

# Energy Trust Board of Directors Meeting

July 30, 2014

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# 130th Board Meeting

Wednesday, July 30, 2014

421 SW Oak Street, Suite 300

Portland, Oregon



|         | Agenda   | Tab      | Purpose                  |
|---------|--|----------|--------------------------|
| 10:00am | <b>Strategic Utility Roundtable</b> <ul style="list-style-type: none"><li>Energy Trust Draft 2015-2019 Strategic Plan.....</li></ul>   |          | <b>Separate Document</b> |
| 11:30am | <b>Lunch</b>   |          |                          |
| 12:15pm | <b>130th Board Meeting—Call to Order</b> ( <i>Debbie Kitchin</i> ) <ul style="list-style-type: none"><li>Approve agenda</li></ul> <b>General Public Comment</b> <p><i>The president may defer specific public comment to the appropriate agenda topic.</i></p> <b>Consent Agenda</b> ..... <p><i>The consent agenda may be approved by a single motion, second and vote of the board. Any item on the consent agenda will be moved to the regular agenda upon the request from any member of the board.</i></p> <ul style="list-style-type: none"><li>May 14 Board meeting minutes</li><li>June 13-14 Board strategic planning workshop minutes</li><li>Executive Director Compensation—R706</li><li>Participant Information Policy revision—R707</li><li>Castle Oak Investments Corporate Signing Authorization—R708</li></ul>  | <b>1</b> | <b>Action</b>            |
| 12:20pm | <b>President's Report</b> ( <i>guest presenter: Roger Hamilton</i> )   |          |                          |
| 12:40pm | <b>Energy Programs</b> ..... <ul style="list-style-type: none"><li>Briefing Paper: ICF contract extension (<i>Spencer Moersfelder</i>) ..... Information</li><li>Briefing Paper: CLEAResult contract extension (<i>Marshall Johnson</i>) ..... Information</li><li>Authorize Program Delivery Contractors for Commercial Strategic Energy Management—R709 (<i>Kathleen Belkhat</i>)..... Action</li><li>Authorize Transition Services Contract with Ecova—R710 (<i>Diane Ferington &amp; Taylor Bixby</i>)..... Action</li><li>Authorize Products Program Contract with Ecova—R711 (<i>Diane Ferington &amp; Taylor Bixby</i>)..... Action</li><li>Authorize New Homes Program Contract with Portland Energy Conservation, Inc.—R712 (<i>Diane Ferington &amp; Taylor Bixby</i>)..... Action</li><li>Authorize Northwest Energy Efficiency Alliance Funding Commitment—R713 (<i>Margie Harris</i>)..... Action</li></ul> | <b>2</b> |                          |
| 2:40pm  | <b>Break</b>   |          |                          |
| 2:55pm  | <b>Committee Reports</b> <ul style="list-style-type: none"><li>Evaluation Committee (<i>Alan Meyer</i>) ..... <b>3</b> Information</li><li>Finance Committee (<i>Dan Enloe</i>)..... <b>4</b> Information</li><li>Nominating Committee (<i>John Reynolds</i>)</li><li>Policy Committee (<i>Roger Hamilton</i>)..... <b>5</b> Information</li><li>Strategic Planning Committee (<i>Rick Applegate</i>)</li></ul>  |          |                          |
| 4:00pm  | <b>Break</b>   |          |                          |
| 4:15pm  | <b>Staff Report</b> <ul style="list-style-type: none"><li>Highlights (<i>Margie Harris</i>)</li></ul>  |          |                          |
| 5:00pm  | <b>Adjourn</b>   |          |                          |

**The next meeting of the Energy Trust Board of Directors will be held  
Wednesday, October 1, 2014 at 12:15 pm  
at Energy Trust of Oregon, 421 SW Oak Street, Suite 300, Portland**

**Tab 1 Consent Agenda**

- May 14 Board meeting minutes
- June 13-14 Board strategic planning workshop minutes
- Executive Director Compensation—R706
- Participant Information Policy revision—R707
- Castle Oak Investments Corporate Signing Authorization—R708

**Tab 2 Energy Programs**

- Briefing Paper: ICF contract extension
- Briefing Paper: CLEAResult contract extension
- Authorize Program Delivery Contractors for Commercial Strategic Energy Management—R709
- Authorize Transition Services Contract with Ecova—R710
- Authorize Products Program Contract with Ecova—R711
- Authorize New Homes Program Contract with Portland Energy Conservation, Inc.—R712
- Authorize Northwest Energy Efficiency Alliance Funding Commitment—R713

**Tab 3 Evaluation Committee**

- June 3 meeting notes
- Existing Homes Process Evaluation and Staff Response
- New Homes Process Evaluation and Staff Response

**Tab 4 Finance Committee**

- May 22 meeting notes
- Notes on April financial statements
- April financials and contract summary report
- Notes on May financial statements
- May financials and contract summary report
- Financial glossary

**Tab 5 Policy Committee**

- June 24 meeting notes

**Tab 6 Advisory Council Notes**

- April 23 RAC meeting notes
- April 23 CAC meeting notes
- *June 18 RAC meeting was cancelled.*
- June 18 CAC meeting notes
- July 23 RAC meeting notes—*notes will be e-mailed prior to board meeting*
- July 23 CAC meeting notes—*notes will be e-mailed prior to board meeting*

**Tab 7 Staff Report**

- Quarterly Market Indicators Report

**Tab 8 Glossary of Energy Industry Acronyms and Terminology**

# Board Meeting Minutes—128th Meeting

May 14, 2014

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**Board members present:** Rick Applegate, Susan Brodahl, Ken Canon, Dan Enloe, Roger Hamilton, Mark Kendall, Debbie Kitchin, Alan Meyer, Kenneth Mitchell-Phillips, John Reynolds, John Savage (OPUC *ex officio*, by phone)

**Board members absent:** Melissa Cribbins, Anne Root, Dave Slavensky

**Staff attending:** Margie Harris, Ana Morel, Hannah Hacker, Julianne Thacher, Debbie Menashe, Amber Cole, Steve Lacey, Peter West, Courtney Wilton, Fred Gordon, Adam Bartini, Jay Ward, Tara Crookshank, Kim Crossman, Dan Rubado, Erika Kociolek, Thad Roth, Katie Wallace, Sue Fletcher

**Others attending:** Juliet Johnson (OPUC, by phone), Jim Abrahamson (Cascade Natural Gas), John Charles (Cascade Policy Institute), Christina Cabrales (Conservation Services Group), Lauren Shapton (Portland General Electric), Don Jones, Jr. (Pacific Power), Kari Greer (Pacific Power), Bob Stull (PECI), Holly Meyer (NW Natural), Jan Schaeffer (general public), Dave Backen (Evergreen Consulting), Michael Gantman (Nexant)

## Business Meeting

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President Debbie Kitchin called the meeting to order at 12:18 p.m.

## General Public Comments

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There were no public comments.

## Consent Agenda

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*The consent agenda may be approved by a single motion, second and vote of the board.  
Any item on the consent agenda will be moved to the regular agenda upon the request from any member of the board.*

### MOTION: Approve consent agenda

Consent agenda includes:

- 1) April 2, 2014, board meeting minutes

Moved by: John Reynolds

Seconded by: Rick Applegate

Vote: In favor: 10

Abstained: 0

Opposed: 0

## President's Report

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Debbie Kitchin referenced her previous president's report about the trend of the increasing average house size per person and connections that has to the energy field. She commented on how economic and social changes over time directly influence energy use habits and impact program planning and delivery. There are similar impacts in the office arena. She referenced a report that analyzed office space leases and determined that square foot per employee has decreased 25 percent in the past decade from 250 square feet per worker to approximately 185 square feet. Part of the decrease is attributed to changes in technology and how business is conducted, such as shared workspaces, condensed cubicle designs to enhance collaboration and working remotely. Debbie recently attended a conference about future office space trends and companies pushing the envelope

by pursuing 150 or 100 square feet per worker. Concurrently, space utilization has increased from 50 percent of the space utilized 10 years ago, to 85 percent or 90 percent utilized today in collaborative work spaces. She noted this may reflect a shift from one building type to another. Debbie said it is interesting to think about these trends as many long-term energy models are based on square footage of property. There are also new options available for temporary offices spaces, and more eco-districts. These changes indicate it may not be just energy use affecting how Energy Trust conducts its work, but also other social, economic and technological forces, as well.

## **Energy Programs**

### ***Cascade Energy Contract Extension for Production Efficiency Streamlined Industrial Initiative***

Adam Bartini, industrial program manager overseeing Energy Trust's Production Efficiency streamlined tracks, presented staff's recommendation for the contract extension. The Production Efficiency streamlined tracks include the industrial initiative and industrial lighting, with both prescriptive and calculated incentives provided through trade allies. The streamlined track constitutes the bulk of project volume for the program with most of the savings from compressed air and irrigation upgrades. Adam noted the streamlined track was previously referred to as the small industrial initiative. The renaming was implemented to reflect that all sizes of industry and agriculture businesses are eligible.

Program Delivery Contracts include a three-year contract with two potential one-year extensions. For Cascade Energy, the three-year contract is for 2012 through 2014, and today's contract extension review is the first one-year extension for the year 2015. Staff recommends extending the contract with Cascade Energy for this additional year.

Adam noted the budget for the contract has risen over the last few years as savings goals have also increased. Staff assessed the performance of Cascade Energy using the criteria described in the board packet. Based on that assessment, Cascade Energy is performing well, as detailed in the briefing paper. The staff perspective is that the proposed contract extension is well deserved.

The board discussed customer eligibility and matching with the streamlined industrial track or the custom track. Staff clarified that streamlined industrial projects are many in number, but bring in smaller amounts of savings per project. Staff referenced the Industrial and Agriculture Sector Trends Analysis Report presented to the Conservation Advisory Council in April for more details.

Staff clarified that size of the business does not determine project eligibility and that all customers can participate. The distinguishing characteristic for a streamlined initiative qualified project is a prescriptive or calculated incentive versus a more extensive custom energy analysis. In addition, Program Delivery Contractors for the streamlined initiative do not work directly with end-use customers and instead develop a network of trade allies to directly interact with customers who rely on in-house technical experts as needed.

In response to questions from the board, staff explained the Production Efficiency program does not work directly with electric rail beyond recently investigating the potential of a project with PGE and supporting businesses manufacturing rail cars with energy efficiency measures for their plants.

The board supported the contract extension.

### ***Evergreen Consulting Group Contract Extension for Industrial Lighting***

Adam presented on the contract extension for Evergreen Consulting Group. Evergreen develops and trains Energy Trust industrial lighting trade allies, serves as a technical resource and facilitates industrial lighting project submissions to the program. For Evergreen Consulting Group, the three-year contract is for 2012 through 2014, with today's contract extension review for a one-year extension for

the year 2015. Staff recommends extending the contract with Evergreen Consulting Group for this additional year.

Staff assessed the performance of Evergreen Consulting Group using the criteria described in the board packet. Staff indicated Evergreen Consulting Group is well positioned for success this year.

The board discussed Evergreen Consulting Group's 2013 performance, given achievement to goal was about two-thirds of expected savings. Staff mentioned the 2013 goal was set aggressively after basing the goal on prior year trends showing growth over time and expecting that trend to continue. However, 2013 was the first year without Oregon Business Energy Tax Credit available and without Energy Trust bonuses implemented to support the industry during the transition to a market with no state tax credits.

The board talked about changes in lighting technology. Staff is seeing LED installations in industrial settings this year, and prices are dropping on a monthly basis. Lighting incentive amounts are revisited twice a year. The board agreed with this approach given the fast-paced changing lighting market and asked staff to follow-up with information on the breakout of lighting projects based on CFL or LED technology.

The board commented that beyond the shortage in achieving the 2013 savings goal, Evergreen Consulting Group is effective in relationship development, trade ally development and other areas of responsibility. The board supported the contract extension.

## **Committee Reports**

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### ***Audit Committee, Ken Canon***

Ken provided an update on the in-progress Management Review, part of Energy Trust's grant agreement with the OPUC and required for completion every five years. Coraggio Group in Portland is conducting the review and examining four main areas of Energy Trust internal operations. Some findings may feed into the 2015-2019 Strategic Plan process this summer. The work plan is complete, the first round of internal reviews has been conducted and a report outline drafted. Next Coraggio Group will interview four regional utilities to benchmark Energy Trust's activity in a number of key areas. Coraggio will also interview a few board members, staff, OPUC staff and representatives of our funding utilities. The committee receives weekly reports and is working with Coraggio Group on the content of the outline. The next update will be provided at the July board meeting.

### ***Evaluation Committee, Alan Meyer***

Alan mentioned that due to several new members recently joining the committee, the last committee meeting including a review of both process and impact evaluations, and how evaluations inform program design and delivery and also help document program history and results.

The board discussed how Energy Trust's evaluation process compares to other organizations. At the latest committee meeting, an external expert on the committee mentioned that Energy Trust has one of most rigorous evaluation departments. Given Energy Trust's charter and level of scrutiny by the public, the external expert supported the amount and level of Energy Trust evaluations. The board commented how generous it is for external experts to donate their time to the committee and opinions are well received given their national recognition. It is important to staff to validate savings and resources, especially given the use of ratepayer funds.

The board discussed last year's transition to CLEAResult as Existing Homes Program Management Contractor (PMC). Staff informed the board that the program strategy was re-examined to enable the program to improve savings delivery this year. Staff commented they underestimated the impact of the transition from the incumbent PMC and the level at which cost-effectiveness challenges would

hamper savings acquisition. Strategies now in play include greater use of targeted marketing, upstream activities, changes in pricing, and re-evaluation of the approach used in the field. Staff feels confident about this year. The board commented this is where an evaluation has value.

The board asked about the changing rules for weatherization measures. Because of the gas cost-effectiveness exception Energy Trust is working within now, some measures are not qualifying that would have previously qualified. Staff described that with the reduced price of energy on the natural gas side, the value to the system of saving that energy also is lower. This has required staff to eliminate or tighten requirements for certain measures. Staff mentioned changes mainly impact gas with some additional impact on electric measures. In addition, consistent messaging and not varying measure requirements or incentive levels based on heating fuel type, remains important in reducing customer confusion and in streamlining participation. It was noted single-family homes are predominately gas-heated. Staff updated the board that an Energy Trust paper is due to the OPUC on July 1 to present options for delivering programs and measures affected by the gas cost-effectiveness exception.

In regards to the Products process evaluation, the board discussed the availability of low-cost energy-efficient refrigerators. Staff mentioned that based on Energy Trust data, the program is seeing a decrease in the availability of these units at retail locations. The next step for staff is to interview manufacturers, distributors and retailers to investigate reasoning.

Alan briefly described the rest of the March and April evaluation meeting discussions, including a New Homes process evaluation, staff proposal on free ridership studies, Existing Buildings process evaluation and residential windows market research. Full details are in the Evaluation Committee notes in the board packet.

***Executive Director Review Committee, Roger Hamilton***

Every year, the committee reviews the Executive Director's performance and compensation. The committee reviewed an annual 2013 accomplishments summary provided by Margie, conducted an independent salary survey, as well as a "360" feedback survey. Select board members will discuss the salary survey and review the accomplishments with Margie.

Roger introduced Resolution 704, which rescinds the previous Resolution 555 on the procedures of the Executive Director Review Committee, reaffirms the establishment of the Executive Director Review Committee and more directly assigns board review committee composition. In essence, the resolution aligns this committee with the process required of other board committees.

**RESOLUTION 704  
EXECUTIVE DIRECTOR REVIEW COMMITTEE**

**WHEREAS:**

- 1. At its meeting on June 12, 2010, the Energy Trust Board of Directors established procedures for executive director review.**
- 2. At that time, the Board deemed it prudent to establish procedures for the Executive Director Review Committee (the "Committee").**
- 3. The Board now deems it prudent to delegate establishment of procedures for the Committee to the Committee and, therefore, wishes to rescind Resolution No. 555 and replace it with this resolution.**

**It is therefore RESOLVED:**

1. **That the Board of Directors reaffirms the establishment of the Executive Director Review Committee (“the Committee”), consisting of Board members selected by the President, including, but not limited to the Chair of the Board’s Compensation Committee, and appointed by the Board.**
2. **That the Board of Directors hereby appoints the current Chair of the Compensation Committee, Dan Enloe, to the Committee for a term that will continue until a subsequent resolution changing committee appointments is adopted.**
3. **That the Committee shall determine what schedule and process will best produce an effective review and will make its recommendations on executive director review and compensation to the Board for final approval.**

Moved by: Alan Meyer

Seconded by: John Reynolds

Vote: In favor: 10

Abstained: 0

Opposed: 0

#### ***Finance Committee, Dan Enloe***

March revenues look on track. Reserves continued to grow and incentives paid are behind budget, which is normal in the first part of the year. Existing Buildings, Existing Homes and New Homes are behind on incentive spending, with Production Efficiency on track and New Buildings doing very well. The board noted how the commercial real estate market is very active, and the program strategy might be adjusted to allow for direct communication with new owners.

The board commented that the pie chart describing expenses needs a year-to-date label or title. Staff will make the change.

The cash flow statement shows an increase in cash from January through March. Revenues are up compared to the prior year and expenses down compared to the prior year.

#### ***Compensation Committee, Dan Enloe***

The performance of funds is doing well. Later this year, an independent audit of the 401(k) funds provider will be conducted, assessing whether Energy Trust should go to market for a different provider.

The employee review of performance and compensation was recently completed, with a similar process being followed for the Executive Director, as Roger described.

Energy Trust’s Form 990 tax return was filed on time. The board was asked to review their volunteer hours, which are reported on Form 990, and to notify Courtney Wilton if they need to change. Staff clarified the write off on the IT project and that the loss on the IT project more than offset income, which is why a net number is shown.

#### ***Policy Committee, Roger Hamilton***

The committee met in April and examined the fuel switching policy. Staff recommended and the board committee supported the use of a new tool for contractors to estimate utility bill savings benefits derived from investments customers can make as part of Energy Efficiency and Sustainable Technology Act and Savings Within Reach programs which include on-bill loan repayments related to new heating systems. Staff and the committee agree there is no conflict with the policy for using the tool and staff will keep the committee informed.



The committee also reviewed the Renewable Energy Certificate (REC) policy, scheduled for its regular three-year review. Staff recommended and the committee agreed to postpone review of the policy, conduct a study on the Renewable Energy Certificate market and revisit the policy when findings are available from the study. Current status is that Bonneville Environmental Foundation was selected to conduct the study, a scope of work was provided and a cost estimate submitted, which is in range of expectations. The study will analyze use of RECs at Energy Trust and alignment of that use with the direction the market is moving in terms of REC prices and greater desire among larger companies to promote renewable energy attributes of their projects.

The board discussed the value of RECs, process to register RECs and current staff evaluation on transferring RECs to the electric utilities. Staff has been working with utilities, the Oregon Department of Energy and Western Renewable Energy Generation Information System (WREGIS) to perfect the transfer of RECs to utilities so they can be retired to meet Renewable Portfolio Standard requirements. Staff clarified that it does not cost Energy Trust to hold RECs, and it is being evaluated whether it will cost anything to transfer them to the utilities. It was noted the value of a project's RECs, and the willingness of a utility to absorb the transfer costs, is largely defined by the size of the project. The ease of registering RECs is also improved with projects of larger size and WREGIS is not set up currently to accommodate many, smaller projects. WREGIS rules determine REC registration, including that qualifying facility RECs need to be registered by the generator.

The April policy committee meeting also included an update on large customer funding limitations. Energy Trust spending on large customer projects is approaching the baseline cap, especially for PGE. Staff will report back to the committee after a May meeting with OPUC staff, and will include a more detailed explanation of the method used to set the baseline. The board expressed a desire for more information on the history and details of the funding limitation. Staff clarified the baseline was set on historical averages prior to SB 838 supplemental funding being available. Staff will provide the committee with revenue received and expenditures based on customer class. Staff clarified the public purpose charge is collected based on "wires" charges. The board discussed the approach to equity of expenditures based on customer sector and the desire to balance spending by sector with acquiring available cost-effective savings. Staff clarified implementation of the law is within requirements and Energy Trust is not yet out of compliance. The baseline has not yet been exceeded but it is being approached, which is why options are now being reviewed.

Lauren Shapton from PGE commented that PGE is interested in finding a way to not reach the spending cap and take away cost-effective energy efficiency. The utility also does not want to increase rates. The Citizens' Utility Board of Oregon has developed and proposed a rate treatment proposal where customers under 1 average megawatt would get benefit of cost-effective energy efficiency and pay for it. PGE is currently reviewing the proposal.

The board reviewed new appointments to the Renewable Energy Advisory Council roster as recommended by the policy committee, including representatives from PGE, the Oregon Department of Energy, Renewables Northwest, One PacificCoast Bank, Bonneville Environmental Foundation and The Climate Trust.

The board notes the April Conservation Advisory Council and Renewable Energy Advisory Council meeting minutes were not included in the May board packet. Staff commented on the timing after a council meeting that is needed to approve the minutes. Efforts will be made to prioritize and complete notes for inclusion in the board packets whenever possible.

***Strategic Planning Committee, Rick Applegate***

The committee is meeting regularly on to develop the draft 2015-2019 Strategic Plan. The upcoming June board strategic workshop will review the draft in-depth, including discussion of the energy-

efficiency goal, renewable energy goal and operations goal. The purpose of the retreat will be for the board to review and discuss the draft plan. Following the retreat, staff will incorporate any board feedback into a revised draft plan prior to making the document available for public comment starting in late July and continuing through late August. A main consideration in the plan is the impact of cost-effectiveness requirements and the difficulty in future planning given these constraints.

*The board took a break from 2:22 p.m. to 2:35 p.m.*

Debbie K. shared a letter she received from a recent Energy Trust participant complimenting outreach staff member Brooke Ingram.

## Staff Report

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### **Highlights, Margie Harris**

Margie described the recent completion of a second geothermal system at Oregon Tech in Klamath Falls. With Ken Canon, she attended a ribbon cutting that recognized the geothermal system and a ground-mount solar system installation. Oregon Tech is now the first net-zero campus in the nation to generate all its energy on-site with renewable energy. Pacific Power will deliver excess energy to tenants of a local low-income housing development.

Margie highlighted the recently completed 2013 Annual Report to the OPUC and Board of Directors. In 2013, Energy Trust continued to provide value to customers of all four utilities. Energy Trust exceeded the electric efficiency stretch goal, came very close to achieving the natural gas efficiency stretch goal and nearly met the renewable energy conservative goal. Energy savings were at levelized costs well below the annual performance measures. Renewable energy programs were challenged by the low cost of natural gas, and operating in a market where fewer tax credits were available. Energy Trust met all minimum annual performance measures set by the OPUC, including obtaining an unmodified financial audit.

Total resource benefit/cost ratios were greater than one for all programs except for NEEA programs with a 0.8 benefit/cost ratio. NEEA is below 1.0 due in part to challenges quantifying single-year societal costs. By contrast, NEEA's investment portfolio includes multi-year market transformation initiatives at various stages of development. These are difficult to fully represent in the current benefit cost methodology used, which is focused on annual vs. long term savings acquisition.

Margie highlighted a few 2013 achievements. Low-cost savings were from data center construction, a large industrial project, behavioral savings from industrial Strategic Energy Management and savings from NEEA's television initiative. In addition:

- Improvements made last year in IT systems will support future initiatives, including use of utility customer data.
- New construction saw a rebound in both residential and commercial sectors. New Homes scored its 4,000th home using an Energy Performance Score (EPS) since the tool was made available in 2009. The New Buildings program also enrolled a record number of projects last year.
- Multifamily saw success with installing energy-saving products and completed the first four projects through Mpower, utility on-bill repayment offer to serve residents in affordable housing developments.
- Product installations in multifamily and kit distribution through water agencies were methods used to reach new and diverse customers.
- The first commercial-only lending ally was added to our network to support projects in Existing Buildings and Multifamily.
- Collaborative efforts were initiated with the Oregon Food Bank and refrigerator and freezer recycling, and with the Oregon Department of Energy and school audits.

Margie reviewed progress made to 2010-2014 Strategic Plan goals. By the end of 2013, the organization achieved 91 percent of the electric efficiency goal, 95 percent of the natural gas goal and 91 percent of the renewable energy goal.

All-time benefits from Energy Trust investment of \$848 million since 2002 includes \$1.7 billion saved on participant utility bills, \$3.1 billion added to the Oregon economy, 10 million tons of carbon dioxide avoided and \$2.80 in deferred utility investment for every \$1 invested by Energy Trust in energy efficiency.

The board commented on the successful year.

Margie previewed highlights from the Quarter 1 2014 report, due to the OPUC on May 15. The organization is meeting expectations for savings and generation achievements for the first quarter. There was an increase in sites served and measures installed in this quarter compared to the year prior. Strong pipelines will benefit wind, geothermal, hydropower, Existing Buildings and multifamily later in the year. Spending was below budget, a typical trend for early in the year. Staff will analyze the annual budgeting process to see if it can accommodate the cyclical nature of expenditures and activity, which is low in Quarter 1 and significantly ramps up in Quarter 4.

Based on the board's inquiry, staff will follow up on whether the cold weather this past heating season led to more customer calls or website visits.

Program highlights in the first quarter of the year include the launch of spring bonuses for Existing Homes and Existing Buildings, completion of the Energy Payback Estimator for residential customers, meetings with credit unions in Bend and Medford to explore additions to the lending ally network, re-instituting the LivingWise with Energy Trust curriculum for sixth-grade students, a continuing positive trend of LED installations and launching of a Savings Within Reach on-bill loan product. In addition, staff continues to enhance Customer Relationship Management (CRM) capabilities and kicked-off replacement of FastTrack, Energy Trust's project tracking system.

Customer service results in the first quarter include a slight increase in calls and website visits compared to the same quarter last year. Satisfaction rates are strong for all programs evaluated through Fast Feedback.

Margie concluded her report with the recent experience of a Portland homeowner installing 100 percent energy-efficient lighting, including compact fluorescent light bulbs and LEDs. By inviting media to see the installation, Energy Trust was able to communicate to a broad audience the benefits of efficient lighting. Locations where similar lighting can be purchased at a discount due to Energy Trust's product buy-down incentive at retail outlets were also promoted. The board commented that with LED technology, the risk of fire from overheating of older wires may be reduced as the current is lowered and heat generated lowered. This may be a potential area for Energy Trust to investigate.

Margie introduced Jay Ward, Energy Trust Senior Community Relations Manager, a new position approved by the board in December 2013. Jay recently worked in Senator Wyden's office for seven years.

***Feature Presentation: Collaboration and Coordination: Our work with utility partners, Amber Cole and Steve Lacey***

Energy Trust staff works directly with utility staff throughout the year to coordinate a variety of joint activities. Steve Lacey described the critical role utilities play in Energy Trust's ability to effectively deliver programs. To reach and serve customers, Energy Trust works with the market, independent

businesses such as trade allies, retail channels and distributors, as well as with each funding utility. Energy Trust annual energy-efficiency goals are directly linked to utility Integrated Resource Plan (IRP) targets, set in coordination with each utility. Each utility is distinct and that shapes how Energy Trust works with each one. Steve introduced the primary staff utility liaisons, as well as Margie's primary liaisons. Steve thanked the utility staff in attendance for the time they dedicate to working with Energy Trust.

Steve reviewed the origins of working with each utility, which stem from a mix of policy and legislation for PGE and Pacific Power for electric funding and OPUC regulatory agreements and subsequent contracts with NW Natural and Cascade Natural Gas for natural gas funding. The practice and process of working with each utility on an annual basis is largely the same though the origins are different. There are contracts with each utility that reference Energy Trust's action plan and the utility's IRP target.

Steve reviewed the IRP planning process and how it flows into annual budgets and two-year action plans for the organization. The process is conducted in close collaboration with each utility and the Energy Trust Planning group. The process drives Energy Trust's annual energy savings targets for each utility and drives utility tariff filings. Steve showed a chart of the annual implementation cycle. Together Energy Trust and the utilities quantify total savings and cost per unit saved for all available efficiency using IRP targets and market intelligence. Energy Trust then develops early program concepts for the next year's budget and action plans and gathers utility input. When program goals are agreed upon, utilities file tariffs for any revenue adjustments needed. Energy Trust implements activities consistent with the budget and action plan. Utilities support these activities promoting available offerings through their customer channels. In addition, the electric utilities undertake their own complementary marketing and outreach as part of SB 838 funds they retain. Energy Trust reports savings results for each year, and any new evaluation results are incorporated to inform the next cycle of planning.

Amber Cole highlighted primary marketing and communications coordination activities between Energy Trust and each utility, including bimonthly meetings, monthly data exchanges, early involvement in developing annual budgets, long-term planning sessions to identify future strategies, joint marketing and outreach coordination, and special initiatives such as pilots and field collaboration.

Amber shared recent examples of joint marketing and outreach activities conducted with each utility. Successful channels to reach customers include email and utility bill inserts. Energy Trust strives to work in a way that fits each utility's brand and style.

Other jointly coordinated efforts include customer notification of new data sharing agreements, on-bill loan repayment agreements, mid-year tariff reductions in 2014 and cost-effectiveness docket coordination. Last year Energy Trust, the utilities and the OPUC agreed to evaluate Energy Trust and utility joint marketing and outreach activities as part of Energy Trust's regular program process evaluations. Energy Trust also reports quarterly to each utility on progress toward annual goals and other activities.

The board commented on the thorough job of conducting customer satisfaction surveys, and asked if the satisfaction survey approach is also done with the utilities. Staff commented that opportunities for feedback are available through process evaluations and agreed there could be a more direct assessment of each utility for their feedback on Energy Trust process, outreach, marketing, coordination, planning and program delivery.

The board discussed how the utilities rely on Energy Trust to determine the energy efficiency resource available and how that number becomes an input in their IRP modeling. This specific piece of the

working relationship was solidified in 2008 once SB 838 allowed electric utilities to pursue additional cost-effective energy efficiency. The same practice has been extended and applied to both gas utilities.

## **Adjourn**

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The meeting adjourned at 4:00 p.m.

**The next meeting of the Energy Trust Board of Directors will be the Annual Strategic Planning Workshop** held Friday, June 13, 2014, 8:00 a.m. to 5:00 p.m. and Saturday, June 13, 2014, 9:00 a.m. to 12:30 p.m. at Reed College in the Choral Room of the Performing Arts Building, 3203 SE Woodstock Blvd, Portland, Oregon.

**The next regular meeting of the Energy Trust Board of Directors** will then be held Wednesday, July 30, 2014, at 12:15 p.m. at Energy Trust of Oregon, Inc., 421 SW Oak Street, Suite 300, Portland, Oregon.

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Alan Meyer, Secretary

# Board Strategic Planning Workshop

## Reed College, Portland, Oregon

Friday, June 13, 2014

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**Board members present:** Rick Applegate, Susan Brodahl, Ken Canon, Melissa Cribbins, Dan Enloe, Roger Hamilton, Mark Kendall, Debbie Kitchin, Alan Meyer, John Reynolds, Anne Root, Dave Slavensky, Warren Cook (ODOE special advisor)

**Board members absent:** Kenneth Mitchell-Phillips, John Savage (OPUC *ex officio*)

**Staff attending:** Margie Harris, Ana Morel, Hannah Hacker, Debbie Menashe, Amber Cole, Steve Lacey, Peter West, Courtney Wilton, Fred Gordon, Scott Clark, Elaine Prause, John Volkman, Julianne Thacher, Thad Roth, Jessica Rose, Dave McClelland, Cheryle Easton

**Others attending:** Nick Viele, *Facilitator* (c3 Strategy), Jim Abrahamson (Cascade Natural Gas), Bill Edmonds (NW Natural), Jason Eisdorfer (OPUC), Juliet Johnson (OPUC), Holly Meyer (NW Natural), John Charles (Cascade Policy Institute), Bob Stull (PECI), Don Jones Jr. (PacifiCorp), Erin Dopfel (PECI), John Morris (CLEAResult),

### Call to order and welcome

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President Debbie Kitchin called the workshop to order at 8:05 a.m. Every June, the annual retreat provides the board an opportunity to delve into a handful of topics and think strategically through their opportunities and risks. This year, the retreat is particularly important as the draft five-year strategic plan is ready for board review and input. Debbie thanked the Strategic Planning Committee members for their role in the development process, and the support of the staff in preparing for this retreat.

Rick Applegate, chair of the Strategic Planning Committee, reviewed the process to date in the development of the draft plan. The process started in late fall 2013, and included an external expert review, staff intake through a "strengths, weaknesses, opportunities and threats" exercise, Margie's interviews of industry experts, analysis of California's practices, and discussions with utility partners, Conservation Advisory Council members and Renewable Energy Advisory Council members. The board heard that Energy Trust may be entering an era where a lot of the easier-to-achieve energy savings have been acquired and the future does not look as promising in terms of the levels of efficiency known and available. These and other items are what the board will hear about and discuss throughout the retreat.

The board welcomed retreat facilitator Nick Viele from c3 Strategy.

### Opening remarks

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Margie Harris welcomed the board and encouraged discussion throughout the day, especially of new board members who provide a fresh perspective. She asked the board to think through what role they see Energy Trust playing in the next five years, what guidance should they provide now for staff to make the best decisions, and how does the organization balance between discrete, measurable goals and flexible strategies.

Margie described the current strategic plan and decisions made in 2009 that shaped the current structure of Energy Trust, where emphasis was placed and where investment made. Examples of how Energy Trust evolved while implementing the current plan include completing a redesign to set up the

organization to double and triple results, shifting the focus to be centered more on customer experience, looking for ways to be efficient and effective in IT and data analysis, developing cascading goals to link the strategic plan to the everyday activities of staff, and investing time to strengthen relationships with utilities and others.

While implementing the plan, Energy Trust experienced unexpected market changes. In response, Energy Trust employed various program strategies to encourage participation and serve customers. With those actions, Energy Trust made great progress to the goals in the current strategic plan, including expectations of achieving 106 percent of the electric efficiency goal and 114 percent of the natural gas efficiency goal, both of which were ambitious and aggressive. Staff expects to achieve only 70 percent of the renewable generation goal. The sector was impacted by a number of factors, like the loss of tax credits and low avoided costs, which necessitated mid-course corrections. Those corrections will be revisited today as staff asks the board how to measure progress over the next five years.

To set the stage for discussion on the next strategic plan, Margie described that in the state of Oregon, economic recovery is outpacing other states and the construction industry is beginning to rebound. Interestingly, the middle class is shrinking and discretionary spending is still constrained, meaning Energy Trust may need to revisit its model of pay-to-play to overcome customer investment challenges.

In the draft plan for the board's consideration is the potential selection of an area of emphasis when staff is implementing strategies to achieve the five-year goals. The two areas are broadening participation by all contributing ratepayers or building capability to deliver energy savings by using new technologies. Related to the broaden participation emphasis, Margie noted that over the most recent 10-year census period, population growth in Oregon mainly occurred with non-whites, with the greatest population growth among Hispanics. Assuming population growth and diversity continue in the state, new opportunities are created to better reach different people, tailor strategies and services, and re-shape programs.

Related to investing in new technologies, filling the pipeline would mean investment in new products and services. In the years ahead, Energy Trust would potentially work closer with the Northwest Energy Efficiency Alliance (NEEA), conduct more pilots, work with national labs and place more emphasis on how products and equipment perform in the Pacific Northwest's climate.

A layer on top of all this is a number of clean energy policies that may provide new or different direction, rules and regulations. The policies include the Oregon Global Warming Commission, Governor Kitzhaber's 10-Year Energy Action Plan, the Pacific Coast Action Plan on Climate and Energy, Oregon's SB 844 and the Environmental Protection Agency's (EPA) Clean Air Act carbon regulations on existing coal plants. These can impact how Energy Trust delivers its programs.

Energy Trust has successfully scaled a considerable landscape with solid and sound results. What staff predicts in the future is different than the exponential growth seen in the past five years. It's estimated that the pace of savings acquisition will shift to becoming more measured, steadier and slower. Staff anticipates working differently, and in some cases working harder, to get lower results. The savings may not cost less, they may cost more. The board and staff should expect new challenges. Even so, Energy Trust should not be intimidated by this; organizationally, Energy Trust thrives on challenges.

Marge recapped her discussions with industry leaders around the country, who are called "influentials" in the plan documentation. The essence of the feedback from the influential is for Energy Trust to stay

true to its mission, continue to emphasize what programs do well, expand relationships, and be poised and ready for what else may come. Margie said that with a talented staff and goal-oriented focus, Energy Trust has the building blocks to implement the direction the board provides today.

Margie reviewed the main questions before the board today:

- Should Energy Trust continue to emphasize renewable energy market and project support, and is 10 average megawatts (aMW) the right goal?
- How high should the energy-efficiency goal be set, and does Energy Trust pursue balanced strategies, emphasize broader participation or emphasize new technology and methods?
- Should Energy Trust have an operations goal and what should it emphasize?

## **Renewable energy goals**

### ***Staff presentation on current plan (Thad Roth)***

Thad Roth began his presentation with current system installations and renewable energy capacity installed in Oregon. The takeaway is that Energy Trust participation has helped expand the number of non-solar projects installed in the state 50 percent since 2005. Those projects have been smaller in capacity than non-Energy Trust projects, on average 1.3 MW vs. 5.9 MW. Energy Trust has been a key player in biogas, hydropower and solar. For standard solar, Energy Trust incentives combined with state and federal incentives have been the primary driver for net-metered projects.

Thad reviewed the current plan's long-term renewable energy goal and five-year energy goals. The sector will fall short of the generation goal, and is estimated to come in at 16 aMW due to declining incentives at the state and federal level, smaller projects and a portfolio of projects that is heavily weighted to solar, which has a low capacity factor. The sector has been successful in expanding markets, especially for solar and also hydropower and biopower.

### ***Staff presentation on proposed plan (Thad Roth, Betsy Kauffman, Dave McClelland)***

In developing the renewable energy proposal for the next plan, Thad said staff considered the Energy Trust annual budget and the availability of other, non-Energy Trust incentives that help build up a project to make it successful. In 2015, the renewable energy sector expects to receive about \$14 million in annual revenue, which is less than previous years. Over the last five years, the sector was working with annual budgets of about \$18 million to \$22 million, largely due to unallocated funds from prior years rolling into current years. In addition, there is expected a continued decline in state and federal incentives, and wholesale energy rates.

The board asked if wholesale retail rates are declining. Thad said avoided cost rates are available to qualifying facilities. Over the last five years, the avoided cost rates have gone down 50 percent. The Oregon Public Utility Commission (OPUC) is going through a docket that will clarify where rates will go in the future and Energy Trust will further articulate differences between variable resources, like solar and wind, and baseload resources as described in UM 1610. The avoided cost rate will continue to affect the viability of projects Energy Trust can support.

Staff proposes to maintain in the next plan the long-term goal as written in the current plan. On five-year energy goals, the draft plan indicates a change in focus as order of the goals flips to emphasize market and project development first, and then energy acquisition second. This reflects Energy Trust's annual revenues and circumstances in the market. The first goal would then be to sustain a vibrant small and mid-scale renewable energy generation market. The sector has been doing this for the past 10 years. A key measure is continual growth in project installations. The sector would still maintain the strategy in-place since the beginning of supporting all five technologies. Staff recognizes the refocus still needs a benchmark and a way to measure success, which leads to the second goal of 10 aMW



by 2019. This lower generation amount is based on assessment of current conditions, and reflects reality.

Betsy presented on the strategies for the Other Renewables program. The program will support all four technologies, looking to build the pipeline, improve overall financial performance of projects, conduct outreach, provide project development assistance and support existing projects. Betsy showed a chart of non-solar generation from 2005, including generation from in construction projects for 2014-2016. The takeaway is the program experiences lumpy progress. It may see two to three projects a year, maybe four in a good year. Each project also takes two or more years to plan and develop, and staff support is provided throughout. The long project timelines and lumpy project completion makes it difficult to determine a benchmark or measure for progress. Betsy showed a graph of the current plan showing aMW by technology. Biopower and hydropower bring in the most generation and make up about a dozen projects.

Betsy described an example of a hydropower strategy in the draft plan that is based on experiences from the current plan. For the past five years, the program focused on in-conduit hydropower projects, and has seen eight complete and five are in process. The learning from these projects is there is an opportunity to do hydropower in irrigation districts due to the water savings effect. Instead of looking for places to do hydropower projects, staff is looking at places to do water savings and along with that, hydropower generation. This means staff will collaborate with organizations that have relationships and expertise in this area, like the Farmers Conservation Alliance, and have them help Energy Trust conduct outreach. Because there are fewer incentives to provide, the program is looking for projects that can pull in other funding sources, or leverage innovative ownership and financing models. Progress with this technology would be the number of irrigation districts involved, the number of projects participating and list of potential projects applying for project development assistance.

Betsy also provided an example of a biopower strategy. Challenges for this technology are the significant operations and maintenance costs which last the life of the project. Due to the importance of lowering these costs to improve the project's financial performance, staff is looking at gathering baseline operations and maintenance costs, learning about cost drivers, working with national organizations looking at similar issues and establishing best practices to share. The measurement of progress would be monitoring changes in costs as the strategy is implemented.

Dave presented on the Solar program, which has seen a lot of change in the last five years. He mentioned that 87 percent of Oregon's solar electric capacity seen today was installed in the past five years. Also, the average costs for installed solar have declined by about one-half in the last five years from \$8-\$9/watt installed to \$4.50 per watt for residential and \$3.30 per watt for commercial systems. Utility-scale is even lower, at about \$2 or \$3 per watt installed. Dave showed a chart of commercial capacity since 2004 and the effect on volume as the Oregon Business Energy Tax Credit changed from 35 percent to 50 percent to zero percent. Dave described the changes in the residential market. The local, bulk purchase effort called "Solarize" was responsible for a large amount of system installations in 2010 and into 2011 but that model has been quiet lately in Oregon even though it's becoming a popular model in other states. In Oregon, the market is shifting to third-party owned systems, which are about two-thirds of the market today.

Challenges for solar over the next five years include the conclusion of the Volumetric Incentive Rate pilot, the solar capacity standard being met by the utilities five years early, the federal Investment Tax Credit dropping to 10 percent at the end of 2016 and the Oregon Residential Energy Tax Credit expiring at the end of 2017. This means Energy Trust will be the sole incentive program but would not be able to support the market to the level it has reached today. Dave showed scenarios of how Energy Trust could support solar in the next plan. The program strategies will be to collaborate with NW Solar Communities, measure soft costs and identify soft cost reduction targets for Oregon.

***Board discussion on proposed plan***

The board discussed how the program can be involved in reducing soft costs for solar installation, mentioning the cost-reduction effect of competitive processes, the Solarize effort and positive user experience that makes going solar easier and streamlined.

The board was pleased to hear both presentations, and acknowledged the fact that the sector has a relatively fixed budget and was glad to hear staff is looking at bundling benefits on non-solar systems and reducing costs on solar systems. And as economics change, the sector has flexibility to shift to support one technology over the other.

The board asked about the outlook for energy storage or micro-grids in the future. Staff hasn't yet received such requests, but in the next five years the region may experience pressure to move to storage. Staff pointed out that California's solar generation levels will have an impact on Oregon as the region uses a connected grid. Staff noted California has a mandate for storage.

The board commented on whether the Solar program should shift with the market away from the bulk buy model, especially if it's growing in other states.

The board asked how the Other Renewables program is attracting other outside capital, and whether Energy Trust could play the role of aggregator. Staff commented that one initiative with hydropower is to find a set of projects and package and then look for investors, and to talk with foundations interested in water and environmental benefits. Staff is beginning to have those types of conversations to attract outside financing. Plus, with project development assistance, the sector increased the cap to \$150,000 to help projects move along more quickly to a point where they have a nice package they can present to the investment community. The challenge remains of an unpredictable level of volume.

The board asked what role Energy Trust plays in attracting projects across all technologies. Staff mentioned that outreach is a strong component to their work. With competitive RFPs, available funding is getting wider publicity and Energy Trust is becoming known to more people. The challenge is that these complex projects are being done by people whose core business isn't electricity or electric utilities but water agencies, irrigation districts or wastewater treatment plants.

***Board discussion on goal setting questions for next plan***

The board agreed with the proposed renewable energy goals and the order in which they are listed as appropriate for the strategic plan. The board supported additional metrics to document the sector's efforts. The metrics should be set for each technology and area of focus like cost reductions for solar soft costs and operations and maintenance. Timing for this would be during the annual budget and action plan development. The board encouraged staff to look at metrics by market segment, too.

The board commented they would like to see a clearer link between the draft plan and the strategies in the briefing papers.

The board asked for clarification on the strategy around load management and climate change. Staff mentioned the direction would be set by the utilities and Energy Trust would not be in the lead. Energy Trust will be supportive of any such efforts, and be open and receptive to change in the energy policy arena, including the recently passed EPA rules on carbon (111D). The board mentioned a desire to learn more about carbon reduction at a future board meeting.

**Confirm recap of renewable energy goals**

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John Volkman recapped the discussion for the board:

The board is comfortable with reaffirmation of the current approach to the sector and shifting the order of goals as staff proposed. Around the question about additional metrics, the board thinks it is an important idea best spelled out in two-year action plans. It is also a good idea to have development metrics for any areas staff is proposing emphasis. The board also encourages looking at whether staff can measure any spillover effects from program activities.

The board discussion included direction to staff to go through the draft plan and make sure strategies match up with what was heard today and as written in the briefing paper. There are several areas for questions on whether there should be more specificity in the draft plan, like around attracting other sources of capital, reducing soft costs for solar or working in the realm of operations and maintenance. The board also wants the program to think about how to stay involved in the bulk-buy solar strategy.

There is interest in and questions about the strategy of supporting state and utility climate change load management priorities. The board asked whether that is a strategy or an outcome, how does it foster renewable energy and even energy conservation, and how does it match up with federal climate goals. The board would like staff to think about a future board briefing about these issues.

There is interest in showing how renewable energy strategic goals tie together with resource assessments, and thoughts for staff to consider how micro-grids, storage and multi-meter owner strategies might be incorporated into program implementation.

The board agreed the recap captured its comments and discussion, particularly support for the content and order of the five-year goals, and that no other refinements are needed for this section of the plan.

The board asked what will be sent out to the public for comment, the whole packet or just the plan. Staff said the public will receive the revised draft plan and a document that summarizes and focuses people on the same issues and questions before the board today.

## **Energy Trust in action**

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### ***Reed College Performing Arts Building (Jessica Rose)***

Jessica Rose presented on the building being a recent participant in Energy Trust's New Buildings program, having completed construction in fall 2013. The building houses classrooms, theater, dance and music rehearsal space, and a student "living room". The building participated through the Small Commercial Efficiency pilot, and was on the large end at 80,000 square feet. Often, buildings less than 100,000 square feet are designated as small commercial. The Small Commercial Efficiency pilot was launched to understand how small buildings can be energy efficient, the steps for them to get there and the support needed.

The board asked how this pilot works with architects and if that's different than the standard program approach. In the pilot, the offer of a per square foot incentive is easier to understand and easier for trade allies to install. In forming the pilot, the program analyzed by market and set prescriptive incentives, delivering a checklist where the owner can choose a good, better or best level of efficiency. Overall, the pilot makes being energy efficient easier.

*The board took a lunch break at 11:35 a.m. and resumed at 1:00 p.m.*

## **Energy conservation goals**

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### ***Staff presentation (Fred Gordon & Elaine Prause)***

Elaine previewed the three energy-efficiency questions posed to the board today. The board is asked to determine a goal option, which is the specific amount of savings Energy Trust will seek to achieve, and the strategy for achieving the goal.

1. Which goal option?
2. Which strategy to emphasize or balance all?
3. Does the answer to the second question change the goal selected?

Energy Trust's current strategic plan is about growth, and has so far resulted in doubling energy savings over 2009. Energy Trust focused on customer service and innovation to meet those goals. Going forward, staff expects markets and Energy Trust programs to change by 2019. For example, cost-effectiveness is a challenge today that was not present when the current strategic plan was created. Staff expects Energy Trust to continue to add savings annually in the next five years, but at a slower rate than in the last five years.

The draft strategic plan includes three goal options representing different amounts of risk and savings: a Base Option, a Base Plus New Technology Option that includes the Base Option, and an Expanded Option that includes both the Base Option and New Technology Option. All goals will include continued Integrated Resource Plan, IRP, and utility planning processes.

**The Base Option is 218 aMW and 22 million annual therms**, and includes all known available resources without hedged emerging technologies.

**The Base Plus New Technology Option is 237 aMW and 24 million annual therms**, and includes all known available resources plus hedged estimates of emerging technologies, which adds 8 percent to Base electric savings and 9 percent to Base gas savings. Emerging technologies are primarily LEDs, smart home automation and absorption heat pump water heaters.

**The Expanded Option is 244 aMW and 27.5 million annual therms**, and includes all known available resources, hedged emerging technologies, large opportunities and sustained cost-effectiveness exceptions. Large opportunities are large data centers and industrial megaprojects that were excluded from the resource assessment because they are not predictable sources of savings. The Expanded Option adds 13 percent to Base electric savings and 11 percent to Base gas savings. Extending cost-effectiveness exceptions is an OPUC decision, not an Energy Trust board decision.

In determining goal options, staff determined scenarios bounding uncertainty. The "maximum challenge" scenario includes reduced load growth, less participation and lower avoided costs. This is modeled at 80 percent of Base goal. The "unforeseen opportunity" scenario includes nearly all emerging technologies coming to fruition and no limitations for funding greater than one aMW customers. The three goal options fall in between these two bounds.

Board members recommended that the strategic plan include cumulative energy savings and not characterize high avoided cost as an opportunity or load growth as a challenge. The board also noted that technology innovation can come from other parts of the world.

Board members asked about strategies, and staff presented on the five successful strategies that should be included in the strategic plan: broaden participation, manage total costs of conservation, continuously improve designs, support state and utility climate and load management priorities and invest in development of new technologies. Some of these strategies may conflict and compete for limited resources. Each sector and program may need to emphasize different strategies to achieve goals.

Staff presented two strategic emphases posed to the board today. The first choice is to emphasize **New Technology**, which shifts resources to field testing and refining efficient products and behavioral program strategies to increase available efficiency. The Base goal includes one or two technology pilots with NEEA at any given time. Energy Trust relies on other entities to develop new technologies, for example a Bonneville Power Administration heat pump water heater pilot. New technology development does happen all over the world, but it needs to occur locally to work with the Pacific Northwest climate, culture, equipment and code requirements. New Technology work is adopting technologies, not inventing them. This strategy does not include new product development.

With the New Technology emphasis, Energy Trust would redirect resources from near-term savings acquisition, which would increase risk of falling short of near-term goals. This emphasis may result in high long-term savings, but results are not predictable. Adopting the New Technology emphasis would represent a strategic change for the organization.

The second emphasis option is **Broadening Participation**, which increases commitment to reaching more types of participants not yet reached in large numbers. The Base goal includes serving markets with the largest potential savings. Broadening Participation would address additional markets by geography, ethnicity and income. Adopting a Broadening Participation emphasis would mean resources are redirected from high-volume markets to low-volume markets. Similar to the New Technology emphasis, Broadening Participation would be an investment in long-term savings that may decrease near-term savings. Regardless of emphasis, Energy Trust will strive to achieve annual goals.

### ***Board discussion***

Board members discussed risks associated with the three goal options, and asked about rewards and motivation for taking on additional risk. Staff explained that the Base goal starts at a point of moderate risk and includes innovation in service delivery. The Base Plus New Technology goal includes slightly more risk than the Base goal. The Expanded goal includes more opportunity than staff can identify.

The more risk the organization takes on, the more potential there is for greater gains. There is value in setting an aspirational goal. Setting high goals and failing to meet them might be detrimental. Investing in new technologies will cost more in the near term.

The board asked for examples and outcomes of past choices that Energy Trust identified as new technology. This is a new question for Energy Trust. In the past, staff assumed progressive increases in savings, but never assumed more savings than could be identified. Past new technology changes have occurred in dramatic shifts and have not been predictable.

The board discussed that if Energy Trust's goal is to require all cost-effective conservation, then the Expanded Option will achieve the most conservation. Staff responded that there is uncertainty about how much conservation will be available to achieve. The Expanded Option includes opportunities that cannot be anticipated.

The board considered whether, to be consistent with the Energy Trust mission to acquire all achievable energy conservation, broader participation should take precedence over new technologies. Board members discussed tactics for Broadening Participation. Low-income customers are motivated by different kinds of incentives, such as immediate or ongoing incentives, so Energy Trust should consider creating options for incentives delivery.

Board members asked about the relationship between strategic plan goals and annual IRP targets. Since Energy Trust is held accountable for meeting annual IRP targets and not strategic plan goals,

there might not be any downside to setting an aspirational strategic plan goal. Staff noted that the Base goal aligns with IRP targets, which are conservative estimates and updated every other year. Energy Trust will be accountable to goals that emerge from IRP discussions with utilities. Staff will strive to align annual goals to with strategic plan goals.

Don Jones, Pacific Power, explained how IRP targets are developed through an iterative process with Energy Trust. The Base Plus New Technology goal aligns with Pacific Power's current analysis. Don hopes that there is minimal variance between Energy Trust goals and Pacific Power IRP targets.

Jim Abrahamson, Cascade Natural Gas said the utility relies on Energy Trust to determine IRP targets.

Board members talked about the merits of each goal option. Some board members supported the Base and Base Plus New Technology goals, and were wary of the additional variables in the Expanded goal. Other board members described the positive impacts an achievable goal can have on staff performance and the importance of a visionary goal. Board members cautioned that a goal must be attainable.

Board members questioned the necessity of picking one strategy at the expense of others. Staff responded that the Base goal includes Broadening Participation and New Technology emphasis to a limited extent. Energy Trust is resource and staff constrained, so there must be a choice between near-term acquisition and one of these emphases. Board members recommended that Energy Trust free up resources by shaving costs from proven energy-saving programs.

Board members noted that the continuous improvement strategy allows for each program to apply different strategies. Energy Trust could also broaden participation by changing strategies rather than adopting more expensive strategies. Members noted that efforts to broaden participation should be targeted and may have low return on investment.

Board members asked about using reserves to add resources for focus areas. Staff responded that reserves are not a resource for emphasizing goals.

Jason Eisdorfer, Oregon Public Utility Commission said Energy Trust needs to take into account 111(D), the Environmental Protection Agency's carbon ruling that includes emission reduction targets for Oregon. In creating these targets, the EPA expects Oregon to ramp up savings and then level out. Energy Trust needs to think about priming the pump for future savings acquisition in three to five years. Jason recommended the board consider trading off near-term savings in exchange for growing and sustaining long-term savings as Oregon needs to invest in stable, ongoing energy savings for the future.

Jason responded to board questions, and clarified that Energy Trust is expected to deliver a steady stream of cost-effective energy savings over time, and to balance new technology adoption with short-term energy generation. The board agreed that staff need latitude to make strategy judgments by program and market, and advised staff to pay attention to the upcoming NEEA budget decisions that may impact funding for new technology.

When asked to state a preference between expanding Energy Trust's reach and investing in large, cost-effective projects, Jason responded that acquisition and equity are both important, and Energy Trust's primary directive is to acquire cost-effective energy efficiency. Board members noted that Energy Trust has flexibility on how it acquires savings beyond IRP.

*The board took a break from 3:00 to 3:23 p.m.*

## **Confirm recap of energy conservation goals**

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Margie noted that the draft strategic plan will be updated based on board guidance before it is distributed to the public.

John Volkman led an effort to recap the discussion about goals and strategies. There is confusing terminology because the three goal options do include emerging technology and broadening participation strategies separate from the similarly named emphasis areas. Energy Trust will include a graph in the plan that shows cumulative savings, not just declining resources by year. It is problematic to characterize high avoided costs as positive and reduced load growth as a negative. Board members suggested deriving cost-savings from efficiencies in proven programs. Staff will clarify that climate and load management are not related. 111(D) is a significant external driver that may merit more thought about it as characterized in the plan. The long-term conservation goal should be the total cost-effective “achievable” resource.

The board did not reach agreement that Broadening Participating and New Technology emphases are mutually exclusive and requested clarification to quantify and characterize impacts of risks associated with goals. Staff noted that the choices are not binary. Energy Trust needs to serve rural areas, but can choose to add additional emphasis to increase long-term savings opportunities from underserved customers. These strategy questions are about Energy Trust’s identity and mission.

Board members discussed the Broadening Participation emphasis.

Board members discussed the importance of balancing prescriptive strategies and staff flexibility, noting that the strategic plan should balance definitive direction while leaving room for staff discretion and should empower staff to be tactically nimble at the market and program level.

John Volkman summarized that the board wants nimbleness and flexibility, and wants to emphasize Broadening Participation and New Technology as appropriate in different markets and sectors. This is consistent with the Base goal.

The board discussed goals of 240 aMW and 25 million annual therms.

Board members supported an aspirational goal, and recalled that Energy Trust’s prior aspirational goals were achieved. Low goals result in regional under-investment in energy efficiency. Given a history of credibility and accomplishment, Energy Trust is in a position to push limits. A high goal will help Energy Trust adapt to the changing market.

Staff will revise the strategic plan based on board guidance. Strategy guidance is that Energy Trust stay nimble and flexible to seize unexpected opportunities, and explore both Broadening Participation and New Technologies emphases, but not at the expense of the other strategies.

Staff will modify the plan for review at the July 22 Strategic Plan Committee meeting. The plan will be distributed to all board members prior to the meeting, and members can submit input in writing or attend the meeting.

## **Operations**

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**Staff presentation** (Margie Harris)

Energy Trust's strategy is to hatch new ideas, test them through a small-scale pilot process, learn from testing and then modify offerings based on lessons. This process also applies to internal operations, which include communications, IT, finance, human resources, planning and evaluation. Operations goals help ensure a responsible, transparent, accountable and responsive organization, and are complementary to program goals. Energy Trust already demonstrates operational emphasis through forecasting efforts, program feedback, the IT "agile" approach and marketing success.

The proposed operations goal is to align internal operations and management to support Energy Trust strategic goals and objective, optimize human resources and maintain an effective, open, transparent and accountable business model and structure. Operations strategies include continuous improvement, management review recommendations, establishing metrics and reporting on progress, succession planning and strategic partnerships.

The question before the board is whether a five-year operations goal should be included in the plan, and is this the right goal?

**Board discussion**

Board members agreed that Energy Trust should include an organizational goal in the strategic plan, with the addition of "most efficiently" prior to the word "support."

Should the strategic plan emphasize Energy Trust's reliance on staff expertise to make those real-time decisions? Board members agreed this is implicit in the strategic plan goals and strategies, and can be made more explicit.

**End of day comments and feedback on the day**

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Board members commended colleagues for productive, respectful and engaged discussions. Margie thanked board members for continued support and high engagement, and Debbie thanked staff for supporting the strategic plan and board workshop.

*The board adjourned for the day at 4:40 p.m.*



# Board Strategic Planning Workshop

## Reed College, Portland, Oregon

Saturday, June 14, 2014

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**Board members present:** Rick Applegate, Susan Brodahl, Ken Canon, Melissa Cribbins, Dan Enloe, Roger Hamilton, Mark Kendall, Debbie Kitchin, Alan Meyer, John Reynolds, Anne Root, Dave Slavensky, Warren Cook (ODOE special advisor)

**Board members absent:** Kenneth Mitchell-Phillips, John Savage (OPUC *ex officio*)

**Staff attending:** Margie Harris, Ana Morel, Hannah Hacker, Debbie Menashe, Amber Cole, Steve Lacey, Peter West, Courtney Wilton, Fred Gordon, Elaine Prause, John Volkman, Cheryle Easton

**Others attending:** Nick Viele, *Facilitator* (c3 Strategy), Jim Abrahamson (Cascade Natural Gas), Don Jones Jr. (PacifiCorp), Bob Stull (PECI)

### Welcome & day one recap

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President Debbie Kitchin called the workshop to order at 9:06 a.m. The board commented on the value of the two recap portions of the agenda. The board would like to further discuss the emphasis of increasing participation of customers and trade ally contractors, particularly outside the Portland metro area.

### Reflections on goals & strategies

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#### ***Board discussion and reflection on the operations goal***

The board continued to support the inclusion of an operations goal. The Strategic Planning Committee will examine whether the goal should specifically encourage and give more license to staff to make more tactical, technical, informed decisions with regards to the weighting of the broaden participation or new technology emphasis depending on market and timing. Any changes will be brought to the full board for review.

#### ***Board discussion and reflection on the renewables goal***

The board continued to support the renewables goals and strategies, especially bundling benefits and reducing costs to get the most out of the budget. The board reflected on how to stimulate more innovation and the value of combining energy and non-energy benefits, like water savings, to complete projects. The board reflected how Energy Trust should be part of the conversation in these expansion areas, whether it's inter-agency efforts, authoring white papers or raising awareness of the issue. It's always important to think about commonalities, and combining the efforts around sustainability.

#### ***Board discussion and reflection on emphasis areas***

The board encouraged using resources like an energy use map to target areas for outreach, and asked whether the definition of trade ally should be expanded to include plumbers and welders. The board noted that smaller, rural markets are more expensive for outreach, and staff should look for ways to naturally connect into the community, like working with the local Ace Hardware store, attracting more trade allies and making it easier for more "generalist" contractors in smaller markets to participate in one or multiple programs. They caveated this all with the layer of cost management. The board said there are opportunities to raise awareness of Energy Trust in local communities, from consumers to businesses to contractors, and to help contractors use Energy Trust development funds to market their energy services. One strategy to do so could be regional focused staff. The board

discussed how these markets could benefit from increased collaboration with the area's consumer-owned utility. The board asked how Energy Trust can document its influence throughout the market and tie it back to the goals, including documenting if there is there a "spillover" effect to Energy Trust's work.

Looking at the fifth conservation goal and the renewables goal, the board asked whether there is a way to look at climate policy and load management in a broader sense when there are clearly aligned opportunities that fit within Energy Trust's mission. The board commented the plan needs a more direct link between the climate goal and the strategies.

The board discussed how their desire for broader participation needs to be considered jointly with the cost constraint Energy Trust operates within, and encouraged staff to deploy resources well.

Margie said there is a sweet spot between finding savings in those outer areas and costs. Energy Trust needs to get more from these areas that have been served less.

Fred said that as efficiency margins get smaller, Energy Trust may not be able to be in as many places, in retail transactions in urban and rural, or as visible as savings are achieved through codes and standards. But visibility is important. What is the plug-and-play Energy Trust can give outer areas so programs don't over-interact or for Energy Trust to deliver with lower overhead. The downside is Energy Trust may not be a part of the culture in that community.

In response to a board question on how free ridership plays into the strategies, Fred said Energy Trust's accountability with the OPUC is to get savings from what action Energy Trust influenced, which is found through evaluations. Evaluations are imprecise and they can sideswipe the programs. For example, when a large customer says it would have saved the energy anyway and the program can no longer claim those savings. Energy Trust is helpful in other areas, like codes and standards. Energy Trust needs to evaluate what programs influenced with new technology, like quality, but attribution in the market is getting harder and harder.

The board conveyed its interest in measuring Energy Trust influence and marked the fact that Energy Trust currently evaluates conservatively.

The board commented that when looking out five years, what is a unique, new strategic method Energy Trust hasn't employed in a more planned way? Could one strategy be board ambassadors, not just attending customer ribbon cuttings but talking to city councils and rotary clubs, like the Forest Stewardship Council's an annual roadshow that includes board members?

#### ***Board discussion and reflection on the electric efficiency goal***

The board continued to support the 240 aMW five-year savings goal, noting that Energy Trust still needs to be responsive in real time to changes. It was noted the first efficiency strategy should move down the list and be rephrased in a more positive manner, possibly changing to "maximize value with current resources."

#### ***Board discussion and reflection on the natural gas efficiency goal***

The board revisited the natural gas efficiency goal, posed yesterday as 25 million annual therms. Staff clarified that the Expanded goal option assumed resolution of cost-effectiveness challenges, which still needs to be reviewed in an OPUC docket. Staff said Energy Trust has a much lower probability of achieving the Base Plus New Technology goal even with the best of efforts. Staff recommended revisiting the goal and coming back to the Strategic Planning Committee. The board supported the

approach and that it is important to give good and full regard and analysis to the natural gas efficiency goal.

The board asked how the cost-effectiveness docket may affect strategy. Staff is in the process of drafting a paper on gas cost-effectiveness, which at this point looks stark for wall, floor and duct insulation, which is about 16 percent of the Existing Homes savings. There are some savings impacted in other programs, too. The OPUC is mulling through some options, there are hearings over the summer, and by the end of October it will have a rule. The decision will interact with the budget process.

The board commented that a goal could be set for now and then always amended after adoption if something dramatic changes. Staff mentioned a similar approach was taken when SB 838 passed.

Board confirmed staff will go back and refine the number, which will go to the committee and all board members will receive a copy.

## **Review vision & purpose statements**

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Board discussed and approved the current plan's vision and purpose statements for the upcoming plan.

## **Outreach strategy**

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Amber Cole described the next steps on public and stakeholder outreach around the draft strategic plan. The draft plan won't be released to the public until the Strategic Planning Committee has reviewed it at its July 22 meeting. The draft will be emailed to the full board prior to that meeting on July 15 and all board members are invited to attend. The same document will go to the Conservation Advisory Council and Renewable Energy Advisory Council at the July 23 meetings. It is ideal for the committee to come to resolution on the draft plan at the July 22 meetings to allow for enough public comment time, which would start on July 25 and end August 26. The committee will then see a revised draft at its September 8 meeting and a final draft presented at the October 1 board meeting. .

Outreach strategies include promotion on the Energy Trust website, a webinar, Conservation Advisory Council and Renewable Energy Advisory Council presentations, a strategic utility roundtable and regional meetings. It was clarified that regional meetings scheduled before July 25 will not mention specifics of the draft strategic plan, and will instead surface that Energy Trust has a five-year strategic plan and when and where to provide feedback. Board members are welcome at the regional events, which are in coordination with Pacific Power customer events. Staff will send the board the dates of the regional meetings. The board requested Salem, Eugene and Vancouver be added to the list.

Staff clarified the list of influential will receive a communication when the draft plan is ready for comment.

The board requested the questions posed to the public to gather feedback on the plan be more specific and directional while allowing for open-ended responses. The questions might include how Energy Trust can improve broadening its outreach and venues to do so. Staff will send the questions to the Strategic Planning Committee to review with the revised draft plan. The board asked how staff will set context around the plan to further direct feedback, for example, that Energy Trust operates within a budget even though the strategic plan doesn't include costs. Staff will include a cover letter with the draft plan to set that context. The board encouraged adding Energy Trust's cumulative accomplishments, and the process and outreach already conducted to develop the plan.

## **Summing up**

The board commended Rick on his coordination, leadership, strategic pacing of the committee and engagement with staff.

Warren mentioned the Oregon Department of Energy is completing a future plan that includes energy conservation and efficiency, and it's important to know that plan includes a strategy on coordination with Energy Trust and others. The Oregon Department of Energy programs do not operate in a vacuum; they augment programs and fill voids where other programs don't play. He sees an opportunity to help align things. On the gas side, Warren mentioned the Oregon Department of Energy has different latitude and is working with Energy Trust residential staff on how to support non-cost-effective measures in the tax credit world. When looking at broadening and deepening outreach to those that both organizations serve, there is opportunity to work on both identities together.

## **Next steps & closing remarks**

Margie thanked the board for their involvement and the work they do to steer the organization. She mentioned there is opportunity to get more people aware of the discussions happening at the board retreat and will go back to discuss with staff how to do this.

## **Adjourn**

The workshop adjourned at 11:27 a.m.

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Alan Meyer, Secretary

# Board Decision

## Executive Director Review

July 30, 2014

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### Summary

The Executive Director Review Committee conducted a performance review process for Margie Harris' performance. The results of this performance evaluation process lead them to recommend an increase in compensation.

### Background

The Executive Director Review Committee, including chair Roger Hamilton, John Reynolds, Kenneth Mitchell-Phillips, Susan Brodahl, Debbie Kitchin (*ex officio*) and Dan Enloe (*ex officio* from Compensation Committee) conducted the review process in April and May 2014. Mark Kendall also participated.

Results of a survey of opinions offered to 76 stakeholders, including board members, staff members and external parties reflected very favorable evaluations of Margie's performance in the following categories:

- Leadership
- Managing and Coaching
- Achievement
- Influence
- Succession Planning
- Decision Making
- Communication
- Accountability
- Resource Management
- Initiative
- Teamwork

An evaluation of Margie's performance against her 2013 work plan goals demonstrated that she is performing at a very high level.

Results of a salary survey indicated that Margie's current salary is below market rates of many comparable positions.

### Discussion

Based on both the survey and the committee's evaluation of Margie's performance as outstanding, the committee recommends an increase to Margie's compensation.

The Committee will be working with Margie to develop a work plan for 2014 describing her five major goal targets for the year.

### Recommendation

The Executive Director Review Committee recommends awarding a merit increase of 4.5% and a market adjustment of 4.0% to be awarded effective February 1, 2014.

**RESOLUTION 706**  
**EXECUTIVE DIRECTOR PERFORMANCE REVIEW**

**WHEREAS:**

- 1. Energy Trust's Executive Director Review Committee completed its evaluation of Margie Harris' performance in 2013.**
- 2. The Committee evaluated Margie's performance as outstanding.**
- 3. The Executive Director Review Committee also considered the following in proposing a merit increase resulting from the review:**
  - a. Documented market salary survey information for comparable Executive Director positions**
  - b. Energy Trust's existing salary structure**

**It is therefore RESOLVED:**

**The Board of Directors authorizes a merit award increasing Margie's salary by 8.5% effective February 1, 2014.**

Moved by:

Seconded by:

Vote:

In favor:

Abstained:

Opposed:[list name(s) and, if requested, reason for "no" vote]

**Board Decision**  
**Amending the Policy on Information Submitted**  
**by Utilities, Program Participants, Contractors and Bidders**  
July 30, 2014

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**RESOLUTION 707**

**AMENDING THE POLICY ON INFORMATION SUBMITTED  
BY UTILITIES, PROGRAM PARTICIPANTS, AND BIDDERS**

**WHEREAS:**

1. Energy Trust and its contractors acquire information from utilities, program participants and others. Since 2004, Energy Trust has maintained the Policy on Information Submitted by Utilities, Program Participants, and Bidders, a policy on the use, disclosure, and confidentiality of information (the "Policy").;
2. With regard to the treatment of Energy Trust contracts, the Policy provides that, "except for contracts that concern personnel matters," contracts will not be treated as confidential. Current language provides, though, that for purposes of the Policy, "contract" does not mean "program application materials;"
3. Energy Trust provides incentives through its energy programs through program application materials such as standardized forms and through incentive project funding agreements. Incentive project funding agreements are negotiated agreements, not standardized forms, but they are fundamentally the same in authorizing payments of Energy Trust incentive funding;
4. In the interest of applying the Policy consistently to materials that are fundamentally the same, Energy Trust staff recommends that the Policy be amended to exclude "incentive project funding agreements" in addition to "program application materials" from the definition of contracts for purposes of the Policy; and
5. The Policy Committee supports the suggested amendment and recommends approval through the board's consent agenda.

**It is therefore RESOLVED that the Board of Directors hereby approves amendment of the Policy on Information Submitted by Utilities, Program Participants, Contractors and Bidders as shown in Attachment 1.**

Moved by:

Vote:

In favor:

Opposed:

Seconded by:

Abstained:

## ATTACHMENT 1

### 4.17.000-P

### Policy on Information Submitted by Utilities, Program Participants, Contractors and Bidders

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| History          |         |  |                  |
|------------------|---------|--|------------------|
| Source           | Date    | Action/Notes   | Next Review Date |
| Policy Committee | 5/24/04 | Review and discussion                                  | 8/24/04          |
| Policy Committee | 8/24/04 | Reviewed for board action                              | 9/9/04           |
| Board            | 9/9/04  | Action postponed pending further review and discussion | 9/21/04          |
| Board            | 7/6/05  | Approved (R345)  | 7/08             |
| Board            | 5/9/07  | Amended (R438)   | 5/2010           |
| Board            | 11/7/12 | Amended (R648)   | 11/2015          |

**Purpose:** Energy Trust and its contractors acquire information from utilities, program participants and others. This document establishes Energy Trust policy on collection, use and disclosure of information about program participants. This policy also addresses confidentiality of contracts and bid information. The policy does not apply to information that is in the public domain.

**1. Energy Trust will inform participants of this policy**

Participants in Energy Trust programs will be advised of the contents of this policy by appropriate means (e.g., on program application forms, the Energy Trust web site and oral communications). Energy Trust and its contractors will offer participants a copy of this policy.

**2. Energy Trust protects information provided by utilities**

Utilities provide Energy Trust with information about energy consumers on condition that it is treated confidentially. This information is covered by Oregon Public Utility Commission administrative rules, OAR 860-086-000, et seq., and “information transfer agreements” negotiated with each funding utility. Energy Trust will not afford access to this information to anyone who has not signed a confidentiality agreement consistent with the applicable administrative rules and information transfer agreements. If Energy Trust obtains written, oral (documented electronically or in writing), or electronic consent from an Energy Trust program participant, information relating to such participant is no longer subject to utility confidentiality agreements, and instead is governed by section 3 of this policy.

**3. Energy Trust and those it works with use Participant Information only for Energy Trust purposes**

- A. Definition of Participant Information: “Participant Information” means information obtained from program participants that refers specifically to the participant by name, address, or other personally identifiable characteristics.



- B. Generally. Energy Trust employees, contractors and sub-contractors will use Participant Information only for Energy Trust purposes. Contractors who receive Participant Information from Energy Trust may not disclose it to any other party unless required by law or the other party has by contract or other written agreement agreed to protect such information consistent with this Energy Trust policy. Contractors will consult with their Energy Trust contract manager when in doubt.
- C. Collaborative analysis. Energy Trust analyzes Participant Information and aggregates it with other information to plan, evaluate and report on Energy Trust programs. If consistent with section 3 and if the shared data do not reveal Participant Information, Energy Trust may share such aggregated information with other analysts, recognizing that some of these analysts work for organizations with their own information disclosure policies and requirements.
- D. Using Participant Information in marketing. Before using Participant Information in case studies, brochures, press releases, advertisements, marketing or other publicity material, Energy Trust and/or its contractors will obtain participant approval.
- E. Information provided to government entities
- (1) Energy Trust will treat residential program participant information as confidential. Energy Trust may report individual residential participant information if it does not identify the participant by name, address, telephone or other information that would allow identification of the individual.
  - (2) For non-residential programs, Energy Trust may include the following information in reports to the Bonneville Power Administration, the legislature, the Oregon Public Utility Commission ("OPUC") and other state agencies as necessary to meet Energy Trust responsibilities:
    - participant name
    - city or county of business
    - Energy Trust services or incentive payments provided to the participant, or
    - energy saved or generated as a result of Energy Trust services or incentives.
  - (3) Before providing Participant Information other than information listed in section 3.E(2), Energy Trust will obtain participant approval.
- F. Information provided to utilities. Energy Trust will provide Participant Information to utilities as specified in OAR 860-086-000, which, as of September, 2012, consisted of
- name;
  - service address (including apartment, unit, or suite number);
  - meter number and other point-of-delivery identification numbers;
  - information about efficiency program participation, such as measures installed since the inception of the efficiency programs; and
  - whether an electric customer has agreed to the transfer of its proprietary customer information as a result of its participation in an efficiency program, and the term during which Energy Trust has the right to see it, if applicable.

#### **4. Contracts**

- A. Except for contracts that concern personnel matters, contracts to which Energy Trust is a party will not be treated as confidential. For purposes of this policy “contract” does not mean program application materials or incentive project funding agreements.
- B. If a contract specifically identifies as confidential sensitive business records or financial or commercial information that is not customarily provided to business competitors, Energy Trust will treat such information as confidential. However, Energy Trust may disclose all other information in the contract.
- C. Subject to litigation or other legal disclosure and/or audit requirements, Energy Trust will not disclose information submitted in response to requests for proposals or other solicitations.

#### **5. Audit**

Energy Trust will afford auditors full access to participant information for purposes of audit.

#### **6. Resolving issues**

In the event the OPUC requests from Energy Trust information that a participant has reasonably designated as Confidential Information, Energy Trust will follow the procedure specified in section 3.c of the Grant Agreement between Energy Trust and the OPUC (available at [http://energytrust.org/About/PDF/grant\\_agreement.pdf](http://energytrust.org/About/PDF/grant_agreement.pdf)).

## **Board Decision**

### **Corporate Signing Authorization (Investment Account)**

July 30, 2014

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#### **RESOLUTION 708**

#### **AUTHORIZING APPROVED CASTLEOAK SECURITIES, L.P. ACCOUNT SIGNERS**

#### **WHEREAS:**

1. Energy Trust seeks to open one or more investment accounts with or through CastleOak Securities, L.P. and/or their now or hereafter existing affiliated entities (collectively CastleOak Securities, L.P.) to facilitate and hold funds for the purchase of short term investments consistent with Energy Trust's investment policy.
2. Section 7.3 of the Energy Trust bylaws requires that the board of directors authorize officers or agents to sign all checks, drafts, or orders for the payment of money, notes, or other evidences of indebtedness issued in the name of Energy Trust by way of resolution from time to time ("authorized signers").

#### **It is therefore RESOLVED that,**

1. Energy Trust is hereby authorized and directed to establish and maintain one or more accounts, not including margin accounts, (each, an "Account"), and to engage in any of the transactions hereinafter described, in each case, with or through CastleOak Securities, L.P., through an Account or otherwise, with CastleOak Securities, L.P. acting as principal or agent in such transactions;
2. Energy Trust is hereby authorized and empowered to purchase, hold, finance, pledge, exercise, convert, tender, redeem, exchange, transfer, assign, sell, enter into, write, issue, terminate, amend and otherwise deal and trade, singly or in combination, in the following: any and all forms of securities, evidences of interest, participation, or indebtedness, instruments of any issuer (whether publicly registered or exempt from registration) transactions and investments, including, but not limited to common or preferred stock, scrip, warrants and rights; bills, notes, bonds or debentures of any coupon, (including "zero coupon" or maturity; certificates of deposit, bank notes or deposit notes; commercial paper, money market instruments; listed and/or over-the-counter options, commodities, commodity futures, options on futures (including single stock futures contracts and other securities futures products), transactions in foreign currencies; limited partnership interests and other interests in hedge funds, buyout funds, real estate investment trusts, venture capital funds, private equity funds and private equity investment vehicles; whole mortgage loans, any and all interests and participations in mortgage loans, mortgage-backed and asset backed securities; any kind of derivative investment, and any instrument or interest generally regarded as an investment or hedge, secured or unsecured, or

any transaction, that is similar to any of those described above (including an option with respect to any of them) (each of the foregoing, an “Activity”), provided, however, any Activity authorized hereunder must comply with the Energy Trust investment policy;

3. Subject to all requirements of the Energy Trust investment policy, each of the directors, officers, employees and agents of Energy Trust below (each, an “Authorized Person”) is hereby individually authorized for and on behalf of the Energy Trust by oral, written, electronic or other means to: (1) give to and receive from CastleOak Securities, L.P. oral, written or electronic instructions, confirmations, notices or demands with respect to any Account, Activity or transaction; (2) bind Energy Trust to enter into and perform any transaction or agreement, amendment or modification thereof, relating to any Account, Activity or transaction involving the Energy Trust; (3) pay in cash or by check or by credit or debit card or draft drawn upon the funds of Energy Trust any sums required to be paid in connection with any Account, Activity or transaction; (4) order the transfer of record of any securities, funds or other property to any name and to accept delivery of any securities, funds or other property; (5) direct the sale or exercise of any rights with respect to any securities or other property; (6) agree to any terms or conditions or execute or otherwise assent to any document or agreement affecting any Account, Activity or transaction; (7) endorse any securities or other property in order to pass title thereto (or any interest therein); (8) direct CastleOak Securities, L.P. to surrender any securities or other property for the purpose of effecting any exchange or conversion thereof; (9) appoint any other person or persons to do any and all things which such director, officer, employee or agent of Energy Trust is hereby empowered to do; and (10) generally, take all such action as such director, officer, employee or agent of Energy Trust may deem necessary or desirable to implement or facilitate the trading activities described herein;
4. The following officers or agents of Energy Trust are authorized signers for accounts established and maintained on behalf of Energy Trust with CastleOak Securities, L.P. (the “Authorized Persons”):
  - a. Margie Harris, Executive Director
  - b. Courtney Wilton, Chief Financial Officer
  - c. Peter West, Director of Programs
  - d. Steve Lacey, Director of Operations
  - e. Debbie Goldberg Menashe, General Counsel;
5. The Executive Director is authorized to execute all required documentation to implement this resolution.

Moved by:

Seconded by:

Vote: In favor:

Abstained:

Opposed:

## Briefing Paper

# ICF Existing Buildings Contract Extension

July 22, 2014

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### Summary

Staff proposes to extend the Existing Buildings contract with ICF Resources, LLC (ICF) for one year, through December 31, 2015. This would be the first one-year extension out of a possible three. The executive director may extend the contract for one year if extension criteria are met and the board does not object.

### Background

- The Existing Buildings contract provides technical assistance and financial incentives for existing commercial buildings.
- In December 2012, the board authorized a contract for program management and delivery services through ICF Resources LLC (ICF) with a first-year budget for 2013 of \$7.69 Million. The contract was amended in 2014 to add budget and savings goals consistent with the board-approved 2014 budget and action plan.
- The December 2012 board resolution authorizing this contract also directed staff to report to the board on ICF's progress toward meeting contract extension criteria prior to recommending whether to extend the contract. The contract extension criteria are:
  - Cross-program referrals
  - Project pipeline
  - Innovation
  - Teamwork
  - Satisfactory execution of statement-of-work deliverables

### Discussion

Staff has assessed ICF's performance and determined that ICF has satisfied the requirements for contract extension, through:

1. **Cross-program referrals:** ICF has coordinated program efforts and referred project leads on a weekly basis with Energy Trust New Buildings, Strategic Energy Management, Production Efficiency, Existing Multifamily and Solar Programs, as well as with the Oregon Department of Energy and Clark PUD (Public Utility District).
2. **Project Pipeline:** ICF is performing well in developing a project pipeline in all service territories. As of the end of June 2014 Existing Buildings was forecast to achieve 76% of the stretch goal for electric savings and 78% of the stretch goal for gas savings inclusive of NW Natural Washington.
3. **Innovation:** ICF has staff specifically dedicated to coordinating with Energy Trust to introduce new technologies and strategies to achieve savings. Examples of this innovation include: a small commercial lighting strategy, development of a small/medium business and

direct install initiative that are both aimed to better serve underserved ratepayers in urban and rural settings, lighting buy-down initiatives, new standard and bonus measures added to the program and a focus on niche sectors that can benefit from focused strategy and delivery efforts. ICF was also the first PMC (Project Management Contractor) to go paperless and provide digital archiving, and successfully launched the “Bring Us In” marketing campaign and comprehensive website revisions on behalf of the program.

4. **Teamwork:** ICF has been flexible in meeting Energy Trust’s priorities to provide new initiatives and bonuses, meeting with internal and external stakeholders on a regular basis, representing the program to regional and national organizations, and incorporating planning and evaluation results into program design when they become available.
5. **Deliverables:** ICF has consistently met deadlines for deliverables in their contract, provided monthly reports and improved accuracy of forecasting, managed limited delivery and management budgets, received near perfect scores on all compliance audits and has been responsive to information or data requests on an as needed basis.

After a successful transition of the program from the previous implementer, ICF achieved savings of over 81.5 million kWh and 1.3 million therms in 2013. These savings met 90% of the stretch goal for electric savings and 92% of the stretch goal for gas savings when NW Natural activity in Oregon and Washington and NWN DSM (demand side management) were combined. In addition to these levels of saving achievement, ICF also increased the number of participating Allied Technical Assistance Contractors and Trade Allies by 7 and 24 respectively.

## Next Steps

Staff recommends that the contract with ICF Resources, LLC for delivery of the Existing Buildings program be extended to December 31, 2015, consistent with the 2015 board-approved budget and action plan. If the board does not object, the executive director or her designee is authorized to sign a one-year contract extension.

## Briefing Paper

# CLEAResult Existing Homes Contract Extension

July 30, 2014

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### Summary

Staff proposes to extend the Existing Homes program management contract with CLEAResult Consulting, Inc. (formerly Fluid Market Strategies LLC) for one year, through December 31, 2015. This would be the first one-year extension out of a possible three. The executive director may extend the contract for one year if extension criteria are met and the board does not object.

### Background

- The Existing Homes program provides technical assistance and financial incentives for single-family and manufactured homes.
- In December 2012, the board authorized a program management and delivery services contract beginning January 1, 2013 with a first-year budget of \$7.2 million for Oregon and \$250,000 for Washington services. The contract was amended in 2014 to add budget and savings goals consistent with the board-approved 2014 budget and action plan.
- The December 2012 board resolution also directed staff to report to the board on CLEAResult's progress toward meeting contract extension criteria prior to recommending whether to extend the contract. The contract extension criteria are:
  1. Cross-program referrals
  2. Project pipeline
  3. Innovation
  4. Teamwork
  5. Satisfactory execution of statement of work deliverables

### Discussion

Staff has assessed CLEAResult's performance and notes that first year performance was not optimal, but corrections have been undertaken by both Energy Trust staff and CLEAResult to improve performance. In light of correction efforts, Energy Trust staff reviewed the contract extension criteria and is recommending a one year extension of the CLEAResult program management contract. Before describing the ways in which the extension criteria have been satisfied, a brief summary of the challenges and program responses are summarized below.

- Energy Trust selected CLEAResult based on a request for proposals which requested program design strategies that included a reduced reliance on Energy Saver Kits (ESKs). CLEAResult presented a strong plan to sustain historical savings levels while also shifting program savings reliance away from ESKs and emphasizing core savings (equipment and weatherization) measures. Despite the strong plan and Energy Trust staff support for the approach, the rapid shift in program design strategy did not result in sufficient savings to meet goals, and the program fell short of 2013 conservative savings goals for all utilities. As a result, in February 2014 Energy Trust and CLEAResult developed a Savings Action Plan to achieve savings earlier in the year and renew efforts to deliver ESKs to the market. The

Savings Action Plan has produced results with 2014 program savings well on track to achieve goals.

- CLEAResult's initial launch included an out of state call center resource which did not achieve customer service expectations. Within three months, CLEAResult and Energy Trust worked to relocate the call center to Portland. Currently, the call center meets Energy Trust customer experience and quality performance requirements.
- CLEAResult's program design assumed reliance on Energy Trust's IT systems as the primary tools for customer/ally engagement and measure tracking, a significant shift from the previous program management contractor program design. This shift to use of Energy Trust systems took longer than expected to implement. Process improvements have occurred to improve coordination resulting in successful implementation of many IT projects to benefit the Existing Homes program.

Through each of these challenges, Energy Trust staff has worked closely and effectively with CLEAResult and staff therefore supports extending the CLEAResult program management contract for one year. Staff has assessed CLEAResult's performance, with special acknowledgment of efforts in implementing the Savings Action Plan, and has determined that CLEAResult has satisfied the requirements for contract extension through:

1. **Cross-program referrals:** CLEAResult has done a good job coordinating with the existing multifamily, new homes, residential products, and Energy Trust solar programs—sorting customer participation through marketing collateral, customer triage and call center efforts. CLEAResult's initial management of Existing Homes coincided with the transition of services for small multifamily structures from the Existing Homes to Existing Multifamily program. Staff recognized CLEAResult's leadership in mitigating market confusion and supporting a positive customer experience.
2. **Project pipeline:** As a result of transitioning to CLEAResult as a new Project Management Contractor (PMC), marketing efforts were reduced during Q3 and Q4 of 2012, which resulted in a smaller pipeline of projects as CLEAResult took over the PMC role. The pipeline began to grow in the second half of 2013. In early 2014, CLEAResult established a Savings Action Plan and cultivated a strong pipeline accelerating savings achievement earlier in the year.
3. **Innovation:** CLEAResult has revised program design for reduced program touch points and an increased role for trade allies. CLEAResult has introduced streamlined operational efficiencies through electronic improvements, such as a uniform revised webform and supported Energy Trust in designing a Trade Ally portal permitting the trade ally to self-manage interactions with the program. The Trade Ally portal also reduces delivery costs of trade ally management. In addition to delivery innovation, CLEAResult has supported Energy Trust in developing and adjusting cost-effective measures, and CLEAResult demonstrates a strong competency in measure screening, pilot development, and implementation.
4. **Teamwork:** CLEAResult understands Energy Trust's priorities and cooperates well, supporting new initiatives, incorporating planning and evaluation results into program design, submitting invoices in a timely manner and complying with financial audit principals



and monthly reporting requirements. Coordination on the Savings Action Plan is an example of this teamwork. Additionally the Existing Homes program has cost effectiveness challenges with specific measures within the gas portfolio. The future and design of the gas portion of the program may hinge upon outcomes of a docket at the OPUC. CLEAResult is working closely with Energy Trust staff to monitor the OPUC docket and develop program design enhancements for 2015 as needed in light of cost effectiveness challenges.

5. **Deliverables:** Despite disappointing results for 2013, CLEAResult maintains a strong focus on achieving and documenting its contractual deliverables. They uphold Energy Trust customer experience priorities and comply with established service level agreements and systems use. Importantly, as of the end of May, CLEAResult had achieved 131% to 236% of the anticipated savings levels that were expected by this point, providing confidence about achievement of 2014 savings goals for the Existing Homes program.

## Next Steps

Staff recommends that the contract with CLEAResult Consulting, Inc. for delivery of the Existing Homes program be extended to December 31, 2015, consistent with the 2015 board-approved budget and action plan. If the board does not object, the executive director or her designee is authorized to sign a one-year contract extension.

# **Board Decision**

## **Authorizing Strategic Energy Management Program Delivery Contractors for the Commercial Sector**

July 30, 2014

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### **Summary**

Approve the basic terms of two multi-year agreements to provide Strategic Energy Management program delivery services for Energy Trust's Commercial Sector, and authorize the executive director to execute and amend the contracts to conform to annual board-approved budgets and corresponding action plans.

### **Background**

- Energy Trust's Commercial Strategic Energy Management offering (CSEM) was designed and is managed in-house. Staff has determined it is appropriate at this time to transition from a Commercial Technical Service Provider (CTSP) model for delivering CSEM to utilizing program delivery contractors (PDCs) to perform outreach and delivery functions for CSEM.
- Under the CSEM PDC model, PDC responsibilities will emphasize: stronger accountability for recruitment, savings and quality control; input on program delivery improvements; improved administrative management; and expansion of the customer market.
- CSEM PDCs will play a critical role in engaging with commercial customers through: customer outreach and recruitment, technical and organizational guidance, and program coordination.
- Energy Trust's two current Commercial Technical Service Provider contracts will expire December 31, 2014.
- On June 6, 2014, Energy Trust staff issued a request for qualifications (RFQs) for CSEM PDCs. The selection process is further explained in Appendix 1.
- Energy Trust received nine notices of intent to respond; six responses were submitted.
- A review team comprised of Energy Trust staff and an external reviewer from NEEA reviewed the six responses.
- The review team selected and recommend the following firms to provide CSEM PDC services:
  - HST&V, LLC (DBA: Strategic Energy Group)
  - Triple Point Energy, Inc.

### **Discussion**

- Staff proposes CSEM PDC contracts will initially be for a two-year term, January 1, 2015 through December 31, 2016, with an option to renew for up to three additional one-year time periods. Transition contracts with the proposed PDCs will also be put in place from

September through December, 2014 for training and 2015 recruitment efforts. Neither transition contract is expected to authorize funding in excess of \$500,000.

- Final PDC contract amounts have not yet been determined, pending decisions about PDC service distribution. Final PDC allocation decisions and anticipated 2015 contract amounts and goals will be presented during the November 2014 board meeting as part of initial 2015-2016 budget presentations. We anticipate that each of the CSEM PDC contracts will exceed \$500,000, and therefore require board approval.
- The estimated first-year 2015 budget for delivery of CSEM, from the Board approved 2014-2015 budget, is approximately \$2.5 million dollars, with associated energy savings goals of 16.3 million kWh and 440,000 therms. Final delivery costs and savings goals for 2015 for each of the CSEM PDC contracts will be developed as part of the budget process for 2015-2016.
- After the board adopts the 2015 annual budget and action plan in December 2014, PDC contract amounts and goals will be negotiated with each PDC. Actual contract amounts for each year will be negotiated annually, consistent with each year's board-adopted annual budget. The contracts will refer to expected program incentive costs, but will not include these costs in PDC contract payments. Incentive costs are part of the program's cost, and they are paid by Energy Trust to program participants. Program incentive amounts will also be provided and reviewed as part of the annual budgeting process and ensuing contract amendments.

## **Recommendation**

Authorize the executive director to negotiate and sign contracts with each of the selected firms identified above for CSEM program delivery services by adopting resolution 709.

**RESOLUTION 709  
AUTHORIZE STRATEGIC ENERGY MANAGEMENT  
PROGRAM DELIVERY CONTRACTORS FOR THE COMMERCIAL SECTOR**

**WHEREAS:**

1. With assistance from an outside party, staff has conducted a fair and open procurement process to select two program delivery contractors to deliver the CSEM for the next 2-5 years.
2. The following firms were selected and contract terms are being negotiated:
  - a. HST&V, LLC (DBA: Strategic Energy Group)
  - b. Triple Point Energy, Inc.
3. Staff has estimated a total first-year (2015) budget for these two contracts will be approximately \$2.5 million, including possible performance compensation.
4. Based on current assumptions, staff projects the total program savings for these two contracts will be 16.3 million kWh and 440,000 therms with levelized costs that align with the 2015 board approved budget.

**It is therefore RESOLVED:**

1. Subject to determination of final contract amounts based on the board-approved 2015 budget, the executive director or her designee is authorized to enter into a contract with each of the following firms to deliver the Commercial Strategic Energy Management (CSEM) for an initial term from January 1, 2015, through December 31, 2016:
  - a. HST&V, LLC (DBA: Strategic Energy Group)
  - b. Triple Point Energy, Inc.
2. First-year contract costs and savings goals included in the contracts shall be consistent with the board-approved 2015 budget. Thereafter, the contracts may be amended consistent with the board's annual budget decisions.
3. The final contracts may include a provision allowing staff to offer up to three one-year extensions if the program delivery contractor meets certain established performance criteria.
4. Before extending any of these contracts beyond December 31, 2016, staff will report to the board on the program delivery contractor's progress and staff's recommendation for any additional extension time periods. If the board does not object to the extension, contract terms would remain as approved in the most recent action plans, budgets and contract at the time of extension, and the executive director or her designee is authorized to sign any such contract extensions.

Moved by:

Seconded by:

Vote:

In favor:

Abstained:

Opposed: [list name(s) and, if requested, reason for "no" vote]

## APPENDIX I

Energy Trust of Oregon followed a comprehensive competitive Request-for-Qualifications (RFQ) process.

The RFQ was issued on June 6, 2014, with response due by June 30, 2014. Nine organizations submitted intent to respond forms for the RFQ; six responses were submitted. The process was led by an RFQ review team consisting of five Energy Trust representatives, and one member from NEEA. The review team evaluated on the following overall factors:

1. Solid understanding of Strategic Energy Management (SEM) and SEM or SEM-related program expertise
2. Outreach and sales expertise and understanding of customer barriers
3. Technical expertise and ability to create cost-effective savings methodology and identify realistic results
4. Program and Project Management expertise
5. Capabilities and strategies for expansive Oregon delivery coverage
6. Workshop facilitation experience and creativity of techniques
7. Key personnel, organization structure and rates
8. Sample project staffing plans

Based on this review, the review committee selected three firms for interviews.

The interviews were conducted during the week of July 14th. The interview panel comprised of internal staff and the reviewer from NEEA. After the interviews, two firms were selected to be CSEM Program Delivery Contractors for the Commercial Sector program.

### Distinguishing Characteristics of Selected Respondents

- HST&V, LLC (DBA Strategic Energy Group):
  - Proven success delivering Commercial SEM for Energy Trust
  - Consistent track record of good performance and customer service
  - Demonstrated understanding of the commercial market sector and ability to leverage technical and communication strategies to enhance SEM results
  - Strong recruitment approach
- Triple Point Energy, Inc.:
  - Proven success delivering SEM for Energy Trust (in Industrial capacity)
  - Creativity of delivery techniques and emphasis on customer experience
  - Diversity of staff skill set
  - Exhibited an understanding of commercial market nuances, both from a technical and outreach perspective

# Board Decision

## Authorizing a Transition Services Contract with Ecova, Inc.

July 30, 2014

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### Summary

Authorize the executive director to negotiate and execute a program management contractor transition services contract with Ecova, Inc. (Ecova) to authorize more than \$500,000 in expenditures, which exceeds the executive director's signing authority.

### Discussion

Founded originally in 1997, Ecova was recently acquired by Cofely, an international energy services company owned by a GDF SUEZ. Ecova has provided, and will continue to provide, total energy and sustainability management services to companies throughout North America. Locally, Ecova has worked with NEEA and Energy Trust in a variety of areas, including in connection with Energy Trust's strategic energy management initiatives.

The proposed transition services contract represents a significant investment to support a smooth and seamless transition. This proposed transition services contract includes a higher contract budget than previous transition contracts. Under this proposed contract, transition services would be structured for reduced impact on the market with focus on early training, early IT systems integration, and acceleration of revised delivery strategies for key program components. The following summary highlights key elements of this contract:

#### Ecova will hire staff early

- Ecova Program Managers will be hired to provide oversight of the transition and onboarding process for this program. In the past this role has been filled by PMC transition staff who may not serve on the program following launch.
- Program staff will be hired and trained earlier than in prior contracts. Field and call center representatives will have time to be fully trained prior to assuming delivery activities in 2015.

#### Ecova will integrate systems sooner

- Ecova's data platform will be integrated with and customized to Energy Trust needs in advance of 2015 to run the retail portion of this program starting January 1, 2015. This IT work requires a large portion of the contract budget, but will allow Ecova to bring retailers into the program earlier.

#### Ecova will perform transition activities to be ready to launch certain program elements in Q1 2015

- Retailer outreach and market coordination work will be performed in the transition contract period to prepare for a Q1 launch. Launching significant program changes in Q1 (historically these have been launched in Q2) will allow the program to operate consistently for all of 2015. This approach also avoids the need to train Ecova staff on the current program processes for just one quarter.

Energy Trust staff believes that there is significant benefit in moving up the timeframe for integration and training activities from early 2015 to late 2014. This strategy would increase the transition services contract budget by approximately from \$250,000 as compared to what was presented to the board's Policy Committee in June. However, this increased transition services

budget is expected to result in a reduction to the 2015 PMC delivery budget; in total the earlier investment in transition activities adds very little budget across both years. Energy Trust staff believes that the transition budget as outlined below is a realistic budget for effective integration and onboarding a new PMC.

Table 1: 2014 Transition budget by category

| <b>2014 (August 1 - December 31)</b> |                   |
|--------------------------------------|-------------------|
| Management and Delivery Staff        | \$ 460,374        |
| IT Vendors and Services              | \$ 271,989        |
| Marketing Staff                      | \$ 150,134        |
| ODCs                                 | \$ 79,715         |
| Subcontractors – Earth Advantage     | \$ 13,877         |
| <b>2014 Total</b>                    | <b>\$ 976,090</b> |

## Recommendation

Authorize the executive director or her designee to sign an agreement with Ecova for program management transition services to authorize funding for the agreement to exceed \$500,000.

### RESOLUTION 710 AUTHORIZE THE EXECUTIVE DIRECTOR TO SIGN A TRANSITION CONTRACT WITH ECOVA, INC.

#### WHEREAS:

1. Following a competitive process completed in June 2014, Energy Trust chose Ecova, Inc. (“Ecova”) to provide program management contractor services to deliver its Products program beginning in January 2015.
2. In order to facilitate a smooth and seamless transition between the current program management contract for the Products program to Ecova, Energy Trust seeks to engage Ecova to provide specific and significant transition services, including, but not limited to, onboarding and training program delivery staff, integrating IT systems, and beginning preparations for the launch of key program elements in January 2015.
3. To accomplish these services, Energy Trust proposes to enter into an agreement with Ecova through December 31, 2014, and to authorize contract funding in amounts not to exceed \$976,090.

#### It is therefore RESOLVED:

That the Board of Directors of Energy Trust of Oregon, Inc., hereby authorizes the executive director or her designee to sign a contract with Ecova for transition services through December 2014 and to authorize expenditures for such services in amounts not to exceed \$976,090.

Moved by:

Seconded by:

Vote:

In favor:

Abstained:

Opposed:[list name(s) and, if requested, reason for "no" vote]

# Authorizing a Program Management Contract for the Products program

July 30, 2014

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## Summary

Approve the basic terms for a a contract for program management services for Energy Trust's Products program. It is anticipated that the contract will be structured with an initial term of two years, with the potential for one-year performance-based extensions thereafter and a total contract duration not to exceed five years.

## Background

- In March 2014, Energy Trust staff issued a request for proposals (RFP) for a Program Management Contractors (PMCs) to deliver for one or both of Energy Trust's New Homes program and Products program.
- Energy Trust received five intent to respond notifications to the RFP for the Products PMC services. Ultimately, three proposals were submitted in response to the RFP for the Products program. A review team comprised of Energy Trust staff and external reviewers from Bonneville Power Administration (BPA) and Northwest Energy Efficiency Alliance (NEEA) reviewed the proposals, and agreed that two of the Products program proposals warranted oral interviews and scoring.
- After oral presentations and written responses to follow-up questions, the review committee selected Ecova, Inc. (Ecova) to recommend to the board to deliver PMC services for the Products program based on the strength of its proposal and interview. The selection process and criteria are further explained in Appendix 1.

## Discussion

Founded originally in 1997, Ecova was recently acquired by Cofely, an international energy services company owned by a GDF SUEZ. Ecova has provided, and will continue to provide, total energy and sustainability management services to companies throughout North America. Locally, Ecova has worked with NEEA and Energy Trust in a variety of areas, including in connection with Energy Trust's strategic energy management initiatives.

In delivering energy efficiency programs for utilities, Ecova's provides services in the following areas:

- Lighting, appliances and consumer electronics
- Customer engagement, audit/direct install and smart grid solutions for single-family and multifamily customers
- Strategic energy management and technology programs
- Pilot program design and implementation, planning studies

Ecova's proposal in response to the Products program RFP exhibited the following strengths.

### Competitive price and savings

- Ecova proposed an equivalent level of savings at a significantly lower levelized cost than the other scored proposal.
- As proposed, Ecova's delivery budget for 2015 would be \$1.2 million less than the 2014 delivery budget for the current Products program PMC.
- Ecova's savings strategies are realistic and actionable. The proposal relies on measures, and quantities of measures, which are backed by Ecova's experience, a good understanding of market potential and current market conditions in the Northwest.



National expertise and pre-existing retailer and manufacturer relationships

- Ecova is currently running 14 other retail programs in the nation and will leverage their experience in these programs.
- Ecova's business model brings established manufacturer and retailer relationships which should allow for a smooth transition. Umbrella contracts with large retail chains will allow for a quick on-boarding process for many stores in our territory.

Data driven strategy with strong existing infrastructure.

- Ecova's IT platform allows flexibility and transparency in program operations.
- Ecova's IT platform and program design allows efficient and prompt data feedback which enables quick changes in program design.
- Ecova's IT platform allows for faster turnaround of sales data increasing administrative efficiencies and faster acquisition of savings.

Reach to rural populations.

- Ecova proposed a varied incentive structure utilizing price point regression analysis for lighting which allows the program to increase the breadth of retail locations that the program engages with. Current retail lighting incentives are frequently too low for thrift retailers such as Goodwill, Dollar tree, as well as small grocery, and small hardware stores to participate. Expanding the program to include these stores is a key strategy to serving rural markets and reaching underserved customers.
- Ecova will work with Techniart, an online and pop-up mobile retailer, to promote awareness or provide Energy Trust offers in more remote areas of the service territory not served extensively by other retailers.

Single field service team

- Ecova's proposal includes a unified field service team of six (6) full time equivalent employees that will be able to cohesively represent the Energy Trust Products program. The current model has three different organizations providing these services.

## Recommendation

Authorize the executive director or her designee to negotiate and sign a PMC contract with Ecova, Inc. to deliver Products program management services by adopting resolution 711, below.

### RESOLUTION 711

#### AUTHORIZING A PROGRAM MANAGEMENT CONTRACT FOR THE PRODUCTS PROGRAM

##### WHEREAS:

1. With assistance from a selection committee including outside parties, staff has conducted a fair and open procurement process to select a program management contractor to manage the Energy Trust Products program for the next 2-5 years;
2. Ecova, Inc. was selected and contract terms are being negotiated;
3. Staff has assumed and estimated a total first-year program management budget for 2015, including first-year incentives, contracted delivery, performance compensation and program transition

contingency funds of approximately \$13,090,000, which includes approximately \$3.18 million in delivery, possible performance compensation, and \$9.91 million in incentives; and

4. Actual program savings and costs will be reviewed by the Energy Trust board as part of the annual budget and action plan process, but based on current assumptions, Energy Trust staff projects the following program savings and fully-loaded costs in 2015:

|                        | Electric              | Gas                   |
|------------------------|-----------------------|-----------------------|
| <b>Savings</b>         | <b>69,508,108 kWh</b> | <b>230,913 therms</b> |
| <b>\$/Unit Savings</b> | <b>\$0.185/kWh</b>    | <b>\$1.73/therm</b>   |
| <b>Levelized Cost</b>  | <b>\$0.030/kWh</b>    | <b>\$0.23/therm</b>   |

It is therefore **RESOLVED**:

1. Subject to determination of a final contract amount based on the board-approved 2015 budget, the executive director or her designee is authorized to enter into a contract with Ecova, Inc. to manage the Products program for an initial term from January 1, 2015 through December 31, 2016.
2. First-year contract costs and savings goals included in the contract shall be consistent with the board-approved 2015 budget and two-year action plan. Thereafter, the contract(s) may be amended consistent with the board's annual budget and action plan decisions and the executive director or her designee is authorized to sign any such contract amendments.
3. The final contract may include a provision allowing staff to offer one-year extensions beyond the initial term if the program management contractor meets certain established performance criteria. In no event would the total term of the contract plus any extension periods exceed five years.
4. Before extending this contract beyond the initial term, staff will report to the board on the program management contractor's progress and staff's recommendation for any additional extension time periods. If the board does not object to extension, contract terms would remain as approved in the most recent action plans, budgets and contract at the time of extension, and the executive director is authorized to sign any such contract extensions.

Moved by:

Seconded by:

Vote:

In favor:

Abstained:

Opposed:[list name(s) and, if requested, reason for "no" vote]

## APPENDIX I

### Energy Trust of Oregon Program Management Contractor Selection

Energy Trust of Oregon followed a comprehensive competitive Request-for-Proposal (RFP) process. The RFP was structured so that respondents could submit proposals to provide one or both of Energy Trust's New Homes program and Products program.

Five organizations submitted intent to respond forms for the Products program. The process was led by an RFP review team consisting of five voting members and six non-voting members. The voting team consisted of three Energy Trust representatives, one member from the Northwest Energy Efficiency Alliance and one member from the Bonneville Power Authority. The non-voting team consisted of six Energy Trust representatives from across the organization. The review team considered, evaluated and numerically scored the proposal on four overall major factors:

1. Strength of the Proposal (20%) - Considerations included: strength of the approach; responsiveness to the specific objectives; creativity in solving problems; creating and leveraging market opportunities; and ability to collaborate with other Energy Trust programs in order to provide seamless customer service.
2. Creativity and Innovation (25%): New concepts brought to present operations that will address Energy Trust priorities, leverage market opportunities and address present challenges.
3. Strength & Cohesiveness of Program Management Team (25%) – Proposals were evaluated based on demonstrated management experience and technical capability to address the many issues in this RFP for the design, implementation, marketing/outreach and management of the program. Subcontracting to provide expertise for specific program management tasks, such as outreach and delivery to specific market sectors, was encouraged and the successful respondent will demonstrate how it will work cohesively and efficiently to perform various aspects of program administration.
4. Cost and Savings (30%) - Proposals were evaluated based on the Proportion of the total implementation and delivery budget as compared to the incentive budget. Considerations include:  
(i) Labor rates for management and program activity, and reasonableness and credibility of each cost elements will be examined. Proposals will be penalized for underestimating costs factors to reduce the bid amount. Proposals will also be evaluated based on the proposed savings goals.

# **Board Decision**

## **Authorizing a Program Management Contract for the New Homes Program in Oregon**

July 30, 2014

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### **Summary**

Approve the basic terms for a contract for program management services for Energy Trust's New Homes program in Oregon. It is anticipated that the contract will be structured with an initial term of two years, with the potential for one-year performance-based extensions thereafter and a total contract duration not to exceed five years.

### **Background**

- In March 2014, Energy Trust staff issued a request for proposals for Program Management Contractors (PMCs) to deliver services for one or both of Energy Trust's New Homes program and New Products program.
- Portland Energy Conservation, Inc. (PECI) is the current PMC for both programs, the New Homes and Products programs, and has managed these programs for Energy Trust since 2004. In response to the recent RFP, three companies, including PECO, submitted intent to respond notifications for a proposal for the New Homes program. Of those three, one did not submit a proposal and two elected to team together with PECO.
- A review team comprised of Energy Trust staff and an external reviewer from Northwest Energy Efficiency Alliance (NEEA) reviewed the PECO New Homes proposal and attended an oral presentation by PECO. All members of the review team had a very favorable opinion of the PECO New Homes proposal and recommended moving forward with a contract for program management contractor services. The selection process and criteria are further explained in Appendix 1.

### **Discussion**

PECO's response embodied a continuation and enhancement of the strong performance they have brought to the program as the current program management contractor. The following is a summary of the additional value their proposal would bring to the current New Homes program.

- Delivering a number of new program enhancements while continuing to grow the number of participating EPS (Energy Performance Score) homes, with only a small increase in delivery costs of approximately \$275,000.
- Expanding EPS into newly constructed low rise multi-family housing resulting in an estimated doubling of electric savings in 2015 from previous years.
- Increasing focus on major remodels, leveraging the value proposition of EPS at time of sale.
- Expanding work with affordable homes builders including Habitat for Humanity and community action agencies.
- Achieving aggressive, yet attainable goals for EPS market share of new homes increasing to 27% by 2017 (40% when including standalone measures).
- Teaming with Earth Advantage Institute to expand work with large developers, lenders, real estate agents, and appraisers.
- Launching a number of new creative marketing concepts including gift baskets (energy saver kits) for new EPS homeowners and a campaign to encourage builders to donate incentives to Habitat for Humanity.
- Conducting a home energy monitoring pilot.

## Recommendation

Authorize the executive director or her designee to negotiate and sign a PMC contract with Portland Energy Conservation, Inc. to deliver New Homes program management services by adopting resolution 712, below.

### RESOLUTION 712 AUTHORIZING A PROGRAM MANAGEMENT CONTRACT FOR THE NEW HOMES HOMES PROGRAM

#### WHEREAS:

1. With assistance from a selection committee including an outside party, staff has conducted a fair and open procurement process to select a program management contractor to manage New Homes program services for Oregon for the next 2-5 years;
2. Portland Energy Conservation, Inc. (PECI) was selected and contract terms are being negotiated;
3. Staff has assumed and estimated a total first-year program management budget for 2015, including first-year incentives, contracted delivery, and possible performance compensation of approximately \$6.45 million, which includes approximately \$2.7 million in delivery, \$3.75 million in incentives for Oregon services; and
4. Actual savings and costs will be reviewed by the Energy Trust board as part of the annual budget and action plan process, but based on current assumptions, Energy Trust staff projects the following program savings and fully-loaded costs in 2015:

|                        | Electric             | Gas*                  |
|------------------------|----------------------|-----------------------|
| <b>Savings</b>         | <b>2,922,000 kWh</b> | <b>349,000 therms</b> |
| <b>\$/Unit Savings</b> | <b>\$0.928/kWh</b>   | <b>\$10.70/therm</b>  |
| <b>Levelized Cost</b>  | <b>\$0.067/kWh</b>   | <b>\$0.647/therm</b>  |

\* Gas savings do not include the Market Transformation savings. If these were included the savings and levelized cost would improve significantly.

#### It is therefore RESOLVED:

1. Subject to determination of a final contract amount based on the board-approved 2015 budget, the executive director or her designee is authorized to enter into a contract with PECO to manage the New Homes program for an initial term from January 1, 2015 through December 31, 2016.
2. First-year contract costs and savings goals included in the contracts shall be consistent with the board-approved 2015 budget and two-year action plan. Thereafter, the contract(s) may be amended consistent with the board's annual budget and action plan decisions and the executive

**director or her designee is authorized to sign any such contract amendments.**

- 3. The final contract may include a provision allowing staff to offer one-year extensions beyond the initial term if the program management contractor meets certain established performance criteria. In no event would the total term of the contract plus any extension periods exceed five years.**
- 4. Before extending this contract beyond the initial term, staff will report to the board on the program management contractor's progress and staff's recommendation for any additional extension time periods. If the board does not object to extension, contract terms would remain as approved in the most recent action plans, budgets and contract at the time of extension, and the executive director or her designee is authorized to sign any such contract extensions.**

Moved by:

Seconded by:

Vote:

In favor:

Abstained:

Opposed:[list name(s) and, if requested, reason for "no" vote]

## **APPENDIX I**

### **Energy Trust of Oregon Program Management Contractor Selection**

Energy Trust of Oregon followed a comprehensive competitive Request-for-Proposal (RFP) process. The RFP was structured so that respondents could submit proposals to provide one or both of Energy Trust's New Homes program and Products program.

Three organizations submitted an intent to respond forms for the New Homes program RFP. The process was led by an RFP review team consisting of seven Energy Trust representatives and one member from the Northwest Energy Efficiency Alliance (NEEA). The review team considered and qualitatively evaluated the proposal on four overall major factors:

1. **Strength of the Proposal** - Considerations included: strength of the approach; responsiveness to the specific objectives; creativity in solving problems; creating and leveraging market opportunities; and the ability to collaborate with other Energy Trust programs in order to provide seamless customer service.
2. **Creativity and Innovation** - New concepts brought to present operations that will address Energy Trust priorities, leverage market opportunities and address present challenges.
3. **Strength & Cohesiveness of Program Management Team** – Proposals were evaluated based on demonstrated management experience and technical capability to address the many issues in this RFP for the design, implementation, marketing/outreach and management of the program. Subcontracting to provide expertise for specific program management tasks, such as outreach and delivery to specific market sectors, was encouraged and the successful respondent was to demonstrate how it would work cohesively and efficiently to perform various aspects of program administration.
4. **Cost and Savings** - Proposals were evaluated based on the Proportion of the total implementation and delivery budget as compared to the incentive budget. Considerations included: (i) Labor rates for management and program activity, and reasonableness and credibility of each cost elements were examined. Proposals were penalized for underestimating cost factors to reduce the bid amount. Proposals were also evaluated based on the proposed savings goals.

# Board Decision

## Authorizing a 2015-2019 Funding Commitment to the Northwest Energy Efficiency Alliance

July 30, 2014

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### Summary

Authorize the executive director to negotiate and execute a five-year contractual commitment to fund the Northwest Energy Efficiency Alliance (NEEA) 2015-2019 business plan in an amount up to \$34,000,000 to acquire an estimated 29.2 average megawatts (aMW) of electricity savings, pursue regional market transformation activities, and secure related benefits for Oregon utility customers.

### Background

- Since our inception, Energy Trust has supported and relied upon NEEA as the premier source of market transformation activities and electric energy savings benefitting over 140 Pacific Northwest utilities and their respective 12 million customers.
- As the second largest funder, Energy Trust represents approximately 20% of NEEA's total budget.
- Through 2013, NEEA has delivered approximately 89 aMW in savings for Energy Trust, approximately 21.5% of Energy Trust cumulative savings.
- During the last two years, NEEA developed new Strategic and Business Plans to guide the next five-year period of investment. As a NEEA board member representing Energy Trust and our utility partners, Margie Harris has been actively involved in the development of both plans.
- As articulated in its Strategic and Business Plans, NEEA is guided by two interdependent goals, which Energy Trust seeks to support and leverage:
  - Fill the energy efficiency pipeline with new products, services, and approaches; and,
  - Create market conditions that will accelerate and sustain the market adoption of emerging energy efficiency products, services and practices.
- Energy Trust staff support the execution of this contract.

### Discussion

- Energy Trust supports and seeks to continue its membership and engagement with NEEA as the regional Alliance of more than 140 Northwest utilities and the Bonneville Power Administration, pursuing market transformation benefits on behalf of the region.
- Continued collaborative investment in NEEA enables resources to be pooled and leveraged across the region, maximizing opportunities and benefits of market changes while minimizing risks.
- Energy Trust's own draft strategic plan identifies the need to expand focus on emerging technologies, an area of NEEA expertise and a significant strategy to meet our future savings acquisition goals through new products, services and opportunities.
- NEEA's planned investments also support ongoing development of highly energy efficient codes and standards, and the delivery of education, training, marketing and other services best conducted at a regional level.

- To pursue activities and achieve results identified in its Strategic and Business Plans for the 2015-2019 funding cycle, NEEA is seeking to secure five-year contractual commitments from its funders by October 1, 2014.
- NEEA requests a five-year, \$33,996,442 commitment from Energy Trust, an amount less than provided in the prior five-year funding cycle, averaging approximately \$6.8 million/year compared to \$8 million/year.
- The new Business Plan proposes to acquire 145 aMW in regional savings from market transformation investments over five years at a projected cost of no more than 3.5 cents/kWh. Of this amount, approximately 29.2 aMW are anticipated as Energy Trust savings.
- The cost of savings to be acquired is slightly higher than past NEEA investments of approximately 2-3 cents/kWh yet well within minimum OPUC performance measures for Energy Trust. The increase can be attributed to a decline in opportunities for large scale consumer product initiatives with significant energy savings combined with infrastructure investments to support local utility programs.
- Execution of this five-year contract requires formal notification to the Oregon Public Utility Commission.
- Energy Trust staff support the NEEA Strategic and Business Plans and the corresponding funding request. Staff regards NEEA investments as critical to the achievement of Energy Trust savings goals over the next five years, knowing such savings will continue to deliver benefits to utilities and customers we represent well beyond this time period.

## **Recommendation**

Authorize the executive director or her designee to sign a contract authorizing expenditure of up to \$34,000,000 to acquire 29.2 aMW of electric savings during the period 2015-2019, contingent on successful contract negotiation consistent with the resolution, below.



**RESOLUTION 713  
AUTHORIZING A 2015-2019 FUNDING COMMITMENT  
TO THE NORTHWEST ENERGY EFFICIENCY ALLIANCE**

**WHEREAS:**

1. The Northwest Energy Efficiency Alliance (NEEA) remains the premier regional market transformation organization and Energy Trust contractor since our inception.
2. Historically, Energy Trust has contributed approximately 17% of NEEA's budget and derived approximately 17% of NEEA's energy savings.
3. Through 2013, Energy Trust has acquired approximately 89 aMW of savings attributable to NEEA, representing approximately 21.5% of total Energy Trust savings for that period.
4. The NEEA board has adopted a new Strategic Plan and Business Plan and is seeking corresponding commitments for the period 2015-2019 funding cycle.
5. The proposed new NEEA budget estimates Energy Trust funding share at slightly over 20%.
6. The NEEA Business Plan targets acquisition of 145 aMW in regional energy savings over five years at a projected cost of no more than 3.5 cents/kWh. Of this, approximately 29.2 aMW would be allocated to Energy Trust.
7. Planned NEEA savings acquisition compare favorably to costs projected from other Energy Trust programs and also comply with minimum OPUC performance measures established for Energy Trust.
8. The NEEA Business Plan prioritizes regional coordination and collaboration to accelerate development of emerging energy efficiency technologies, a critical strategy identified in Energy Trust's own strategic planning process.
9. Staff regards NEEA's work as essential to achieving Energy Trust savings goals over the next few years, helping ensure a full pipeline of efficiency projects to deliver long-term benefits to Oregon and the region.

**It is therefore RESOLVED:**

1. The executive director or her designee is authorized to negotiate and sign a five-year contract with NEEA authorizing funding of up to \$34,000,000 to acquire 29.2 aMW of electric energy savings.
2. Funding shall be consistent with Energy Trust's board-approved annual budgets and two-year action plans.

Moved by:

Seconded by:

Vote:

In favor:

Abstained:

Opposed:[list name(s) and, if requested, reason for "no" vote]

# Evaluation Committee Meeting

June 3, 2014 12:00 pm - 3:00 pm

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## Attendees

### Evaluation Committee Members

Alan Meyer, Board Member, Committee Chair  
Mark Kendall, Board Member  
Susan Brodahl, Board Member  
Ken Mitchell-Phillips, Board Member (phone)  
Ken Keating, Expert Outside Reviewer

### Energy Trust Staff

Steve Lacey, Director of Operations  
Fred Gordon, Director of Planning and Evaluation  
Phil Degens, Evaluation Manager  
Erika Kociolek, Evaluation Project Manager  
Dan Rubado, Evaluation Project Manager  
Belinda Judelman, Evaluation Intern  
Spencer Haley, Data Analyst  
Elaine Prause, Sr. Manager, Planning  
Ted Light, Sr. Planning Project Manager  
Adam Shick, Planning Project Manager  
Paul Sklar, Planning Engineer  
Jackie Goss, Planning Engineer  
Amber Cole, Director of Communications and Customer Service  
Sue Fletcher, Sr. Manager, Communications and Customer Service  
Oliver Kesting, Commercial Sector Lead  
Spencer Moersfelder, Sr. Program Manager, Existing Buildings  
Scott Swearingen, Program Manager, Multifamily  
Kathleen Belkhat, Project Manager, Commercial  
Marshall Johnson, Program Manager, Existing Homes  
Matt Braman, Sr. Program Manager, New Homes and Products  
Kim Crossman, Industry and Agriculture Sector Lead  
JP Batmale, Industrial Program Manager  
Athena Petty, Industrial Project Manager

### Other Attendees

William Ranes – CLEAResult  
Andrea Crosby – CLEAResult  
John Czarowski – CLEAResult  
Sheryl Bunn – CLEAResult  
Christopher Frye - NEEA

## 1. 2013 Fast Feedback Results

Presented by Erika Kociolek

Background: Fast Feedback is a short phone survey of participants about a month after they receive their incentive check. We ask participants about satisfaction, investment decisions, use of tax credits (if applicable), suggestions for program changes, and any program “pet

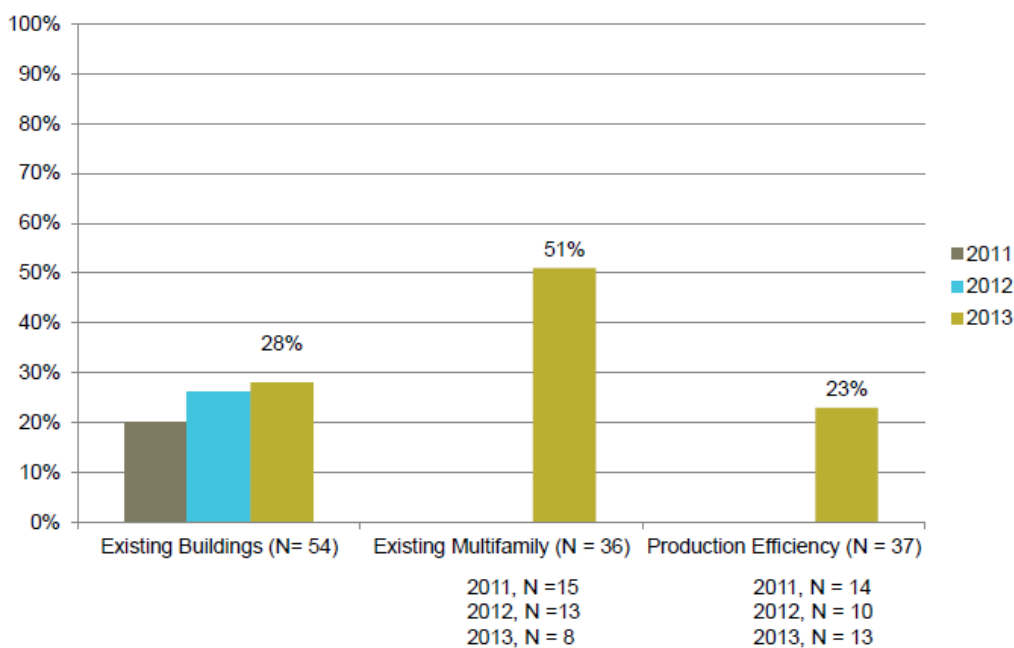
questions.” We try to structure the survey quotas so that we get representative samples with 90% confidence and 10% precision. Open ended comments from Fast Feedback are provided to programs on a monthly basis. A quarterly summary of results is distributed internally, and some of these results are reported to the OPUC in quarterly reports. Annual results are public. Data from Fast Feedback feed into OPUC performance metrics for satisfaction.

In 2013, there were just under 500 completed surveys with non-residential participants and just over 2,800 surveys with residential participants.

Non-Residential Results: There are many data points we could discuss, but for this presentation, we will focus on overall satisfaction and free ridership. We now have three years of data (2011-2013) so we can compare results over time. Overall satisfaction was very high across the board and over time; above 90% consistently. It is worth noting that there were few surveys completed for Existing Buildings – Washington, so the numbers fluctuate more.

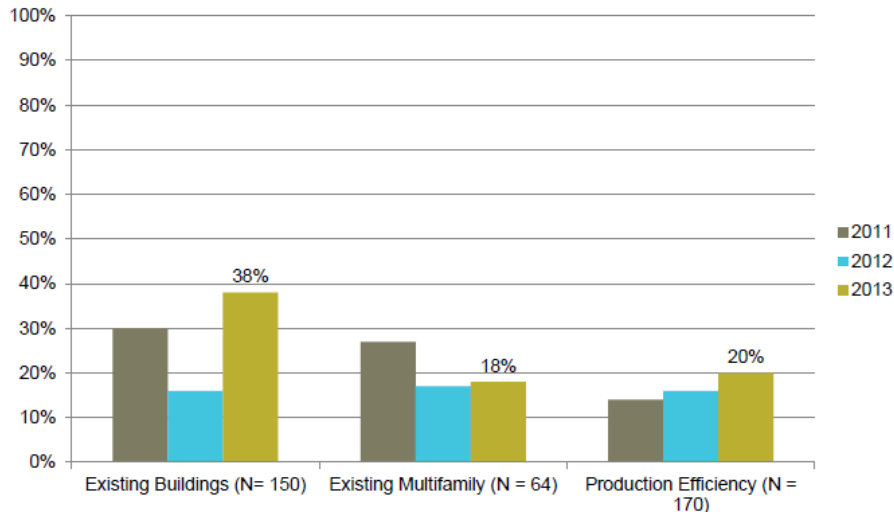
We have discussed the free ridership calculation at the last few evaluation committee meetings, and the numbers shown below are calculated using the methodology approved at the last meeting. Looking first at gas free ridership, Existing Buildings free ridership has gone up slightly over time. For Multifamily and Production Efficiency, we combined projects from 2011, 2012, and 2013 to achieve a sufficient sample size. For Multifamily, the free ridership rate was quite high (51%). Two large projects (one in 2012, and one in 2013) strongly influenced this result.

#### 2013 non-residential gas free ridership



On the electric side, free ridership was up for Existing Buildings in 2013. This result was also influenced by large projects (three in particular in Q4 2013). Electric free ridership was fairly consistent for Multifamily and Production Efficiency. Phil mentioned that these free ridership numbers have implications for True-Up and will affect Energy Trust's reportable savings.

## 2013 non-residential electric free ridership



Alan asked if this information is also collected in program evaluations. Phil responded that, no, it is now just collected in Fast Feedback. The exception to this is the New Buildings program; we no longer survey New Buildings participants through Fast Feedback.

Spencer mentioned that after getting these results, he saw that there were three projects that heavily influenced the 2013 results for Existing Buildings. The program wants to know if they can oversample to get a more representative sample for larger projects, however, there is an issue with changing methods part way through the year and with sampling fatigue from a small group of customers.

Ken said whether we are accurately measuring our influence on projects is one question and whether we have a representative sample of large customers is another. We have to decide ahead of time if sample sizes are good enough and not decide after the fact that we think the results are skewed. Ken then asked whether we applied a finite population correction factor which improves the statistical significance of small samples when they represent a high proportion of the total population. Phil said that no, we have not done that, because there are other screens that we add when selecting the sample. Ken recommended that we use this correction factor in all cases where we have small population sizes.

Fred asked if we sample a larger proportion of large customers. Erika responded that we have quotas but they are not based on customer size – they are based on program tracks (the custom track is where most of the large projects fall and this is limited to 1/3 of the sample for Existing Buildings and Production Efficiency). Phil added that results are weighted by savings.

Susan commented that the sample was skewed because we are not asking questions of folks that did not participate that were making similar decisions. Phil said that economists define free riders differently from the utility industry and we just assume that people are telling the truth when we ask them about the program's influence. Mark said that market is acclimated to using Energy Trust incentives and taking our money because it makes good business sense so the impact of the money may not be as apparent to them.

Oliver said that the sample is 184 for Existing Buildings in 2013 and that three sites influenced

the free ridership rate. Phil said that yes, that is the case, but the way that sampling works is one occasionally gets something outside the normal range if enough samples are drawn. Over time it should level out, so we should not be hasty and just wait and see what happens. Susan asked if we use an average over time when we use the numbers in True-Up and forecasting. Phil clarified that we do. [We use a three-year average for the purposes of forecasting, but we will true-up savings for a given year based on the free ridership rate estimated using the recently revised free ridership methodology.] Oliver asked what the weighted rolling average will be for 2015 forecasting. Adam responded that it has not been calculated yet.

Residential Results: Satisfaction with Existing Homes measures is fairly high across the board, between 80% and 95%. There was a drop in satisfaction with wall insulation in 2013; the reason for this is not known. Ken said in general the message is that people were happy. Erika continued that there is no overall change in trends. Satisfaction for Products measures was relatively stable as well.

Free ridership has been inching up for most measures over time. Alan asked Ken how free ridership rates of over 40% are viewed. Ken responded that we need to look at how we spend next years' dollars at this point and look at reasons for spending the money on these things. However, we are not up at 70% or 80% at which point we would want to rethink whether the money is being effectively spent. There are still changes being made in the market, such as improved installation quality and a majority of customers are still influenced by the program. Fred said some of these high free rider rates are okay and others seriously impact the cost-effectiveness of the measures. Any self-attribution in a survey or opinion of what people would have done in retrospect is flawed. While we have no perfect method, we still need to show that we are creating value by being out in the market and the Fast Feedback survey is the way that we do that.

Efficient Home Products free ridership was aligned with past years, and satisfaction for solar participants was very high across the board. Overall, Energy Trust achieved 93% overall satisfaction across all programs and 97% satisfaction with program representatives.

Next Steps: Evaluation staff will investigate if it is possible to increase the number of completed surveys for Existing Buildings and Production Efficiency in future surveys. This can't be done for Multifamily because we are essentially surveying everyone we can without talking to participants more than once per year. Staff also will go back and compare the size and type of surveyed projects to the population to assess the representativeness of the samples. On the residential side, we will analyze satisfaction by contractor and look at trends over time in verbatim comments. Finally, because non-residential free rider rates are weighted by savings, it can be difficult to determine what's driving trends in free ridership. We want to look at whether there are trends in the influence or "would they have done it anyway" questions that are driving trends in overall free ridership.

Oliver asked about the population adjustment and whether we want to do that. Ken said that for commercial solar we did not achieve significance with small sample but we still reported them. In cases where we can take credit, we should apply the finite population correction factor so that we feel more assured about the answers. Phil said it doesn't change the numbers but just the error associated with them. Numbers are presented whether or not they are significant, but we tell people not to just take them and run with them. However, Ken said that with small populations, the numbers may be significant. Alan asked about changes in efficiency levels for windows and how it might impact free riders. Fred answered that we look at market share in some cases like windows to get additional information about what level of efficiency products

are out in the market and what choices are influenced by Energy Trust. Ken said that Fred's point is that you take data from more than one source. Some distributors may not even carry certain efficiency tiers and we can't ask consumers about decisions they didn't even make.

Oliver asked what the next step titled "influence vs. 'would have done it anyway'" means. Erika clarified that non-residential free ridership is calculated based on responses to three questions. We want to look at whether there are trends in responses to these questions (that make up the overall rate) that can help us explain trends in the overall rate. Mark asked if we track how many people look at Fast Feedback on the website. Amber said we track web statistics but have not specifically looked at that.

## 2. Gas Fireplace Studies

Presented by Elaine Prause and Erika Kociolek

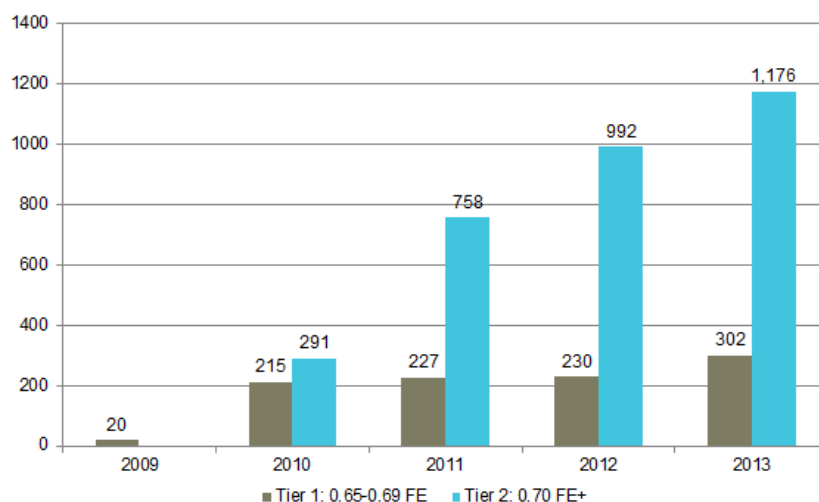
On June 2, we distributed a memo to the committee summarizing results from three studies (a market survey, a metering study, and distributor interviews) on fireplaces, along with the studies themselves. The third study (distributor interviews) is still not quite complete. However, we are working on the hearth measure for 2015 and need to bring results from the studies together quickly so that we can plan for next year.

Background: The gas fireplace measure has two tiers of efficiency with difference incentives (see table below).

|               | FE rating | Incentive (per unit) |
|---------------|-----------|----------------------|
| <b>Tier 1</b> | 65.0-69.9 | \$200                |
| <b>Tier 2</b> | 70+       | \$250                |

To qualify for these incentives, gas fireplaces cannot have standing pilot lights and must be vented to outside with sealed combustion. The current measure assumptions come primarily from a 2009 study on the market baseline. This study suggested that customers use the fireplace an average of 20 hours per week, and that higher efficiency tiers were very uncommon. As the graph below shows, over time, the portion of higher tier appliances in the program has dramatically increased, indicating that incentives have had an effect. Additionally, the measure has grown to comprise a large portion of program gas savings (14% in 2013). Given this, we wanted to revisit the assumptions for this measure.

## Number of incented measures, by year and tier



Our first attempt to review the measure was billing analysis; the results proved inconclusive. Given this, we updated the 2009 market study to revisit the market baseline efficiency and incremental costs. We also did a metering study to revisit the assumption about hours of use and investigate what these new fireplaces are replacing. Finally, we interviewed distributors to learn about how hearth sales differ in Oregon from other regions without incentives.

**Market Survey Findings:** Cadmus interviewed 23 vendors and asked them about sales of direct vent gas fireplaces, top selling brands, the use of fireplaces for heating, the percent of units sold with standing pilot lights, the efficiency of units and average prices, the average cost of venting, and pellet stove sales.

The table below shows the efficiency of fireplaces along with the average and median prices by efficiency. The average efficiency of top-selling fireplaces is 68%, up from 61% in 2009.

## Fireplace efficiency and cost

| FE Rating            | Number of Models | Average Price | Median Price |
|----------------------|------------------|---------------|--------------|
| <55                  | 1                | \$ 1,799      | \$ 1,799     |
| 55-59                | 1                | \$ 1,800      | \$ 1,800     |
| 60-65                | 9                | \$ 2,531      | \$ 2,517     |
| 66-70                | 15               | \$ 2,621      | \$ 2,500     |
| Over 70              | 15               | \$ 2,666      | \$ 2,542     |
| Total & Overall Avg. | 41               | \$ 2,581      | \$ 2,500     |

Cadmus also asked vendors about the prevalence of standing pilot lights. The table below compares results from the 2009 and 2013 surveys. In 2009, standing pilot lights appeared to be standard, and now they are on their way out.

## Prevalence of pilot lights

| % of Sales with Standing Pilot Lights | 2013 Survey    |                  | 2009 Survey    |                  |
|---------------------------------------|----------------|------------------|----------------|------------------|
|                                       | Response Total | Response Percent | Response Total | Response Percent |
| 15% of Sales or Less                  | 15             | 65%              | 7*             | 30%              |
| 16%-70% of Sales                      | 4              | 17%              | 5              | 22%              |
| >70% of Sales                         | 4              | 17%              | 11             | 48%              |
| Total                                 | 23             | 100%             | 23             | 100%             |

\*Categories from the 2009 survey started with 25% or less and > 75%

Finally, Cadmus asked vendors about how much they think customers use the fireplace. 74% of vendors estimated that at least half of customers would heat 20 hours per week or more, which is consistent with results from the 2009 survey. They said that they thought high use was more prevalent outside the Portland Metro area.

Metering Study Findings: Billing analysis of gas fireplaces found an increase in load, which suggests billing analysis is probably not the best method for evaluating savings. There are several theories that might explain these findings, including Energy Trust influencing efficiency where there was no prior gas fireplace. The goal of the metering study was to estimate the average number of hours fireplaces were used per week, learn about the existing equipment (if any) being replaced by the new gas fireplace, and how customers are using the fireplace (i.e. in conjunction with other heating systems, as the primary heating system). We worked with Ecotope on this study. 49 sites were metered; 35 of these sites were sites that installed efficient hearths and received the Energy Trust incentive, and 14 were baseline hearths (standard efficiency).

The study screened out customers that reported using their fireplace less than 5 hours per week so as not to waste resources by metering them. Therefore, the average hours of use (shown in the table below) is lower, since these numbers exclude very low users. Before meters were installed, we asked customers to tell us what they thought they used – on average, this was 26 hours per week, about 10 hours per week higher than what we found through metering sites (16 hours). A relatively small proportion of sites (about a fifth) used the fireplace more than 20 hours per week. These high numbers skewed the average up. But the majority of folks used the fireplace less than 20 hours per week.

## Average reported and metered hours of use per week

|   | Efficient               | Baseline                | All                     |
|---|-------------------------|-------------------------|-------------------------|
| <b>Average reported hearth use per week</b> | 24<br>( $\sigma = 18$ ) | 31<br>( $\sigma = 36$ ) | 26<br>( $\sigma = 24$ ) |
| <b>Average metered hearth use per week</b>  | 15<br>( $\sigma = 16$ ) | 21<br>( $\sigma = 20$ ) | 16<br>( $\sigma = 17$ ) |

The pre-existing equipment was often a wood burning fireplace (47%) or an old gas fireplace (43%). In some cases it was replacing nothing (9%). Only a small portion of respondents (16%) reported using the fireplace as the primary heating source for their home. Most respondents (89%) that didn't use the fireplace as the primary heating source for their home said they used it for heating in conjunction with another heating system.



Distributor Interviews: Cadmus conducted a small qualitative study of distributors that operate in Oregon. The sample was 3 out of a total of perhaps 6 that operate in Oregon. Two interviews are complete and written up in the document provided to the committee; another interview has yet to be written up (but seems to land in the middle of the two completed interviews).

Both respondents said that unit efficiency levels are rising and most of their products meet the Tier 2 standard. They are no longer selling standing pilot lights in Oregon and that market will continue to trend to higher efficiency. One respondent said that our incentives have influenced gains in the market, whereas the other respondent said we have helped with awareness, but are not really impacting demand for products.

Next Steps: Results will be discussed with Energy Trust's Conservation Advisory Council on July 23. Major measure assumptions need to be updated, and market influence needs to be considered when we re-work the measure. Mark asked what we are thinking we will do to update the measure. Elaine responded that the baseline may be updated from 61% to 68%. We may also decrease the hours of use assumption which impacts the cost-effectiveness of measure. Mark said that there is the one brand that does not sell units with standing pilot lights which seems like a big shift in the market due to the incentive. Alan said it looks like a complex program and seems to be quite a challenge to monitor our effect. Fred said that it became clear when we did billing analysis how little we knew about fireplaces. This necessitated more study with the most important question being how much they are used. Ken said that the information on cost is very important, as it showed that a \$200 or \$250 incentive is not enough to actually drive purchases of this equipment. The difference in the cost of efficient units over standard units is greater than the incentive. We haven't designed this evaluation to really answer the hypothesis that we are transforming the market, but now we have evidence to show that we have been impacting the market and want to look into it.

Ken reiterated that we are offering \$200 on a \$2,500 purchase. Is that enough to switch from wood to gas? Or is it a decision the customer already made and this is influencing them to get a higher efficiency fireplace. It is clear from the study results that customers have already decided to buy a gas fireplace and that the incentive is influencing the decision about the efficiency of the equipment. Marshall asked if there are any non-energy benefits we should consider. Ken answered that there is a non-energy benefit in switching from wood to gas (improved health due to reduced exposure to fine particulates and improved air quality), but that is not the decision that we are claiming to influence. Even though health benefits have a large monetary value, it might be difficult to claim that they should be included in cost-effectiveness. Fred said that a fear was that higher efficient fireplaces would be used more than baseline efficiency fireplaces, but we saw across the board that load hours have been decreasing.

### **3. 2014 Residential HVAC Market Assessment**

Presented by Ted Light

Background: This study covers furnaces, heat pumps, and ductless heat pumps (DHPs) in existing homes in 2012-2013. This is an update to prior study of 2009-2011. We were able to interview six distributors; sometimes we got actual data and other times, we got estimates, so there is some variance here. We are exploring other ways to get this data. This year, for the first time, we got data from D&R, and added data from them to this analysis as a point of comparison.

Previously, the 6 interviewed distributors were assumed to cover >75% of the market. For this study, we asked them for their own self-reported estimate of market share, and added up responses (shown in the table below).

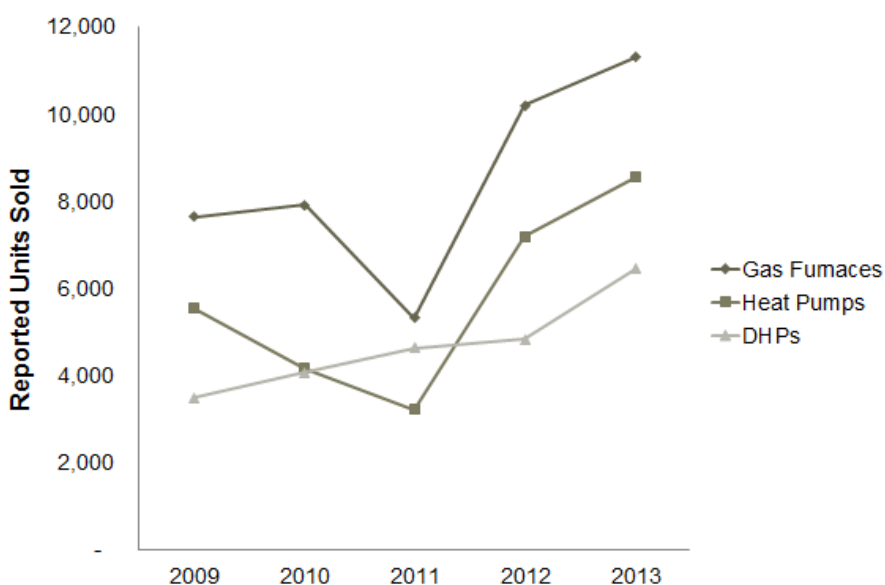
Distributor self-reported market share, by equipment type

| Gas<br>Furnaces | Heat<br>Pumps | DHPs   |
|-----------------|---------------|--------|
| 38.0%           | 52.2%         | 128.8% |

There is clearly error in the distributors' estimates of market share, and it is not exclusive to DHPs. Given this, it is tough to know what proportion of the market is captured in these interviews of distributors. With this survey, we captured more unit sales than what we got through data from D&R. Regardless of market share, this represents the best data we can obtain. Mark asked how many brands are represented by these distributors. Ted responded that we did not ask that in this study.

The graph below shows self-reported volume of units sold, by equipment type. Anecdotally, the dip in 2011 was due in part due to growth in repairs versus replacements. There was some worry that DHPs were taking over the market from furnaces or heat pumps, but it looks like this is not the case. Matt asked if new homes are included in these data. Ted responded that we tried to limit this to existing homes, but it is often difficult for distributors to tell.

Distributor-reported volumes, by equipment type

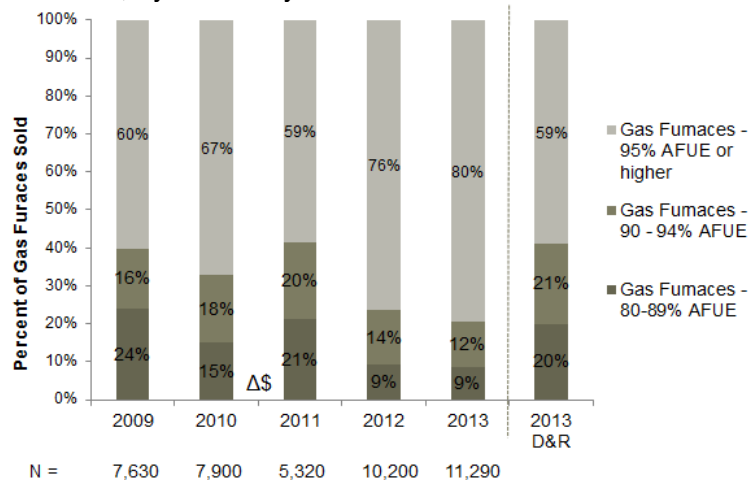


Looking at the percent change in sales by distributor, we see that the trend for all was fairly similar (although one distributor experienced a large change between 2011 and 2013). In general, the trend was a modest decrease in 2011, an increase in 2012, and a small increase in 2013.

Furnaces: The graph below shows furnaces broken out by efficiency level, contrasting the survey results with 2013 results from D&R. Although there is some noise in the data, the market

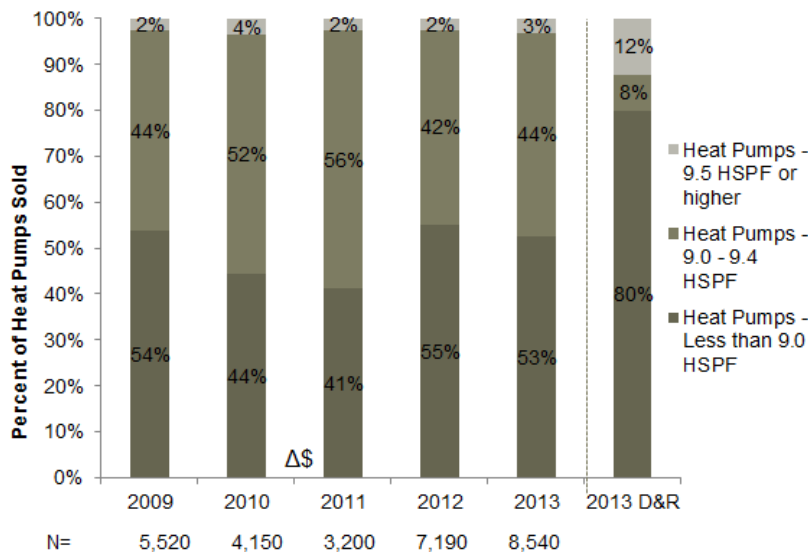
share for efficient furnaces seems to be holding steady. In 2011, the Energy Trust incentive for 90+ furnaces was discontinued, and the federal tax credit for 95+ changed (to \$150 from 30% of cost up to \$1,500). There was a small decline in the proportion of efficient furnaces in 2011, from which the market has since recovered.

#### Furnaces, by efficiency level



Heat Pumps: Heat pumps show a similar story to furnaces in terms of volume (a decrease in 2011, and increases in 2012 and 2013). As shown in the graph below, the key takeaway is that the results from the study are very different from the results we saw from the D&R data. Mark asked if the data is by component. Ted clarified that they are looking at invoices. Ken asked if the D&R data is for all of the Northwest or just Oregon. Phil clarified that it is for Oregon only, based on HARDI data. It is another reference point for where certain portions of the market are at. We are hoping D&R can get additional people to provide data.

#### Heat pumps, by efficiency level



When we break out responses by distributor (for heat pumps with an HSPF of 9.0 or above) we see that the market has been fairly steady – one distributor was increasing the proportion of

heat pump sales that are efficient, and another was slightly decreasing. Overall, there is no clear case that the market has moved, necessitating adjusting assumptions for measure. Our own incentive data shows there are a lot of units at 9.0, a small number at 9.5 and not many at 9.2.

Ductless Heat Pumps (DHPs): No program is offering incentives for DHPs by efficiency level, so we didn't ask about sales by efficiency level. The DHP market seems to be growing. Steve asked if some models are more efficient than others. Ted responded that they range in terms of HSPFs. Ken commented that DHPs are not intended to replace other technologies – they only work well in certain situations, such as where there is electric baseboard heat (zonal). DHPs do not have backup heat; if gets too cold outside for the DHP to work well, people depend on resistance heat installed in the house already. Given this, DHPs will only affect a certain amount of the market. The RTF acknowledges that DHPs reduce use of wood substantially in homes that use fireplaces and woodstoves to heat for backup. Fred noted there are people who have considered putting in two DHPs rather than a central heat pump – the technology is starting to move out of the niche. Marshall noted that we are following NEEA's lead on DHPs being a direct displacement effort.

Conclusions: The data we have show that efficient furnaces are maintaining market share, there are some signs that suggest efficient heat pumps (HSPF 9.0+) are gaining more traction, and the DHP market is growing continuously but slowly.

#### **4. CORE Improvement Pilot – Year 1 Evaluation**

Presented by Dan Rubado

The CORE Pilot was a Production Efficiency pilot and this evaluation presents year one evaluation results. Additional evaluations will be done over next couple of years as the pilot grows and evolves.

Background: What is CORE Improvement? Strategic Energy Management (SEM) training for small to medium-sized industrial customers. The CORE Pilot is being implemented by Triple Point Energy, who provides training, support, and energy modeling services to get customers to aggressively manage their energy use. Training is delivered in a cohort setting to a group of 12 highly motivated industrial customers, and is modeled closely after the successful Industrial Energy Improvement (IEI) initiative for large industrial customers.

Pilot Goals: The goals of the Pilot are to test if SEM can successfully and cost-effectively be rolled out in small to medium industrial sites, and determine if barriers faced by smaller companies can be overcome - CORE sites have lower energy use, fewer employees, and lower production capacity than IEI.

Mark asked if the program screens for volume of energy use. Dan responded that the program has criteria; sites must have between \$50,000 and \$500,000 of annual energy costs. If they have higher costs, they fall into IEI.

Pilot Activities: The program recruits customers, and 4 group workshops are held covering an overview of, and the philosophy behind, SEM. Onsite activities dive into implementing SEM. For instance, each site conducts an energy scan, where participants and implementers inventory energy using equipment and create an opportunity register. They also walk through the facility to look for areas where operational changes can be made. There are three milestone incentives

intended to test whether we can get participants to better comply at certain points (for instance, provide production and energy data by a certain date, which are used to create a baseline energy model). Triple Point creates energy models and MT&R workbooks used to track production and energy use data and calculate energy savings. Mark asked when the models are handed over to customers. Dan responded that Triple Point creates the models, then gives them to customers. Based on savings from the post-implementation period, performance incentives are paid to customers.

Year One Evaluation: Navigant performed the Year One evaluation, between Fall 2012 and Q1 2014. This evaluation follows the first cohort; since then a second cohort has kicked off. The process evaluation component includes documenting and assessing Pilot delivery, establishing success with SEM, determining customer motivation to participate, compiling customer feedback, identifying attributes of successful firms, assessing energy team effectiveness and company engagement, and identifying services with the largest benefits. There is also a technical review portion, which includes assessing participant MT&R workbooks and regression models. There will be Y2 and Y3 evaluations focused on cohort 2 results, persistence over time, verification of energy savings, and follow-through with capital projects.

Methods: The methods include reviewing Pilot materials, documents, and data; in-depth interviews with Energy Trust staff, PDCs, Triple Point, and participants (including those who have completed CORE and those that dropped out); and technical review, including reviewing MT&R workbooks.

Process Findings: Pilot recruitment was focused on Portland Metro, particularly past participants in Energy Trust's other efficiency initiatives that owned facilities. Ten sites (representing 9 organizations) completed CORE; 2 dropped out. The 10 sites completed a 15 month process of workshops, meetings, implementation and monitoring. The MT&R tool was used to track energy and production data and compute savings. Eight sites achieved electric savings of 3-10%; gas savings were less consistent (4 sites had some gas savings). All 10 sites received milestone incentives, indicating that these incentives were effective. Alan asked, when the program first approached customers to participate, was a value proposition presented? Athena responded that the program talked about energy savings that have been seen through IEI (8% savings on average, with a range of 5-20%), have listed customers that participated in these offerings, and discuss incentives and milestone incentives.

Savings: There was a range of electric savings at each of the 10 participant sites, and on the gas side, some sites did not achieve savings. Mark commented that it is hard to tell if customers have margins to save, or if others have been highly active and don't have much opportunity. Dan responded that in general, SEM is oriented to O&M measures, although many sites do capital projects. Kim commented that although counterintuitive, the program has found that some of sites that have done the most capital projects, save the most in SEM as well.

Energy Trust Interviews: Program staff reported that smaller customers are just as capable of success with SEM as larger customers. They reported that recruitment was a bit more difficult as this is a new customer base for the program. Customers were more concerned about time involvement, and it was unclear what characteristics were associated with success. Employee engagement was not as strong, but executive engagement was much easier (executives were closer to the production floor). The Pilot was higher touch than expected, but improvements helped. Energy Trust staff were impressed with Triple Point's work on CORE. Staff also reported that the market segment for CORE is larger than IEI, as there are more small- to medium-sized facilities. Kim commented that she has seen some reports indicating that 50% of

the load is accounted for by large sites (maybe around 100) and many thousands are making up that other half of the pie. Staff expressed support for expanding CORE as a complement to IEI, and are planning to have regional CORE cohorts in other parts of the state.

Alan asked about sorting rules for customers into CORE and IEI. Kim responded that right now the program is considering whether there is a need to have separate offerings at all – the offerings are designed to be similar, and there may be value to having a mix of large and medium customers in one place.

Program Delivery Contractor (PDC) Interviews: PDCs are well positioned to identify and recruit participants using existing relationships. They would like credit for CORE energy savings. They believe CORE will increase customer awareness of and interest in capital projects. They had some concern about diverting resources away from capital projects, but thought that small firms would be a good target for SEM. They thought that up to a third of customers would be good candidates for CORE.

Triple Point Interviews: Triple Point staff reported that getting data and training firms to use the MT&R tool was more difficult than anticipated. They noted that there are conflicting purposes of MT&R workbooks: a management tool for customers, and as a way to accurately quantify program savings. Triple Point also noted that a pre-defined, 3-month measurement period to calculate savings was not ideal – they wanted more flexibility depending on facility conditions. Triple Point reported that the PDCs were helpful during energy scans and could connect with customers about capital projects. They felt they could handle more participants per cohort (15-20).

Participant Interviews: Participants were interested in tracking and saving energy to reduce costs. All participants would recommend CORE and some already have (to other industrial facilities). Participants reported that they received value from CORE, and plan to maintain practices. The evaluator found that the level of engagement and success in CORE are related to: the effectiveness and skills of the energy team, engagement with other employees in the firm, and support from management, which is consistent with findings from IEI. Incentives provided some motivation, but were outweighed by cost savings. Kim commented that this is a sign of success to hear customers talk about the value of energy savings. SEM teaches the value of energy savings, and we haven't heard this very much in the past from customers. Dan said that anecdotally, teams with more maintenance staff had higher savings, as did firms with more executive involvement.

Participants were better able to plan and execute capital projects, and opportunity registers helped get projects prioritized. [Opportunity registers are lists of potential energy saving projects identified by participants and implementers.] Participants did not see the benefits of some planning activities (such as developing an energy policy and energy management plan). They were critical of group activities where time was not spent efficiently or was not specific to energy. Participants were mixed on the importance of employee engagement. They highly valued peer to peer networking and onsite meeting activities. Participants provided universally positive feedback about Triple Point staff.

Participants reported that the MT&R workbooks were not easy to use; some teams needed Excel training. Information in the workbooks was useful for tracking energy use and verifying impacts of actions. Some used the MT&R workbooks to demonstrate cost savings. Participants reported that production and energy data were not easy to obtain; some purchased electronic data from their utility. Models were difficult to create and to update after process changes.

Teams with a dedicated member to access data and update workbooks had more success with MT&R engagement. Alan asked if the program sees ways to make this easier moving forward. Dan said this is being worked on. Athena responded that they are working with a contractor now on how to get what we need for estimating savings, but make it easier for people to use.

Technical Review Findings: All participants were actively using MT&R workbooks during and after participation. Information is clear and easy to understand with appropriate training. Regression models were reasonable for calculating savings; in one case, only one O&M measure was implemented and the evaluator felt that a different method for determining savings (retrofit isolation, where savings are calculated using field measurements of key parameters affecting the measure's energy use) might be a better option.

The evaluator also found that the current savings calculation methods (pre/post regression analysis) are in line with M&V protocols. Regression is not ideal when projected savings are less than 10%, but there is no better alternative. The evaluator also noted that monthly energy and production data are not ideal - daily data could provide more accurate results. Capital project savings are clearly separated from O&M savings. Minimal data is collected about equipment and measures – it is not possible to independently assess how reasonable estimated savings are for SEM actions (outside of MT&R models).

The step-wise regression approach used in CORE is not favored by econometric literature. The evaluator also noted that weather variables are inconsistently handled. Baseline models are created early and not changed, which is best practice. The baseline period exceeded one full year in all cases, but the measurement period used to calculate annual savings was less than one full year, and may be inaccurate. Alan asked why this is the case. Dan responded that it is by design. Phil commented that for all of our other measures, there are no post-installation estimates to produce the reported savings, but for SEM, we are doing monitoring and verification for the first three months post-intervention. Ken noted it is difficult to say when the intervention ended.

Standard errors were not provided with savings estimates, making it difficult to assess precision. There are large error bands around savings estimates, meaning fairly low statistical confidence. Models will deteriorate over time as process changes occur; they need to be updated when this happens.

Recommendations: Enhance the usability of the MT&R tool and improve training on it. Leverage PDC expertise to help with customer recruitment. Sharpen the focus of group meetings to just the most useful activities, and build in peer-to-peer networking as a structured activity. Help firms understand the benefits of strategic planning activities (such as the energy policy and energy management plan). Circulate participant roster to facilitate communication, leverage past participants to help recruit future cohorts, and promote CORE throughout the year to build a waiting list.

Additionally, continue the current practice of creating models and having Energy Trust review them and creating new baseline models when there are changes to production or facility changes. Include all relevant production variables in models and standardize the treatment of weather. Provide standard errors of savings estimates to help assess precision and use shorter interval data. The measurement period to calculate savings over baseline should be one full year to address seasonal effects.

Energy Trust Take: CORE has been a success with smaller customers, and is expanding to additional cohorts and other parts of the state. The program is trying to improve and automate MT&R tools. The CORE curriculum and workshop content is continuously being improved. PDCs are more involved with CORE now. The program is negotiating the acquisition of short interval energy data for some CORE participants. The program disagrees with recommendations to include more variables in models regardless of fit. Phil commented that the models need to be maintainable and accessible. We should err on side of the models being easy to interpret. Dan noted that a concern for some statisticians is when fitting a model, one should identify variables prospectively that have a theoretical basis for being included in the model, so as to not fish for significant. In this case, there is no theoretical framework – the variables are identified in the process. Mark commented that the most significant variable will be the one that has significance to customer. Dan continued that the program disagrees that the measurement period must be one full year (in some cases, to avoid seasonality issues, this may not be logistically feasible). The program also disagrees that retrofit isolation should be used in some cases; they don't know prospectively how many measures a site is going to implement.

Athena noted that CORE cohorts will be formed in southern and central Oregon. Steve asked when the pilot phase of CORE will be over. Kim responded that this is the first year evaluation and there are 2 cohorts in the pilot phase. This evaluation has demonstrated that the proof of concept is already there, so the program is moving forward with central and southern Oregon cohorts that aren't part of the pilot. Steve asked about lower consumption customers, and if anyone has thought about a light touch, web-based approach. Ken commented that PG&E is doing this and has been quite disappointed so far; 97% of people only go to website once. No one going is back, and 28% of recommendations resulted in an initial estimate of more energy savings than used at facility.

## **5. Short Take: Strategic Energy Management Introductory Pilot**

Presented by Dan Rubado

With the Strategic Energy Management Introductory (SEMi) pilot we're testing a "short take" approach - presenting results to the Evaluation Committee from small initiatives concisely and at a very high level.

Background: The SEMi pilot tested a light touch commercial SEM approach for smaller commercial customers or customers that are not otherwise a good fit for the full commercial SEM offering. Chain companies were targeted for this pilot, with the idea that staff could apply lessons learned to multiple sites. Energy champions were selected at each site; pilot staff planned to introduce SEM concepts and help energy champions identify operational changes that could be replicated at all sites. The effort was a 12-week commitment centered on an Energy Day, which included an organizational energy management assessment, introduction to SEM concepts, and a virtual walk-through at one site identifying opportunities for operational changes. Incentives were based on the number of measures and a priority level associated with each measure – a minimum number of measures was required to qualify for incentives.

Results: One participant with 10 sites participated in Q4 2013. Four staff representing 2 stores attended Energy Day. One gas and 4 electric measures were implemented at 6 sites. The participant did not achieve the minimum number of measures needed to receive the incentive. A semi-prescriptive approach was used to estimate savings (percent reductions per end use of facility energy usage). Overall energy savings were 248,000 kWh. 95% of these savings were due to a refrigeration controls adjustment performed at 5 of the 6 participating sites. 118 therms



were saved from an air curtain installed at one site. Many other operational changes and capital projects were identified.

Problems Identified: Implementation did not go as planned. The Pilot hit at the participant's busy season, and few staff attended Energy Day. Additionally, the timeframe was too short – the participant implemented very few of the opportunities identified. Staff were not recruited to represent every store. The evaluator found that savings estimates were reasonable, but methods could be improved. 95% of savings were due to refrigeration control adjustment identified by a contractor that just happened to be on site that day. The organizational assessment would be more useful if appropriate level of staff attended and were prepared.

Summary: This was the program's first attempt to engage smaller commercial customers in SEM. The pilot was not very successful, and won't be continued in 2014. Major modifications are needed before attempting this type of SEM offering again. The program is looking to this evaluation and SEM contractors to retool and get new ideas before rolling out a new offering in 2015.

Ken commented that this is a good example of one of the beauties of Energy Trust – that people design pilots and then can back away from them. Energy Trust does not discourage people from suggesting new pilots, which is not found at every organization. Alan commented that he is glad we did this pilot. It sounds like some version of SEM should work if we tweak the offer. Dan commented that this pilot showed that twelve weeks is far too short to allow people to implement anything.

## **Wrap-Up & Next Steps**

We won't have many evaluations coming in until September, so in the next few weeks we will send out a Doodle poll with potential dates and times in September.



Final Report

# Existing Homes Process Evaluation

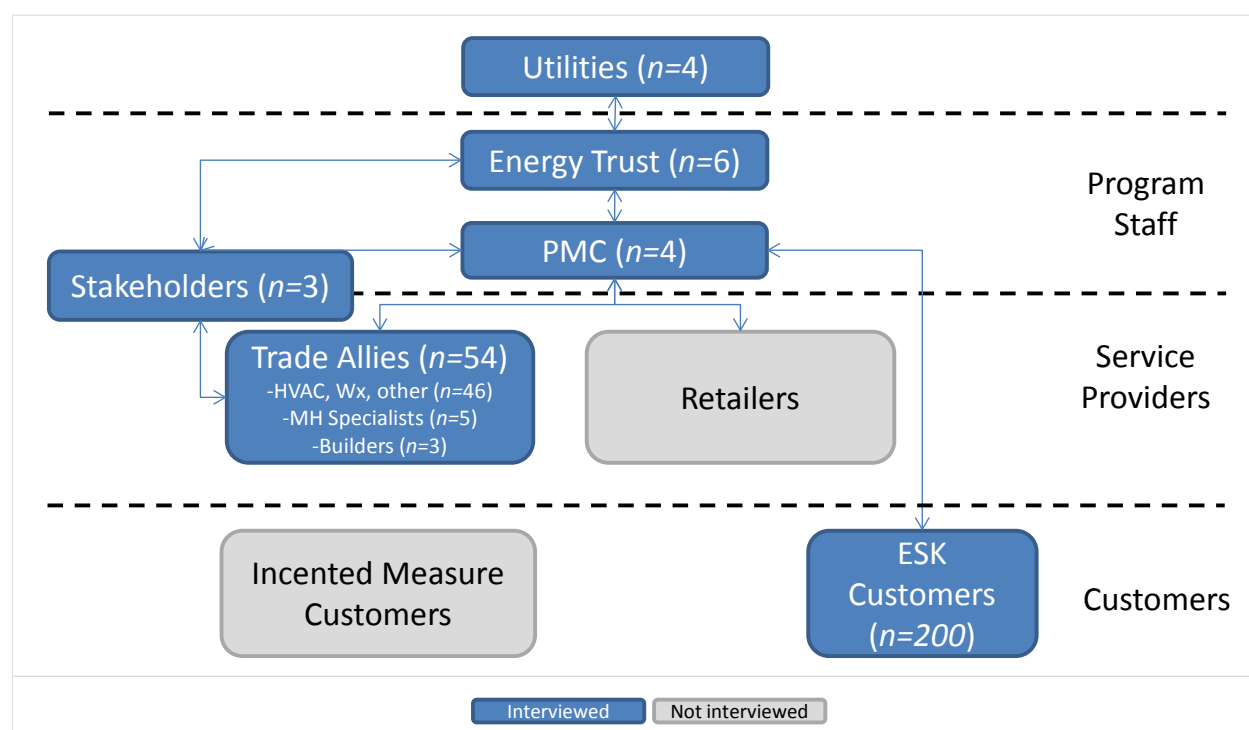
April 2014

# Executive Summary

In this report, Research Into Action, Inc. presents findings from its process evaluation of Energy Trust of Oregon's (Energy Trust) Existing Homes program ("EH" or "the program"). In 2012, Energy Trust selected Fluid Market Strategies (Fluid)<sup>1</sup> to replace Conservation Services Group (CSG) as the program management contractor (PMC) from January 1, 2013 through December 31, 2014 with the option to renew its contract in subsequent years. This evaluation focused on the transition to a new PMC, identified successes and challenges related to the transition, and identified possible steps the program could take to improve the program going forward. Since Energy Trust also selected Fluid to implement the New Homes program in Washington, this evaluation also addressed the transition to the new PMC for that program.

This evaluation relied on in-depth interviews with six Energy Trust and four implementer staff, interviews with three representatives of stakeholder groups, interviews with representatives of four utilities, surveys of 54 trade allies, and surveys of 200 recipients of Energy Saver Kits (ESKs). Figure 21 provides a diagram of all market actors related to the program and identifies which market actors we surveyed and their relationship to other market actors.

**Figure 1: Diagram of Market Actors**



<sup>1</sup> Fluid Market Strategies was renamed CLEAResult Inc. in December 2013.

We gained an understanding of the program through review of program documents and data, such as program websites and monthly reports submitted by the PMC to Energy Trust. Additionally, this review informed our development of the surveys and interviews.

Below are key findings organized by data source.

### Staff Feedback and Document Review

The first year with Fluid as the new PMC saw some successes, but also a range of challenges for both Energy Trust and Fluid.

Fluid revised the program implementation manual making it more detailed than the prior version of the manual and more usable by all staff. Instructions for program processes are clearer because of this revision. Additionally, Fluid revised the application forms, improving the usability of program paper and web forms for contractors and homeowners. These improvements also reduced the administrative burden and costs related to paper-based forms. Fluid also increased outreach to rural areas, particularly Eastern Oregon, and pursued a strategy of developing more trade allies in those areas of the state. Energy Trust welcomed that strategy and it appears to be yielding some benefits for the program, although it is too early to tell the extent to which these efforts will result in additional savings.

The accuracy of capturing and using program data to help make decisions has improved in 2013. Fluid has used program data to improve the reports Energy Trust receives and has plans to continue to use data to better inform program decisions than was possible in the past.

Perhaps the greatest challenge Energy Trust and Fluid staff faced was how to identify and address their differing expectations regarding their priorities and roles. Energy Trust and Fluid appeared to have differing expectations regarding the need to balance savings goals with other program priorities and regarding each entity's need to adapt to the other's business practices.

A notable change in the program was the de-emphasis of the measures associated with Energy Saver Kits (ESK) (aerators and compact fluorescent lamps (CFLs) primarily). Under Fluid, the program purposely did not promote ESKs, even though in years past ESKs constituted the majority of savings for the program. Without an obvious replacement for the ESK savings the program struggled to meet savings goals in 2013.

Both Fluid and Energy Trust staff identified communication challenges related to the approval and implementation of marketing efforts for the EH program. Fluid struggled to meet Energy Trust's requirements for the marketing plan and Energy Trust's requirements and processes presented challenges to Fluid's ability to launch marketing campaigns in a timely manner.

In the first part of the year, Fluid's staffing model stretched some staff too thin and assigned high-level staff to some tasks that lower-level staff might be able to perform. As a result, staff roles were not always clear and responsibilities shifted as Fluid tried to adapt to the program's needs. Differences between the two entities in expectations regarding budgeting for staffing may have contributed to these issues.

Finally, a backlog of projects in the Energy Trust IT department and lack of clarity about project priorities may have delayed improvements in payment processing and in the implementation of tools intended to support Fluid's marketing strategies.

### Trade Allies

The majority of trade allies noted mostly positive changes to the program in 2013 compared with prior years. Most positive comments related to the improvements made to forms, but covered other program aspects. These positive changes resulted in more satisfied trade allies.

Trade allies largely promote Energy Trust incentives using one-on-one communications with customers and on documents such as project bids. Brochures and other materials with Energy Trust information are used, but not emphasized as much as personal communications with customers.

The trade allies that work in both Oregon and Washington generally did not note any differences between the programs in each state.

### Manufactured Homes

Manufactured home trade allies also noted changes to the program in 2013, most focusing on program communication and application forms; they were equally likely to cite positives as negatives. The changes noted did not appear to affect the business operations of the manufactured home trade allies.

The small sample of trade allies we interviewed tended to regard the manufactured homes sector as largely saturated with energy efficiency services provided by Energy Trust and other organizations in most of the state, with the exception of Salem and the Columbia Gorge. This must be weighed against the finding that according to Energy Trust data on homes served by the program, roughly 16% of manufactured homes in Energy Trust territory have been served since program inception. Some areas of the state such as Eastern Oregon have received very little service from Energy Trust. This analysis together with market research that includes a larger sample of trade allies, more detailed information about the age of manufactured homes in each region, and data from community organizations would provide a clearer picture on the degree of market saturation.

### Builders

Builders in Southwest Washington were aware of the New Homes program in Washington, but largely received their program information from their verifiers that provide Energy Star certification of their homes. The builders would like to see Energy Trust promote efficient homes and contribute to creating more demand for energy efficient homes than promoting the program to builders.

### Energy Saver Kit (ESK) Recipients

A-lamp bulbs and CFL bulbs were the most common measures installed by ESK recipient rates with almost three of four installing these measures. The least commonly installed measures were kitchen aerators and reflector bulbs with about half of recipients installing those items. The most common reason given for not installing these items were they did not fit existing fixtures.

Income appeared to affect how people learned about the availability of ESKs. Those reporting less than \$50,000 in annual household income were more likely to report they learned about ESKs through their utility whereas those earning over \$50,000 were more likely to report they learned about the program through word-of-mouth, Energy Trust, or some other source.

Of ESK recipients that took an efficiency related action after receiving the kit, the majority reported purchasing efficient light bulbs.

Households that had used the Home Energy Profile tool were significantly more likely to be younger (less than 50 years old), with at least a college education or with higher education, have a household income of \$50,000 or more, and be Caucasian.

### Coordination with Utilities

Communications and coordination between Energy Trust and the utilities are generally working well. Contacts reported that program marketing and delivery are going well and the organizations work together effectively; as a result, customers generally are clear about program offerings and how to access them. Collaboration and coordination appears to work best when there is direct and regular communication, including regular communication outside of planned meetings. One possible improvement area is providing greater and earlier information sharing between Energy Trust and the utilities in program planning and fostering greater collaboration in the use and training of outreach contractors and trade allies

### Conclusions and Recommendations

**Conclusion:** Fluid and Energy Trust staff differ regarding how to balance the program's need both to deliver savings and meet other needs, such as customer service, program equity, and compliance with policies and regulations. Fluid focused on delivering savings, but Energy Trust has other needs that may or may not have been made clear during contract negotiations and the first year of the transition. Lack of communication between Energy Trust and Fluid staff exacerbated this and other challenges.

**Recommendation:** Energy Trust and Fluid should revisit Fluid's contract and statement of work to more clearly outline Fluid's responsibilities in meeting Energy Trust's needs related to non-savings goals. As part of that process, Energy Trust and Fluid should clarify communication lines, processes, and expectations.

**Conclusion:** The program chose to make a notable shift in program priorities by abandoning ESKs, an activity that brought in a large amount of savings in years past, in exchange for pushing more projects driven by trade allies and consumers. However, the shift away from ESKs came before the program was adequately positioned to replace those savings with incented measures. To move away from relying on ESKs for savings, it is key to market other program offerings to build awareness of offerings among customers and contractors.

**Recommendation:** The program needs to improve coordination between program marketing staff and Fluid. This includes Energy Trust's providing access to data Fluid needs to conduct targeted marketing or allowing Fluid to use alternative methods to conduct targeted marketing.

**Conclusion:** The CRM tool that Fluid was planning on using for their targeted marketing was not available when anticipated. When this became clear, developing alternatives to using the CRM tool should have been a priority to both Energy Trust and Fluid.

**Recommendation:** When faced with an obstacle such as a key tool not being available when necessary, Energy Trust should permit alternative approaches or otherwise be proactive in assisting the PMC to develop alternatives.

**Conclusion:** Some lack of coordination and communication between Energy Trust program and non-program staff may have undermined the program. Specifically, resolving tensions between program and finance staff about the appropriate balance between best practice accounting procedures with operational effectiveness and determining EH priorities for the information technology (IT) department could have made the program run smoother in 2013.

**Recommendation:** In 2014, program and non-program staff may want to determine ways to better meet each other's needs by having strategy meetings or engaging in discussions to better address each other's concerns.

**Recommendation:** Energy Trust program staff and Fluid staff should work together to identify program priorities, and Energy Trust Existing Homes program staff should work with the Energy Trust IT department to identify and resolve any conflicting priorities (e.g., with other Energy Trust programs).

**Conclusion:** Continually making application forms easier to use for trade allies and homeowners can help automate the payment verification process, reducing the amount of Energy Trust staff time spent reviewing paper applications and verifying payments.

**Recommendation:** Fluid should continue to work to make paper and online forms mirror each other and promote online forms to trade allies.

**Conclusion:** ESK items are not always installed upon receipt. Many ESK items do not get installed because the equipment does not fit or the recipient received too many of a certain item.

**Recommendation:** Energy Trust and Fluid program staff should jointly consider building more flexibility into ESK orders to enhance customization and provide better item descriptions so that recipients are more likely to install the measures they order.



**Recommendation:** Fluid should consider sending follow-up notices to ESK recipients soon after they receive shipment to encourage them to install equipment, providing the call center number for questions they may have.

**Conclusion:** Evidence on the degree of saturation of energy efficiency services in the manufactured homes sector is equivocal. A small sample of trade allies reported high saturation in most parts of the state, but analysis using Census data indicates that recent Energy Trust market penetration is low.

**Recommendation:** If it is a high priority to obtain a clear picture of the degree of market saturation of energy efficiency services in the manufactured homes sector, Energy Trust should conduct analyses of the reach of Energy Trust projects over a larger time frame as well as market research that includes a larger sample of trade allies and data from community organizations.



# MEMO

**Date:** June 11, 2014  
**To:** Board of Directors  
**From:** Marshall Johnson, Residential Sector Manager  
Sarah Castor, Evaluation Sr. Project Manager  
**Subject:** Staff Response to the 2013 Existing Homes Process Evaluation

Energy Trust undertook a process evaluation of the Existing Homes program in 2013, primarily to assess the effects of the transition to Fluid Market Strategies (since renamed CLEAResult) as program management contractor (PMC) on internal and external processes, communications and relationships.

Since the evaluation was conducted, Energy Trust and CLEAResult have taken several steps to improve communication and coordination between the organizations. Program and PMC staff conducted a series of “summit” meetings with Energy Trust Planning and Evaluation, IT and Finance groups in early 2014 to help to define collaboration approaches, map staff roles and responsibilities and prioritize joint projects. A Savings Action Plan was developed for the first half of 2014 to provide a roadmap for meeting savings goals. This plan has brought staff from both organizations to agreement on strategies and use of resources.

Earlier this year, Energy Trust changed its approach to forms maintenance in an effort to align web and paper forms. This change has made it easier for CLEAResult staff to request changes to forms, and should result in forms that are easier for both customers and trade allies to complete.

In late 2013, the program conducted its first targeted marketing campaign using Energy Trust’s Customer Relationship Management (CRM) campaign functionality to track results of an email to promote Energy Saver Kits. This project involved the cooperation of many groups from both organizations to join data from multiple Energy Trust systems, and was considered a success with a 6% response rate (double the standard response rate for such an effort) and savings of over one million kWh and 30,000 therms.

The survey of 2013 Energy Saver Kit recipients revealed an improvement in installation rates of kitchen aerators from offering custom kits rather than the static kits of 2012 and earlier. Installation rates are still somewhat low for some specialty light bulbs and bath aerators. The program will continue to research bulb options and ways to improve the web order form to best meet customer needs, as well as pursue a method of following up with customers to remind them to install their kit components, as recommended by the evaluator.

The program recognizes kits have an important part in savings acquisition and customer engagement and should be utilized strategically. The Savings Action Plan includes a larger role for kits than they carried in 2013.

The program's relationships with utilities are working well and staff will strive to provide opportunities to collaboratively develop meeting agendas and continue to support the training of utility marketing outreach staff.

While the evaluation notes that more research would be needed to accurately estimate the degree of saturation of weatherization services in manufactured homes, staff feel the analysis from this report and evidence from other sources is sufficient to recommend a shift in strategy for this market, de-emphasizing weatherization and focusing more on promoting efficient heating equipment.



**PWP Inc.**

# **2013 New Homes Program Process Evaluation**

A Report to Energy Trust of Oregon

FINAL Report April 14, 2014



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## **Acknowledgements**

John Boroski was the Evergreen Economics project manager for this report. Other Evergreen Economics staff contributing to this report were John Cornwell, Tyler Nelson, Rushdee Dewan, Joe Clark and Sarah Larsen. Dr. Phil Willems (President, PWP Inc.) was also a primary contributor to this report.

# 1 Executive Summary

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This report presents process evaluation findings for Energy Trust's New Homes Program based on in-depth interviews with participating and non-participating builders, homes verifiers, trade ally subcontractors and real estate agents and representatives of lending institutions throughout Oregon. Evergreen staff also completed interviews with program implementation staff and reviewed program participation data in the FastTrack database. The report also includes data on the Oregon single-family new construction market. The evaluation covers the 2012-2013 program years and occurred between July 2013 and March 2014.

Energy Trust's New Homes Program has achieved high market shares of over 20 percent in the recent past, and according to the program implementation staff, program year 2013 is forecasted to finish with 22 percent market share, which would exceed the 2013 market share goal of 20 percent. Full implementation of the 2011 Oregon Code has not had significant, lasting detrimental program impacts. While it is likely that the code change caused some builders to drop out of the program, participating builders have adjusted to the new code and even some non-participating builders regularly include energy efficient features that exceed code. Most interviewed builders also reported that demand for energy efficiency above Oregon State code is increasing.

In addition, the program has established strategic relationships with multiple verifiers to assist builders through the construction process, inspect homes and obtain EPS scores. Overall, 18 different firms completed home verifications in 2012 and 2013. The market based verifier model appears to be working well generally and active verifiers have enough business to continue serving the market. However, in Southern Oregon and Northwest Oregon (not including the Portland metropolitan area) there are only two verifiers per market, while the Eastern Oregon market has only one active verifier. In these markets builders would prefer to have additional choices, particularly if construction volumes increase. Following are some additional key findings from this evaluation:

1. The program's internal delivery processes appear to operate smoothly and have been refined by the current implementation team over several years. There are no critical needs for operational changes.
2. Builders are generally satisfied with the verification process but would like a faster turnaround time for EPS scores, as they have often sold homes before receiving the EPS, partly negating the score's usefulness for marketing. The new Axis database under development should help to rectify these delays.
3. The biggest challenges to participating builders are materials and labor costs, an "uneducated" marketplace and potential subcontractor supply gaps if the market recovers robustly.

4. The primary participation barriers for non-participating builders are:
  - Inadequate program awareness and knowledge – Interviewed, non-participant builders have low self-reported knowledge of the program, and HBA staff reported that non-participants “are either totally slammed or totally checked out, there is no in-between, they need to get the same information repeatedly.”
  - Verification fees and construction expenses that are too high for lower cost, entry level homes
  - Program paperwork
5. Participant builders still confuse EPS with the Earth Advantage and ENERGY STAR programs, and do not always understand how the different programs relate and layer.
6. Most builders think that EPS provides a sales advantage, however they requested more program promotions and market actor trainings to raise homebuyer awareness, which still remains low. Builders would like to see more real estate agent trainings delivered, and support the introduction of appraiser training, as appraisers/inspectors could also educate homebuyers and sellers, since realtors do not always do this.

To continue building on the Program’s success, Energy Trust should do the following in 2014 (if not already underway):

1. Work to increase verifier numbers in areas outside the Portland Metro area, particularly Southern Oregon.
2. Continue to clarify EPS to builders, emphasizing that EPS complements other certifications and provides more detailed energy consumption information to consumers. It is important that participating builders understand where their incentives are coming from, and they could improve their collaboration with subcontractors and EPS marketing.
3. Promote the program’s Early Design Assistance more aggressively to non-participating builders.
4. Monitor verification fees, which are likely to increase initially in 2014 until verifiers become comfortable with the new, variable savings-based incentive schedule.
5. Continue to test and refine consumer messaging for comprehension. In future Smart Homebuyer materials consider more simplified information about energy consumption and efficiency and reduced emphasis on Energy Trust and EPS scoring details.
6. Consider marketing directly to retirees through AARP and other organizations and publications, highlighting the benefits of energy savings for retirees on fixed incomes.
7. Conduct more subcontractor HVAC trainings with a focus on mechanical ventilation.

# MEMO

**Date:** May 22, 2014

**To:** Board of Directors

**From:** Matt Braman, Residential Sr. Program Manager  
Dan Rubado, Evaluation Project Manager

**Subject:** Staff Response to the 2012-2013 New Homes Program Process Evaluation

Energy Trust undertook a process evaluation of the New Homes program in 2013. The goal of the process evaluation was to obtain feedback and market intelligence to improve the program. The last evaluation of this program was in 2011 of the 2009-2010 program years. Since this time the program has made some significant changes to the way that the program is implemented and this evaluation was a good opportunity to understand how these changes have been accepted by the market.

The evaluation report had several goals but focused on program effectiveness, market feedback and reach, value of EPS and verification, and geographic trends. These activities helped create a snapshot of the current program design and structure, which is helpful as the program is in the midst of being re-bid. Additionally, the results of these activities provide insight into opportunities for the program moving forward.

It is important to note that this evaluation only covered the first six months of 2013. Since this report was completed, the program has worked with NEEA and their contractor, Pivotal Energy Solutions, to fully implement a web-based tool for verifiers and program staff to submit all required program information, provide EPS score sheets, and queue up incentive payments. The goals of this web tool, called the Axis Database, are to speed up incentive payments, eliminate paperwork and duplicative data entry, provide real time EPS scores, and reduce missing and incorrect information.

Areas to focus on in 2014 and beyond include:

- Increase support and program offerings to better educate and engage subcontractors in high performance home building options
- Work with builders, verifiers, realtors and homebuyers to better clarify the role of EPS and Energy Trust incentives in the new homes market and how they complement various certification programs
- Promote home appraiser and realtor trainings more aggressively in conjunction with lenders
- Promote and support HVAC and ventilation trainings for subcontractors
- Revisit single head ductless heat pump requirement for standalone measures
- Assess other potential standalone incentives to better serve market demands
- Work to get EPS on MLS more consistently

The strategies outlined in the process evaluation and above align with the 2014 strategy being implemented by the New Homes program.

# Finance Committee Meeting

May 22, 2014

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The Finance Committee met at 2:00 p.m. on Thursday, May 22<sup>nd</sup> via teleconference. Present during the meeting were Dan Enloe, Finance Committee chair, Anne Root, board member, and Dave Slavensky, board member, Margie Harris, Executive Director; Courtney Wilton, CFO; and Alison Ebbott and Michelle Spampinato from finance department.

## Approved February meeting minutes

### Review of and discussion of first quarter financial statements with end of April update

Of note:

1. Revenue is running about four percent ahead of last year due primarily to a colder than anticipated winter. As you know, revenue was actually budgeted to drop a small amount due to NWNG rate adjustment –so we are actually about nine percent above budget to date. Both of these variances (from last year actual and current year budget) should moderate as the year progresses and as scheduled electric rate reductions take effect / impact. I expect actual revenue will end up very close to budget by year end.
2. Overall spending is about three percent ahead of last year to date. Staff and PMC costs are up as expected - due to contract escalations and fewer staff vacancies. But, incentive costs are almost exactly the same as prior year through 3/31. It's interesting that their composition is quite different. See attached word document for comments Alison prepared on topic.
3. Surplus / net income to date is just under \$30m (29.6m) which brings our total retained earnings to \$107.5m. As you know, it's common to run a surplus in the first quarter due to winter receipts and low incentive spending. Last year's surplus for same time period was \$28.5m. This surplus normally gets drawn in later months - especially November and December when incentive payments ramp up. Last year, however, this didn't happen and the first quarter surplus essentially held throughout the year. So, whether we end the year above \$100m in retained earnings will depend on what happens with incentive payments this year. If we spend consistent with 2013 incentive levels as we have in the first quarter, we will likely run another significant operating surplus and our reserves will grow to around \$100m.

### Discussion of Forecasting Goals / Reserve Level Management

Committee reviewed budget and forecasting history over multi-year history. For the most part, we've budgeted revenue tightly at an average of 97.5% of actual. Budget to actual variances on the expense side have been more significant. Actuals have averaged about 82% of budget. Last year's expenses were less; incentive totals for year were only about 69% of budget. Our forecasting has also been somewhat conservative. On average, we've ended the year with reserve levels about \$10m higher than estimated in August. Last year's forecast-actual difference was \$15.3m. It's no doubt very challenging to estimate our year end spending levels given all the variables and uncertainties. However, the existing variance levels are contributing to an ever growing reserve; based on first quarter financials, if incentive spending remains at 2013 levels we will very likely end the year above \$100m. Since this level of reserves isn't necessary for operations, or desirable from a political standpoint, we are planning to more actively manage in the future. Further discussion on to degree PUC and/or legislature monitors total reserve levels.



**Investment Discussion****1. Recap of current holdings / earning impact**

Reviewed current holdings. Have diversified holdings within current policy and extended maturities up to three years. Also negotiated lower deposit requirement with Umpqua and higher overnight repurchase earnings rate.

**2. Discussion of changes to existing policy**

Approved following changes to ETO investment policy:

- A. Require that all investments be held by a third party custodian. "All investments will be delivered to and held for safekeeping by a qualified third-party securities custodian."
- B. Add issues investment concentration limits. "The maximum portfolio concentration per issuer is 100% for federal government obligations, 50% for federal agencies and 10% for all other non-FDIC insured issuers."
- C. Allow Oregon state and local government bonds to qualified investment list provided they are rated A or better by Moodys or Standard and Poor's.

Staff to check with Deb to determine if board resolution needed to change, or if committee action sufficient. Also requested that staff investigate feasibility of purchasing gov. bonds financing projects that are consistent with our mission such as wastewater treatment plants.

**Discussion of Oregon bank certificates of deposit over and above FDIC limit**

Committee was not interested in changing current policy to allow investments in bank CD's over and above FDIC limit. Extra earnings not worth the risk.

**Upcoming banking service agreement expiration**

Our agreement with Umpqua is expiring this fall. Direction from committee was to informally survey market to determine if there is interest in account before proceeding further. If strong interest we can proceed to next competitive stage. If not, we can work on contract renewal.

**Updates on other topics of interest:**

- 1. Large Customer Funding Limitation Analysis Workgroup**
- 2. Analysis of Potential ETO Provided Financing Tools**

Much discussion regarding 1149 large customer limits - i.e. where we are and impacts if limited. The issue has been communicated to our board, and most recently to CAC and ETO's policy committee. A group of staff will be meeting in near term to analyze options and brainstorm solutions. Was discussed in last year's board retreat, and will be again this year.

We recently discussed with finance committee the rollout of our new financing program, titled "savings within reach." Work continues on analyzing the feasibility of offering additional financing products – either via partnerships or even directly with limits. We'll likely be checking back with finance committee in the near term with some potential ideas.

**Next Meeting: August 15**

## Notes on April 2014 Financial Statements

May 20, 2014

### Revenue

Cascade Natural Gas made an adjustment in April that will reduce their future payments from May forward. We have begun to invest in financial instruments with slightly higher returns and expect investment income to continue to exceed budget amounts for the rest of the year.

| <u>Apr-14</u>     | <u>YTD Actual</u> | <u>YTD Budget</u> | <u>YTD Var</u> | <u>YTD %</u> |
|-------------------|-------------------|-------------------|----------------|--------------|
| PGE               | 33,302,899        | 31,332,098        | 1,970,801      | 6%           |
| PAC               | 20,402,707        | 18,254,702        | 2,148,005      | 12%          |
| NWN               | 12,472,986        | 12,541,611        | (68,625)       | -1%          |
| CNG               | 1,853,822         | 1,033,403         | 820,419        | 79%          |
| Investment Income | 49,351            | 26,000            | 23,351         | 90%          |
| Total             | 68,081,765        | 63,187,814        | 4,893,951      | 8%           |

### Reserves

Total Reserves at the end of April are below. As is typical for this time of year, revenue exceeds cash requirements out so the reserves grow in size.

### Reserves

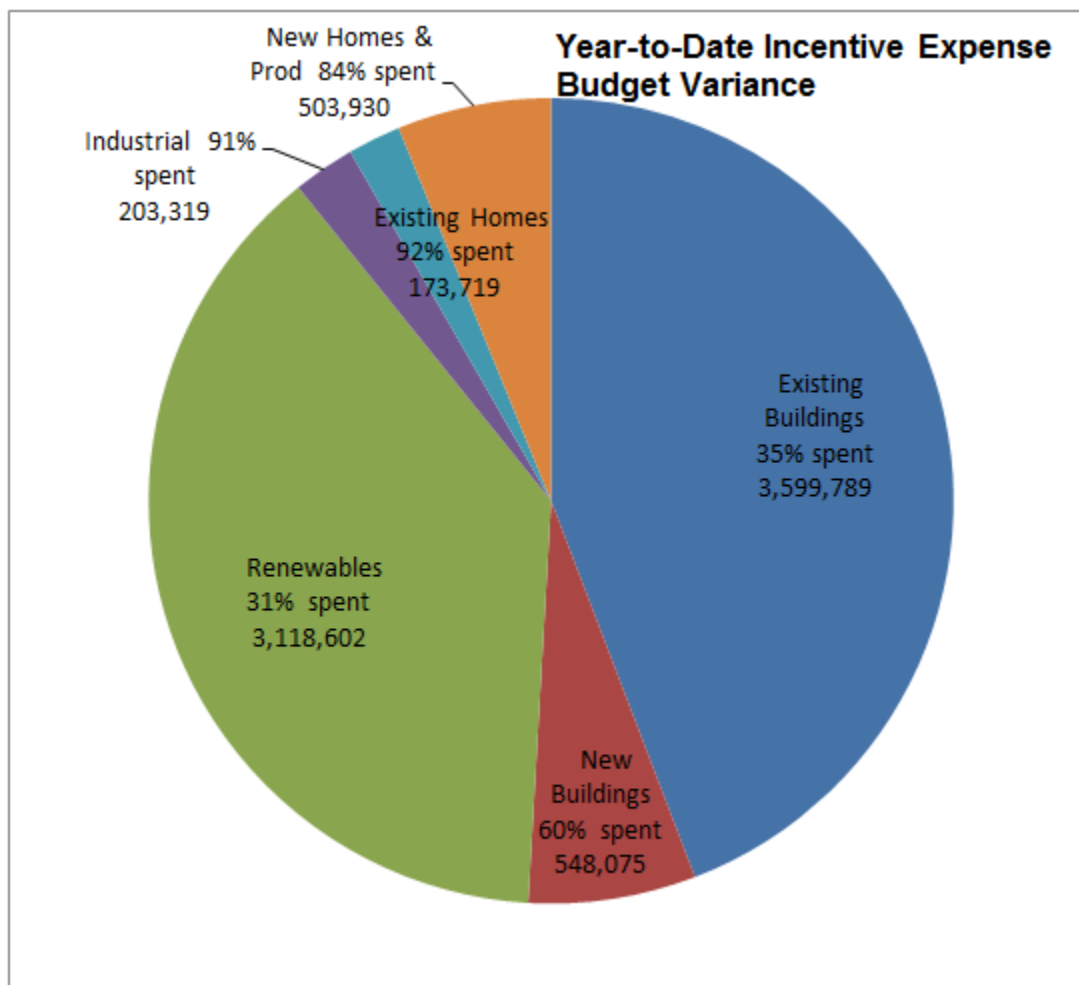
|                       | <u>Actual 12/31/13</u><br><u>Amount</u> | <u>Actual 4/30/14</u><br><u>Amount</u> | <u>% Change</u> |
|-----------------------|---|--|-----------------|
| PGE                   | 24,483,032                              | 38,782,384                             | 58.4%           |
| PacifiCorp            | 11,560,814                              | 20,996,210                             | 81.6%           |
| NW Natural            | 8,569,670                               | 15,002,179                             | 75.1%           |
| Cascade               | 658,260                                 | 2,080,544                              | 216.1%          |
| NWN Industrial        | 356,235                                 | 1,018,566                              | 185.9%          |
| NWN Washington        | 473,674                                 | 714,025                                | 50.7%           |
| PGE Renewables        | 12,041,462                              | 13,786,279                             | 14.5%           |
| PAC Renewables        | 11,793,715                              | 13,386,304                             | 13.5%           |
| Contingency Reserve   | 5,000,000                               | 5,000,000                              | 0.0%            |
| Contingency Available | 2,993,710                               | 3,055,561                              | 2.1%            |
| Total                 | 77,930,572                              | 113,822,050                            | 46.1%           |

## Expenses

Last year at this time total spending was \$31.4 million. This year total spending is \$32.2 million. Incentive spending is the same: \$11.15 million last year vs. \$11.15 million this year.

## Incentive Expenses

The incentives paid out so far in 2014 are \$8.2 million below budgeted amounts. The following graph shows how much each program is underspent. The % reference shows how much of the Y-T-D budget has been consumed. For example, New Buildings has spent 60% of their Y-T-D incentive budget. They have not yet spent \$548,075 of the \$8.2 million unspent incentives, leading to a relatively small slice of the pie. It's worth noting that Existing Homes had spent only 69% of their budget last month and they've now increased that to 92%, primarily through Energy Saver Kits.



| <b>Total Incentives</b>    |                  |                   |                  |              |
|----------------------------|------------------|-------------------|------------------|--------------|
| <b>Year-to-Date 2014</b>   |                  |                   |                  |              |
| Incentives thru April 2014 | <u>Actual</u>    | <u>Budget</u>     | <u>Variance</u>  | <u>Var %</u> |
| Existing Buildings         | 1,974,943        | 5,574,732         | 3,599,789        | 65%          |
| New Buildings              | 822,472          | 1,370,547         | 548,075          | 40%          |
| Production Efficiency      | 2,087,746        | 2,291,065         | 203,319          | 9%           |
| Existing Homes             | 2,122,256        | 2,295,975         | 173,719          | 8%           |
| New Homes & Products       | 2,665,165        | 3,169,095         | 503,930          | 16%          |
| Washington Programs - All  | 96,150           | 169,554           | 73,404           | 43%          |
| Solar                      | 1,347,937        | 2,141,587         | 793,650          | 37%          |
| Open Solicitation          | 35,733           | 2,360,685         | 2,324,952        | 98%          |
| Total Incentives           | 11,152,402       | 19,373,240        | 8,220,838        | 42%          |
| Energy Efficiency Only     | <b>9,768,732</b> | <b>14,870,968</b> | <b>5,102,236</b> | <b>34%</b>   |

| <b>Total Incentives</b>        |                     |                   |                 |              |
|--------------------------------|---------------------|-------------------|-----------------|--------------|
| <b>Year-to-Year Comparison</b> |                     |                   |                 |              |
| April 2014 v April 2013        | <u>Current Year</u> | <u>Prior Year</u> | <u>Variance</u> | <u>Var %</u> |
| Existing Buildings             | 1,974,943           | 1,592,377         | (382,566)       | -24%         |
| New Buildings                  | 822,472             | 2,273,097         | 1,450,625       | 64%          |
| Production Efficiency          | 2,087,746           | 2,902,100         | 814,354         | 28%          |
| Existing Homes                 | 2,122,256           | 1,185,303         | (936,953)       | -79%         |
| New Homes & Products           | 2,665,165           | 2,055,430         | (609,735)       | -30%         |
| Washington Programs - All      | 96,150              | 54,361            | (41,789)        |              |
| Solar                          | 1,347,937           | 877,207           | (470,730)       | -54%         |
| Other                          | 35,733              | 209,442           | 173,709         | 83%          |
| Total Incentives               | 11,152,402          | 11,149,313        | (3,089)         | 0%           |
| Energy Efficiency Only         | <b>9,768,732</b>    | <b>10,062,668</b> | <b>293,936</b>  | <b>3%</b>    |

Energy Trust of Oregon, Inc  
BALANCE SHEET  
April 30, 2014  
(Unaudited)

|   | APR<br>2014        | MAR<br>2014        | DEC<br>2013        | APR<br>2013       | Change from<br>one month ago | Change from<br>Beg. of Year | Change from<br>one year ago |
|---|--------------------|--------------------|--------------------|-------------------|------------------------------|-----------------------------|-----------------------------|
| <b>Current Assets</b>                   |                    |                    |                    |                   |                              |                             |                             |
| Cash & Cash Equivalents                 | 76,404,658         | 88,795,538         | 76,484,638         | 84,404,348        | (12,390,879)                 | (79,980)                    | (7,999,689)                 |
| Restricted Cash (Escrow Funds)          | 4,637              | 4,637              | -                  | 252,683           | -                            | 4,637                       | (248,046)                   |
| Investments                             | 42,069,768         | 23,517,122         | 25,270,363         | -                 | 18,552,647                   | 16,799,406                  | 42,069,768                  |
| Restricted Investments (Escrow Funds)   | -                  | -                  | 77,988             | -                 | 0                            | (77,988)                    | 0                           |
| Receivables                             | 142,516            | 29,577             | 8,276              | 8,066             | 112,939                      | 134,240                     | 134,450                     |
| Prepaid Expenses                        | 522,433            | 564,778            | 526,087            | 903,613           | (42,345)                     | (3,654)                     | (381,179)                   |
| Advances to Vendors                     | 1,941,778          | 2,306,806          | 2,015,420          | 1,716,087         | (365,028)                    | (73,642)                    | 225,690                     |
| <b>Total Current Assets</b>             | <b>121,085,790</b> | <b>115,218,457</b> | <b>104,382,771</b> | <b>87,284,796</b> | <b>5,867,333</b>             | <b>16,703,019</b>           | <b>33,800,994</b>           |
| <b>Fixed Assets</b>                     |                    |                    |                    |                   |                              |                             |                             |
| Computer Hardware and Software          | 1,448,587          | 1,448,587          | 1,401,967          | 1,353,958         | -                            | 46,620                      | 94,629                      |
| Leasehold Improvements                  | 313,333            | 313,333            | 313,333            | 313,333           | -                            | -                           | -                           |
| Office Equipment and Furniture          | 600,662            | 600,662            | 600,662            | 600,662           | -                            | -                           | -                           |
| <b>Total Fixed Assets</b>               | <b>2,362,582</b>   | <b>2,362,582</b>   | <b>2,315,962</b>   | <b>2,267,953</b>  | <b>-</b>                     | <b>46,620</b>               | <b>94,629</b>               |
| Less Depreciation                       | (1,611,871)        | (1,583,453)        | (1,500,494)        | (1,293,360)       | (28,418)                     | (111,376)                   | (318,511)                   |
| <b>Net Fixed Assets</b>                 | <b>750,712</b>     | <b>779,130</b>     | <b>815,468</b>     | <b>974,593</b>    | <b>(28,418)</b>              | <b>(64,756)</b>             | <b>(223,881)</b>            |
| <b>Other Assets</b>                     |                    |                    |                    |                   |                              |                             |                             |
| Rental Deposit                          | 64,461             | 64,461             | 61,461             | 64,461            | -                            | 3,000                       | -                           |
| Deferred Compensation Asset             | 509,389            | 499,637            | 552,641            | 429,348           | 9,753                        | (43,251)                    | 80,042                      |
| <b>Total Other Assets</b>               | <b>573,851</b>     | <b>564,098</b>     | <b>614,102</b>     | <b>493,809</b>    | <b>9,753</b>                 | <b>(40,251)</b>             | <b>80,042</b>               |
| <b>Total Assets</b>                     | <b>122,410,353</b> | <b>116,561,685</b> | <b>105,812,341</b> | <b>88,753,198</b> | <b>5,848,668</b>             | <b>16,598,012</b>           | <b>33,657,155</b>           |
| <b>Current Liabilities</b>              |                    |                    |                    |                   |                              |                             |                             |
| Accounts Payable and Accruals           | 6,992,942          | 7,416,917          | 26,326,508         | 7,203,396         | (423,975)                    | (19,333,566)                | (210,455)                   |
| Deposits Held for Others                | -                  | -                  | -                  | 6,555             | -                            | -                           | (6,555)                     |
| Salaries, Taxes, & Benefits Payable     | 718,945            | 742,924            | 631,548            | 649,494           | (23,979)                     | 87,397                      | 69,451                      |
| <b>Total Current Liabilities</b>        | <b>7,711,886</b>   | <b>8,159,841</b>   | <b>26,958,055</b>  | <b>7,859,445</b>  | <b>(447,954)</b>             | <b>(19,246,169)</b>         | <b>(147,559)</b>            |
| <b>Long Term Liabilities</b>            |                    |                    |                    |                   |                              |                             |                             |
| Deferred Rent                           | 359,962            | 361,033            | 364,244            | 338,538           | (1,070)                      | (4,281)                     | 21,425                      |
| Deferred Compensation Payable           | 509,389            | 499,637            | 552,641            | 429,348           | 9,753                        | (43,251)                    | 80,042                      |
| Other Long-Term Liabilities             | 7,065              | 6,955              | 6,830              | 13,934            | 110                          | 235                         | (6,869)                     |
| <b>Total Long-Term Liabilities</b>      | <b>876,416</b>     | <b>867,624</b>     | <b>923,714</b>     | <b>781,819</b>    | <b>8,792</b>                 | <b>(47,298)</b>             | <b>94,598</b>               |
| <b>Total Liabilities</b>                | <b>8,588,303</b>   | <b>9,027,465</b>   | <b>27,881,769</b>  | <b>8,641,264</b>  | <b>(439,162)</b>             | <b>(19,293,467)</b>         | <b>(52,961)</b>             |
| <b>Net Assets</b>                       |                    |                    |                    |                   |                              |                             |                             |
| Temporarily Restricted Net Assets       | 4,637              | 4,637              | 77,988             | 252,683           | -                            | (73,350)                    | (248,046)                   |
| Unrestricted Net Assets                 | 113,817,413        | 107,529,583        | 77,852,585         | 79,859,251        | 6,287,830                    | 35,964,829                  | 33,958,162                  |
| <b>Total Net Assets</b>                 | <b>113,822,050</b> | <b>107,534,220</b> | <b>77,930,572</b>  | <b>80,111,934</b> | <b>6,287,830</b>             | <b>35,891,478</b>           | <b>33,710,116</b>           |
| <b>Total Liabilities and Net Assets</b> | <b>122,410,353</b> | <b>116,561,685</b> | <b>105,812,341</b> | <b>88,753,198</b> | <b>5,848,668</b>             | <b>16,598,012</b>           | <b>33,657,155</b>           |

BS-Acct-YTD-001

**Energy Trust of Oregon**  
**Cash Flow Statement-Indirect Method**  
**Monthly 2014**

|   | <u>January</u>       | <u>February</u>      | <u>March</u>         | <u>April</u>         | <u>Year to Date</u>    |
|---|----------------------|----------------------|----------------------|----------------------|------------------------|
| <b>Operating Activities:</b>                            |                      |                      |                      |                      |                        |
| <i>Revenue less Expenses</i>                            | 12,906,165           | 10,113,897           | 6,583,587            | 6,287,830            | \$ 35,891,479          |
| <i>Non-cash items:</i>                                  |                      |                      |                      |                      |                        |
| Depreciation  | 27,123               | 27,123               | 28,713               | 28,418               | \$ 111,377             |
| Loss on disposal of assets                              |                      |                      |                      |                      | \$ -                   |
| Receivables   | 3,902                | (49)                 | -                    | -                    | \$ 3,853               |
| Interest Receivable                                     | 1,292                | 663                  | (27,109)             | (112,939)            | \$ (138,093)           |
| Advances to Vendors                                     | 680,371              | 678,630              | (1,650,387)          | 365,028              | \$ 73,642              |
| Prepaid expenses and other costs                        | (151,035)            | 100,837              | 11,507               | 42,345               | \$ 3,654               |
| Accounts payable  | (19,456,433)         | (797,502)            | 1,417,700            | (423,975)            | \$ (19,260,210)        |
| Payroll and related accruals                            | 70,280               | (88,799)             | 76,891               | (14,227)             | \$ 44,145              |
| Deferred rent and other                                 | (3,988)              | 51,851               | (945)                | (10,714)             | \$ 36,204              |
| <b>Cash rec'd from / (used in) Operating Activities</b> | <b>(5,922,323)</b>   | <b>10,086,651</b>    | <b>6,439,957</b>     | <b>6,161,766</b>     | <b>\$ 16,766,051</b>   |
| <b>Investing Activities:</b>                            |                      |                      |                      |                      |                        |
| Investment Activity (1)                                 | 992,503              | 992,840              | (232,102)            | (18,552,646)         | \$ (16,799,405)        |
| (Acquisition)/Disposal of Capital Assets                | -                    |                      | (46,620)             | -                    | \$ (46,620)            |
| <b>Cash rec'd from / (used in) Investing Activities</b> | <b>992,503</b>       | <b>992,840</b>       | <b>(278,722)</b>     | <b>(18,552,646)</b>  | <b>\$ (16,846,025)</b> |
| <b>Cash at beginning of Period</b>                      | <b>76,484,638</b>    | <b>71,554,817</b>    | <b>82,634,304</b>    | <b>88,795,538</b>    | <b>76,484,638</b>      |
| <b>Increase/(Decrease) in Cash</b>                      | <b>(4,929,820)</b>   | <b>11,079,491</b>    | <b>6,161,235</b>     | <b>(12,390,880)</b>  | <b>(79,974)</b>        |
| <b>Cash at end of period</b>                            | <b>\$ 71,554,817</b> | <b>\$ 82,634,304</b> | <b>\$ 88,795,538</b> | <b>\$ 76,404,658</b> | <b>\$ 76,404,658</b>   |

(1) As investments mature, they are rolled into the Repo account.  
Investments that are made during the month reduce available cash.

Energy Trust of Oregon  
Cash Flow Projection  
January 2014 - December 2015

|                                 | Actual      |            |            |              | Adjusted Budget |            |            |            |            |            |            |              |
|---------------------------------|-------------|------------|------------|--------------|-----------------|------------|------------|------------|------------|------------|------------|--------------|
|                                 | January     | February   | March      | April        | May             | June       | July       | August     | September  | October    | November   | December     |
|                                 |             |            |            |              |                 |            |            |            |            |            |            |              |
| Cash In:                        |             |            |            |              |                 |            |            |            |            |            |            |              |
| Public purpose and Incr funding | 17,726,777  | 18,539,933 | 16,486,831 | 15,278,872   | 11,700,000      | 10,900,000 | 12,000,000 | 11,100,000 | 10,700,000 | 12,700,000 | 11,700,000 | 14,300,000   |
| From other sources              | 3,902       | (49)       | 12,500     | -            | -               | -          | -          | -          | -          | -          | -          | -            |
| Investment Income               | 12,036      | 10,159     | (15,526)   | (95,411)     | 4,000           | 4,000      | 4,000      | 4,000      | 4,000      | 4,000      | 4,000      | 4,000        |
| Total cash in                   | 17,742,715  | 18,550,043 | 16,483,805 | 15,183,461   | 11,704,000      | 10,904,000 | 12,004,000 | 11,104,000 | 10,704,000 | 12,704,000 | 11,704,000 | 14,304,000   |
| Cash Out:                       |             |            |            |              |                 |            |            |            |            |            |            |              |
|                                 | 22,672,537  | 7,470,551  | 10,322,571 | 27,574,340   | 9,900,000       | 14,500,000 | 12,500,000 | 12,500,000 | 15,900,000 | 14,300,000 | 16,600,000 | 35,700,000   |
| Net cash flow for the month     | (4,929,822) | 11,079,492 | 6,161,234  | (12,390,879) | (2,320,989)     | 1,543,254  | 3,387,048  | (859,044)  | 3,308,520  | 3,384,264  | 2,450,490  | (21,396,000) |
| Beginning Balance: Cash & MM    | 76,484,640  | 71,554,817 | 82,634,309 | 88,795,543   | 76,404,659      | 82,336,039 | 83,879,294 | 87,266,342 | 86,407,299 | 89,715,819 | 93,100,082 | 95,550,571   |
| Ending cash & MM                | 71,554,817  | 82,634,309 | 88,795,543 | 76,404,659   | 74,083,668      | 83,879,294 | 87,266,342 | 86,407,299 | 89,715,819 | 93,100,082 | 95,550,571 | 74,154,570   |

|                            |            |            |            |            |            |            |            |            |            |            |            |            |
|----------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Future Commitments         |            |            |            |            |            |            |            |            |            |            |            |            |
| Renewable Incentives       | 20,900,000 | 21,000,000 | 14,200,000 | 14,200,000 | 14,300,000 | 13,800,000 | 14,400,000 | 14,800,000 | 15,200,000 | 15,700,000 | 16,200,000 | 16,400,000 |
| Efficiency Incentives      | 39,500,000 | 47,800,000 | 44,400,000 | 44,100,000 | 43,000,000 | 41,800,000 | 40,500,000 | 39,400,000 | 39,100,000 | 40,200,000 | 41,700,000 | 37,600,000 |
| Emergency Contingency Pool | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  |
| Total Commitments          | 65,400,000 | 73,800,000 | 63,600,000 | 63,300,000 | 62,300,000 | 60,600,000 | 59,900,000 | 59,200,000 | 59,300,000 | 60,900,000 | 62,900,000 | 59,000,000 |

|                                  |        |        |          |       |         |   |   |   |   |   |   |   |
|----------------------------------|--------|--------|----------|-------|---------|---|---|---|---|---|---|---|
| Escrow Cash Balance              |        |        |          |       |         |   |   |   |   |   |   |   |
| Beginning Balance                | 77,989 | 77,989 | 77,993   | 4,637 | 4,637   |   |   |   |   |   |   | - |
| Net Escrow (Payments)/Funding    |        |        | (73,356) |       | (4,637) |   |   |   |   |   |   | - |
| Interest Paid on Escrow Balances |        | 4      |          |       |         |   |   |   |   |   |   | - |
| Ending Escrow Balance (1)        | 77,989 | 77,993 | 4,637    | 4,637 | -       | - | - | - | - | - | - | - |

(1) Included in "Ending cash & MM" above

- Dedicated funds adjustment:

Committed funds adjustment:

Cash reserve:

Escrow:
- reduction in available cash for commitments to Renewable program projects with board approval, or when board approval not required, with signed agreements

reduction in available cash for commitments to Efficiency program projects with signed agreements

reduction in available cash to cover cashflow variability and winter revenue risk

dedicated funds set aside in separate bank accounts

Energy Trust of Oregon  
Cash Flow Projection  
January 2014 - December 2015

|                                 | 2015 Round 2 Budget |            |            |            |            |             |             |            |             |            |             |              |
|---------------------------------|---------------------|------------|------------|------------|------------|-------------|-------------|------------|-------------|------------|-------------|--------------|
|                                 | January             | February   | March      | April      | May        | June        | July        | August     | September   | October    | November    | December     |
| Cash In:                        |                     |            |            |            |            |             |             |            |             |            |             |              |
| Public purpose and Incr funding | 15,500,000          | 16,100,000 | 15,400,000 | 14,100,000 | 11,800,000 | 11,000,000  | 11,900,000  | 11,100,000 | 10,700,000  | 12,600,000 | 11,800,000  | 14,400,000   |
| From other sources              |                     |            |            |            |            |             |             |            |             |            |             |              |
| Investment Income               | 8,000               | 8,000      | 8,000      | 8,000      | 8,000      | 8,000       | 8,000       | 8,000      | 8,000       | 8,000      | 8,000       | 8,000        |
| Total cash in                   | 15,508,000          | 16,108,000 | 15,408,000 | 14,108,000 | 11,808,000 | 11,008,000  | 11,908,000  | 11,108,000 | 10,708,000  | 12,608,000 | 11,808,000  | 14,408,000   |
| Cash Out:                       | 19,300,000          | 9,100,000  | 13,400,000 | 11,100,000 | 9,700,000  | 14,300,000  | 13,300,000  | 11,300,000 | 13,800,000  | 12,200,000 | 14,800,000  | 41,000,000   |
| Net cash flow for the month     | (3,792,000)         | 7,008,000  | 2,008,000  | 3,008,000  | 2,108,000  | (3,292,000) | (1,392,000) | (192,000)  | (3,092,000) | 408,000    | (2,992,000) | (26,592,000) |
| Beginning Balance: Cash & MM    | 74,154,570          | 70,362,570 | 77,370,570 | 79,378,570 | 82,386,570 | 84,494,570  | 81,202,570  | 79,810,570 | 79,618,570  | 76,526,570 | 76,934,570  | 73,942,570   |
| Ending cash & MM                | 70,362,570          | 77,370,570 | 79,378,570 | 82,386,570 | 84,494,570 | 81,202,570  | 79,810,570  | 79,618,570 | 76,526,570  | 76,934,570 | 73,942,570  | 47,350,570   |

|                            |            |            |            |            |            |            |            |            |            |            |            |            |
|----------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Future Commitments         |            |            |            |            |            |            |            |            |            |            |            |            |
| Renewable Incentives       | 16,400,000 | 16,400,000 | 16,400,000 | 16,400,000 | 16,400,000 | 16,400,000 | 16,400,000 | 16,400,000 | 16,400,000 | 16,400,000 | 16,400,000 | 16,400,000 |
| Efficiency Incentives      | 37,600,000 | 37,600,000 | 37,600,000 | 37,600,000 | 37,600,000 | 37,600,000 | 37,600,000 | 37,600,000 | 37,600,000 | 37,600,000 | 37,600,000 | 37,600,000 |
| Emergency Contingency Pool | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  |
| Total Commitments          | 59,000,000 | 59,000,000 | 59,000,000 | 59,000,000 | 59,000,000 | 59,000,000 | 59,000,000 | 59,000,000 | 59,000,000 | 59,000,000 | 59,000,000 | 59,000,000 |

|                                  |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Escrow Cash Balance              |   |   |   |   |   |   |   |   |   |   |   |   |
| Beginning Balance                | - | - | - | - | - | - | - | - | - | - | - | - |
| Net Escrow (Payments)/Funding    |   |   |   |   |   |   |   |   |   |   |   |   |
| Interest Paid on Escrow Balances | - | - | - | - | - | - | - | - | - | - | - | - |
| Ending Escrow Balance (1)        | - | - | - | - | - | - | - | - | - | - | - | - |

(1) Included in "Ending cash & MM" above

- Dedicated funds adjustment:

Committed funds adjustment:

Cash reserve:

Escrow:
- reduction in available cash for commitments to Renewable program projects with board approval, or when board approval not required, with signed agreements

reduction in available cash for commitments to Efficiency program projects with signed agreements

reduction in available cash to cover cashflow variability and winter revenue risk

dedicated funds set aside in separate bank accounts



**Energy Trust of Oregon, Inc**  
**INCOME STATEMENT - ACTUAL AND PRIOR YR COMPARISON**  
**For the Four Months Ending April 30, 2014**  
**(Unaudited)**

|                                    | April             |                      |                        |               | YTD               |                      |                        |               |
|------------------------------------|-------------------|----------------------|------------------------|---------------|-------------------|----------------------|------------------------|---------------|
|                                    | Actual            | Actual<br>Prior Year | Prior Year<br>Variance | Variance<br>% | Actual            | Actual<br>Prior Year | Prior Year<br>Variance | Variance<br>% |
| <b><u>REVENUES</u></b>             |                   |                      |                        |               |                   |                      |                        |               |
| Public Purpose Funds-PGE           | 3,160,135         | 2,896,556            | 263,580                | 9%            | 13,862,372        | 12,880,217           | 982,155                | 8%            |
| Public Purpose Funds-PacifiCorp    | 2,233,010         | 2,159,200            | 73,811                 | 3%            | 10,245,848        | 9,487,069            | 758,780                | 8%            |
| Public Purpose Funds-NW Natural    | 2,151,780         | 2,695,545            | (543,765)              | (20%)         | 10,921,457        | 13,140,406           | (2,218,949)            | (17%)         |
| Public Purpose Funds-Cascade       | 301,943           | 191,076              | 110,867                | 58%           | 1,853,822         | 1,146,257            | 707,564                | 62%           |
| <b>Total Public Purpose Funds</b>  | <b>7,846,868</b>  | <b>7,942,376</b>     | <b>(95,508)</b>        | <b>(1%)</b>   | <b>36,883,498</b> | <b>36,653,949</b>    | <b>229,549</b>         | <b>1%</b>     |
| Incremental Funds - PGE            | 4,285,670         | 4,173,563            | 112,108                | 3%            | 19,440,528        | 18,384,956           | 1,055,572              | 6%            |
| Incremental Funds - PacifiCorp     | 2,121,981         | 2,198,510            | (76,529)               | (3%)          | 10,156,859        | 9,514,871            | 641,987                | 7%            |
| NW Natural - Industrial DSM        | 1,024,352         | 575,946              | 448,406                | 78%           | 1,024,352         | 575,946              | 448,406                | 78%           |
| NW Natural - Washington            | 0                 | 0                    | 0                      |               | 527,177           | 645,551              | (118,374)              | (18%)         |
| Contributions                      | 0                 | 930                  | (930)                  | (1)           | 12,500            | 930                  | 11,570                 | 1244%         |
| Revenue from Investments           | 17,528            | 7,615                | 9,913                  | 130%          | 49,351            | 29,244               | 20,107                 | 69%           |
| Gain or Loss on Investments        | 0                 | 97                   | (97)                   | (100%)        | 0                 | 97                   | (97)                   | (100%)        |
| <b>TOTAL REVENUE</b>               | <b>15,296,399</b> | <b>14,899,037</b>    | <b>397,363</b>         | <b>3%</b>     | <b>68,094,264</b> | <b>65,805,543</b>    | <b>2,288,721</b>       | <b>3%</b>     |
| <b><u>EXPENSES</u></b>             |                   |                      |                        |               |                   |                      |                        |               |
| Program Subcontracts               | 3,471,690         | 3,705,048            | 233,358                | 6%            | 14,784,071        | 14,422,113           | (361,958)              | (3%)          |
| Incentives                         | 3,916,356         | 3,831,503            | (84,853)               | (2%)          | 11,152,402        | 11,149,315           | (3,087)                | (0%)          |
| Salaries and Related Expenses      | 894,126           | 793,684              | (100,441)              | (13%)         | 3,568,175         | 3,176,619            | (391,556)              | (12%)         |
| Professional Services              | 536,528           | 367,828              | (168,700)              | (46%)         | 1,908,624         | 1,707,416            | (201,207)              | (12%)         |
| Supplies                           | 1,848             | 3,573                | 1,725                  | 48%           | 13,692            | 10,935               | (2,757)                | (25%)         |
| Telephone                          | 4,255             | 4,077                | (177)                  | (4%)          | 17,059            | 16,694               | (365)                  | (2%)          |
| Postage and Shipping Expenses      | 1,291             | 1,335                | 44                     | 3%            | 3,911             | 3,377                | (534)                  | (16%)         |
| Occupancy Expenses                 | 54,509            | 55,823               | 1,314                  | 2%            | 220,569           | 220,394              | (174)                  | (0%)          |
| Noncapitalized Equip. & Depr.      | 48,303            | 53,403               | 5,100                  | 10%           | 231,527           | 205,983              | (25,544)               | (12%)         |
| Call Center                        | 12,936            | 66,480               | 53,544                 | 81%           | 50,456            | 251,899              | 201,442                | 80%           |
| Printing and Publications          | 8,197             | 5,790                | (2,406)                | (42%)         | 60,086            | 54,627               | (5,459)                | (10%)         |
| Travel                             | 17,197            | 11,078               | (6,120)                | (55%)         | 34,631            | 38,232               | 3,601                  | 9%            |
| Conference, Training & Mtng Exp    | 26,023            | 13,684               | (12,339)               | (90%)         | 63,626            | 43,274               | (20,353)               | (47%)         |
| Interest Expense and Bank Fees     | 0                 | 77                   | 77                     | 100%          | 2,000             | 443                  | (1,557)                | (352%)        |
| Insurance                          | 8,622             | 7,800                | (822)                  | (11%)         | 34,488            | 31,200               | (3,288)                | (11%)         |
| Miscellaneous Expenses             | 599               | 180                  | (419)                  | (233%)        | 639               | 180                  | (459)                  | (255%)        |
| Dues, Licenses and Fees            | 6,091             | 19,055               | 12,965                 | 68%           | 56,831            | 42,458               | (14,373)               | (34%)         |
| <b>TOTAL EXPENSES</b>              | <b>9,008,570</b>  | <b>8,940,419</b>     | <b>(68,150)</b>        | <b>(1%)</b>   | <b>32,202,786</b> | <b>31,375,158</b>    | <b>(827,628)</b>       | <b>(3%)</b>   |
| <b>TOTAL REVENUE LESS EXPENSES</b> | <b>6,287,830</b>  | <b>5,958,617</b>     | <b>329,212</b>         | <b>6%</b>     | <b>35,891,478</b> | <b>34,430,385</b>    | <b>1,461,093</b>       | <b>4%</b>     |

IS-Acct-YTD-PY

**Energy Trust of Oregon, Inc**  
**INCOME STATEMENT - ACTUAL AND YTD BUDGET COMPARISON**  
**For the Four Months Ending April 30, 2014**  
**(Unaudited)**

|                                    | April             |                   |                    |               | YTD               |                   |                    |               |
|------------------------------------|-------------------|-------------------|--------------------|---------------|-------------------|-------------------|--------------------|---------------|
|                                    | Actual            | Budget            | Budget<br>Variance | Variance<br>% | Actual            | Budget            | Budget<br>Variance | Variance<br>% |
| <b><u>REVENUES</u></b>             |                   |                   |                    |               |                   |                   |                    |               |
| Public Purpose Funds-PGE           | 3,160,135         | 2,911,681         | 248,454            | 9%            | 13,862,372        | 12,947,142        | 915,230            | 7%            |
| Public Purpose Funds-PacifiCorp    | 2,233,010         | 2,088,926         | 144,084            | 7%            | 10,245,848        | 9,136,982         | 1,108,866          | 12%           |
| Public Purpose Funds-NW Natural    | 2,151,780         | 2,182,254         | (30,474)           | (1%)          | 10,921,457        | 10,638,182        | 283,274            | 3%            |
| Public Purpose Funds-Cascade       | 301,943           | 153,097           | 148,846            | 97%           | 1,853,822         | 1,033,403         | 820,419            | 79%           |
| <b>Total Public Purpose Funds</b>  | <b>7,846,868</b>  | <b>7,335,958</b>  | <b>510,911</b>     | <b>7%</b>     | <b>36,883,498</b> | <b>33,755,709</b> | <b>3,127,789</b>   | <b>9%</b>     |
| Incremental Funds - PGE            | 4,285,670         | 4,173,563         | 112,107            | 3%            | 19,440,528        | 18,384,956        | 1,055,571          | 6%            |
| Incremental Funds - PacifiCorp     | 2,121,981         | 2,042,685         | 79,296             | 4%            | 10,156,859        | 9,117,720         | 1,039,138          | 11%           |
| NW Natural - Industrial DSM        | 1,024,352         | 1,257,878         | (233,526)          | (19%)         | 1,024,352         | 1,257,878         | (233,526)          | (19%)         |
| NW Natural - Washington            | 0                 | 0                 | 0                  |               | 527,177           | 645,551           | (118,374)          | (18%)         |
| Contributions                      | 0                 | 0                 | 0                  |               | 12,500            | 0                 | 12,500             | -             |
| Revenue from Investments           | 17,528            | 6,500             | 11,028             | 170%          | 49,351            | 26,000            | 23,351             | 90%           |
| <b>TOTAL REVENUE</b>               | <b>15,296,399</b> | <b>14,816,584</b> | <b>479,815</b>     | <b>3%</b>     | <b>68,094,264</b> | <b>63,187,814</b> | <b>4,906,450</b>   | <b>8%</b>     |
| <b><u>EXPENSES</u></b>             |                   |                   |                    |               |                   |                   |                    |               |
| Program Subcontracts               | 3,471,690         | 4,207,274         | 735,584            | 17%           | 14,784,071        | 16,416,819        | 1,632,748          | 10%           |
| Incentives                         | 3,916,356         | 7,185,637         | 3,269,281          | 45%           | 11,152,402        | 19,373,240        | 8,220,838          | 42%           |
| Salaries and Related Expenses      | 894,126           | 987,115           | 92,990             | 9%            | 3,568,175         | 3,945,794         | 377,619            | 10%           |
| Professional Services              | 536,528           | 758,552           | 222,024            | 29%           | 1,908,624         | 3,135,881         | 1,227,258          | 39%           |
| Supplies                           | 1,848             | 4,588             | 2,740              | 60%           | 13,692            | 18,353            | 4,661              | 25%           |
| Telephone                          | 4,255             | 5,484             | 1,229              | 22%           | 17,059            | 21,906            | 4,847              | 22%           |
| Postage and Shipping Expenses      | 1,291             | 1,183             | (108)              | (9%)          | 3,911             | 4,733             | 823                | 17%           |
| Occupancy Expenses                 | 54,509            | 64,275            | 9,766              | 15%           | 220,569           | 257,099           | 36,531             | 14%           |
| Noncapitalized Equip. & Depr.      | 48,303            | 48,397            | 94                 | 0%            | 231,527           | 384,156           | 152,629            | 40%           |
| Call Center                        | 12,936            | 15,000            | 2,064              | 14%           | 50,456            | 60,000            | 9,544              | 16%           |
| Printing and Publications          | 8,197             | 11,858            | 3,662              | 31%           | 60,086            | 47,433            | (12,653)           | (27%)         |
| Travel                             | 17,197            | 17,773            | 575                | 3%            | 34,631            | 79,340            | 44,709             | 56%           |
| Conference, Training & Mtng Exp    | 26,023            | 29,245            | 3,222              | 11%           | 63,626            | 132,730           | 69,103             | 52%           |
| Interest Expense and Bank Fees     | 0                 | 417               | 417                | 100%          | 2,000             | 1,667             | (333)              | (20%)         |
| Insurance                          | 8,622             | 9,167             | 545                | 6%            | 34,488            | 36,667            | 2,179              | 6%            |
| Miscellaneous Expenses             | 599               | 268               | (331)              | (123%)        | 639               | 1,073             | 434                | 40%           |
| Dues, Licenses and Fees            | 6,091             | 5,313             | (777)              | (15%)         | 56,831            | 68,028            | 11,197             | 16%           |
| <b>TOTAL EXPENSES</b>              | <b>9,008,570</b>  | <b>13,351,546</b> | <b>4,342,977</b>   | <b>33%</b>    | <b>32,202,786</b> | <b>43,984,920</b> | <b>11,782,134</b>  | <b>27%</b>    |
| <b>TOTAL REVENUE LESS EXPENSES</b> | <b>6,287,830</b>  | <b>1,465,038</b>  | <b>4,822,792</b>   | <b>329%</b>   | <b>35,891,478</b> | <b>19,202,894</b> | <b>16,688,584</b>  | <b>87%</b>    |

IS-Acct-YTD-001

**Energy Trust of Oregon, Inc**  
**Statement of Functional Expenses**  
**For the Four Months Ending April 30, 2014**

|                                    | Energy<br>Efficiency | Renewable<br>Energy | Total Program<br>Expenses | Management<br>& General | Communications &<br>Customer Service | Total Admin<br>Expenses | Total             | Budget            | Variance          | %<br>Var   |
|------------------------------------|----------------------|---------------------|---------------------------|-------------------------|--------------------------------------|-------------------------|-------------------|-------------------|-------------------|------------|
| <b>Program Expenses</b>            |                      |                     |                           |                         |                                      |                         |                   |                   |                   |            |
| Incentives/ Program Management & E | 24,493,959           | 1,442,513           | 25,936,472                |                         |                                      | 0                       | 25,936,472        | 35,790,058        | 9,853,586         | 28%        |
| Payroll and Related Expenses       | 1,029,522            | 318,817             | 1,348,339                 | 629,995                 | 284,013                              | 914,008                 | 2,262,347         | 2,458,278         | 195,931           | 8%         |
| Outsourced Services                | 1,139,139            | 56,853              | 1,195,992                 | 83,149                  | 143,883                              | 227,032                 | 1,423,024         | 2,682,632         | 1,259,608         | 47%        |
| Planning and Evaluation            | 901,983              | 31,093              | 933,076                   | 654                     |                                      | 654                     | 933,730           | 954,606           | 20,876            | 2%         |
| Customer Service Management        | 210,551              | 8,682               | 219,233                   |                         |                                      | 0                       | 219,233           | 227,335           | 8,102             | 4%         |
| Trade Allies Network               | 135,764              | 6,145               | 141,909                   |                         |                                      | 0                       | 141,909           | 159,069           | 17,160            | 11%        |
| <b>Total Program Expenses</b>      | <b>27,910,917</b>    | <b>1,864,103</b>    | <b>29,775,020</b>         | <b>713,798</b>          | <b>427,896</b>                       | <b>1,141,694</b>        | <b>30,916,714</b> | <b>42,271,977</b> | <b>11,355,263</b> | <b>27%</b> |
| <b>Program Support Costs</b>       |                      |                     |                           |                         |                                      |                         |                   |                   |                   |            |
| Supplies                           | 4,538                | 1,137               | 5,675                     | 2,924                   | 1,133                                | 4,057                   | 9,732             | 12,952            | 3,220             | 25%        |
| Postage and Shipping Expenses      | 1,088                | 668                 | 1,756                     | 627                     | 328                                  | 955                     | 2,711             | 2,758             | 47                | 2%         |
| Telephone                          | 741                  | 242                 | 983                       | 591                     | 224                                  | 815                     | 1,798             | 4,490             | 2,692             | 60%        |
| Printing and Publications          | 57,506               | 955                 | 58,461                    | 170                     | 501                                  | 671                     | 59,132            | 45,790            | (13,342)          | -29%       |
| Occupancy Expenses                 | 67,152               | 21,931              | 89,083                    | 37,242                  | 20,265                               | 57,507                  | 146,590           | 166,976           | 20,386            | 12%        |
| Insurance                          | 10,500               | 3,429               | 13,929                    | 5,823                   | 3,169                                | 8,992                   | 22,921            | 23,813            | 892               | 4%         |
| Equipment                          | 5,599                | 15,058              | 20,657                    | 1,741                   | 947                                  | 2,688                   | 23,345            | 8,009             | (15,336)          | -191%      |
| Travel                             | 11,635               | 9,000               | 20,635                    | 5,406                   | 5,724                                | 11,130                  | 31,765            | 63,774            | 32,009            | 50%        |
| Meetings, Trainings & Conferences  | 24,274               | 7,480               | 31,754                    | 7,986                   | 2,827                                | 10,813                  | 42,567            | 87,730            | 45,163            | 51%        |
| Interest Expense and Bank Fees     |                      |                     | 0                         | 2,000                   |                                      | 2,000                   | 2,000             | 1,667             | (333)             | -20%       |
| Depreciation & Amortization        | 16,562               | 5,409               | 21,971                    | 9,185                   | 4,998                                | 14,183                  | 36,154            | 35,329            | (825)             | -2%        |
| Dues, Licenses and Fees            | 24,363               | 9,299               | 33,662                    | 2,138                   | 805                                  | 2,943                   | 36,605            | 52,858            | 16,253            | 31%        |
| Miscellaneous Expenses             | 639                  |                     | 639                       |                         |                                      | 0                       | 639               | 783               | 144               | 18%        |
| IT Services                        | 588,307              | 75,185              | 663,492                   | 123,304                 | 83,316                               | 206,620                 | 870,112           | 1,206,020         | 335,908           | 28%        |
| <b>Total Program Support Costs</b> | <b>812,904</b>       | <b>149,793</b>      | <b>962,697</b>            | <b>199,138</b>          | <b>124,236</b>                       | <b>323,374</b>          | <b>1,286,071</b>  | <b>1,712,945</b>  | <b>426,874</b>    | <b>25%</b> |
| <b>TOTAL EXPENSES</b>              | <b>28,723,822</b>    | <b>2,013,897</b>    | <b>30,737,719</b>         | <b>912,935</b>          | <b>552,132</b>                       | <b>1,465,067</b>        | <b>32,202,786</b> | <b>43,984,920</b> | <b>11,782,134</b> | <b>27%</b> |
| <b>OPUC measure vs. 9%</b>         |                      |                     |                           |                         |                                      |                         |                   |                   |                   |            |
|                                    | <b>3.57%</b>         |                     |                           |                         |                                      |                         |                   |                   |                   |            |

Exp-Acct-YTD-002

**Energy Trust of Oregon, Inc**  
**Year to Date by Program/Service Territory**  
**For the Four Months Ending April 30, 2014**  
**(Unaudited)**

|  | ENERGY EFFICIENCY |                   |                   |                  |                   |                  |                   |                |                   |
|--|-------------------|-------------------|-------------------|------------------|-------------------|------------------|-------------------|----------------|-------------------|
|  | PGE               | PacifiCorp        | Total             | NWN Industrial   | NW Natural        | Cascade          | Oregon Total      | NWN WA         | ETO Total         |
| <b>REVENUES</b>                              |                   |                   |                   |                  |                   |                  |                   |                |                   |
| Public Purpose Funding                       | \$10,704,326      | \$7,956,600       | \$18,660,926      |                  | \$10,921,457      | \$1,853,822      | \$31,436,205      |                | \$31,436,205      |
| Incremental Funding                          | 19,440,528        | 10,156,859        | 29,597,387        | 1,024,352        |                   |                  | 30,621,739        | 527,177        | 31,148,915        |
| Contributions                                |                   |                   |                   |                  |                   |                  |                   |                |                   |
| Revenue from Investments                     |                   |                   |                   |                  |                   |                  |                   |                |                   |
| <b>TOTAL PROGRAM REVENUE</b>                 | <b>30,144,854</b> | <b>18,113,459</b> | <b>48,258,313</b> | <b>1,024,352</b> | <b>10,921,457</b> | <b>1,853,822</b> | <b>62,057,944</b> | <b>527,177</b> | <b>62,585,121</b> |
| <b>EXPENSES</b>                              |                   |                   |                   |                  |                   |                  |                   |                |                   |
| Program Management (Note 3)                  | 888,392           | 483,791           | 1,372,182         | 33,970           | 369,494           | 34,833           | 1,810,480         | 43,166         | 1,853,646         |
| Program Delivery                             | 6,957,038         | 4,120,758         | 11,077,796        | 134,171          | 1,468,706         | 169,708          | 12,850,381        | 62,691         | 12,913,072        |
| Incentives                                   | 5,206,541         | 2,546,156         | 7,752,697         | 145,214          | 1,626,877         | 147,794          | 9,672,582         | 96,150         | 9,768,732         |
| Program Eval & Planning Svcs.                | 810,408           | 430,641           | 1,241,049         | 13,165           | 278,947           | 21,887           | 1,555,048         | 26,135         | 1,581,183         |
| Program Marketing/Outreach                   | 640,368           | 352,306           | 992,674           | 9,073            | 253,369           | 17,807           | 1,272,922         | 10,852         | 1,283,774         |
| Program Quality Assurance                    | 11,538            | 8,925             | 20,463            | 0                | 12,339            | 526              | 33,328            | 0              | 33,328            |
| Outsourced Services                          | 63,238            | 37,570            | 100,808           | 916              | 27,491            | 1,618            | 130,833           | 0              | 130,833           |
| Trade Allies & Cust. Svc. Mgmt.              | 145,994           | 91,541            | 237,535           | 1,082            | 92,722            | 5,431            | 336,771           | 9,544          | 346,315           |
| IT Services                                  | 286,568           | 152,820           | 439,388           | 4,563            | 121,737           | 8,914            | 574,602           | 13,708         | 588,310           |
| Other Program Expenses                       | 114,528           | 58,750            | 173,278           | 3,398            | 33,038            | 3,390            | 213,104           | 11,533         | 224,637           |
| <b>TOTAL PROGRAM EXPENSES</b>                | <b>15,124,614</b> | <b>8,283,257</b>  | <b>23,407,870</b> | <b>345,552</b>   | <b>4,284,721</b>  | <b>411,908</b>   | <b>28,450,051</b> | <b>273,779</b> | <b>28,723,822</b> |
| <b>ADMINISTRATIVE COSTS</b>                  |                   |                   |                   |                  |                   |                  |                   |                |                   |
| Management & General (Notes 1 & 2)           | 449,214           | 246,020           | 695,234           | 10,263           | 127,260           | 12,234           | 844,991           | 8,132          | 853,123           |
| Communications & Customer Svc (Notes 1 & 2)  | 271,679           | 148,789           | 420,468           | 6,207            | 76,965            | 7,399            | 511,039           | 4,918          | 515,957           |
| <b>Total Administrative Costs</b>            | <b>720,893</b>    | <b>394,809</b>    | <b>1,115,702</b>  | <b>16,470</b>    | <b>204,225</b>    | <b>19,633</b>    | <b>1,356,030</b>  | <b>13,050</b>  | <b>1,369,080</b>  |
| <b>TOTAL PROG &amp; ADMIN EXPENSES</b>       | <b>15,845,502</b> | <b>8,678,063</b>  | <b>24,523,565</b> | <b>362,021</b>   | <b>4,488,948</b>  | <b>431,538</b>   | <b>29,806,073</b> | <b>286,826</b> | <b>30,092,899</b> |
| <b>TOTAL REVENUE LESS EXPENSES</b>           | <b>14,299,352</b> | <b>9,435,396</b>  | <b>23,734,748</b> | <b>662,331</b>   | <b>6,432,509</b>  | <b>1,422,284</b> | <b>32,251,871</b> | <b>240,351</b> | <b>32,492,222</b> |
| Cumulative Carryover at 12/31/13 (Note 4)    | 24,483,032        | 11,560,814        | 36,043,846        | 356,235          | 8,569,670         | 658,260          | 45,628,011        | 473,674        | 46,101,685        |
| Change in net assets this year               | 14,299,352        | 9,435,396         | 23,734,748        | 662,331          | 6,432,509         | 1,422,284        | 32,251,871        | 240,351        | 32,492,222        |
| <b>Ending Net Assets - Reserves</b>          | <b>38,782,384</b> | <b>20,996,210</b> | <b>59,778,594</b> | <b>1,018,566</b> | <b>15,002,179</b> | <b>2,080,544</b> | <b>77,879,882</b> | <b>714,025</b> | <b>78,593,907</b> |
| <b>Ending Reserve by Category</b>            |                   |                   |                   |                  |                   |                  |                   |                |                   |
| Program Reserves (Efficiency and Renewables) | 38,782,384        | 20,996,210        | 59,778,594        | 1,018,566        | 15,002,179        | 2,080,544        | 77,879,882        | 714,025        | 78,593,907        |
| Assets Released for General Purpose          |                   |                   |                   |                  |                   |                  |                   |                |                   |
| Emergency Contingency Pool                   |                   |                   |                   |                  |                   |                  |                   |                |                   |
| <b>TOTAL NET ASSETS CUMULATIVE</b>           | <b>38,782,384</b> | <b>20,996,210</b> | <b>59,778,594</b> | <b>1,018,566</b> | <b>15,002,179</b> | <b>2,080,544</b> | <b>77,879,882</b> | <b>714,025</b> | <b>78,593,907</b> |

Note 1) Both Management & General and Communications & Customer Service Expenses (Administrative) have been allocated based on total expenses.  
 Note 2) Administrative costs are allocated for management reporting only. GAAP for Not for Profit organizations does not allow allocation of administrative costs to program expenses.  
 Note 3) Program Management costs include both outsourced and internal staff.  
 Note 4) Cumulative carryover at 12/31/2013 reflects audited results.

Energy Trust of Oregon, Inc  
Year to Date by Program/Service Territory  
For the Four Months Ending April 30, 2014  
(Unaudited)

|  | RENEWABLE ENERGY |             |             | Other     | TOTAL        | Approved budget | Change      | % Change |
|--|------------------|-------------|-------------|-----------|--------------|-----------------|-------------|----------|
|  | PGE              | PacifiCorp  | Total       |           | All Programs |                 |             |          |
| REVENUES                                     |                  |             |             |           |              |                 |             |          |
| Public Purpose Funding                       | \$3,158,045      | \$2,289,248 | \$5,447,293 |           | \$36,883,498 | \$33,755,708    | \$3,127,790 | 9%       |
| Incremental Funding                          |                  |             |             |           | 31,148,915   | 29,406,105      | 1,742,811   | 6%       |
| Contributions                                |                  |             |             | 12,500    | 12,500       |                 | 12,500      |          |
| Revenue from Investments                     |                  |             |             | 49,351    | 49,351       | 26,000          | 23,351      | 90%      |
|  |                  |             |             |           |              |                 |             |          |
| TOTAL PROGRAM REVENUE                        | 3,158,045        | 2,289,248   | 5,447,293   | 61,851    | 68,094,264   | 63,187,813      | 4,906,452   | 8%       |
|  |                  |             |             |           |              |                 |             |          |
| EXPENSES                                     |                  |             |             |           |              |                 |             |          |
| Program Management (Note 3)                  | 174,880          | 157,258     | 332,138     |           | 2,185,784    | 2,185,948       | 164         | 0%       |
| Program Delivery                             | 22,239           | 23,271      | 45,510      |           | 12,958,582   | 14,179,641      | 1,221,059   | 9%       |
| Incentives                                   | 1,000,911        | 382,759     | 1,383,670   |           | 11,152,402   | 19,373,240      | 8,220,838   | 42%      |
| Program Eval & Planning Svcs.                | 21,303           | 14,934      | 36,237      |           | 1,617,420    | 1,754,340       | 136,920     | 8%       |
| Program Marketing/Outreach                   | 5,688            | 5,730       | 11,418      |           | 1,295,192    | 2,019,178       | 723,986     | 36%      |
| Program Quality Assurance                    | 0                | 0           | 0           |           | 33,328       | 85,000          | 51,672      | 61%      |
| Outsourced Services                          | 25,830           | 14,461      | 40,291      |           | 171,124      | 628,672         | 457,548     | 73%      |
| Trade Allies & Cust. Svc. Mgmt.              | 10,531           | 4,295       | 14,826      |           | 361,141      | 386,403         | 25,262      | 7%       |
| IT Services                                  | 42,266           | 32,920      | 75,186      |           | 663,496      | 919,635         | 256,139     | 28%      |
| Other Program Expenses                       | 45,978           | 28,642      | 74,620      |           | 299,257      | 305,383         | 6,126       | 2%       |
|  |                  |             |             |           |              |                 |             |          |
| TOTAL PROGRAM EXPENSES                       | 1,349,627        | 664,269     | 2,013,897   |           | 30,737,719   | 41,837,440      | 11,099,714  | 27%      |
|  |                  |             |             |           |              |                 |             |          |
| ADMINISTRATIVE COSTS                         |                  |             |             |           |              |                 |             |          |
| Management & General (Notes 1 & 2)           | 39,632           | 20,183      | 59,815      |           | 912,935      | 1,213,991       | 301,053     | 25%      |
| Communications & Customer Svc (Notes 1 & 2)  | 23,969           | 12,206      | 36,175      |           | 552,132      | 933,489         | 381,357     | 41%      |
|  |                  |             |             |           |              |                 |             |          |
| Total Administrative Costs                   | 63,601           | 32,389      | 95,990      |           | 1,465,067    | 2,147,480       | 682,410     | 32%      |
|  |                  |             |             |           |              |                 |             |          |
| TOTAL PROG & ADMIN EXPENSES                  | 1,413,228        | 696,659     | 2,109,887   |           | 32,202,786   | 43,984,920      | 11,782,124  | 27%      |
|  |                  |             |             |           |              |                 |             |          |
| TOTAL REVENUE LESS EXPENSES                  | 1,744,817        | 1,592,589   | 3,337,406   | 61,851    | 35,891,478   | 19,202,893      | 16,688,576  | 87%      |
|  |                  |             |             |           |              |                 |             |          |
|  |                  |             |             |           |              |                 |             |          |
| Cumulative Carryover at 12/31/13 (Note 4)    | 12,041,462       | 11,793,715  | 23,835,177  | 7,993,710 | 77,930,572   | 62,609,764      | 15,320,808  | 24%      |
| Change in net assets this year               | 1,744,817        | 1,592,589   | 3,337,406   | 61,851    | 35,891,478   | 19,202,893      | 16,688,576  | 87%      |
|  |                  |             |             |           |              |                 |             |          |
| Ending Net Assets - Reserves                 | 13,786,279       | 13,386,304  | 27,172,583  | 8,055,561 | 113,822,050  | 81,812,657      | 32,009,384  | 39%      |
|  |                  |             |             |           |              |                 |             |          |
| Ending Reserve by Category                   |                  |             |             |           |              |                 |             |          |
| Program Reserves (Efficiency and Renewables) | 13,786,279       | 13,386,304  | 27,172,583  | 3,055,561 | 108,822,041  |                 |             |          |
| Assets Released for General Purpose          |                  |             |             |           |              |                 |             |          |
| Emergency Contingency Pool                   |                  |             |             | 5,000,000 | 5,000,000    |                 |             |          |
|  |                  |             |             |           |              |                 |             |          |
| TOTAL NET ASSETS CUMULATIVE                  | 13,786,279       | 13,386,304  | 27,172,583  | 8,055,561 | 113,822,050  | 81,812,657      | 32,009,384  | 39%      |
|  |                  |             |             |           |              |                 |             |          |

Note 1) Both Management & General and CommurNote 1) Both Management & General and Communications & Customer Service Expenses (Administrative) have been allocated based on total expenses.  
Note 2) Administrative costs are allocated for manzNote 2) Administrative costs are allocated for management reporting only. GAAP for Not for Profit organizations does not allow allocation of admin costs to program expenses.  
Note 3) Program Management costs include both cNote 3) Program Management costs include both outsourced and internal staff.  
Note 4) Cumulative carryover at 12/31/2013 reflectNote 4) Cumulative carryover at 12/31/2013 reflects audited results.

**Energy Trust of Oregon, Inc**  
**Program Expense by Service Territory**  
**For the Four Months Ending April 30, 2014**  
**(Unaudited)**

|  | PGE               | Pacific Power    | Subtotal Elec.    | NWN Industrial | NW Natural Gas   | Cascade        | Subtotal Gas     | Oregon Total      | NWN WA         | ETO Total         | YTD Budget        | Variance          | % Var      |
|--|-------------------|------------------|-------------------|----------------|------------------|----------------|------------------|-------------------|----------------|-------------------|-------------------|-------------------|------------|
| <b>Energy Efficiency</b>               |                   |                  |                   |                |                  |                |                  |                   |                |                   |                   |                   |            |
| <b>Commercial</b>                      |                   |                  |                   |                |                  |                |                  |                   |                |                   |                   |                   |            |
| Existing Buildings                     | 3,953,346         | 2,058,774        | 6,012,120         | 91,093         | 836,569          | 57,161         | 984,823          | 6,996,943         | 105,208        | 7,102,151         | 11,591,282        | 4,489,131         | 39%        |
| New Buildings                          | 2,066,670         | 303,955          | 2,370,625         | 9,332          | 322,479          | 55,404         | 387,215          | 2,757,840         |                | 2,757,840         | 3,643,881         | 886,041           | 24%        |
| NEEA                                   | 531,643           | 401,065          | 932,708           |                |                  |                | 0                | 932,708           |                | 932,708           | 897,233           | (35,475)          | -4%        |
| <b>Total Commercial</b>                | <b>6,551,659</b>  | <b>2,763,794</b> | <b>9,315,453</b>  | <b>100,425</b> | <b>1,159,048</b> | <b>112,565</b> | <b>1,372,038</b> | <b>10,687,491</b> | <b>105,208</b> | <b>10,792,699</b> | <b>16,132,396</b> | <b>5,339,697</b>  | <b>33%</b> |
| <b>Industrial</b>                      |                   |                  |                   |                |                  |                |                  |                   |                |                   |                   |                   |            |
| Production Efficiency                  | 3,507,917         | 1,888,332        | 5,396,249         | 261,596        | 172,396          | 108,216        | 542,208          | 5,938,457         |                | 5,938,457         | 6,442,396         | 503,939           | 8%         |
| NEEA                                   | 214,145           | 161,550          | 375,695           |                |                  |                | 0                | 375,695           |                | 375,695           | 439,457           | 63,762            | 15%        |
| <b>Total Industrial</b>                | <b>3,722,062</b>  | <b>2,049,882</b> | <b>5,771,944</b>  | <b>261,596</b> | <b>172,396</b>   | <b>108,216</b> | <b>542,208</b>   | <b>6,314,152</b>  |                | <b>6,314,152</b>  | <b>6,881,853</b>  | <b>567,701</b>    | <b>8%</b>  |
| <b>Residential</b>                     |                   |                  |                   |                |                  |                |                  |                   |                |                   |                   |                   |            |
| Existing Homes                         | 2,096,817         | 1,621,911        | 3,718,728         |                | 2,235,410        | 95,289         | 2,330,699        | 6,049,427         | 87,682         | 6,137,109         | 6,894,699         | 757,590           | 11%        |
| New Homes/Products                     | 2,744,029         | 1,691,070        | 4,435,099         |                | 922,094          | 115,468        | 1,037,562        | 5,472,661         | 93,936         | 5,566,597         | 7,112,143         | 1,545,546         | 22%        |
| NEEA                                   | 730,935           | 551,406          | 1,282,341         |                |                  |                | 0                | 1,282,341         |                | 1,282,341         | 1,214,328         | (68,013)          | -6%        |
| <b>Total Residential</b>               | <b>5,571,781</b>  | <b>3,864,387</b> | <b>9,436,168</b>  |                | <b>3,157,504</b> | <b>210,757</b> | <b>3,368,261</b> | <b>12,804,429</b> | <b>181,618</b> | <b>12,986,047</b> | <b>15,221,170</b> | <b>2,235,123</b>  | <b>15%</b> |
| <b>Energy Efficiency Program Costs</b> | <b>15,845,502</b> | <b>8,678,063</b> | <b>24,523,565</b> | <b>362,021</b> | <b>4,488,948</b> | <b>431,538</b> | <b>5,282,507</b> | <b>29,806,072</b> | <b>286,826</b> | <b>30,092,899</b> | <b>38,235,419</b> | <b>8,142,521</b>  | <b>21%</b> |
| <b>Renewables</b>                      |                   |                  |                   |                |                  |                |                  |                   |                |                   |                   |                   |            |
| Solar Electric (Photovoltaic)          | 1,295,811         | 492,252          | 1,788,063         |                |                  |                | 0                | 1,788,063         |                | 1,788,063         | 2,918,236         | 1,130,173         | 39%        |
| Other Renewable                        | 117,417           | 204,407          | 321,824           |                |                  |                |                  | 321,824           |                | 321,824           | 2,831,264         | 2,509,440         | 89%        |
| <b>Renewables Program Costs</b>        | <b>1,413,228</b>  | <b>696,659</b>   | <b>2,109,887</b>  |                |                  |                | <b>0</b>         | <b>2,109,887</b>  |                | <b>2,109,887</b>  | <b>5,749,500</b>  | <b>3,639,613</b>  | <b>63%</b> |
| <b>Cost Grand Total</b>                | <b>17,258,730</b> | <b>9,374,722</b> | <b>26,633,452</b> | <b>362,021</b> | <b>4,488,948</b> | <b>431,538</b> | <b>5,282,507</b> | <b>31,915,959</b> | <b>286,826</b> | <b>32,202,786</b> | <b>43,984,919</b> | <b>11,782,134</b> | <b>27%</b> |

**Energy Trust of Oregon, Inc.**  
**ADMINISTRATIVE EXPENSES**  
For the Month and Year to Date Ended April 30, 2014  
(Unaudited)

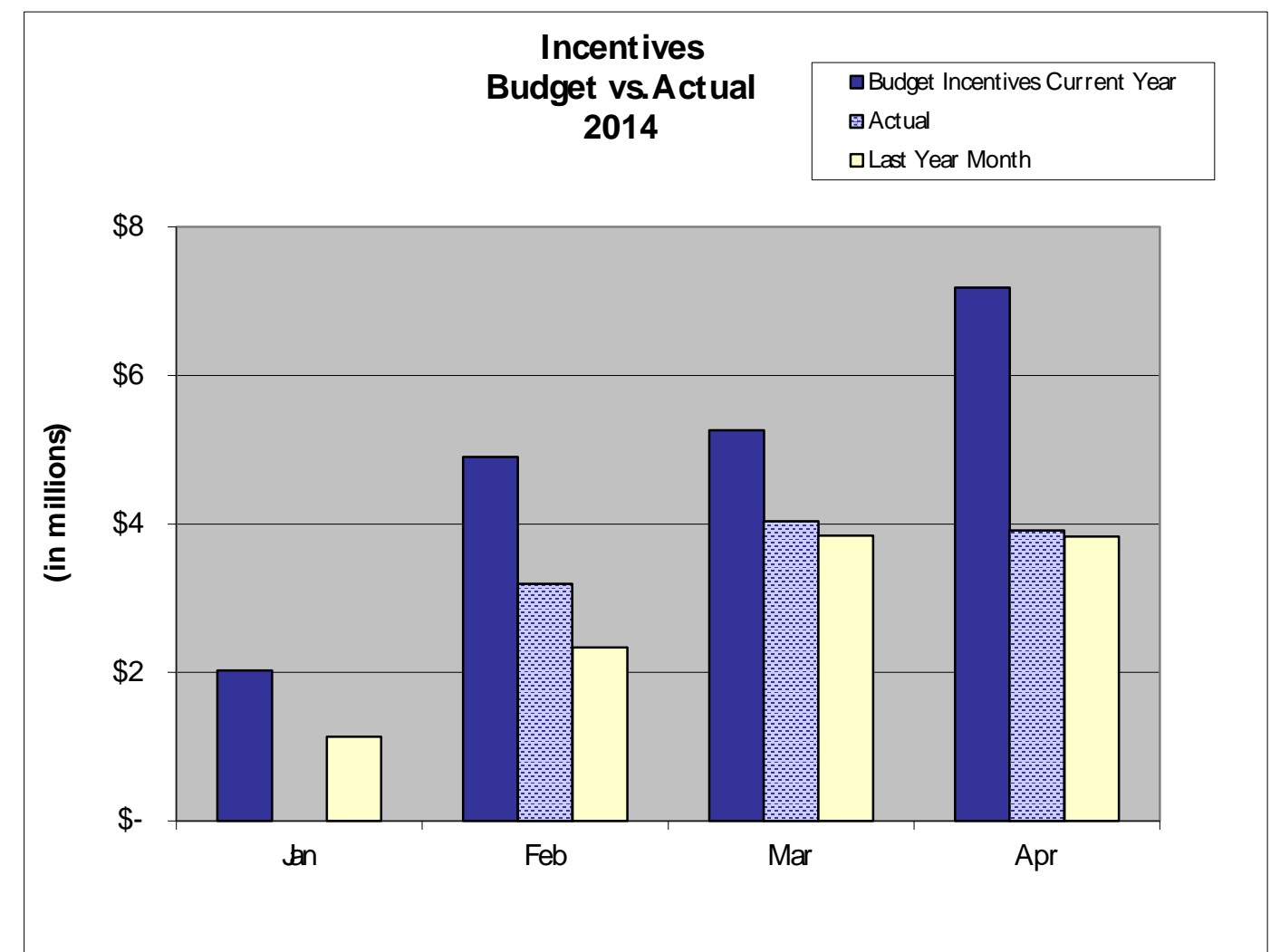
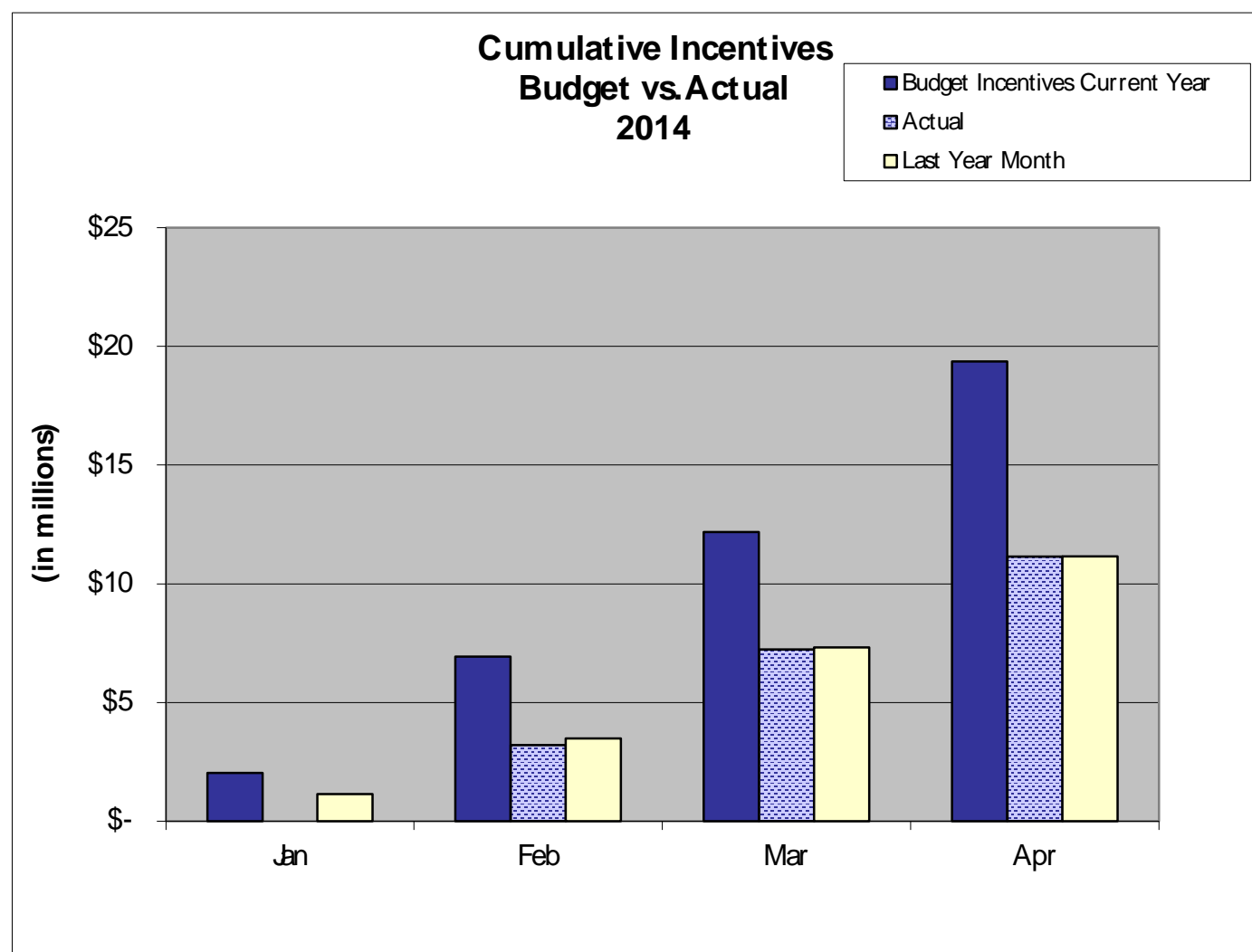
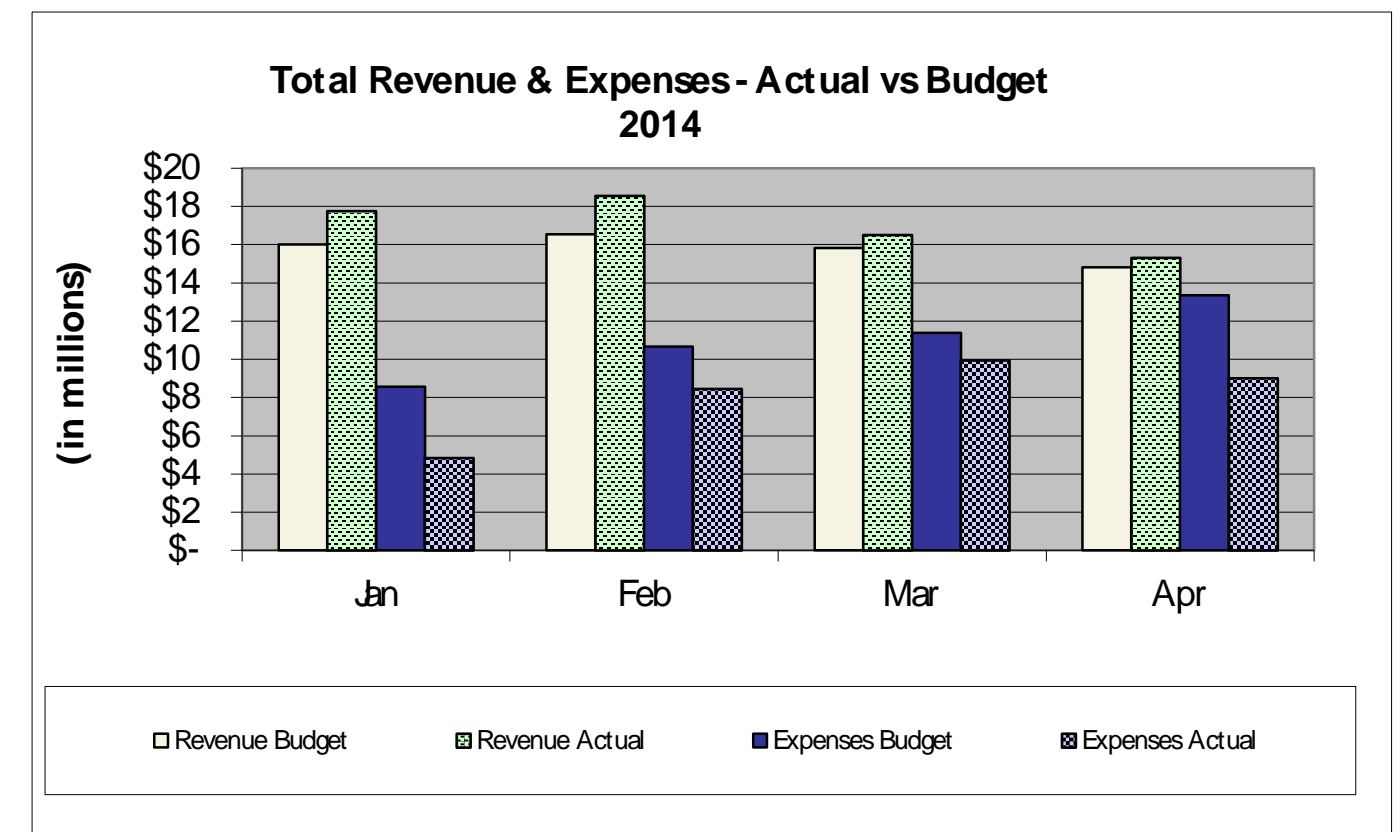
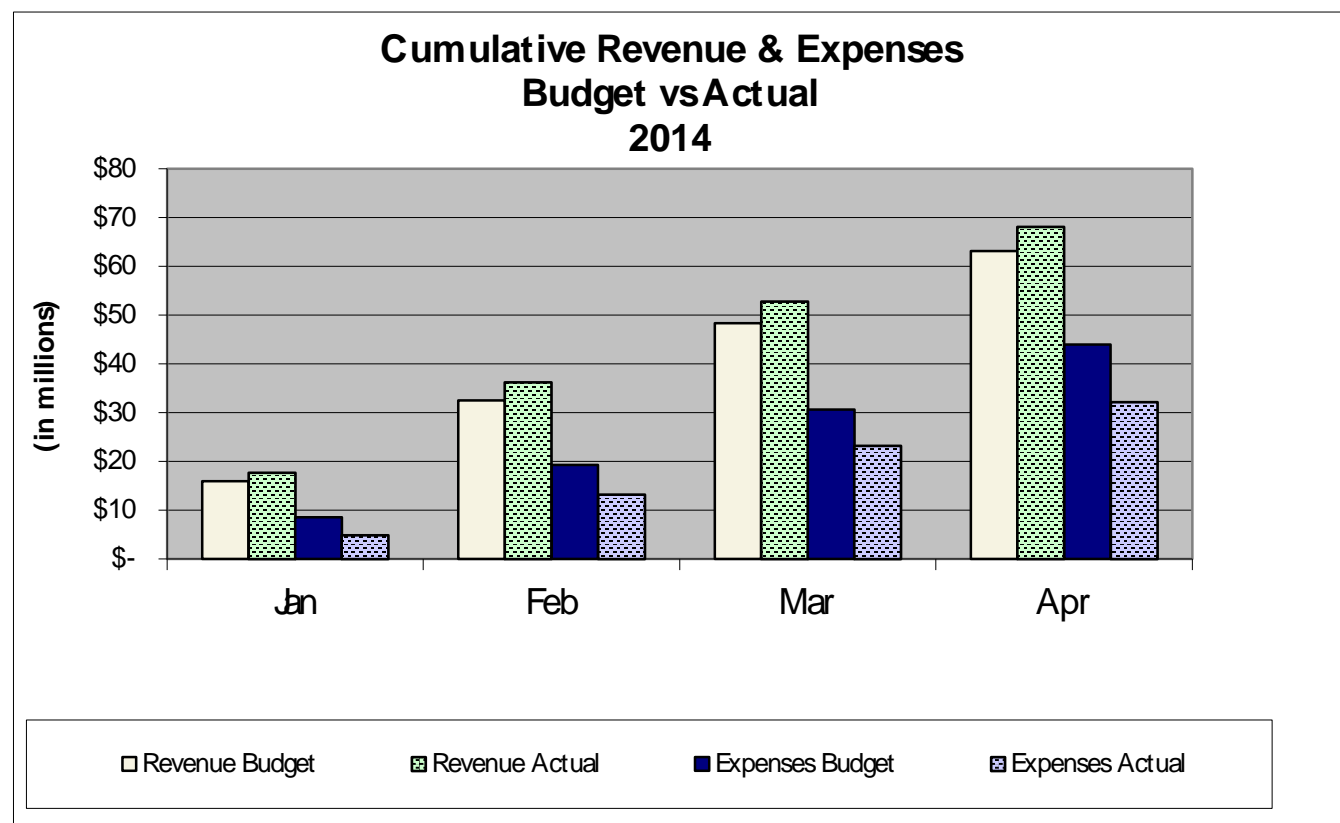
| EXPENSES                       | MANAGEMENT & GENERAL |                |                |                |                  |                | COMMUNICATIONS & CUSTOMER SERVICE |                |                |                |                |                |
|--------------------------------|----------------------|----------------|----------------|----------------|------------------|----------------|-----------------------------------|----------------|----------------|----------------|----------------|----------------|
|                                | MONTHLY              |                |                | YTD            |                  |                | MONTHLY                           |                |                | YTD            |                |                |
|                                | ACTUAL               | BUDGET         | REMAINING      | ACTUAL         | BUDGET           | VARIANCE       | ACTUAL                            | BUDGET         | REMAINING      | ACTUAL         | BUDGET         | VARIANCE       |
| Outsourced Services            | \$19,752             | \$160,017      | \$140,266      | \$82,397       | \$188,023        | \$105,626      | \$54,110                          | \$265,300      | \$211,190      | \$143,883      | \$353,733      | \$209,850      |
| Legal Services                 | 160                  | 13,750         | 13,590         | 752            | 18,333           | 17,582         |                                   |                |                |                |                |                |
| Salaries and Related Expenses  | 147,828              | 527,605        | 379,777        | 629,974        | 700,807          | 70,833         | 73,658                            | 298,515        | 224,857        | 284,001        | 398,020        | 114,019        |
| Supplies                       | 11                   | 1,950          | 1,939          | 994            | 2,600            | 1,606          | 9                                 | 240            | 231            | 82             | 320            | 238            |
| Telephone                      |                      | 545            | 545            | 180            | 727              | 547            |                                   | 490            | 490            |                | 373            | 373            |
| Postage and Shipping Expenses  | 24                   |                | (24)           | 24             |                  | (24)           |                                   | 250            | 250            |                | 333            | 333            |
| Noncapitalized Equipment       |                      |                |                |                |                  |                |                                   | 250            | 250            |                | 333            | 333            |
| Printing and Publications      |                      | 75             | 75             | 42             | 100              | 58             | 78                                | 1,750          | 1,672          | 432            | 2,333          | 1,902          |
| Travel                         | 2,350                | 13,305         | 10,955         | 5,406          | 17,740           | 12,334         | 3,356                             | 9,500          | 6,144          | 5,724          | 12,667         | 6,943          |
| Conference, Training & Mtngs   | 3,039                | 35,360         | 32,321         | 7,785          | 47,147           | 39,361         | 2,448                             | 5,500          | 3,052          | 2,718          | 7,333          | 4,615          |
| Interest Expense and Bank Fees |                      | 1,250          | 1,250          | 2,000          | 1,667            | (333)          |                                   |                |                |                |                |                |
| Miscellaneous Expenses         |                      | 180            | 180            |                | 240              | 240            |                                   |                |                |                |                |                |
| Dues, Licenses and Fees        | 1,439                | 2,150          | 711            | 2,138          | 2,867            | 729            |                                   | 400            | 400            | 805            | 533            | (272)          |
| Shared Allocation (Note 1)     | 13,833               | 46,650         | 32,817         | 57,287         | 62,200           | 4,913          | 8,038                             | 31,522         | 23,484         | 31,172         | 42,029         | 10,858         |
| IT Service Allocation (Note 2) | 37,191               | 106,228        | 69,037         | 123,304        | 170,905          | 47,601         | 25,130                            | 71,778         | 46,648         | 83,316         | 115,480        | 32,164         |
| Planning & Eval                | 131                  | 472            | 341            | 654            | 636              | (17)           |                                   |                |                |                |                |                |
| <b>TOTAL EXPENSES</b>          | <b>225,758</b>       | <b>909,538</b> | <b>683,780</b> | <b>912,935</b> | <b>1,213,991</b> | <b>301,056</b> | <b>166,827</b>                    | <b>685,495</b> | <b>518,668</b> | <b>552,132</b> | <b>933,489</b> | <b>381,356</b> |
|                                | =====                | =====          | =====          | =====          | =====            | =====          | =====                             | =====          | =====          | =====          | =====          | =====          |

Note 1) Represents allocation of Shared (General Office Management) Costs

Exp-Prog-YTD-001

Note 2) Represents allocation of Shared IT Costs

Administrative Expenses 1st Month of Quarter





**Energy Trust of Oregon**  
**Contract Status Summary Report**

Report Date: 5/16/2014

For contracts with costs  
 through: 4/30/2014

Page 1 of 4

| Contractor                                  | Description                    | *City         | Est Cost         | Actual TTD       | Remaining        | Start    | End      |
|---|--------------------------------|---------------|------------------|------------------|------------------|----------|----------|
| <b>Administration</b>                       |                                |               |                  |                  |                  |          |          |
| <b>Administration Total:</b>                |                                |               | <b>7,888,649</b> | <b>2,624,327</b> | <b>5,264,322</b> |          |          |
| <b>Communications &amp; Outreach</b>        |                                |               |                  |                  |                  |          |          |
| <b>Communications &amp; Outreach Total:</b> |                                |               | <b>3,069,255</b> | <b>1,160,411</b> | <b>1,908,845</b> |          |          |
| <b>Energy Efficiency Programs</b>           |                                |               |                  |                  |                  |          |          |
| Northwest Energy Efficiency Alliance        | Regional Energy Eff Initiative | Portland      | 39,138,680       | 31,582,484       | 7,556,196        | 1/1/10   | 7/1/15   |
| ICF Resources, LLC                          | PMC BE 2014                    | Fairfax       | 8,860,987        | 2,471,552        | 6,389,435        | 1/1/14   | 12/31/14 |
| CLEAResult Consulting Inc                   | 2014 HES PMC                   | Austin        | 7,595,520        | 2,225,787        | 5,369,733        | 1/1/14   | 12/31/14 |
| Portland Energy Conservation, Inc.          | PMC NHP 2014                   | Portland      | 6,965,473        | 1,890,321        | 5,075,152        | 1/1/14   | 12/31/14 |
| Portland Energy Conservation, Inc.          | 2014 NBE PMC                   | Portland      | 4,735,000        | 1,322,139        | 3,412,861        | 1/1/14   | 12/31/14 |
| Intel Corporation                           | Intel D1X Megaproject          | Hillsboro     | 4,000,000        | 4,000,000        | 0                | 11/15/12 | 12/31/14 |
| Lockheed Martin Services, Inc.              | 2014 MF PMC                    | Cherry Hill   | 3,569,068        | 971,299          | 2,597,770        | 1/1/14   | 12/31/14 |
| Portland General Electric                   | PDC - PE 2014                  | Portland      | 2,314,600        | 563,162          | 1,751,438        | 1/1/14   | 12/31/14 |
| Oregon State University                     | CHP Project - OSU              | Corvallis     | 2,024,263        | 1,920,000        | 104,263          | 12/20/10 | 1/31/16  |
| Energy 350 Inc                              | PDC - PE 2014                  | Portland      | 1,976,000        | 638,825          | 1,337,175        | 1/1/14   | 12/31/14 |
| NEXANT, INC.                                | PDC - PE 2014                  | San Francisco | 1,429,461        | 459,075          | 970,386          | 1/1/14   | 12/31/14 |
| Cascade Energy, Inc.                        | PDC - PE 2014 Small Industrial | Walla Walla   | 1,234,100        | 374,554          | 859,546          | 1/1/14   | 12/31/14 |
| RHT Energy Solutions                        | PDC - PE 2014                  | Medford       | 1,145,000        | 398,881          | 746,119          | 1/1/14   | 12/31/14 |
| Evergreen Consulting Group, LLC             | PE Lighting PDC 2014           | Tigard        | 1,092,000        | 380,544          | 711,456          | 1/1/14   | 12/31/14 |
| Northwest Power & Conservation Council      | Annual Work Plan               |               | 874,652          | 845,716          | 28,936           | 3/20/12  | 12/31/14 |
| Evoworx Inc.                                | EnergySavvy Online Audit Tool  | Seattle       | 472,500          | 380,384          | 92,116           | 1/1/12   | 12/31/14 |
| Clean Energy Works Oregon Inc               | Clean Energy Works             | Portland      | 448,500          | 300,000          | 148,500          | 1/1/10   | 4/30/14  |
| Navigant Consulting Inc                     | Analytical Model & Study       | Boulder       | 412,052          | 287,776          | 124,276          | 8/12/13  | 6/30/14  |
| OPOWER, Inc.                                | OPower Personal Energy Reports | Arlington     | 399,447          | 226,098          | 173,349          | 8/1/13   | 7/31/15  |
| The Cadmus Group Inc.                       | PE Impact Eval 2012            | Watertown     | 345,000          | 0                | 345,000          | 4/15/14  | 1/31/15  |
| CLEAResult Consulting Inc                   | 2014 HES WA PMC                | Austin        | 277,600          | 47,495           | 230,105          | 1/1/14   | 12/31/14 |
| The Cadmus Group Inc.                       | BE Impact Evaluation 2012      | Watertown     | 250,000          | 32,118           | 217,882          | 1/1/14   | 12/31/14 |
| J. Hruska Global                            | Quality Assurance Services     | Columbia City | 215,000          | 123,980          | 91,020           | 1/1/13   | 12/31/14 |
| Energy 350 Inc                              | PDC Transition Agreement       | Portland      | 200,000          | 199,855          | 145              | 9/1/13   | 12/31/13 |
| ICF Resources, LLC                          | NWN WA BE 2014                 | Fairfax       | 191,538          | 35,733           | 155,805          | 1/1/14   | 12/31/14 |
| The Cadmus Group Inc.                       | NBE Program Impact Evaluation  | Watertown     | 186,000          | 52,639           | 133,361          | 1/15/14  | 9/30/14  |
| D&R International LTD                       | Market Lift Program            | Silver Spring | 150,000          | 222              | 149,778          | 1/1/13   | 3/31/14  |
| Abt SRBI Inc.                               | Fast Feedback Surveys          | New York      | 118,000          | 16,312           | 101,688          | 1/31/14  | 2/29/16  |
| Navigant Consulting Inc                     | CORE Improvement Pilot Eval    | Boulder       | 115,000          | 86,154           | 28,846           | 9/1/12   | 9/1/15   |
| ICF Resources, LLC                          | NWN DSM Initiative 2014        | Fairfax       | 113,850          | 27,706           | 86,144           | 1/1/14   | 12/31/14 |
| Pollinate Inc                               | Web Application Development    | Portland      | 107,015          | 74,941           | 32,074           | 1/1/12   | 4/30/14  |
| Ecotope, Inc.                               | Gas Hearth Study               | Seattle       | 105,104          | 85,578           | 19,526           | 10/10/13 | 9/1/15   |
| The Cadmus Group Inc.                       | RTU Tune-up Evaluation         | Watertown     | 105,000          | 58,685           | 46,316           | 1/1/14   | 12/31/14 |
| PWP, Inc.                                   | NBE Process Evaluation         | Gaithersburg  | 95,000           | 30,179           | 64,821           | 1/15/14  | 12/31/14 |
| Research Into Action, Inc.                  | Products Process Evaluation    | Portland      | 75,240           | 75,240           | 0                | 7/1/13   | 5/31/14  |

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| Contractor   | Description                    | *City        | Est Cost | Actual TTD | Remaining | Start    | End      |
|--|--------------------------------|--------------|----------|------------|-----------|----------|----------|
| Evergreen Economics                                  | New Homes Process Eval - 2013  | Portland     | 70,000   | 70,000     | 0         | 6/24/13  | 3/31/14  |
| Pivotal Energy Solutions LLC                         | New Homes Database             | Gilbert      | 60,000   | 60,000     | 0         | 10/1/13  | 3/1/14   |
| PWP, Inc.  | Comm SEM Initiative Evaluation | Gaithersburg | 52,000   | 42,313     | 9,687     | 7/1/12   | 9/30/14  |
| Research Into Action, Inc.                           | BE Process Eval - 2013         | Portland     | 51,000   | 51,000     | 0         | 10/1/13  | 5/30/14  |
| ICF Resources, LLC                                   | OSU CHP Performance Monitoring | Fairfax      | 50,000   | 22,790     | 27,210    | 7/1/13   | 6/30/14  |
| KEMA Incorporated                                    | NEEA 2014 Lighting Survey      | Oakland      | 47,500   | 23,750     | 23,750    | 12/2/13  | 7/30/14  |
| PWP, Inc.  | SEM Intro Pilot Evaluation     | Gaithersburg | 40,000   | 21,490     | 18,510    | 10/28/13 | 10/2/15  |
| The Cadmus Group Inc.                                | Lighting Pilot Evaluation      | Watertown    | 35,000   | 25,314     | 9,686     | 4/1/12   | 12/31/14 |
| WegoWise Inc   | Wegowise Benchmarking License  | Boston       | 35,000   | 35,000     | 0         | 5/14/12  | 5/14/14  |
| Apex Analytics LLC                                   | Nest Pilot Evaluation          | Boulder      | 32,000   | 13,980     | 18,020    | 11/15/13 | 10/31/14 |
| David Lineweber                                      | Heat Pump Study                | Tigard       | 30,500   | 2,175      | 28,325    | 3/20/14  | 3/31/15  |
| Btan Consulting                                      | ESP Cert Boot Camp Evaluation  | Madison      | 30,000   | 9,875      | 20,125    | 2/1/14   | 4/30/15  |
| Energy Center of Wisconsin                           | Billing Analysis Review        | Madison      | 30,000   | 1,110      | 28,890    | 11/1/13  | 12/31/14 |
| MetaResource Group                                   | Intel D1X Megaproject          | Portland     | 30,000   | 8,343      | 21,657    | 10/10/11 | 12/31/14 |
| Michael Blasnick & Associated                        | Billing Analysis Process       | Boston       | 30,000   | 3,938      | 26,063    | 1/1/10   | 12/31/14 |
| The Cadmus Group Inc.                                | Pay For Performance Pilot Eval | Watertown    | 30,000   | 1,665      | 28,335    | 9/25/13  | 12/31/14 |
| Pivotal Energy Solutions LLC                         | License Agreement              | Gilbert      | 29,500   | 2,460      | 27,040    | 3/1/14   | 12/31/14 |
| Stellar Processes, Inc.                              | BE Measure Evaluation          | Portland     | 25,250   | 19,125     | 6,125     | 10/24/12 | 10/24/14 |
| Portland General Electric                            | PGE Efficiency Seminars 2014   | Portland     | 24,950   | 24,950     | 0         | 1/1/14   | 12/31/14 |
| Oregon Assoc. of Clean Water Agencies                | SEM Training - Round III       |              | 19,920   | 8,000      | 11,920    | 5/23/13  | 6/15/14  |
| KEMA Incorporated                                    | Market Lift Pilot Evaluation   | Oakland      | 19,500   | 4,654      | 14,847    | 3/1/14   | 7/1/14   |
| Consortium for Energy Efficiency                     | Membership Dues - 2014         |              | 18,889   | 18,889     | 0         | 4/16/14  | 12/31/14 |
| Sheepscot Creative LLC                               | SEM Videos                     | Portland     | 15,000   | 0          | 15,000    | 4/22/14  | 9/30/14  |
| MetaResource Group                                   | Energy Performance Score Eval  | Portland     | 14,500   | 13,200     | 1,300     | 9/1/13   | 5/30/14  |
| Cascade Energy, Inc.                                 | PDC Transition Agreement       | Walla Walla  | 14,000   | 9,876      | 4,124     | 1/1/14   | 3/10/14  |
| Consumer Opinion Services Inc                        | Residential Phone Surveys      | Seattle      | 12,000   | 7,384      | 4,616     | 9/1/13   | 10/31/14 |
| Lane Community College, NEEI Science Division        | 2014 Scholarship Grant         | Eugene       | 10,600   | 0          | 10,600    | 1/1/14   | 12/31/14 |
| Portland State University Foundation                 | Green Modular Classroom Proj   | Portland     | 10,500   | 10,500     | 0         | 6/13/12  | 7/31/14  |
| American Council for and Energy Efficient Economy    | Advancing EE Programs          |              | 10,000   | 10,000     | 0         | 12/19/13 | 9/30/14  |
| American Council for and Energy Efficient Economy    | High Participation Rates       |              | 10,000   | 10,000     | 0         | 12/23/13 | 12/31/14 |
| American Council for and Energy Efficient Economy    | Game-Based EE Programs         |              | 10,000   | 10,000     | 0         | 12/23/13 | 10/31/14 |
| American Council for and Energy Efficient Economy    | Extended Motor Products Label  |              | 10,000   | 10,000     | 0         | 12/23/13 | 3/31/15  |
| Bridgetown Printing Company                          | January 2014 Bill Insert       | Portland     | 8,509    | 8,509      | 0         | 1/1/14   | 12/31/14 |
| City of Portland Bureau of Planning & Sustainability | City of Portland Workshops     | Portland     | 8,000    | 8,000      | 0         | 1/1/14   | 12/31/14 |
| Northwest Environmental Business Council             | Future Energy Conference 2014  | Portland     | 6,500    | 6,500      | 0         | 2/13/14  | 12/31/14 |
| Cascadia Region Green Building Council               | Cascadia Green Bldgs Sponsor   | Portland     | 5,000    | 5,000      | 0         | 1/15/14  | 1/15/15  |
| Social Enterprises Inc.                              | GoGreen Sponsorship - 2014     | Portland     | 5,000    | 5,000      | 0         | 3/14/14  | 10/31/14 |

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| Contractor   | Description                    | *City         | Est Cost          | Actual TTD        | Remaining         | Start    | End      |
|--|--------------------------------|---------------|-------------------|-------------------|-------------------|----------|----------|
| <b>Energy Efficiency Programs Total:</b>               |                                |               | <b>92,277,268</b> | <b>52,770,220</b> | <b>39,507,048</b> |          |          |
| <b>Joint Programs</b>                                  |                                |               |                   |                   |                   |          |          |
| D&R International LTD                                  | Better Data Better Design      | Silver Spring | 133,500           | 25,000            | 108,500           | 4/30/13  | 7/31/14  |
| Portland State University                              | Technology Forecasting         |               | 87,437            | 58,598            | 28,839            | 11/7/11  | 12/31/14 |
| Research Into Action, Inc.                             | Residential Awareness Study    | Portland      | 65,000            | 0                 | 65,000            | 5/1/14   | 12/31/14 |
| Watkins and Associates, Inc.                           | EPS & Solar Valuation Study    | Portland      | 38,000            | 4,365             | 33,635            | 2/1/14   | 11/30/14 |
| E Source Companies LLC                                 | E Source Service Agreement     | Boulder       | 36,500            | 36,500            | 0                 | 2/1/14   | 1/31/15  |
| KRH Consulting   | Work Load Mangement            | Portland      | 25,900            | 23,752            | 2,148             | 4/23/13  | 10/1/14  |
| The Cadmus Group Inc.                                  | Evaluation Consultant          | Watertown     | 25,130            | 19,430            | 5,700             | 6/20/13  | 2/28/15  |
| Navigant Consulting Inc                                | P&E Consultant Services        | Boulder       | 22,530            | 17,491            | 5,039             | 1/15/14  | 12/30/15 |
| Pinnacle Economics Inc                                 | Economic Impacts Study         | Camas         | 20,720            | 20,720            | 0                 | 2/1/14   | 2/1/15   |
| CoStar Realty Information Inc                          | Property Data                  | Baltimore     | 19,220            | 17,628            | 1,592             | 6/1/11   | 5/31/14  |
| Glumac Inc   | Planning Technical Analysis    | Portland      | 15,000            | 15,000            | 0                 | 10/17/12 | 10/17/14 |
| American Council for and Energy Efficient Economy      | ACEEE Sponsorships - 2014      |               | 7,500             | 7,500             | 0                 | 1/1/14   | 12/31/14 |
| Bruins Analysis and Consulting                         | Fast Feedback Reporting        | Bremerton     | 6,000             | 0                 | 6,000             | 6/1/14   | 4/30/15  |
| <b>Joint Programs Total:</b>                           |                                |               | <b>502,437</b>    | <b>245,984</b>    | <b>256,453</b>    |          |          |
| <b>Renewable Energy Program</b>                        |                                |               |                   |                   |                   |          |          |
| JC-Biomethane LLC                                      | Biogas Plant Project Funding   | Eugene        | 2,000,000         | 500,000           | 1,500,000         | 10/18/12 | 10/18/32 |
| Oregon Institute of Technology                         | Geothermal Resource Funding    | Klamath Falls | 1,550,000         | 0                 | 1,550,000         | 9/11/12  | 9/11/32  |
| Central Oregon Irrigation District                     | COID Juniper Phase 2           | Redmond       | 1,281,820         | 0                 | 1,281,820         | 7/19/13  | 7/19/33  |
| Farm Power Misty Meadows LLC                           | Misty Meadows Biogas Facility  | Mount Vernon  | 1,000,000         | 250,000           | 750,000           | 10/25/12 | 10/25/27 |
| Three Sisters Irrigation District                      | TSID Hydro                     | Sisters       | 1,000,000         | 0                 | 1,000,000         | 4/25/12  | 4/25/32  |
| Farmers Irrigation District                            | FID - Plant 2 Hydro            | Hood River    | 825,000           | 0                 | 825,000           | 4/1/14   | 4/1/34   |
| Tioga Solar VI, LLC                                    | Photovoltaic Project Agreement | San Mateo     | 570,760           | 570,760           | 0                 | 2/1/09   | 2/1/30   |
| Oregon Institute of Technology                         | Geothermal Resource Funding    | Klamath Falls | 487,000           | 487,000           | 0                 | 3/2/10   | 3/2/30   |
| City of Medford  | 750kW Combined Heat & Power    | Medford       | 450,000           | 225,000           | 225,000           | 10/20/11 | 10/20/31 |
| City of Pendleton                                      | Pendleton Microturbines        | Pendleton     | 450,000           | 150,000           | 300,000           | 4/20/12  | 4/20/32  |
| RES - Ag FGO LLC                                       | Biogas Manure Digester Project | Washington    | 441,660           | 331,245           | 110,415           | 10/27/10 | 10/27/25 |
| RES - Ag FGO LLC                                       | Biogas Manure Digester - FGO   | Washington    | 441,660           | 110,415           | 331,245           | 10/27/10 | 10/27/25 |
| City of Gresham  | City of Gresham Cogen 2        |               | 330,000           | 0                 | 330,000           | 4/9/14   | 7/9/34   |
| K2A Properties, LLC                                    | Doerfler Wind Farm Project     | Aumsville     | 230,000           | 203,970           | 26,030            | 5/20/10  | 5/20/30  |
| Confederated Tribes of the Umatilla Indian Reservation | Small Wind Project Funding     | Pendleton     | 170,992           | 0                 | 170,992           | 7/25/13  | 12/31/28 |
| Klamath Basin Geopower Inc                             | Henley Proj Dev Assistance     | Reno          | 150,000           | 0                 | 150,000           | 4/10/14  | 8/31/15  |
| City of Astoria  | Bear Creek Funding Agreement   | Astoria       | 143,000           | 0                 | 143,000           | 3/24/14  | 3/24/34  |
| Bloomberg LP   | Insight Services               | San Francisco | 114,800           | 85,983            | 28,817            | 4/1/11   | 1/1/15   |
| Klamath Basin Geopower Inc                             | Poe Valley Proj Dev Assistance | Reno          | 112,874           | 0                 | 112,874           | 4/10/14  | 6/30/15  |
| Wallowa Resources Community Solutions, Inc.            | Upfront Hydroelectric Project  |               | 100,000           | 14,210            | 85,790            | 10/1/11  | 10/1/15  |

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| Contractor                                 | Description                    | *City         | Est Cost           | Actual TTD        | Remaining         | Start    | End      |
|--|--------------------------------|---------------|--------------------|-------------------|-------------------|----------|----------|
| Oregon Military Department                 | Kingsley Field Geothermal Proj | Salem         | 75,000             | 0                 | 75,000            | 11/26/13 | 8/29/14  |
| Deschutes Valley Water District            | Early Development Assistance   | Madras        | 68,373             | 0                 | 68,373            | 7/23/13  | 12/31/14 |
| Mapdwell LLC                               | Mapdwell Account               | Boston        | 66,381             | 10,405            | 55,976            | 3/17/14  | 3/31/16  |
| The Cadmus Group Inc.                      | Residential Solar Mkt Research | Watertown     | 60,000             | 3,696             | 56,305            | 3/18/14  | 12/31/14 |
| City of Klamath Falls                      | Klamath Falls Biopower Project | Klamath Falls | 49,927             | 0                 | 49,927            | 1/9/14   | 12/31/14 |
| Clean Energy States Alliance               | CESA Year 11 (2014)            |               | 39,500             | 39,500            | 0                 | 7/1/13   | 6/30/14  |
| United Wind Inc                            | Wind Consultant                | Brooklyn      | 37,500             | 27,500            | 10,000            | 2/6/12   | 3/31/14  |
| Mariah Wind LLC                            | Development Assistance Funding | Victor        | 28,300             | 0                 | 28,300            | 10/25/13 | 12/31/14 |
| University of Oregon                       | UO SRML Contribution - 2014    | Eugene        | 24,999             | 24,999            | 0                 | 3/10/14  | 3/10/15  |
| Robert Migliori                            | 42kW wind energy system        | Newberg       | 24,125             | 11,641            | 12,484            | 4/11/07  | 1/31/24  |
| Solar Oregon                               | Education & Outreach Services  | Portland      | 24,000             | 8,000             | 16,000            | 1/1/14   | 12/31/15 |
| Ecofys US, Inc.                            | Renewable Energy Consultant    | Corvallis     | 18,000             | 0                 | 18,000            | 4/7/14   | 3/31/16  |
| Farmers Conservation Alliance              | Small-Scale Hydro Plant Review | Hood River    | 17,500             | 0                 | 17,500            | 1/2/14   | 6/30/14  |
| Warren Griffin                             | Griffin Wind Project           | Salem         | 13,150             | 9,255             | 3,895             | 10/1/05  | 10/1/20  |
| Clean Energy States Alliance               | CESA ITAC                      |               | 10,000             | 10,000            | 0                 | 1/1/14   | 12/31/14 |
| Garrad Hassan America Inc                  | RE Consulting Services         | San Diego     | 6,841              | 6,841             | 0                 | 6/11/13  | 2/28/15  |
| OSEIA-Oregon Solar Energy Industries Assoc | OSEIA 2014 Conference          |               | 5,000              | 5,000             | 0                 | 2/6/14   | 12/31/14 |
| Solar Oregon                               | Solar Now! University Sponsor  | Portland      | 5,000              | 0                 | 5,000             | 3/28/14  | 12/31/14 |
| eFormative Options LLC                     | RE Evaluation Consultant       | Vashon        | 3,000              | 3,000             | 0                 | 3/1/13   | 2/28/15  |
| <b>Renewable Energy Program Total:</b>     |                                |               | <b>12,426,162</b>  | <b>3,088,419</b>  | <b>9,337,743</b>  |          |          |
| <b>Grand Totals:</b>                       |                                |               | <b>116,163,771</b> | <b>59,889,361</b> | <b>56,274,411</b> |          |          |

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## Notes on May 2014 Financial Statements

June 18, 2014

### Revenue

Cascade Natural Gas made an adjustment in April that will reduce their future payments from May forward. They are now paying closer to budgeted amounts. Actual investment income is better than budget because of expanded investment options. As we continue to add new secure investment opportunities, income will continue to outpace budget. At this pace, we are projecting investment income to be around \$230,000 by year end.

| May-14            | <u>YTD Actual</u> | <u>YTD Budget</u> | <u>YTD Var</u> | <u>YTD %</u> |
|-------------------|-------------------|-------------------|----------------|--------------|
| PGE               | 40,074,959        | 37,872,827        | 2,202,132      | 6%           |
| PAC               | 24,380,479        | 22,286,179        | 2,094,300      | 9%           |
| NWN               | 14,076,218        | 14,187,989        | (111,771)      | -1%          |
| CNG               | 1,956,264         | 1,090,814         | 865,450        | 79%          |
| Investment Income | 71,683            | 32,500            | 39,183         | 121%         |
| Total             | 80,559,603        | 75,470,309        | 5,089,294      | 7%           |

### Reserves

Total Reserves at the end of May are below. April total Reserves were \$113.8 million and May's reserves are \$114 million. The reserves per utility remained fairly flat because revenue (\$12.48 million for the month) and expenses (\$12.26 million for the month) and were nearly the same.

### Reserves

|                       | <u>Actual 12/31/13</u><br><u>Amount</u> | <u>Actual 5/31/14</u><br><u>Amount</u> | <u>% Change</u> |
|-----------------------|---|--|-----------------|
| PGE                   | 24,483,032                              | 38,919,121                             | 59.0%           |
| PacifiCorp            | 11,560,814                              | 20,791,055                             | 79.8%           |
| NW Natural            | 8,569,670                               | 15,201,769                             | 77.4%           |
| Cascade               | 658,260                                 | 2,093,613                              | 218.1%          |
| NWN Industrial        | 356,235                                 | 910,149                                | 155.5%          |
| NWN Washington        | 473,674                                 | 639,288                                | 35.0%           |
| PGE Renewables        | 12,041,462                              | 14,076,179                             | 16.9%           |
| PAC Renewables        | 11,793,715                              | 13,327,911                             | 13.0%           |
| Contingency Reserve   | 5,000,000                               | 5,000,000                              | 0.0%            |
| Contingency Available | 2,993,710                               | 3,078,793                              | 2.8%            |
| Total                 | 77,930,572                              | 114,037,876                            | 46.3%           |

## Expenses

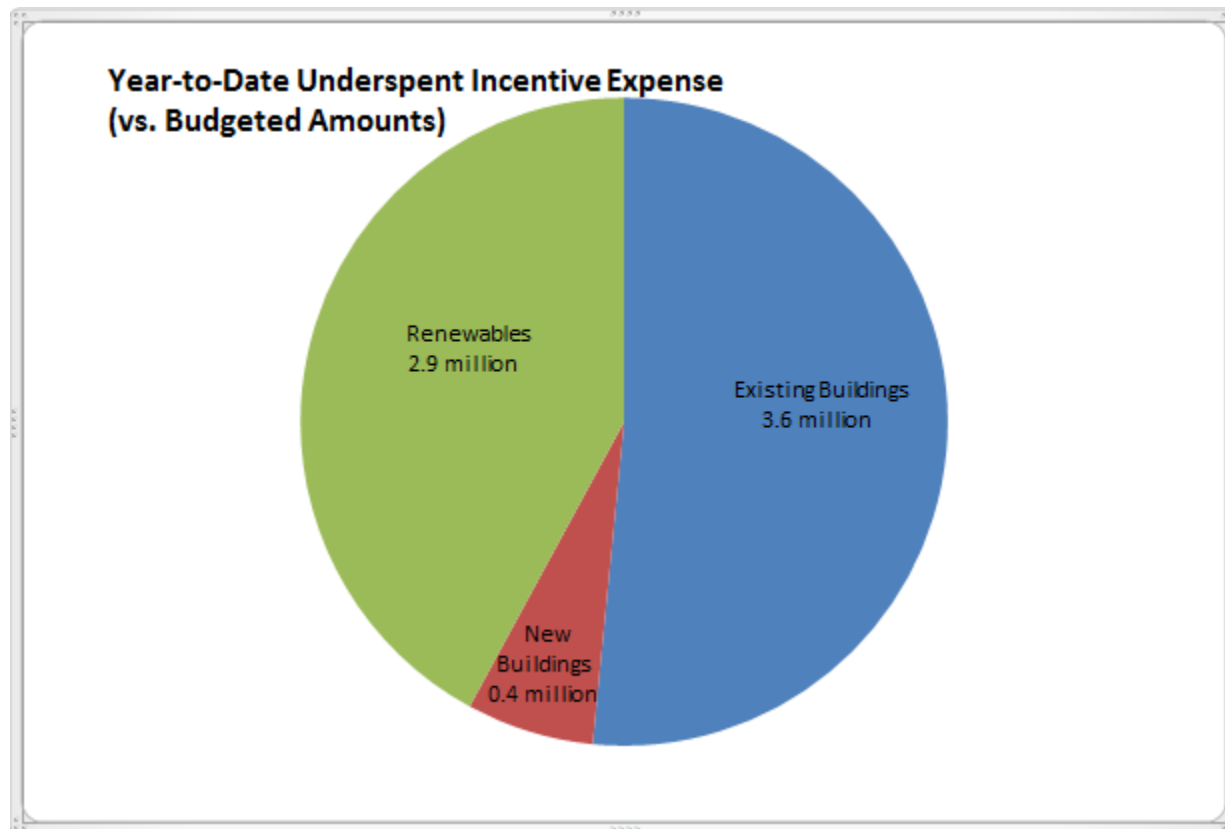
Last year at this time total spending was \$41.1 million. This year total spending is \$44.5 million. Over half of the \$3.4 million increase is due to a \$1.8 million bump in May incentive spending (\$4.3 million in May last year vs. \$6.1 million in May this year).

## Incentive Expenses

The incentives paid out so far in 2014 are about \$7 million below budgeted amounts. Three of the programs are very close to budget; Production Efficiency, Existing Homes, and New Homes & Products are all within 2% of year-to-date budgeted incentives. The other three programs are quite a bit below budget. The following graph shows how much each of the underspent programs is below their budgeted amount.

Renewables incentives are underspent by \$2.9 million. Commercial Solar spending is below anticipated levels and a \$1.55 million payment to OIT for a geothermal project has been pushed back to September.

Existing buildings incentive expenditures continue to lag behind budget. Last year the program was at 47% of the year to date budget, this year they're at 48% of year to date budget. Last year the spending pace picked up toward year end, yet the program finished at 77% of total year budget. Further analysis will be prepared at the end of the second quarter end to determine if similar performance is likely.



| <b>Total Incentives</b>   |               |               |                 |              |
|---------------------------|---------------|---------------|-----------------|--------------|
| <b>Year-to-Date 2014</b>  |               |               |                 |              |
| Incentives thru May 2014  | <u>Actual</u> | <u>Budget</u> | <u>Variance</u> | <u>Var %</u> |
| Existing Buildings        | 3,390,147     | 7,001,879     | 3,611,732       | 52%          |
| New Buildings             | 1,367,568     | 1,813,814     | 446,246         | 25%          |
| Production Efficiency     | 3,198,744     | 3,152,228     | (46,516)        | -1%          |
| Existing Homes            | 2,932,938     | 2,928,337     | (4,601)         | 0%           |
| New Homes & Products      | 4,145,343     | 4,068,710     | (76,633)        | -2%          |
| Washington Programs - All | 121,720       | 213,604       | 91,884          | 43%          |
| Solar                     | 1,663,164     | 2,642,677     | 979,513         | 37%          |
| Open Solicitation         | 392,348       | 2,360,685     | 1,968,337       | 83%          |
| Total Incentives          | 17,211,972    | 24,181,934    | 6,969,962       | 29%          |
| Energy Efficiency Only    | 15,156,460    | 19,178,572    | 4,022,112       | 21%          |

| <b>Total Incentives</b>        |                     |                   |                 |              |
|--------------------------------|---------------------|-------------------|-----------------|--------------|
| <b>Year-to-Year Comparison</b> |                     |                   |                 |              |
| May 2014 v May 2013            | <u>Current Year</u> | <u>Prior Year</u> | <u>Variance</u> | <u>Var %</u> |
| Existing Buildings             | 3,390,147           | 2,636,873         | (753,274)       | -29%         |
| New Buildings                  | 1,367,568           | 2,775,677         | 1,408,109       | 51%          |
| Production Efficiency          | 3,198,744           | 3,584,882         | 386,138         | 11%          |
| Existing Homes                 | 2,932,938           | 1,763,801         | (1,169,137)     | -66%         |
| New Homes & Products           | 4,145,343           | 2,881,031         | (1,264,312)     | -44%         |
| Washington Programs - All      | 121,720             | 85,352            | (36,368)        | -43%         |
| Solar                          | 1,663,164           | 1,229,524         | (433,640)       | -35%         |
| Other                          | 392,348             | 496,387           | 104,039         | 21%          |
| Total Incentives               | 17,211,972          | 15,453,523        | (1,758,449)     | -11%         |
| Energy Efficiency Only         | 15,156,460          | 13,727,616        | (1,428,844)     | -10%         |

Energy Trust of Oregon, Inc  
BALANCE SHEET  
May 31, 2014  
(Unaudited)

|   | MAY<br>2014        | APR<br>2014        | DEC<br>2013        | MAY<br>2013       | Change from<br>one month ago | Change from<br>Beg. of Year | Change from<br>one year ago |
|---|--------------------|--------------------|--------------------|-------------------|------------------------------|-----------------------------|-----------------------------|
| <b>Current Assets</b>                   |                    |                    |                    |                   |                              |                             |                             |
| Cash & Cash Equivalents                 | 74,070,305         | 76,404,658         | 76,484,638         | 82,083,349        | (2,334,353)                  | (2,414,333)                 | (8,013,044)                 |
| Restricted Cash (Escrow Funds)          | 0                  | 4,637              | 0                  | 252,690           | (4,637)                      | 0                           | (252,690)                   |
| Investments                             | 46,786,485         | 42,069,768         | 25,270,363         | 4,980,004         | 4,716,717                    | 21,516,123                  | 41,806,481                  |
| Restricted Investments (Escrow Funds)   | 0                  | 0                  | 77,988             | 0                 | 0                            | (77,988)                    | 0                           |
| Receivables                             | 175,557            | 142,516            | 8,276              | 8,584             | 33,042                       | 167,281                     | 166,974                     |
| Prepaid Expenses                        | 551,145            | 522,433            | 526,087            | 913,387           | 28,711                       | 25,058                      | (362,243)                   |
| Advances to Vendors                     | 1,172,842          | 1,941,778          | 2,015,420          | 1,007,075         | (768,935)                    | (842,578)                   | 165,768                     |
| <b>Total Current Assets</b>             | <b>122,756,335</b> | <b>121,085,790</b> | <b>104,382,771</b> | <b>89,245,088</b> | <b>1,670,544</b>             | <b>18,373,563</b>           | <b>33,511,246</b>           |
| <b>Fixed Assets</b>                     |                    |                    |                    |                   |                              |                             |                             |
| Computer Hardware and Software          | 1,448,587          | 1,448,587          | 1,401,967          | 1,368,867         | 0                            | 46,620                      | 79,720                      |
| Leasehold Improvements                  | 313,333            | 313,333            | 313,333            | 313,333           | 0                            | 0                           | 0                           |
| Office Equipment and Furniture          | 600,662            | 600,662            | 600,662            | 600,662           | 0                            | 0                           | 0                           |
| <b>Total Fixed Assets</b>               | <b>2,362,582</b>   | <b>2,362,582</b>   | <b>2,315,962</b>   | <b>2,282,863</b>  | <b>0</b>                     | <b>46,620</b>               | <b>79,720</b>               |
| Less Depreciation                       | (1,640,289)        | (1,611,871)        | (1,500,494)        | (1,306,826)       | (28,418)                     | (139,794)                   | (333,463)                   |
| <b>Net Fixed Assets</b>                 | <b>722,294</b>     | <b>750,712</b>     | <b>815,468</b>     | <b>976,037</b>    | <b>(28,418)</b>              | <b>(93,174)</b>             | <b>(253,743)</b>            |
| <b>Other Assets</b>                     |                    |                    |                    |                   |                              |                             |                             |
| Rental Deposit                          | 64,461             | 64,461             | 61,461             | 64,461            | 0                            | 3,000                       | 0                           |
| Deferred Compensation Asset             | 522,059            | 509,389            | 552,641            | 434,461           | 12,669                       | (30,582)                    | 87,597                      |
| <b>Total Other Assets</b>               | <b>586,520</b>     | <b>573,851</b>     | <b>614,102</b>     | <b>498,922</b>    | <b>12,669</b>                | <b>(27,582)</b>             | <b>87,597</b>               |
| <b>Total Assets</b>                     | <b>124,065,149</b> | <b>122,410,353</b> | <b>105,812,341</b> | <b>90,720,047</b> | <b>1,654,796</b>             | <b>18,252,807</b>           | <b>33,345,101</b>           |
| <b>Current Liabilities</b>              |                    |                    |                    |                   |                              |                             |                             |
| Accounts Payable and Accruals           | 8,394,003          | 6,992,942          | 26,326,508         | 6,160,626         | 1,401,061                    | (17,932,505)                | 2,233,376                   |
| Salaries, Taxes, & Benefits Payable     | 745,253            | 718,945            | 631,548            | 670,171           | 26,309                       | 113,706                     | 75,082                      |
| <b>Total Current Liabilities</b>        | <b>9,139,256</b>   | <b>7,711,886</b>   | <b>26,958,055</b>  | <b>6,830,798</b>  | <b>1,427,369</b>             | <b>(17,818,800)</b>         | <b>2,308,458</b>            |
| <b>Long Term Liabilities</b>            |                    |                    |                    |                   |                              |                             |                             |
| Deferred Rent                           | 358,892            | 359,962            | 364,244            | 342,363           | (1,070)                      | (5,352)                     | 16,529                      |
| Deferred Compensation Payable           | 522,059            | 509,389            | 552,641            | 434,461           | 12,669                       | (30,582)                    | 87,597                      |
| Other Long-Term Liabilities             | 7,065              | 7,065              | 6,830              | 13,904            | 0                            | 235                         | (6,839)                     |
| <b>Total Long-Term Liabilities</b>      | <b>888,015</b>     | <b>876,416</b>     | <b>923,714</b>     | <b>790,727</b>    | <b>11,599</b>                | <b>(35,699)</b>             | <b>97,288</b>               |
| <b>Total Liabilities</b>                | <b>10,027,271</b>  | <b>8,588,303</b>   | <b>27,881,769</b>  | <b>7,621,525</b>  | <b>1,438,968</b>             | <b>(17,854,498)</b>         | <b>2,405,746</b>            |
| <b>Net Assets</b>                       |                    |                    |                    |                   |                              |                             |                             |
| Temporarily Restricted Net Assets       | (0)                | 4,637              | 77,988             | 252,690           | (4,637)                      | (77,988)                    | (252,690)                   |
| Unrestricted Net Assets                 | 114,037,878        | 113,817,413        | 77,852,585         | 82,845,833        | 220,464                      | 36,185,293                  | 31,192,045                  |
| <b>Total Net Assets</b>                 | <b>114,037,878</b> | <b>113,822,050</b> | <b>77,930,572</b>  | <b>83,098,523</b> | <b>215,827</b>               | <b>36,107,306</b>           | <b>30,939,355</b>           |
| <b>Total Liabilities and Net Assets</b> | <b>124,065,149</b> | <b>122,410,353</b> | <b>105,812,341</b> | <b>90,720,047</b> | <b>1,654,796</b>             | <b>18,252,807</b>           | <b>33,345,101</b>           |

BS-Acct-YTD-001



**Energy Trust of Oregon**  
**Cash Flow Statement-Indirect Method**  
**Monthly 2014**

|   | <u>January</u>       | <u>February</u>      | <u>March</u>         | <u>April</u>         | <u>May</u>           | <u>Year to Date</u>    |
|---|----------------------|----------------------|----------------------|----------------------|----------------------|------------------------|
| <b>Operating Activities:</b>                            |                      |                      |                      |                      |                      |                        |
| <i>Revenue less Expenses</i>                            | 12,906,165           | 10,113,897           | 6,583,587            | 6,287,830            | 215,826              | \$ 36,107,305          |
| <i>Non-cash items:</i>                                  |                      |                      |                      |                      |                      |                        |
| Depreciation  | 27,123               | 27,123               | 28,713               | 28,418               | 28,418               | \$ 139,795             |
| Loss on disposal of assets                              |                      |                      |                      |                      |                      | \$ -                   |
| Receivables   | 3,902                | (49)                 | -                    | -                    | 174                  | \$ 4,027               |
| Interest Receivable                                     | 1,292                | 663                  | (27,109)             | (112,939)            | (33,215)             | \$ (171,308)           |
| Advances to Vendors                                     | 680,371              | 678,630              | (1,650,387)          | 365,028              | 768,936              | \$ 842,578             |
| Prepaid expenses and other costs                        | (151,035)            | 100,837              | 11,507               | 42,345               | (28,712)             | \$ (25,058)            |
| Accounts payable  | (19,456,433)         | (797,502)            | 1,417,700            | (423,975)            | 1,401,061            | \$ (17,859,149)        |
| Payroll and related accruals                            | 70,280               | (88,799)             | 76,891               | (14,227)             | 38,978               | \$ 83,123              |
| Deferred rent and other                                 | (3,988)              | 51,851               | (945)                | (10,714)             | (13,739)             | \$ 22,465              |
| Funds from finalized Escrow                             |                      |                      |                      |                      | 4,637                | \$ 4,637               |
| <b>Cash rec'd from / (used in) Operating Activities</b> | <b>(5,922,323)</b>   | <b>10,086,651</b>    | <b>6,439,957</b>     | <b>6,161,766</b>     | <b>2,382,364</b>     | <b>\$ 19,148,415</b>   |
| <b>Investing Activities:</b>                            |                      |                      |                      |                      |                      |                        |
| Investment Activity (1)                                 | 992,503              | 992,840              | (232,102)            | (18,552,646)         | (4,716,717)          | \$ (21,516,122)        |
| (Acquisition)/Disposal of Capital Assets                | -                    |                      | (46,620)             | -                    |                      | \$ (46,620)            |
| <b>Cash rec'd from / (used in) Investing Activities</b> | <b>992,503</b>       | <b>992,840</b>       | <b>(278,722)</b>     | <b>(18,552,646)</b>  | <b>(4,716,717)</b>   | <b>\$ (21,562,742)</b> |
| <b>Cash at beginning of Period</b>                      | <b>76,484,638</b>    | <b>71,554,817</b>    | <b>82,634,304</b>    | <b>88,795,538</b>    | <b>76,404,658</b>    | <b>76,484,638</b>      |
| <b>Increase/(Decrease) in Cash</b>                      | <b>(4,929,820)</b>   | <b>11,079,491</b>    | <b>6,161,235</b>     | <b>(12,390,880)</b>  | <b>(2,334,353)</b>   | <b>(2,414,333)</b>     |
| <b>Cash at end of period</b>                            | <b>\$ 71,554,817</b> | <b>\$ 82,634,304</b> | <b>\$ 88,795,538</b> | <b>\$ 76,404,658</b> | <b>\$ 74,070,305</b> | <b>\$ 74,070,305</b>   |

(1) As investments mature, they are rolled into the Repo account.  
Investments that are made during the month reduce available cash.

Energy Trust of Oregon  
Cash Flow Projection  
January 2014 - December 2015

|                                 | Actual      |            |            |              |             | Adjusted Budget |            |             |             |             |             |              |
|---------------------------------|-------------|------------|------------|--------------|-------------|-----------------|------------|-------------|-------------|-------------|-------------|--------------|
|                                 | January     | February   | March      | April        | May         | June            | July       | August      | September   | October     | November    | December     |
| Cash In:                        |             |            |            |              |             |                 |            |             |             |             |             |              |
| Public purpose and Incr funding | 17,726,777  | 18,539,933 | 16,486,831 | 15,278,872   | 12,455,507  | 10,800,000      | 11,900,000 | 10,900,000  | 10,600,000  | 12,500,000  | 11,600,000  | 14,100,000   |
| From other sources              | 3,902       | (49)       | 12,500     | -            | 5,711       | -               | -          | -           | -           | -           | -           | -            |
| Investment Income               | 12,036      | 10,159     | (15,526)   | (95,411)     | (10,883)    | 3,000           | 3,000      | 3,000       | 3,000       | 3,000       | 3,000       | 3,000        |
| Total cash in                   | 17,742,715  | 18,550,043 | 16,483,805 | 15,183,461   | 12,450,335  | 10,803,000      | 11,903,000 | 10,903,000  | 10,603,000  | 12,503,000  | 11,603,000  | 14,103,000   |
| Cash Out:                       |             |            |            |              |             |                 |            |             |             |             |             |              |
|                                 | 22,672,537  | 7,470,551  | 10,322,571 | 27,574,340   | 14,784,686  | 14,200,000      | 12,500,000 | 12,400,000  | 15,800,000  | 14,200,000  | 16,600,000  | 35,500,000   |
| Net cash flow for the month     | (4,929,822) | 11,079,492 | 6,161,234  | (12,390,879) | (2,334,351) | (3,397,000)     | (597,000)  | (1,497,000) | (5,197,000) | (1,697,000) | (4,997,000) | (21,397,000) |
| Beginning Balance: Cash & MM    | 76,484,640  | 71,554,817 | 82,634,309 | 88,795,543   | 76,404,659  | 74,070,305      | 70,673,305 | 70,076,305  | 68,579,305  | 63,382,305  | 61,685,305  | 56,688,305   |
| Ending cash & MM                | 71,554,817  | 82,634,309 | 88,795,543 | 76,404,659   | 74,070,305  | 70,673,305      | 70,076,305 | 68,579,305  | 63,382,305  | 61,685,305  | 56,688,305  | 35,291,305   |

|                            |            |            |            |            |            |            |            |            |            |            |            |            |
|----------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Future Commitments         |            |            |            |            |            |            |            |            |            |            |            |            |
| Renewable Incentives       | 20,900,000 | 21,000,000 | 14,200,000 | 14,200,000 | 14,300,000 | 13,800,000 | 14,400,000 | 14,800,000 | 15,200,000 | 15,700,000 | 16,200,000 | 16,400,000 |
| Efficiency Incentives      | 39,500,000 | 47,800,000 | 44,400,000 | 44,100,000 | 43,000,000 | 41,800,000 | 40,500,000 | 39,400,000 | 39,100,000 | 40,200,000 | 41,700,000 | 37,600,000 |
| Emergency Contingency Pool | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  |
| Total Commitments          | 65,400,000 | 73,800,000 | 63,600,000 | 63,300,000 | 62,300,000 | 60,600,000 | 59,900,000 | 59,200,000 | 59,300,000 | 60,900,000 | 62,900,000 | 59,000,000 |

|                                  |        |        |          |       |         |   |   |   |   |   |   |   |
|----------------------------------|--------|--------|----------|-------|---------|---|---|---|---|---|---|---|
| Escrow Cash Balance              |        |        |          |       |         |   |   |   |   |   |   |   |
| Beginning Balance                | 77,989 | 77,989 | 77,993   | 4,637 | 4,637   |   |   |   |   |   |   | - |
| Net Escrow (Payments)/Funding    |        |        | (73,356) |       | (4,637) |   |   |   |   |   |   | - |
| Interest Paid on Escrow Balances |        | 4      |          |       |         |   |   |   |   |   |   | - |
| Ending Escrow Balance (1)        | 77,989 | 77,993 | 4,637    | 4,637 | -       | - | - | - | - | - | - | - |

(1) Included in "Ending cash & MM" above

- Dedicated funds adjustment:

Committed funds adjustment:

Cash reserve:

Escrow:
- reduction in available cash for commitments to Renewable program projects with board approval, or when board approval not required, with signed agreements

reduction in available cash for commitments to Efficiency program projects with signed agreements

reduction in available cash to cover cashflow variability and winter revenue risk

dedicated funds set aside in separate bank accounts

Energy Trust of Oregon  
Cash Flow Projection  
January 2014 - December 2015

|                                 | 2015 Round 2 Budget |            |            |            |            |             |             |            |             |            |             |              |
|---------------------------------|---------------------|------------|------------|------------|------------|-------------|-------------|------------|-------------|------------|-------------|--------------|
|                                 | January             | February   | March      | April      | May        | June        | July        | August     | September   | October    | November    | December     |
|                                 |                     |            |            |            |            |             |             |            |             |            |             |              |
| Cash In:                        |                     |            |            |            |            |             |             |            |             |            |             |              |
| Public purpose and Incr funding | 15,500,000          | 16,100,000 | 15,400,000 | 14,100,000 | 11,800,000 | 11,000,000  | 11,900,000  | 11,100,000 | 10,700,000  | 12,600,000 | 11,800,000  | 14,400,000   |
| From other sources              |                     |            |            |            |            |             |             |            |             |            |             |              |
| Investment Income               | 8,000               | 8,000      | 8,000      | 8,000      | 8,000      | 8,000       | 8,000       | 8,000      | 8,000       | 8,000      | 8,000       | 8,000        |
| Total cash in                   | 15,508,000          | 16,108,000 | 15,408,000 | 14,108,000 | 11,808,000 | 11,008,000  | 11,908,000  | 11,108,000 | 10,708,000  | 12,608,000 | 11,808,000  | 14,408,000   |
| Cash Out:                       | 19,300,000          | 9,200,000  | 13,400,000 | 11,100,000 | 9,700,000  | 14,300,000  | 13,300,000  | 11,300,000 | 13,800,000  | 12,200,000 | 14,800,000  | 41,000,000   |
| Net cash flow for the month     | (3,792,000)         | 6,908,000  | 2,008,000  | 3,008,000  | 2,108,000  | (3,292,000) | (1,392,000) | (192,000)  | (3,092,000) | 408,000    | (2,992,000) | (26,592,000) |
| Beginning Balance: Cash & MM    | 35,291,305          | 31,499,305 | 38,407,305 | 40,415,305 | 43,423,305 | 45,531,305  | 42,239,305  | 40,847,305 | 40,655,305  | 37,563,305 | 37,971,305  | 34,979,305   |
| Ending cash & MM                | 31,499,305          | 38,407,305 | 40,415,305 | 43,423,305 | 45,531,305 | 42,239,305  | 40,847,305  | 40,655,305 | 37,563,305  | 37,971,305 | 34,979,305  | 8,387,305    |

|                            |            |            |            |            |            |            |            |            |            |            |            |            |
|----------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Future Commitments         |            |            |            |            |            |            |            |            |            |            |            |            |
| Renewable Incentives       | 16,400,000 | 16,400,000 | 16,400,000 | 16,400,000 | 16,400,000 | 16,400,000 | 16,400,000 | 16,400,000 | 16,400,000 | 16,400,000 | 16,400,000 | 16,400,000 |
| Efficiency Incentives      | 37,600,000 | 37,600,000 | 37,600,000 | 37,600,000 | 37,600,000 | 37,600,000 | 37,600,000 | 37,600,000 | 37,600,000 | 37,600,000 | 37,600,000 | 37,600,000 |
| Emergency Contingency Pool | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  | 5,000,000  |
| Total Commitments          | 59,000,000 | 59,000,000 | 59,000,000 | 59,000,000 | 59,000,000 | 59,000,000 | 59,000,000 | 59,000,000 | 59,000,000 | 59,000,000 | 59,000,000 | 59,000,000 |

|                                  |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Escrow Cash Balance              |   |   |   |   |   |   |   |   |   |   |   |   |
| Beginning Balance                | - | - | - | - | - | - | - | - | - | - | - | - |
| Net Escrow (Payments)/Funding    |   |   |   |   |   |   |   |   |   |   |   |   |
| Interest Paid on Escrow Balances | - | - | - | - | - | - | - | - | - | - | - | - |
| Ending Escrow Balance (1)        | - | - | - | - | - | - | - | - | - | - | - | - |

(1) Included in "Ending cash & MM" above

|                             |  |
|-----------------------------|--|
| Dedicated funds adjustment: | reduction in available cash for commitments to Renewable program projects with board approval, or when board approval not required, with signed agreements |
| Committed funds adjustment: | reduction in available cash for commitments to Efficiency program projects with signed agreements  |
| Cash reserve:               | reduction in available cash to cover cashflow variability and winter revenue risk  |
| Escrow:                     | dedicated funds set aside in separate bank accounts  |

**Energy Trust of Oregon, Inc**  
**INCOME STATEMENT - ACTUAL AND PRIOR YR COMPARISON**  
**For the Five Months Ending May 31, 2014**  
**(Unaudited)**

|                                    | May               |                      |                        |               | YTD               |                      |                        |               |
|------------------------------------|-------------------|----------------------|------------------------|---------------|-------------------|----------------------|------------------------|---------------|
|                                    | Actual            | Actual<br>Prior Year | Prior Year<br>Variance | Variance<br>% | Actual            | Actual<br>Prior Year | Prior Year<br>Variance | Variance<br>% |
| <b><u>REVENUES</u></b>             |                   |                      |                        |               |                   |                      |                        |               |
| Public Purpose Funds-PGE           | 2,927,269         | 2,684,619            | 242,650                | 9%            | 16,789,640        | 15,564,836           | 1,224,804              | 8%            |
| Public Purpose Funds-PacifiCorp    | 2,066,142         | 2,003,068            | 63,074                 | 3%            | 12,311,990        | 11,490,137           | 821,853                | 7%            |
| Public Purpose Funds-NW Natural    | 1,603,232         | 2,033,625            | (430,393)              | (21%)         | 12,524,689        | 15,174,031           | (2,649,343)            | (17%)         |
| Public Purpose Funds-Cascade       | 102,442           | 134,088              | (31,646)               | (24%)         | 1,956,263         | 1,280,345            | 675,918                | 53%           |
| <b>Total Public Purpose Funds</b>  | <b>6,699,085</b>  | <b>6,855,401</b>     | <b>(156,316)</b>       | <b>(2%)</b>   | <b>43,582,583</b> | <b>43,509,350</b>    | <b>73,233</b>          | <b>0%</b>     |
| Incremental Funds - PGE            | 3,844,791         | 3,842,099            | 2,693                  | 0%            | 23,285,319        | 22,227,054           | 1,058,265              | 5%            |
| Incremental Funds - PacifiCorp     | 1,911,630         | 1,983,096            | (71,466)               | (4%)          | 12,068,489        | 11,497,967           | 570,522                | 5%            |
| NW Natural - Industrial DSM        | 0                 | 0                    | 0                      |               | 1,024,352         | 575,946              | 448,406                | 78%           |
| NW Natural - Washington            | 0                 | 0                    | 0                      |               | 527,177           | 645,551              | (118,374)              | (18%)         |
| Contributions                      | 900               | 0                    | 900                    |               | 13,400            | 930                  | 12,470                 | 1341%         |
| Revenue from Investments           | 22,332            | 6,983                | 15,349                 | 220%          | 71,683            | 36,227               | 35,457                 | 98%           |
| Gain or Loss on Investments        | 0                 | (97)                 | 97                     | 100%          | 0                 | 0                    | 0                      |               |
| <b>TOTAL REVENUE</b>               | <b>12,478,738</b> | <b>12,687,481</b>    | <b>(208,743)</b>       | <b>(2%)</b>   | <b>80,573,003</b> | <b>78,493,025</b>    | <b>2,079,978</b>       | <b>3%</b>     |
| <b><u>EXPENSES</u></b>             |                   |                      |                        |               |                   |                      |                        |               |
| Program Subcontracts               | 4,403,074         | 4,055,250            | (347,824)              | (9%)          | 19,187,145        | 18,477,363           | (709,782)              | (4%)          |
| Incentives                         | 6,059,570         | 4,304,211            | (1,755,358)            | (41%)         | 17,211,972        | 15,453,526           | (1,758,446)            | (11%)         |
| Salaries and Related Expenses      | 1,011,240         | 820,264              | (190,976)              | (23%)         | 4,579,414         | 3,996,883            | (582,531)              | (15%)         |
| Professional Services              | 599,040           | 284,681              | (314,359)              | (110%)        | 2,507,664         | 1,992,097            | (515,566)              | (26%)         |
| Supplies                           | 3,019             | 1,904                | (1,115)                | (59%)         | 16,711            | 12,839               | (3,872)                | (30%)         |
| Telephone                          | 4,934             | 4,611                | (323)                  | (7%)          | 21,993            | 21,306               | (687)                  | (3%)          |
| Postage and Shipping Expenses      | 1,403             | 1,206                | (197)                  | (16%)         | 5,314             | 4,583                | (731)                  | (16%)         |
| Occupancy Expenses                 | 52,550            | 54,253               | 1,703                  | 3%            | 273,119           | 274,648              | 1,529                  | 1%            |
| Noncapitalized Equip. & Depr.      | 56,667            | 54,579               | (2,088)                | (4%)          | 288,195           | 260,563              | (27,632)               | (11%)         |
| Call Center                        | 12,062            | 58,834               | 46,773                 | 79%           | 62,518            | 310,733              | 248,215                | 80%           |
| Printing and Publications          | 4,340             | 18,157               | 13,817                 | 76%           | 64,427            | 72,784               | 8,357                  | 11%           |
| Travel                             | 20,595            | 16,538               | (4,057)                | (25%)         | 55,226            | 54,770               | (456)                  | (1%)          |
| Conference, Training & Mtng Exp    | 13,079            | 14,341               | 1,262                  | 9%            | 76,706            | 57,615               | (19,091)               | (33%)         |
| Interest Expense and Bank Fees     | 0                 | 35                   | 35                     | 100%          | 2,000             | 478                  | (1,522)                | (319%)        |
| Insurance                          | 8,339             | 8,205                | (134)                  | (2%)          | 42,827            | 39,405               | (3,422)                | (9%)          |
| Miscellaneous Expenses             | 0                 | 168                  | 168                    | 100%          | 639               | 348                  | (291)                  | (84%)         |
| Dues, Licenses and Fees            | 12,998            | 3,654                | (9,345)                | (256%)        | 69,829            | 46,112               | (23,718)               | (51%)         |
| <b>TOTAL EXPENSES</b>              | <b>12,262,911</b> | <b>9,700,893</b>     | <b>(2,562,018)</b>     | <b>(26%)</b>  | <b>44,465,697</b> | <b>41,076,051</b>    | <b>(3,389,646)</b>     | <b>(8%)</b>   |
| <b>TOTAL REVENUE LESS EXPENSES</b> | <b>215,827</b>    | <b>2,986,588</b>     | <b>(2,770,761)</b>     | <b>(93%)</b>  | <b>36,107,306</b> | <b>37,416,973</b>    | <b>(1,309,668)</b>     | <b>(4%)</b>   |

IS-Acct-YTD-PY

**Energy Trust of Oregon, Inc**  
**INCOME STATEMENT - ACTUAL AND YTD BUDGET COMPARISON**  
**For the Five Months Ending May 31, 2014**  
**(Unaudited)**

|                                   | May               |                   |                    |               | YTD               |                   |                    |               |
|-----------------------------------|-------------------|-------------------|--------------------|---------------|-------------------|-------------------|--------------------|---------------|
|                                   | Actual            | Budget            | Budget<br>Variance | Variance<br>% | Actual            | Budget            | Budget<br>Variance | Variance<br>% |
| <b><u>REVENUES</u></b>            |                   |                   |                    |               |                   |                   |                    |               |
| Public Purpose Funds-PGE          | 2,927,269         | 2,698,630         | 228,639            | 8%            | 16,789,640        | 15,645,771        | 1,143,869          | 7%            |
| Public Purpose Funds-PacifiCorp   | 2,066,142         | 2,034,320         | 31,822             | 2%            | 12,311,990        | 11,171,302        | 1,140,688          | 10%           |
| Public Purpose Funds-NW Natural   | 1,603,232         | 1,646,378         | (43,146)           | (3%)          | 12,524,689        | 12,284,561        | 240,128            | 2%            |
| Public Purpose Funds-Cascade      | 102,442           | 57,411            | 45,031             | 78%           | 1,956,263         | 1,090,814         | 865,449            | 79%           |
| <b>Total Public Purpose Funds</b> | <b>6,699,085</b>  | <b>6,436,739</b>  | <b>262,346</b>     | <b>4%</b>     | <b>43,582,583</b> | <b>40,192,448</b> | <b>3,390,135</b>   | <b>8%</b>     |
| Incremental Funds - PGE           | 3,844,791         | 3,842,099         | 2,693              | 0%            | 23,285,319        | 22,227,055        | 1,058,264          | 5%            |
| Incremental Funds - PacifiCorp    | 1,911,630         | 1,997,157         | (85,527)           | (4%)          | 12,068,489        | 11,114,877        | 953,611            | 9%            |
| NW Natural - Industrial DSM       | 0                 | 0                 | 0                  |               | 1,024,352         | 1,257,878         | (233,526)          | (19%)         |
| NW Natural - Washington           | 0                 | 0                 | 0                  |               | 527,177           | 645,551           | (118,374)          | (18%)         |
| Contributions                     | 900               | 0                 | 900                |               | 13,400            | 0                 | 13,400             |               |
| Revenue from Investments          | 22,332            | 6,500             | 15,832             | 244%          | 71,683            | 32,500            | 39,183             | 121%          |
| <b>TOTAL REVENUE</b>              | <b>12,478,738</b> | <b>12,282,495</b> | <b>196,244</b>     | <b>2%</b>     | <b>80,573,003</b> | <b>75,470,309</b> | <b>5,102,694</b>   | <b>7%</b>     |

|                                    |                   |                   |                    |              |                   |                   |                   |            |
|------------------------------------|-------------------|-------------------|--------------------|--------------|-------------------|-------------------|-------------------|------------|
| <b><u>EXPENSES</u></b>             |                   |                   |                    |              |                   |                   |                   |            |
| Program Subcontracts               | 4,403,074         | 3,967,295         | (435,779)          | (11%)        | 19,187,145        | 20,384,114        | 1,196,969         | 6%         |
| Incentives                         | 6,059,570         | 4,808,696         | (1,250,874)        | (26%)        | 17,211,972        | 24,181,936        | 6,969,964         | 29%        |
| Salaries and Related Expenses      | 1,011,240         | 987,115           | (24,125)           | (2%)         | 4,579,414         | 4,932,909         | 353,495           | 7%         |
| Professional Services              | 599,040           | 757,952           | 158,912            | 21%          | 2,507,664         | 3,893,834         | 1,386,170         | 36%        |
| Supplies                           | 3,019             | 4,588             | 1,569              | 34%          | 16,711            | 22,942            | 6,231             | 27%        |
| Telephone                          | 4,934             | 5,484             | 550                | 10%          | 21,993            | 27,390            | 5,397             | 20%        |
| Postage and Shipping Expenses      | 1,403             | 1,183             | (220)              | (19%)        | 5,314             | 5,917             | 603               | 10%        |
| Occupancy Expenses                 | 52,550            | 64,275            | 11,724             | 18%          | 273,119           | 321,374           | 48,255            | 15%        |
| Noncapitalized Equip. & Depr.      | 56,667            | 48,397            | (8,270)            | (17%)        | 288,195           | 432,553           | 144,358           | 33%        |
| Call Center                        | 12,062            | 15,000            | 2,938              | 20%          | 62,518            | 75,000            | 12,482            | 17%        |
| Printing and Publications          | 4,340             | 11,858            | 7,518              | 63%          | 64,427            | 59,292            | (5,135)           | (9%)       |
| Travel                             | 20,595            | 17,773            | (2,822)            | (16%)        | 55,226            | 97,113            | 41,887            | 43%        |
| Conference, Training & Mtng Exp    | 13,079            | 29,245            | 16,166             | 55%          | 76,706            | 161,975           | 85,269            | 53%        |
| Interest Expense and Bank Fees     | 0                 | 417               | 417                | 100%         | 2,000             | 2,083             | 83                | 4%         |
| Insurance                          | 8,339             | 9,167             | 828                | 9%           | 42,827            | 45,833            | 3,006             | 7%         |
| Miscellaneous Expenses             | 0                 | 268               | 268                | 100%         | 639               | 1,342             | 703               | 52%        |
| Dues, Licenses and Fees            | 12,998            | 11,763            | (1,236)            | (11%)        | 69,829            | 79,791            | 9,961             | 12%        |
| <b>TOTAL EXPENSES</b>              | <b>12,262,911</b> | <b>10,740,476</b> | <b>(1,522,435)</b> | <b>(14%)</b> | <b>44,465,697</b> | <b>54,725,396</b> | <b>10,259,699</b> | <b>19%</b> |
| <b>TOTAL REVENUE LESS EXPENSES</b> | <b>215,827</b>    | <b>1,542,019</b>  | <b>(1,326,192)</b> | <b>(86%)</b> | <b>36,107,306</b> | <b>20,744,913</b> | <b>15,362,392</b> | <b>74%</b> |

IS-Acct-YTD-001

**Energy Trust of Oregon, Inc**  
**Statement of Functional Expenses**  
**For the Five Months Ending May 31, 2014**

|                                    | Energy<br>Efficiency | Renewable<br>Energy | Total Program<br>Expenses | Management<br>& General | Communications &<br>Customer Service | Total Admin<br>Expenses | Total             | Budget            | Variance          | %<br>Var         |
|------------------------------------|----------------------|---------------------|---------------------------|-------------------------|--------------------------------------|-------------------------|-------------------|-------------------|-------------------|------------------|
| <b>Program Expenses</b>            |                      |                     |                           |                         |                                      |                         |                   |                   |                   |                  |
| Incentives/ Program Management & E | 34,264,525           | 2,134,592           | 36,399,117                |                         |                                      | 0                       | 36,399,117        | 44,566,049        | 8,166,932         | 18%              |
| Payroll and Related Expenses       | 1,290,223            | 400,126             | 1,690,349                 | 791,111                 | 358,182                              | 1,149,293               | 2,839,642         | 3,073,513         | 233,871           | 8%               |
| Outsourced Services                | 1,451,884            | 83,375              | 1,535,259                 | 89,329                  | 291,126                              | 380,455                 | 1,915,714         | 3,344,834         | 1,429,120         | 43%              |
| Planning and Evaluation            | 1,185,585            | 40,870              | 1,226,455                 | 859                     |                                      | 859                     | 1,227,314         | 1,175,403         | (51,911)          | -4%              |
| Customer Service Management        | 277,487              | 11,442              | 288,929                   |                         |                                      | 0                       | 288,929           | 282,790           | (6,139)           | -2%              |
| Trade Allies Network               | 167,855              | 7,597               | 175,452                   |                         |                                      | 0                       | 175,452           | 197,724           | 22,272            | 11%              |
| <b>Total Program Expenses</b>      | <b>38,637,558</b>    | <b>2,678,001</b>    | <b>41,315,559</b>         | <b>881,300</b>          | <b>649,308</b>                       | <b>1,530,608</b>        | <b>42,846,167</b> | <b>52,640,313</b> | <b>9,794,146</b>  | <b>19%</b>       |
| <b>Program Support Costs</b>       |                      |                     |                           |                         |                                      |                         |                   |                   |                   |                  |
| Supplies                           | 5,372                | 1,402               | 6,774                     | 3,381                   | 1,669                                | 5,050                   | 11,824            | 16,190            | 4,366             | 27%              |
| Postage and Shipping Expenses      | 1,973                | 741                 | 2,714                     | 750                     | 394                                  | 1,144                   | 3,858             | 3,447             | (411)             | -12%             |
| Telephone                          | 1,059                | 347                 | 1,406                     | 768                     | 478                                  | 1,246                   | 2,652             | 5,620             | 2,968             | 53%              |
| Printing and Publications          | 60,869               | 955                 | 61,824                    | 368                     | 631                                  | 999                     | 62,823            | 57,238            | (5,585)           | -10%             |
| Occupancy Expenses                 | 82,852               | 27,132              | 109,984                   | 46,014                  | 24,935                               | 70,949                  | 180,933           | 208,719           | 27,786            | 13%              |
| Insurance                          | 12,992               | 4,255               | 17,247                    | 7,215                   | 3,910                                | 11,125                  | 28,372            | 29,767            | 1,395             | 5%               |
| Equipment                          | 7,537                | 19,204              | 26,741                    | 2,820                   | 1,528                                | 4,348                   | 31,089            | 10,010            | (21,079)          | -211%            |
| Travel                             | 18,025               | 10,334              | 28,359                    | 8,189                   | 8,705                                | 16,894                  | 45,253            | 77,654            | 32,401            | 42%              |
| Meetings, Trainings & Conferences  | 26,040               | 8,180               | 34,220                    | 12,006                  | 3,416                                | 15,422                  | 49,642            | 108,850           | 59,208            | 54%              |
| Interest Expense and Bank Fees     |                      |                     | 0                         | 2,000                   |                                      | 2,000                   | 2,000             | 2,083             | 83                | 4%               |
| Depreciation & Amortization        | 20,627               | 6,755               | 27,382                    | 11,456                  | 6,208                                | 17,664                  | 45,046            | 44,162            | (884)             | -2%              |
| Dues, Licenses and Fees            | 27,292               | 9,299               | 36,591                    | 3,338                   | 2,921                                | 6,259                   | 42,850            | 63,436            | 20,586            | 32%              |
| Miscellaneous Expenses             | 639                  |                     | 639                       |                         |                                      | 0                       | 639               | 977               | 338               | 35%              |
| IT Services                        | 752,225              | 96,134              | 848,359                   | 157,659                 | 106,530                              | 264,189                 | 1,112,548         | 1,456,929         | 344,381           | 24%              |
| <b>Total Program Support Costs</b> | <b>1,017,503</b>     | <b>184,738</b>      | <b>1,202,241</b>          | <b>255,964</b>          | <b>161,325</b>                       | <b>417,289</b>          | <b>1,619,530</b>  | <b>2,085,082</b>  | <b>465,552</b>    | <b>22%</b>       |
| <b>TOTAL EXPENSES</b>              | <b>39,655,062</b>    | <b>2,862,738</b>    | <b>42,517,800</b>         | <b>1,137,264</b>        | <b>810,633</b>                       | <b>1,947,897</b>        | <b>44,465,697</b> | <b>54,725,395</b> | <b>10,259,698</b> | <b>19%</b>       |
| <b>OPUC measure vs. 9%</b>         |                      |                     |                           |                         |                                      |                         |                   |                   |                   |                  |
|                                    | <b>3.91%</b>         |                     |                           |                         |                                      |                         |                   |                   |                   | Exp-Acct-YTD-002 |

Energy Trust of Oregon, Inc  
Year to Date by Program/Service Territory  
For the Five Months Ending May 31, 2014  
(Unaudited)

|  | ENERGY EFFICIENCY |                   |                   |                  |                   |                  |                   |                |                   |
|--|-------------------|-------------------|-------------------|------------------|-------------------|------------------|-------------------|----------------|-------------------|
|  | PGE               | PacifiCorp        | Total             | NWN Industrial   | NW Natural        | Cascade          | Oregon Total      | NWN WA         | ETO Total         |
| <b>REVENUES</b>                              |                   |                   |                   |                  |                   |                  |                   |                |                   |
| Public Purpose Funding                       | \$12,973,009      | \$9,565,817       | \$22,538,826      |                  | \$12,524,689      | \$1,956,263      | \$37,019,778      |                | \$37,019,778      |
| Incremental Funding                          | 23,285,319        | 12,068,489        | 35,353,808        | 1,024,352        |                   |                  | 36,378,160        | 527,177        | 36,905,337        |
| Contributions                                |                   |                   |                   |                  |                   |                  |                   |                |                   |
| Revenue from Investments                     |                   |                   |                   |                  |                   |                  |                   |                |                   |
| <b>TOTAL PROGRAM REVENUE</b>                 | <b>36,258,328</b> | <b>21,634,306</b> | <b>57,892,634</b> | <b>1,024,352</b> | <b>12,524,689</b> | <b>1,956,263</b> | <b>73,397,938</b> | <b>527,177</b> | <b>73,925,115</b> |
| <b>EXPENSES</b>                              |                   |                   |                   |                  |                   |                  |                   |                |                   |
| Program Management (Note 3)                  | 1,102,264         | 635,878           | 1,738,143         | 41,397           | 451,176           | 39,524           | 2,270,240         | 53,677         | 2,323,917         |
| Program Delivery                             | 9,003,354         | 5,416,803         | 14,420,157        | 164,330          | 1,844,319         | 203,247          | 16,632,053        | 82,284         | 16,714,337        |
| Incentives                                   | 8,081,220         | 4,261,708         | 12,342,928        | 206,945          | 2,299,547         | 185,320          | 15,034,740        | 121,720        | 15,156,460        |
| Program Eval & Planning Svcs.                | 1,066,731         | 581,351           | 1,648,082         | 15,456           | 361,338           | 26,078           | 2,050,954         | 31,803         | 2,082,757         |
| Program Marketing/Outreach                   | 845,127           | 497,246           | 1,342,373         | 9,911            | 330,225           | 21,440           | 1,703,949         | 14,289         | 1,718,238         |
| Program Quality Assurance                    | 14,149            | 12,857            | 27,006            | 0                | 15,318            | 661              | 42,985            | 0              | 42,985            |
| Outsourced Services                          | 74,227            | 45,904            | 120,131           | 1,272            | 30,346            | 1,738            | 153,487           | 0              | 153,487           |
| Trade Allies & Cust. Svc. Mgmt.              | 183,221           | 127,222           | 310,443           | 1,222            | 115,408           | 6,407            | 433,480           | 11,861         | 445,341           |
| IT Services                                  | 361,280           | 208,273           | 569,554           | 5,392            | 149,594           | 10,159           | 734,698           | 17,527         | 752,225           |
| Other Program Expenses                       | 134,705           | 73,442            | 208,147           | 3,903            | 37,184            | 3,519            | 252,753           | 12,565         | 265,318           |
| <b>TOTAL PROGRAM EXPENSES</b>                | <b>20,866,279</b> | <b>11,860,683</b> | <b>32,726,962</b> | <b>449,829</b>   | <b>5,634,454</b>  | <b>498,094</b>   | <b>39,309,339</b> | <b>345,726</b> | <b>39,655,062</b> |
| <b>ADMINISTRATIVE COSTS</b>                  |                   |                   |                   |                  |                   |                  |                   |                |                   |
| Management & General (Notes 1 & 2)           | 558,131           | 317,249           | 875,380           | 12,032           | 150,710           | 13,323           | 1,051,445         | 9,247          | 1,060,692         |
| Communications & Customer Svc (Notes 1 & 2)  | 397,831           | 226,132           | 623,963           | 8,576            | 107,425           | 9,497            | 749,461           | 6,592          | 756,053           |
| <b>Total Administrative Costs</b>            | <b>955,961</b>    | <b>543,382</b>    | <b>1,499,343</b>  | <b>20,608</b>    | <b>258,135</b>    | <b>22,819</b>    | <b>1,800,906</b>  | <b>15,839</b>  | <b>1,816,745</b>  |
| <b>TOTAL PROG &amp; ADMIN EXPENSES</b>       | <b>21,822,239</b> | <b>12,404,065</b> | <b>34,226,304</b> | <b>470,438</b>   | <b>5,892,590</b>  | <b>520,910</b>   | <b>41,110,242</b> | <b>361,563</b> | <b>41,471,805</b> |
| <b>TOTAL REVENUE LESS EXPENSES</b>           | <b>14,436,089</b> | <b>9,230,241</b>  | <b>23,666,330</b> | <b>553,914</b>   | <b>6,632,099</b>  | <b>1,435,353</b> | <b>32,287,696</b> | <b>165,614</b> | <b>32,453,310</b> |
| Cumulative Carryover at 12/31/13 (Note 4)    | 24,483,032        | 11,560,814        | 36,043,846        | 356,235          | 8,569,670         | 658,260          | 45,628,011        | 473,674        | 46,101,685        |
| Change in net assets this year               | 14,436,089        | 9,230,241         | 23,666,330        | 553,914          | 6,632,099         | 1,435,353        | 32,287,696        | 165,614        | 32,453,310        |
| <b>Ending Net Assets - Reserves</b>          | <b>38,919,121</b> | <b>20,791,055</b> | <b>59,710,176</b> | <b>910,149</b>   | <b>15,201,769</b> | <b>2,093,613</b> | <b>77,915,707</b> | <b>639,288</b> | <b>78,554,995</b> |
| <b>Ending Reserve by Category</b>            |                   |                   |                   |                  |                   |                  |                   |                |                   |
| Program Reserves (Efficiency and Renewables) | 38,919,121        | 20,791,055        | 59,710,176        | 910,149          | 15,201,769        | 2,093,613        | 77,915,707        | 639,288        | 78,554,995        |
| Assets Released for General Purpose          |                   |                   |                   |                  |                   |                  |                   |                |                   |
| Emergency Contingency Pool                   |                   |                   |                   |                  |                   |                  |                   |                |                   |
| <b>TOTAL NET ASSETS CUMULATIVE</b>           | <b>38,919,121</b> | <b>20,791,055</b> | <b>59,710,176</b> | <b>910,149</b>   | <b>15,201,769</b> | <b>2,093,613</b> | <b>77,915,707</b> | <b>639,288</b> | <b>78,554,995</b> |

Note 1) Both Management & General and Communications & Customer Service Expenses (Administrative) have been allocated based on total expenses.

Note 2) Admin costs are allocated for mgmt reporting only. GAAP for Not for Profit organizations does not allow allocation of admin costs to program expenses.

Note 3) Program Management costs include both outsourced and internal staff.

Note 4) Cumulative carryover at 12/31/2013 reflects audited results.

Energy Trust of Oregon, Inc  
Year to Date by Program/Service Territory  
For the Five Months Ending May 31, 2014  
(Unaudited)

|  | RENEWABLE ENERGY  |                   |                   |                  | TOTAL              |                   |                   |            |
|--|-------------------|-------------------|-------------------|------------------|--------------------|-------------------|-------------------|------------|
|  | PGE               | PacifiCorp        | Total             | Other            | All Programs       | Approved budget   | Change            | % Change   |
| <b>REVENUES</b>                              |                   |                   |                   |                  |                    |                   |                   |            |
| Public Purpose Funding                       | \$3,816,631       | \$2,746,173       | \$6,562,804       |                  | \$43,582,583       | \$40,192,448      | \$3,390,134       | 8%         |
| Incremental Funding                          |                   |                   |                   |                  | 36,905,337         | 35,245,361        | 1,659,976         | 5%         |
| Contributions                                |                   |                   |                   | 13,400           | 13,400             |                   | 13,400            |            |
| Revenue from Investments                     |                   |                   |                   | 71,683           | 71,683             | 32,500            | 39,183            | 121%       |
| <b>TOTAL PROGRAM REVENUE</b>                 | <b>3,816,631</b>  | <b>2,746,173</b>  | <b>6,562,804</b>  | <b>85,083</b>    | <b>80,573,003</b>  | <b>75,470,309</b> | <b>5,102,693</b>  | <b>7%</b>  |
| <b>EXPENSES</b>                              |                   |                   |                   |                  |                    |                   |                   |            |
| Program Management (Note 3)                  | 242,580           | 174,201           | 416,781           |                  | 2,740,698          | 2,729,215         | (11,484)          | (0%)       |
| Program Delivery                             | 31,400            | 31,013            | 62,413            |                  | 16,776,750         | 17,589,927        | 813,177           | 5%         |
| Incentives                                   | 1,232,253         | 823,259           | 2,055,512         |                  | 17,211,972         | 24,181,936        | 6,969,964         | 29%        |
| Program Eval & Planning Svcs.                | 26,941            | 24,197            | 51,138            |                  | 2,133,895          | 2,170,609         | 36,716            | 2%         |
| Program Marketing/Outreach                   | 15,026            | 10,336            | 25,362            |                  | 1,743,600          | 2,521,162         | 777,559           | 31%        |
| Program Quality Assurance                    | 0                 | 0                 | 0                 |                  | 42,985             | 106,250           | 63,264            | 60%        |
| Outsourced Services                          | 29,620            | 18,125            | 47,745            |                  | 201,232            | 776,604           | 575,374           | 74%        |
| Trade Allies & Cust. Svc. Mgmt.              | 12,986            | 6,052             | 19,038            |                  | 464,379            | 480,515           | 16,136            | 3%         |
| IT Services                                  | 51,666            | 44,469            | 96,135            |                  | 848,360            | 1,110,962         | 262,604           | 24%        |
| Other Program Expenses                       | 55,428            | 33,188            | 88,616            |                  | 353,934            | 376,155           | 22,221            | 6%         |
| <b>TOTAL PROGRAM EXPENSES</b>                | <b>1,697,900</b>  | <b>1,164,840</b>  | <b>2,862,738</b>  |                  | <b>42,517,800</b>  | <b>52,043,335</b> | <b>9,525,532</b>  | <b>18%</b> |
| <b>ADMINISTRATIVE COSTS</b>                  |                   |                   |                   |                  |                    |                   |                   |            |
| Management & General (Notes 1 & 2)           | 49,051            | 27,522            | 76,573            |                  | 1,137,264          | 1,519,974         | 382,710           | 25%        |
| Communications & Customer Svc (Notes 1 & 2)  | 34,963            | 19,618            | 54,581            |                  | 810,633            | 1,162,086         | 351,453           | 30%        |
| <b>Total Administrative Costs</b>            | <b>84,014</b>     | <b>47,140</b>     | <b>131,154</b>    |                  | <b>1,947,897</b>   | <b>2,682,060</b>  | <b>734,163</b>    | <b>27%</b> |
| <b>TOTAL PROG &amp; ADMIN EXPENSES</b>       | <b>1,781,914</b>  | <b>1,211,977</b>  | <b>2,993,891</b>  |                  | <b>44,465,697</b>  | <b>54,725,395</b> | <b>10,259,698</b> | <b>19%</b> |
| <b>TOTAL REVENUE LESS EXPENSES</b>           | <b>2,034,717</b>  | <b>1,534,196</b>  | <b>3,568,913</b>  | <b>85,083</b>    | <b>36,107,306</b>  | <b>20,744,914</b> | <b>15,362,392</b> | <b>74%</b> |
| Cumulative Carryover at 12/31/13 (Note 4)    | 12,041,462        | 11,793,715        | 23,835,177        | 7,993,710        | 77,930,572         | 62,609,764        | 15,320,808        | 24%        |
| Change in net assets this year               | 2,034,717         | 1,534,196         | 3,568,913         | 85,083           | 36,107,306         | 20,744,914        | 15,362,392        | 74%        |
| <b>Ending Net Assets - Reserves</b>          | <b>14,076,179</b> | <b>13,327,911</b> | <b>27,404,090</b> | <b>8,078,793</b> | <b>114,037,878</b> | <b>83,354,678</b> | <b>30,683,200</b> | <b>37%</b> |
| <b>Ending Reserve by Category</b>            |                   |                   |                   |                  |                    |                   |                   |            |
| Program Reserves (Efficiency and Renewables) | 14,076,179        | 13,327,911        | 27,404,090        | 3,078,793        | 109,037,878        |                   |                   |            |
| Assets Released for General Purpose          |                   |                   |                   | 5,000,000        | 5,000,000          |                   |                   |            |
| Emergency Contingency Pool                   |                   |                   |                   |                  |                    |                   |                   |            |
| <b>TOTAL NET ASSETS CUMULATIVE</b>           | <b>14,076,179</b> | <b>13,327,911</b> | <b>27,404,090</b> | <b>8,078,793</b> | <b>114,037,878</b> | <b>83,354,678</b> | <b>30,683,200</b> | <b>37%</b> |

Note 1) Both Management & General and Communications & Customer Service Expenses (Administrative) have been allocated based on total expenses.

Note 2) Admin costs are allocated for mgmt reporting only. GAAP for Not for Profit organizations does not allow allocation of admin costs to program expenses.

Note 3) Program Management costs include both outsourced and internal staff.

Note 4) Cumulative carryover at 12/31/2013 reflects audited results.



**Energy Trust of Oregon, Inc**  
**Program Expense by Service Territory**  
**For the Five Months Ending May 31, 2014**  
**(Unaudited)**

|  | PGE               | Pacific Power     | Subtotal Elec.    | NWN Industrial | NW Natural Gas   | Cascade        | Subtotal Gas     | Oregon Total      | NWN WA         | ETO Total         | YTD Budget        | Variance          | % Var      |
|--|-------------------|-------------------|-------------------|----------------|------------------|----------------|------------------|-------------------|----------------|-------------------|-------------------|-------------------|------------|
| <b>Energy Efficiency</b>               |                   |                   |                   |                |                  |                |                  |                   |                |                   |                   |                   |            |
| <b>Commercial</b>                      |                   |                   |                   |                |                  |                |                  |                   |                |                   |                   |                   |            |
| Existing Buildings                     | 5,706,252         | 2,848,100         | 8,554,352         | 108,046        | 1,084,781        | 57,602         | 1,250,429        | 9,804,781         | 126,927        | 9,931,708         | 14,530,230        | 4,598,522         | 32%        |
| New Buildings                          | 2,889,557         | 590,578           | 3,480,135         | 9,207          | 483,905          | 74,016         | 567,128          | 4,047,263         |                | 4,047,263         | 4,655,749         | 608,486           | 13%        |
| NEEA                                   | 683,289           | 515,464           | 1,198,753         |                |                  |                | 0                | 1,198,753         |                | 1,198,753         | 1,123,253         | (75,500)          | -7%        |
| <b>Total Commercial</b>                | <b>9,279,098</b>  | <b>3,954,142</b>  | <b>13,233,240</b> | <b>117,253</b> | <b>1,568,686</b> | <b>131,618</b> | <b>1,817,557</b> | <b>15,050,797</b> | <b>126,927</b> | <b>15,177,724</b> | <b>20,309,232</b> | <b>5,131,508</b>  | <b>25%</b> |
| <b>Industrial</b>                      |                   |                   |                   |                |                  |                |                  |                   |                |                   |                   |                   |            |
| Production Efficiency                  | 4,668,921         | 2,648,724         | 7,317,645         | 353,185        | 196,639          | 127,420        | 677,244          | 7,994,889         |                | 7,994,889         | 8,388,728         | 393,839           | 5%         |
| NEEA                                   | 267,060           | 201,467           | 468,527           |                |                  |                | 0                | 468,527           |                | 468,527           | 541,683           | 73,156            | 14%        |
| <b>Total Industrial</b>                | <b>4,935,981</b>  | <b>2,850,191</b>  | <b>7,786,172</b>  | <b>353,185</b> | <b>196,639</b>   | <b>127,420</b> | <b>677,244</b>   | <b>8,463,416</b>  |                | <b>8,463,416</b>  | <b>8,930,411</b>  | <b>466,995</b>    | <b>5%</b>  |
| <b>Residential</b>                     |                   |                   |                   |                |                  |                |                  |                   |                |                   |                   |                   |            |
| Existing Homes                         | 2,604,028         | 2,366,143         | 4,970,171         |                | 2,829,639        | 122,170        | 2,951,809        | 7,921,980         | 117,924        | 8,039,904         | 8,692,614         | 652,710           | 8%         |
| New Homes/Products                     | 4,009,817         | 2,484,246         | 6,494,063         |                | 1,297,626        | 139,702        | 1,437,328        | 7,931,391         | 116,712        | 8,048,103         | 8,788,731         | 740,628           | 8%         |
| NEEA                                   | 993,315           | 749,343           | 1,742,658         |                |                  |                | 0                | 1,742,658         |                | 1,742,658         | 1,538,697         | (203,961)         | -13%       |
| <b>Total Residential</b>               | <b>7,607,160</b>  | <b>5,599,732</b>  | <b>13,206,892</b> |                | <b>4,127,265</b> | <b>261,872</b> | <b>4,389,137</b> | <b>17,596,029</b> | <b>234,636</b> | <b>17,830,665</b> | <b>19,020,042</b> | <b>1,189,377</b>  | <b>6%</b>  |
| <b>Energy Efficiency Program Costs</b> | <b>21,822,239</b> | <b>12,404,065</b> | <b>34,226,304</b> | <b>470,438</b> | <b>5,892,590</b> | <b>520,910</b> | <b>6,883,938</b> | <b>41,110,242</b> | <b>361,563</b> | <b>41,471,805</b> | <b>48,259,685</b> | <b>6,787,880</b>  | <b>14%</b> |
| <b>Renewables</b>                      |                   |                   |                   |                |                  |                |                  |                   |                |                   |                   |                   |            |
| Solar Electric (Photovoltaic)          | 1,535,372         | 694,659           | 2,230,031         |                |                  |                | 0                | 2,230,031         |                | 2,230,031         | 3,560,851         | 1,330,820         | 37%        |
| Other Renewable                        | 246,542           | 517,318           | 763,860           |                |                  |                |                  | 763,860           |                | 763,860           | 2,904,860         | 2,141,000         | 74%        |
| <b>Renewables Program Costs</b>        | <b>1,781,914</b>  | <b>1,211,977</b>  | <b>2,993,891</b>  |                |                  |                | <b>0</b>         | <b>2,993,891</b>  |                | <b>2,993,891</b>  | <b>6,465,711</b>  | <b>3,471,820</b>  | <b>54%</b> |
| <b>Cost Grand Total</b>                | <b>23,604,153</b> | <b>13,616,042</b> | <b>37,220,195</b> | <b>470,438</b> | <b>5,892,590</b> | <b>520,910</b> | <b>6,883,938</b> | <b>44,104,133</b> | <b>361,563</b> | <b>44,465,697</b> | <b>54,725,396</b> | <b>10,259,700</b> | <b>19%</b> |

**Energy Trust of Oregon, Inc.**  
**ADMINISTRATIVE EXPENSES**  
For the Two Months and Year to Date Ended May 31, 2014  
(Unaudited)

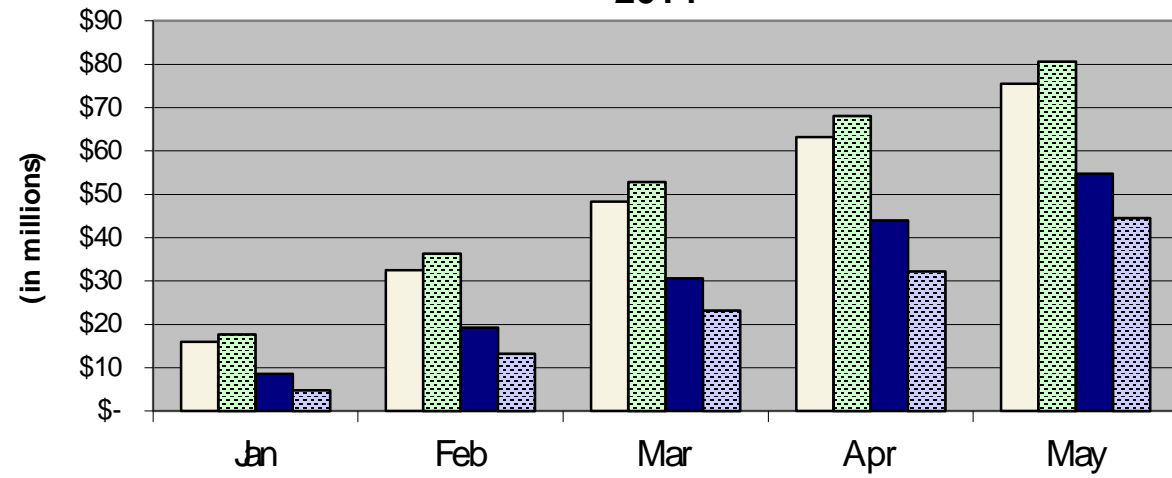
| EXPENSES                       | MANAGEMENT & GENERAL |                |                |                  |                  |                | COMMUNICATIONS & CUSTOMER SERVICE |                |                |                |                  |                |
|--------------------------------|----------------------|----------------|----------------|------------------|------------------|----------------|-----------------------------------|----------------|----------------|----------------|------------------|----------------|
|                                | QTD                  |                |                | YTD              |                  |                | QTD                               |                |                | YTD            |                  |                |
|                                | ACTUAL               | BUDGET         | REMAINING      | ACTUAL           | BUDGET           | VARIANCE       | ACTUAL                            | BUDGET         | REMAINING      | ACTUAL         | BUDGET           | VARIANCE       |
| Outsourced Services            | \$25,932             | \$160,017      | \$134,085      | \$88,578         | \$244,029        | \$155,451      | \$201,353                         | \$265,300      | \$63,947       | \$291,126      | \$442,167        | \$151,040      |
| Legal Services                 | 160                  | 13,750         | 13,590         | 752              | 22,917           | 22,165         |                                   |                |                |                |                  |                |
| Salaries and Related Expenses  | 308,944              | 527,605        | 218,660        | 791,090          | 876,675          | 85,585         | 147,827                           | 298,515        | 150,687        | 358,170        | 497,525          | 139,354        |
| Supplies                       | 21                   | 1,950          | 1,929          | 1,004            | 3,250            | 2,246          | 308                               | 240            | (68)           | 381            | 400              | 19             |
| Telephone                      |                      | 545            | 545            | 180              | 908              | 728            | 160                               | 490            | 330            | 160            | 537              | 377            |
| Postage and Shipping Expenses  | 24                   |                | (24)           | 24               |                  | (24)           |                                   | 250            | 250            |                | 417              | 417            |
| Noncapitalized Equipment       |                      |                |                |                  |                  |                |                                   | 250            | 250            |                | 417              | 417            |
| Printing and Publications      | 198                  | 75             | (123)          | 240              | 125              | (115)          | 209                               | 1,750          | 1,541          | 562            | 2,917            | 2,354          |
| Travel                         | 5,133                | 13,305         | 8,172          | 8,189            | 22,175           | 13,986         | 6,337                             | 9,500          | 3,163          | 8,705          | 15,833           | 7,128          |
| Conference, Training & Mtngs   | 7,059                | 35,360         | 28,301         | 11,805           | 58,933           | 47,128         | 3,037                             | 5,500          | 2,463          | 3,307          | 9,167            | 5,860          |
| Interest Expense and Bank Fees |                      | 1,250          | 1,250          | 2,000            | 2,083            | 83             |                                   |                |                |                |                  |                |
| Miscellaneous Expenses         |                      | 180            | 180            |                  | 300              | 300            |                                   |                |                |                |                  |                |
| Dues, Licenses and Fees        | 2,639                | 2,150          | (489)          | 3,338            | 3,583            | 245            | 2,116                             | 400            | (1,716)        | 2,921          | 667              | (2,254)        |
| Shared Allocation (Note 1)     | 28,092               | 46,650         | 18,558         | 71,546           | 77,750           | 6,204          | 15,638                            | 31,522         | 15,884         | 38,771         | 52,537           | 13,766         |
| IT Service Allocation (Note 2) | 71,547               | 106,228        | 34,682         | 157,659          | 206,462          | 48,802         | 48,344                            | 71,778         | 23,434         | 106,530        | 139,505          | 32,976         |
| Planning & Eval                | 336                  | 472            | 136            | 859              | 784              | (76)           |                                   |                |                |                |                  |                |
| <b>TOTAL EXPENSES</b>          | <b>450,086</b>       | <b>909,538</b> | <b>459,451</b> | <b>1,137,264</b> | <b>1,519,974</b> | <b>382,710</b> | <b>425,328</b>                    | <b>685,495</b> | <b>260,167</b> | <b>810,633</b> | <b>1,162,086</b> | <b>351,453</b> |
|                                | =====                | =====          | =====          | =====            | =====            | =====          | =====                             | =====          | =====          | =====          | =====            | =====          |

Note 1) Represents allocation of Shared (General Office Management) Costs  
Note 2) Represents allocation of Shared IT Costs

Exp-Prog-YTD-002

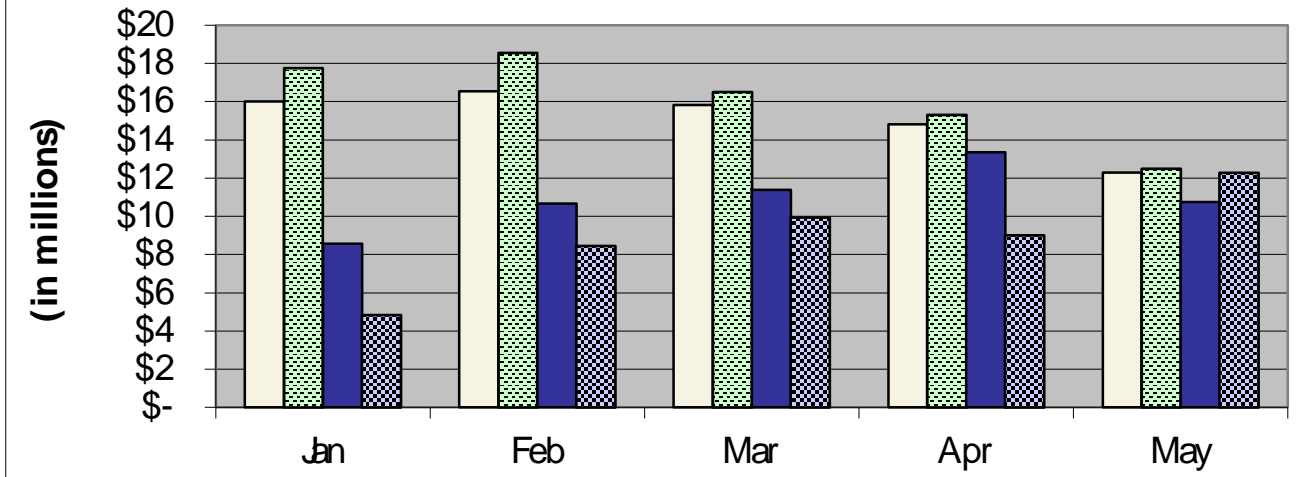
Administrative Expenses 2nd Month of Quarter

**Cumulative Revenue & Expenses  
Budget vs Actual  
2014**



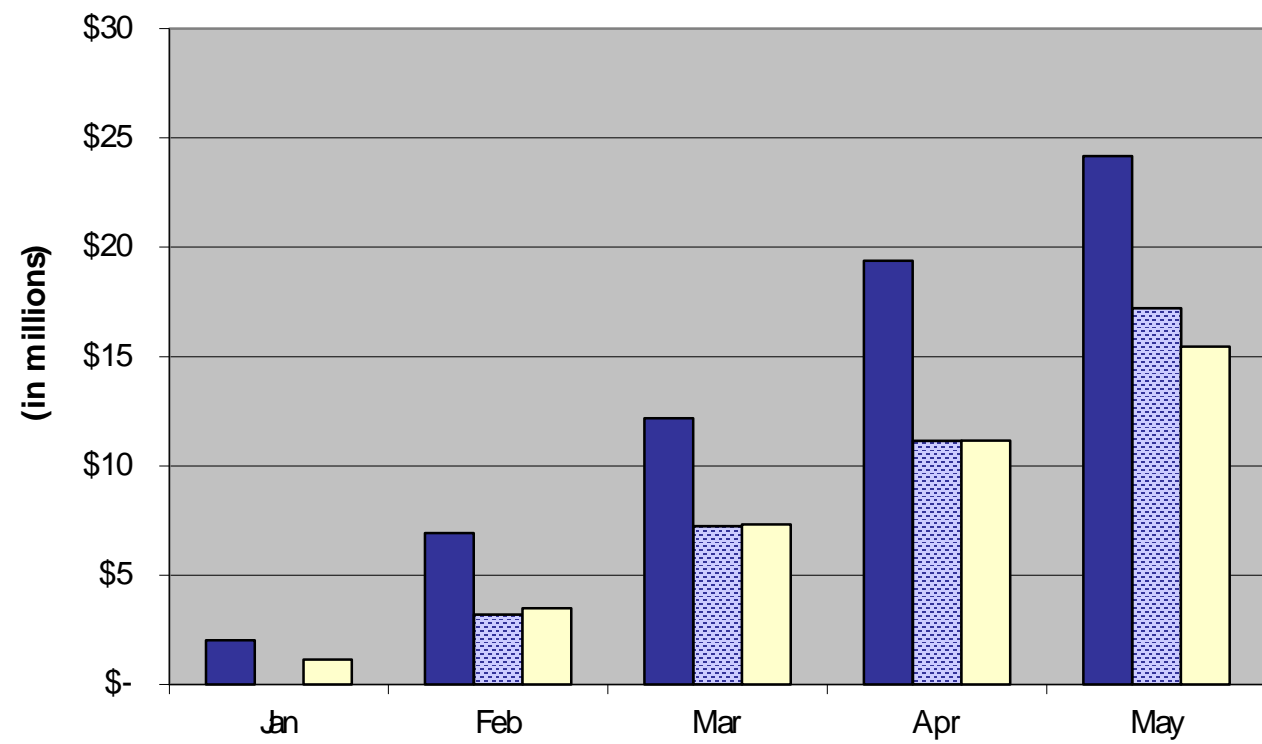
□ Revenue Budget    ■ Revenue Actual    ■ Expenses Budget    ■ Expenses Actual

**Total Revenue & Expenses - Actual vs Budget  
2014**



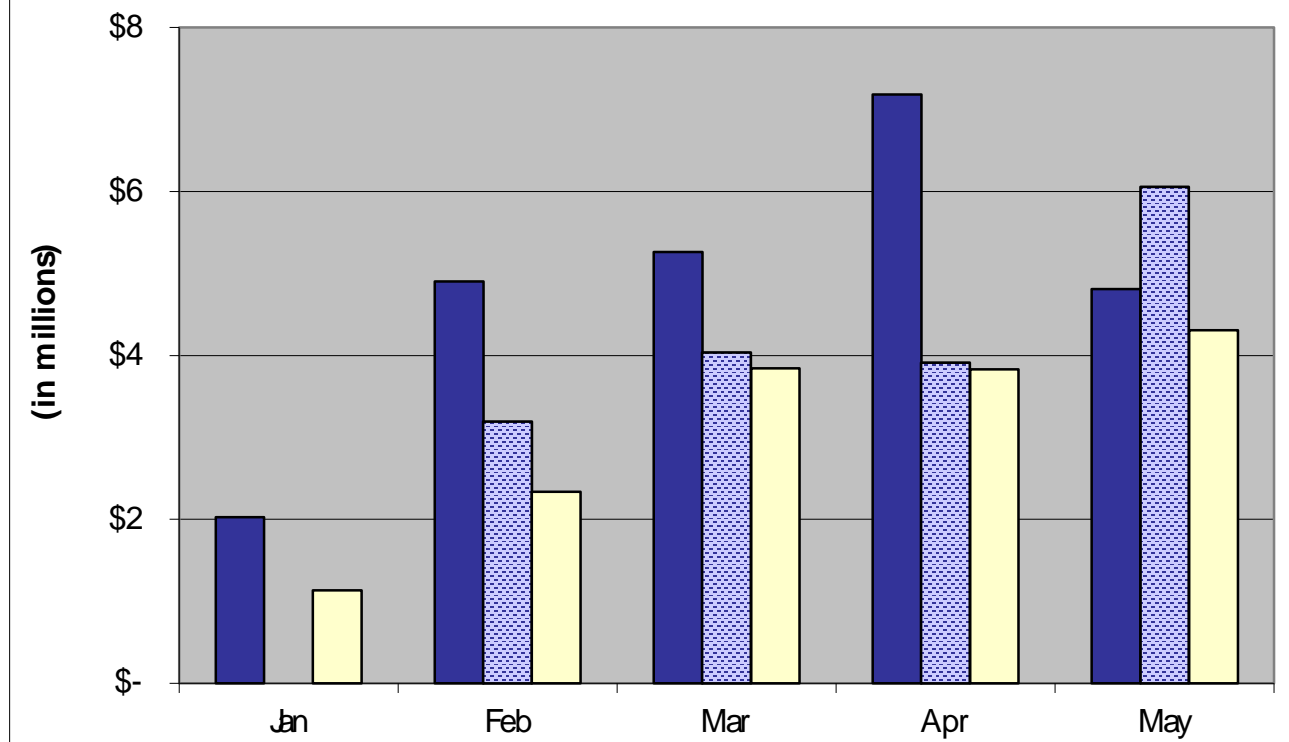
□ Revenue Budget    ■ Revenue Actual    ■ Expenses Budget    ■ Expenses Actual

**Cumulative Incentives  
Budget vs Actual  
2014**



■ Budget Incentives Current Year  
■ Actual  
□ Last Year Month

**Incentives  
Budget vs Actual  
2014**



■ Budget Incentives Current Year  
■ Actual  
□ Last Year Month

**Energy Trust of Oregon**  
**Contract Status Summary Report**

Report Date: 7/10/2014

For contracts with costs  
 through: June 2014, for May 2014 report

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| Contractor                                  | Description                    | *City         | Est Cost         | Actual TTD       | Remaining        | Start    | End      |
|---|--------------------------------|---------------|------------------|------------------|------------------|----------|----------|
| <b>Administration</b>                       |                                |               |                  |                  |                  |          |          |
| <b>Administration Total:</b>                |                                |               | <b>7,942,726</b> | <b>3,043,119</b> | <b>4,899,606</b> |          |          |
| <b>Communications &amp; Outreach</b>        |                                |               |                  |                  |                  |          |          |
| <b>Communications &amp; Outreach Total:</b> |                                |               | <b>3,159,914</b> | <b>1,586,701</b> | <b>1,573,213</b> |          |          |
| <b>Energy Efficiency Programs</b>           |                                |               |                  |                  |                  |          |          |
| Northwest Energy Efficiency Alliance        | Regional Energy Eff Initiative | Portland      | 39,138,680       | 32,351,420       | 6,787,260        | 1/1/10   | 7/1/15   |
| ICF Resources, LLC                          | PMC BE 2014                    | Fairfax       | 9,008,736        | 3,128,727        | 5,880,009        | 1/1/14   | 12/31/14 |
| CLEAResult Consulting Inc                   | 2014 HES PMC                   | Austin        | 7,595,520        | 2,863,873        | 4,731,647        | 1/1/14   | 12/31/14 |
| Portland Energy Conservation, Inc.          | PMC NHP 2014                   | Portland      | 6,965,473        | 2,596,304        | 4,369,169        | 1/1/14   | 12/31/14 |
| Portland Energy Conservation, Inc.          | 2014 NBE PMC                   | Portland      | 4,735,000        | 1,836,301        | 2,898,699        | 1/1/14   | 12/31/14 |
| Intel Corporation                           | Intel D1X Megaproject          | Hillsboro     | 4,000,000        | 4,000,000        | 0                | 11/15/12 | 12/31/14 |
| Lockheed Martin Services, Inc.              | 2014 MF PMC                    | Cherry Hill   | 3,569,068        | 1,245,171        | 2,323,897        | 1/1/14   | 12/31/14 |
| Portland General Electric                   | PDC - PE 2014                  | Portland      | 2,314,600        | 718,354          | 1,596,246        | 1/1/14   | 12/31/14 |
| Oregon State University                     | CHP Project - OSU              | Corvallis     | 2,024,263        | 1,982,682        | 41,581           | 12/20/10 | 1/31/16  |
| Energy 350 Inc                              | PDC - PE 2014                  | Portland      | 1,996,000        | 787,844          | 1,208,156        | 1/1/14   | 12/31/14 |
| NEXANT, INC.                                | PDC - PE 2014                  | San Francisco | 1,429,461        | 564,198          | 865,263          | 1/1/14   | 12/31/14 |
| Cascade Energy, Inc.                        | PDC - PE 2014 Small Industrial | Walla Walla   | 1,234,100        | 476,569          | 757,531          | 1/1/14   | 12/31/14 |
| RHT Energy Solutions                        | PDC - PE 2014                  | Medford       | 1,145,000        | 477,572          | 667,428          | 1/1/14   | 12/31/14 |
| Evergreen Consulting Group, LLC             | PE Lighting PDC 2014           | Tigard        | 1,092,000        | 466,281          | 625,719          | 1/1/14   | 12/31/14 |
| Northwest Power & Conservation Council      | Annual Work Plan               |               | 874,652          | 845,716          | 28,936           | 3/20/12  | 12/31/14 |
| Evoworx Inc.                                | EnergySavvy Online Audit Tool  | Seattle       | 472,500          | 380,384          | 92,116           | 1/1/12   | 12/31/14 |
| Clean Energy Works Oregon Inc               | Clean Energy Works             | Portland      | 448,500          | 300,000          | 148,500          | 1/1/10   | 6/30/14  |
| Navigant Consulting Inc                     | Analytical Model & Study       | Boulder       | 412,052          | 405,460          | 6,592            | 8/12/13  | 6/30/14  |
| OPOWER, Inc.                                | OPower Personal Energy Reports | Arlington     | 399,447          | 343,415          | 56,032           | 8/1/13   | 7/31/15  |
| The Cadmus Group Inc.                       | PE Impact Eval 2012            | Watertown     | 345,000          | 3,481            | 341,520          | 4/15/14  | 1/31/15  |
| Cascade Energy, Inc.                        | SEM Curriculum                 | Walla Walla   | 329,080          | 5,245            | 323,835          | 5/1/14   | 4/30/16  |
| Craft3                                      | SWR Loan Origination/Loss Fund | Portland      | 305,000          | 0                | 305,000          | 6/1/14   | 6/30/15  |
| Craft3                                      | Loan Agreement                 | Portland      | 300,000          | 100,000          | 200,000          | 6/1/14   | 6/20/25  |
| CLEAResult Consulting Inc                   | 2014 HES WA PMC                | Austin        | 277,600          | 66,610           | 210,990          | 1/1/14   | 12/31/14 |
| The Cadmus Group Inc.                       | BE Impact Evaluation 2012      | Watertown     | 250,000          | 119,317          | 130,683          | 1/1/14   | 12/31/14 |
| EnerNoc, Inc.                               | Commercial SEM curriculum      | Boston        | 216,915          | 0                | 216,915          | 6/27/14  | 5/30/15  |
| J. Hruska Global                            | Quality Assurance Services     | Columbia City | 215,000          | 158,334          | 56,666           | 1/1/13   | 12/31/14 |
| Energy 350 Inc                              | PDC Transition Agreement       | Portland      | 200,000          | 199,855          | 145              | 9/1/13   | 12/31/13 |
| ICF Resources, LLC                          | NWN WA BE 2014                 | Fairfax       | 191,538          | 44,986           | 146,552          | 1/1/14   | 12/31/14 |
| The Cadmus Group Inc.                       | NBE Program Impact Evaluation  | Watertown     | 186,000          | 123,026          | 62,974           | 1/15/14  | 9/30/14  |
| Northwest Energy Efficiency Alliance        | Product Funding Agreement      | Portland      | 171,851          | 152,619          | 19,232           | 6/5/14   | 12/31/15 |
| Abt SRBI Inc.                               | Fast Feedback Surveys          | New York      | 118,000          | 18,001           | 99,999           | 1/31/14  | 2/29/16  |
| Navigant Consulting Inc                     | CORE Improvement Pilot Eval    | Boulder       | 115,000          | 87,576           | 27,424           | 9/1/12   | 9/1/15   |
| ICF Resources, LLC                          | NWN DSM Initiative 2014        | Fairfax       | 113,850          | 35,275           | 78,575           | 1/1/14   | 12/31/14 |
| Ecotope, Inc.                               | Gas Hearth Study               | Seattle       | 105,104          | 105,096          | 8                | 10/10/13 | 9/1/15   |

\*The city indicated is the contractor's mailing address, not necessarily the location where work was performed.

**Energy Trust of Oregon**  
**Contract Status Summary Report**

Report Date: 7/10/2014

For contracts with costs  
 through: June 2014, for May 2014 report

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| Contractor  | Description                    | *City         | Est Cost | Actual TTD | Remaining | Start    | End      |
|---|--------------------------------|---------------|----------|------------|-----------|----------|----------|
| The Cadmus Group Inc.                             | RTU Tune-up Evaluation         | Watertown     | 105,000  | 67,695     | 37,305    | 1/1/14   | 12/31/14 |
| Pivotal Energy Solutions LLC                      | EPS New Home dbase construct   | Gilbert       | 100,000  | 0          | 100,000   | 7/1/14   | 6/30/16  |
| CLEAResult Consulting Inc                         | QA Reinspection Services       | Austin        | 96,116   | 0          | 96,116    | 4/28/14  | 3/30/15  |
| PWP, Inc.   | NBE Process Evaluation         | Gaithersburg  | 95,000   | 37,119     | 57,881    | 1/15/14  | 12/31/14 |
| The Cadmus Group Inc.                             | Commercial Op Pilot Eval       | Watertown     | 85,000   | 69,232     | 15,768    | 7/1/11   | 9/1/15   |
| PWP, Inc.   | Comm SEM Initiative Evaluation | Gaithersburg  | 52,000   | 45,906     | 6,095     | 7/1/12   | 9/30/14  |
| ICF Resources, LLC                                | OSU CHP Performance Monitoring | Fairfax       | 50,000   | 22,790     | 27,210    | 7/1/13   | 6/30/14  |
| KEMA Incorporated                                 | NEEA 2014 Lighting Survey      | Oakland       | 47,500   | 23,750     | 23,750    | 12/2/13  | 10/30/14 |
| PWP, Inc.   | SEM Intro Pilot Evaluation     | Gaithersburg  | 40,000   | 21,490     | 18,510    | 10/28/13 | 10/2/15  |
| CLEAResult Consulting Inc                         | New Homes QA Inspections       | Austin        | 37,100   | 0          | 37,100    | 4/28/14  | 12/31/14 |
| The Cadmus Group Inc.                             | Lighting Pilot Evaluation      | Watertown     | 35,000   | 26,416     | 8,584     | 4/1/12   | 12/31/14 |
| WegoWise Inc                                      | Wegowise Benchmarking License  | Boston        | 35,000   | 35,000     | 0         | 5/14/12  | 5/14/14  |
| Apex Analytics LLC                                | Nest Pilot Evaluation          | Boulder       | 32,000   | 18,060     | 13,940    | 11/15/13 | 10/31/14 |
| David Lineweber                                   | Heat Pump Study                | Tigard        | 30,500   | 2,175      | 28,325    | 3/20/14  | 3/31/15  |
| Btan Consulting                                   | ESP Cert Boot Camp Evaluation  | Madison       | 30,000   | 10,750     | 19,250    | 2/1/14   | 4/30/15  |
| Energy Center of Wisconsin                        | Billing Analysis Review        | Madison       | 30,000   | 1,110      | 28,890    | 11/1/13  | 12/31/14 |
| MetaResource Group                                | Intel D1X Megaproject          | Portland      | 30,000   | 8,343      | 21,657    | 10/10/11 | 12/31/14 |
| Michael Blasnick & Associated                     | Billing Analysis Process       | Boston        | 30,000   | 3,938      | 26,063    | 1/1/10   | 12/31/14 |
| Seattle City Light                                | Lighting Design Lab            | Seattle       | 30,000   | 0          | 30,000    | 1/1/14   | 12/31/14 |
| The Cadmus Group Inc.                             | Pay For Performance Pilot Eval | Watertown     | 30,000   | 1,665      | 28,335    | 9/25/13  | 12/31/14 |
| Pivotal Energy Solutions LLC                      | License Agreement              | Gilbert       | 29,500   | 9,838      | 19,662    | 3/1/14   | 12/31/14 |
| Stellar Processes, Inc.                           | BE Measure Evaluation          | Portland      | 25,250   | 19,125     | 6,125     | 10/24/12 | 10/24/14 |
| Portland General Electric                         | PGE Efficiency Seminars 2014   | Portland      | 24,950   | 24,950     | 0         | 1/1/14   | 12/31/14 |
| Triple Point Energy Inc.                          | SEM workshops                  | Portland      | 24,240   | 0          | 24,240    | 6/10/14  | 1/31/15  |
| Northwest Energy Efficiency Alliance              | NEEA Product Funding Agreement | Portland      | 20,000   | 20,000     | 0         | 2/1/14   | 3/1/15   |
| WegoWise Inc                                      | benchmarking license 2015      | Boston        | 20,000   | 0          | 20,000    | 6/15/14  | 12/31/15 |
| Oregon Assoc. of Clean Water Agencies             | SEM Training - Round III       |               | 19,920   | 14,000     | 5,920     | 5/23/13  | 6/15/14  |
| KEMA Incorporated                                 | Market Lift Pilot Evaluation   | Oakland       | 19,500   | 5,765      | 13,735    | 3/1/14   | 9/1/14   |
| Consortium for Energy Efficiency                  | Membership Dues - 2014         |               | 18,889   | 18,889     | 0         | 4/16/14  | 12/31/14 |
| Sheepscot Creative LLC                            | SEM Videos                     | Portland      | 15,000   | 4,000      | 11,000    | 4/22/14  | 9/30/14  |
| MetaResource Group                                | Energy Performance Score Eval  | Portland      | 14,500   | 14,475     | 25        | 9/1/13   | 5/30/14  |
| ARAMARK Sports & Entertainment LLC                | ACEEE conf hotel 2014          | Pacific Grove | 14,186   | 12,859     | 1,327     | 6/20/14  | 9/20/14  |
| Cascade Energy, Inc.                              | PDC Transition Agreement       | Walla Walla   | 14,000   | 9,876      | 4,124     | 1/1/14   | 3/10/14  |
| Navigant Consulting Inc                           | SEM workshop                   | Boulder       | 13,375   | 0          | 13,375    | 6/15/14  | 10/31/14 |
| Consumer Opinion Services Inc                     | Residential Phone Surveys      | Seattle       | 12,000   | 8,307      | 3,693     | 9/1/13   | 10/31/14 |
| Lane Community College, NEEI Science Division     | 2014 Scholarship Grant         | Eugene        | 10,600   | 0          | 10,600    | 1/1/14   | 12/31/14 |
| Portland State University Foundation              | Green Modular Classroom Proj   | Portland      | 10,500   | 10,500     | 0         | 6/13/12  | 7/31/14  |
| American Council for and Energy Efficient Economy | Advancing EE Programs          |               | 10,000   | 10,000     | 0         | 12/19/13 | 9/30/14  |

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**Energy Trust of Oregon**  
**Contract Status Summary Report**

Report Date: 7/10/2014

For contracts with costs  
 through: June 2014, for May 2014 report

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| Contractor   | Description                    | *City         | Est Cost          | Actual TTD        | Remaining         | Start    | End      |
|--|--------------------------------|---------------|-------------------|-------------------|-------------------|----------|----------|
| American Council for and Energy Efficient Economy    | High Participation Rates       |               | 10,000            | 10,000            | 0                 | 12/23/13 | 12/31/14 |
| American Council for and Energy Efficient Economy    | Game-Based EE Programs         |               | 10,000            | 10,000            | 0                 | 12/23/13 | 10/31/14 |
| American Council for and Energy Efficient Economy    | Extended Motor Products Label  |               | 10,000            | 10,000            | 0                 | 12/23/13 | 3/31/15  |
| American Council for and Energy Efficient Economy    | ACEEE conference 2014          |               | 9,090             | 9,090             | 0                 | 6/20/14  | 8/20/14  |
| Bridgetown Printing Company                          | January 2014 Bill Insert       | Portland      | 8,509             | 8,509             | 0                 | 1/1/14   | 12/31/14 |
| City of Portland Bureau of Planning & Sustainability | City of Portland Workshops     | Portland      | 8,000             | 8,000             | 0                 | 1/1/14   | 12/31/14 |
| TRC Engineers Inc.                                   | SEM workshop                   | Irvine        | 7,400             | 0                 | 7,400             | 6/15/14  | 10/31/14 |
| Northwest Environmental Business Council             | Future Energy Conference 2014  | Portland      | 6,500             | 6,500             | 0                 | 2/13/14  | 12/31/14 |
| Cascadia Region Green Building Council               | Cascadia Green Bldgs Sponsor   | Portland      | 5,000             | 5,000             | 0                 | 1/15/14  | 1/15/15  |
| Social Enterprises Inc.                              | GoGreen Sponsorship - 2014     | Portland      | 5,000             | 5,000             | 0                 | 3/14/14  | 10/31/14 |
| The Cadmus Group Inc.                                | SEM workshop                   | Watertown     | 4,800             | 0                 | 4,800             | 6/15/14  | 10/31/14 |
| <b>Energy Efficiency Programs Total:</b>             |                                |               | <b>93,715,915</b> | <b>57,639,812</b> | <b>36,076,103</b> |          |          |
| <b>Joint Programs</b>                                |                                |               |                   |                   |                   |          |          |
| D&R International LTD                                | Better Data Better Design      | Silver Spring | 133,500           | 25,000            | 108,500           | 4/30/13  | 7/31/14  |
| Portland State University                            | Technology Forecasting         |               | 87,437            | 58,598            | 28,839            | 11/7/11  | 12/31/14 |
| Research Into Action, Inc.                           | Residential Awareness Study    | Portland      | 65,000            | 3,702             | 61,299            | 5/1/14   | 12/31/14 |
| Watkins and Associates, Inc.                         | EPS & Solar Valuation Study    | Portland      | 38,000            | 9,210             | 28,790            | 2/1/14   | 11/30/14 |
| E Source Companies LLC                               | E Source Service Agreement     | Boulder       | 36,500            | 36,500            | 0                 | 2/1/14   | 1/31/15  |
| The Cadmus Group Inc.                                | Evaluation Consultant          | Watertown     | 29,210            | 28,585            | 625               | 6/20/13  | 2/28/15  |
| KRH Consulting                                       | Work Load Mangement            | Portland      | 25,900            | 24,752            | 1,148             | 4/23/13  | 10/1/14  |
| Navigant Consulting Inc                              | P&E Consultant Services        | Boulder       | 22,530            | 22,530            | 0                 | 1/15/14  | 12/30/15 |
| Pinnacle Economics Inc                               | Economic Impacts Study         | Camas         | 20,720            | 20,720            | 0                 | 2/1/14   | 2/1/15   |
| CoStar Realty Information Inc                        | Property Data                  | Baltimore     | 19,220            | 18,720            | 500               | 6/1/11   | 5/31/14  |
| Glumac Inc   | Planning Technical Analysis    | Portland      | 15,000            | 15,000            | 0                 | 10/17/12 | 10/17/14 |
| American Council for and Energy Efficient Economy    | ACEEE Sponsorships - 2014      |               | 7,500             | 7,500             | 0                 | 1/1/14   | 12/31/14 |
| Bruins Analysis and Consulting                       | Fast Feedback Reporting        | Bremerton     | 6,000             | 0                 | 6,000             | 6/1/14   | 4/30/15  |
| <b>Joint Programs Total:</b>                         |                                |               | <b>506,517</b>    | <b>270,816</b>    | <b>235,701</b>    |          |          |
| <b>Renewable Energy Program</b>                      |                                |               |                   |                   |                   |          |          |
| JC-Biomethane LLC                                    | Biogas Plant Project Funding   | Eugene        | 2,000,000         | 676,056           | 1,323,944         | 10/18/12 | 10/18/32 |
| Oregon Institute of Technology                       | Geothermal Resource Funding    | Klamath Falls | 1,550,000         | 0                 | 1,550,000         | 9/11/12  | 9/11/32  |
| Central Oregon Irrigation District                   | COLD Juniper Phase 2           | Redmond       | 1,281,820         | 0                 | 1,281,820         | 7/19/13  | 7/19/33  |
| Farm Power Misty Meadows LLC                         | Misty Meadows Biogas Facility  | Mount Vernon  | 1,000,000         | 500,000           | 500,000           | 10/25/12 | 10/25/27 |
| Three Sisters Irrigation District                    | TSID Hydro                     | Sisters       | 1,000,000         | 0                 | 1,000,000         | 4/25/12  | 4/25/32  |
| Farmers Irrigation District                          | FID - Plant 2 Hydro            | Hood River    | 825,000           | 0                 | 825,000           | 4/1/14   | 4/1/34   |
| Tioga Solar VI, LLC                                  | Photovoltaic Project Agreement | San Mateo     | 570,760           | 570,760           | 0                 | 2/1/09   | 2/1/30   |
| Oregon Institute of Technology                       | Geothermal Resource Funding    | Klamath Falls | 487,000           | 487,000           | 0                 | 3/2/10   | 3/2/30   |
| City of Medford                                      | 750kW Combined Heat & Power    | Medford       | 450,000           | 225,000           | 225,000           | 10/20/11 | 10/20/31 |
| City of Pendleton                                    | Pendleton Microturbines        | Pendleton     | 450,000           | 150,000           | 300,000           | 4/20/12  | 4/20/32  |

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**Energy Trust of Oregon**  
**Contract Status Summary Report**

Report Date: 7/10/2014

For contracts with costs  
 through: June 2014, for May 2014 report

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| Contractor   | Description                    | *City         | Est Cost           | Actual TTD        | Remaining         | Start    | End      |
|--|--------------------------------|---------------|--------------------|-------------------|-------------------|----------|----------|
| RES - Ag FGO LLC                                       | Biogas Manure Digester Project | Washington    | 441,660            | 331,245           | 110,415           | 10/27/10 | 10/27/25 |
| RES - Ag FGO LLC                                       | Biogas Manure Digester - FGO   | Washington    | 441,660            | 110,415           | 331,245           | 10/27/10 | 10/27/25 |
| City of Gresham  | City of Gresham Cogen 2        |               | 330,000            | 0                 | 330,000           | 4/9/14   | 7/9/34   |
| K2A Properties, LLC                                    | Doerfler Wind Farm Project     | Aumsville     | 230,000            | 203,970           | 26,030            | 5/20/10  | 5/20/30  |
| Confederated Tribes of the Umatilla Indian Reservation | Small Wind Project Funding     | Pendleton     | 170,992            | 0                 | 170,992           | 7/25/13  | 12/31/28 |
| Klamath Basin Geopower Inc                             | Henley Proj Dev Assistance     | Reno          | 150,000            | 42,000            | 108,000           | 4/10/14  | 8/31/15  |
| City of Astoria  | Bear Creek Funding Agreement   | Astoria       | 143,000            | 0                 | 143,000           | 3/24/14  | 3/24/34  |
| Bloomberg LP   | Insight Services               | San Francisco | 114,800            | 85,983            | 28,817            | 4/1/11   | 1/1/15   |
| Klamath Basin Geopower Inc                             | Poe Valley Proj Dev Assistance | Reno          | 112,874            | 63,000            | 49,874            | 4/10/14  | 6/30/15  |
| Wallowa Resources Community Solutions, Inc.            | Upfront Hydroelectric Project  |               | 100,000            | 15,790            | 84,210            | 10/1/11  | 10/1/15  |
| Oregon Military Department                             | Kingsley Field Geothermal Proj | Salem         | 75,000             | 47,500            | 27,500            | 11/26/13 | 8/29/14  |
| Deschutes Valley Water District                        | Early Development Assistance   | Madras        | 68,373             | 0                 | 68,373            | 7/23/13  | 12/31/14 |
| Mapdwell LLC   | Mapdwell Account               | Boston        | 66,381             | 10,405            | 55,976            | 3/17/14  | 3/31/16  |
| Mariah Wind LLC  | Development Assistance Funding | Victor        | 65,300             | 0                 | 65,300            | 10/25/13 | 12/31/14 |
| The Cadmus Group Inc.                                  | Residential Solar Mkt Research | Watertown     | 60,000             | 7,222             | 52,779            | 3/18/14  | 12/31/14 |
| City of Klamath Falls                                  | Klamath Falls Biopower Project | Klamath Falls | 49,927             | 0                 | 49,927            | 1/9/14   | 12/31/14 |
| Clean Energy States Alliance                           | CESA Year 11 (2014)            |               | 39,500             | 39,500            | 0                 | 7/1/13   | 6/30/14  |
| United Wind Inc  | Wind Consultant                | Brooklyn      | 37,500             | 27,500            | 10,000            | 2/6/12   | 3/31/14  |
| Wallowa Resources Community Solutions, Inc.            | Hydroelectric Pipeline         |               | 25,000             | 8,000             | 17,000            | 6/26/14  | 3/30/15  |
| University of Oregon                                   | UO SRML Contribution - 2014    | Eugene        | 24,999             | 24,999            | 0                 | 3/10/14  | 3/10/15  |
| Robert Migliori  | 42kW wind energy system        | Newberg       | 24,125             | 11,641            | 12,484            | 4/11/07  | 1/31/24  |
| Solar Oregon   | Education & Outreach Services  | Portland      | 24,000             | 12,000            | 12,000            | 1/1/14   | 12/31/15 |
| Bonneville Environmental Foundation                    | REC policy analysis            | Portland      | 20,000             | 0                 | 20,000            | 6/15/14  | 12/31/14 |
| Ecofys US, Inc.  | Renewable Energy Consultant    | Corvallis     | 18,000             | 8,663             | 9,338             | 4/7/14   | 3/31/16  |
| Farmers Conservation Alliance                          | Small-Scale Hydro Plant Review | Hood River    | 17,500             | 0                 | 17,500            | 1/2/14   | 10/30/14 |
| Warren Griffin   | Griffin Wind Project           | Salem         | 13,150             | 9,255             | 3,895             | 10/1/05  | 10/1/20  |
| Clean Energy States Alliance                           | CESA ITAC                      |               | 10,000             | 10,000            | 0                 | 1/1/14   | 12/31/14 |
| Garrad Hassan America Inc                              | RE Consulting Services         | San Diego     | 6,841              | 6,841             | 0                 | 6/11/13  | 2/28/15  |
| OSEIA-Oregon Solar Energy Industries Assoc             | OSEIA 2014 Conference          |               | 5,000              | 5,000             | 0                 | 2/6/14   | 12/31/14 |
| Solar Oregon   | Solar Now! University Sponsor  | Portland      | 5,000              | 5,000             | 0                 | 3/28/14  | 12/31/14 |
| eFormative Options LLC                                 | RE Evaluation Consultant       | Vashon        | 3,000              | 3,000             | 0                 | 3/1/13   | 2/28/15  |
| <b>Renewable Energy Program Total:</b>                 |                                |               | <b>12,508,162</b>  | <b>3,697,744</b>  | <b>8,810,418</b>  |          |          |
| <b>Grand Totals:</b>                                   |                                |               | <b>117,833,234</b> | <b>66,238,192</b> | <b>51,595,042</b> |          |          |

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## **Financial Glossary**

(for internal use) - updated August 9, 2012

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### **Administrative Costs**

Costs that, by nonprofit accounting standards, have general objectives which enable an organization's programs to function. The organization's programs in turn provide direct services to the organization's constituents and fulfill the mission of the organization.

i.e. management and general and general communication and outreach expenses

#### **I. Management and General**

- Includes governance/board activities, interest/financing costs, accounting, payroll, human resources, general legal support, and other general organizational management costs.
- Receives an allocated share of indirect costs.

#### **II. General Communications and Outreach**

- Expenditures of a general nature, conveying the nonprofit mission of the organization and general public awareness.
- Receives an allocated share of indirect costs.

### **Allocation**

- A way of grouping costs together and applying them to a program as one pool based upon an allocation base that most closely represents the activity driver of the costs in the pool.
- Used as an alternative to charging programs on an invoice-by-invoice basis for accounting efficiency purposes.
- An example would be accumulating all of the costs associated with customer management (call center operations, Energy Trust customer service personnel, complaint tracking, etc). The accumulated costs are then spread to the programs that benefited by using the ratio of calls into the call center by program (i.e. the allocation base).

### **Allocation Cost Pools**

- Employee benefits and taxes.
- Office operations. Includes rent, telephone, utilities, supplies, etc.
- Information Technology (IT) services.
- Planning and evaluation general costs.
- Customer service and trade ally support costs.
- General communications and outreach costs.
- Management and general costs.
- Shared costs for electric utilities.
- Shared costs for gas utilities.
- Shared costs for all utilities.

### **Auditor's Opinion**

- An accountant's or auditor's opinion is a report by an independent CPA presented to the board of directors describing the scope of the examination of the organization's books, and certifying that the financial statements meet the AICPA (American Institute of Certified Public Accountants) requirements of GAAP (generally accepted accounting principles).



- Depending on the audit findings, the opinion can be unqualified or qualified regarding specific items. Energy Trust strives for and has achieved in all its years an unqualified opinion.
- An unqualified opinion indicates agreement by the auditors that the financial statements present an accurate assessment of the organization's financial results.
- The OPUC Grant Agreement requires an unqualified opinion regarding Energy Trust's financial records.
- Failure to follow generally accepted accounting principles (GAAP) can result in a qualified opinion.

**Board-approved Annual Budget**

- Funds approved by the board for *expenditures* during the budget year (subject to board approved program funding caps and associated policy) for the stated functions.
- Funds approved for *capital* asset expenditures.
- Approval of the general allocation of funds including commitments and cash outlays.
- Approval of expenditures is based on assumed revenues from utilities as forecasted in their annual projections of public purpose collections and/or contracted revenues.

**Carryover Funds**

- In any one year, the amount by which revenues exceed expenses for that year in a designated category that will be added to the cumulative balance and brought forward for expenditure to the next budget year.
- In any one year, if expenditures exceed revenues, the negative difference is applied against the cumulative carryover balance.
- Does not equal the cash on hand due to noncash expense items such as depreciation.
- Tracked by major utility funder and at high level program area--by EE vs RE, not tracked by program.

**Commitments**

- Represents funds obligated to identified efficiency program participants in the form of signed applications or agreements and tracked in the project forecasting system.
- If the project is not demonstrably proceeding within agreed upon time frame, committed funds return to incentive pool. Reapplication would then be required.
- Funds are expensed when the project is completed.
- Funds may be held in the operating cash account, or in escrow accounts.

**Contract obligations**

- A signed contract for goods or services that creates a legal obligation.
- Reported in the monthly Contract Status Summary Report.

**Cost-Effectiveness Calculation**

- Programs and measures are evaluated for cost-effectiveness.
- The cost of program savings must be lower than the cost to produce the energy from both a utility and societal perspective.
- Expressed as a ratio of energy savings cost divided by the presumed avoided utility and societal cost of energy.
- Program cost-effectiveness evaluation is "fully allocated," i.e. includes all of the program costs plus a portion of Energy Trust administrative costs.

**Dedicated Funds**

- Represents funds obligated to identified renewable program participants in the form of signed applications or agreements and tracked in the project forecasting system.

- May include commitments, escrows, contracts, board designations, master agreements.
- Methodology utilized to develop renewable energy activity-based budgets amounts.

**Direct Program Costs**

- Can be directly linked to and reflect a causal relationship to one individual program/project; or can easily be allocated to two or more programs based upon usage, cause, or benefit.

**Direct Program Evaluation & Planning Services**

- Evaluation services for a specific program rather than for a group of programs.
- Costs incurred in evaluating programs and projects and included in determining total program funding caps.
- Planning services for a specific program rather than for a group of programs.
- Costs incurred in planning programs and projects and are included in determining program funding expenditures and caps.
- Evaluation and planning services attributable to a number of programs are recorded in a cost pool and are subsequently allocated to individual programs.

**Escrowed Program (Incentive) Funds**

- Cash deposited into a separate bank account that will be paid out pursuant to a contractual obligation requiring a certain event or result to occur. Funds can be returned to Energy Trust if such event or result does not occur. Therefore, the funds are still “owned” by Energy Trust and will remain on the balance sheet.
- The funds are within the control of the bank in accordance with the terms of the escrow agreement.
- When the event or result occurs, the funds are considered “earned” and are transferred out of the escrow account (“paid out”) and then are reflected as an expense on the income statement for the current period.

**Expenditures/Expenses**

- Amounts for which there is an obligation for payment of goods and/or services that have been received or earned within the month or year.

**FastTrack Projects Forecasting**

Module developed in FastTrack to provide information about the timing of future incentive payments, with the following definitions:

- Estimated-Project data may be inaccurate or incomplete. Rough estimate of energy savings, incentives and completion date by project and by service territory.
- Proposed-Project that has received a written incentive offer but no agreement or application has been signed. Energy savings, incentives and completion date to be documented by programs using this phase. For Renewable projects-project that has received Board approval.
- Accepted-Used for renewable energy projects in 2nd round of application; projects that have reached a stage where approval process can begin.
- Committed-Project that has a signed agreement or application reserving incentive dollars until project completion. Energy savings/generations, incentives and completion date by project and by service territory must be documented in project records and in FastTrack. If project not demonstrably proceeding within agreed upon time frame, committed funds return to incentive pool. Reapplication would then be required.
- Dedicated-Renewable project that has been committed, has a signed agreement, and if required, has been approved by the board of directors.

**Incentives****I. Residential Incentives**

- Incentives paid to a residential program participant (party responsible for payment for utility service in particular dwelling unit) exclusively for energy efficiency and renewable energy measures in the homes or apartments of such residential customers.

**II. Business Incentives**

- Incentives paid to a participant other than a residential program participant as defined above following the installation of an energy efficiency or renewable energy measure.
- Above market cost for a particular renewable energy project.

**III. Service Incentives**

- Incentives paid to an installation contractor which serves as a reduction in the final cost to the participant for the installation of an energy efficiency or renewable energy measure.
- Payment for services delivered to participants by contractors such as home reviews and technical analysis studies.
- End-user training, enhancing participant technical knowledge or energy efficiency practices proficiency such as “how to” sessions on insulation, weatherization, or high efficiency lighting.
- CFL online home review fulfillment and PMC direct installations.
- Technical trade ally training to enhance program knowledge.
- Incentives for equipment purchases by trade allies to garner improvements of services and diagnostics delivered to end-users, such as duct sealing, HVAC diagnosis, air filtration, etc.

**Indirect Costs**

- Shared costs that are “allocated” for accounting purposes rather than assigning individual charges to programs.
- Allocated to all programs and administration functions based on a standard basis such as hours worked, square footage, customer phone calls, etc.
- Examples include rent/facilities, supplies, computer equipment and support, and depreciation.

**IT Support Services**

- Information technology costs incurred as a result of supporting all programs.
- Includes FastTrack energy savings and incentive tracking software, data tracking support of PMCs and for the program evaluation functions.
- Includes technical architecture design and physical infrastructure.
- Receives an allocation of indirect shared costs.
- Total costs subsequently allocated to programs and administrative units.

**Outsourced Services**

- Miscellaneous professional services contracted to third parties rather than performed by internal staff.
- Can be incurred for program or administrative reasons and will be identified as such.

**Program Costs**

- Expenditures made to fulfill the purposes or mission for which the organization exists and are authorized through the program approval process.
- Includes program management, incentives, program staff salaries, planning, evaluation, quality assurance, program-specific marketing and other costs incurred solely for program purposes.
- Can be direct or indirect (i.e. allocated based on program usage.)

**Program Delivery Expense**

- This will include all PMC labor and direct costs associated with: incentive processing, program coordination, program support, trade ally communications, and program delivery contractors.
- Includes contract payments to NEEA for market transformation efforts.
- Includes performance compensation incentives paid to program management contractors under contract agreement if certain incentive goals are met.
- Includes professional services for items such as solar inspections, anemometer maintenance and general renewable energy consulting.

**Program Legal Services**

- External legal expenditures and internal legal services utilized in the development of a program-specific contract.

**Program Management Expense**

- PMC billings associated with program contract oversight, program support, staff management, etc.
- ETO program management staff salaries, taxes and benefits.

**Program Marketing/Outreach**

- PMC labor and direct costs associated with marketing/outreach/awareness efforts to communicate program opportunities and benefits to rate payers/program participants.
- Awareness campaigns and outreach efforts designed to reach participants of individual programs.
- Co-op advertising with trade allies and vendors to promote a particular program benefit to the public.

**Program Quality Assurance**

- Independent in-house or outsourced services for the quality assurance efforts of a particular program (distinguished from program quality control).

**Program Reserves**

- Negotiated with utilities annually, with a goal of providing a cushion of approximately 5% above funds needed to fulfill annual budgeted costs. Management may access up to 50% of annual program reserve without prior board approval (resolution 633, 2012).

**Program Support Costs**

- Source of information is contained in statement of functional expense report.
- Portion of costs in OPUC performance measure for program administration and support costs.
  - Includes expenses incurred directly by the program.
  - Includes allocation of shared and indirect costs incurred in the following categories: supplies; postage and shipping; telephone; printing and publications; occupancy expenses; insurance; equipment; travel; business meetings; conferences and training; depreciation and amortization; dues, licenses,

subscriptions and fees; miscellaneous expense; payroll & related expense; outsourced services; and an allocation of information technology department cost.

### **Project Specific Costs (for Renewable Energy)**

- Expenses directly related to identified projects or identified customers to assist them in constructing or operating renewable projects. Includes services to prospective as well as current customers.
- Must involve direct contact with the project or customer, individually or in groups, and provide a service the customer would otherwise incur at their own expense.
- Does not include general program costs to reach a broad (unidentified) audience such as websites, advertising, program development, or program management.
- Project-Specific costs may be in the categories of; Incentives, Staff salaries, Program delivery, Legal services, Public relations, Creative services, Professional services, Travel, Business meetings, Telephone, or Escrow account bank fees.

### **Savings Types**

- **Working Savings/Generation:** the estimate of savings/generation that is used for data entry by program personnel as they approve individual projects. They are based on deemed savings/generation for prescriptive measures, and engineering calculations for custom measures. They do not incorporate any evaluation or transmission and distribution factors.
- **Reportable Savings/Generation:** the estimate of savings/generation that will be used for public reporting of Energy Trust results. This includes transmission and distribution factors, evaluation factors, and any other corrections required to the original working values. These values are updated annually, and are subject to revision each year during the “true-up” as a result of new information or identified errors.
- **Contract Savings:** the estimate of savings that will be used to compare against annual contract goals. These savings figures are generally the same as the reportable savings at the time that the contract year started. For purposes of adjusting working savings to arrive at this number, a single adjustment percentage (a SRAF, as defined below) is agreed to at the beginning of the contract year and is applied to all program measures. This is based on the sum of the adjustments between working and reportable numbers in the forecast developed for the program year.
- **Savings Realization Adjustment Factors (SRAF):** are savings realization adjustment factors applied to electric and gas working savings measures in order to reflect more accurate savings information through the benefit of evaluation and other studies. These factors are determined by the Energy Trust and used for annual contract amendments. The factors are determined based on the best available information from:
  - Program evaluations and/or other research that account for free riders, spill-over effects and measure impacts to date; and
  - Published transmission and distribution line loss information resulting from electric measure savings.

### **Total Program and Admin Expenses (line item on income statement)**

- Used only for cost effectiveness calculations, levelized cost calculations and in management reports used to track funds spent/remaining by service territory.
- Includes all costs of the organization--direct, indirect, and an allocation of administration costs to programs.
- Should not be used for external financial reporting (not GAAP).

**Total Program Expenses (line item on income statement)**

- All indirect costs have been allocated to program costs with the exception of administration (management and general costs and communications & outreach).
- Per the requirements of Generally Accepted Accounting Principles (GAAP) for nonprofits, administrative costs should not be allocated to programs.
- There is no causal relationship—costs would not go away if the program did not exist.

**Trade Ally Programs & Customer Service Management**

- Costs associated with Energy Trust sponsorship of training and development of a trade ally network for a variety of programs.
- Trade Ally costs are tracked and allocated to programs based on the number of allies associated with that program.
- Costs in support of assisting customers which benefit all Energy Trust programs such as call center operations, customer service manager, complaint handling, etc.
- Customer service costs are tracked and allocated based on # of calls into the call center per month.

**True Up**

- True-up is a once-a-year process where we take everything we've learned about how much energy programs actually save or generate, and update our reports of historic performance and our software tools for forecasting and analyzing future savings.
- Information incorporated includes improved engineering models of savings (new data factor), anticipated results of future evaluations based on what prior evaluations of similar programs have shown (anticipated evaluation factor), and results from actual evaluations of the program and the year of activity in question (evaluation factor).
- Results are incorporated in the Annual Report (for the year just past) and the True-up Report (for prior years).
- Sometimes the best data on program savings or generation is not available for 2-3 years, especially for market transformation programs. So for some programs, the savings are updated through the annual true-up 2 or 3 times

# Policy Committee Meeting

June 24, 2014, 3:30–5:00 pm

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## Attending by phone and videoconference

Rick Applegate, Ken Canon, John Reynolds, Diane Ferington

## Attending at Energy Trust offices

Roger Hamilton, Steve Lacey, Fred Gordon, Courtney Wilton, Debbie Menashe, Oliver Kesting, Kathleen Belkhat, Taylor Bixby, Matt Braman, Brian DiGiorgio, Marshall Johnson

## Policy for Review

### 1. Policy on Information Submitted by Utilities, Program Participants, Contractors and Bidders

The “Policy on Information Submitted by Utilities, Program Participants, Contractors and Bidders” provides that “participant information,” information that is obtained from Energy Trust program participants that refers specifically to participants by “name, address, or other personally identifiable information,” should be treated as confidential. The same policy also sets forth a provision that Energy Trust contracts are generally not treated as confidential, but explicitly carves out “program application materials” from the definition of “contracts.” Program application materials, which are standardized form incentive applications, contain “participant information.” Incentive funding agreements, which are more customized versions of “program application materials,” similarly contain “participant information.”

Although this policy is not up for its regular three year review, staff recommended to the committee a slight revision to ensure that the policy is consistent in its treatment of standardized form applications and incentive funding agreements. A copy of the proposed revised policy was presented to the committee, and the committee agreed with the staff recommendation. The committee requested that the proposed revised policy be included on the consent agenda for the next full board meeting with a Policy Committee recommendation to approve the revision.

## Previews of Board Action Items

### 1. PMC Contract Renewals

Staff previewed their presentations regarding the extension of the current Existing Homes and Existing Buildings program management contracts.

Oliver Kesting, Business Sector Lead, presented the staff conclusion that the ICF Existing Buildings Program Management Contractor (PMC) agreement be extended for an additional one-year term through December 2015. Pursuant to the terms of this board-approved contract, the executive director may extend the contract for one year if the extension criteria are met and the board does not object. Staff has determined that the extension criteria for the Existing Buildings PMC agreement have been satisfied and Oliver provided details underlying staff’s determination. These criteria are: cross-program referrals, program results, project pipeline, innovation, teamwork, and deliverables.

The committee expressed no objections to staff's determination and supports making the presentation to the full board at its next meeting.

Marshall Johnson, Homes Program Manager, presented the staff conclusion that the CLEAResult existing homes PMC agreement be extended for an additional one-year term through December 2015. Marshall explained that although the Existing Homes program experienced challenges in achieving its goals in 2013, Energy Trust and CLEAResult staff have been working productively and collaboratively to address these challenges directly. Through these joint efforts, CLEAResult is well on target to achieve or exceed its savings goals for 2014, and staff believes that they have satisfactorily met the extension criteria.

The committee asked that staff provide more detail on the degree to which CLEAResult did not meet its 2013 contract and program goals. Staff clarified that the PMC did not meet conservative savings goals in any of the utility territories in 2013.

The committee expressed thanks for the background information, and supports making the full presentation to the full board at its next meeting.

## **2. Update on RFQ Process for Commercial Strategic Energy Management PDC Services**

Kathleen Belkhat, Business Project Manager and manager of the Commercial Strategic Energy Management (CSEM) program, updated the committee regarding the Request for Qualification (RFQ) competitive process for selection of one or more program delivery contractors (PDCs) for the CSEM program. Currently, Energy Trust staff works closely with "Commercial Technical Service Providers" (CTSPs), to deliver the CSEM program. CTSPs operate under scopes of work that are narrow, providing technical support only to CSEM program participants. Selected PDCs will have more expanded program delivery scopes, permitting an enhancement and expansion of the CSEM program in the future.

Responding to a question from the committee, Kathleen reported that of the firms indicating an intent to respond, only one is a current CTSP in the CSEM program. The RFQ has, therefore, generated interest among an expanded group of program delivery providers. RFQ responses are due on June 30, 2014. Following a staff review, including interviews with top candidates, staff expects to request authorization to contract with selected respondents at the July 30, 2014 board meeting.

## **3. Update on RFP Process for New Homes and New Products programs**

Matt Braman provided an update of the rebid process for the New Homes and New Products programs. The current contract for these programs is combined, and Energy Trust has a contract with PECl for delivery and management of both of these programs. The contract was extended for its final year extension in January 2014. An RFP was issued earlier this spring for program management contractor (PMC) services for both programs, the New Homes and the Products programs, and proposals were submitted and reviewed. Respondents were permitted to respond to one or both of the programs. Staff briefed the committee on the results of the process to date. Staff expects to request authorization to contract with the selected respondents, including authorization for a transition service contract, at the July 30, 2014 board meeting. Ken Canon asked whether staff and new PMCs expectations for transition are aligned and covered in contract. Debbie Menashe explained that the transition contracts have



historically covered transition staffing assurances and other matters to help set expectations and assure smooth transitions.

## Updates

### 1. Pay for Performance Request for Proposals

Oliver introduced Brian DiGiorgio, a financing specialist working with Oliver's group. Brian has been overseeing the Pay for Performance (PFP) project, working closely with the OPUC. Brian explained that Energy Trust issued an RFP in February 2014 for PFP pilot project proposals. The PFP concept is designed to test an alternative incentive approach that emphasizes energy performance over time to calculate incentives for implementation of energy efficiency projects. For selected PFP pilot projects, Energy Trust would provide financial incentives over time—annually for three years—for demonstrated energy savings achievements, rather than one up-front payment at project completion.

Energy Trust received six proposals in response to the RFP, and four proposals were eliminated for not meeting the RFP threshold that the "requested incentive rate must be reasonably aligned with incentive rates paid under existing Energy Trust programs." Staff expects to move forward to contract with the two remaining proposals. The contracts are expected to be complex because, among other things, it will be difficult to establish baselines from which savings will be measured and incentives will be paid. Ken Canon pointed out that there is some history of usage in these buildings, and that history should be helpful for determination of baselines.

Ken Canon also remarked that the proposals submitted are for sites in Portland only. Brian responded that although the RFP explicitly sought proposals from throughout Energy Trust's service territory, most buildings large enough for this type of incentive arrangement are located in the metropolitan area, so the response geography is not surprising. Ken asked whether outreach to state-owned buildings might be appropriate. Staff agreed that the PFP model might bring good opportunities to state-owned buildings, but noted that state-owned buildings have access to Small-Scale Energy Loan Program (SELP) financing through the Oregon Department of Energy.

### 2. Large Customer Funding Limitations

At the last Policy Committee meeting, staff discussed the current large customer funding cap limitation status. Staff promised to report back to the committee after more internal analysis on the current funding situation. Fred and Oliver presented information on the current internal analysis underway. As previously reported, Energy Trust is not currently exceeding the limitation, so programs are continuing to operate without change. Staff will continue to monitor throughout the year, but will analyze and report out on funding levels for large customers next in April 2015. Oliver reported that staff has been working on a model to help forecast both funding levels and the effects of changes in program delivery which could occur if funding caps are reached, including strategies such as that suggested by Ken Canon, a "first come, first served" approach if, in PGE territory, funding does become maxed out. Under some modeled scenarios, Energy Trust does not exceed the cap, even for PGE large customers, in 2014.

In addition, staff reported that the Citizens Utility Board (CUB) is working on a proposal to address the looming limitation for PGE customers in the context of the current PGE rate case

docket. OPUC staff has urged Energy Trust staff to monitor this proposal and responses to it before making programmatic changes. The committee supports this approach.

### **3. OPUC Docket 1622 on Gas Measure Cost Effectiveness Exceptions**

Fred updated the committee on staff's nearly-final report to the OPUC on gas measure cost effectiveness exceptions. Fred explained that the report will respond directly to the OPUC's July 2013 order in the docket and to ongoing discussions with OPUC staff by providing the following:

- A. Lists steps to make Energy Trust gas programs as cost effective as possible, steps already undertaken and plans to modify or eliminate measures that are: a) not cost effective now, b) not likely to be cost effective in the future, and c) do not meet exception criteria in OPUC Order 94-590.
- B. Provides the following information:
  - 1. An analysis of the estimated benefit cost ratios (BCRs) for all its remaining gas programs and measures where BCRs are close to or less than 1.0.
  - 2. Project achievable savings for each gas measure and program with Utility Cost Test and Total Resource Cost Test BCRs of close to or less than 1.0.
- C. Identifies programs and measures Energy Trust proposes to continue and those to discontinue, including specific exceptions criteria (A-G) established in Order 94-590 used to justify proposals. Section 3 also includes an initial concept of a Core Residential Program that would provide customer access to certain measures as a basic utility customer service. This is not part of Order 13-256 but was requested by the OPUC for consideration in this section.

Rick Applegate expressed his concern that the region as a whole has underinvested in energy efficiency, and that the OPUC's order, which is limited in its scope, may not give rise to the broader discussion that is needed. Roger Hamilton requested that this item be included on the board agenda for a report and discussion at the July 30<sup>th</sup> board meeting.

The meeting adjourned at 5:05 pm. The next meeting of the Policy Committee is on August 12, 2014, 3:30-5:00 pm.

# Renewable Energy Advisory Council Meeting Notes

April 23, 2014

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**Attending from the council:**

Bruce Barney, Portland General Electric  
Jason Busch, Oregon Wave Energy Trust  
Robert Grott, Northwest Environmental  
Business Council  
Juliet Johnson, Oregon Public Utility  
Commission  
Matt Krumenauer, Oregon Department of  
Energy  
Suzanne Leta-Liou, Atkins  
Michael O'Brien, Renewable Northwest  
Dick Wanderscheid, Bonneville  
Environmental Foundation  
Tashiana Wangler, Pacific Power

**Attending from Energy Trust:**

Chris Dearth  
Matt Getchell

Fred Gordon  
Jed Jorgensen  
Betsy Kauffman  
Dave McClelland  
Debbie Menashe  
Dave Moldal  
Elaine Prause  
Thad Roth  
Gayle Roughton  
Lizzie Rubado

**Others attending:**

Bill Eddy, One Energy  
Wendy Koelfgen, Clean Energy Works  
Alan Meyer, Energy Trust Board  
William Newell, Cascade Policy Institute  
John Reynolds, Energy Trust Board

**Welcome and introductions**

Betsy Kauffman called the meeting to order at 9:30 a.m. and reviewed the agenda. The minutes from the March meeting were approved. The agenda, notes and presented materials are available on Energy Trust's website at [www.energytrust.org/About/public:meetings/REACouncil.aspx](http://www.energytrust.org/About/public:meetings/REACouncil.aspx).

**1. Energy Trust Strategic Plan update**

Elaine Prause presented on the creation of Energy Trust's draft Strategic Plan for 2015-2019. Staff are preparing for a retreat about the Strategic Plan for the Board of Directors in June followed by summer outreach of the draft plan.

Initial feedback, including feedback from Renewable Energy Advisory Council members, confirmed that energy efficiency acquisition and renewable energy generation should be the core goals in the plan. When asked whether aspirational goals should be included in the plan, such as peak load management and climate goals, council members expressed interest in Energy Trust focusing on core goals and supporting other opportunities if linked back to core goals.

The future focus of Energy Trust, as described in the draft plan, is achieving core energy efficiency acquisition and renewable energy generation goals while working in new ways. The draft plan describes applying integrated resource planning to efficiency investments, supporting renewable energy project and market development, leveraging and collaborating with others and prioritizing efforts through strategic planning. The draft plan identified four strategies regarding efficiency issues: improve program designs and services to meet customer needs, broaden participation, support new technologies and new approaches, and decrease costs.

Robert Grott: What is meant by the inclusion of integrated resource planning in the draft plan?

Elaine: Integrated resource planning is letting the utilities know what we see as available cost-effective resource and what we can achieve. This is consistent with existing current Energy Trust practices.

Elaine described the renewable energy portion of the draft plan, which includes continuing the current focus on early project and market development, continuing support for a range of technologies and reconsidering the generation goal to reflect the market. At the retreat in June, the board will consider what it would look like to not have a generation goal. Energy Trust will continue to focus on early market development and to allocate funds across technologies.

Initial work on the strategic plan identified a need for an operations plan. This would allow Energy Trust to think about how strategies in the plan are met internally.

Next steps include a draft presentation at the Energy Trust board retreat in June. After the retreat, staff will incorporate the board's feedback into the plan and conduct additional outreach.

Dick Wanderscheid: What is considered related to utility roundtables?

Debbie Menashe: We have roundtables with our board and the utilities. We are considering making the strategic plan the topic of the next roundtable. Additionally, we have had individual discussions with utility staff over the last month about the strategic plan.

Juliet Johnson: On the topic of reconsidering the generation goal to reflect the market, was there a consensus at the last Renewable Energy Advisory Council meeting that the generation goal isn't necessary?

Elaine: The discussion was about how we would set a generation goal for five years. Currently, we have a process for setting goals and performance metrics. The single generation goal today is for solar. Is our success in the market reflected in the current generation goal? Are those numbers the most important or is there other value that we are bringing? There was interest in addressing these questions in the strategic plan. The council did not provide a consensus to shift away from a generation goal.

Suzanne Leta-Liou: I see value in looking at goals in other ways. I encourage looking at the pipeline, how utility scale portfolios are managed and how progress is tracked.

Jason Busch: Do you capture economic impacts of projects?

Elaine: Renewable goals have always been very specific and focused on generation. We now have a new set of benchmarks. Measuring economic impact is not one of those goals.

Fred: Energy Trust conducts a study based on an input/output model. It is not broken down by individual resource but renewables is rolled in. This study looks at economic impacts in an aggregate number.

Juliet: I appreciate the focus on core goals in the draft plan. How does meeting the state goals fit with the input you received?

Elaine: Through meeting our core goals, we help others meet their goals. For example, we are listed in the state's road map for meeting climate goals. In meeting our core goals, we are contributing to the state's goals by influencing greenhouse gas reductions.

## **2. Mapdwell solar mapping tool**

Lizzie Rubado presented a new pilot tool to help reduce the non-equipment "soft" cost of solar installations. Solar installation costs are lower in other countries, and Energy Trust would like to make solar more affordable for more Oregonians. Some soft costs come from customer

acquisition. Demand for solar hasn't yet reached a point where it sells itself. Contractors spend a lot of time selling customers on projects, and many of these projects don't move forward.

Energy Trust plans to provide broadly accessible tools to increase demand for solar and reduce customer acquisition costs. An online tool can efficiently address the questions that customers consistently ask, making the sales process more efficient.

The U.S. Department of Energy SunShot Initiative produced some new options in the market. Last fall, Energy Trust issued a request for proposals for a new product and received six responses. Staff selected Mapdwell, which is in development right now for our the Portland area.

Mapdwell is an online platform with a Google map-like interface. It shows the potential for solar power production for every building rooftop in a specific area. Energy Trust plans to pilot this tool in Beaverton, Tigard and Hillsboro. The company captures a 3-D image of a geographic area, and overlays weather and mapping data. For every hour in the year, Mapdwell can show how much solar energy hits a building using publicly available data.

The tool shows solar production potential of building rooftops and provides a high-level summary of the financial, technical and environmental benefits of installing solar. Mapdwell has a simple interface and allows a user to print or send information to a contractor to get a more specific estimate. Anyone in the geographic area with an existing solar system can voluntarily add their system to the map. This tool shows the full solar potential of the overall area mapped.

Alan: How accurate is this tool?

Lizzie: The company states that Mapdwell's generation estimates are accurate within 3 to 5 percent. We don't have information yet on the accuracy of other summary information provided to potential customers. The inputs are provided by the program sponsor, so we will put in the assumptions. This is why we are testing the tool as a pilot.

Suzanne: How does the tool factor in home or commercial energy use?

Lizzie: It doesn't factor that in at all. It has an assumption that there is a load to benefit from generation.

Suzanne: It would be interesting to see if Green Button data can tie in. How often is the data updated?

Lizzie: It is up to us. The pilot version of the tool will use data from 2012 LiDAR flight. Energy Trust can ask for an update and identify what has changed since the last look, depending on available data. This data is typically gathered in urban areas every 2-3 years. Updating data doesn't require a complete redevelopment of the map.

Suzanne: I see value in adding in Energy Trust incented solar systems to the map. Is that part of the plan?

Lizzie: We see benefit of that as well and it is under consideration.

Suzanne: What are the costs to implement this as a pilot and for the full territory?

Lizzie: There are two costs. There is a recurring ongoing maintenance cost based on the size of area covered. The yearly cost for the pilot area is approximately \$15,000. The larger cost is a one-time fee for the map of the area, which is based on the number of buildings. For this pilot area, this one-time fee is approximately \$50,000. If we decide to add additional geographic

coverage, there will be additional one-time costs. Portland would be most expensive. Adding more area will also increase annual subscription costs.

Dick: You could layer utility data and we could see feeder issues, such as feeders with too much solar or interconnection issues. This may be useful in urban areas, but it may not make sense in more rural communities. Will you get data on usage of the tool?

Lizzie: We agree that there may be utility opportunities for the tool. PGE staff attended a demonstration and were interested in the underlying information. We do get usage data on who is using the systems on a monthly basis, so we know where interest is coming from. This will let us know where we need to do more outreach. We also want to learn how to use this as a lead generation tool with trade allies.

Bruce Barney: Are the underlying economics driven by a net-metering model? Could the tool look at the feed-in tariff model?

Lizzie: The out-of-the-box tool is currently structured to assume a net-metered installation with Energy Trust's incentives. In theory, it can be customized.

Bruce: The differences are so big that it would be good to see both ways. Is the goal to have this be a zero-cost model? Could contractors support the cost?

Dave: Contractors could have a per-lead cost in the future to support use of the tool.

Robert: It would be good to consider how it looks for purchase versus lease models.

Michael: Do you expect contractors to use Mapdwell to target customers?

Lizzie: Yes, we do. Contractors in other cities are using this to target and educate customers.

Suzanne: What were the other responses to the request for proposals? Why did this one stand out?

Lizzie: Mapdwell stood out for its accuracy and methodology. The academic and research-focused approach fit well with our goals. Many of the other products were sales tools with a for-profit business model connecting contractors and customers. This wasn't what we were looking for now, but we expect a lot of those tools to become more readily used in the market.

Jed Jorgensen: If the tool is successful, could you reduce program paperwork?

Lizzie: It does pose future opportunities. The U.S. Department of Energy is investing in tools like this to reduce process steps and costs for everyone—consumers, contractors and administrators.

Alan: Does support for this tool fit under SB 1149 and our role to cover above-market costs?

Dave: By reducing soft costs and increasing demand, we can reduce our incentives. This is market development.

Lizzie: The expected launch for this pilot is in July. Energy Trust will put together a release plan that will include workshops with Solar Oregon. We will also create an evaluation plan.

### **3. Solar request for proposals plan**

Dave McClelland presented on this topic. For 2014, Energy Trust allocated \$6 million for solar projects in PGE territory and \$1 million for larger solar projects.

In 2013, Energy Trust conducted a competitive bid process for larger projects and received four responses to a request for proposals. Two of the respondents were not ready to move forward, one fell out and one moved forward and is nearly final.

This year, Energy Trust is conducting a simplified bid process instead of a request for proposals. There are \$1 million available for solar projects in PGE territory with 250 kilowatt hours to 2 megawatts aggregate capacity. The systems will need to be net-metered, meeting PGE load at the site and eligibility requirements.

These funds will be allocated through a competitive bid process open to solar electric trade allies. Trade allies will tell Energy Trust what incentive they need to move a project forward.

A two-page application was posted this week. Bids are due by May 30, and a ranked list of bids will be announced on June 16.

Bruce: What are the units of the bids?

Dave: Capacity based in DC watts.

John: Who will dog the screening?

Dave: The solar program at Energy Trust.

Dave: Incentive requests are capped at \$499,000. This will allow at least two projects to be supported. The successful bidders will have a 90-day window to finalize an incentive application. On September 15, we will know if participating projects have moved forward to contracting. Approved projects will then get a one-year incentive reservation. On September 15, if a project is unable to move forward, the ranked list can be reviewed again.

Alan: Did the project approved last year use all the funding allocated?

Dave: No. Unused dollars were reallocated into the standard program.

Tashiana Wangler: Is eligibility based only on capacity?

Dave: No. The full list of eligibility requirements is on Energy Trust's trade ally web pages.

#### **4. Presentation on project development assistance for 2013**

Betsy presented on this topic. New renewable energy performance measures for 2013 were created with the OPUC, including a requirement for an annual report on project development assistance. This first project development assistance report for 2013 was sent to Renewable Energy Advisory Council members. The other performance measures were:

- Standard net-metered solar to meet 85 percent of the budgeted generation goal
- Non-solar to meet a three-year rolling average incentive per Renewable Energy Credit of less than \$29 per megawatt hour
- Staff to submit a report on innovative and custom solar projects

With project development assistance, Energy Trust is building a pipeline, expanding market understanding and helping projects secure financing. Project development assistance is primarily a pipeline building activity. It also addresses barriers like access to capital and challenging market conditions. With these resources, Energy Trust funds feasibility, design and interconnection studies, wind monitoring, permitting assistance and resource characterization.

In 2013, 22 projects were supported with \$492,000. Some of these efforts span multiple years. The projects reflected in this report include some that completed activities in 2013 and some that will complete activities in 2014. The 12 projects completed in 2013 account for \$130,000 and the 10 projects completing in 2014 account for \$362,000.

Tashiana: Did you look these efforts by utility?

Betsy: Yes. That is captured in a table in the report.

John: If a project received project development assistance, does that reduce its incentive?

Jed: It is included in the project cost. We do net it out.

Alan: Are these all custom projects?

Betsy: Yes.

Tashiana: If you subtract the project development assistance, does that mean you don't see it as part of the incentive? Does that mean that you get fewer Renewable Energy Credits?

Jed: We take such a large percentage of the Renewable Energy Credits that the impact would be minor.

Bruce: Is projects completed one of the metrics of success? What percent went to completion?

Betsy: That is one way to view the success of these efforts. Going forward, you will be able to see more of that reflected in this report.

Robert: Is telling a project owner that a project won't be successful sometimes considered a success?

Betsy: Yes. A "no" can be considered a success as it may prevent a project that wouldn't have succeeded from going forward.

Juliet: Did you take a larger view of what constitutes a project? For example, a county that had barriers to renewable energy development and the role you provided there. I would encourage you to think of projects more broadly in the future.

Thad Roth: We see that as market development. We could include those efforts in this report as well. We would distinguish that from work with projects.

Jed: Hydropower fish passage issues and our work with Farmer's Conservation Alliance is a good example from 2013.

Juliet: I could also see consultant time to these efforts being included.

Betsy: Broken down by technology, 12 hydropower projects, 7 wind projects and 3 geothermal projects received project development assistance in 2013. Energy Trust did a lot of biopower project development assistance in 2012 but none in 2013.

Project development assistance completed for hydropower included design and interconnection support for irrigation, design and permitting assistance, two feasibility studies and assistance with Federal Energy Regulatory Committee permitting. For geothermal power, project development assistance included resource characterization and feasibility work. For wind projects, there were interconnection studies and small wind project monitoring.

Suzanne: Did you provide the down payment for the interconnection study?

Betsy: We helped pay for it.

Bruce: What is wind monitoring?

Betsy: It is production monitoring and wind speed data gathering. It helps us know if the turbine is producing energy as intended at given wind speeds.

The hydropower activities to be completed include design and permitting assistance for four low-head projects in two irrigation districts. These include a scoping level study and permitting and financing package assistance. Geothermal activities to be completed include



initial resource characterization for two projects. Wind activities to be completed include an interconnection study for a community-scale project. This will allow finalization of a power purchase agreement.

In 2012, biopower spending on project development assistance was considerable and those funds translated into projects in 2013. Energy Trust spent about the same amount in 2013 as compared to 2012. There is greater uptake now in larger chunks of money.

John: How many project development assistance activities don't turn into projects?

Thad: It is probably less than 25 percent. The questions answered through project development assistance may be of value to us even if the project doesn't move forward. It is part of the business of developing projects.

Jed: We say no less often and provide answers more quickly. We can also say no when we know something won't work from past experience or application of project development assistance.

Dick: Some projects go forward but don't use Energy Trust incentives.

Alan: It sounds like we have good screening criteria for spending project development assistance dollars.

Thad: We do, and we continue to improve.

Betsy: We also sometimes turn people down for project development assistance. Those are not shown in this report. We provide information by phone outside of the project development assistance process to help answer questions.

Bruce: In 2014, do you expect hydropower to continue to use the most project development assistance dollars?

Betsy: We are anticipating project development assistance requests in Biopower. We also expect geothermal will be a bigger share of project development assistance requests, hydropower requests will increase later in the year and wind is likely to tap fewer dollars.

Thad: Is this information helpful? We see the benefit in presenting activities by utility and will show that next time.

Bruce: I would like to see a comparison of dollars spent to generation. Can we get to efficacy?

Thad: Yes.

Betsy: We exercise judgment when comparing requests and consider the generation potential.

Tashiana: What are you learning from the report, such as market trends?

Betsy: We can pull lessons learned into this report. A good example in the past was the Federal Energy Regulatory Committee process and our production of a guide that helped to reduce that barrier.

## **5. Public comment**

No public comment.

## **6. Meeting adjournment**

Betsy thanked the council members for their participation and adjourned the meeting at 11:40 a.m. The next full council meeting is scheduled for June 18, 2014.

## Conservation Advisory Council Meeting Notes

April 23, 2014

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### **Attending from the council:**

Andria Jacob, City of Portland  
Don MacOdum, Home Performance Guild of Oregon  
Garret Harris, Portland General Electric  
Holly Meyer, NW Natural  
Warren Cook, Oregon Department of Energy  
Jeff Bissonnette, Fair and Clean Energy Coalition  
Jim Abrahamson, Cascade Natural Gas  
Juliet Johnson, Oregon Public Utility Commission  
Kari Greer, Pacific Power  
Stan Price, Northwest Energy Efficiency Council  
Scott Inman, Oregon Remodelers Association  
Wendy Gerlitz, Northwest Energy Coalition

### **Attending from Energy Trust:**

Amber Cole  
Brian DiGiorgio  
Courtney Wilson  
Debbie Goldberg-Menashe  
Diane Ferington  
Elaine Prause  
Fred Gordon  
Jackie Goss  
Jessica Rose  
JP Batmale  
Julianne Thacher  
Kyle Morrill

Margie Harris  
Marshall Johnson  
Matt Braman  
Oliver Kesting  
Peter West  
Sue Fletcher  
Scott Swearingen  
Spencer Moersfelder  
Ted Light

### **Others attending:**

Alan Meyer, Energy Trust Board of Directors  
Becky Walker, PECO  
Bob Stull, PECO  
Cameron Gallagher, Nexant  
Kendall Hansen, CSG  
Lonny Peet, Nexant  
Mark Kendall, Energy Trust Board of Directors  
Ron Lynch, ASC Engineers  
Sara Frederickson, CLEAResult  
Scott Davidson, Clean Energy Works  
Scott Jasinski, PECO  
Sheryl Bunn, CLEAResult  
Tim Burrows, Northmore Gordon  
Tracy Scott, Lockheed Martin  
William Newell, Cascade Policy Institute

### **1. Welcome and introductions**

Diane Ferington convened the meeting at 1:35 p.m. and reviewed the agenda. The agenda, notes and presentation materials are available on Energy Trust's website at [www.energytrust.org/About/public-meetings/CACMeetings.aspx](http://www.energytrust.org/About/public-meetings/CACMeetings.aspx).

## 2. Old business

Diane started by reviewing minutes from the March Conservation Advisory Council and asked for corrections.

Holly Meyer: On page two, the notes reference that I said that Energy Trust may want to avoid reviewing principles annually. I meant that you may want to avoid updating them annually, not avoid reviewing them annually. By keeping the specific year listed in the principles, you'll have to update them annually. Taking out the year reference would remove the need to update annually if no other changes are needed. The notes were very helpful.

Scott Inman: I was in attendance at the March meeting. Please correct in the minutes.

Diane introduced Elaine Prause, senior manager of planning, to present on Energy Trust's draft 2015-2019 Strategic Plan.

Elaine Prause: In March, Conservation Advisory Council members provided feedback on potential focus areas for the Energy Trust 2015-2019 Strategic Plan. Last time, council members affirmed that energy efficiency and renewable energy are Energy Trust's core goals. Conservation Advisory Council, Renewable Energy Advisory Council and other stakeholders advised us to focus on our core energy efficiency and renewable energy strengths and goals. Energy Trust should support other opportunities only if they are directly linked to efficiency and renewable energy acquisition.

Right now, we are working on the draft plan. This discussion set our future focus, which will include working in new ways to continue to meet customer needs. We'll continue to apply fundamentals of utility Integrated Resource Plan least-cost planning for efficiency, and support renewable project and market development. Leveraging and collaborating with others to pursue mutually complementary benefits will be important, as will using the strategic planning process to help us prioritize where we put our resources.

To meet our goals, we developed four strategies regarding energy efficiency, including improving program designs, broadening participation, adopting new technologies and approaches, and driving down costs. We plan to optimize our mix of strategies to meet short- and long-term goals.

Mark Kendall: So an example of driving down costs would be expanding very cost-effective strategies like Strategic Energy Management?

Elaine: Yes. Strategies will be different for each sector.

We will evaluate how we determine renewable energy goals. We will also continue focus on early project and market development and supporting a range of technologies. Like the efficiency portion, the renewable energy portion of the plan will also have an element of needing to optimize our resources between technology types.

Energy Trust also began development of an operations plan, featuring internal plans to achieve goals and strategies, such as staffing, collaborating with other organizations and engaging resources.

Mark: How does the operations plan interact with the strategic plan?

Elaine: These two plans will guide us in addition to annual budget and two-year action plans.

Holly: Your presentation did a good job of documenting and including Conservation Advisory Council feedback from last meeting.

Mark: When can people provide input on the plan?

Elaine: Input is welcome at any time, but comments to influence the draft plan should be submitted prior to the board retreat on June 13. After that presentation, staff will update the draft plan with any board feedback and distribute for wider public comment in July and August.

Jim Abrahamson: I thought the draft plan would be released in June. I would like to provide input by reacting to something.

Mark: The strategic plan will be a product of the retreat.

Elaine: Materials will be provided to board members prior to retreat.

Mark: A draft will be available for public comment July and August.

Scott: How many resources will Energy Trust put toward achieving the aspirational goals mentioned?

Elaine: To clarify, we heard feedback to focus on core Energy Trust goals, not aspirational goals.

Holly: Availability of potential energy is contingent on results of the cost-effectiveness docket. How can Energy Trust plan accurately without the outcome of the cost-effectiveness docket?

Elaine: The draft plan will include a set of efficiency goals, including options for the board to consider given different scenarios.

Holly: What is driving the timeline of the plan?

Fred Gordon: Cost-effectiveness outcomes are important for gas residential weatherization measures, but not as much for other programs.

Jim: What is the process for the gas efficiency cost-effectiveness docket, UM 1622?

Juliet Johnson: OPUC staff will create a docket and bring in comments in July, and then make recommendations to the commissioners. The commission will decide in October.

Diane: The next topic is high priority measure development. Elaine will walk you through the document in the April Conservation Advisory Council packet developed by Energy Trust Planning and Evaluation.

Elaine: This document presents a standard approach for the Conservation Advisory Council to discuss and provide feedback on measures. This document incorporates prior Conservation Advisory Council member feedback. Additional feedback is welcome.

We will address measures that are high priority, which we mainly define as high volume or high impact. Additional characteristics are listed in bullets on page one. Examples of high priority measure that may be discussed in 2014 include residential window replacements, direct-vent gas fireplaces and ductless heat pumps. For each one of these measures we plan to reevaluate baselines based on new information and report back to the Conservation Advisory Council.

The rest of the document explains the process for discussing high-priority measures. We propose a two-step process. First, we will provide information ahead of an initial Conservation Advisory Council meeting. Then we will discuss and collect feedback in a

second meeting. This could potentially be accomplished in one meeting or be expanded to three meetings.

The next section of the document indicates how we will present information about measures to you, including key measure characteristics organized by categories. An example is provided for showerheads.

We may discuss implementation of new measures or reworking of existing measures. We may also consider removal of a measure, such as was the case with air sealing.

Mark: I recommend adding an indication in the template of whether a measure is new or existing.

Don MacOdrum: How are cost-effectiveness exceptions presented in the measure discussion document?

Elaine: We will provide benefit/cost ratio results and indicate if a measure is cost-effective and if an exception justification is warranted.

Warren: For electric measures, can we see Regional Technical Forum assumptions for measure development? If you are not using RTF assumptions, please indicate and explain why in the template.

Holly: This document captures all of the key elements needed to discuss measures. "May contain controversy" is very subjective. Please add equipment measures. Also, utilities need advance notice because we develop marketing campaigns well in advance. Please build this into timelines and add a timeline to the template.

Juliet: There's a balance between meeting council needs and developing a cumbersome process for Energy Trust staff. I like this technique for gathering council feedback, but be aware if this process is creating more work and let us know.

Diane: We will only address high-priority measures with this group, not all measures.

Mark: All of this information needs to be articulated anyway, this is just a way to document it in an organized way.

Elaine: Email other thoughts to [elaine.prause@energytrust.org](mailto:elaine.prause@energytrust.org).

### **3. 2013 sector trends highlights**

Diane: Now we will hear about sector trends and highlights. Each sector will present highlights of trends, and complete information is available in the April Conservation Advisory Council packet.

#### *Commercial sector trends*

Oliver: We will cover the highlights of commercial sector trends today, so that we have time for questions. I want to first acknowledge Chris Hiatt, operations analyst, and all program managers who worked on this analysis.

The sector saw a steady increase in overall numbers of projects completed. New Buildings maintained an upward trend even in economic recession. Multifamily volume increased steeply starting in 2011, following multifamily buildings transitioning from residential to the commercial sector in 2010. This large increase is attributed largely to

mid-stream buy-downs, providing incentives to distributors to reduce costs of energy-efficient appliances like refrigerators and clothes washers, and direct installations of light bulbs, showerheads and faucet aerators. The volume of Existing Buildings projects shows a steady ramp with a drop off in 2013, due to the discontinuation of the rooftop HVAC unit tune-up measure and a slight dip in lighting.

The next slide shows incentive cost trends for New Buildings, Existing Buildings and multifamily by fuel source. Overall incentive costs decreased on the electric side and decreased slightly on the gas side. Existing Buildings shows a slight increase in 2011 and 2012 due to bonuses and incentive changes. New Buildings electric incentive costs have dropped in recent years due to several large projects reaching the cap allowed for incentive payments. Changes in multifamily are primarily due to shifting from weatherization measures to a broader mix of measures.

Regarding savings from Existing Buildings measures, we saw an increase in savings in lighting. There was a slight drop in electric savings from custom projects, due to large projects shifting from 2013 to 2014. There was a drop in gas savings from operations and maintenance projects, which is due to discontinuation of rooftop tune-ups.

Regarding electric savings from multifamily measures, we saw growth in savings from common-area lighting and prescriptive measures and a decrease in savings from direct-installation of energy-saving products. The decrease in direct installations is due to emphasis on other measures. This is a strategic shift to go deeper and focus on more capital projects where possible. Multifamily saw an increase in gas savings from direct-installation of energy-saving products. This increase is largely due to an increase in serving smaller properties, which tend to use more gas heat for dwelling units. A drop in gas savings from custom projects is due to delays of larger projects from 2013 to 2014.

Andria Jacob: Why did electric savings from instant-savings measures decrease but the volume of completed projects increased? Savings from direct installations of energy-saving products are down for electric and up for gas.

Scott Swearingen: We're serving more properties that bring smaller projects. For instance, the graph showing an increase in projects includes many small properties. As we serve more yet smaller properties, the proportion of gas savings increases.

Scott Inman: When did multifamily start including duplexes? Those account for gas heat.

Scott Swearingen: 2013.

Oliver: New Buildings is seeing more savings from code, and the market solutions offering. The program saw high electric savings in 2013 through data centers, and this trend is expected to continue in 2014. On the gas side, the high savings achieved in 2010 is due to large hospital projects that brought high gas savings. New Buildings is seeing less gas savings with small projects. In 2014, we expect more large New Buildings multifamily projects and a corresponding uptick in gas.

### *Residential sector trends*

Matt Braman: I'll present an overview of the residential sector and market. We have observed a steady increase in electric savings from 2009 to 2012. Though savings leveled off in 2013, the mix of measures that achieved savings changed. Northwest Energy Efficiency Alliance savings increased due to energy-efficient TVs. Savings from products increased due to lighting, including new LEDs and reintroduction of general purpose compact fluorescent light bulbs.

Existing Homes savings declined due to decrease in Energy Saver Kits and impacts of low avoided costs for gas. New Homes and Products gas savings increased due to growth in new home construction. The residential sector has a portfolio of programs, and each year some exceed goals and some fall short of goals. These programs balance each other out, and each year brings a different mix of savings.

Holly: You said there was a drop in avoided cost. Did we lose measures?

Marshall: We lost savings from gas weatherization measure adjustments related to UM 1622. We observed a fall off of about 40 percent of our ceiling insulation and 10-15 percent of our floor insulation volumes, as well as impacts due to the elimination of the duct ceiling measure and a modified air sealing measure.

Matt: Regarding the New Homes and Products program, we saw a big increase in new homes in 2013 with 1,540 new EPS™ homes. The market share of EPS has increased steadily in recent years, which declined in 2010 and 2013 by about 5 percent corresponding with state energy code changes. Note there is a delay of about a year when code changes impact Energy Trust results.

Scott Inman: Is that because code gets more stringent?

Matt: Yes.

Garret: How much savings per unit per home do you see after a code change?

Matt: After each code change, energy usage decreases by about 10 to 15 percent, which carries over to program savings. In 2013, homes are achieving deeper savings and building further above code than in past years.

Jim Abrahamson: Can we break out EPS market share by electric and gas?

Matt: This would be very difficult given overlapping territories. We can look at our data and try to help answer that question with the caveat there would be some assumptions necessary.

Jim: Cascade Natural Gas has information on new connections to gas, but we don't know if those are new homes

Matt: I will follow up with you.

Matt: Lighting has shown strong growth in savings in recent years. In 2009, Energy Trust phased out of the general CFL market, assuming it was transformed. From 2010 to 2012, we focused on specialty CFLs, such as candelabras, globes and reflectors. In 2013, due to impacts of the federal Energy Independence and Security Act that increased efficiency of CFLs, we saw increases in halogen bulbs and began incenting general purpose CFLs again. Also in 2013 and 2014, we expanded LED products incented at retail. LED prices have come down and demand has increased.

Regarding trends in appliance measures, baselines for appliances have increased over time and therefore savings have declined. For clothes washers, we saw a sizable decrease in volume in the last few years, but not as significant as refrigerators. Since 2011, we saw a 75 percent decrease in volume of refrigerators. We used to have two incentive tiers and dropped the lower one. Also, state energy tax credits expired for appliances in 2011, impacting consumer demand. Some major retailers stopped stocking the low-end qualifying refrigerator models with top freezers, which tend to be lower cost. This means that many of the available energy-efficient refrigerators are high-end, expensive models.

Holly: So cheap, efficient fridges have gone away?

Matt: Yes.

Holly: So would you talk to retailers to bring them back or would NEEA?

Matt: We are talking to Sears.

Marshall Johnson: Regarding trends for Existing Homes, the Existing Homes savings displayed are from the single-family homes. We saw a notable increase in gas and electric savings from Energy Saver Kits in 2012 and a notable reduction in gas savings in 2013, plus three times fewer kits distributed in 2013 than in 2012. In addition, fewer projects were eligible for Energy Trust incentives due to cost-effectiveness challenges, such as duct ceiling and insulation measures that were mentioned earlier. In 2013, small multifamily sites moved from the residential sector to the commercial sector.

In 2013, Existing Homes transitioned to a new Program Management Contractor, which meant we were building a pipeline and setting up operations for the new PMC. There was also less marketing activity in quarters three and four of 2012 due to the previous PMC's focus on that year's savings goal and winding down operations. That impacted the program's ability to create demand.

With the new Program Management Contractor, the program design in 2013 had less emphasis on Energy Saver Kits. Kits play an important part of the Existing Homes portfolio due to their low cost, and they also offer a valuable customer engagement tool. We had anticipated that kits will begin to decline as a source of savings in 2015 due to the federal Energy Independence and Security Act, but now we recognize baselines are not shifting as quickly as anticipated and kits will not fall off in the near future. We want to continue to use kits as customer engagement opportunities and we plan to distribute a larger volume of kits in 2014, aiming to double our 2013 kit volumes but provide significantly fewer than 2010-2012 yearly numbers.

Since 2010, savings per kit have declined rapidly for gas and electric. Starting in 2012, we modified kits to improve realization rates and triple the savings per site.

Juliet: I like the kits. I installed one and it's great. Why reduce the program's savings from kits?

Marshall: When we rebid the Existing Homes program in 2012, a major theme was to solicit ideas and strategies to move away from relying on kits as a primary source of savings. We knew that in 2011 and 2012, we relied on kits for a significant percent of savings. We knew we could not sustain the kit volume levels seen from 2010 through 2012. Our strategy with the new PMC in 2013 included ramping up savings from sources other than kits, primarily from equipment and some areas of weatherization. We learned that a gradual transition away from kits toward other sources of savings is important. We need a balanced approach.

Juliet: Kits are nice strategy to serve renters and people who live in apartments.

Jim: Is Home Performance savings all from Clean Energy Works?

Marshall: It includes all Home Performance with ENERGY STAR® projects, many of which were Clean Energy Works projects.

Jim: Why did therms per kit jump from 2011 to 2012?

Marshall: In 2012, we began customizing kits, so people with two bathrooms can get two showerheads and two faucet aerators. The more products included per kit, the higher the savings. We also get better realization rates because customers have the ability to opt out of getting devices if they don't need them.



Custom kits allow us to serve gas customers at cheaper cost, since only the components related to water heating are charged to the gas utility, as opposed to a historical kit which, in cases of overlap between gas and a public utility district, the lighting savings were not offset by a qualifying electric provider.

Scott Inman: Do customized kits result in better installation rates?

Marshall: Yes.

Jim: What is the potential of homes in Cascade Natural Gas that have not received kits?

Marshall: According to our analysis, we have roughly 20 percent penetration for showerheads in Cascade Natural Gas territory.

### *Industry and agriculture sector trends*

JP Batmale: I will present on some forward-looking trends in the industry and agriculture sector. In recent years, we have seen an increase in volumes of small, simple projects and an increase in savings from large, complex projects. Streamlined track projects remain a major source of gas savings. Our diversity of measures drives growth and mitigates risk. We have also noticed that savings are shifting across industry sectors.

Custom track projects have been a consistent source of electric savings since 2004. Despite being a mature offering, custom track projects consistently deliver 50 million to 60 million kWh per year. Large projects generated more than 20 percent of savings, which has helped us exceed our goals. Lighting savings decreased in 2013, but were balanced by increased savings from industrial SEM and a very large project.

Gas savings are very lumpy. We're seeing a high volume of streamlined industrial projects bringing gas savings, including greenhouses. Streamlined projects have consistently delivered savings since 2008.

Holly: Is measure life roughly the same for electric and gas projects in each track?

JP: SEM has a shorter measure life and smaller savings cost. There is a three-year measure life for gas SEM savings. Custom track measure life ranges from eight to 20 years. Lighting measure life varies.

The volume of gas projects has increased and is expected to continue growth in 2014 due to increased outreach efforts. We are also focusing on reaching out broadly to different sizes and types of customers, and this will result in more small projects.

In terms of system types that generated electric savings, SEM was the biggest source of electric savings and is expected to continue to be a strong source of savings going forward. Lighting and compressed air have been bedrock sources of savings over time.

In terms of systems that generated gas savings, greenhouses are our biggest source of gas savings. A small number of greenhouses generate a lot of savings.

Holly: What kind of greenhouse measures are there?

Adam Bartini: We offer a variety of measures for greenhouses, both prescriptive and calculated. Measures include upgrades to greenhouse envelopes, thermal curtains, boilers and heating systems and venting.

Holly: Are we running out of greenhouses?

JP: No.

Alan Meyer: How does pneumatic conveyance save gas?

JP: Largely from more energy-efficient pasteurizers, which use a pneumatic conveyance system.

JP: We are seeing savings shift across sectors. We have seen more electric savings from computers and electronics industries, comprising almost 30 percent of total electric savings in 2013. We made inroads with the high tech sector, and this trend is expected to continue. Projects with wood products companies have consistently declined as a source of savings over the past few years. Greenhouse projects provide the majority of gas savings.

#### **4. Electric avoided costs and electric efficiency cost-effectiveness**

Elaine: About a year ago, the OPUC asked Energy Trust to update gas and electric avoided costs on a regular basis. In the past year to six months, we updated electric avoided costs, which are more complicated than gas avoided costs because there are multiple quantifiable values efficiency provides to the electric system beyond energy market value that are specific to each utility and need to be added. All of the information used in Energy Trust analysis came from utilities and align with their most recent IRPs.

Components of electric avoided costs include base forward prices, avoided transmission and distribution, generation resource capacity deferral, risk avoidance regarding fuel prices and a 10 percent Northwest Conservation Credit. We will update electric avoided costs every other year going forward.

Overall, we're seeing a 5-20 percent reduction in electric avoided costs.

Mark: Is there a benefit to going to a time-of-day load shape for our measures? That would change the avoided cost.

Juliet: That's taken into account.

Elaine: Yes, load shapes are taken into account for each measure.

Impacts of updating electric avoided costs are minimal to Energy Trust's portfolio. In a comparative analysis of 2013 results, only 5.5 percent of 2013 electric portfolio savings were not cost-effective using the updated avoided electric costs. This is evenly split between custom and prescriptive measures.

We're working with OPUC staff to determine prescriptive exceptions for electric measures, similar to the gas exceptions. Energy Trust will propose which measures meet exception criteria. Energy Trust identified three measure categories: measures that are not cost-effective yet meet UM 551 criteria, exceptions that are not cost-effective but Energy Trust plans to rework for 2015 so will continue to offer in 2014, and measures that Energy Trust will continue to offer under current exceptions.

Energy Trust will propose several measures that have exception based on meeting UM 551 criteria, including duct insulation, freezer recycling, zonal electric advanced builder option packages, LED A-lamps, ozone laundry in motels and multifamily insulation. LED A-Lamps are just barely not cost-effective now, but costs are coming down. We believe there should be a market transformation exception and LED A-Lamps will be cost-effective in a few years.

Energy Trust will propose measures with exceptions for 2014 to be reworked in 2015, including ductless heat pumps, rim joist insulation, CEE Tier III refrigerators, server

virtualization, convection ovens and market solutions offerings. Market solutions packages will be adapted in 2015 based on code changes.

We will continue current exceptions for market solutions, recently excepted measures, pilot measures, commercial and residential solar water heating, 1 HP motors and limited irrigation measures. We are documenting our recommendations and working with Juliet.

Alan: How closely are we working with utilities?

Elaine: We worked closely with utilities through the fall in developing the new avoided cost assumptions, and we have shared impacts with utilities.

Scott: Did avoided costs decline because electricity is cheaper from gas-fired electricity plants?

Elaine: Yes.

Juliet: When we looked at gas exceptions, we thought we might fold electrics into UM 1622. However commissioners want us to look at electric measures from square one and take a fresh approach. OPUC staff will review the recommendation, open up a new docket, open the docket for comment and then a final recommendation will go to the commission. You will have an opportunity to comment. The process will mirror UM 1622.

Mark: Criteria will be the same as UM 551?

Juliet: Yes.

Don MacOdrum: UM 1622 provided a two-year grace period for some gas measures.

Juliet: I anticipate the commission will give some grace period for electric measures.

## **5. SB 1149, SB 838 funding limitations for large commercial and industrial customers**

Diane: This presentation is to explain the context for funding limitations for large commercial customers. We will plan a deeper discussion at the June Conservation Advisory Council meeting.

Ted Light: For background, SB 838 allowed electric utilities to collect funding above the original 3 percent public purpose charge for identified cost-effective energy efficiency to meet Integrated Resource Plan efficiency targets. As a result of this increase funding, Energy Trust was able to double annual savings. But there were limits to how Energy Trust can apply these funds.

A consumer with electric load greater than 1 aMW in a year is not required to contribute more than 3 percent for the public purpose charge. Subsequently, they should not receive additional benefit from supplemental funding expenditures.

Large users are industrial and agricultural sites and large commercial sites such as college campuses and hospitals. These sites can be commercial and industrial.

Funding began in 2008, and savings for more than 1 aMW sites increased greatly in Pacific Power and PGE territories.

Now we are approaching funding limits for these very large customers. Potential impacts of limiting funding may result in lost opportunity for customers. Timing is important regarding very large projects, and we may miss opportunities to influence decisions at very large sites when we limit funding. These savings are included in utility IRP targets.

Funding limits for very large sites impact Energy Trust's ability to achieve energy-efficiency savings.

Mark: Some very large sites are the most cost-effective projects?

Ted: Yes.

The methodology to determine funding limitations is based on an informal stakeholder agreement. We use incentives as a proxy for total program costs. Serving large sites may be more cost-effective, but the total cost of serving these sites is difficult to track.

The question guiding the informal stakeholder agreement is what percent of our past spending went to these large sites before SB 838. That percent would be used to set the funding limitation going forward. Staff looked at total incentive spending before SB 838 as a percentage of total revenue, which was just SB 1149 revenue. We determined that 27 percent of revenue was used for Pacific Power large customers and 18 percent of revenue was used for PGE large customers.

Fred: When board members determined Energy Trust's equity policy, they decided to make opportunities available for all types of customers. There are broader benefits than direct participation. When you get a lot of savings for little money, that's good for everyone.

Mark: And the potential for very large projects varies as well.

Alan: I suspect the program served a greater number of industrial customers in Pacific Power than in PGE territory prior to SB 838. I think these numbers should be re-evaluated, because there will be pushback if we try to get more dollars from customers.

Ted: The Production Efficiency program was more active in Pacific Power territory in the early years, but program activity and industrial load is shifting.

Jeff Bissonnette: What are the savings? We're paying more for very large customers but it's the cheapest power available. What other power can you buy that's cheaper? We're going to have to save the power, buy the power or build the power.

Alan: Industrial SEM has shown you can do an effective job of using limited dollars to achieve large savings.

Wendy Gerlitz: The bottom line is that residential and commercial customers are paying more for the energy-efficiency resource. The problem is that industrial customers are not contributing more than 3 percent toward the energy-efficiency resource. At some point, utilities will need to acquire more resources. Do we want them to acquire very low-cost industrial conservation or build more expensive energy generating plants?

Alan: What if 18 percent is wrong and it should be 27 percent? I'm not convinced there's missed opportunity yet.

Ted: We look at current spending to see if it is in line with past spending. If we do exceed the funding cap, we have time to correct that. Programs commit to projects well in advance and we don't want to disrupt markets.

Results of our calculations show we have been holding fairly steady below our funding limit for Pacific Power territory. For PGE, incentives paid to large projects have increased each year. Our single-year spending has exceeded the funding limit for the past few years, but in 2012 the cumulative average was still below the limit. Analysis is

still underway, but the 2013 cumulative average is expected to be very close to the funding limit.

It's challenging to estimate resource potential. There is a high level of demand and activity from very large sites. We are facing reaching the funding cap for PGE at some point in the future. This is less likely for Pacific Power. If we are constrained by that funding cap, it limits Energy Trust's incentive spending to about \$5 million to \$5.5 million per year for very large sites, compared to about \$6.5 million in 2013.

Garret: When will program changes take place?

Ted: We have until we cross the line and then several years to adjust programs. If not in 2013, we will likely exceed the limit in 2014. Programs would begin to adjust in the years after that. Existing program commitments would be honored.

Ted: This topic has been discussed in 2012 and 2013 board retreats. In January 2014, a meeting with stakeholders was held to gather input. A clear solution has not yet been identified. In June, we'll have final results from 2013 and can review program options or timing for steps that may need to be taking.

Alan: Do stakeholders include people contributing or receiving money?

Ted: Both.

Jeff: People contributing and people receiving are the same people.

Alan: I think 18 percent is too low. If we increased it, that would solve our problem.

Fred: We convened stakeholder group in January, including OPUC staff, and did not reach consensus that the limit should be adjusted.

## **6. Public comment**

There were no additional public comments.

## **7. Meeting adjournment**

Diane thanked all council members for their participation and adjourned the meeting. The next full council meeting is on June 18, 2014.

## Conservation Advisory Council Meeting Notes

June 18, 2014

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### Attending from the council:

Andria Jacob, City of Portland  
Garret Harris, Portland General Electric  
Holly Meyer, NW Natural  
Roger Kainu, Oregon Department of Energy  
Jeff Bissonnette, Citizens Utility Board of Oregon  
Jim Abrahamson, Cascade Natural Gas  
Juliet Johnson, Oregon Public Utility Commission  
Kari Greer, Pacific Power  
Stan Price, Northwest Energy Efficiency Council  
Scott Inman, Oregon Remodelers Association  
Wendy Gerlitz, Northwest Energy Coalition  
Bruce Dobbs, Building Owners and Managers Association  
Stephanie Vasquez, Bonneville Power Administration  
Don MacOdrum, Home Performance Guild

### Attending from Energy Trust:

Margie Harris  
Kim Crossman  
Paul Sklar  
Jay Ward  
Tom Beverly  
Sue Fletcher

Debbie Goldberg-Menashe  
Diane Ferington  
Elaine Prause  
Fred Gordon  
Jackie Goss  
Mark Wyman  
Marshall Johnson  
Ed Wales  
Peter West  
Steve Lacey  
Ted Light

### Others attending:

Mark Kendall, Energy Trust Board of Directors  
Scot Davidson, Clean Energy Works  
Andrea Johnson, CLEAResult  
Andrew Morphis, CLEAResult  
Joel Gray, Cascade Policy Institute  
Jennifer Hudson, Schnitzer Steel  
Brien Sipe, CLEAResult  
John Morris, CLEAResult  
Christina Cabralas, CSG  
Jeremy Anderson, WISE  
Carolyn Gross, NW Natural  
Carolyn Farrar, NW Natural  
Jamie McGovern, Citizens Utility Board of Oregon

### 1. Welcome and introductions

Kim Crossman convened the meeting at 1:30 p.m. and reviewed the agenda. The agenda, notes and presentation materials are available on Energy Trust's website at [www.energytrust.org/About/public-meetings/CACMeetings.aspx](http://www.energytrust.org/About/public-meetings/CACMeetings.aspx).

Kim indicated that the agenda for the next Conservation Advisory Council meeting on July 23 will be quite dense. Large customer funding, Quarter 2 dashboards and more are on the agenda. Staff will likely schedule from 12 to 5 p.m. The council doesn't meet in August. It's important for the annual budget and two-year action plans for next year to hear from council.

## **2. Old business**

April Conservation Advisory Council minutes were not included in the packet in time for member review at this meeting. Council members are requested to review the minutes and contact Kim if they have any comments.

## **3. Savings Within Reach bill impact estimator**

Mark Wyman discussed updates to the Savings Within Reach bill impact estimator. This is a tool currently being used in the Existing Homes programs. It helps customers know what the impact on their bill will be when they finance improvements and repay them on their utility bills.

Savings Within Reach is marketed by trade ally contractors. Financing includes on-utility-bill repayment, and that option is used only with Savings Within Reach qualifying measures. On-bill repayment is ideal for smaller improvement projects. There is no minimum and terms go up to 10 years for loans greater than \$2,500 or five years for loans less than \$2,500. Staff is working with \$600,000 in initial capitalization. The demonstration will continue until funding runs out or for a maximum of one year. It's available to customers of NW Natural, Portland General Electric and Pacific Power.

The estimator is an Excel workbook completed by the trade ally, and currently is not available on the website for consumers. It provides one output. The customer has to sign a written statement that they received and read it.

Upgrades include an easier interface, addition of seasonal bonuses and recognition of oil and propane as source fuels. It's a far different dynamic from a single-fuel project if they change fuels and finance on-bill. Customers save money overall, but their heating utility bill will go up significantly. The tool provides that functionality with updates. It doesn't model conversions between electric and gas.

Don MacOdrum: What are the Savings Within Reach qualifications?

Mark W: This is the moderate-income piece of Existing Homes. Savings Within Reach is targeted at households at 185 percent to 250 percent of federal poverty level. They are above the weatherization assistance cutoff, but face a significant barrier from out-of-pocket costs. It offers enhanced incentives.

Garret Harris: When a person converts from oil or propane to electric or natural gas, they can participate in your programs. Is that true with Savings Within Reach?

Mark W: With Savings Within Reach, we engage prior to measure installations. We can receive an application for a mechanical system and we'll record the original fuel type. We can claim some savings based on the assumption that they already made the decision to change to natural gas or electric heat from oil or propane and we are pushing them to a more efficient system.

Garret: If you convert the heating system and do another measure, can you still claim both incentives with this?

Mark W: Yes, a customer may also claim incentives from eligible weatherization measures in conjunction with a heating system replacement. Deemed savings for weatherization measures are assigned to the customer's replacement heating fuel source. Energy Trust's planning staff weight a range of installation environments when determining deemed savings levels, including those scenarios when a customer's mechanical equipment may be newly or recently installed.

Jim Abrahamson: With the gas furnace line blacked out, would the form be what the electrical customer sees? Two of the electric measures are replacing non-electric heat. Two different

HSPFs are shown as clearly replacing non-electric sources. Can this estimate what the fuel savings would be from those?

Mark W: It's not set up to do that. You select your current fuel source, and it would disable some choices. If it's electric, you will see electric options. If you select oil or propane it will surface natural gas and electric options as the new heat source.

Mark continued his presentation, showing examples of what the contractor would see as they are working through the spreadsheet. Staff updated the tool for new heating fuel sources for oil and propane. The choices depend on the new fuel source. The original workbook is on the bottom of the slides. In the load shifting scenario, it adds monthly costs to the loan payment. Staff has to rework it to present things in a way customers will find easy to understand. Overall cost savings will often outweigh the cost shift to the utility bill for a new heat source.

Wendy Gerlitz: I'm assuming that total interest payments are included in the totals, but they are also shown in their own box. That makes it appear that they are not included in the calculations.

Mark W: The Savings Within Reach offering is designed to be easy for customers, and underwriting is flexible, but we wanted to build awareness that it's not free money. That's why the interest is shown separately. It's included in the totals.

Holly Meyer: Have any groups tested this to see if people like it?

Mark W: Feedback has been positive so far, but testing has been limited and we haven't completed broader consumer testing. It may be a good fast feedback topic.

Scott Inman: The total interest payments are confusing. Is that total interest over the term of the loan? It shows estimated annual savings of \$1,500 but is the \$1,300 cost over the life of the loan?

Mark W: We are double messaging on the cost of capital, to ensure customers are aware of it, but that may be confusing. We can remove the redundancy.

Holly: I don't understand the bottom part, where it says, "Impact of the same fuel upgrade expressed as debt service – energy savings." Can you clarify it?

Mark W: It's the net impact of the bill. The customer is saving the "estimated monthly energy savings" and subtracting the monthly loan payment to arrive at the net effect on the utility bill.

In regards to Energy Trust's fuel neutrality policy, we feel this is within the policy requirements. We are trying to show the net impacts when people use their utility bill as a means of repayment.

Customers would never see the multiple simulations on this. However, we don't watch contractors when they give estimates. The tool could be run multiple times for differing comparisons.

Bruce Dobbs: What if I want to compare electric to gas. It sounds like that's forbidden.

Mark: Those options are disabled to follow fuel neutrality requirements. We are aware a contractor could compare using a different fuel type by running the analysis twice.

Holly: It sounds like it wouldn't be allowed, since the customer has to sign off prior to going forward. They could do everything but on-bill repayment if they wanted to switch, though.

Mark: We are allowing your new fuel to be your fuel of record. That utility will be the one collecting payments. For other customers it would be the utility they already have in place.



The engineering behind this is the same as the website tool. The new assumptions are around oil or propane equipment.

Kim: If you have comments, clarifications or advice, please provide those.

Jim Abrahamson: We're in this zone at the end because the policy about fuel neutrality causes strange gymnastics around a logical customer question. The program isn't set up to make the gas versus electric comparison because of policy, and the tool doesn't deal with it. It's a logical question for customers to ask.

Mark Kendall: This is a demonstration that started in the spring. What kind of check-in and verification are we planning to do? Contractors run the software and give customers the output. How much variability are we going to be checking and managing? Also, does the 5.99 percent interest rate cover the on-bill financing service costs and other costs?

Mark W: Craft3 would have more insight about the fund administrative costs. Our utility operating agreements include other costs. We do quality review on workbooks, but we don't know how people may be playing around with it. We will correct errors we see submitted to the program. We get it early enough that the customer will receive corrections before moving forward.

Mark K: The range in parameters can vary, though.

Mark W: We thought about giving more site specifics, but it adds to the challenge. It is meant to be streamlined and easy.

Scott Inman: Does the bill stay with the home, or does it go with the homeowner if they move?

Mark W: The loan can be moved off bill and serviced by ACH. It can also be handled through a fixture transfer. It's early to tell, but the Energy Efficiency and Sustainable Technology Act, EEAST, portfolio is the precedent. With that, most people seem to move it off bill if they sell the home, or retire it at the time of sale.

Garrett: How many applications have you received that show non-qualifying fuels switching to qualifying?

Mark W: It's too early to tell yet.

Garrett: Please track that and provide more information when you have it.

Wendy: If the customer has questions down the road, such as situations where they don't see the expected amount of savings, who do they call? Where are they directed by the paperwork?

Mark W: The application has the same terms and conditions as our program applications. It would have our program contact information. Service related issues are expected to come through the program, and the lender information is there for debt servicing contacts. We are working with the utilities to divert those to the resources we provide.

Andria Jacob: Is the capitalization from Craft3 or Energy Trust?

Mark W: It's split equally between Craft3 and Energy Trust.

#### **4. Gas cost-effectiveness UM 1622 update**

Fred Gordon and Juliet Johnson presented the gas cost-effectiveness update.

Fred: Juliet is covering the original Oregon Public Utility Commission request for information that Energy Trust is responding to. The handouts have more current information than what was previously posted online.

Juliet Johnson: This is OPUC docket UM 1622, Order 13-256. It has often been helpful for me to go back to the source, to see what the commission said and required in response so I can stay focused. In other words, "What did the commission require?"

The commission granted exceptions to current cost-effectiveness guidelines for all gas measures and programs. The exceptions run through October 18, 2014. Energy Trust should take active steps before then to make gas measures as cost effective as possible, and create plans to eliminate measures that still aren't passing, won't pass or don't meet UM 551 exception criteria. Energy Trust will provide estimated benefit cost ratios for both the Utility Cost Test (UCT) and Total Resource Cost Test (TRC) for all measures which are close to or less than 1.0. If they are cost effective, what are the savings, and where would UM 551 exception criteria apply? Energy Trust was to identify proposed measures and programs to be continued and discontinued. That's not necessarily what would be accepted by the OPUC. Energy Trust is also determining what a core residential program for gas would look like. The docket schedule is listed in the presentation slides and online at [www.apps.puc.state.or.us/edockets/docket.asp?DocketID=17795](http://www.apps.puc.state.or.us/edockets/docket.asp?DocketID=17795). Energy Trust will report by July 1, 2014. The commissioners will see the memos created by OPUC staff.

The public meeting is September 30, 2014. People are allowed to state their cases or correct facts in the memos during that meeting.

Jim Abrahamson: What is the concept of core gas programs? Will that be in the July 1 report?  
Fred: What we'll say remains to be seen. We don't have a lot of information.

Jim: If the exceptions expire and substantial gas-saving programs drop off, I would assume the utility Integrated Resource Plans (IRPs) are adjusted. Energy Trust provides savings numbers, and if they remove measures and programs, they should also be removed from the IRPs.

Juliet: I imagine the commission would implement changes for both Energy Trust and the utilities.

Jim: I would hope the IRP savings would come out if they show up in this docket.

Juliet: It wouldn't hurt to restate that for the commission if it's a concern.

Mark K: How long after the public meeting will the order come out?

Juliet: An order typically comes a week after the meeting.

Don MacOdrum: The "societal cost" terminology doesn't seem to be here.

Fred: The societal test isn't in our information. TRC and UCT are the only tests that are in rule UM 551. So we are not planning to discuss general societal benefits in our comments. In our July 1 filing, we are giving a beginning product for the docket and not an end product. If something can't be done within this rule, that's for you, and others, to talk about. The OPUC has suggested that any discussion of changing the rule should explain what measures cannot be accommodated within UM 551 and why they are important.

Fred: The presentation includes what the OPUC asked for, and two additional suggestions. One covers some process issues, and the other relates to hedge, or risk value. Both are discussed below.

What follows is a high-level review of the key cost-effectiveness tests in UM 551. We have covered these issues extensively with this council, including an entire workshop on these issues, so I won't delve into the details here.

The UCT for measures includes incentives as costs, and avoided utility costs plus 10 percent, as benefits. The benefits are divided by the costs. As applied to programs, the costs also include Energy Trust's program management costs and an allocated share of Energy Trust's administrative costs.

The TRC is different primarily in these two respects: it includes as costs the full costs of the measures, including the portion that consumers pay, not just the portion covered by incentives. Also, benefits include non-energy benefits enjoyed by the consumer. Carbon benefits are included in both tests to the extent that they are forecast as utility compliance costs for future regulations. If someone believes there is a higher cost to carbon, it's not included.

Next, I'll review changes we've made since the UM 1622 order to lower the cost of programs and eliminate measures.

In looking at measures, Performance Tested Comfort Systems whole-house duct sealing was the biggest thing we changed. We discontinued it because of performance issues. We attempted to do a pilot, but we had site selection criteria designed to increase average savings, and couldn't find homes that fit the right criteria. We couldn't build a big enough sample. We are now out of duct sealing for single-family homes. Duct and air sealing in mobile homes seem to be cost effective.

As an aside, there are many, many gas measures that are still cost effective. In the current draft, we list them at the end of the report.

We propose to discontinue whole-house air sealing at the end of this year. As noted below we have a pilot underway for air sealing using a different approach.

For ceiling and floor insulation, requirements for site eligibility were tightened. This has resulted in fewer qualifying sites, but more savings per site. The calculations presented today reflect these higher savings.

We have held back on narrowing eligibility for custom gas measures to avoid a seesaw effect. We currently allow measures which have a TRC of 0.7 or better as long as they pass the UTC.

Kim: We've discussed everything on this list of adjusted and eliminated measures at Conservation Advisory Council meetings over the last 18 months.

Fred: For reference in this presentation, if we have an exception, which means it is written into the rules that we can continue doing a certain measure and we have obtained specific authorization from the OPUC to do so.

The gas side of the Production Efficiency program is not presented because there are no problems presented by lower gas avoided costs. Some custom measures at specific sites may not pass, but not enough to be a concern to the program.

The gas portion of Existing Buildings as a whole is okay and passes both the UCT and TRC. Some custom gas measures are at issue. These are primarily custom HVAC and custom control measures. More sites won't pass because avoided costs went down. We

will go to new avoided costs at some date. The tighter investment limit for custom may impact some projects at large universities and hospitals.

For existing buildings, residential-type dishwashers should be removed, and were already taken out of residential programs.

Within the Existing Buildings program, multifamily has issues for all insulation measures. They are a very small percentage of the gas portion of the multifamily initiative. Some people value insulation, but it doesn't amount to a lot of the 2013 annual multifamily savings. Windows also have issues with the TRC. Energy Trust market research shows that owners invest in windows for other reasons in addition to the value of energy savings.

The gas portion of New Buildings as a whole is okay, and passes both the UCT and TRC. There are a number of issues with specific measures, which only amount to about 2.5 percent. Some of the issues reflect code changes. We need to spend some time looking at some of the data. Again we should remove the residential dishwasher measure, and also demand control ventilation. Market solutions is a series of packages of measures for small commercial buildings. There are a handful of cost-effectiveness issues for different packages. Some are with measures that are likely to cost less later, with designer experience, market volume and more competition. In a couple of cases, we believe we need to retain a measure so that the entire package reaches a threshold of savings that captures the developers' attention, for example, 10 percent of load.

The market solutions initiative is shown on the slide with no annual savings. It was just launched last year, and will be an increasing share of the program over time, but will be a lower percentage of savings.

The gas portion of the New Homes program as a whole is okay, and passes both the UCT and TRC. Builder Option Packages are mostly okay except for the one package listed on the slide which is a tiny proportion of the overall program. This is the only problem within the gas portion of New Homes.

These are all the current measures that have cost-effectiveness issues within the current gas offerings other than for Existing Homes. Based on 2013, all the measures with cost-effectiveness issues constitute 6 percent of the overall program savings.

Don MacOdrum: For that option package, is there a reduced future cost exception?

Fred: Yes, it's market transformation. As you do more of it, the cost comes down through training and practice, or it gets adopted through code.

Bruce Dobbs: Existing multifamily windows are a paradox to me. It's the most substantial way to save energy in a majority of multifamily buildings, but it's very expensive to do windows and it ends up being dropped.

Fred: We had many window measures in our program until the multifamily Business Energy Tax Credit from the Oregon Department of Energy mostly went away. There are benefits to the owner, but without someone else paying a large share of the money, few will do it.

Jeremy Anderson: On multifamily, does the TRC testing remove tax credits from the owner's cost?

Fred: It's a reduction from total cost for the TRC. We aren't dealing with it for multifamily.

Jeremy: There is an excellent tax credit for multifamily windows. The program has never been close to fully subscribed.

Fred: There is a tax credit there, but it's limited in its use, so we didn't include it. We will follow-up with you to discuss this further.

Holly Meyer: The slides from last night, and the current ones, make it look like they get an exception. The slide you have up say, "see single-family discussion."

Fred: This has been through much iteration, and is pretty dynamic. We're now proposing that these measures be addressed the same way as single-family insulation. But we're leaving this open as to the specific approach.

Fred continued his presentation. The gas side of Existing Homes as a whole has cost-effectiveness issues. One is prospective and another is retrospective. The current issue is the UCT. We are forecasting a positive TRC in 2014, so hope that issue is retrospective.

On a gas-only basis, we've seen the 2013 program come in under 1.0 on the UCT, and the same has been true so far in 2014. Showerheads have large quantifiable non-energy benefits and helped the TRC. But the added savings were not nearly enough to bring the UCT above 1.0. We are confronting this situation now.

The UCT was 0.7 in 2013 and is 0.73 in 2014. The insulation measures, which will be discussed next, are not the whole picture of the Existing Homes program. Water-saving measures contribute a lot of gas savings as do water heaters, furnaces and hearths.

The UCT reflects all costs compared to savings from all measures. Measure savings have diminished, and that helped drive the UCT below 1.0. Our stricter requirements for ceiling insulation, which is we won't insulate if there is already a certain amount in the ceiling, has led to a 50 percent disqualification rate on proposed ceiling insulation installations. Each participant is saving more, but there is less measure throughput and no administrative savings.

Regional data from a NEEA survey shows that 85 percent of single-family homes has a significant amount of ceiling insulation already. We suspect that we are doing better on insulation in Oregon than the region does as a whole because we've been working on it longer and more consistently. We think we are chasing a residual market.

Other factors driving the UCT issue are that in both 2013 and 2014, we invested in improvements to our internal systems like IT, web forms and so on, to create efficiencies that may lower costs later. This may result in some productivity gains, but they are good only for a few percentage points.

In this way we changed several measures to change the TRC, but it didn't provide change for the UCT.

Also, in the current gas avoided cost forecasts, there is no risk premium or hedge value. We may not fully value the benefits of efficiency for gas in the way we do for electric savings.

I will now review single-family gas weatherization measures and their cost-benefit performance.

Insulation measures don't pass the TRC by wide margins. Ceiling insulation comes in with roughly half the benefits of costs. Other insulation measures have benefit cost ratios

of 0.2 or 0.3, depending on if you look at the whole program or the standard track where the average cost of the measure is lowest.

Moderate-income furnaces, hearths, windows and aerators are a bigger piece of the gas portion of the Existing Homes savings. Insulation is process and labor intensive, and doesn't pass.

Wendy Gerlitz: The program doesn't pass the UCT, but I don't see measures which don't pass as a large proportion of the program.

Fred: When we perform benefit cost tests for individual measures, we don't include a share of program management and administrative costs. Generally, programs don't depend on a single measure so those costs will be there either way. When we perform the benefit cost tests for a program, we include program management costs.

Additionally, we don't usually deduct savings for free riders when performing benefit cost tests for individual measures. Those numbers tend to bounce around, and sometimes the information is more reliable if viewed in aggregate. If a measure has a sustained high level of free riders we will still pull it from the program.

Existing Homes measures need to come in at an average TRC somewhere between 2.0 or 3.0 for the program to pass after program management costs, administrative costs and free riders are considered.

Wendy: Are they fairly typical on costs, or is this an expensive program?

Fred: This is a high touch, high administrative cost program, so it costs more to run.

Bruce: Is ceiling insulation passing for electric savings? Is this only gas?

Fred: This is just for gas.

Fred continued his presentation. As mentioned previously we are proposing that we sunset whole-house air sealing after 2014. We hope we can transition to a prescriptive approach to air sealing at the time that ceiling insulation is installed. We are doing a pilot through the heating season to see how well it works. Depending on the benefit cost ratio that we forecast based on that pilot, we may need to come back to the OPUC to see if we can carry it forward.

ENERGY STAR 0.67 to 0.70 Energy Factor water heaters don't pass the TRC. This measure is due to become a market minimum under federal standards soon. We want to hang onto it until the standard is implemented in the field, because federal standards have often rolled back. We think that providing success in the field with this measure increases chances that the standard will be put in place.

Solar water heating has been under a proxy, but this is now not the OPUC's preferred approach. The proxy was based on market research showing many other reasons customers install the measure. Spa covers work for electric but not gas. We want to keep it for consistency.

There has been much discussion of consumer non-energy benefits. The appendix to our report provides some documentation of these benefits. The OPUC has the option of considering an exception on the basis of these benefits. The appendix will show what other states have done, and will pull out facts from other studies. This appendix will not discuss broader benefits to Oregon or society, such as additional value of carbon reduction or job benefits. Our instructions are to work within the rules and not focus on

economic development and the like, which fall outside of the scope of UM 551, the OPUC's cost-effectiveness rule.

There are two proposals for a streamlined process for granting cost-effectiveness exceptions. The proposed streamlined exceptions process would delegate some authority to the Energy Trust planning staff with guidance from the OPUC. We are hoping for ways to shorten the supply chain. The OPUC has the option of considering these ideas through the cost-effectiveness docket or separately.

Finally, we offer some discussion of gas hedge, premium, or risk value. There are a couple of basic ideas behind this. If you lower the gas load, the marginal cost of gas to the utility may decrease, which benefits ratepayers. Also, there is a lower risk of very high costs if gas loads and prices grow more than expected. NW Natural plans to study hedge value through its IRP process in 2015. Gas price forecasts have varied extensively over the last 10 years and the price is difficult to predict.

Until there is a conclusion on this issue, we suggest that the OPUC allow measures and programs with TRC and UCT benefit cost ratios somewhat below 1.0.

Don MacOdrum: 20 percent was mentioned. How does that tie to the benefit cost ratios?

Fred: We saw that Massachusetts has a higher premium gas value that, if applied to Oregon avoided cost forecasts, would bring measures to around a benefit cost ratio of 0.8 to 1.0. That's probably not appropriate as Massachusetts starts out with much higher forecast avoided costs. But it provides an estimate of what the highest value might be.

Carolyn Farrar: Do the environmental benefits have costs added in Massachusetts?

Fred: They are a state of detail. They have separate, specific adders for all sorts of things. That involved \$15 million in research and selection of values within a wide range of uncertainty. We've learned that trying to pick numbers with a huge variance is not a preferred approach for the OPUC. The exceptions process provides for qualifying measures without doing this.

Holly: With a 0.7 UCT, that's concerning. If you didn't have gas and had only electric, the electric utilities would have to carry the burden of costs.

Fred: If they had to carry it, we would have very different programs. PGE and Pacific Power ran individual electric programs before Energy Trust came on the scene.

Holly: It's benefitting the same people, so maybe we don't look at TRC, and combine the utilities. If you took away gas it would burden electric more.

Fred: If you look at the gas portion of the New Home and Products program in combination with the Existing Homes program, the combination passes both UCT and TRC. There are some measures for Existing Homes in the New Homes and Products program, such as refrigerator retirement. We allocate program management costs and administrative costs to electric and gas portions of programs in a way that more electric incentives reduces the gas benefit cost ratios. The allocation method is based on generally accepted accounting practices. These may not be flexible.

Jim Abrahamson: I'm back to the original data dump. Will there be numbers associated with administrative and program costs allocated out?

Fred: We already have that in our budgets, published on our website, so yes, we can do that.

Kari Greer: Are you going to say what exception applies and why in the report?

Fred: Where there is background research, we will reference it. Where we have that we will add it in.

Don: It sounds like the electric side is generally cost effective, but not as large as the gas?

Fred: It's true for insulation, and it is quite cost effective.

Don: Does having the gas program help with customer acquisition in the electric program?

Fred: We have designed a program with a lot of outreach, customer service and the like. Prior to Energy Trust, PGE and Pacific Power ran more responsive programs with less outreach. They were differently featured.

Jim: Cascade Natural Gas is running larger programs in Washington, ourselves, right now.

Fred: If you are asking about running it yourselves, that's on the table with the other ideas.

Holly: Do we legally even have to run conservation programs?

Fred: There are laws requiring an energy audit that is pretty useless. For electric, SB 1149 waived the audit. For gas, the OPUC staff says we are doing better than the audit so deemed our programs to be equivalent. There's a law from the 1970s that talks about caulking, weatherstripping and cold water pipe wraps, things no longer thought to be that good a program approach.

Juliet: We are looking into that. There are many, very old things on the books. Some say that programs, incentives, loans and audits should be offered. They are heavily cross referenced, but it appears there is some guidance to run these programs. We are still looking into it.

Fred: EEAST is something to look at.

Scott Davidson: You set the current situation stage and recommendations. You aren't charged to look at a number of innovative opportunities and alternatives to go forward.

Fred: We aren't looking at different tests. I think in terms of the rationale within the existing rule, weatherization has presented a tough situation. We need to look at developing a core program. Given the numbers, there are a couple of ways to go. For insulation, the non-energy benefits have to carry a large share of the costs, if that's the rationale.

Scott Davidson: Would that creative thinking happen through a coalition outside this group, or within Energy Trust?

Fred: There is thinking about how we might reduce program costs and what objectives would that meet. We need guidance on how we shape that project. We will look at what the Existing Homes program is.

Scott Davidson: I came in thinking that the exceptions would be a path to a whole-home retrofit, but the UCT findings make that difficult. When you think about the homeowner's needs, they don't have complete control over their heat source. It might be good to look at a comprehensive solution.

Fred: The OPUC will look at how gas and electric look together, and we'll give additional analysis. We are going to think about how to balance program costs against savings.

Margie Harris: When this came up before, we determined that we are the starting point for responding to the OPUC order; so we are setting the table for the dialog. We have references to other ideas and research, but we aren't going as deep as others can, as part of the process. We'll frame things up, and we want others to participate in the process with the OPUC.

Juliet: The OPUC wants suggestions, and it would be great to provide comments early and often.



Scott Davidson: I fear that one voice will not change things. We need some mechanism to collaborate on ideas to create some powerful and feasible concepts.

Juliet: Joint comments come up and grab people's attention. During the process, if people want to organize and file joint comments, it can help.

Stephanie Vasquez: The load is not as big as we thought and savings weren't as much by a quarter. What are the pieces of the pie represented by the measures?

Fred: The columns show the specific measures as percentages. Everything at issue was about 6 percent of program savings on up to 18 percent for Existing Homes in 2013. We run many programs with smaller issues than we've seen for Existing Homes. In Existing Homes insulation, we are retrofitting entirely new things, which is more expensive than upgrading replacement equipment that the customer plans to buy without us. And we're engaging in many small projects.

## **5. Resource assessment**

Kim Crossman: The agenda item on resource assessments no longer fits with our schedule. The slides describe the results of a published study, which is available on our website at [www.energytrust.org/reports](http://www.energytrust.org/reports) under "Resource Assessments," and nothing controversial came out of it. We decided to push it from the meeting today. Please send questions or concerns to Ted Light at [ted.light@energytrust.org](mailto:ted.light@energytrust.org) if you read the study and have any questions or comments.

## **6. Residential HVAC Market Study**

Paul Sklar: This is a quick update on a new study. We didn't see a great deal of change between the 2012 study and this year's. We aren't proposing any changes to residential HVAC equipment.

Holly Meyer: We've heard a lot of anecdotal evidence that a lot of gas furnaces are going back to 80 percent. Did you look at that?

Ted Light: Yes, we included gas furnaces in the study, but the findings did not support that.

Kim: This is following our agreement that we'd focus our time at Conservation Advisory Council on measures where there is a possibility of a significant change.

## **7. Measure update: Residential windows**

Marshall Johnson: This study originated because there were observations that indicated the baselines for windows are shifting, and we haven't made adjustments to windows for a long time. We've had two tiers for a long time, and we get anecdotal evidence that there's a high free ridership rate, while our impact is low on windows. We know there's a new ENERGY STAR structure coming at the national level.

Paul: The proposed ENERGY STAR specifications are planned for January 2016. There is a prescriptive measure for U-Value 0.27 or better windows. An alternative is based on equivalent energy performance criteria as defined by ENERGY STAR, which allow slightly higher U-Values for a higher Solar Heat Gain Coefficient to get more passive solar heating. That motivated the suggested changes.

The second motivation for change is a market study that Energy Trust hired a third-party contractor to do in the third quarter of 2013. It is part of the packet and slides.

The baseline showed two peaks in the proportion of sales from different window efficiencies from U-Values of 0.35 to 0.33 and 0.29 to 0.30.

We wanted to come up with a picture of the market that exists outside our programs to use as a baseline. To better reflect the market, we adjusted the sales date to pull out Energy Trust participants who were not free riders. This allows us to measure efficiency against the natural market baseline.

Marshall: Paul attempted to remove our influence from the data that was studied.

Paul: The market baseline is the weighted average in blue, or 0.334. The current baseline we use is 0.35. There have been changes to the program volume over time with windows. It increased in 2011 when we dropped the second measure requirement. We also entered the market with 0.25 or better windows.

To calculate savings, we are using evaluated program data from billing analysis. This information came from 2008 and 2009 data. Prior to 2010, there were few tier two windows in the program, so we used a modeled estimate from the Regional Technical Forum. The suggested change to the savings methodology is to estimate tier two savings on a straight line extrapolation from tier one. Gas savings from tier one used to be 0.29 therms per square foot. They are now 0.196 therms per square foot, due to the baseline change. With the new savings methodology, tier two savings would increase. They were 0.42 therms per square foot, and are now 0.475 therms per square foot.

Marshall: The new methodology allows us to capture greater savings for tier two windows and the incremental amount increases for tier one.

Paul: We don't use wholesale when calculating costs, so we have to convert the data from the wholesale cost estimates in the market study to retail, using the ratio of the wholesale costs from the study to the 25th percentile cost of windows installed in the program. Rather than take the median we took the 25th percentile cost. That is intended to represent the incremental cost of a basic efficient window without extra features. Market data for tier one and two are shown in the slides.

Since the costs were previously from 2009 data, they have changed, primarily for tier two. The incremental cost for tier two windows has gone up from \$2.25 per square foot to \$4.36.

The benefit cost ratios all pass. We calculated the Utility Cost Test benefit cost ratio to come out to 1.0 for gas heated homes. By doing that, we identify the maximum possible incentive amount. The highest levels we can offer would be \$1.78 for tier one windows and \$4.31 for tier two windows.

Kim: For incentive design, Planning staff is providing us with the maximum that could be offered for a measure, the ceiling. But of course, we don't want to pay more than is needed to generate activity. Knowing the maximum is an important input for the programs to determine what the actual incentive level should be to generate activity.

Marshall: We have program costs on top of that, so just because it passes doesn't mean we can set incentives at that level. This information comes in time to help with budgeting. The majority of windows in our program come in at U-Values of 0.30 and 0.29. We want installers to work in alignment with ENERGY STAR. We want the ceiling of tier two to push contractors to demand

more from manufacturers. Right now they are tooling to 0.30 and 0.29. We aligned with the Department of Energy's program before and realized it was a stretch. Our tier two was intended to drive a higher level of efficiency, but it's really a minority of program activity. By making this adjustment now, we can be ready for DOE transitions in 2016.

Paul: Energy Trust will do evaluations of these new measures. We have data accumulating for more efficient windows, and we will get more billing analysis on them. We've been in the market for quite some time, as has NEEA for electric-heated homes, and we want to look at options for market transformation for windows in gas-heated homes for Existing Homes.

If we assume a similar market share in 2015 to 2013, the impact is minimal for electric, but more for gas. It aligns with the next generation of ENERGY STAR and recognizes the market shift.

Things are up in the air with the OPUC docket, so we have not settled on an incentive design yet. We are confident in the ceiling adjustment for the tier two and wanted to get that information out now. We will come back to this group later with more information.

Scott Inman: You've offered gas and electric homes the same incentives for a while, but it looks like you could offer more for electric. Did you look at that? Multifamily has different incentives. Marshall: That's true, and we have considered offering different incentives. We looked at that for air sealing for example, and discussed it with the Conservation Advisory Council. There is an issue of how we sell that to customers and keep incentives simple. We could have higher incentives for electric.

Holly Meyer: When you put in windows and a thermostat, and bundle other things, it becomes murkier to evaluate.

Scott Inman: When you make the change, I think the percentages of better windows will increase. You talk about additional benefits from many things, but triple-paned windows have detriments. To get to 0.27 they don't have to be triple-paned.

Kim: So, to recap, Scott, you are saying that the design shift we are proposing for windows seems like it will work, and also that we could consider paying different incentives for gas and electric. Both Jim and Holly seemed to think that having different incentives for gas and electric creates new complexities that need to be considered. Is that correct?

All agreed.

Marshall: It might make strategic sense to look at different incentives for other measures. Adding more money here might increase free ridership and hurt us more.

Wendy Gerlitz: When you get to 0.25 or lower, they jump up in cost quite a bit. Would you do a tier three to encourage more efficient windows, or would it add confusion?

Marshall: The push-pull strategy is to keep the existing tier structure in place, but we could potentially add a new tier when we change to 0.27. We want to encourage people to go there. The windows market is complex, and few people wanted to give us this information. It may be more about the strategy than putting costs on it.

Scott Inman: You lost the tax credit in 2013, especially for box stores that may go backward in terms of efficiency.

Wendy: Windows are a long-term investment. If you have these more efficient ones available and the homeowner is on the verge of going more efficient, they will still get the same incentives either way. I'm not sure it makes sense from a consumer standpoint. Why spend so much more on windows if you don't get more of an incentive?

Paul: We want to look at bringing them back in at some point, but I have concerns with adding another tier.

Scott Inman: The highest efficiency is 0.22, but you add 50 percent to weight and 50 percent to wear and tear. The technology moves quickly, and who knows where it will be in five years? I'm in favor of adding another tier.

Peter West: There is always a trade-off when you're looking at a program with a UCT of 0.7. Simplicity sells, and the Conservation Advisory Council is a sophisticated audience. We sacrifice some things to reach the right audience. There are two distributors that do most of what we get in terms of savings. We have to consider that.

Fred: NEEA has been exploring an initiative to build a supply chain to get more efficient windows at volume. It's a struggle. There are things that could work out. People who care a whole lot seem to move without us so we may not need a higher incentive for these windows at this early point.

#### **8. Public comment**

There were no additional comments.

#### **9. Meeting adjournment**

The meeting adjourned at 4:15 p.m. The next Conservation Advisory Council meeting is scheduled on July 23, 2014.

## Briefing Paper Market Indicators Report

July 21, 2014

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The purpose of this report is to track and assess changes in key economic indicators in an attempt to gain a better understanding of how demand for Energy Trust programs will respond to changing market dynamics. By monitoring the behavior of several widely used macro-level indicators we hope to stay closely attuned to any signs of improvement or further worsening of economic conditions, thereby providing Energy Trust program managers with the ability to respond to changes accordingly.

Halfway through 2014, we continue to take stock of the progress of the economic recovery after regional and national economists, including outgoing Federal Reserve Chair Ben Bernanke and his replacement, Janet Yellen, have been cautiously optimistic that the country is on the path to recovery. In 2013, unemployment levels in Oregon followed national trends and decreased from 8.3% to 7.1%. Thus far in 2014, those numbers have continued to improve, albeit with some turbulence in Oregon in the last couple months. The most recent statistics available for May put the unemployment rate at 6.9%, a slight increase from the low of 6.8% in April. This is compared to the nation's rate of 6.3%. Construction permits are thus far roughly matching 2013 numbers in Oregon, but are stronger in the multifamily sector and are projected to continue improving. Both the Oregon Employment Department and University of Oregon Economic Forum are projecting continued growth and recovery in Oregon through 2014.

Federal Reserve Chair Janet Yellen spoke in April at the Economic Club of New York and echoed this cautious optimism. She summarized the current state of the economic recovery, while detailing a projected timeline for full recovery. She stated:

Nearly five years into the expansion that began after the financial crisis and the Great Recession, the recovery has come a long way. More than 8 million jobs have been added to nonfarm payrolls since 2009, almost the same number lost as a result of the recession. Led by a resurgent auto industry, manufacturing output has also nearly returned to its pre-recession peak. While the housing market still has far to go, it seems to have turned a corner. It is a sign of how far the economy has come that a return to full employment is, for the first time since the crisis, in the medium-term outlooks of many forecasters. It is a reminder of how far we have to go, however, that this long-awaited outcome is projected to be more than two years away...projections for the unemployment rate at the end of 2016 is 5.2 to 5.6 percent, and for inflation the central tendency is 1.7 to 2 percent. If this forecast was to become reality, the economy would be approaching what my colleagues and I view as maximum employment and price stability for the first time in nearly a decade. I find this baseline outlook quite plausible.<sup>1</sup> —Janet Yellen, 4/16/14

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<sup>1</sup> <http://www.federalreserve.gov/newsevents/speech/yellen20140416a.htm>

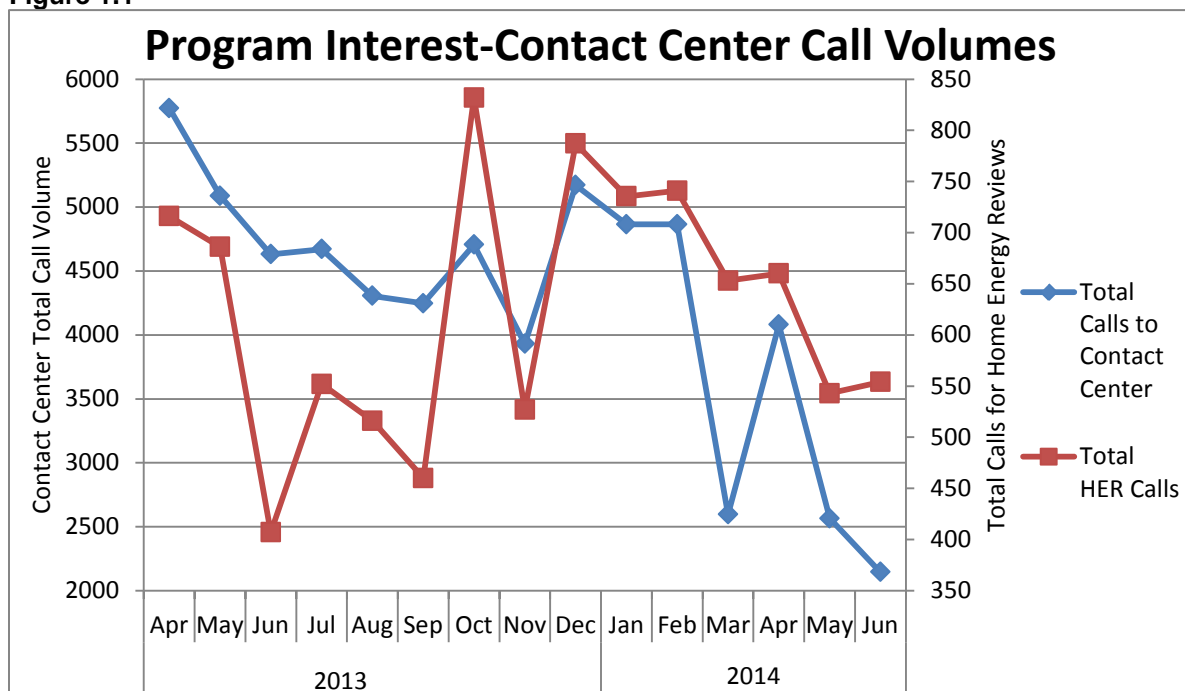
The Federal Open Market Committee (FOMC) recently released another optimistic statement on June 18th, 2014, stating:

...growth in economic activity has rebounded in recent months. Labor market indicators generally showed further improvement. The unemployment rate, though lower, remains elevated. Household spending appears to be rising moderately and business fixed investment resumed its advance, while the recovery in the housing sector remained slow. Fiscal policy is restraining economic growth, although the extent of restraint is diminishing. Inflation has been running below the Committee's longer-run objective, but longer-term inflation expectations have remained stable...When the Committee decides to begin to remove policy accommodation, it will take a balanced approach consistent with its longer-run goals of maximum employment and inflation of 2 percent. The Committee currently anticipates that, even after employment and inflation are near mandate-consistent levels, economic conditions may, for some time, warrant keeping the target federal funds rate below levels the Committee views as normal in the longer run. <sup>2</sup> –FOMC, 6/18/14

## 1.1 Energy Trust Programmatic Indicators

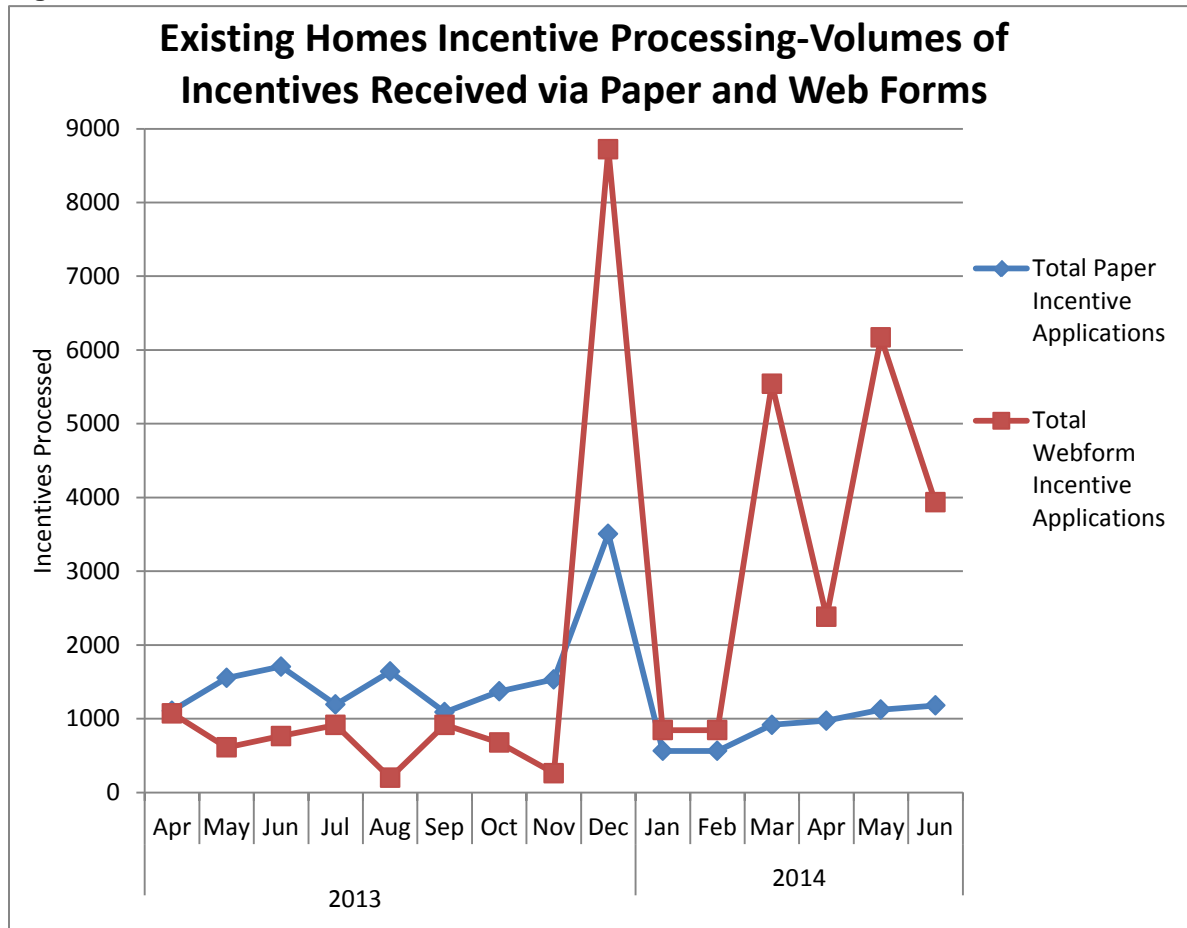
Activity in Energy Trust's Existing Homes program is presented here as general indicator of overall Energy Trust program interest. While the number of calls over the last few months is lower than comparable months in the spring of 2013, call center volume and HER calls continue to be generally consistent with historical patterns, with more calls received in fall and winter months compared to the summer. The noticeable peaks and valleys are generally the result of initiatives, offerings, marketing efforts and process improvements that generate calls or reduce customer follow-up.

Figure 1.1



<sup>2</sup> <http://www.federalreserve.gov/newsevents/press/monetary/20140618a.htm>

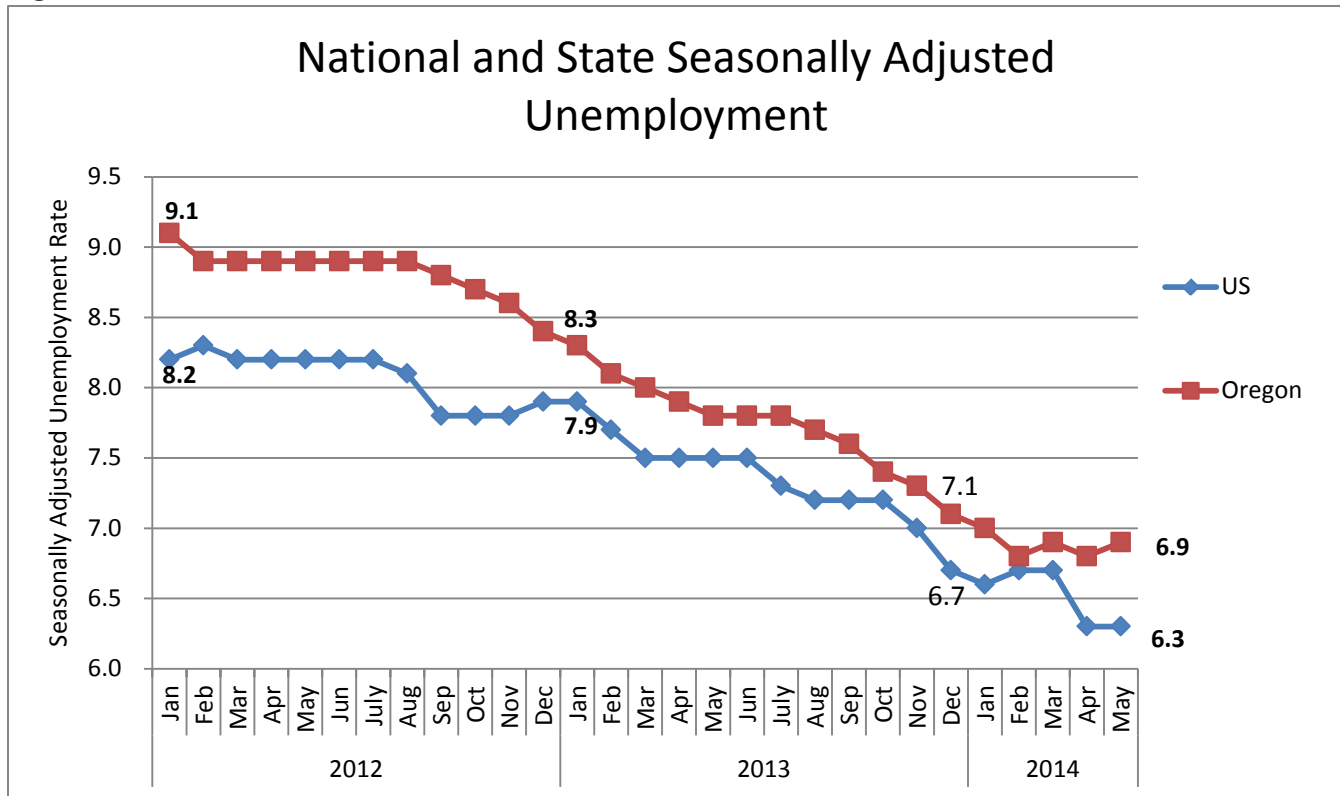
Figure 1.2



The number of paper processed incentives has remained fairly consistent across 2013-2014, but web processed incentives have taken on a different pattern. The huge spike in web form applications in December, 2013 was due to a big end of the year ESK push, as well as general end of the year increased project bookings. The spikes in web form applications in March and May of 2014 are due primarily to PMC paid applications from the deployment of ESKs. In 2013, 52% of incentives were web processed, while at the end of Q2 in 2014 the % of web form-processed applications is at 79%.

## 2.1 Macroeconomic Indicators

Figure 2.1



2013 proved to be a major year in the economic recovery for both the nation and Oregon, as unemployment rates fell from 7.9% to 6.7% and 8.3% to 7.1% respectively. In late January, 2014 the Oregonian stated, "Oregon's economic recovery is taking hold"<sup>3</sup>. Since a low of 6.8% in February however, Oregon's unemployment rate has held flat, and most recently thousands more have been reported as unemployed, which has resulted in an increase to 6.9%. The Oregonian writes, "May marks the 11th consecutive month that Oregon has gained new jobs, and nearly a year since the state's economic recovery started picking up in earnest. Yet the unemployment rate edged up, from a revised 6.8 percent in April to 6.9 percent in May. The uptick could be a sign that people who had previously stopped looking for work are trying again (and being counted again) as the economy improves"<sup>4</sup>. This is in stark contrast to the national trend, as the nation's unemployment rate has continued to drop to 6.3%.

New reports published by the Oregonian midway through July (data not reflected in this graph), state that, "Oregon's economy lost thousands of jobs in June, ending a months-long streak of hiring gains, according to a report out Tuesday. The state Employment Department said employers cut 4,300 jobs during the month. The losses were

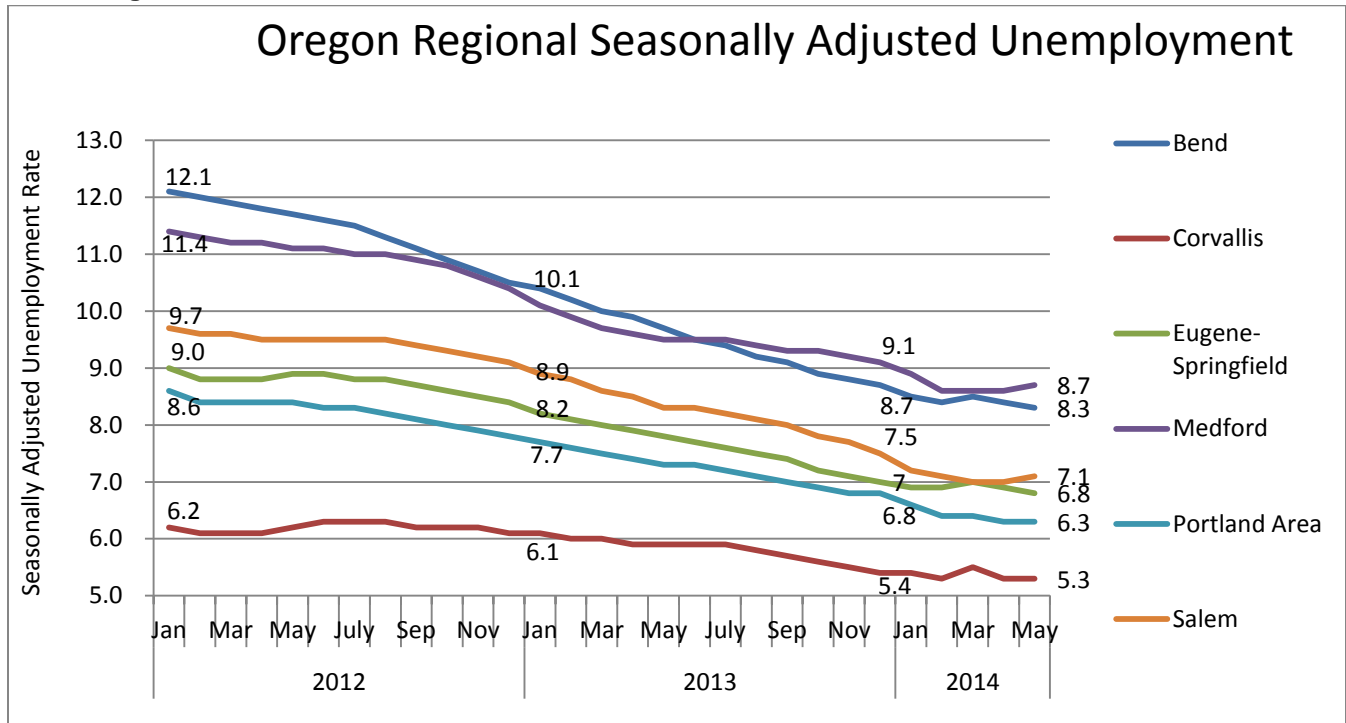
<sup>3</sup> [http://www.oregonlive.com/money/index.ssf/2014/01/oregon\\_unemployment\\_rate\\_falls\\_to\\_new\\_5-year\\_low\\_as\\_2013\\_becomes\\_standout\\_year\\_for\\_states\\_economic\\_recovery.html](http://www.oregonlive.com/money/index.ssf/2014/01/oregon_unemployment_rate_falls_to_new_5-year_low_as_2013_becomes_standout_year_for_states_economic_recovery.html)

<sup>4</sup> [http://www.oregonlive.com/money/index.ssf/2014/06/oregon\\_adds\\_jobs\\_for\\_11th\\_straight\\_month\\_despite\\_unemployment\\_rise.html](http://www.oregonlive.com/money/index.ssf/2014/06/oregon_adds_jobs_for_11th_straight_month_despite_unemployment_rise.html)



widespread, spanning blue-collar and white-collar industries, as well as low- and highly-paid jobs”<sup>5</sup>. It is uncertain at this point whether these new developments are temporary statistical blips in the data or evidence of a new trend.

**Figure 2.2**

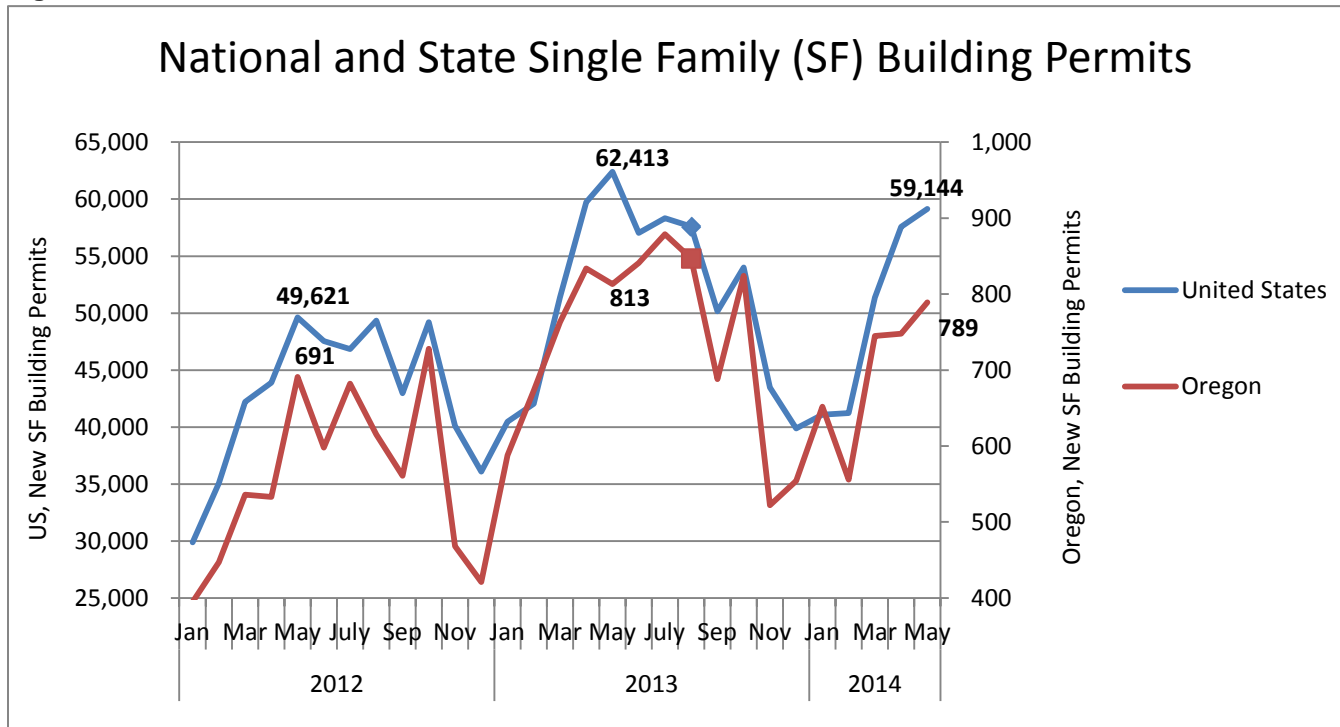


The Central and Southern (Bend/Medford) areas continue to have the highest unemployment rate in the state, but these areas have seen continued drops in unemployment rates in 2014. Economist D. Runberg at the State Employment Department states, “Central Oregon is growing again. Jobs are coming back to the region and Deschutes County is experiencing some of the fastest population growth in the West. Expect to see a surge in construction employment this summer as new homes, apartments, and commercial buildings break ground to meet the increased demand for housing. Expect another busy summer tourism season with initial figures from the spring showing a high number of visitations in overnight accommodations”<sup>6</sup>.

<sup>5</sup>[http://www.oregonlive.com/money/index.ssf/2014/07/oregon\\_loses\\_thousands\\_of\\_jobs\\_in\\_june\\_the\\_first\\_setback\\_in\\_nearly\\_1\\_year.html](http://www.oregonlive.com/money/index.ssf/2014/07/oregon_loses_thousands_of_jobs_in_june_the_first_setback_in_nearly_1_year.html)

<sup>6</sup><http://www.qualityinfo.org/olmisj/ArticleReader?print=1&itemid=00002496>

Figure 2.3



While the construction industry was hit hard during the recession, and accounted for a considerable number of the unemployed and underemployed population, 2013 showed definite improvement over 2012 as Oregon continued to closely follow US seasonal trends, while outstripping its growth rate in some months. As 2014 begins to unfold, Oregon has shown an increase in permits over 2013 during the winter months, but is trending slightly below the 2013 numbers for the spring, and is falling short of national trends for the spring and early summer months when compared to national numbers.

The Oregon State Employment Department notes that “In the past 12 months, job growth accelerated....job gains were broad based as most of the major industries grew by close to 3 percent. The primary exception...is construction, which grew by 10.5 percent, or 7,800 jobs, during that time”<sup>7</sup>. The hiring trends seem to be setting the stage for a big year of construction, despite the lower numbers of permits and suggests that 2014 will likely match if not exceed its 2013 performance.

Similar to the statewide vs. National permit numbers shown in Figure 2.3, Figure 2.4 below indicates similar numbers and trends by season between 2013 and 2014, with visible increases over 2012. The Portland metro, Bend and Salem areas show the strongest growth in construction permits over 2012, while Eugene-Springfield and Corvallis are still at rates similar to 2012.

<sup>7</sup> <http://www.qualityinfo.org/olmisj/ArticleReader?itemid=00009230>

Figure 2.4

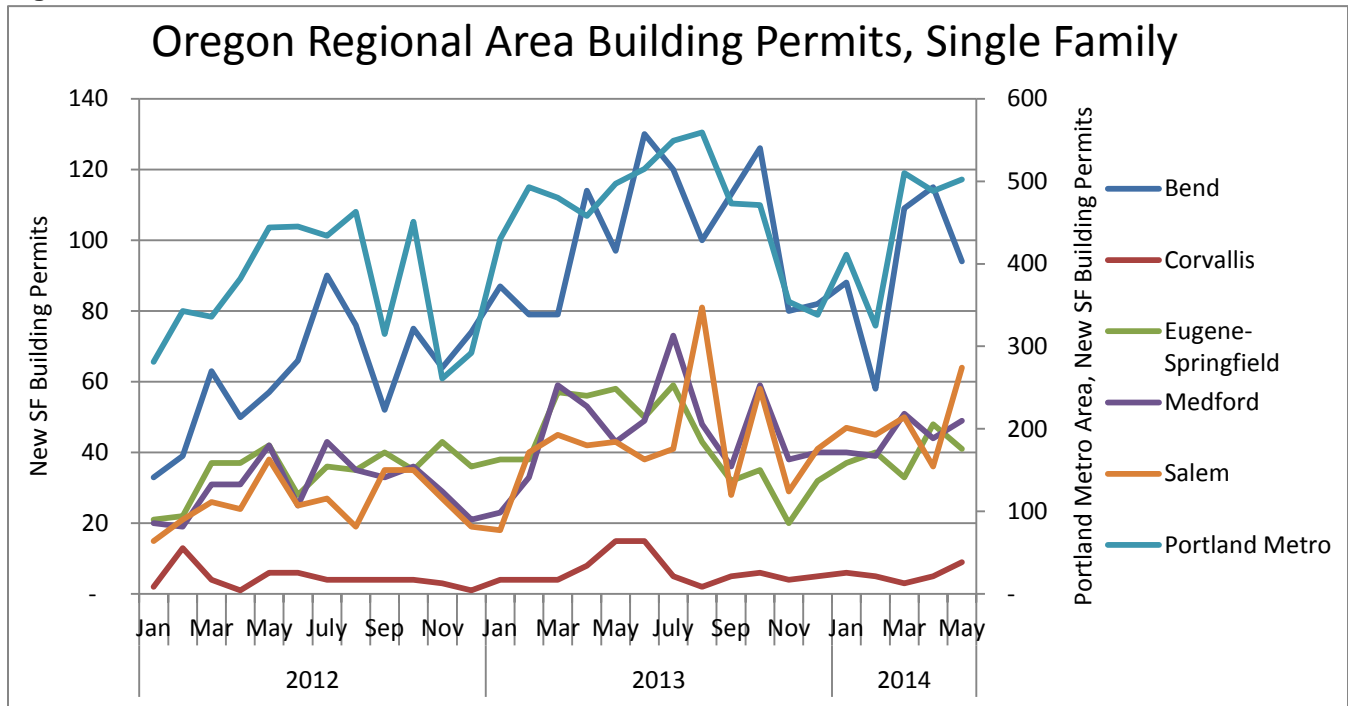
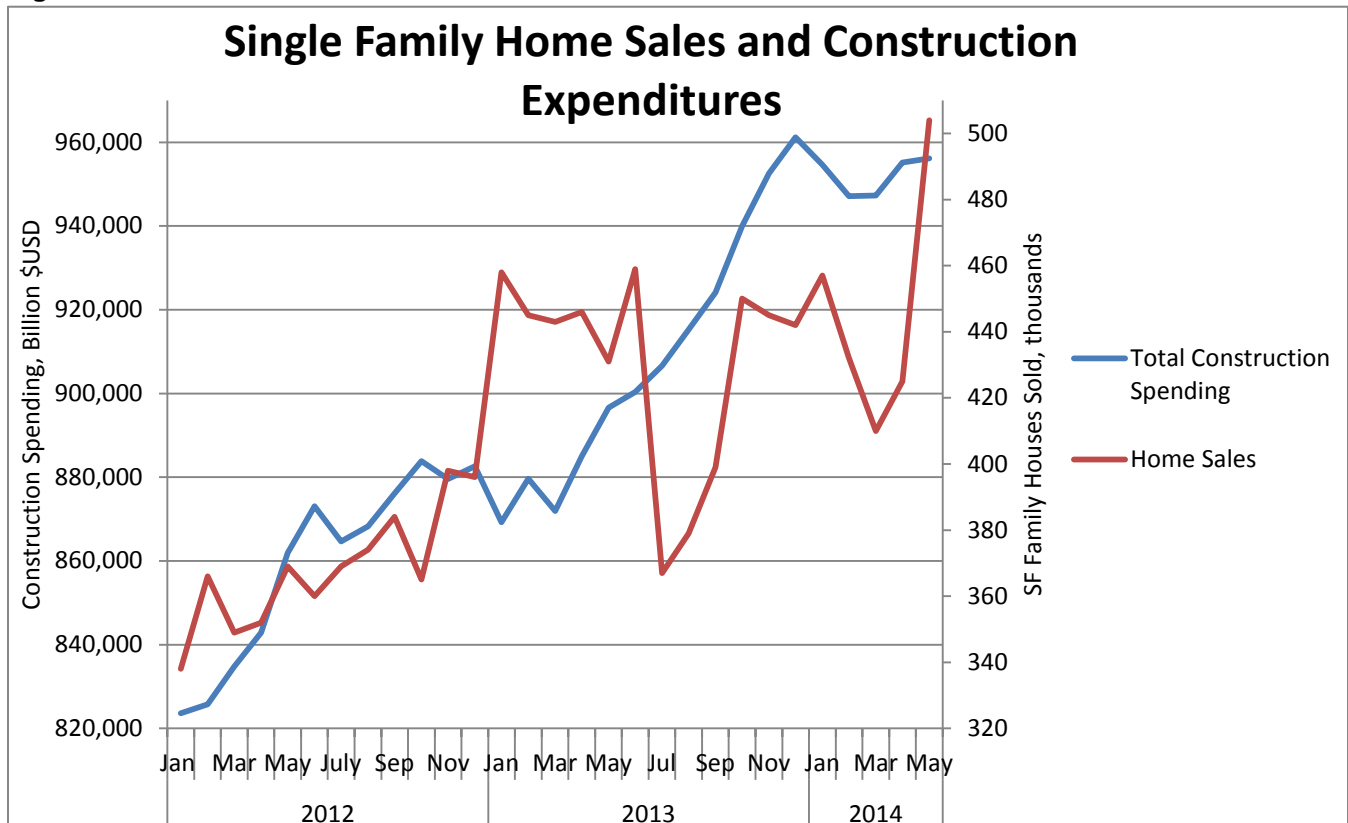
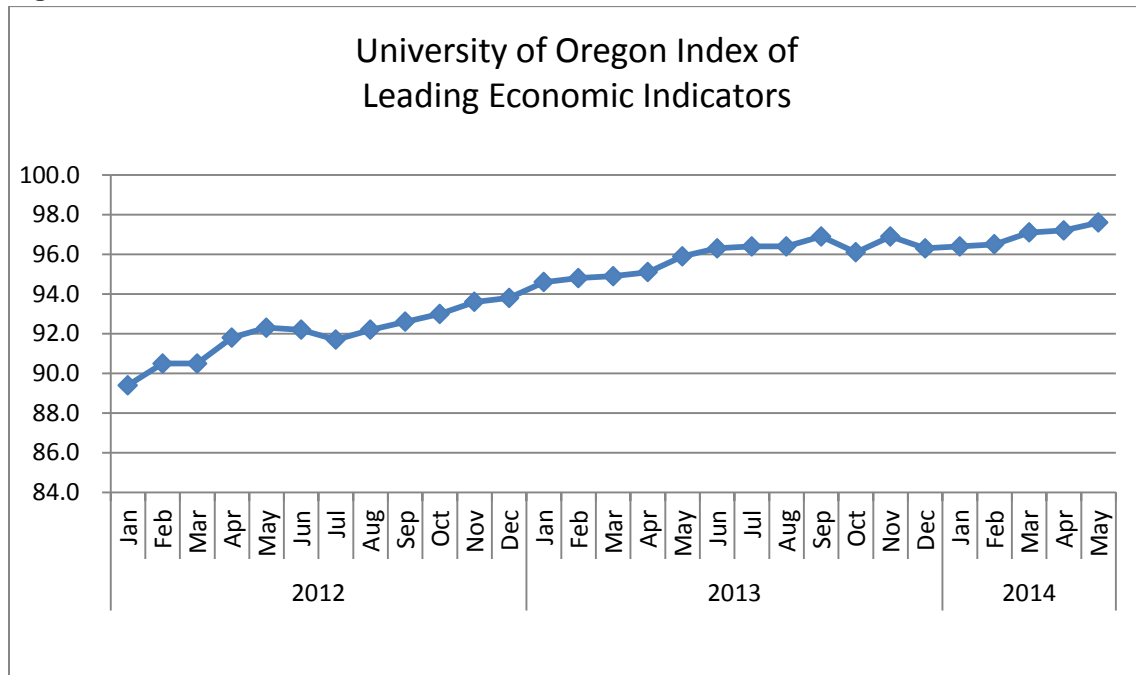


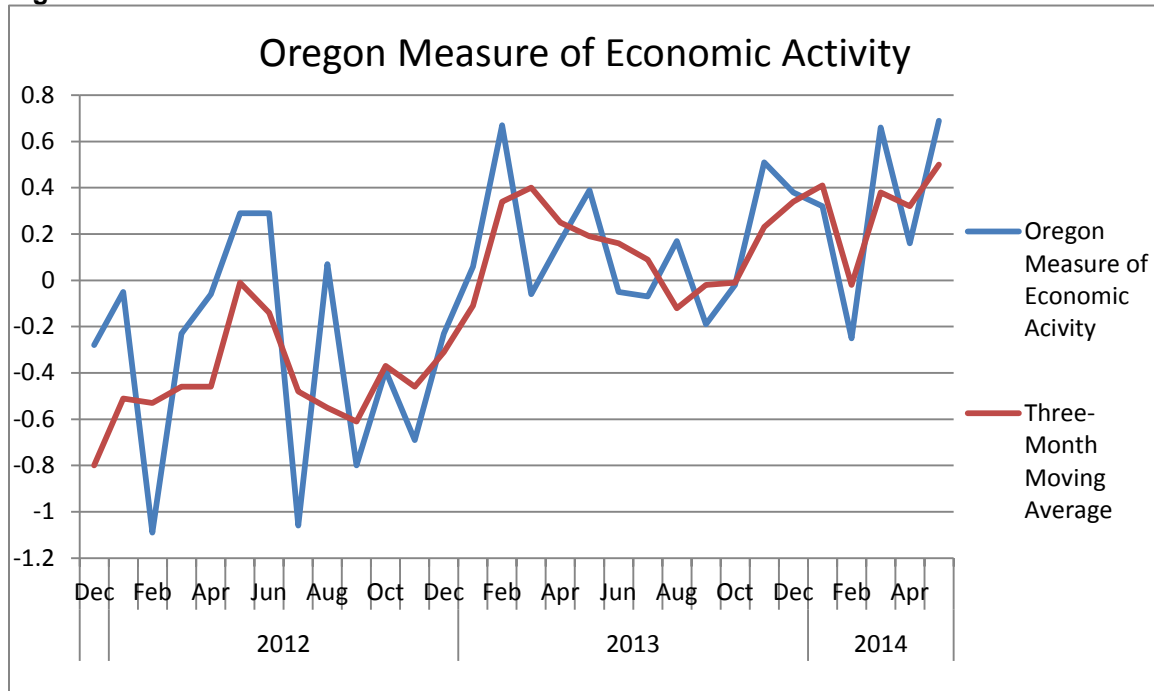
Figure 2.5



**Figure 2.6**

The University Of Oregon Index Of Economic Indicators rose 0.4 percent in May, the 5th month in a row of positive growth; the UO Index has risen in ten of the past twelve months. Initial unemployment claims fell again to the lowest level since 2006; the pace of layoffs is consistent with that of previous periods of solid economic growth in Oregon and ongoing improvement in labor markets. Residential building permits (smoothed) rose, with the gains largely attributable to an increase in multifamily permits. The market for single-family construction remains constrained. Initial unemployment claims dropped sharply and are now in a range consistent with strong job growth in Oregon, suggesting that the pace of hiring may accelerate in the months ahead.<sup>8</sup>

<sup>8</sup> <http://econforum.uoregon.edu/files/2014/07/may14uoindex-1h2m233.pdf>

**Figure 2.7**

The Oregon Measure of Economic Activity rose to 0.69, compared to a revised increase of 0.16 the previous month. The three-month moving average, which smooths month-to-month volatility in the measure, is 0.50 where “zero” for this measure indicates the average growth rate over the 1990-present period. All sectors contributed positively to the measure.

The two indicators suggest continued growth in Oregon at an above average pace of activity. Further gains are likely as the national economy will continue its general upward trajectory for the foreseeable future.<sup>9</sup>

<sup>9</sup> <http://econforum.uoregon.edu/files/2014/07/may14uoindex-1h2m233.pdf>

Figure 2.8

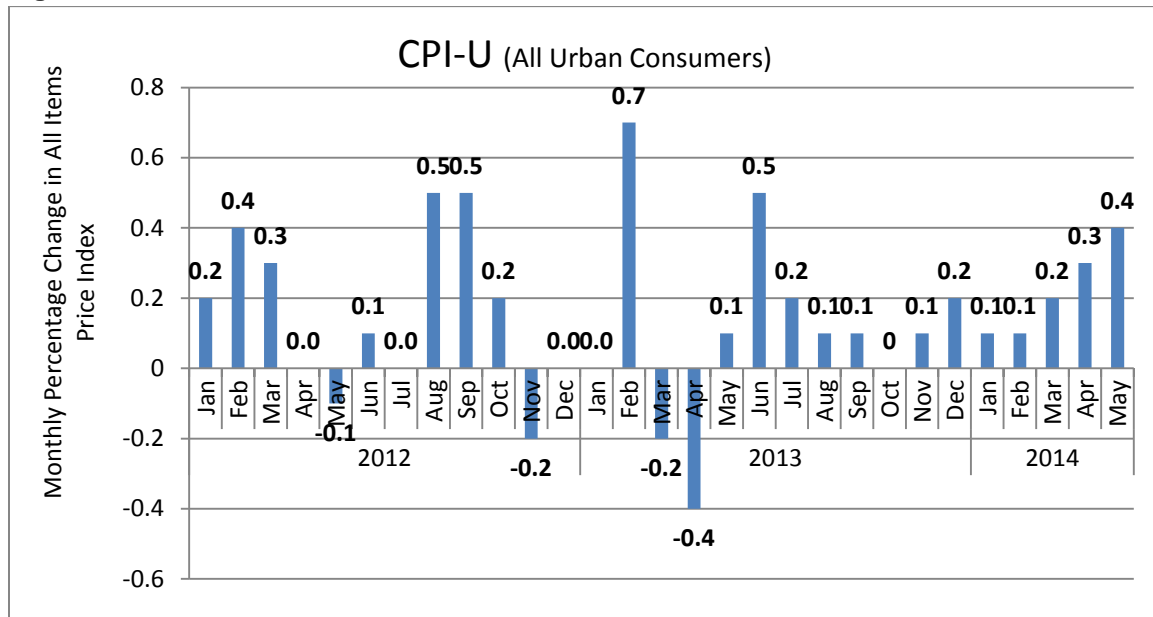
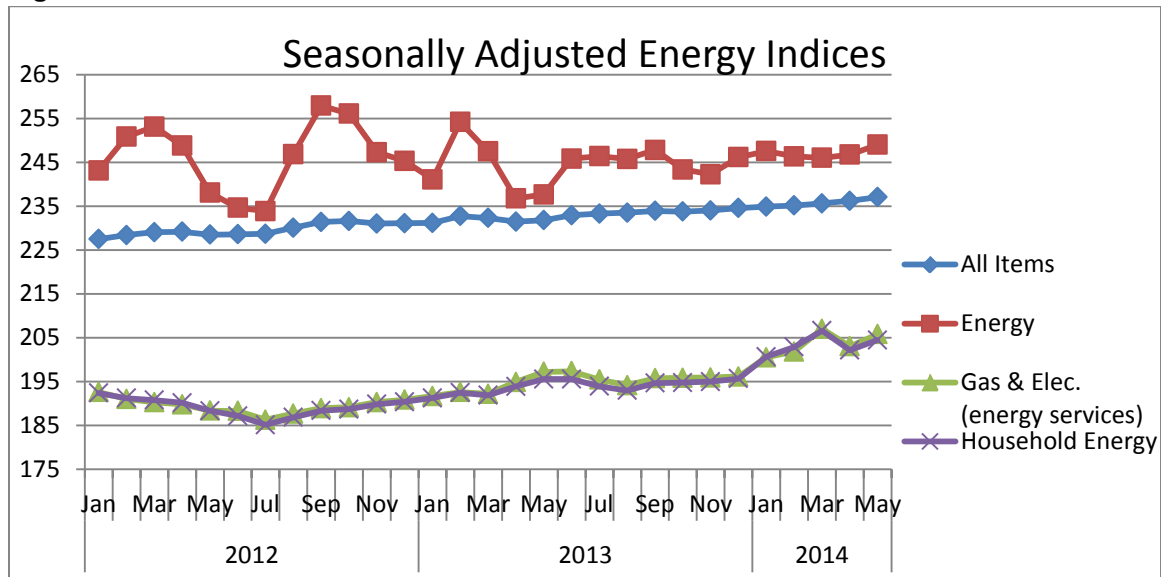


Figure 2.9



The Consumer Price Index for All Urban Consumers (CPI-U) increased 0.4 percent in May on a seasonally adjusted basis. Over the last 12 months, the all items index increased 2.1 percent before seasonal adjustment. The seasonally adjusted increase in the all items index, the largest since February 2013, was broad-based. The indexes for shelter, electricity, food, airline fares, and gasoline were among those that contributed. The food index posted its largest increase since August 2011, with the index for food at home rising 0.7 percent.<sup>10</sup>

<sup>10</sup> <http://www.bls.gov/cpi/cpid1405.pdf>

The energy index increased 0.9 percent in May due to increases in electricity and gasoline, after rising 0.3 percent in April. The electricity index rose 2.3 percent in May after declining 2.6 percent in April. The decline is largely due to semiannual climate credits applied to electricity bills in California. The credits were applied to bills in April, which caused prices to appear lower than normal.; The May increase reflects those bills returning to normal levels that do not include the credit. The index for natural gas declined in May, falling 1.7 percent after increasing in each of the four previous months.<sup>11</sup>

### **Institute of Supply Management Report on Business**

According to the July, 2014 *Manufacturing Report on Business* from the Institute of Supply Management, economic activity in the nation's manufacturing sector expanded in June for the 13th consecutive month, and the overall economy grew for the 61st consecutive month. Of the 18 manufacturing industries, 15 are reporting growth in June. Industry respondents from 3 of the major manufacturing industries in Oregon provided statements on recent economic conditions. A representative of the 'Fabricated Metal Products' industry stated, "The strength of the automotive industry continues to drive the high demand for steel." A 'Computer & Electronics Products' representative stated, "Another strong month overall." A representative from the 'Wood Products' industry stated, "Orders are picking up, but pricing has declined in last month. Not the norm for this time of year."<sup>12</sup>

### **Utility Rate Cases**

#### *Natural Gas*

Natural gas prices are likely headed higher this fall, according to officials with Oregon's three regulated natural gas providers. That was the message they delivered to the Oregon Public Utility Commission (OPUC) during the annual Gas Outlook Meeting on July 8, 2014. Pressure is being put on natural gas prices by an extremely cold winter that has depleted reserves, and a shift to natural gas from coal to generate electricity said company officials. "We are at our lowest gas storage levels since 2003," said NW Natural's Randy Friedman. NW Natural expects their increase in middle single digits. Avista Utilities predicts an increase of 8 to 10 percent. And Cascade Natural Gas said it should be in the same range as the others.<sup>13</sup>

A review of articles from Bloomberg Energy, which cover the viewpoint of investors, provides some interesting context to this statement and to some degree counters the position offered by the Oregon utilities. Investors highlight two important trends that have been unfolding, namely, increased storage reserves due to steadily increasing production from hubs across North America, coupled with a cooler than average summer. This has reduced electricity demand from air conditioning loads. Because

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<sup>11</sup> <http://www.bls.gov/cpi/cpid1405.pdf>

<sup>12</sup> <http://www.ism.ws/ISMReport/MfgROB.cfm?navItemNumber=12942>

<sup>13</sup> <http://www.puc.state.or.us/Pages/news/2014/201414.aspx>

Power plants account for 31 percent of gas demand, according to the Energy Information Administration<sup>14</sup>, the forecasted price of gas has been declining over the last two months. Overall, weather speculation appears to be driving weekly fluctuations in the price. The NW gas utility's assessment appears to be a conservative position based on regional rather than nationwide trends and a longer-term outlook represented within the Bloomberg assessment.<sup>15</sup>

### *PGE*

On February 13, 2014, PGE filed a general rate case request with the OPUC to review and approve customer rates changes beginning on January 1, 2015. The utility is asking for an overall rate increase of 4.6 percent or \$81.5 million annually. As proposed, a typical residential customer who uses 840 kilo-watt hours per month (kWh) would see their bill increase by about five dollars. The filing proposes to adjust rates in three phases. The request is driven primarily for the addition of two new generating resources. The resources include the Port Westward 2 expansion (PW2) and the Tucannon River Wind Farm. PW2 is expected to go into service the first quarter of 2015, and Tucannon in the first half of 2015. The rate change, without the costs of the new generating plants, is 0.9 percent overall or \$16.5 million. The OPUC staff and customer groups will take approximately 10 months to review the utility's request. The Commission may accept, reject, or modify the utility's filing.<sup>16</sup>

### *Pacific Power*

In the fall of 2013, the OPUC formalized an all-party settlement with customer groups that raised electric rates for Oregon customers of PacifiCorp by 1.9 percent overall or \$23.7 million, beginning January 1, 2014. As part of this resolution, Pacific Power agreed to forego a general rate case filing in Oregon in 2014. Following the January 1, 2014 implementation of rates in this case and the potential June 1, 2014 implementation of the Lake Side 2 tariff rider, the earliest effective date for Pacific Power's next general rate case will be January 1, 2016. The parties may file for deferrals, but agree their goal is to minimize rate changes during this period.<sup>17</sup>

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<sup>14</sup> <http://www.eia.gov/forecasts/steo/report/natgas.cfm>

<sup>15</sup> <http://www.bloomberg.com/news/2014-07-18/natural-gas-trades-near-7-month-low-on-weather-outlook.html>

<sup>16</sup> [http://www.puc.state.or.us/Pages/electric\\_gas/2014-PORTLAND-GENERAL-ELECTRIC-%28PGE%29-RATE-CHANGE-REQUEST-UE-283.aspx](http://www.puc.state.or.us/Pages/electric_gas/2014-PORTLAND-GENERAL-ELECTRIC-%28PGE%29-RATE-CHANGE-REQUEST-UE-283.aspx)

<sup>17</sup> <http://apps.puc.state.or.us/orders/2013ords/13-474.pdf>



## **Around the State**

### **Portland and Surrounding Areas**

Portland banking startup Simple Finance Technology Corp. was sold to Spanish bank BBVA and will operate separately from BBVA's main banking business. It plans to add more than 100 employees this year. *The Oregonian*, 3/21/2014

A 223-room Residence Inn by Marriott will open in Portland's Pearl District. *Portland Business Journal*, 4/8/2014

CarMax, Inc. is hiring about 175 people for stores that will open in Clackamas and Beaverton. *Clackamas Review*, 7/2/2014

A four-story, 146-room Marriott Residence Inn will open in Hillsboro later this year. *The Oregonian*, 6/24/2014

Construction began on a 211,000-square-foot FedEx Ground distribution center on Swan Island in Portland. It is expected to open in October 2015 and will employ about 150 people. *The Oregonian*, 6/24/2014

Puppet Labs, an IT automation software maker in Portland, raised \$40 million in venture capital. It recently hired 18 workers and plans to add more. *Portland Business Journal*, 6/19/2014

### **Oregon Coast**

Solar Tracker 360 opened in Tillamook. It makes portable solar chargers. *Headlight-Herald*, 4/2/2014

The U.S. Department of Energy conditionally authorized Jordan Cove Energy Project in Coos Bay to export liquefied natural gas to non-Free Trade Agreement countries. The approval allows it to export LNG at a rate of 0.8 billion standard cubic feet per day for 20 years. *The World*, 3/24/2014

Lincoln County plans to add 4.5 FTE positions in the 2014-2015 fiscal year, the first employment increase in several years. It has eliminated about 65 positions since 2009. *News-Times*, 4/4/2014

Bornstein Seafoods purchased Astoria Pacific Seafoods' lease at the Port of Astoria, tripling its freezing capacity. It expects to hire 200 temporary workers for the new addition. *The Daily Astorian*, 6/5/2014

Lektro, an aircraft-tug manufacturing plant in Warrenton, plans to add 20 workers. *The Daily Astorian*, 6/19/2014

**Willamette Valley**

The Department of Veterans Affairs will build an outpatient clinic in north Eugene. It will open with about 120 employees and could increase to about 235. *The Register-Guard*, 4/11/2014

Shoei Electronic Materials will open a research and development and production facility in west Eugene. It will expand its nanotechnology called quantum dots, which are crystals used in display screens for more accurate colors and to draw less power. It will employ 20 people and could increase to 50 in the near future. *The Register-Guard*, 4/28/2014

McKenzie-Willamette Medical Center in Springfield will undergo an \$80-million renovation and expansion that is expected to be completed by 2018. *The Register-Guard*, 5/30/2014

Cosmos Creations, a maker of puffed corn snacks, plans to build a 135,000-square-foot factory in Junction City that could eventually employ up to 150 workers. *The Register-Guard*, 6/4/2014

Ninkasi Brewing in Eugene completed a \$24 million expansion that included a 23,000-square-foot brewery, an administrative building, and a distribution center. It plans to hire more workers this year. *The Register-Guard*, 6/22/2014

**Eastern Oregon**

The John Day-based Malheur National Forest hired about 40 employees, bolstering its staff to keep pace with the accelerated pace of restoration work on the forest. It is also adding 60 to 80 more seasonal workers than usual. *Blue Mountain Eagle*, 5/28/2014

Malheur Lumber Co. plans to add 20 to 30 jobs at its John Day mill, going beyond a single shift for the first time since 1998. *Blue Mountain Eagle*, 5/21/2014

**Central Oregon/Columbia Gorge**

Cloud Cap Technology in Hood River laid off about 25 people. It makes guidance systems, stabilized camera applications, and engines for unmanned aircraft systems. *Northwest News Partnership*, 4/1/2014

Backdrop Distilling will open in Bend this summer in a shared production space with GoodLife Brewing Co. *The Bulletin*, 6/13/2014

**Southern Oregon**

Fred Meyer in Grants Pass is undergoing a \$6.8-million renovation that will add a sushi/salad bar and a sporting-goods desk that sells guns. *Grants Pass Daily Courier*, 3/8/2014

Regence BlueCross BlueShield of Oregon plans to add 70 workers at its health care services operations center in Medford this year. *Mail Tribune*, 4/9/2014

Kairos, a treatment center in Grants Pass that works with at-risk youth, opened the Community Services Building at its new \$4.5-million Children's Mental Health Campus. A residential psychiatric facility is also under construction. *Grants Pass Daily Courier*, 3/30/2014

Caring Senior Service, an in-home senior care company, opened in Grants Pass. *Grants Pass Daily Courier*, 6/27/2014

## **Glossary of Energy Industry Terms**

*Glossary provided to the Energy Trust Board of Directors for general use. Definitions and acronyms are compiled from a variety of resources. Energy Trust policies on topics related to any definitions listed below should be referenced for the most up-to-date and comprehensive information. Last updated May 2014.*

### **Above-Market Costs of New Renewable Energy Resources**

The portion of the net present value cost of producing power (including fixed and operating costs, delivery, overhead and profit) from a new renewable energy resource that exceeds the market value of an equivalent quantity and distribution (across peak and off-peak periods and seasonally) of power from a nondifferentiated source, with the same term of contract. Energy Trust board policy specified the methodology for calculating above-market costs.

### **Aggregate**

Combining retail electricity consumers into a buying group for the purchase of electricity and related services. “Aggregator” is an entity that aggregates.

### **Air Sealing (Infiltration Control)**

Conservation measures, such as caulking, better windows and weatherstripping, which reduce the amount of cold air entering or warm air escaping from a building.

### **Ampere (Amp)**

The unit of measure that tells how much electricity flows through a conductor. It is like using cubic feet per second to measure the flow of water. For example, a 1,200 watt, 120-volt hair dryer pulls 10 amperes of electric current (watts divided by volts).

### **Anaerobic Digestion**

A biochemical process by which organic matter is decomposed by bacteria in the absence of oxygen, producing methane and other byproducts.

### **Average Megawatt (aMW)**

One megawatt of capacity produced continuously over a period of one year. 1 aMW equals 1 megawatt multiplied by the 8,760 hours in a year. 1 aMW equals 8,760 MWh or 8,760,000 kWh.

### **Avoided Cost**

(Regulatory) The amount of money that an electric utility would need to spend for the next increment of electric generation they would need to either produce or purchase if not for the reduction in demand due to energy-efficiency savings or the energy that a co-generator or small-power producer provides. Federal law establishes broad guidelines for determining how much a qualifying facility (QF) gets paid for power sold to the utility.

### **Base Load**

The minimum amount of electric power delivered or required over a given period of time at a steady rate.

**Benefit/Cost Ratios**

By law, Oregon public purpose funds may be invested only in cost-effective energy-efficiency measures—that is, efficiency measures must cost less than acquiring the energy from conventional sources, unless exempted by the OPUC.

Energy Trust calculates Benefit/Cost ratios (BCR) on a prospective and retrospective basis. Looking forward, all prescriptive measures and custom projects must have a total resource cost test  $BCR > 1.0$  unless the OPUC has approved an exception. As required in the OPUC grant agreement, Energy Trust reports annually how cost effective programs were by comparing total costs to benefits, which also need to exceed 1.0.

**Biomass**

Solid organic wastes from wood, forest or field residues which can be heated to produce energy to power an electric generator.

**Biomass Gas**

A medium Btu gas containing methane and carbon dioxide, resulting from the action of microorganisms on organic materials such as a landfill.

**Blower Door**

Home Performance test conducted by a contractor (or energy auditor) to evaluate a home's air tightness. During this test a powerful fan mounts into the frame of an exterior door and pulls air out of the house to lower the inside air pressure. While the fan operates, the contractor can determine the house's air infiltration rate and better identify specific leaks around the house.

**British Thermal Unit**

The standard measure of heat energy. The quantity of heat required to raise the temperature of 1 pound of liquid water by 1 degree Fahrenheit at the temperature at which water has its greatest density (approximately 39 degrees Fahrenheit).

**Cogeneration (Combined Heat & Power or CHP)**

The sequential production of electricity and useful thermal energy, often by the recovery of reject heat from an electric generating plant for use in industrial processes, space or water heating applications. Conversely, may occur by using reject heat from industrial processes to power an electricity generator.

**Compact Fluorescent Light Bulbs (CFL)**

CFLs combine the efficiency of fluorescent lighting with the convenience of a standard incandescent bulb. There are many styles of compact fluorescent, including exit light fixtures and floodlights (lamps containing reflectors). Many screw into a standard light socket, and most produce a similar color of light as a standard incandescent bulb.

CFLs come with ballasts that are electronic (lightweight, instant, no-flicker starting, and 10–15 percent more efficient) or magnetic (much heavier and slower starting). Other types of CFLs include adaptive circulation and PL and SL lamps and ballasts. CFLs are designed for residential uses; they are also used in table lamps, wall sconces, and hall and ceiling fixtures of hotels, motels, hospitals and other types of commercial buildings with residential-type applications.

**Conservation**

While not specifically defined in the law or OPUC rules on direct access regulation, “conservation” is defined in the OPUC rule 860-027-0310(1)(a) as follows: Conservation means any reduction in electric power or natural gas consumption as the result of increases in efficiency of energy use, production or distribution. Conservation also includes cost-effective fuel switching.

Although fuel switching is part of the definition, this aspect of the rule has not been operationalized as of March 2013.

**Cost Effective**

Not specifically defined in SB 1149. The OPUC has a definition which refers to a definition from ORS 469.631 (4) stating that an energy resource, facility or conservation measure during its life cycle results in delivered power costs to the ultimate consumer no greater than the comparable incremental cost of the least-cost alternative new energy resource, facility or conservation measure. Cost comparison under this definition shall include but not be limited to: (a) cost escalations and future availability of fuels; (b) waste disposal and decommissioning cost; (c) transmission and distribution costs; (d) geographic, climatic and other differences in the state; and (e) environmental impact. ORS 757.612 (4) (SB 1149) exempts utilities from the requirements of ORS 469.631 to 469.645 when the public purpose charge is implemented.

By law, Oregon public purpose funds may be invested only in cost-effective energy-efficiency measures—that is, efficiency measures must cost less than acquiring the energy from conventional sources, unless exempted by the OPUC.

**Cumulative Savings**

Sum of the total annual energy savings over a certain time frame while accounting for measure savings “lives.” (For example, if a measure is installed for each of two years, the cumulative savings would be the sum of the measure installed in the first year, plus the incremental savings from the savings installed in the second year plus the savings in the second year from the measure installed in the first year.)

**Decoupling**

A rate provision which reduces or eliminates the degree to which utility profits are driven by the volume of electricity or gas sold. Decoupling is thought by its proponents to reduce utility disincentives to support efficiency. There are many specific variants employed in different states and with different utilities.

**Direct Access**

The ability of a retail electricity consumer to purchase electricity and certain ancillary services from an entity other than the distribution utility.

**Economizer Air**

A ducting arrangement and automatic control system that allows a heating, ventilation and air conditioning (HVAC) system to supply up to 100 percent outside air to satisfy cooling demands, even if additional mechanical cooling is required.

**Energy Management System (EMS)**

A system designed to monitor and control building equipment. An EMS can often be used to monitor energy use in a facility, track the performance of various building systems and control the operations of equipment.

**ENERGY STAR®**

ENERGY STAR is a joint Environmental Protection Agency and Department of Energy program that encourages energy conservation by improving the energy efficiency of a wide range of consumer and commercial products, enhancing energy efficiency in buildings and promoting energy management planning for businesses and other organizations.

**Energy Use Intensity (EUI)**

A metric that describes a building's energy use relative to its size. It is the total annual energy consumption (kBtu) divided by the total floor space of the building. EUI varies significantly by building type and by the efficiency of the building.

**Enthalpy**

Enthalpy is the useful energy or total heat content of a fluid. Ideally, the total enthalpy of a substance is the amount of useful work that substance can do. Enthalpy is used in fluid dynamics and thermodynamics when calculating properties of fluids as they change temperature, pressure and phase (e.g. liquid to liquid-vapor mixture). In HVAC, refrigeration and power cycle processes, enthalpy is used extensively in calculating properties of the refrigerant or working fluid. Additionally, in HVAC applications, enthalpy is used in calculations relating to humidity. An enthalpy economizer is a piece of HVAC equipment that modulates the amount of outdoor air entering into a ventilation system based on outdoor temperature and humidity.

**Environmental Protection Agency (EPA)**

Founded in 1970, this independent agency was designed to "protect human health and safeguard the natural environment." It regulates a variety of different types of emissions, including the greenhouse gases emitted in energy use. It runs several national end-use programs, like ENERGY STAR, SmartWay, Smart Growth programs and green communities programs.

**Evaluation**

After-the-fact analysis of the effectiveness and results of programs. *Process and Market Evaluations* study the markets to be addressed and the effectiveness of the program strategy, design and implementation. They are used primarily to improve programs. *Impact evaluations* use post-installation data to improve estimates of energy savings and renewable energy generated.

**Feed-in Tariff**

A renewable energy policy that typically offers a guarantee of payments to project owners for the total amount of renewable electricity they produce; access to the grid; and stable, long-term contracts.

**Footcandle**

A unit of illuminance on a surface that is one foot from a uniform point source of light of one candle and is equal to one lumen per square foot

**Free Rider**

This evaluation term describes energy efficiency program participants who would have taken the recommended actions on their own, even if the program did not exist. Process evaluations include participant survey questions, which lead to the quantification of the level of free rider impacts on programs that is applied as a discounting factor to Energy Trust reported results.

**Geothermal**

Useful energy derived from the natural heat of the earth as manifested by hot rocks, hot water, hot brines or steam.

**Green Tags (Renewable Energy Credits or RECs)**

A Green Tag is a tradable commodity that represents the contractual rights to claim the environmental attributes of a certain quantity of renewable electricity. For wind farms, the environmental attributes include the reductions in emissions of pollutants and greenhouse gases that result from the delivery of the wind-generated electricity to the grid.

Here's how emission reductions occur: When wind farms generate electricity, the grid operators allow that electricity to flow into the grid because it is less expensive to operate, once it has been built, than generators that burn fossil fuels. But the electricity grid cannot have more electricity flowing into it than is flowing out to electricity users, so the grid operators have to turn down other generators to compensate. They generally turn down those that burn fossil fuels. By forcing the fossil fuel generators to generate less electricity, wind farms cause them to generate fewer emissions of pollutants and greenhouse gases. These reductions in emissions are the primary component of Green Tags.

Green Tags were developed as a separate commodity by the energy industry to boost construction of new wind, solar, landfill gas and other renewable energy power plants. Green Tags allow owners of these power plants to receive the full value of the environmental benefits their plants generate. They also allow consumers to create the same environmental benefits as buying green electricity, or to neutralize the pollution from their consumption of fossil fuels.

Green Tags are bought and sold every day in the electricity market. Tens of millions of dollars in Green Tags are under contract today. They are measured in units, like electricity. Each kilowatt hour of electricity that a wind farm produces also creates a one-kilowatt hour Green Tag. Wind farm owners may sell Green Tags to other purchasers, remote or local, to obtain the extra revenues they need for their wind farms to be economically viable.

**Gross Savings**

Savings that are unadjusted for evaluation factors of free riders, spillover, and savings realization rates. Energy Trust reports all savings in net terms, not gross terms, unless otherwise stated in the publication.

**Heat Pump**

An HVAC system that works as a two-way air conditioner, moving heat outside in the summer and scavenging heat from the cold outdoors with an electrical system in the winter. Most use forced warm-air delivery systems to move heated air throughout the house.

**Heating, Ventilation and Air Conditioning (HVAC)**

The mechanical systems that provide thermal comfort and air quality in an indoor space are often grouped together because they are generally interconnected. HVAC systems include: central air conditioners, heat pumps, furnaces, boilers, rooftop units, chillers and packaged systems.

**Hydroelectric Power (Hydropower)**

The generation of electricity using falling water to turn turbo-electric generators.



**Incremental Annual Savings**

Energy savings in one year corresponding to the energy-efficiency measures implemented in that same year.

**Incremental Cost**

The difference in cost relative to a base case, including equipment and labor cost.

**Instant-savings Measure (ISM)**

Inexpensive energy-efficiency products installed at no charge, such as CFLs, low-flow showerheads and high-performance faucet aerators. Predominately used by the Existing Homes program and multifamily track to provide homeowners and renters with easy-to-install, energy-saving products.

**Integrated Resources Planning (Least-Cost Planning)**

A power-planning strategy that takes into account all available and reliable resources to meet current and future loads. This strategy is employed by each of the utilities served by Energy Trust, and for the region's electric system by the Northwest Power and Conservation Council. The term "least-cost" refers to all costs, including capital, labor, fuel, maintenance, decommissioning, known environmental impacts and difficult to quantify ramifications of selecting one resource over another.

**Interconnection**

For all distributed generation—solar, wind, CHP, fuel cells, etc.—interconnection with the local electric grid provides back-up power and an opportunity to participate in net-metering and sell-back schemes when they are available. It's important to most distributed generation projects to be interconnected with the grid, but adding small generators at spots along an electric grid can produce a number of safety concerns and other operational issues for a utility. Utilities, then, generally work with their state-level regulatory bodies to develop interconnection standards that clearly delineate the manner in which distributed generation systems may be interconnected.

**Joule**

A unit of work or energy equal to the amount of work done when the point of application of force of 1 newton is displaced 1 meter in the direction of the force. It takes 1,055 joules to equal a British thermal unit. It takes about 1 million joules to make a pot of coffee.

**Kilowatt**

One thousand (1,000) watts. A unit of measure of the amount of electricity needed to operate given equipment.

**Large Customers (with reference to SB 838)**

Customers using more than 1 aMW of electricity a year are not required to pay electric conservation charges under SB 838. Additionally, Energy Trust may not provide them with services funded under SB 838 provisions.

**Least Cost**

The term "least-cost" refers to all costs, including capital, labor, fuel, maintenance, decommissioning, known environmental impacts and difficult to quantify ramifications of selecting one resource over another.

**Levelized Cost**

The level of payment necessary each year to recover the total investment and interest payments (at a specified interest rate) over the life of the measure.

**Local Energy Conservation**

Conservation measures, projects or programs that are installed or implemented within the service territory of an electric company.

**Low-income Weatherization**

Repairs, weatherization and installation of energy-efficient appliances and fixtures for low-income residences for the purpose of enhancing energy efficiency. In Oregon, SB 1149 directs a portion of public purpose funds to Oregon Housing and Community Services to serve low-income customers. Energy Trust coordinates with low-income agencies and refers eligible customers.

**Lumen**

A measure of the amount of light available from a light source equivalent to the light emitted by one candle.

**Lumens/Watt**

A measure of the efficacy of a light fixture; the number of lumens output per watt of power consumed.

**Market Transformation**

Lasting structural or behavioral change in the marketplace and/or changes to energy codes and equipment standards that increases the adoption of energy-efficient technologies and practices. Market transformation is defined in the Oregon Administrative Rules.

**Megawatt**

The electrical unit of power that equals one million watts (1,000 kW).

**Megawatt Hour**

One thousand kilowatt hours, or an amount of electrical energy that would power approximately one typical PGE or Pacific Power household for one month. (Based on an average of 11,300 kWh consumed per household per year.)

**Methane**

A light hydrocarbon that is the main component of natural gas and marsh gas. It is the product of the anaerobic decomposition of organic matter, enteric fermentation in animals and is one of the greenhouse gases.

**Monitoring, Targeting and Reporting (MT&R)**

A systematic approach to measure and track energy consumption data by establishing a baseline in order to establish reduction targets, identify opportunities for energy savings and report results.

**Municipal Solid Waste**

Refuse offering the potential for energy recovery. Technically, residential, institutional and commercial discards. Does not include combustible wood by-products included in the term "mill residue."

**Net Metering**

An electricity policy for consumers who own (generally small) renewable energy facilities (such as wind, solar power or home fuel cells). "Net," in this context, is used in the sense of meaning "what remains after deductions." In this case, the deduction of any energy outflows from metered energy inflows. Under net metering, a system owner receives retail credit for at least a portion of the electricity they generate.

**Net-to-Gross**

Net-to-gross ratios are important in determining the actual energy savings attributable to a particular program, as distinct from energy efficiency occurring naturally (in the absence of a program). The net-to-gross ratio equals the net program load impact divided by the gross program load impact. This factor is applied to gross program savings to determine the program's net impact.

**Net Savings**

Savings that are adjusted for evaluation factors of free riders, spillover and savings realization rates. Energy Trust reports all savings in net terms, not gross terms, unless otherwise stated in the publication.

**Nondifferentiated Source (Undifferentiated Source)**

Power available from the wholesale market or delivered to retail customers.

**Non-energy Benefit (NEB)**

The additional benefits created by an energy-efficiency or renewable energy project beyond the energy savings or production of the project. Non-energy benefits often include things like water and sewer savings (e.g. clothes washers, dishwashers), improved comfort (e.g. air sealing, windows), sound deadening (e.g. insulation, windows), property value increase (e.g. windows, solar electric), improved health and productivity and enhanced brand.

**Path to Net Zero Pilot (PTNZ)**

The Path to Net Zero pilot was launched in 2009 by Energy Trust's New Buildings program to provide increased design, technical assistance, construction, and measurement and reporting incentives to commercial building projects that aimed to achieve exceptional energy performance. Approximately 13 buildings worked with New Buildings to develop strategies to save 60 percent more energy than Oregon's already stringent code through a combination of 50 percent energy efficiency and 10 percent renewable power. The pilot demonstrates that a wide range of buildings can achieve aggressive energy goals using currently available construction methods and technology, as well as by testing innovative design strategies.

**Photovoltaic**

Direct conversion of sunlight to electric energy through the effects of solar radiation on semiconductor materials. Photovoltaic systems are one type of solar system eligible for Energy Trust incentives.

**Public Utility Commissions**

State agencies that regulate, among others, investor-owned utilities operating in the state with a protected monopoly to supply power in assigned service territories.

**Public Utility Regulatory Act of 1978 (PURPA)**

Federal legislation that requires utilities to purchase electricity from qualified independent power producers at a price that reflects what the utilities would have to pay for the construction of new generating resources. The Act was designed to encourage the development of small-scale cogeneration and renewable resources.

**Qualifying Facility (QF)**

A power production facility that generates its own power using cogeneration, biomass waste, geothermal energy, or renewable resources, such as solar and wind. Under PURPA, a utility is required to purchase power from a QF at a price equal to that which the utility would otherwise pay to another source, or equivalent to the cost if it were to build its own power plant.

**Renewable Energy Resources**

- a) Electricity-generation facilities fueled by wind, waste, solar or geothermal power or by low-emission nontoxic biomass based on solid organic fuels from wood, forest and field residues
- b) Dedicated energy crops available on a renewable basis
- c) Landfill gas and digester gas
- d) Hydroelectric facilities located outside protected areas as defined by federal law in effect on July 23, 1999

**Renewable Portfolio Standard**

A legislative requirement for utilities to meet specified percentages of their electric load with renewable resources by specified dates, or a similar requirement. May be referred to as Renewable Energy Standard.

**Retrofit**

A retrofit involves the installation of new, usually more efficient equipment into an existing building or process prior to the existing equipment's failure or end of its economic life. In buildings, retrofits may involve either structural enhancements to increase strength, or replacing major equipment central to the building's functions, such as HVAC or water heating systems. In industrial applications, retrofits involve the replacement of functioning equipment with new equipment.

**Roof-top Units (RTU)**

Packaged heating, ventilating and air conditioning unit that generally provides air conditioning and ventilating services for zones in low-rise buildings. Roof-top units often include a heating section, either resistance electric, heat pump or non-condensing gas (the latter are called "gas-paks"). Roof-top units are the most prevalent comfort conditioning systems for smaller commercial buildings. Generally small (<10 ton) commodity products, but very sophisticated high-efficiency versions are available, as are units larger than 50 tons.

**R-Value**

A unit of thermal resistance used for comparing insulating values of different material. It is basically a measure of the effectiveness of insulation in stopping heat flow. The higher the R-Value number, a material, the greater its insulating properties and the slower the heat flow through it. The specific value needed to insulate a home depends on climate, type of heating system and other factors.

**SB 1149**

The Oregon legislation enacted in 1999 allowing for the creation of a third party, nonprofit organization to receive approximately 74 percent of a 3 percent utility surcharge (public purpose charge) and deliver energy-efficiency and renewable energy programs to the funding Oregon ratepayers of Portland General Electric and Pacific Power. Energy Trust was approved by the OPUC to deliver the services. The rest of the surcharge is distributed to school districts and Oregon Housing and Community Services.

**SB 838**

SB 838, enacted in 2007, augmented Energy Trust's mission in many ways. Most prominently, it provided a vehicle for additional electric efficiency funding for customers under 1 aMW in load, and restructured the renewable energy role to focus on generation plants that produce less than 20 aMW. SB 838 is also the legislation creating the state's Renewable Portfolio Standard and extended Energy Trust's sunset year from 2012 to 2026.

**SBW Consulting, Inc**

A consulting firm based in Bellevue, WA, with expertise in facility energy assessments, utility conservation programs and program evaluations.

**Sectors**

For energy planning purposes, the economy is divided into four sectors: residential, commercial, industrial and irrigation.

**Self-Directing Consumers**

A retail electricity consumer that has used more than one average megawatt of electricity at any one site in the prior calendar year or an aluminum plant that averages more than 100 average megawatts of electricity use in the prior calendar year, that has received final certification from the Oregon Department of Energy for expenditures for new energy conservation or new renewable energy resources and that has notified the electric company that it will pay the public purpose charge, net of credits, directly to the electric company in accordance with the terms of the electric company's tariff regarding public purpose credits.

**Societal Cost**

Similar to the total resource cost as including the full cost to install a measure including equipment, labor and Energy Trust cost to administer and deliver the program, societal cost also includes any costs beyond those realized by the participant and Energy Trust associated with the energy-saving project. Typically additional societal benefits are seen with energy-efficiency projects that can be difficult to quantify and include in the Societal Cost Test for cost effectiveness.

**Solar Power**

Using energy from the sun to make electricity through the use of photovoltaic cells.

**Solar Thermal**

The process of concentrating sunlight on a relatively small area to create the high temperatures needed to vaporize water or other fluids to drive a turbine for generation of electric power.

**Spillover**

Additional measures that were implemented by the program participant for which the participant did not receive an incentive. They undertook the project on their own, influenced by prior program participation.

**Therm**

One hundred thousand (100,000) British thermal units (1 therm = 100,000 Btu).

**Total Resource Cost**

The OPUC has used the “total resource cost” (TRC) test as the primary basis for determining conservation cost-effectiveness as determined in Order No. 94-590 (docket UM 551). SB 1149 allows the “self-directing consumers” to use a simple payback of one to 10 years as the cost-effectiveness criterion.

**Tidal Energy**

Energy captured from tidal movements of water.

**U-Value (U-Factor)**

A measure of how well heat is transferred by the entire window—the frame, sash and glass—either into or out of the building. U-Value is the opposite of R-Value. The lower the U-Value number, the better the window will keep heat inside a home on a cold day.

**Wave Energy**

Energy captured by the cyclical movement of waves in the ocean or large bodies of water.

**Watt**

A unit of measure of electric power at a point in time, as capacity or demand. One watt of power maintained over time is equal to one joule per second.

**Wind Power**

Harnessing the energy stored in wind via turbines, which then convert the energy into electricity. Mechanical power of wind can also be used directly.

**Weatherization**

The activity of making a building (generally a residential structure) more energy efficient by reducing air infiltration, improving insulation and taking other actions to reduce the energy consumption required to heat or cool the building. In practice, “weatherization programs” may also include other measures to reduce energy used for water heating, lighting and other end uses.

## Energy Industry Acronyms

|                 |   |   |
|-----------------|---|---|
| <b>AAMA</b>     | American Architectural Manufacturers Association                                | Trade group for window, door manufacturers  |
| <b>A/C</b>      | Air Conditioning  |   |
| <b>ACEEE</b>    | American Council for an Energy-Efficient Economy                                | Environmental Advocacy, Researcher  |
| <b>AEE</b>      | Association of Energy Engineers   |   |
| <b>AEO</b>      | Annual Energy Outlook   |   |
| <b>AESP</b>     | Association of Energy Services Professionals                                    | Energy services and energy efficiency trade org   |
| <b>A+E</b>      | Architecture + Energy   | Outreach program for architects   |
| <b>AFUE</b>     | Annual Fuel Utilization Efficiency  | The measure of seasonal or annual efficiency of a furnace or boiler                                       |
| <b>AgriMet</b>  | Agricultural Meteorology  | Program for soil moisture data  |
| <b>AIA</b>      | American Institute of Architects  | Trade organization  |
| <b>AIC</b>      | Association of Idaho Cities   | Local government organization   |
| <b>aMW</b>      | Average Megawatt  | A way to equally distribute annual energy over all the hours in one year; there are 8,760 hours in a year |
| <b>AOI</b>      | Associated Oregon Industries  |   |
| <b>APEM</b>     | Association of Professional Energy Managers                                     |   |
| <b>ARI</b>      | Air-Conditioning and Refrigeration Institute                                    | AC trade association  |
| <b>ASE</b>      | Alliance to Save Energy   | Environmental advocacy organization   |
| <b>ASERTTI</b>  | Association of State Energy Research and Technology Transfer Institutions, Inc. |   |
| <b>ASHRAE</b>   | American Society of Heating, Refrigeration, and Air Conditioning Engineers      | Technical (engineers) association   |
| <b>ASME</b>     | American Society of Mechanical Engineers  | Professional organization   |
| <b>ASiMi</b>    | Advanced Silicon Materials LLC  | Manufacturer of polysilicon with plants in Moses Lake and Butte Mountain                                  |
| <b>AWC</b>      | Association of Washington Cities  | Local government trade organization   |
| <b>BACT</b>     | Best Achievable Control Technology  |   |
| <b>BCR</b>      | Benefit/Cost ratio  | See definition in text  |
| <b>BEF</b>      | Bonneville Environmental Foundation   | Nonprofit that funds renewable energy projects  |
| <b>BETC</b>     | Business Energy Tax Credit  | Oregon tax credit   |
| <b>BOC</b>      | Building Operator Certification   | Alliance funded project that trains and certifies building operators                                      |
| <b>BOMA</b>     | Building Owners and Managers Association  |   |
| <b>BPA</b>      | Bonneville Power Administration   | Federal power authority   |
| <b>C&amp;RD</b> | Conservation & Renewable Discount   | BPA program   |
| <b>CAC</b>      | Conservation Advisory Council   |   |
| <b>CARES</b>    | Conservation and Renewable Energy System  | Defunct consortium of Pacific Northwest PUDs  |
| <b>CCS</b>      | Communications and Customer Service   | A group within Energy Trust   |
| <b>CCCT</b>     | Combined Cycle Combustion Turbine   |   |



|               |  |  |
|---------------|--|--|
| <b>CEE</b>    | Consortium for Energy Efficiency           | National energy efficiency group   |
| <b>CEWO</b>   | Clean Energy Works Oregon                  |  |
| <b>CFL</b>    | Compact Fluorescent Light bulb             |  |
| <b>CHP</b>    | Combined Heat and Power                    |  |
| <b>CNG</b>    | Cascade Natural Gas                        | Investor-owned utility   |
| <b>ConAug</b> | Conservation Augmentation Program          | BPA program  |
| <b>CHT</b>    | Coefficient of Heat Transmission (U-Value) | A value that describes the ability of a material to conduct heat. The number of Btu that flow through 1 square foot of material, in one hour. It is the reciprocal of the R-Value (U-Value = 1/R-Value). |
| <b>COU</b>    | Consumer-Owned Utility                     |  |
| <b>COP</b>    | Coefficient of Performance                 | The Coefficient of Performance is the ratio of heat output to electrical energy input for a heat pump  |
| <b>CT</b>     | Combustion Turbine                         |  |
| <b>CUB</b>    | Citizens' Utility Board of Oregon          | Public interest group  |
| <b>Cx</b>     | Commissioning                              |  |
| <b>DG</b>     | Distributed Generation                     |  |
| <b>DSI</b>    | Direct Service Industries                  | Direct Access customers to BPA   |
| <b>DOE</b>    | Department of Energy                       | Federal agency   |
| <b>DSM</b>    | Demand Side Management                     |  |
| <b>EA</b>     | Environmental Assessment                   |  |
| <b>EASA</b>   | Electrical Apparatus Service Association   | Trade association  |
| <b>ECM</b>    | Electrically Commutation Motor             | An Electrically Commutation Motor, also known as a variable-speed blower motor, can vary the blower speed in accordance with the needs of the system   |
| <b>EE</b>     | Energy Efficiency                          |  |
| <b>EER</b>    | Energy Efficiency Ratio                    | The cooling capacity of the unit (in Btu/hour) divided by its electrical input (in watts) at standard peak rating conditions   |
| <b>EF</b>     | Energy Factor                              | An efficiency ratio of the energy supplied in heated water divided by the energy input to the water heater   |
| <b>EIA</b>    | Energy Information Administration          |  |
| <b>EIC</b>    | Energy Ideas Clearinghouse                 | Washington State University program that provides energy-efficiency information, Alliance funded project   |
| <b>EMS</b>    | Energy Management System                   | See definition in text   |
| <b>EPA</b>    | Environmental Protection Agency            | Federal agency   |
| <b>EPRI</b>   | Electric Power Resource Institute          | Utility organization   |



|               |  |   |
|---------------|--|---|
|               |  | Brand name used by Energy Trust for the rating that assesses a newly built or existing home's energy use, carbon impact and estimated monthly utility costs |
| <b>EPS</b>    | Energy Performance Score                         |   |
| <b>EQIP</b>   | Environmental Quality Incentive Program          |   |
| <b>EREN</b>   | Energy Efficiency and Renewable Energy Network   | DOE program   |
| <b>ESS</b>    | Energy Services Supplier                         |   |
| <b>EUI</b>    | Energy Use Intensity                             | See definition in text  |
| <b>EWB</b>    | Eugene Water & Electric Board                    | Utility organization  |
| <b>FCEC</b>   | Fair and Clean Energy Coalition                  | Environmental advocacy organization   |
| <b>FEMP</b>   | Federal Energy Management Program                |   |
| <b>FERC</b>   | Federal Energy Regulatory Commission             | Federal regulator   |
| <b>GHG</b>    | Greenhouse gas                                   |   |
| <b>HER</b>    | Home Energy Review                               | A free visit to a customer's home by an Energy Trust energy advisor to assess efficiency and provide personalized recommendations for improvement           |
| <b>HSPF</b>   | Heating Season Performance Factor                |   |
| <b>HVAC</b>   | Heating, Ventilation and Air Conditioning        |   |
| <b>ICNU</b>   | Industrial Consumers of Northwest Utilities      | Trade interest group  |
| <b>ICF</b>    | ICF International                                | Existing Buildings Program Management Contractor  |
| <b>ICL</b>    | Institute for Conservation Leadership            |   |
| <b>IDWR</b>   | Idaho Department of Water Resources              | State agency  |
| <b>IEEE</b>   | Institute of Electrical and Electronic Engineers | Professional association  |
| <b>IESNA</b>  | Illuminating Engineering Society of America      |   |
| <b>IOU</b>    | Investor-Owned Utility                           |   |
| <b>IRP</b>    | Integrated Resource Plan                         |   |
| <b>ISIP</b>   | Integrated Solutions Implementation Project      |   |
| <b>ISM</b>    | Instant-Savings Measure                          | See definition in text  |
| <b>kW</b>     | Kilowatt   |   |
| <b>kWh</b>    | Kilowatt Hours                                   | 8,760,000 kWh = 1 aMW   |
| <b>LBL</b>    | Lawrence Berkeley Laboratory                     |   |
| <b>LED</b>    | Lighting Emitting Diode                          | Solid state lighting technology   |
| <b>LEED</b>   | Leadership in Energy & Environmental Design      | Building rating system from the U.S. Green Building Council   |
| <b>LIHEAP</b> | Low Income Housing Energy Assistance Program     |   |
| <b>LIWA</b>   | Low Income Weatherization Assistance             |   |
| <b>LOC</b>    | League of Oregon Cities                          | Local government organization   |
| <b>MEEA</b>   | Midwest Energy Efficiency Alliance               | Midwest Market Transformation organization, Alliance counterpart  |
| <b>MLCT</b>   | Montana League of Cities and Towns               | Local government organization   |

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| <b>MLGEO</b>    | Montana Local Government Energy Office                 | Local government organization   |
| <b>MT&amp;R</b> | Monitoring, Targeting and Reporting                    | See definition in text  |
| <b>MW</b>       | Megawatt   | Unit of electric power equal to one thousand kilowatts                                  |
| <b>MWh</b>      | Megawatt Hour  | Unit of electric energy, which is equivalent to one megawatt of power used for one hour |
| <b>NAHB</b>     | National Association of Home Builders                  | Trade association   |
| <b>NCBC</b>     | National Conference on Building Commissioning          |   |
| <b>NEB</b>      | Non-Energy Benefit                                     | See definition in text  |
| <b>NEEA</b>     | Northwest Energy Efficiency Alliance                   |   |
| <b>NEEC</b>     | Northwest Energy Efficiency Council                    | Trade organization  |
| <b>NEEI</b>     | Northwest Energy Education Institute                   | Training organization   |
| <b>NEEP</b>     | Northeast Energy Efficiency Partnership                | Northwest market transformation organization, Alliance counterpart                      |
| <b>NEMA</b>     | National Electrical Manufacturer's Association         | Trade organization  |
| <b>NERC</b>     | North American Electricity Reliability Council         |   |
| <b>NFRC</b>     | National Fenestration Rating Council                   |   |
| <b>NRC</b>      | National Regulatory Council                            | Federal regulator   |
| <b>NRCS</b>     | Natural Resources Conservation Service                 |   |
| <b>NRDC</b>     | Natural Resources Defense Council                      |   |
| <b>NREL</b>     | National Renewable Energy Lab                          |   |
| <b>NRTA</b>     | Northwest Regional Transmission Authority              |   |
| <b>NWEC</b>     | Northwest Energy Coalition                             | Environmental advocacy organization   |
| <b>NWBOA</b>    | Northwest Building Operators Association               | Trade organization  |
| <b>NWFPA</b>    | Northwest Food Processors Association                  | Trade organization  |
| <b>NWN</b>      | NW Natural   | Investor-owned utility  |
| <b>NWPPA</b>    | Northwest Public Power Association                     | Trade organization  |
| <b>NWPCC</b>    | Northwest Power and Conservation Council               | Regional energy planning organization, "the council"                                    |
| <b>NYSERDA</b>  | New York State Energy Research & Development Authority | New York public purpose organization  |
| <b>OBA</b>      | Oregon Business Association                            | Business lobby group  |
| <b>OEFC</b>     | Oregon Energy Facility Siting Council                  | Authority to site energy facilities in Oregon   |
| <b>ODOE</b>     | Oregon Department of Energy                            | Oregon state energy agency  |
| <b>OPUC</b>     | Oregon Public Utility Commission                       |   |
| <b>OPUDA</b>    | Oregon Public Utility District Association             | Utility trade organization  |
| <b>OPEC</b>     | Organization of Petroleum Exporting Countries          |   |
| <b>ORECA</b>    | Oregon Rural Electric Cooperative Association          | Utility trade organization  |
| <b>OSD</b>      | Office of Sustainable Development                      |   |
| <b>OSEIA</b>    | Solar Energy Industries Association of Oregon          | Volunteer nonprofit organization dedicated to education/promotion                       |
| <b>OTED</b>     | Office of Trade & Economic Development                 | Washington State agency   |
| <b>P&amp;E</b>  | Planning and Evaluation                                | A group within Energy Trust   |
| <b>PDC</b>      | Program Delivery Contractor                            | Company contracted with Energy  |

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|                 |  | Trust to identify and deliver industrial and agricultural services to Energy Trust customers                  |
| <b>PEA</b>      | Pacific Energy Associates                        |   |
| <b>PECI</b>     | Portland Energy Conservation, Inc.               | Energy Trust Program Management Contractor  |
| <b>PGE</b>      | Portland General Electric                        | Investor-owned utility  |
| <b>PG&amp;E</b> | Pacific Gas & Electric                           | California investor-owned utility   |
| <b>PMC</b>      | Program Management Contractor                    | Company contracted with Energy Trust to deliver a program   |
| <b>PNGC</b>     | Pacific Northwest Generating Cooperatives        |   |
| <b>PNUCC</b>    | Pacific Northwest Utilities Conference Committee |   |
| <b>PPC</b>      | Public Power Council                             | National trade group  |
| <b>PPL</b>      | Pacific Power                                    |   |
| <b>PSE</b>      | Puget Sound Energy                               | Investor-owned utility  |
| <b>PTC</b>      | Production Tax Credit                            |   |
| <b>PTCS</b>     | Performance Tested Comfort Systems               | Alliance project that promotes the efficiency of air-systems in residential homes                             |
| <b>PTNZ</b>     | Path to Net Zero pilot                           | See definition in text  |
| <b>PUC</b>      | Public Utility Commission                        | Oregon and Idaho PUCs   |
| <b>PUD</b>      | Public Utility District                          |   |
| <b>PURPA</b>    | Public Utility Regulatory Policies Act           | See definition in text  |
| <b>QF</b>       | Qualifying Facility                              |   |
| <b>RAC</b>      | Renewable Energy Advisory Council                |   |
| <b>RE</b>       | Renewable Energy                                 |   |
| <b>REIT</b>     | Real Estate Investment Trust                     |   |
| <b>RETC</b>     | Residential Energy Tax Credit                    | Oregon tax credit   |
| <b>RFI</b>      | Request for Information                          |   |
| <b>RFP</b>      | Request for Proposal                             |   |
| <b>RFQ</b>      | Request for Qualification                        |   |
| <b>RNP</b>      | Renewable Northwest Project                      | Renewable energy advocacy group   |
| <b>RSES</b>     | Refrigeration Service Engineers Society          | Trade association   |
| <b>RTF</b>      | Regional Technical Forum                         | BPA funded research group   |
| <b>RTU</b>      | Rooftop HVAC Unit Tune Up                        | Rooftop HVAC unit tune up, an Existing Buildings incentive offering   |
| <b>SCCT</b>     | Single Cycle Combustion Turbine                  |   |
| <b>SCL</b>      | Seattle City Light                               | Public utility  |
| <b>SEED</b>     | State Energy Efficient Design                    | Established in 1991, requires all state facilities to exceed the Oregon Energy Code by 20 percent or more     |
| <b>SEER</b>     | Seasonal Energy Efficiency Ratio                 | A measure of cooling efficiency for air conditioners; the higher the SEER, the more energy efficient the unit |

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| <b>SGC</b>     | Super Good Cents                                   | Alliance project & legacy BPA & utility program that promotes the sales of SGC homes   |
| <b>SIS</b>     | Scientific Irrigation Scheduling                   | Agricultural information program   |
| <b>SNOPUD</b>  | Snohomish Public Utility District                  | Washington State PUD   |
| <b>SEIA</b>    | Solar Energy Industries Association                | Volunteer nonprofit organization dedicated to education/promotion  |
| <b>SWEEP</b>   | Southwest Energy Efficiency Partnership            | Southwest market transformation group, Alliance counterpart  |
| <b>T&amp;D</b> | Transmission & Distribution                        |  |
| <b>TNS</b>     | The Natural Step                                   |  |
| <b>TRC</b>     | Total Resource Cost                                | See definition in text   |
| <b>TXV</b>     | Thermal Expansion Valve                            |  |
|                | University of Oregon Solar Monitoring Laboratory   | Solar resource database  |
| <b>U-Value</b> |  | The reciprocal of R-Value; the lower the number, the greater the heat transfer resistance (insulating) characteristics of the material |
| <b>USGBC</b>   | U.S. Green Building Council                        | Sustainability advocacy organization responsible for LEED  |
| <b>VFD</b>     | Variable Frequency Drive                           | An electronic control to adjust motion   |
| <b>WAPUDA</b>  | Washington Public Utility District Association     | Utility trade organization   |
| <b>WNP</b>     | Washington Nuclear Power Plant                     |  |
| <b>WPPSS</b>   | Washington Public Power Supply System              | Also called "whoops"   |
| <b>WUTC</b>    | Washington Utilities and Transportation Commission |  |
| <b>Wx</b>      | Weatherization                                     |  |
| <b>W</b>       | Watt   |  |