Energy Trust Board of Directors Annual Meeting

February 25, 2015

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134th Board Meeting—Annual Meeting

Wednesday, February 25, 2015
421 SW Oak Street, Suite 300
Portland, Oregon

	Agenda	Tab	Purpose
12:15pm	**134th Board Meeting—Call to Order** (Debbie Kitchin) • Approve agenda		
	General Public Comment *The president may defer specific public comment to the appropriate agenda topic.*		
	Consent Agenda *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.* • December 12 Board meeting minutes	**1**	Action
12:20pm	**Nominating Committee** (John Reynolds) • Election to new terms of office—R734 • Election of officers—R735	**2**	Action
12:30pm	**President's Report** (Debbie Kitchin) • Committee Assignments—R736	**3**	Action
12:45pm	**Planning** • Approve Five-year Regional Technical Forum funding agreement—R738 (Jennifer Anziano, Northwest Power & Conservation Council, Regional Technical Forum Manager)	**4**	Action
1:00pm	**Committee Reports**		
	• Evaluation Committee (Alan Meyer)	**5**	Information
	• Finance Committee (Dan Enloe)	**6**	Information
	• Policy Committee (Roger Hamilton)	**7**	Information
	♦ Amend Fossil-Fuel Combined Heat and Power Policy Policy—R737	**7**	Action
	• Strategic Planning Committee (Mark Kendall)		Information
1:40pm	**Break**		
1:50pm	**Staff Report** • Highlights (Margie Harris) ♦ Preliminary year-end results • Integrated Solutions Implementation quarterly update (Scott Clark) • 2015 Legislation update (Jay Ward & Hannah Hacker)	**8**	Information
3:15pm	**Feature Presentation: EcoDistricts** Rob Bennett, CEO of EcoDistricts Erin Flynn, Associate Vice President, Strategic Partnerships, PSU & President and Co-Chair, South of Market EcoDistrict Sarah Heinicke, Principal, Verditas & Executive Director of Lloyd EcoDistrict		
4:15pm	**Adjourn**		

The next meeting of the Energy Trust Board of Directors will be held Wednesday, April 1, 2015 at 12:15pm at Energy Trust of Oregon, 421 SW Oak Street, Suite 300, Portland

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Tab 1

Board Meeting Minutes—133rd Meeting

December 12, 2014

Board members present: Heather Beusse-Eberhardt, Ken Canon, Melissa Cribbins, Dan Enloe, Roger Hamilton (by phone), Mark Kendall, Debbie Kitchin, Alan Meyer, John Reynolds, Anne Root, Eddie Sherman, Warren Cook (ODOE special advisor), John Savage (OPUC *ex officio*, by phone)

Board members absent: Susan Brodahl, Dave Slavensky

Staff attending: Margie Harris, Ana Morel, Debbie Menashe, Amber Cole, Steve Lacey, Fred Gordon, Pati Presnail, Peter West, Courtney Wilton, Ted Light, Kate Scott, Oliver Kesting, Betsy Kauffman, Dave Moldal, Chris Dearth, Thad Roth, Erika Kociolek, Phil Degens, Diane Ferington, Julianne Thacher

Others attending: Jim Abrahamson (Cascade Natural Gas), Don Jones, Jr. (PacifiCorp), Lauren Shapton (Portland General Electric), Juliet Johnson (OPUC), Janice Boman (Ecova), Jim Fitzpatrick (CLEAResult), Christina Cabrales (CSG), Bill Eddie (One Energy Renewables)

Business Meeting

President Debbie Kitchin called the meeting to order at 12:17 p.m.

General Public Comments

There were no public comments.

Consent Agenda

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) November 5 Board meeting minutes
2) Amend Cost Effectiveness Policy—R731
3) Amend Self-Direct Policy—R732
4) Amend contract with Energy Savvy—R728

Moved by: Dan Enloe		Seconded by: John Reynolds
Vote:	In favor: 9	Abstained: 0
	Opposed: 0	

RESOLUTION 731
AMENDING THE COST EFFECTIVENESS POLICY

WHEREAS:

1. **The Cost Effectiveness Policy was originally adopted by the board in 2002to set forth principles to evaluate whether Energy Trust investments to reduce the economic and environmental costs of using gas and electricity are consistent with Oregon law on "cost effective local energy conservation." To determine whether support for local energy conservation is "cost effective," Energy Trust compares the costs of energy-savings programs and measures to the cost of alternative sources of natural gas and electric energy. The cost of alternative sources is known as "avoided cost";**

2. **The Cost Effectiveness Policy has undergone revisions since its adoption, and was last reviewed by the Policy Committee in December 2011 as part of the Committee's regular cycle of policy reviews;**

3. **In 2014, the Oregon Public Utility Commission (OPUC) and the Washington Utility and Transportation Commission (WTUC) issued orders clarifying the substance and application of tests used to compare energy efficiency costs to avoided cost in order to ensure that energy efficiency investments are cost-effective;**

4. **Although no substantive changes to the policy are warranted by these orders, Energy Trust staff suggested some editing of the current policy to ensure that the policy reflects terminology that is consistent with the recent OPUC and WTUC orders. As a result, staff revised the policy language as reflected in the suggested amended policy attached as Attachment 1; 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 Cost Effectiveness Policy as shown in Attachment 1.

ATTACHMENT 1

Cost-Effectiveness Policy and General Methodology for Energy Trust of Oregon

History			
Source	Date	Action/Notes	Next Review Date
Board Decision	February 27, 2002	Approved (R83)	March 22, 2002
Board	March 22, 2002	Reviewed, Revised	April 3, 2002
Board	April 3, 2002	Reviewed, Revised (Minutes)	April 2005
Board	September 7, 2005	Revised (R353)	September 2008
Board	February 13, 2008	Revised (R464)	February 2011
Board	December 16, 2011	Revised (R596)	December 2014

Introduction

The Energy Trust of Oregon seeks a future that includes sufficient, stable, and affordable power available to all customers through sustained investment in energy efficiency and renewable resources that reduce the economic and environmental costs of using gas and electricity. To properly evaluate such investments, Energy Trust compares the cost of energy-saving programs and measures to the cost of alternative sources of natural gas and electric energy. The cost of alternative sources is known as "avoided cost". The Oregon Public Utility Commission (PUC), the Washington Utilities and Transportation Commission (WUTC), the Northwest Power and Conservation Council (NPCC) and the Northwest Energy Efficiency Alliance (Alliance) use similar approaches and assumptions to analyze the cost-effectiveness of energy efficiency investments. Consistent with these approaches, this policy encompasses two tests to determine cost-effectiveness and describes the key variables or economic model inputs that define these tests in Energy Trust analysis.

The Oregon Renewable Energy Act of 2007 (SB 838) allows supplemental energy efficiency funding, i.e., more than the three-percent public purpose charge authorized in the 1999 law. The 2007 Act, together with the agreements that fund Energy Trust natural gas efficiency programs in Oregon, support Energy

Trust programs that help utilities meet goals that are determined through Integrated Resource Planning. In that process, the OPUC reviews and may acknowledge avoided cost forecasts from each utility. Because Energy Trust funding is significantly affected by this process, the following policy is designed to be consistent with OPUC guidance and, to the extent practical, with utility integrated resource plans. Energy Trust may consider prospective costs and benefits over a period of more than one year, as appropriate, for emerging technologies and market transformation ventures.

Policy

Energy Trust adopts the Utility Cost Test (UCT) and ~~Societal~~ Total Resource Cost t~~T~~est (TRC)~~s~~, as described below, as its primary determinants of whether efficiency investments meet cost-effectiveness criteria. The economic comparison will be presented as a benefit-to-cost ratio. Programs and measures that pass both tests, or are likely to over time, are eligible for Energy Trust investment. Both tests consider energy impacts on customers who are influenced by the program, and long term market effects of programs and measures (e.g., sales, or efficacy of efficient technologies beyond the direct program participants) where such effects are significant and likely. The difference between the ~~Utility System~~ UCT and ~~Societal tests~~TRC is that the ~~Societal Test~~TRC includes all costs (not just Energy Trust costs) and savings of program participants and others who were influenced to act by Energy Trust programs. The ~~Utility System Test~~UCT includes Energy Trust costs only, and savings from program participants and others who were influenced to act by Energy Trust programs.

For programs and measures that pass these cost-effectiveness tests, in configuring programs Energy Trust may consider other factors identified in its strategic plan and action plans.

Costs

The ~~societal~~ total resource cost definition is in alignment with the OPUC docket no. UM-551's definition ~~of Total Resource Cost (Societal) perspective~~ as including total costs and total benefits in cost effectiveness calculations.[1] The following costs will be included in the ~~societal~~ TRC perspective:

1. Total cost of efficiency measures and actions,[2] including costs to Energy Trust and participants
2. Energy Trust administrative costs
3. Energy Trust program management costs

The utility cost~~system~~ test includes only the Energy Trust incentives and items 2 and 3, above, i.e., all Energy Trust efficiency costs, not those paid by consumers.

Costs excluded: The value of Oregon and/or Federal tax credits will be deducted from the cost of measures because similar tax credits are not included in avoided costs used by Energy Trust. Program administration or management costs of local programs that are paid by federal or state agencies will not be included, as they are often associated with non-energy considerations such as equity, employment, etc., and are not included in the benefit/cost tests under PUC guidance.

Benefits

In the ~~societal~~ total resource cost test, Energy Trust will include the following benefits:

1. The value of the electrical and/or gas energy saved based on the avoided cost forecasts of the utilities whose customers are served by the Energy Trust, as reviewed and approved by the PUC.[3] Periodically, Energy Trust will work with the utilities and PUC to develop an

[1] In Washington, the primary cost/benefit criterion is the ~~societal~~ total resource cost test, but where there are significant non energy benefits the WUTC will consider using the utility cost test. ~~applied to entire programs. In addition to following this guidance, Energy Trust will continue to apply the test to specific measures to assure consistency of programs across states (for administrative efficiency) and optimal rate payer value.~~

[2] For equipment or structures that would be purchased regardless of efficiency actions, this is the incremental cost of upgrading the efficiency of the purchase beyond common practice.

[3] This includes the value of avoided peak energy use.

average, or merged cost forecast. This will be done separately for the electric utilities and gas utilities, so that Energy Trust program decisions are based on a single set of price forecasts for each fuel.Energy Trust may include factors such as hedge value, if not considered in the utility forecasts, based on agreement with the utilities and PUC.

2. Non-energy benefits will be quantified by a reasonable and practical method.Where non-energy benefits are clear, large, but difficult to quantify, Energy Trust will document this to the Oregon and/or Washington Commissions and propose cost-effectiveness exceptions in Oregon, and application of the UCT in Washington.~~Unless and until the OPUC develops an alternative approach, Energy Trust may use proxies for these benefits where research shows that the benefits are large, they cannot be practically quantified, and they clearly influence consumer decisions~~.
3. For electricity, both line losses and avoided Transmission and Distribution construction.
4. Natural gas capacity benefits and benefits from reduced transmission and delivery losses will be included where significant and quantifiable.
5. In addition, the Energy Trust will apply in its analysis the 10% credit for energy efficiency as required under the Northwest Power Act and OPUC docket no. UM-551. This credit recognizes the benefits of conservation in addressing risk and uncertainty.

Avoided costs based on integrated resource planning will be provided to the Energy Trust by utilities. The utility ~~system~~ cost test will include items 1, 3, 4 and 5, above.

Currently, utility avoided costs include the forecast value of reduced carbon dioxide emissions. Oregon PUC guidance provides that other environmental pollutant costs may be considered only when specified by the PUC.

Discount rates

Energy Trust will revise avoided costs and discount rate from time to time to be consistent with the cost of capital used in the utilities' Integrated Resource Plans.

In analysis and reporting, Energy Trust will use a discount rate based on OPUC-reviewed integrated resource planning discount rates used by the utilities whose customers are served by the Energy Trust. Periodically, Energy Trust will work with the utilities and OPUC to derive a single discount rate close to those employed by the utilities. This discount rate will be used to compare the costs and benefits of efficiency investments to other investments.

In conclusion, Energy Trust programs and measures will be reviewed using both the Utility ~~System~~ Cost and the Total Resource Cost ~~Societal~~ tests. If the benefit-to-cost ratio is greater than 1.0, a program should be considered cost-effective and may be considered for Energy Trust efficiency funding.

RESOLUTION 732
AMENDING THE SELF DIRECT POLICY

WHEREAS:

1. **Oregon law allows entities that use over one average megawatt of electricity a year at a single site to direct their own electric efficiency and renewable energy projects and deduct the cost from the public purpose charge on their electric bills;**

2. **The Self Direct Policy was originally adopted by the board in 2001 and revised in 2002 to allow self-directors incentives for projects only if they agree not to use self-direct credits at the same site for 36 months. The policy recognizes that self-directors should not have the same access to Energy Trust incentives as electric users who pay the public purpose charge;**

3. **The Self Direct Policy is up for its regular three year cycle of review by the Policy Committee;**

4. **Staff has proposed some format changes to the Self-Direct Policy, but no substantive changes at this time, and the revised the policy language is attached as Attachment 1; 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 Cost Effectiveness Policy as shown in Attachment 1.

ATTACHMENT 1
Eligibility of Self-Direct Businesses for Energy Trust Incentives

History			
Source	Date	Action/Notes	Next Review Date
Board Decision	May 8, 2001	Approved (R27)	November 28, 2001
Board	November 28, 2001	Reviewed, Revised (R58)	January 30, 2002
Board	January 30, 2002	Reviewed, Revised (R69, R70)	April 3, 2002
Board	April 3, 2002	Reviewed, Revised (R96)	October 30, 2002
Board	October 30, 2002	Reviewed, Revised (R137)	October 2005
Board	May 25, 2006	Reviewed, Revised (R392)	May 2009
Policy Committee/Board	September 2, 2009	Reviewed, no changes	August 2012
Policy Committee	Oct. 23, 2012	Ditto	Oct. 2015

~~ENERGY TRUST POLICY ON SELF-DIRECTION~~

Introduction
~~WHEREAS:~~

~~1.~~ Oregon law allows entities that use over one average megawatt of electricity a year at a single site to direct their own electric efficiency and renewable energy projects and deduct the cost from the public purpose charge on their electric bills.
~~2.~~ In 2002, Energy Trust adopted a policy allowing self-directors a full Energy Trust incentive for the new project only if the self-director agrees not to use self-direct credits at the same site for 36 months. The policy recognizes that self-directors should not have the same access to Energy Trust incentives as electric users who pay the public purpose charge.
~~3. The board wishes to clarify the policy and to make two substantive changes meant to facilitate the policy's administration.~~

~~It is therefore RESOLVED:~~

Policy
~~The Energy Trust policy on self-direction is as follows:~~

Purpose: Energy Trust generally supports projects only of energy users who pay into the three percent public purpose fund on which Energy Trust programs are based. At the same time, Oregon's self-direction requirement can lead to situations in which an energy user reduces or eliminates its contribution to the public purpose fund by implementing energy efficiency or renewable energy measures certified by the Oregon Department of Energy. This policy outlines circumstances in which a self-directing energy user nevertheless qualifies for Energy Trust support.

1. Incentives:
   A. No incentives for self-directed measures: No Energy Trust incentive will be given for any measure ("measure" includes technical studies and commissioning services) for which self-direction credit is also claimed.

   B. Measures exempted: As long as it claims no self-direct credit for these measures, an energy user may receive 100% of the standard Energy Trust incentive for the following measures:
      - unitary HVAC systems;
      - motor replacement; and
      - measures determined by Energy Trust staff to have modest costs ($3,000 or less per project) and savings, and where application of this policy's requirements would unreasonably interfere with efforts to encourage participation in an Energy Trust program.

   C. All other measures: An energy user that seeks an Energy Trust incentive for a measure other than those exempted above:
      - must agree not to use any self-direct credits for 36 months at the same ODOE-certified site as the site of the proposed Energy Trust measure, and receive 100% of the standard Energy Trust incentive for the measure. After 36 months, the energy user may resume using self-direct credits, or
      - if the energy user continues to use any self-direct credits for non-Energy Trust measures at the same site, the energy user will receive 50% of the standard Energy Trust incentive for the measure.

2. Restrictions on funding for self-directors: No more than $1.5 million/year of Energy Trust funds (combined total) will be paid for efficiency projects to all firms that self-direct. With board approval (in the annual budget process or otherwise), this amount could be adjusted upward if program demand is running behind funding for a sustained period.

3. Allocation by customer class. Allocation of Energy Trust funds to self-directing end-users will not change the allocation of funds by customer class.

4. Repayment requirement: If the energy user accepts a full Energy Trust incentive for a measure and agrees not to use self-direction credits on its electric bill at a site for a 36-month period, Energy Trust staff:
   A. Shall require repayment if the self-director begins using credits before the 36 months has ended. If required, recovery will be by the following formula: Refund Amount = 0.5 x A x B, *where* A = total amount of Energy Trust incentives paid and B = 36 minus the number of months elapsed since measure installation or completion, divided by 36. Repayment must be completed within two years of the time the repayment obligation is triggered.
   B. May waive repayment for projects whose repayment obligation would be $3,000 or less.

5. Energy efficiency and renewable energy measures considered separately: Energy efficiency and renewable energy measures shall be considered separately for the purposes of this policy. That is, during the 36 months after a measure is installed at a site, a self-director may use self-direction credits for a renewable energy project at an ODOE-certified site if it receives Energy Trust incentives for an energy efficiency project at that site, or *vice versa,* with no repayment requirement.

~~Adopted on May 25, 2006, by the Energy Trust Board of Directors~~

RESOLUTION 728
AMEND THE CONTRACT WITH ENERGY SAVVY

WHEREAS:

1. **Since 2004 Energy Trust has offered a free online audit tool for residential customers.**
2. **In 2012, Energy Trust awarded a contract to Energy Savvy to provide this service.**
3. **By the end of 2014 Energy Trust will have expended about $434,000 on the Energy Savvy contract. Continuing the service in 2015 will cost another $115,000, putting the total contract amount over $500,000, which requires board authorization.**
4. **The proposed contract extension will continue this service for a year while staff conducts a competitive solicitation for bids to provide the service longer-term.**

It is therefore RESOLVED:

The Board of Directors of Energy Trust of Oregon authorizes the executive director to amend Energy Trust's contract with Energy Savvy to add $115,000 to provide an on-line audit tool for residential customers during 2015, while a competitive process is conducted for bids to provide the service longer-term.

Board Appointments

Election of Heather Beusse-Eberhardt, John Reynolds

John Reynolds introduced Heather Beusse-Eberhardt. Heather is director of technology evaluation and implementation-solar at EDF Renewable Energy in Portland. She has also held positions at GLOBIO and Intel.

RESOLUTION 723
ELECTING HEATHER BEUSSE-EBERHARDT TO
THE ENERGY TRUST BOARD OF DIRECTORS

WHEREAS:

1. **In December 2013 Kenneth Mitchell-Phillips was elected to finish out a three-year board term (ending February 2016) vacated by Anne Donnelly on September 29, 2013. Director Mitchell-Phillips resigned his position on the board effective July 20, 2014 due to scheduling conflicts, and his position on the board has remained open and unfilled since that time.**
2. **The board nominating committee has reviewed candidates for the open board seat and nominates Heather Beusse-Eberhardt, Director of Technology Evaluation and Implementation-Solar at EDF Renewable Energy in Portland, Oregon to fill Mr. Mitchell-Phillips' remaining term complete a full successive term.**

It is therefore RESOLVED:

That the Energy Trust of Oregon, Inc., Board of Directors elects Heather Beusse-Eberhard to the Energy Trust Board of Directors to a term expiring February 2019, subject to all requirements of the Bylaws of Energy Trust.

Moved by: Ken Canon		Seconded by: Melissa Cribbins
Vote:	In favor: 11	Abstained: 0
	Opposed: 0	

Heather thanked the directors for the opportunity to serve on the board, and stated that she is excited to bring her experience and expertise to Energy Trust. Heather is motivated by Energy Trust's mission and record of innovation.

President's Report

Debbie introduced John Reynolds. John presented the 2014 American Council for an Energy-Efficient Economy state rankings, noting that Oregon is ranked third in the nation in a tie with Vermont and Rhode Island. Oregon is ahead of Washington and Idaho, which ranked eighth and 30th, respectively. Since 2008, Oregon has been ranked in the top four most energy-efficient states.

Oregon continues to have some challenges, such as lack of performance incentives for utilities, combined heat and power policies that remain static, and residential building codes that are not as stringent as some other states.

In the draft rankings presented by ACEEE to the Oregon Department of Energy, all of Oregon's savings were from Energy Trust reports. It is noteworthy that Energy Trust delivers so much energy savings that Oregon ranks favorably even without considering other sources of energy savings. Oregon Department of Energy anticipates ACEEE to take a more accurate count of savings next year by including contributions from public and rural utilities served through BPA.

The board noted that Energy Trust influences energy savings beyond direct distribution of incentives.

Final Proposed 2015 Annual Budget & 2015-2016 Action Plan

Debbie introduced Margie Harris, Peter West and Courtney Wilton to present Energy Trust's final proposed 2015 Annual Budget and 2015-2016 Action Plan. Debbie acknowledged that the final budget and action plan are a culmination of staff, board and stakeholder efforts.

Margie presented the final proposed budget and action plan, including outreach activities conducted since November 5 and minor changes to the final budget and action plan. The final proposed 2015 Annual Budget and 2015-2016 Action Plan are based on plans to lower revenue collections, lower spending, reduce reserves, supporting emphasize support for renewable energy project development, flat staffing costs and low administrative costs. The action plan includes three main focus areas linked to the newly completed five-year strategic plan: expanding participation, emerging technologies, and gaining operational efficiencies.

Outreach activities began in October and included presentations of the draft budget and action plan to both advisory councils, all four utilities, the Oregon Public Utility Commission (OPUC), Citizens Utility Board (CUB) and the public through a live webinar. Energy Trust invited formal comments during all of these forums, and received comments from all four utilities and the OPUC. Comments were largely supportive, and included appreciation for Energy Trust's refined budget process and willingness to collaborate with stakeholders. Staff worked with Conservation Advisory Council members to modify timing of Existing Homes measure transitions in response to suggestions made.

Mark Kendall joined the meeting at 12:37 p.m.

The OPUC supported the final proposed 2015 Budget and 2015-2016 Action Plan, including four new staff positions. The OPUC submitted comments specify requests for reports on NEEA activities and requests for a new performance measure that sets a maximum percentage on total staffing costs of 7.75 percent of total expenditures computed on a three year rolling average. Current Energy Trust staffing costs are about 6.8 percent (Note: this is the correct percentage, not the 6.2% reported at the board meeting). The board expressed support for establishing a metric to evaluate and manage staffing levels.

Margie described changes to the draft budget and action plan were minimal. Changes included a 1.3 percent increase in spending of $2.1 million across efficiency and renewable programs. Savings and generation goals changed very slightly, less than 1 percent each.

Margie reiterated Energy Trust's plans to reduce budgeted revenues in 2015. Three of the four utilities plan to submit requests to the OPUC to reduce collections effective in January 2015. Cascade Natural Gas collections are planned to remain the same. OPUC utility tariff filings are expected to move forward on December 16. Energy Trust budgeted $148.2 million in revenues for 2015, which is $20 million less than forecasted 2014 revenues.

The board requested the percentage of revenue Energy Trust receives from SB 1149 funds and from SB 838 collections. Steve followed up on this request: Energy Trust receives 2.3 percent of 1149 revenue, including 1.7 percent for energy efficiency efforts and 0.51 percent for renewable generation. Energy Trust also receives 2.7 percent of SB 838 revenue from Portland General Electric and 2.03 percent of SB 838 revenue from Pacific Power.

Margie continued that Energy Trust plans to reduce reserves over the next three years and projects a $46.6 million reduction in reserves in the next two years. The board expressed approval of Energy Trust's plans to reduce reserves, and clarified that reserves include carry over funds. Margie noted that Energy Trust can negotiate the appropriate level of reserves with each utility.

Margie described only minor changes between planned expenditures included in the draft and final proposed 2015 budget. Margie presented planned expenditures by major categories. In 2015, Energy Trust plans to spend about $170 million, which is 3.6 percent less than last year. In the last board meeting, Energy Trust had planned to reduce expenditures by 4.8 percent, and staff have since refined expenditures necessary to meet energy savings and generation goals.

To follow up on a question from the November board meeting, Margie provided 2015 budgets by major categories compared to 2014. Changes reflect typical annual incentive fluctuations. Program delivery costs increased slightly, Energy Trust's internal administrative costs decreased by approximately 10 percent and staffing costs remained stable.

The board noted a trend of decreasing incentives and increasing delivery costs. Margie explained that Energy Trust has historically budgeted slightly more incentives than ultimately needed, as the organization was able to achieve savings goals with lower-than-budgeted incentives. As Energy Trust places more emphasis on future savings from harder-to-access customers, delivery costs will likely increase. In addition, Energy Trust invests up front to achieve future savings such as with commercial Strategic Energy Management offerings. Peter added that in addition to incentives, Energy Trust provides services to help customers achieve energy savings. Such services are included in delivery costs.

Margie presented budgeted electric and natural gas savings goals by program, as well as levelized costs. The final budget includes savings goals of 53.1 average megawatts and 5.8 million annual therms.

Energy Trust does not expect to complete a megaproject in 2015, which historically delivers a high volume of very low-cost savings. A megaproject is anticipated in 2016. Energy Trust anticipates new gas savings from NEEA gas market transformation efforts in future years, and not in 2015.

Energy Trust plans to generate 3.47 aMW of renewable energy in 2015, which is lower than generation budgeted in 2014. The renewables market is challenged by the very low cost of natural gas and we are further constrained by limited revenues for renewable energy activities. Margie also noted that timing of renewable projects can be variable.

The board requested to see a breakout of Other Renewables generation goals by resource. Staff will follow up with this information. Peter noted that Other Renewables activities will be largely from hydropower and biopower projects in 2015, similar to 2014 and recent years.

The board asked if investors are waiting until the renewable energy market is more favorable to pursue projects. Margie explained that low natural gas prices and the discontinuation of state Business Energy Tax Credits, which paid up to 50 percent of project costs, reduced the number of renewable energy projects in the market. Peter noted these changes have also resulted in smaller renewable energy projects in the market. Peter added Energy Trust does not have the budget to fund projects larger than 5 MW while still supporting projects across all 5 technologies. Margie noted that the marketplace is still adjusting to the new normal after the loss of Business Energy Tax Credits, which was in place for more than 30 years. Margie noted that residential solar energy state and federal tax credits remain in place.

Margie presented long-term savings and generation trends, including savings and generation across five-year increments. Between 2010 and 2014, Energy Trust set out to double savings acquired and did. That trend is not projected to happen again. Instead, the organization is planning for a more stable rate of savings acquisition in the future. Margie noted that 2015-2019 goals remain aggressive in comparison to Integrated Resource Plan goals. Energy Trust expects to exceed 2010-2014 strategic plan five-year goals.

Margie presented staffing costs, describing the total staffing budget increase of less than 2 percent in 2015, remaining at approximately 6.8 percent of total annual budgeted expenditures. Cost savings were achieved by reducing medical expenses, self-insuring for unemployment, and the converting agency staff to full-time staff. Going forward, staff will report to the OPUC when existing staff job duties and responsibilities significantly change. Over time, Energy Trust staffing costs as a percentage of total expenditures have remained stable. Administrative costs as a percentage of revenue have remained well below the current OPUC metric of 9 percent. The board noted that as revenues decrease, administrative costs will increase as a percentage of revenue.

The board commented that the regulatory landscape has changed radically in the last ten years. Energy Trust may need to evaluate the staffing benchmark number based on current regulatory requirements. The board expressed approval for documenting efficiency gains from IT investments and reporting improvements.

The board asked why a staffing measure is needed in addition to a measure of administrative costs. The board speculated that there may be political concerns about the number of employees, and Margie agreed. Board members look forward to developing metrics to evaluate staffing given declining budgets, and stated that Energy Trust needs to better explain productivity gains to alleviate these political concerns. The board cautioned that with revenues decreasing, expenditures will appear to increase even if they are decreasing at a slower rate than expenditures. Margie stated that this new staffing measure gives the OPUC a metric to hold Energy Trust accountable, and considerable work is required for staff to document this information.

The board asked about the percentage of administrative and staffing costs for Program Management Contractors (PMCs). Margie responded that this is not a straightforward comparison, and she will explore the answer.

The board expressed gratitude that Energy Trust is working with utilities to minimize reserves. The board also acknowledged that 2014 has been a notable, transitional year with completion of the 2015-2019 Strategic Plan and the Management Review. Both of these efforts are reflected in the final proposed budget and action plan. The budget is a culmination of good work by board, staff and stakeholders.

RESOLUTION 726
ADOPTION OF 2015 BUDGET AND PROJECTION FOR 2016

BE IT RESOLVED: That the Energy Trust of Oregon, Inc., Board of Directors approves the 2015 budget and 2016 projection as presented in the board packet.

Moved by: Dan Enloe Seconded by: Anne Root

Vote: In favor: 11 Abstained: 0

Opposed: 0

RESOLUTION 727
ADOPTING 2015-2016 ACTION PLAN

BE IT RESOLVED: That Energy Trust of Oregon, Inc. Board of Directors approves the two-year 2015-2016 Action Plan as presented in the board packet.

Moved by: John Reynolds Seconded by: Ken Canon

Vote: In favor: 11 Abstained: 0

Opposed: 0

Margie announced that board members have an opportunity to tour OMSI facilities this afternoon.

The board took a break from 1:30 to 1:46.

Energy Programs

Steel Bridge Solar Project—R729 (Thad Roth and Peter West)

Thad Roth presented a request to authorize the executive director to negotiate and execute a contract for funding of up to $2,000,000 toward the above-market cost of a 3.0 MW_{DC} (megawatt direct current) ground-mounted solar photovoltaic facility near Willamina, developed and owned by NRG Energy, Inc. and delivering energy to Portland General Electric (PGE). The Steel Bridge Solar Project is expected to generate 3800 MWhs (0.43 aMW) per year. Thad introduced Bill Eddie, president of One Energy Renewables, the project developer.

Thad highlighted project history and details outlined in the resolution briefing paper. Project strengths include a solid business plan with key development milestones completed. The Steel Bridge Solar Project development team completed major steps prior to seeking financing. The team signed a 20-year Power Purchase Agreement with PGE. The team also signed an interconnection agreement. Land use permitting is in progress. Construction is expected to start in Q2 2015 and complete in 90 days. The short construction timeline is one of the strengths of solar projects.

The Steel Bridge Solar Project has the lowest all-in cost of any project the solar program has supported. This is the first utility-scale project to move forward in Oregon at qualifying facility, or wholesale, rates without a Business Energy Tax Credit.

Eddie Sherman rejoined the meeting at 1:49 p.m.

The board asked what else can co-exist on the land with the solar installation. Bill Eddie responded that landowners currently use the land for cattle and horse grazing. It is possible to graze sheep underneath the panels, with the added advantage of minimizing weeds. Oregon State University currently grazes sheep under a solar system.

The board asked if staff considered spreading incentive dollars across all three projects that applied to the RFP. Thad explained Energy Trust's scoring system, which includes consideration of overall project costs, incentive costs and the corresponding business plan. The intent of the RFP process is to find the best project to fund. The Steel Bridge Solar Project is the clear choice resulting from the scoring system. Energy Trust has reached out to the two other projects and is seeking opportunities to fund those projects through other mechanisms. Peter noted that the Steel Bridge Solar Project demonstrates that it is possible to develop a large solar project without a Business Energy Tax Credit.

The board asked about Renewable Energy Certificate (REC) allocation. Thad explained that Energy Trust expects 75 percent of the RECs. If the developers would like to hold more RECs, Energy Trust would reduce its incentives.

The board asked about interconnection. Thad responded that a distribution line on the project site connects to a substation that has been used to support several mills and currently support Spirit Mountain Casino.

The board asked about property tax, and Bill responded that property taxes are included in the project's expenses. Polk County is also a Rural Renewable Energy Development Zone.

The board noted that the solar market is volatile and asked if solar panels had been purchased. Eddie responded that solar panels have not yet been purchased.

The board asked if the project is replicable. Bill responded that the project may be replicable in Oregon, but not in PGE territory. Qualifying facility rates already secured for the Steel Bridge Solar Project were higher than what is currently available.

RESOLUTION 729
AUTHORIZING FUNDS FOR STEEL BRIDGE SOLAR PROJECT

WHEREAS:

1. **Consistent with Energy Trust's 2015-2019 Strategic Plan, Energy Trust supports all eligible renewable energy technologies using competitive approaches to identify and fund new projects and market solutions for those projects receiving non-standard incentives.**
2. **In addition, the Oregon Public Utility Commission (OPUC) fourth funding priority for renewables for Energy Trust to support the above-market costs associated with innovative and custom solar projects, "as funds are available."**
3. **In mid-2014, Staff identified $2,000,000 in available funds for innovative and custom solar projects, funds unallocated after a 2014 "Other Renewables" RFP process and support of standard solar projects.**
4. **In September 2014, Energy Trust released a Request for Proposals for innovative and custom solar projects, and three applications were received and reviewed.**
5. **Though all three submissions were eligible for Energy Trust funding, staff recommends moving forward with one, the Steel Bridge Solar**

3.0 MW$_{DC}$ project, a ground mounted, fixed-tilt installation located near Willamina, Oregon on leased, agricultural land. The Steel Bridge project proposal demonstrated many strengths.

6. **This project has a solid business plan, executed 26-year lease, experienced developer, construction contractor, and owner, and executed power purchase agreement (PPA) and interconnection agreement.**
7. **Total project cost is estimated to be approximately $6,000,000, which Energy Trust staff considers reasonable for a project of this size and design, at $1.98/W$_{DC}$ the lowest all-in cost of any project the solar program as supported.**
8. **The above-market cost on a net-present value basis over 20 years is estimated at $3,102,839.**
9. **Based on its analysis of above-market cost and available incentive funding for projects of this type, staff recommends an Energy Trust incentive of up to $2,000,000.**
10. **In consideration for its incentive funding contribution, Energy Trust will require that the project owner assign up to 75 percent of the Renewable Energy Certificates (RECs) for the project to PGE for compliance with Oregon's solar mandate and renewable energy requirements.**

It is therefore RESOLVED that the board of directors of Energy Trust of Oregon, Inc. authorizes:

1. **An incentive of up to $2,000,000 for the Steel Bridge ground-mounted solar project near Willamina, Oregon with minimum capacity of 3.0 MW$_{DC}$ and expected generation of 3,800 MWh/year (0.43 aMW).**
2. **Energy Trust to require the project owner to deliver up to 75% ofall RECs from this project to PGE for the benefit of its ratepayers and for compliance with PGE's renewable energy generation and solar capacity obligations to the state.**
3. **The executive director or her designee to negotiate and sign an agreement consistent with this resolution.**

Moved by: John Reynolds Seconded by: Mark Kendall
Vote: In favor: 11 Abstained: 0
Opposed: 0

Northwest Energy Efficiency Alliance Natural Gas Initiative—R730 (Margie Harris & Fred Gordon)
Margie presented a request for authorization to negotiate and execute a five-year contractual commitment to fund the Northwest Energy Efficiency Alliance 2015-2019 Natural Gas Market Transformation Business Plan in an amount up to $6,300,000. The plan will deliver 280 million therms of savings annually to the region at a 20-year weighted average total resource cost of $0.28/therm through regional gas market transformation activities.

Margie invited Susan Stratton and Karen Meadows from NEEA to help present. Susan is the executive director of NEEA and Karen is leading NEEA's new gas market transformation initiative. Fred represents Energy Trust on NEEA's gas collaborative.

Margie explained that NEEA's gas market transformation efforts will build upon the experience, approach and success of its electric market transformation efforts. Energy Trust is seeking board approval to fund 35 percent of NEEA's gas initiative. NEEA has identified several natural gas technologies for early

exploration, including absorption heat pump water heaters and combined heat pump water heaters for homes, gas dryers for homes, rooftop air conditioners for commercial buildings and new residential hearth products.

The board asked about how the gas initiative will impact NEEA's organizational structure. Susan responded that NEEA has a separate natural gas advisory committee. Two full-time NEEA employees will work on the gas initiative, and staff will be added as needed. Karen explained NEEA manages gas as a separate endeavor for now, and will integrate gas and electric market transformation activities to achieve economies of scale in the future.

Susan explained that NEEA's full board makes funding decisions about gas efforts. Many NEEA funders of this gas effort are already on NEEA's board. The board expressed concern about electric utilities voting on gas efforts. Margie explained the OPUC wanted to be sure the full NEEA board has opportunities to vote on NEEA gas budgets and efforts as part of NEEA's expanded portfolio and budget.

Susan added that Avista, Puget Sound Energy and Energy Trust will initially fund the gas initiative, and all will participate in a new gas advisory committee to be formed. Margie explained that NEEA will maintain separate budget and reporting to account for the gas initiative.

The board asked if there are other gas market transformation entities in the U.S. Susan responded that the Gas Technology Institute does emerging technology work, but it does not work to bring technology to market or remove market barriers. NEEA will not duplicate the efforts of the Gas Technology Institute. Northeast Energy Efficiency Partnerships on the East coast also does some gas market transformation work.

The board stated that the NEEA gas initiative will be beneficial for Northwest utilities, and acknowledged the economies of scale from NEEA's experience in the marketplace. Susan agreed that NEEA is already well connected to the market and plans to leverage existing relationships. Susan also explained that gas initiative funding is strong and utilities have signed funding commitments for this five-year budget cycle.

Margie asked about potential fuel switching concerns. Susan responded that NEEA is committed to being fuel neutral. When working on whole buildings, NEEA will need to be sensitive to fuel switching issues. NEEA will test products for both fuels and let the consumer decide what technologies to purchase.

RESOLUTION 730
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. **As an outcome of a collaborative of regional natural gas stakeholders, NEEA's board of directors has approved a 2015-2019 NEEA Natural Gas Market Transformation Business Plan (the "NEEA Gas Business Plan") which targets acquisition of 280 million Therms in regional energy savings annually at a projected cost of no more than $0.28/Therm.**
3. **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.**

4. **The NEEA Gas Business Plan prioritizes regional coordination and collaboration to accelerate market transformation development of emerging natural energy efficiency technologies, a critical strategy identified in Energy Trust's own strategic planning process.**
5. **Staff regards NEEA's work as essential to achieving Energy Trust savings goals over the next few years, helping ensure a full pipeline of gas 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 $6,300,000~~6,400,000~~ to support natural gas market transformation over the period 2015-19.**
2. **Funding shall be consistent with Energy Trust's board-approved annual budgets and two-year action plans.**

Moved by: Ken Canon (as amended) Seconded by: Anne Root
Vote: In favor: 11 Abstained: 0
Opposed: 0

Committee Reports

Evaluation Committee, Alan Meyer

The committee reviewed results of the 2014 Residential Awareness Survey, year two of the Commercial Strategic Energy Management (SEM) Evaluation, the Trade Ally Network Evaluation and the Memory Care Evaluation. Awareness of Energy Trust among residential customers remained moderate, and Energy Trust general awareness efforts continue to promote energy-saving actions. The Strategic Energy Management Evaluation indicated that SEM commercial efforts are effective and should continue with some refinements. Phil Degens added that SEM is a relatively new endeavor nationwide, and Energy Trust is pioneering these strategies. Outcomes of the Trade Ally Network Evaluation include exploration of revising Energy Trust's insurance requirements for trade allies, and discussions are ongoing to ensure appropriate risk management with guidance provided by the board. Finally, the Memory Care Evaluation indicated that the pilot was not effective. The template provided to customers was helpful, but customers were not motivated to take action.

Finance Committee, Dan Enloe

At the last meeting, the committee reviewed Energy Trust's October financial statements. The discussion emphasized the importance of spending down reserves.

The Board asked about year-end projections. Margie responded that year-end projections are included in Energy Trust budget materials. Courtney added that Energy Trust updates forecasting every month, and projections to date are consistent with those presented in the budget. Margie added that Energy Trust is forecasting higher achievement of 2015 goals than last year at this time. Courtney anticipates ending the year with about $90 million in reserves.

Policy Committee, Roger Hamilton

The committee reviewed four policies, two of which were on today's consent agenda. These policies are reviewed every three years. Two other policies were discussed by the committee and will be discussed again at future committee meetings: the Combined Heat and Power Policy and the Program Management Contracts Policy. At the next committee meeting, committee members plan to consider a Renewable Energy Certificate Market Study based on additional information from Energy Trust staff.

Roger also reported that the committee approved two appointments to the Renewable Energy Advisory Council: Diane Broad, from Oregon Department of Energy, replaced Matt Krumenauer and Kari Greer, from Pacific Power, replaced Tashiana Wangler.

Roger noted that the committee received an update regarding the GP Camas situation. Since the committee meeting, staff reports that the OPUC has provided Energy Trust direction to proceed with the $309,000 in incentive commitments and projects underway and to claim associated energy savings. After these activities are complete, Energy Trust will not take on any additional studies or pay additional incentives to GP Camas.

Staff Update

Margie announced planned changes to Energy Trust reporting content and timing, based on Management Review recommendations to reduce content in Q1 and Q4 reports. In agreement with the OPUC, Energy Trust will consolidate the Q4 report and append Q4 tables to the annual report. The Q1 report will also be shorter. These changes will save staff time and effort. Comments are also welcome from the board on report content. The board requested to receive the Q1 2015 report by email. Margie noted that Energy Trust will also consider changes and improvements to utility reports based on their input.

Margie summarized briefly the results of the Q3 2014 report. Energy Trust is forecasting that 2014 could be one of Energy Trust's highest energy saving years. Energy Trust is projecting to meet gas and electric efficiency goals and OPUC performance measures. Spending is slightly under budget. Gas expenditures are slightly down, due to fewer Clean Energy Works projects completed and lower cost savings from Existing Buildings projects. Web visits increased significantly thanks to program marketing efforts. Customer satisfaction rates remain very high, ranging from 89 to 97 percent satisfaction with programs and program representatives. In Q3, Energy Trust provided opportunities for renters through MPower and enabled customers to buy energy-savings products online for the first time, in collaboration with Costco. Also in 2014, Energy Trust welcomed a new Southern Oregon outreach manager.

The board asked why savings from Clean Energy Works projects were lower than expected. Peter responded that Clean Energy Works may have served the many customers that are easiest to reach, and it is more challenging to reach the next group of customers.

The board noted that Energy Trust was recognized as the third best organization to work for in Oregon, and expressed interest in seeing similar awards and state ranking results included in quarterly and annual reports. Margie responded that Energy Trust will include those types of accomplishments in the future.

Adjourn

The meeting adjourned at 3:15 p.m.

The next regular meeting of the Energy Trust Board of Directors will be held Wednesday, February 25, 2015, at 12:15 p.m. at Energy Trust of Oregon, Inc., 421 SW Oak Street, Suite 300, Portland, Oregon.

_____

Alan Meyer, Secretary

Tab 2

Board Decision
Terms of Office

February 25, 2015

RESOLUTION 734
ELECTING MARK KENDALL AND ANNE ROOT TO NEW TERMS ON THE ENERGY TRUST BOARD OF DIRECTORS

WHEREAS:

1. **The terms of incumbent board members Mark Kendall, Anne Root, and David Slavensky expire in 2015.**
2. **The board nominating committee has recommended that two of these members' terms be renewed.**
3. **Board member David Slavensky has decided to resign. The Nominating Committee will initiate a search for his replacement.**

It is therefore RESOLVED that the Energy Trust of Oregon, Inc., Board of Directors elects Mark Kendall and Anne Root, incumbent board members, to new terms of office that end in 2018.

Moved by: Seconded by:

Vote: In favor: Abstained:

Opposed:

Board Decision
Election of Officers

February 25, 2015

RESOLUTION 735
ELECTING OFFICERS OF
ENERGY TRUST OF OREGON, INC.

WHEREAS:

1. **Officers of the Energy Trust of Oregon, Inc. (other than the Executive Director and Chief Financial Officer) are elected each year by the Board of Directors at the board's annual meeting.**
2. **The Board of Directors nominating committee has nominated the following directors to renew their terms as officers:**
   - **Debbie Kitchin, President**
   - **Ken Canon, Vice President**
   - **Alan Meyer, Secretary**
   - **Dan Enloe, Treasurer**

It is therefore RESOLVED that the Board of Directors hereby elects the following as officers of Energy Trust of Oregon, Inc., for 2015:

- **Debbie Kitchin, President**
- **Ken Canon, Vice President**
- **Alan Meyer, Secretary**
- **Dan Enloe, Treasurer**

Moved by: Seconded by:

Vote: In favor: Abstained:

Opposed:

Tab 3

Board Decision
Committee Assignments

February 25, 2015

RESOLUTION 736
BOARD COMMITTEE APPOINTMENTS

WHEREAS:

1. **The Energy Trust of Oregon, Inc. Board of Directors is authorized to appoint by resolution committees to carry out the Board's business.**
2. **The Board President has nominated new directors to serve on the following committees.**

It is therefore RESOLVED:

1. **This resolution supersedes Resolution 694, adopted by the board at its February 26, 2014, meeting.**
2. **That the Board of Directors hereby appoints the following directors to the following committees for terms that will continue until a subsequent resolution changing committee appointments is adopted:**

Audit Committee
Ken Canon, Chair
Melissa Cribbins
Mark Kendall
Heather Buesse Eberhardt
Karen Ward, outside expert
Debbie Kitchin *(ex officio)*
Board Nominating Committee
John Reynolds, Chair
Roger Hamilton
Alan Meyer
Anne Root
Eddie Sherman
John Savage, OPUC *(ex officio)*
Debbie Kitchin *(ex officio)*
Compensation Committee *(formerly 401(k) Committee)*
Dan Enloe, Chair
Melissa Cribbins
Mark Kendall
Debbie Kitchin *(ex officio)*
Executive Director Review Committee
Roger Hamilton, Chair
Melissa Cribbins
Ken Canon
John Reynolds
Debbie Kitchin *(ex officio)*

Finance Committee
Dan Enloe, Chair
Susan Brodahl
Anne Root
Debbie Kitchin *(ex officio)*
Policy Committee
Roger Hamilton, Chair
Ken Canon
Alan Meyer
John Reynolds
Eddie Sherman
Debbie Kitchin *(ex officio)*
Program Evaluation Committee
Alan Meyer, Chair
Susan Brodahl
Heather Beusse Eberhardt
Anne Root
Tom Eckman, NWPCC, expert outside reviewer
Ken Keating, expert outside reviewer
Debbie Kitchin *(ex officio)*
Strategic Planning Committee
Mark Kendall, Chair
Susan Brodahl
Ken Canon
John Reynolds
Eddie Sherman
Warren Cook, ODOE
John Savage, OPUC
Debbie Kitchin *(ex officio)*

3. The executive director, general counsel, or chief financial officer are authorized to sign routine 401(k) administrative documents on behalf of the board, or other documents if authorized by the Compensation Committee.

Moved by: Seconded by:

Vote: In favor: Abstained:

Opposed:

Tab 4

Board Decision
Approve Five-year Funding for the Regional Technical Forum
February 25, 2015

Summary
Approve a five-year funding agreement for the Regional Technical Forum.

Background
- The Regional Technical Forum (RTF) was created in 1996, when Congress directed the Northwest Power and Conservation Council (Council) and the Bonneville Power Administration to establish a technical forum to develop "consistent standards and protocols for verification and evaluation of energy savings, in consultation with all interested parties." (Senate Report 104-120, 1996). The Council provides staff for the RTF and oversees its work.
- While the RTF reports to the Council, it serves a regional constituency. In 2010, an RTF Review Committee was organized by the Northwest Energy Efficiency Taskforce (a regional effort to accelerate energy conservation). The committee was tasked with reviewing RTF governance and structure, the idea of multi-year work plans, and RTF transparency. This work led to a variety of changes in RTF operations.
- Energy Trust has participated in the RTF consistently, and derived significant benefit from RTF work on cost-effectiveness issues and energy efficiency research and evaluation. During 2012-2014, Energy Trust paid $308,000 per year for RTF work.

Discussion
- There is ongoing regional interest in developing benchmarks and measurement protocols to allow utilities and others to compare methods and results and learn from each other's experience. Energy Trust staff continues to see significant value in the RTF's work in this connection.
- In the past year, Energy Trust and other RTF funders have discussed the need for longer term RTF funding. Based on these discussions, the RTF has developed a five-year (2015-2019) business plan and budget.
- The business plan (attached) includes an extensive list of work, driven largely by requests from utilities, Energy Trust, NEEA and state energy agencies. The plan includes such tasks as:
  - Development of new efficiency measures and protocols for verification and evaluation of energy savings, and review and update of existing measures and protocols
  - Continued standardization of the RTF's *Guidelines* document and research into measures that don't currently fit within the *Guidelines*
  - Continuing development and refinement of analytical tools to assess measure savings and development of new tools
  - Maintaining a process by which utilities, Energy Trust and others can demonstrate different costs, savings and cost-effectiveness findings for their territories
  - High-priority evaluations and research.
- 2015-2019 funding contributions are based on the Northwest Energy Efficiency funding allocation methodology. Energy Trust's share would be up to $339,700 in 2015, $345,000 in 2016, $371,300 in 2017, $380,400 in 2018 and $389,000 in 2019, for a total of up to $1,825,400.
- The increase in funding from the prior time period ($308,000 per year) is related to two issues. First, RTF members have asked RTF to increase efforts to work with local program funders, including Energy Trust, to gather data on efficiency measure performance to improve measure-

specific savings estimates across the region. Second, a wave of new Federal standards midway through the five year period will change the efficiency levels that would occur without further efficiency program action, and thus require that the savings from measures be updated. While RTF routinely updates savings estimates to reflect equipment standards and building codes, the unusual number of new appliance standards will increase workload.

- As proposed, Energy Trust's funding agreement would allow Energy Trust to reduce or terminate funding if the Grant Agreement with the OPUC is terminated or the RTF is "significantly failing to meet its business plan objectives."

Recommendation

Authorize the executive director to sign a five-year funding agreement with the Northwest Power and Conservation Council for up to $1,825,400 for the RTF and its 2015-2019 Business Plan, with termination provisions as outlined above.

RESOLUTION 738
APPROVING A FIVE-YEAR CONTRACT WITH THE NORTHWEST POWER AND CONSERVATION COUNCIL TO FUND THE REGIONAL TECHNICAL FORUM

WHEREAS:

1. **The Northwest Power and Conservation Council's Regional Technical Forum (RTF) develops "consistent standards and protocols for verification and evaluation of energy savings, in consultation with all interested parties." The RTF is the Northwest's primary forum for developing benchmarks and measurement protocols to allow utilities and others to compare methods and results and learn from each other's experience in energy conservation.**
2. **Energy Trust has participated in the RTF consistently over the years, and derived significant benefits from RTF work on cost-effectiveness issues, energy savings analysis, and energy efficiency research and evaluation. During 2012-2014, Energy Trust paid $308,000 per year for this type of work.**
3. **In the past year, Energy Trust and other RTF funders discussed the need for longer-term RTF funding. Based on these discussions, the RTF has developed a five-year (2015-2019) business plan and budget, driven largely by requests from utilities, Energy Trust, NEEA and state energy agencies.**
4. **Proposed 2015-2019 funding contributions for RTF are based on the Northwest Energy Efficiency funding allocation methodology. Energy Trust's share would be $339,700 in 2015, $345,000 in 2016, $371,300 in 2017, $380,400 in 2018 and $389,000 in 2019, a total of $1,825,400**
5. **As proposed, Energy Trust's funding agreement would allow Energy Trust to reduce or terminate funding if the Grant Agreement with the OPUC is terminated or the RTF is "significantly failing to meet its business plan objectives."**

It is therefore RESOLVED that the Board of Directors hereby authorizes the executive director to sign a five-year funding agreement with the Northwest Power and Conservation Council for up to $1,825,400 for the RTF and its 2015-2019 Business Plan, with termination provisions as described above.

Moved by:		Seconded by:
Vote:	In favor:	Abstained:
	Opposed:	

Regional Technical Forum

851 S.W. Sixth Avenue, Suite 1100
Portland, Oregon 97204-1348
Phone 503-222-5161
Fax 503-820-2370
rtf.nwcouncil.org

2015-2019 Business Operating Plan and Funding

Introduction

This document describes the draft Regional Technical Forum's (RTF) 2015 work plan and the 2015-2019 Business Plan. The budget for 2015 is currently estimated at $1,637,600 per year. The RTF staff will present the draft work plan and business plan to the RTF at their August meeting. After a month comment period, the RTF staff will present the proposed work plan and business plan to the RTF at its September meeting for potential adoption, and forward that recommendation to the Council for approval. The RTF Policy Advisory Committee (PAC) will also review the proposed work plan, budget, and business plan at its September meeting and send their recommendation to the Council. The work plan and business plan will be brought to the Council at their October meeting for consideration.

Work Scope

The RTF will continue to pursue the tasks adopted by the Council and its original charge from Congress and the Comprehensive Review[1]. These are:

1. Develop and maintain standardized protocols for verification and evaluation of energy savings.

2. Conduct periodic reviews of the region's progress toward meeting its conservation resource goals, acknowledging changes in the market for energy services, and the potential availability of cost-effective conservation opportunities.

3. Provide feedback and suggestions for improving the effectiveness of the conservation resource development programs and activities in the region.

Consistent with these tasks, the RTF will continue to provide recommendations to Bonneville Power Administration (Bonneville), the region's utilities, and system benefit charge administrators to facilitate the operation of their conservation resource acquisition programs. The 2015 work plan includes, but is not limited, to:

- Review and update existing measures and standardized protocols for verification and evaluation of energy savings. The RTF maintains and continually updates a library of over one hundred measures and protocols, approximately one-quarter of which will require updating in 2015 due to approaching sunset dates. A few additional measures will

[1] See the RTF Charter at http://rtf.nwcouncil.org/Revised_RTF_Charter_and_Bylaws.pdf

be updated to conform to the uniform methods and savings, costs, benefits, and life estimation standards outlined in the RTF's operative *Guidelines*[2].

- Review and aid in the development of research plans for measures of regional importance and interest found to be out-of-compliance with the RTF *Guidelines*.

- Develop new measures and protocols and review unsolicited proposals for new measures and protocols.

- Continue to standardize and update the *Guidelines* for technical review of measures, protocols, and impact evaluations.

- Update and develop new tools for measure analysis, including updates to ProCost and SEEM.

- Conduct research projects, update data, and provide searchable access to data for analysis.

- Provide an inventory of regional evaluation spending and activities to aid in regional coordination of evaluation.

- Maintain a process through which Bonneville, the region's utilities, and system benefit charge administrators may demonstrate that different cost, savings, and cost-effectiveness findings should apply to their specific programs or service territories.

- Develop and maintain protocols by which the savings and the regional cost-effectiveness for energy efficiency measures, technologies, or practices not specifically evaluated by the RTF can be estimated.

- Review measurement and verification and program impact evaluation plans and results to assess their suitability for use supporting studies for RTF-related measure evaluations.

- Upon request of program sponsors, review plans for measurement and verification or program impact evaluation.

- Develop, review, and revise as needed program technical specifications. Identify high-priority evaluations and research and demonstration activities that are needed to improve regional energy savings estimates or facilitate adoption of new and existing energy efficiency technologies, measures, or practices.

- Provide support and outreach to small and rural utilities to ensure the unique circumstances and barriers of their service territories are being taken into account when developing RTF technical measures and specifications.

- Review efficiency-related technical analysis developed for the Council's Seventh Power Plan.

[2] http://rtf.nwcouncil.org/subcommittees/guidelines/

- Provide outreach, training support and presentations for RTF related matters.

2015 Activities and Budget

The RTF's specific work plan is largely driven by the requests it receives from parties within the region, primarily utilities, Bonneville Power Administration (BPA), Energy Trust of Oregon (ETO), Northwest Energy Efficiency Alliance (NEEA), and state energy agencies (SEO). Historically these requests have come to the RTF through informal requests from staff of these entities or through the more formal "petition" process on the RTF Planning, Tracking and Reporting (PTR) web site.

To facilitate the submittal of proposals by parties in the region for review by the RTF, and because the PTR system is no longer utilized by BPA for tracking and reporting purposes, the RTF established an online proposal form located directly on the RTF website as part of its 2013 Work Plan. This proposal form is designed to collect the minimum data that is required for a measure to be considered for RTF approval. This new proposal process allows the RTF to respond in a timely manner to emerging technical issues and questions, and prioritize incoming requests. In addition, the RTF will issue an annual request to Bonneville, the region's utilities, ETO, NEEA, and SEOs asking these entities to identify specific technical research and evaluation issues that they believe should be addressed during the coming year.

During its operating year, the RTF typically adjusts allocation of resources among the categories in its work plan based on requests received, proposals, and the pace of multi-year projects. Specifically, the RTF reviews the budgets allocated to the review of existing and new measures and, within those budget categories, the allocation of funding between Unit Energy Savings (UES) measures and Standard Protocols. The RTF notifies the Council and its funders of all significant reallocation of resources or priorities.

In 2014, the RTF addressed most of the remaining UES measures identified in 2012 as requiring review for compliance with its *Guidelines.* Therefore, UES measure updates n 2015 will focused on addressing those measures scheduled to sunset (24 measures).

The RTF divides its work into six categories of elective work and three categories for management and administration. Table 1 presents a summary of these categories for 2015. It includes components for Contract RFPs, RTF dedicated Contract Analyst Team, the RTF Manager, and Council staff in-kind contributions. The component labeled "Subtotal Funders" represents the amount of funding required from the RTF's voluntary funders. A detailed budget for 2015 and the five-year budget forecast are in the accompanying Excel workbook. Each category of work is briefly discussed in the sections following Table 1.

Table 1: Planned RTF Activities for 2015

Category	Contract RFP 2015	RTF Contract Analyst Team 2015	RTF Manager 2015	Subtotal Funders 2015	Council In-Kind Contribution 2015
Existing Measure Review & Updates	$112,500	$428,000	$0	$540,500	$9,600
New Measure Development & Review of Unsolicited Proposals	$90,000	$310,000	$0	$400,000	$5,100
Standardization of Technical Analysis	$25,000	$84,000	$0	$109,000	$900
Tool Development	$10,500	$80,000	$0	$90,500	$15,000
Research Projects & Data Development	$0	$40,000	$0	$40,000	$20,000
Regional Coordination	$12,500	$125,000	$0	$137,500	$4,000
Website, Database support, Conservation Tracking	$20,000	$20,000	$0	$40,000	$55,000
RTF Member Support & Administration	$146,800	$0	$0	$146,800	$5,000
RTF Management	$8,300	$0	$125,000	$133,300	$87,000
Subtotal New Work	**$425,600**	**$1,087,000**	**$125,000**	**$1,637,600**	**$201,000**

Existing Measure Review & Standardization of Technical Analysis ($649,500)

In 2010, the RTF began the task of updating, standardizing, and strengthening its technical analyses and more thoroughly documenting the input assumptions used for energy efficiency measures approved by the RTF. This work included the initial development of guidelines for estimating energy savings, measure costs, non-energy benefits, and measure life. In 2011, the RTF began a systematic process of conformance for its library of measures to the recently developed *Guidelines*. In 2014, much of this work was completed; therefore only a portion of the 2015 budget will be allocated to bringing the remaining handful of UES measures and Standard Protocols into compliance with these operative *Guidelines*. The remaining budget will be allocated to reviewing UES measures slated to sunset in 2014 and updating those, as necessarily, relative to measure viability, savings and cost estimates, baseline assumptions, lifetime, and other key factors.

In conjunction with this work, the RTF will work to standardize and streamline its technical analysis through improvements to the measure workbooks and the related Standard Information Workbook. The RTF will also continue to assess the relevance of the *Guidelines*, and make updates as necessary.

New Measure Development & Review of Unsolicited Proposals ($400,000)

Typically the RTF sets aside funding for review of specific high-priority new measures as well as unanticipated new measures or protocols proposed during the year. Approximately 24 percent of the 2015 budget is set aside for new measure work. This estimate is based on prior experience where much of the development and research required for new measures is done outside the RTF,

with the RTF budget assuming the costs of review and assistance by the Contract Analyst Team and occasional outside contract support. This development approach has typically been the case over recent years for high priority measures such as heat-pump water heaters and ductless heat pumps, although with the completion of the *Guidelines* in 2013, more utilities and 3rd party entities have been completing the majority this research prior to submitting measures to the RTF for review.

As with past years, the RTF has allocated a portion of its 2015 budget for the review and development of measures specifically targeted at small and rural utilities in recognition of their limited resources and the unique circumstances of their service territories. For 2015, the RTF plans on allocating $40,000 towards the development of measures identified by the small/rural subcommittee. Contract Analyst Team resources have been allocated to review and assist with the development of these work products and other measures that get adopted by the RTF and which may require modification to be applicable to small/rural utilities.

Tool Development ($90,500)

The work of the RTF, its technical analysis, recommendations, and specifications require continued development of analytical tools and measure specifications used region-wide. The 2015 budget allocates funding for the development or enhancement of the economic analysis tool ProCost, including additional cleaning of the code, automation for workbooks, and tool documentation. Additionally, some budget is allocated to addressing the residential heat loss simulation model (SEEM). For 2015, the plan is to shift more of this work to the dedicated Contract Analyst Team to ensure a solid understanding of the impact any updates have on RTF analysis.

Research Projects & Data Development ($40,000)

Primary research has not been a key function of the RTF in the past because primary data collection is expensive. However, on occasion it has been advantageous to use the RTF to sponsor primary research, or to coordinate secondary research where there is distinct region-wide value. For 2015, approximately 2 percent of the budget has been allocated to this category for the Contract Analyst Team to assist with reviewing Power Plan inputs and supply curves as part of the early stages of the Seventh Power Plan development.

Regional Coordination ($137,500)

Approximately 8 percent of the 2015 budget is earmarked for regional coordination efforts. These efforts typically center on activities that are less measure specific and focus more on wider regional efforts that the RTF has identified as important issues to track. For 2015, this category has been increased to account for additional Contract Analyst time focused on review of regional research and evaluation plans.

RTF Member Support & Administration and RTF Management ($320,100)

Support and administrative activities identified for 2015 include RTF member support, contract management, and general meeting costs. Member support includes compensating RTF members when they are asked to devote significant additional time to RTF work tasks and/or when they would not otherwise be compensated by their employer for participation in RTF work. The RTF will require expanded technical capabilities to analyze measures, protocols, and measure specifications through RTF the Contract Analyst Team. The category also includes RTF management to develop agendas, schedule and manage RTF work flow, refine procedures, and

provide analytical support to the Contract Analyst Team. Approximately $125,000 is assigned to this sub-category.

In addition, there is another $201,600 of Council administrative staff work required to support contracts, billing, web site development, annual conservation tracking report, data warehousing, meeting costs, web conference, scheduling and other business functions that are best retained at the Council. These are treated as in-kind contributions from the Council and are not included in the 2015 budget of $1.638 million. Over the next few years, the RTF plans to shift some work to the RTF Manager and expand its use of dedicated Contract Analysts to further relieve Council staff.

Organization and Staffing

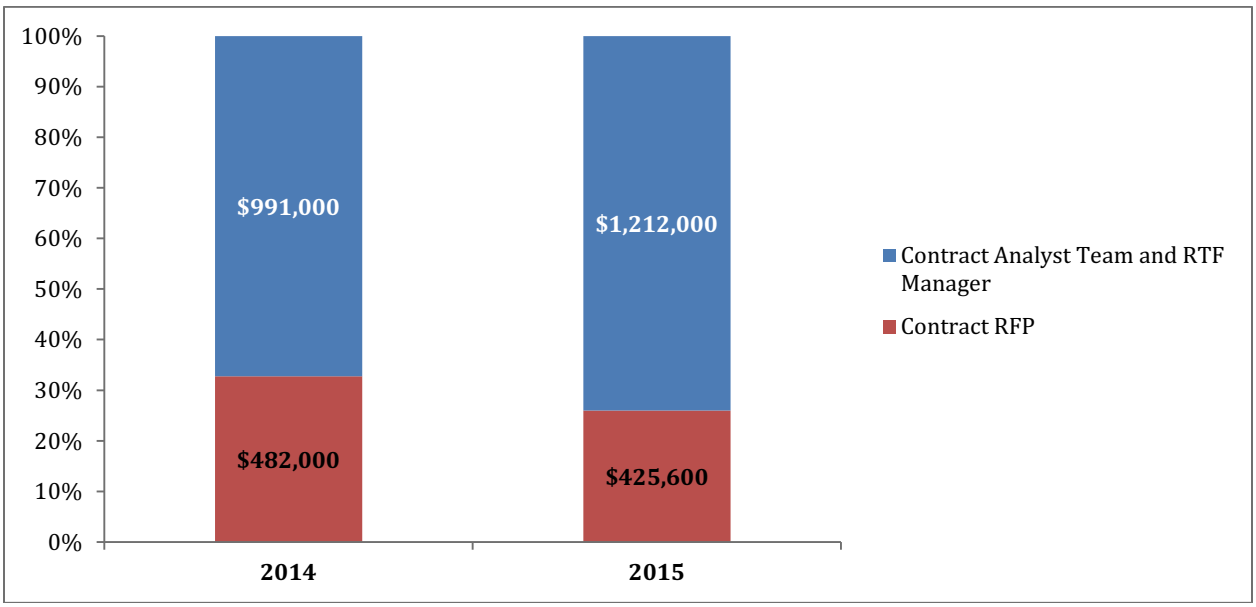
The full RTF meets at least once a month for an all-day meeting. As regional demand for its products and services increase, the RTF is constantly looking for ways to improve its operational efficiency and lessen the burden it places on its volunteer members.

In prior years, the work plan was constructed to bid out the majority of technical analyses and research projects to third-party contractors to develop work products and lead subcommittee discussions. Under that model, the RTF staff focused primarily on developing contract scope, managing contractors, and reviewing deliverables. This level of contract management included considerable technical assistance to contractors and extensive review of work products to ensure consistency with RTF standards. For 2013, the RTF shifted the majority of its technical analysis to a dedicated Contract Analyst Team. The strategy with this shift was to gain and retain technical knowledge within the team during the contract duration. This is expected to help with the long-term technical capability of the organization, as well as decrease the overall obligations of its volunteer members. Moreover, effective subcommittees are important to allow for increased throughput at one-day RTF meetings and the RTF Manager and Contract Analyst Team are typically better equipped to facilitate subcommittee efforts and follow-up on action items when they are closer to the analysis.

Furthermore, in an effort to lend credibility to work products developed by Contract Analyst Team, the 2013 and 2014 work plans also made provisions to contract out-third party reviews of all RTF staff work products throughout the year. This had the added benefit of keeping the measure development knowledge in-house while assuring a credible review of the work is done by an impartial third party. This approach will continue in 2015.

Similar to this business model adopted in 2013, the 2015 RTF work plan will continue to implement this strategy by allocating the majority of its budget towards the Contract Analyst Team time and less towards third-party contract RFPs for technical analysis. Under this model, the RTF will have the equivalent of 7.0 FTE dedicated to this work (1.0 FTE for the RTF Manager; 6.0 FTE for the Contract Analyst Team). For 2015, this represents a greater percentage of funding allocated to the Contract Analyst Team, relative to Contract RTP funds. The primary driver for this shift is the addition of a Contract Analyst focused on research and evaluation (part of this resource is captured in the Regional Coordination task, while the remainder is baked into the measure update and development tasks). Figures 1 represents this percent change in allocation Contract RFP and Contract Analysts Team (including the RTF Manager) between 2014 and 2015.

Figure 1: Percentage of Budget Allocated to RTF Manager/Contract Analyst Team vs. Contract RFP for 2014-2015



Figures 2 and 3 below show the change in allocation for the Contract Analyst Team and Contract RFP over the past three years, respectively. The RTF Manager will continue to oversee the work of a dedicated Contract Analyst Team to provide subcommittee support, review research projects, develop technical work related to new and existing measure development, and work with external stakeholders on bringing measures through the RTF process. Funding set aside for outside contracts will be used to review RTF Manager and Contract Analyst Team work products, conduct research projects as outlined in the work plan, aid in tool development, coordinate regional research efforts, and provide further support to the small and rural utilities work plan.

Figure 2: RTF Manager and Contract Analyst Team Allocation for 2013-2015

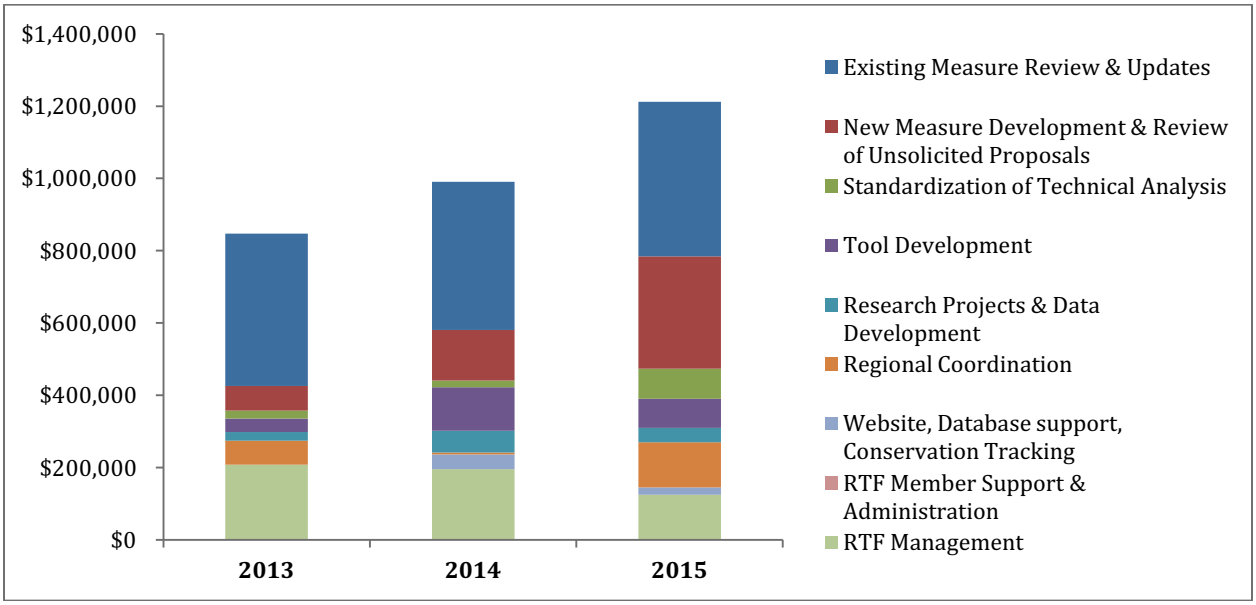
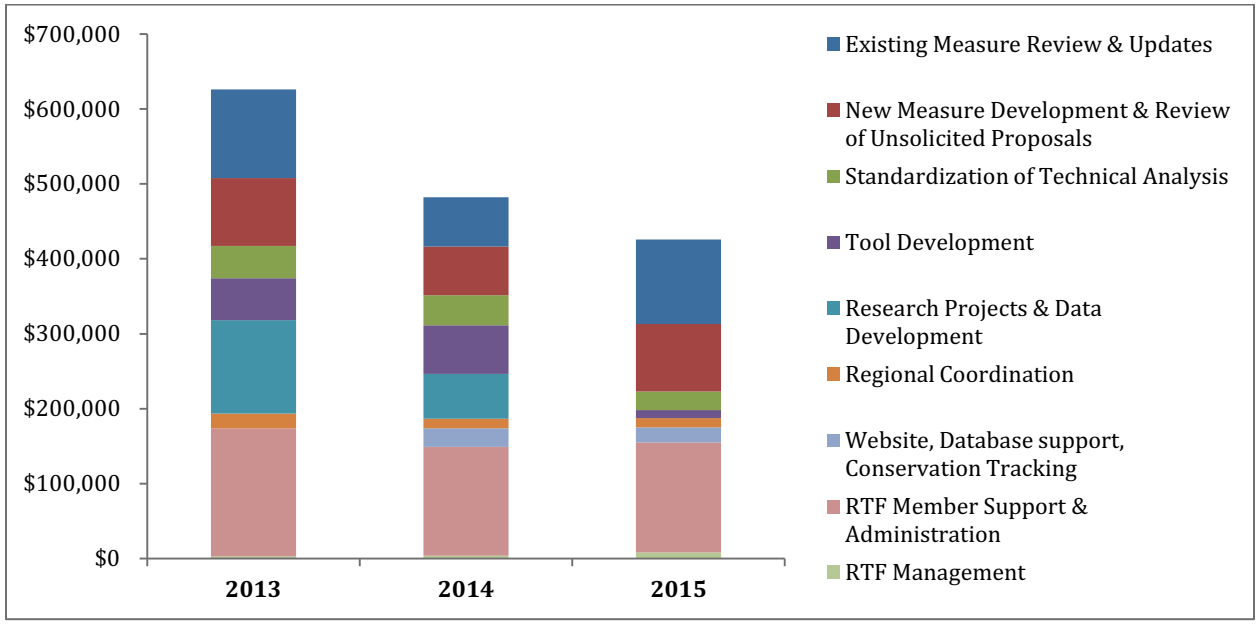


Figure 3: RTF Contract RFP Allocation for 2013-2015



2015 Funding

Funding for the RTF is developed through advice from the RTF Policy Advisory Committee (RTF PAC). In 2014, the RTF PAC recommended a five-year funding level of starting at $1.67 million per year with an annual increase of 2.5 percent for wage and inflation rates over the following years. The RTF PAC also recommended that funding shares should follow the allocation method developed for NEEA funding, with an adjustment for Northwestern Energy[3].

This approach solicits funding from Bonneville, several of the large generating public utilities, and all six investor-owned utilities in the region. Table 2 shows the 2015 funding shares and contributions by funder.

[3] NorthWestern Energy's NEEA share is based on the entire state of Montana, while the RTF share is only western Montana. This equates to a total RTF funding amount of $1,637,600 for the starting year of 2015.

Table 2: 2015 Funding Shares

Organization	NEEA Funding Allocation	Share of RTF Budget (rounded)**
Bonneville Power Administration	36.04%	$607,800
Energy Trust of Oregon	20.15%	$339,700
Puget Sound Energy	14.14%	$238,400
Idaho Power Company	8.97%	$151,200
Avista Corporation, Inc	5.74%	$96,800
PacifiCorp (Washington)	2.54%	$42,900
Northwestern Energy	4.04%	$35,700
Seattle City Light	3.66%	$61,600
PUD No 1 of Clark County	1.31%	$22,200
Tacoma Power	1.10%	$18,500
Snohomish County PUD	0.65%	$11,000
Eugene Water and Electric	0.32%	$5,300
PUD No 1 of Cowlitz County	0.38%	$6,500
Total	**99.03%**	**$1,637,600**

***** Northwestern's contribution adjusted to $35,700 for 2015. The RTF will adjust its work plan accordingly.
** All funding shares adjusted by 100%/99.03% because Chelan Country is present in NEEA funding, but not RTF funding.

Multi-Year Work Plan & Regional Review of the RTF

The RTF PAC approved a RTF developed multi-year work plan and budget for 2015-2019 to aid in long-term work plan development. This 5-year period coincided with the current NEEA funding cycle, and may vary in the upcoming years depending on future NEEA funding cycle changes. Annual work plan development is intended to provide flexibility to meet regional needs year to year and keep focus on high priority work. Table 3 shows committed RTF funding for the 2015 calendar year under the current multi-year agreement, and projected funding for the 2016-2019 calendar years based on work plan priorities in the future, and a forecasted 2.5% inflation rate (wage plus inflation) each year.

Table 3: 2015 Committed Funding and 2016-2019 Projected Funding

	Committed Funding	Projected Funding			
	CY 2015	CY 2016	CY 2017	CY 2018	CY 2019
Contracts	$425,600	$429,500	$451,300	$465,600	$476,500
Contract Analyst Team	$1,087,000	$1,099,200	$1,193,700	$1,212,600	$1,239,700
RTF Manager	$125,000	$134,500	$144,800	$155,800	$158,900
Subtotal Funders	$1,637,600	$1,663,100	$1,789,600	$1,833,700	$1,874,700
Council Staff In-Kind Contribution	$201,600	$209,200	$219,600	$233,000	$238,000

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Tab 5

Evaluation Committee Meeting

January 20, 2015 12:00-3:00 pm

Attendees

Evaluation Committee Members
Alan Meyer, Board Member, Committee Chair
Susan Brodahl, Board Member
Mark Kendall, 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
Sarah Castor, Evaluation Sr. Project Manager
Erika Kociolek, Evaluation Project Manager
Anna Kelly, Evaluation Intern
Elaine Prause, Senior Manager, Planning
Jackie Goss, Engineer, Planning
Ted Light, Sr. Project Manager, Planning
Amber Cole, Director, Communications and Customer Service
Sue Fletcher, Senior Manager, Communications and Customer Service
Marshall Johnson, Program Manager, Existing Homes
Jessica Iplikci, Program Manager, Commercial
Kate Scott, Program Manager, Commercial
Kim Crossman, Sector Lead, Industry & Agriculture
JP Batmale, Sr. Program Manager, Industry & Agriculture

Other Attendees
Becky Walker, CLEAResult
Cindy Strecker, CLEAResult

Fred wanted to check in with board members about whether or not they are comfortable with the number of Energy Trust staff attending these meetings; staff find it a good learning opportunity. Alan responded that as long as staff are using it as a learning opportunity, he is fine with staff attending.

1. Short Take: Customer Engagement Pilot

Presented by Erika Kociolek

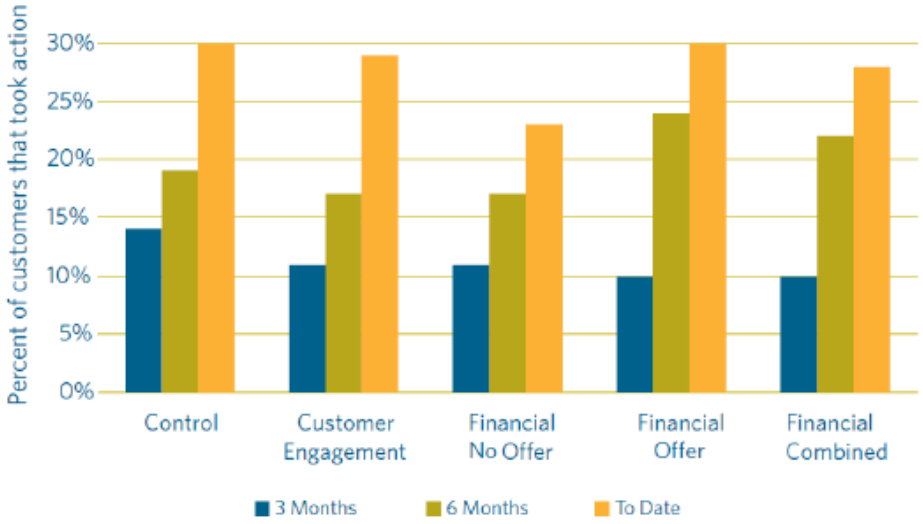
Erika described the purpose of the pilot, which was to determine the effects of enhanced engagement or additional incentives on program participation for customers that had received a Home Energy Review (HER). Working with researchers from Massachusetts Institute of Technology (MIT), Energy Trust developed an experiment to test the effect of those two treatments. There was a control group that received limited contact after the HER, a customer engagement group that received enhanced customer service in the form of more follow-up communications, and a financial group that received an offer of higher incentives for select measures 90 days after their HER. The customer engagement group was slightly larger than the

other two groups, because staff hypothesized that this treatment would have the most positive effect and program staff were concerned about meeting savings goals.

Evaluation tasks included an analysis of "follow-though" (the installation of one or more qualifying measures after the HER), surveys of customers in all three groups, and a billing analysis (to be completed by MIT). The date of completion of the billing analysis is unknown at this time. This presentation covers the results of the follow-through analysis and survey results.

For the financial group, if the customer had already done a measure 90 days post-HER, had no applicable recommendations, or were not interested in taking action to install a measure, they did not receive the offer for a bonus incentive (double the standard incentive, up to 75% of installed cost). This group is referred to as the "Financial – No Offer" group in the graphic below. 66% of the financial group received the offer. Ken noted that the tracking of why people didn't get the offer seemed imprecise; Erika confirmed tracking was not as good as it could have been.

Follow-through results by group



Results of follow-through analysis show that follow-though three months after the HER is about the same across groups, but highest for the Control group. At six months post-HER, the follow-through rate is higher for Financial - Offer group (and Financial – Combined group). But results to date show very similar follow-through of about 25-30% across groups, indicating that the financial offer speeds action a bit, but does not increase the overall percent of customers taking action.

Follow-through results by type of HER – in-home versus phone-based – show that both delivery methods had very similar rates of action taken. Follow-through was slightly higher for customers who had participated in an Energy Trust program before their HER (31% vs. 26% follow-through to date). The analysis also noted differences in follow-through rates by individual Energy Advisor. Unfortunately, this finding is not particularly actionable because we didn't track Energy Advisor characteristics.

About two-thirds of customers that took action installed one or more measures eligible for the bonus incentive. However, there were no significant difference in savings, project costs or incentives between projects in the various treatment and control groups.

The overall findings indicate that additional incentives can be effective at driving action sooner, but do not increase the overall proportion of customers that ultimately participate in an Energy Trust program. Phone based HERs were as effective as in-home HERs. Neither treatment – additional incentives or enhanced customer engagement – appeared to affect project costs, incentives or savings.

Alan said that it seems that if phone-based HERs are as effective as in-home, we should be moving toward them, but the paper says we are decreasing emphasis on phone HERs. Kate responded that we are moving more toward online HERs, rather than either phone or in-home. Alan said that could have been clearer in the paper. Kate added that Energy Trust has done some testing and tracking to verify that people seem to take as many actions after online as in-home reviews.

Erika noted that satisfaction with the HER was a little lower for those who received a phone HER, but we didn't explore specific reasons for that in the survey. Sue added that we are still offering phone consultations, but making them at the time of the call versus scheduling them.

Alan asked if we are planning to investigate which HER method is more preferred by customers. Sarah said that we could explore it in the next Existing Homes process evaluation, to take place in 2016, but we haven't decided yet. Fred added that we are responding more to customer demand, which is tending toward faster options than an in-home HER. Alan said that it seems like we should keep multiple options for people, not just push everyone to one method. Ken noted that studies in California showed that customers who received an in-home review completed more actions than those who received an online review, but online is so much cheaper that it pushed the utilities toward online reviews. We are also assuming that people will become more web-savvy over time and more comfortable with online reviews. Alan thought the report was good. He wants to make sure we are expanding the number of people we work with, so multiple engagement methods help that and we should be flexible. Susan noted that an online review is very static, and does not feel personal; hopefully having a live chat option or another way to connect with an actual person will help.

Marshall asked if we saw any effect of the treatments, especially the bonus incentive, on free ridership. Erika said that the reason we made the financial offer at 90 days after the HER was to reduce free ridership. Sarah noted that the choice of 90 days was somewhat arbitrary, but based on the fact that we typically saw the most actions within the first 90 days post-HER. We did not look specifically at the effects of the treatments on free ridership, given that follow-through was fairly low.

Mark noted that it was interesting that previous participants had a higher incidence of action. Sarah said that the treatment group and the financial offer did not depend on whether a customer had participated in an Energy Trust program before their HER.

Alan asked how the findings are being incorporated into the program. Kate said that the findings contributed to the decision to discontinue in-home HERs. They have also provided a justification for short-term bonus incentives to speed action and to meet program savings goals.

2. Short Take: Strategic Energy Management Workshops

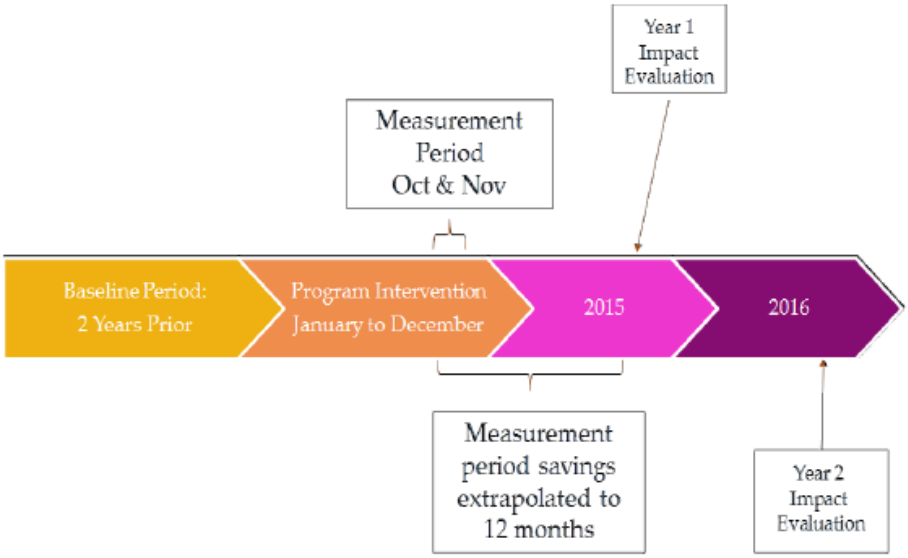
Presented by Phil Degens

Background: In August 2014, Energy Trust held two four-hour workshops, which 18 and 24 Strategic Energy Management (SEM) planners, implementers, designers and evaluators attended. Energy Trust invited two firms, Cadmus and TRC/Navigant to present and facilitate at these workshops. These firms have a lot of experience evaluating SEM, which is why we invited them to participate in these workshops. Energy Trust had evaluated SEM projects as part of prior impact evaluations, and SEM projects achieved fairly high realization rates, but we were not satisfied with the process, and wanted to figure out the best way to evaluate SEM, primarily because it is becoming a larger and larger portion of program savings.

The major goal of these workshops was to discuss and determine the best approaches for evaluating SEM savings across a whole facility or a process over time in a dynamic environment; given varying levels of documentation and energy monitoring, and given changing production processes, volumes, and product types. The workshops helped us develop SEM guidelines and a research roadmap for SEM, which will be discussed later in the presentation.

SEM Definition & Evaluation: Energy Trust uses the Consortium for Energy Efficiency's Minimum Elements to define SEM. Workshop attendees agreed that Monitoring, Targeting and Reporting (MT&R), with its use of regression analysis, is at the core of sound evaluation of energy savings for SEM, and the use of MT&R models makes evaluating SEM different from other resource acquisition program offerings.

Timeline for Energy Trust SEM



The graphic above is a prototype for how Energy Trust does SEM. There is a baseline period, and then the program intervention. During the measurement period, savings are estimated based on three to six months of data post-program intervention using MT&R models. A first-year

impact evaluation would involve updating the MT&R models for the nine months or so after the measurement period.

Discussion – Data Challenges: Workshop participants raised a number of challenges related to data. Evaluators like to have very granular data to work with, but "we evaluate the data we have, not the data we want." Workshop participants noted that for small customers, consumption data are often only available on a monthly basis (the same is true for gas data). Electric data can be obtained at 15-minute intervals, but it can be expensive to get that data on an ongoing basis. Also, there is a lag between the reading of the meter, the customer getting the bill, and the data getting entered into the MT&R model. For developing baselines, SEM implementers need historical billing data; in some cases, utilities archive older data, making it more difficult to obtain.

Participants agreed that it can be challenging to identify production data that are actually driving energy consumption, are easily collected by the customer, are historically available, are sufficiently granular, and meaningful to both evaluators and customers.

Additional issues include:

- Data alignment (sometimes production processes are batch processes, where a facility will produce for a week and then stop, and then begin production for another one or two weeks – the MT&R models need to align those production variables)
- Sometimes facilities have complex processes, and there are difficulties in modeling those processes
- Data time lags (firms produce a product, then put it in storage, then send it out; this is not aligned with energy consumption)
- Post-engagement period model maintenance (firms need to find the MT&R models useful enough to engage with the model, collect data for the model, and then update the model)

Discussion - MT&R: Workshop participants discussed whether key performance indicators (KPIs) could be used in lieu of, or in addition to, MT&R models. Participants agreed that KPIs could be used, but should be used judiciously. In certain cases, such as when there are large loads that are not production-oriented, KPIs will not be effective.

A major challenge with MT&R models is that they can become invalid, due to major changes at the site or to production lines, changes to schedules or production, or other reasons. Workshop participants discussed what can be done when an MT&R model is invalid. In some cases, the changes can be integrated into the existing MT&R model. In other cases, a new MT&R model may need to be created or a KPI might be used instead of an MT&R model. If there are only a few measures, the evaluator might create an engineering model. If none of these work, the evaluator can interview the customer and review the opportunity register to get a more qualitative sense of savings.

Alan asked if we rely on the utility meter for facilities or employ submetering. Kim responded that we are dependent on utility meters for SEM. Many larger sites have multiple meters, and in those cases we would develop multiple models for a site. We get good working models using utility meters. The bigger challenge is many production variables are not available in the same increments as energy data; we need to roll up data to the least granular, and we can end up with monthly increments at a medium-size site because the available production variables are

monthly (even if they have 15-minute electric data). Kim noted that a few sites have existing submetering, but this is relatively rare.

SEM Evaluation Methods: Out of the workshop discussions, we came up with a framework that we will continue to refine and develop as we gain experience with evaluating SEM. The first step is to assess the validity of the MT&R model. If it can be updated, the evaluator will verify savings by updating the model with current data. There was agreement that evaluators should work with existing models where possible. If updating the model is not possible, the evaluator will establish a new model or baseline or use information from interviews with site personnel. Evaluators may also do bottom-up analysis (if there are only a few measures) to triangulate savings. Evaluators will assess site changes that could impact the baseline and evaluate capital projects and subtract those out from the SEM savings estimates. We want to evaluate capital projects (rather than using deemed or estimated savings) so as to not shortchange the SEM savings (or vice versa). Finally, evaluators will assess SEM activities and practices, including reviewing the opportunity registers and interviewing the Energy Champion and energy team members.

Next Steps: Energy Trust will develop guidelines for evaluating SEM for implementers and evaluators. Currently, we are working on incorporating workshop outcomes in the 2012 Production Efficiency program impact evaluation. Of the 73 sites in the sample for that evaluation, about 24 had done SEM between 2010 and 2013. Given that, we initiated an SEM process/impact evaluation to look at SEM specifically. We hope that through this SEM process/impact evaluation we can develop a standard set of interview questions and get an understanding of how savings are changing at sites over time. We also hope to get feedback from the evaluator on how often to reevaluate savings, the measure lifetime, and see how reliable savings are at the facility and program level.

Susan asked about the measure life for SEM. Kim responded at there are two types of custom savings, capital and Operations and Maintenance (O&M). SEM is one of the ways the program gets O&M savings. SEM has a three year measure life, and includes things like fixing compressed air leaks, putting signs next to lights, and resetting control settings; these actions are listed in the opportunity register. SEM participants are also doing capital projects, which are tracked through the program. Kim noted that the three year measure life is an average, and we will see what research tells us about whether or not that should be longer. Alan commented that this seems to be a conservative assumption and evaluation will be particularly important here.

Phil commented that the SEM process/impact evaluation will look at about half of the folks that have gone through SEM between 2010 and 2013. Kim noted that in the interim, the program is going back to sites they worked with five or six years ago, redoing SEM and re-taking those savings. Fred commented that the issue of a savings shape for SEM and other behavioral work keeps coming up, as does a system for measurement and goals.

Kim commented that in 2014, SEM will represent a third of all Production Efficiency electric savings. Kim commented that the biggest takeaway from the SEM workshops was that the program may be overdoing it on the models and analysis on the front end. The cost of developing the models is about a third of the total cost of implementing SEM; the program hopes to rely more on evaluators on the backend.

Ken commented that Energy Trust is doing everything they can, and should recognize that we aren't going to be able to measure all of it; sometimes there are too many confounding issues and you have to live with some estimates. Also, measure life isn't an average – it's a median. It

is the point at which 50% of the measures are still working, and 50% are no longer providing savings.

Phil continued, describing additional next steps. Energy Trust will develop guidelines for determining when an MT&R model is valid, or when it was been compromised, and develop standards for reusing and updating MT&R models. We will also research the benefits of different levels of data granularity and model complexity. These next steps will be somewhat dependent on the results of the SEM process/impact evaluation. Our evaluation intern is working on the latter research question: trying to determine what we get from making models more complex versus using the most basic model (energy as a function of production).

In terms of KPIs, we will look into how many firms are using KPIs versus models, and depending on that result, we may look into how KPIs can be used for evaluation and how best to develop them.

Finally, we will update an analysis on the effect of SEM on capital measure adoption and the SEM process/impact evaluation will help determine when sampling will be an option for estimating program level savings.

3. Short Take: Building Performance Tracking and Controls (BPTaC) Pilot Evaluation

Presented by Phil Degens

Background: This presentation summarizes an updated process evaluation covering second year interviews with BPTaC pilot implementers, vendors, and participants. As a reminder, Energy Management Systems (EMS) are intended for smaller buildings with a forecast savings of 15% and Energy Information Systems (EIS) are intended for large buildings with direct digital controls, and have a forecast savings of 5%.

Methods: The evaluator, Cadmus, conducted interviews with pilot implementers, vendors, and participants. Cadmus reviewed program documentation, including project tracking updates, online project dashboards, and building performance reports from pilot vendors. The last BPTaC evaluation report reviewed by the committee was a billing analysis, comparing vendors' estimated savings to bill savings at the request of ICF (the Existing Buildings Program Management Contractor, or PMC).

Second Year EMS Participant Interviews: EMS participants reported interacting with their system on a daily or weekly basis. They reported some issues with vendor responsiveness to system alerts; they anticipated a response time of 15 minutes, but found it took a bit longer. All participants reported completing energy efficiency measures identified by vendors during an initial walkthrough, and were open to others that meet their ROI (typically one to three years). They were interested in more information regarding the causes of savings or increases in energy usage.

Second Year EIS Participant Interviews: EIS participants had less frequent interaction with their system. They reported completing all of the energy efficiency measures identified by vendors early on. They valued vendors' energy efficiency recommendations and were satisfied with savings levels. They noted that the savings reports enabled them to quantify savings, which could then be reported to management.

Conclusions and Recommendations: Vendors noted, and participants concurred, that they lost momentum at various points in the pilot. Vendors suggested a modified incentive structure where the first portion of the incentive would be paid after installation of the system, and the second portion would be paid after a certain amount of energy-saving changes were in place. This is similar to a pay-for-performance model, which is difficult to institute using our current system; we aren't yet at the point where this would be easy to operationalize. The evaluator recommended continuing to offer incentives for the system and consulting services, and see if a two-part incentive is preferable to the existing incentive structure.

The evaluator noted that the commissioning process can take a year or more, and recommended measuring the performance of these systems and consulting over an extended period of time.

The evaluator found that EIS participants often do not update the status of energy efficiency measures in the online dashboard. They recommend having the vendors track this as part of their reporting services. Alan asked if it was realistic to expect the vendor to do this. Phil responded that it could be an engagement opportunity for the vendors, and it is more realistic to have the vendors (who are used to these systems) do it rather than the customer.

Participants noted that the non-energy benefits of the systems were of great importance to them. The evaluator recommends having the vendors highlight the non-energy benefits of these systems when promoting them.

With EMS, the most significant savings are likely due to effective scheduling, which does not require a high level of attention from participants. The evaluator recommends screening participants for characteristics that are likely to lead to significant savings based on the type of system for which they qualify.

Energy Trust Take: Energy Trust may move to phased incentives in the future, but we would need to implement changes to our IT systems to do that. We will evaluate savings for BPTaC projects in subsequent years as that information becomes available. Fred commented that the program is figuring out what sort of tracking and management systems work, since the first year may not provide much insight into what was accomplished. Alan commented that the phased incentives could help firms develop the types of energy efficient habits we desire. Fred commented that SEM and BPTaC take two different approaches (people-centric vs. hardware-centric) but they seem to be converging.

4. 2012 New Buildings Impact Evaluation

Presented by Sarah Castor

Background: Cadmus performed this impact evaluation. Site visits started in spring 2014, and are still wrapping up (there are two sites remaining). The purpose of the evaluation is to true-up savings estimates for 2012 projects based on analyses of operating conditions and calculation methods. Another goal is to identify program changes to improve future savings estimates and evaluation processes.

Methodology: All major measure categories and tracks are represented in the sample. The sample was determined by stratifying the population by project size and fuel. There are a total of 41 projects, but only 39 are described in the report provided to the committee, since there are two sites that still need to be visited and evaluated (these are two hospitals with a large amount

of gas savings). The sample represents 58% of electric savings and 29% of gas savings. The largest electric project in 2012, a data center, will be evaluated via a separate evaluation project in 2015, along with the largest gas project in 2012 (a school, which was not commissioned in time for this evaluation). So far, the sample achieved 90% confidence and 3% precision.

Alan asked about the relatively low percentage (29%) of gas savings represented in the sample. Sarah responded that results for several projects with large gas savings (two hospitals and the school) aren't included yet, and this makes the evaluation look like it represents a small portion of 2012 gas savings.

Tasks: The evaluation included a document review of electronic versions of project files and most calculation workbooks; review of energy simulation models for custom projects; site visits to check operating conditions, equipment counts, and gather EMS data; and engineering analysis which involved reviewing inputs and calculations, simulation modeling, and calibration with actual energy usage data.

2012 Realization Rates: Overall, the program achieved an 83% realization rate for electric savings and 95% for gas. As shown in the table below, this varied substantially by measure category. The lowest realization rate was for data centers (31%) and there were good realization rates for standard measures. 2012 was the first year Market Solutions projects were completed by the program, and they did well, achieving an 89% realization rate for electric and 95% for gas.

2012 realization rates, by measure category

Measure Category	Total Measures	Reported Savings		Evaluated Savings		Realization Rate	
		Electricity (kWh)	Gas (therms)	Electricity (kWh)	Gas (therms)	Electricity Savings	Gas Savings
Standard Food Service	334	4,084,486	59,259	4,226,405	55,076	103%	93%
Standard HVAC	208	1,427,725	158,188	1,427,799	158,194	100%	100%
Standard Lighting	274	8,825,268	-	9,150,254	-	104%	-
Standard Motors	23	180,805	-	180,805	-	100%	-
Standard Water Heating	171	1,408,884	65,199	1,408,884	65,194	100%	100%
Standard Other	26	230,629	2,210	205,859	2,121	89%	100%
Custom	140	9,641,714	152,370	7,698,966	151,112	80%	99%
LEED	20	7,486,326	119,924	5,833,569	102,489	78%	85%
Data Center	4	4,817,566	214	1,479,527	44	31%	21%
Market Solutions	13	26,971	1,804	24,034	1,707	89%	95%
2012 Overall	1,213	38,130,374	559,077	31,726,338	530,766	83%	95%

Ken asked for a description of Market Solutions. Sarah responded that this is a packaged offering for six types of small new commercial buildings, including offices, restaurants, multifamily, schools, retail, and grocery. The offering is for small projects (under 70,000 square feet). There is no custom modeling; savings estimates are based on prior modeling done by the

program. There are good, better, and best options within each package, making it easier for small buildings to complete projects and qualify for incentives.

Standard Measures: Food service measures achieved realization rates of 103% for electric and 93% for gas. HVAC achieved 100% for both electric and gas. The evaluator noted a few discrepancies related to equipment counts and setpoints, but there were no major issues identified for these measures. Lighting achieved a 104% realization rate. The evaluator made the typical adjustments for fixture counts and operating hours (which can be different from what was initially assumed). One controls measure was code (and received no savings), but even with that, the overall realization rate for lighting was quite high.

Motors achieved a 100% electric realization rate. In the past, the evaluator found some applications where the motors were code, but that did not happen this year. Water heating achieved a 100% realization rate for both fuels. The “other” category was all multifamily clothes washers. The realization rate for “other” was 89% for electric and 100% for gas; two sites had non-Energy Star equipment due to space constraints that arose because of changes to unit floor plans after the equipment was specified (qualified units would not fit).

Custom Measures: Custom HVAC measures achieved a 76% electric realization rate and a 99% gas realization rate, while custom “other” (mostly building shell measures) achieved a 100% electric realization rate. The evaluator found that interactive effects were not properly accounted for in some of the models and in others, calibration to energy use data reduced savings (the program assumed that the building would use more and it actually used less, but not because of energy efficiency measures). There were also the typical adjustments made to setpoints and operating hours.

Custom refrigeration achieved a 61% realization rate. This was primarily due to an error in documentation for one site; the documentation showed 16 motors with 147 horsepower each when it was actually 16 motors with a combined horsepower of 147. We will be digging into this project a bit more with the evaluator to better understand the issue. Custom lighting achieved an 88% realization rate. The report did not provide information on why, but this is also something to check in on – it’s not clear why the custom lighting realization rate is less than standard lighting.

Leadership in Energy and Environmental Design (LEED) Buildings: Seven LEED projects achieved average realization rates of 78% for electric and 86% for gas. The realization rates at individual sites were highly variable, ranging from 70% to 188% on the electric side, and 13% to 128% on the gas side. The evaluator identified some issues with variable refrigerant flow (VRF) modeling, which isn’t a standard option in eQUEST (modeling software), and standard work-arounds were not always applied correctly. They also found discrepancies between the models and as-built/as-occupied conditions; for example, a school that was modeled as-occupied for nine months of the year when it has been occupied year-round since completion.

Alan asked if unique modeling methods were used because the projects are LEED. Becky responded that LEED models to ASHRAE rather than to the Oregon code baseline. The program applies a deration factor to bring those savings in line with an Oregon code baseline. Also, LEED modeling is done at a different time and for a different purpose than modeling done for projects in the custom track, which is according to our specifications. Cindy commented that this is a lot of variation, more than we expected to see. Susan asked if there could be an issue or error with the evaluation results. Sarah responded that Cadmus produced an appendix with detailed information about each project, which Cindy at CLEAResult reviewed, and had some

questions about. The savings in the appendix often did not match those noted in the main report, so we will be following up with Cadmus to verify those savings.

Mark asked if the program plans to share these findings with the LEED program. Fred responded that LEED specifications are set nationally, and we are one of many stakeholders, but when the report is finalized we should share with them.

Data Center: There was one large co-location data center in the sample, which achieved low (31% electric, 21% gas) realization rates because the facility is not loaded to the extent assumed when savings were originally estimated. They are currently serving about 13% of the originally estimated load. The participant reports that they hope to increase loading within 3 to 5 years, but do not yet have any contracts. Three of the four efficiency measures (two HVAC measures and an uninterruptable power supply, or UPS, measure) are significantly impacted by the reduced load, and the final lighting measure received full credit for energy savings but represented a very small portion of the total savings. In addition to being impacted by the low IT load, the evaluator noted that the UPS measure did not meet program requirements. The program requested that the evaluator take another look at the measure, as records from a site visit by program staff indicate that the installed UPS was a different model from the initial submittal but the unit efficiency was still greater than the program baseline requirements and included additional savings features. So that measure may have some savings, but the low realization rate is primarily the result of the data center not being loaded to the extent assumed. So we need to figure out how to treat savings for this site, which we can discuss later in the presentation.

Market Solutions: Market Solutions packages were launched mid-way through 2012, and not many projects were closed in 2012 given the longer lead time typical for new construction; many more were completed in 2013 and 2014. The sample included two Market Solutions projects. One was a small event space/office and the other was a restaurant. The event space was assumed to be only an office space at the time the project was going through the program, but the event space that actually occupies most of the square footage is rarely used. A majority of savings for the event space/office was estimated to come from a heat pump water heater, but it was placed in conditioned space and only used for a hand-washing sink. The evaluator will look into this project a bit more; it's possible the space was going to be used as an office, but the space use changed after project completion. The restaurant had longer operating hours than assumed, which increased savings. Overall, Market Solutions achieved 89% electric and 95% gas realization rates. Only two of the six building types are represented here, so we will want to look at this again in the next impact evaluation, when more building types can be included.

Building Energy Use Intensities (EUIs): Compared to buildings in the 2011 sample, buildings in the 2012 sample had lower EUI, except for K-12 schools. 2012 buildings also had lower EUI than reference studies, except for grocery (which is consistent with findings from previous years). We would like to see these EUIs for 2012 buildings compared to data from the newest Commercial Building Stock Assessment (CBSA), and this will be included in the final report.

Conclusions: The PMC performed a reasonable level of review and quality control. The low realization rate for the data center project was the biggest hit to overall realization rates. There is uncertainty about whether the data center will load up in the next few years, and as an organization, we need to decide whether to take the realization rates as they are now, take savings at some point between where the data center is now and full loading, or pursue another strategy. For the Production Efficiency program, if a site is temporarily shut down, we don't say

savings are zero – we take the midpoint between full production levels and current production levels.

Ken had several thoughts on the data center. First, the realization rate can be low because the actual savings were low, but also because the estimated savings (the denominator for the realization rate) were unrealistically high. Sometimes there is no way to know that in advance – even with the best efforts, the estimated savings are just a guess. Second, a project like this is not the same as an Existing Buildings project where the project should be reducing load the utility needs to meet. With new construction, the load didn't exist in the first place, and the utility does not have to meet the baseline load. So it is a bit hard to make the case for savings here. Third, a company presumably would not put a substantial investment like this into a facility if they weren't committed to getting it fully loaded, so it is reasonable to assume that they will find a way to get it loaded at some point.

Steve commented that this loading issue will be with us for every commercial data center. Phil responded that an issue is trying to true-up over and over again; we usually avoid that, at least for the Production Efficiency program, by asking about when a site plans to resume full production and take the midpoint because we want to get a number to true-up savings, put it to rest, and move on.

Fred commented that from a process and reliability perspective, it's tricky to correct the correction of a corrected number, as it is prone to error. Phil commented that megaprojects are projects providing savings on the level of the program itself. They have their own realization rates. Typically, we follow megaprojects for a three-year period and look at savings. Steve suggested doing this for this class of data centers. Phil responded that this data center is not in the same league as the other data center that was not included in the evaluation. This one is still in the realm of normal size projects.

Jessica commented that she has visited the site, and it is different from the very large data center that will be evaluated in 2015. Cadmus did not conduct a site visit to this data center or look at the IT and HVAC setup; they received data from the participant. The program methods to estimate savings are to take a three-year look at the facility's plan for loading up, come up with an average, and claim 50% of that. The program also thinks that a measure related to the servers was not included in the evaluation, and needs to be added.

Alan asked how these types of projects are normally treated. Are the savings prorated, included in the program realization rate, and then applied to all 2012 projects? Should we use this method for what seems to be a unique case? Fred responded that it is tough to decide. Another issue with new construction program is that buildings are occupied gradually, so when to evaluate is a difficult question. Perhaps co-location facilities are a class of projects where the evaluator shows up later. This could be a case where we pull the project from the evaluation because we came in too early – in the past we have only done that with large projects.

Ken commented that there are anomalies on both sides. Dealing with 39 projects, each are different and in new construction some are not occupied for the first six months, there are different tenants, etc.; the realization rate is an easy metric, and it almost calls for more detailed evaluations. Fred said that office buildings can only be under-occupied, not over-occupied, because of factors like fire code. So there is some bias in throwing out under-occupied (or under-loaded) sites

Susan asked how the decision affects us. Fred commented that the realization rates will be used in the annual true-up report, which tracks progress towards our long-term goals. We also use realization rates in program forecasting; most program goals are set off of a moving average of three years of realization rates, so we focus on the longer-term average.

Sarah commented that there have been instances in prior evaluations where buildings that were not occupied yet were dropped from the sample. Susan responded that in this case, the data center hasn't loaded up; this seems to be quite similar to empty buildings. Fred noted that we do not often pull buildings aside and do true-up in another year, and we typically only do that if they are big projects. Phil commented that excluding the data center only changes the program realization rate from 83% to 89%. If we take the midpoint between fully loaded and current state, that will ameliorate the impact on the program realization rate.

Jessica commented that it doesn't seem like the evaluation methods for data centers mirror program processes because the program looks at loading plans for each of the first three years and claims savings of 50% of the average across those three years, while evaluations of New Buildings projects are typically conducted once, at about two years after project completion. Sarah responded that most of the buildings are ready to be evaluated after two years. If we wait another year, we risk not being able to get into buildings that are ready at two years or having things change at those sites. It's hard to design an evaluation for lots of different building types – this is one facility out of 39, and the other 38 fit into the schedule.

Sarah noted that the report will be revised to incorporate results from the two hospital sites yet to be visited.

Recommendations: To engage data centers in the evaluation process (this recommendation was mainly because of the data center that was not able to be included in this evaluation, but the customer has agreed to be evaluated in 2015, so this recommendation seems overstated). Consider assigning savings according to a ramp-up period at data centers or similar phased projects. Hold off on claiming savings until projects are until fully commissioned. Obtain modeling files during the program year; this is a recommendation that pops up every year because there are a few instances where we don't have the modeling file or a final version of the modeling file. Maintain consistent documentation on modeling files. Encourage participants to enable EMS trends. Sarah will follow up with Cadmus on how many sites have EMS and of those, how many do not have trends enabled to get a sense for the size of the issue. Set a lower bound on Market Solutions project sizes (this is in reference to the small event/office space that was only 1,600 square feet). Incorporate site inspection findings into reported savings; the evaluator noted that a couple of site visits by the PMC did identify changes made to projects that were not reflected in reported savings.

Energy Trust Take: We will resolve how to treat savings for the data center and finish the two hospital site visits. We will evaluate a total of five large saving sites from 2011-2013 in 2015, which include the 2012 school that was undergoing commissioning in 2014, the largest data center site in 2012 (which also had project phases in 2011 and 2013), and another large data center, a hospital, and a school, all from 2013. Because most realization rates have been quite stable, we will not do a full program impact evaluation until 2016 (of the 2014 program year). In place of the 2013 realization rate, we will average the realization rates for 2012 and 2014.

Megaprojects are defined by the incentive amount; if the total project incentive is $500,000 or more, they are a megaproject. Two sites, both data centers, that will be evaluated in 2015 agreed to a capped incentive of $499,999 to avoid the megaproject process, but had the

savings at the level of megaprojects. These are “mini-megaprojects” where, from an evaluation point of view, they should be evaluated as if they are megaprojects, and their realization rates should only apply to those projects. Susan asked if allowing projects to take a reduced incentive to avoid the megaproject process creates a moral hazard. Fred commented that the vetting of savings is equally rigorous, but these sites did not want to go through a long approval process with the board to get more money, due to sensitivity around load, visibility, and timing. The benefit to us is we get exceedingly cheap savings. Sarah responded that evaluation staff feel that large projects do not have the option of not being evaluated, whether or not they are technically megaprojects.

5. 2013-2014 New Buildings Process Evaluation

Presented by Sarah Castor

Background: Phil Willems and two subcontractors performed the 2013-2014 New Buildings process evaluation. The purpose of the evaluation was to gather feedback on program operations and participant experiences to improve the program. Several tasks were completed as part of this evaluation, including data and document review, staff interviews (to identify topics for other evaluation tasks), participant interviews (conducted with 2013 and 2014 participants) and observations of early design and site verification meetings.

2013 was the most recent year for which the program had complete data. In 2013, the program closed 389 projects and 85 of them were multifamily. The program exceeded goals for all utilities. Only 5% of 2013 projects were subject to 2007 code (down from 12% in 2012). The greatest number of projects were prescriptive, followed by a mix of prescriptive and custom measures; the greatest savings came from custom track projects. Data center projects comprised 55% of electric savings. The use of the LEED track was down, which is a trend the evaluator has observed over the last several years. Becky commented that fewer people are doing LEED overall; they are going through the custom track, which includes additional incentives for early design and technical assistance. There was an increase in savings from HVAC measures relative to prior years, and 20 Market Solutions projects closed in 2013 (as noted in the discussion of the New Buildings impact evaluation, this is an offering targeted at smaller facilities with specific space use types).

Dodge data: The evaluator purchased a database from Dodge (McGraw Hill) of in-progress construction projects in Oregon between 2012 and 2013, which included new buildings, renovations, and additions. The database also included “player” information for design and consulting firms, as well as general contracting firms. The Dodge data was then used to compare to 2012 and 2013 Energy Trust projects. There are a number of caveats with Dodge data, namely that it is not a complete listing of projects (not based on permits), it tends to miss smaller projects, and it includes projects that do not ever come to fruition. We did a comparison of Dodge data and program data several years ago to see what percent of projects Energy Trust was involved in, and that analysis showed we were involved in about 65% of projects.

When we replicated the analysis this year, we found that Energy Trust was involved in about 58% of projects within our service territory. The evaluator believes this is a lower bound because we are involved in a large number of smaller projects, which are underrepresented in Dodge data. The estimates varied substantially by county; Energy Trust was involved in a high percentage of projects in Eastern Oregon (because there are relatively few projects), as well as in Multnomah and Clackamas counties. There was less involvement in the Willamette Valley, probably because there are a number of overlapping municipal electric utilities in that area. Alan

asked how we separated out non-Energy Trust territory projects. Sarah responded that Dodge doesn't list utility; the best we can do is to compare the location of projects in Dodge to GIS files of our territory. Sarah noted that she did some rough calculations using the square footage of Dodge data and we are involved in projects representing half of the total square footage in Dodge. Although Dodge lists firms involved in projects, we don't track ally involvement in FastTrack, our project tracking system, so we were not able to compare allies and their activity.

Participant Interviews: The evaluator interviewed 35 owners and owner's representatives who completed projects in 2013. These interviews were focused on getting information about satisfaction which was used in our reporting to the OPUC in 2014. The evaluator also asked these participants about the application process and decision-making. The evaluator interviewed 41 participants involved in projects that were eligible for (but may not have taken) the Market Solutions path in 2014. These projects are all in progress; most are in the early design to construction drawing stages. 41 participants were interviewed, and included 29 owners or owner's representatives, and 12 architects, engineers, and consultants. These interviews focused on reasons for participating, experience with early design assistance, how they selected the program track for their project, and overall satisfaction with the program.

Interviews with 2013 participants were conducted in February and March of 2014. 100% were satisfied with calculator tools, the post-install inspection, the amount of the incentive, and staff courtesy. Participants reported slightly lower satisfaction with timeliness of approval (79%) and enrollment process and paperwork (88%). Overall satisfaction with the program was 89%.

Interviews with 2014 participants focused on several topics of interest, including motivations for participating, experience with early design assistance, how they selected their track, and overall satisfaction with the program. Participants reported a desire to maximize energy savings, availability of incentives, and company standard practice as key motivations for participating. These results are similar to the prior evaluation, except that company standard practice and availability of design assistance increased in importance. 95% were satisfied with the application process so far.

14 of the 41 had used early design assistance and 92% were satisfied with the experience; there were only two suggestions for improvement. Participants reported that the program representative was a strong influence on their decision to use early design assistance. The evaluator suggested that the program could summarize design options more concisely during the early design meetings.

More than half of the participants (25) were not aware of the track their project chose or other options. It could be that someone else, who we did not talk to as part of the evaluation, made that decision. Also, the program has made efforts to make the choice of track less confusing; it may be streamlined enough that participants don't need to know which track they are choosing.

Of the 16 that knew what track their project had chosen, 10 had discussed with a program Outreach Manager and were able to explain why; the remaining six were participating on a limited scale and were not aware of Market Solutions. Other common options considered by these 16 respondents were calculator tools (for lighting and HVAC) and the custom track.

Satisfaction was quite high among 2014 participants; 97% were satisfied with their overall experience, although it's important to keep in mind these projects are still in progress. The evaluator noted that there were no comments this year about the uncertainly of incentives, likely

due to many participants pursuing Market Solutions incentives, which are highly defined. In the past, participants said a key drawback was uncertainty about the incentive.

Allies: Program staff wanted more information about a few key areas related to the relevance of the program to allies. One of these areas related to the qualified products list (QPL) for light emitting diodes (LEDs). The program was finding that the product development cycle for LEDs was moving faster than the process for getting LEDs on the QPL, and the program was losing out on savings because participants were using non-qualified LEDs. Energy Trust Planning staff responded by allowing alternative qualification for LEDs: letting certified lighting designers use their judgment, combined with manufacturer data, to qualify LEDs that are not on the QPL.

Fred and Ken commented that this caution reflects the energy efficiency community's experience with CFLs, where there were many bad experiences with CFLs and it has taken a number of years to weed out bad products. Phil commented that a key issue with the QPL is it now has an enormous number of products (over 40,000) and it is difficult to find products, so the list is not really serving its original purpose of easily identifying quality products.

The program is interested in having good representation of woman- and minority-owned (WMO) businesses in its ally network, and wanted to find out whether the program had the same percentage of these firms in its ally network as the overall population. The evaluator compared Energy Trust New Buildings ally data with listings in Dun & Bradstreet, a business listing database. The analysis showed that New Buildings allies are more likely than the average firm to be WMO: 9% of allies are woman-owned versus less than 7% in general, and 9% of allies are minority-owned versus 3% in general. Overall, 15% of New Buildings allies are WMO.

The evaluator conducted interviews with 12 allies and other non-owners who were involved in 2014 projects. Their responses mirrored those of owners in that they were not much more aware of program participation options than owners, and reported relying on the expertise of program Outreach Managers and owners to make decisions. They were very satisfied with early design assistance. Overall satisfaction with the program was slightly lower compared to owners (92% versus 100%), but still quite high.

Conclusions: The program met its 2013 goals. Based on Dodge data, the program was involved with 58% of new construction projects. Participants were somewhat aware of different incentive options, but didn't know them in detail. They were highly satisfied with early design assistance and their overall experience with the program.

Recommendations: Provide greater visibility to Market Solutions among allies. Look into promoting energy efficient behaviors through suggested operation guidelines – Sarah noted there wasn't much support for this recommendation in the report. It's something the program could do, but it may be difficult given the wide variety of building types in the program, and the value to the program wasn't articulated. The program should be more proactive in promoting measures during the early design assistance meetings. The program should circle back with participants and allies after project completion to discuss how projects change from design through completion; it's worth noting that the program does this with specific types of projects, such as Path to Net Zero, though not in general. We should do more tracking of trade and design ally activity in projects. Finally, the evaluator recommended recognizing the engagement and length of involvement of allies in the program – justification for this recommendation was also not well documented in the report.

Energy Trust Take: Overall, the program is doing well serving participants: they are highly satisfied, Energy Trust is involved in a high proportion of projects in our service territory, and Market Solutions offerings appeal to the market and are filling a market need.

The program could look more at the role of continuous commissioning; having buildings enable EMS trends to look at what's happening in the building. We think that interviewing participants before project completion provides useful information for the program, and will continue to do this in subsequent evaluations. The next process evaluation is slated for 2016.

Alan commented that given we are involved in 58% of projects means there are 42% that represent an opportunity for us to engage. Are we unaware of them? Are they unaware of us? Are these projects that never get built? How can we look into this? Sarah noted this is hard to track. Phil commented that we can and should look at characteristics of this 42% to see if they are one building type or in one specific area. Fred suggested interviewing Outreach Managers about their hit rate and asking about who typically drops out versus who stays with the program. Phil commented that the program endgame is code change, so if we can do that with less of the market, that means we can work on code changes even more cost-effectively. Additionally, the Market Solutions offering is taking off so the program can finally address smaller projects and make it easy to participate.

Fred commented that we have been marketing to development and design firms for a long time, however, it's tough to get them all, especially out of state designers and national property management firms. Becky commented that the program does see some projects that are on a tight timeline and can't take time to engage with the program. Phil commented that the program had 65% of the market back when this was a much smaller market during the recession; now the market has grown considerably, but the program has still retained a large chunk of the market, increasing the number of projects and throughput. Ken noted that 58% is a high amount of penetration for a program that doesn't just focus on one building type or market and includes renovations and remodels. Sarah noted that all renovations were removed from the Dodge data for comparison to Energy Trust data, but the program may be involved in them if they are major renovations.

Wrap-Up & Next Steps

The next meeting will be held in late February or early March 2015. Erika will send out a Doodle poll to determine the date and time of the next meeting.

Final Report

2014 Oregon Residential Awareness and Perceptions Study

December 5, 2014

Final Report

2014 Oregon Residential Awareness and Perception Study

December 5, 2014

Funded By:

Energy Trust of Oregon

Prepared By:

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VuPoint Research

Executive Summary

In this report, Research Into Action, Inc. (Research Into Action) presents findings from Energy Trust of Oregon's (Energy Trust) 2014 Oregon Residential Awareness and Perceptions Study. Energy Trust launched the annual studies in 2008; this is the seventh of these studies. The goal of this project was to field a comprehensive survey to track general awareness of Energy Trust and its services among a representative sample of Energy Trust's residential accounts in Oregon, and to inform Energy Trust of opportunities for improving its marketing and communications strategies. This year, we completed telephone surveys with more than 800 households across Oregon. Below, we present a summary of key findings, and our conclusions and recommendations.

Key Findings

Awareness of Energy Trust

- About 9% of Oregon residents named Energy Trust as a top-of-mind organization that could help them save energy through unprompted questions. More than half could not name any organization.
- When prompted, about half of Oregon residents reported awareness of Energy Trust. We did not find significant differences in awareness of Energy Trust across regions or utility customer bases, but characteristics of home ownership remain strongly correlated with the awareness.
- Those aware of Energy Trust were familiar with Energy Trust's residential services. About one-quarter of respondents aware of Energy Trust also were aware of Energy Trusts' nonresidential services, and this percentage was significantly higher among those that were decision makers at work.

Profiling of Participants *and* Aware Nonparticipants

- Demographic differences are significant per respondents' level of engagement with Energy Trust. In particular, *participants* with Energy Trust services were more likely to have higher income and education levels, own their home, and live in a single-family home.

Energy Trust Program Participation

- Reported participation through the Energy Saver Kits and home energy audits significantly increased in 2014, although the overall self-reported participation rate (19%) was about the same as in 2013 (21%).

- *Participant*s remained highly satisfied with the services they received from Energy Trust and were likely to be repeat participants. Renters were as interested in Energy Trust services as homeowners.

Communication

- Media advertisements and utility communications were effective means of reaching Oregon residents. Data shows the intensive campaigning in 2013 resulted in significantly higher recalls through these channels.

Perceptions Regarding Energy Trust

- Residents' general attitude toward Energy Trust improves with participation or high levels of program awareness.
- Higher proportions of respondents who were aware of Energy Trust reported positively on Energy Trust's credibility and trustworthiness in 2014 compared to 2013.

Energy Efficient Behaviors

- Energy Trust *participants* were significantly more likely than other residents to undertake a home improvement project. However, more than a quarter of *aware nonparticipants* also planned to conduct energy-related home improvements. These *aware nonparticipants* were demographically similar to *participants*.
- Two-thirds of residents reported taking, or planning to take, steps to reduce energy use. *Aware nonparticipants* were equally likely to engage in general energy-efficient behaviors as Energy Trust *participants*.
- More than half of Oregon residents use LED lights.

Motivations and Barriers

- Oregon residents perceive lower energy bills as the most important benefit of energy upgrades, and the cost of efficient products or upgrades as the greatest barrier to undertaking energy efficiency upgrades.

Conclusions and Recommendations

Conclusion 1: Energy Trust's market presence in Oregon remains steady year after year, with nearly half of residents aware of Energy Trust. Different approaches may be needed to increase awareness among the *unaware* group that are likely to participate in Energy Trust services.

One in ten respondents named Energy Trust as a top-of-mind local organization that can help them save energy. When interviewers aided recall of Energy Trust, almost half of the Oregon residents living in Energy Trust's service territory indicated being aware of the organization.

This indicates half of the residents have been reached by Energy Trust's marketing strategies to the degree they can recall the organization when prompted. Survey data indicates many of the *unaware* residents plan to undertake an efficiency upgrade that could make them likely candidates for Energy Trust services, but also indicate they are less likely than the *participants* and *aware nonparticipants* to actively seek information about the optimal improvements they can make.

Recommendations:

- **Energy Trust should investigate ways to identify and engage *unaware* Oregon residents.** Energy Trust should consider developing and testing the effectiveness of other innovative approaches for engaging *unaware* segments.
- **To gauge the success of its marketing strategies, Energy Trust should establish year-to-year targets for brand awareness measures and track these consistently across regions of the state.** We recommend using both prompted and unprompted top-of-mind awareness measures.

Conclusion 2: *Aware nonparticipants* whose demographic characteristics resemble those of *participants* present a near-term potential market for Energy Trust.

The *aware nonparticipant* group comprises approximately one-third of Energy Trust service population (30%) and includes residents with dissimilar demographic characteristics – some demographically similar to the *participant* group, and many akin to the *unaware* group. But *aware nonparticipants* with plans to undertake energy-related upgrades are similar to *participants'* characteristics. Marketing strategies designed to reach and engage *aware nonparticipants* who are homeowners and have higher incomes and education present a near-term potential for Energy Trust to expand its reach.

Recommendation:

- **Energy Trust should investigate innovative ways to identify and engage *aware nonparticipants* whose demographic characteristics resemble the *participant* group – particularly homeowners.**

Conclusion 3: Insightful multi-year trend analyses require a consistent methodological approach throughout the study period. Analysis of responses to survey questions fielded in 2008-2011 and 2012-2013 by three different vendors suggest the methodologies differed sufficiently to prevent reliable assessments of trends over the entire study period. We used previous years' reports and datasets to extract key metrics for multi-year trend analysis, which proved difficult for many metrics. Problems included inconsistent or absent methodological details among the studies, such as the method for calculating survey weights; unclear or illogical subset analysis; changes in measurement techniques; wording; and critical details regarding the treatment of missing data and *don't know* responses.

Recommendation:

- **Energy Trust should establish key methodological requirements for survey vendors to follow every year.** Reliable multi-year trend analysis would allow Energy Trust to

track its marketing progress and set aggressive targets. To do this, the survey methodologies and reporting process for each year's study must meet the formal requirements established and communicated by Energy Trust. At a minimum, these requirements should include:

- Sampling – A sampling plan based on the most up-to-date U.S. Census (Census) data, specifying quota requirements and weighting procedures
- Data collection – Use of the data collection mode most appropriate for multi-year tracking
- Instrument – Specification of repeated measures and question wording
- Analysis and reporting – Specification of analytical details (including reporting subset sample sizes, handling of missing values, *don't know* or *refused* responses, and recoding schemes), and sufficient methodological disclosure (including response rate calculations)

MEMO

Date: January 12, 2015
To: Board of Directors
From: Sarah Castor, Evaluation Sr. Project Manager
Sue Fletcher, Sr. Communications and Customer Service Manager
Susan Jamison, Residential Marketing Manager
Shelly Carlton, Strategic Marketing Manager
Subject: Staff Response to the 2014 Oregon Residential Awareness and Perceptions Study

This is the seventh annual Oregon Residential Awareness and Perceptions Study. As in previous years, a primary goal of the survey was to assess Oregonians' awareness of Energy Trust and energy efficiency in general.

After surveying more than 800 households across Oregon, the study results show that awareness of Energy Trust and level of participation in Energy Trust programs remain stable as compared with previous years. As in recent years, the gap in level of awareness between the Portland metro region and the remainder of Energy Trust service territory continued to diminish, likely the result of a several-year effort to increase marketing in these areas. The study shows that current strategies, such as advertising and utilization of utility communication channels, have been effective and should be continued.

The study identifies segments of customers that are interested in taking energy-saving actions and who were either aware or not aware of Energy Trust but have not yet participated. Continuing to maintain efforts to increase awareness among these segments could result in increased program participation. Tactics started in 2014 to deepen potential customers' knowledge of our offerings will continue in 2015. These include a general program awareness campaign and targeted marketing efforts aided by Customer Relationship Management system capabilities and new data.

Positive perceptions of Energy Trust increased across all five factors assessed in the survey. These questions addressed Energy Trust as a credible information source, an organization that is trusted and an organization that is able to help. Additionally, for the first time, two questions were included to gauge awareness of Energy Trust offerings to businesses. 26 percent of survey respondents reported that they were aware of Energy Trust offers to businesses. Amongst survey respondents who were decision-makers at their businesses, this awareness increased to 41 percent. This result highlights an opportunity to cross-promote business and residential offerings through both targeted and broader campaigns.

Energy Trust's Program Marketing Managers for the residential and business sectors and staff in the Communications and Customer Service group will utilize these findings to enhance existing and future marketing efforts. These results will be shared with marketing counterparts at each utility to facilitate customer participation in Energy Trust residential offers.

Because several of the results have been stable over the last couple of years, Energy Trust will plan to conduct the next full Residential Awareness Survey in 2016. In the meantime, staff will explore other opportunities to gauge awareness and perceptions of Energy Trust and its offerings.

Trade Ally Network Evaluation

Final Report

November 26, 2014

Submitted to:

Energy Trust of Oregon

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EXECUTIVE SUMMARY

TRC Energy Services, Inc. (TRC) was engaged by Energy Trust of Oregon (Energy Trust) to conduct an evaluation of their Trade Ally Network. The overarching objective of this evaluation is to identify changes Energy Trust can make to administer their current Trade Ally Network in a more streamlined manner, while maintaining or increasing energy savings, project volume, and customer and trade ally satisfaction. Providing services to Trade Allies (TA) is a significant expense to Energy Trust and a goal of this project is to separate key services from those that are not providing high value to Energy Trust programs.

The specific objectives of this evaluation are:

- Determine the optimal size of the network;
- Identify changes that need to be made to the network participation requirements, including increasing/decreasing exclusivity and how to implement those changes;
- Determine if Energy Trust should provide incentives to trade ally projects only, directly to trade allies, and/or to homeowners who install measures without using a contractor;
- Determine the value provided by the Trade Ally Star Rating System (only applies to Existing Homes trade allies);
- Review quality control and management practices and identify ways they can be improved;
- Identify factors that influence trade allies' activity level;
- Identify methods to bring in new trade allies and re-engage with existing trade allies (if necessary);
- Determine best practices from Energy Trust programs and other networks for referring customers to trade allies; and
- Understand whether other networks actively seek to increase the number of minority-owned, woman-owned, small business, or rurally located trade allies.

Methodology

TRC conducted several data collection activities to develop a comprehensive understanding of Energy Trust's Trade Ally Network. Activities contributing to this data collection include a review of program documents and forms; interviews with Energy Trust program, trade ally network, and Program Management Contractor staff; and a review and analysis of the program database. In addition to understanding the functions and relationship of the trade ally network with the programs, TRC also took an extensive look at trade ally networks that serve other energy efficiency incentive programs through interviews with these program managers or trade ally network managers.

Findings and Recommendations

Network Size and Exclusivity: The following factors drive the optimal size of a network:

- Number of technologies in the program
- Motivation for retrofits
- Size of territory covered

- Program marketing strategy
- Customer interaction
- Quality control
- Program implementation funding and staff resources
- Incentive funding

Network Requirements: Energy Trust staff express that trade ally and network maintenance is a large draw on administrative resources. A notable activity that requires sizable network resources is tracking renewed licenses, certifications and insurance.

TRC believes that the best way for Energy Trust to streamline network administration is to modify the network requirements so that time and resources are focused on trade allies who are active in the program. Some options for accomplishing this are:

- Maintain the current network enrollment requirements, but only renew documents for trade allies who have submitted some minimum number of projects in the past 12 months.
- Reduce the number of documents or certifications that are required and verified annually.
- Require submittals during initial enrollment but do not conduct annual renewal.
- Streamline requirements so that some documents are not necessary.

Restricting Incentives: Energy Trust programs should not limit the payment of incentives only to projects that use a registered trade ally beyond their current limitations (Solar, Small Wind, and some Existing Homes tracks). Non-registered contractors bring in a significant portion of projects, and the energy savings from their projects often exceeds the savings from trade ally projects.

Self-Installations: Energy Trust should determine whether to restrict or regulate self-installations on a case-by-case basis. Most programs do not report that self-installs are a burden on their programs. The exception is the Existing Homes program which reports that significant resources are spent dealing with issues from homeowner self-installs, both in terms of the completeness of the applications and the quality of the installation.

Network Support: Energy Trust should reassess the scale and format of the roundtable relative to the programs who benefit from them. Only the Existing Homes and Existing Multifamily programs report that the roundtables are a valuable format for their trade allies.

If costs to administer cooperative marketing funds are reasonable and limited to responding to funding requests, then Energy Trust should maintain the funding option, as it is a benefit to some trade allies and could be leveraged more fully in the future. Only the Existing Homes and Solar programs report that their contractors make frequent use of the co-op marketing funds.

Star Rating System: Implementation of an Existing Homes trade ally rating system generally receives positive feedback from trade allies, but other network program managers have mixed feelings over the usefulness and impacts of a rating system. Other networks provide more benefits to trade allies who merit a higher tier rating through their program activity. Energy Trust could enhance its star rating system to include contractor profiles that allow contractors to distinguish themselves beyond the star assignment and focus some resource expenditure on the trade allies that will receive the most benefit.

Referrals: Although direct referrals are not a prevalent approach for most other networks, they do have the potential to impact trade ally activity and provide an advantage to trade allies over contractors. The current Energy Trust protocol of referring three randomly selected trade allies with at least one star

avoids favoritism, but may not promote increased participation because the programs do not select trade allies based on participation level or other trade ally aspects.

Engaging Trade Allies: A low percentage of active trade allies is a common issue across other networks, and, although there are some actions that have shown positive results, there are no strategies that prove to dramatically increase activity levels. Some strategies identified are:

- Provide more compelling benefits to registered trade allies.
- Continue to offer sales and marketing training to registered trade allies.
- Adopt closed networks for appropriate program measures or tracks.
- Assign staff to provide a single point of contact and one-on-one support to registered trade allies.
- Continue offering limited-time promotional incentives and focus on recruiting new trade allies.
- Institute annual recognition based on program activity.
- Continue attending or sponsoring industry or community events.

Quality Control Procedures: Energy Trust's customer complaint and escalation procedures are consistent with actions that other networks take to deal with project and program issues. It is clear through the interviews with Energy Trust program staff that quality assurance (QA) procedures are in place for trade ally and contractor performance in the field, but the documentation of these procedures is not clear and consistent for all of the programs. All Energy Trust programs should consistently document their QA procedures, stringency, and guidelines and make these visible to trade allies and non-trade allies on the program web pages or through other channels.

Diversity: Other utilities do not have focused efforts to attract minority-owned, woman-owned, or small businesses to their trade ally networks, but do make concerted efforts to increase trade allies serving rural or underserved areas. Only two Energy Trust programs mention engaging with minority-owned, woman-owned, or small businesses, and several others identify the benefits that can result from working with these types of business.

MEMO

Date: January 20, 2015
To: Board of Directors
From: Sarah Castor, Evaluation Sr. Project Manager
Tom Beverly, Trade Ally Network Manager
Subject: Staff response to the Trade Ally Network Evaluation

In 2014, Energy Trust undertook an evaluation of its Trade Ally Network in an effort to assess potential network improvements and understand where staff should focus resources to more efficiently manage the network.

The evaluation results indicate that Energy Trust is managing the network in a way that aligns with its priorities and program goals. The research did not point to significant changes to the network's management but identified opportunities for improvements. The research also concluded that Energy Trust programs can have differing requirements based on the needs of the customers and program design. Maintaining a network with trade and non-trade allies was viewed as valuable as significant savings comes from both groups. Interviews with other network managers identified Energy Trust practices as similar or beyond what was viewed as best practice in trade ally network management.

The evaluation was designed to identify opportunities for improving the management of the network. Energy Trust staff see the following opportunities for streamlining network management and enhancing benefits for trade allies as a result of this research:

- The Communications and Customer Service group and Legal staff identified changes to the insurance tracking process and opportunities to increase the compliance rate while maintaining insurance requirements. These changes should reduce the amount of time staff spend on this process.
- Staff are working to transition trade ally enrollment from a paper process to an online experience. This will make it easier for contractors to submit network enrollment applications, add additional programs or renew portions of their enrollment. This will also reduce the amount of administrative resources needed to follow up on missing paperwork and enrollment information.
- Staff are planning to host two sets of regional roundtables – meetings of trade ally contractors that provide program updates, networking and training – in 2015, rather than the typical four. While these roundtables will focus on residential and multifamily trade allies, for which they are reported to be most beneficial, they will be open to trade allies working with all programs. The commercial and industrial programs will continue to engage with their trade allies in other forums, including

direct communications and bi-annual training events targeted specifically for commercial and lighting trade allies.

- Staff are exploring the potential to convert the co-op marketing budgets for several programs into Business Development Funds, similar to what has been done for the Existing Homes program. The Solar program adopted this approach as of January 1, 2015. This change allows trade allies to utilize funds for trainings, conference fees, memberships and other uses that benefit trade ally involvement in programs and markets, in addition to advertising.
- Staff have found the star rating system for Existing Homes trade allies to be useful, both in directing customers to quality trade allies and in directing program resources to the most engaged trade allies. In 2015 and 2016, Energy Trust will explore whether it makes sense to adopt a rating system for solar and/or commercial trade allies and how such a system might work. Each program has differing needs and criteria for such a system, and initial steps will include identifying both.

An additional recommendation in the report regarded the value of allowing Existing Homes customers to self-install measures and how self-installation processes might be improved; no changes in these offerings are planned for 2015. This evaluation also highlighted room for improvement in the way trade ally activity is tracked in program databases. Changes in these methods would allow for further data analysis in future evaluations. Modifying data systems in this manner will rely on implementation of planned changes in 2015 and will be a future consideration.

Tab 6

Notes on November 2014 Financial Statements

December 22, 2014

Revenue

November revenues are starting to show the expected decrease in PGE and PAC incremental funding. The year-to-date revenue overage has dropped from 4% (PGE) and 5% (PAC) in October to 3% in November.

Revenue through Nov 2014

Nov-14	YTD Actual	YTD Budget	YTD Var	YTD %
PGE	79,666,160	77,302,371	2,363,789	3%
PAC	48,820,500	47,285,126	1,535,374	3%
NWN	20,647,963	21,714,497	(1,066,534)	-5%
CNG	2,267,952	1,645,790	622,162	38%
Investment Income	235,752	71,500	164,252	230%
Total	151,638,327	148,019,284	3,619,043	2%

Reserves

Total Reserves at the end of November are shown below. There was a drop in overall reserves from October of over $4,000,000 (about 3.5%).

Reserves

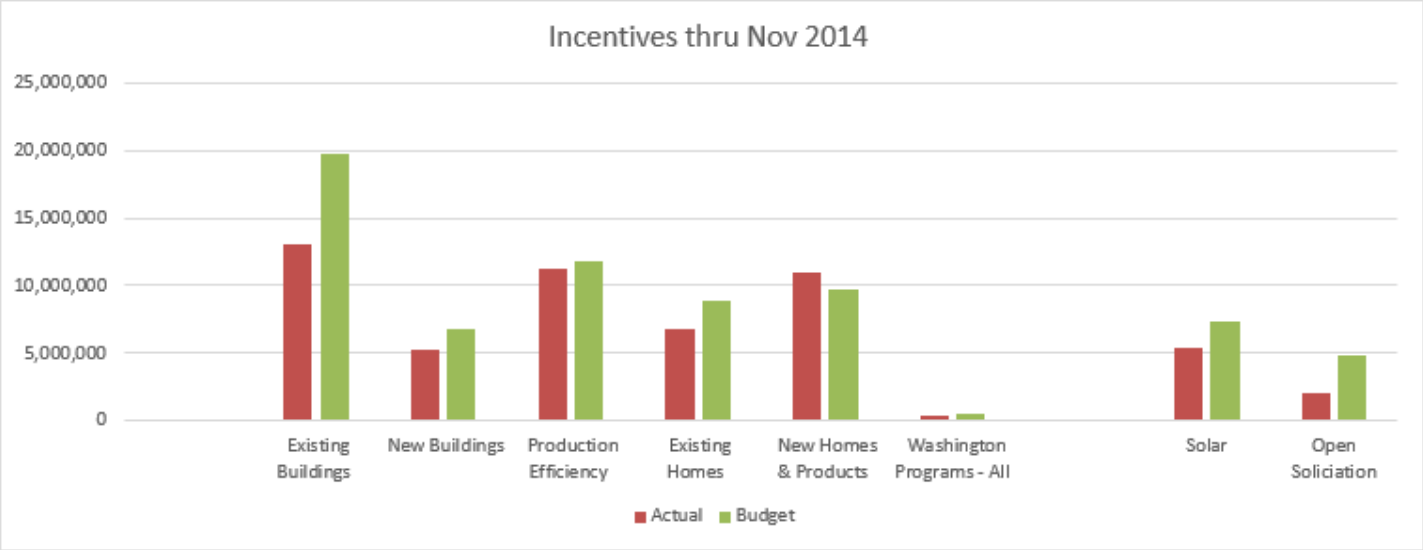
	Actual 12/31/13 Amount	Actual 11/30/14 Amount	YTD % Change	Actual 10/31/14 Amount
PGE	24,483,032	40,474,860	65.3%	41,639,253
PacifiCorp	11,560,814	21,722,650	87.9%	23,170,627
NW Natural	8,569,670	10,899,994	27.2%	11,800,917
Cascade	658,260	1,352,660	105.5%	1,405,861
NWN Industrial	356,235	1,664,525	367.3%	1,897,213
NWN Washington	473,674	595,673	25.8%	701,069
PGE Renewables	12,041,462	14,387,287	19.5%	14,714,088
PAC Renewables	11,793,715	12,952,075	9.8%	12,768,881
Contingency Reserve	5,000,000	5,000,000	0.0%	5,000,000
Contingency Available	2,993,710	3,242,862	8.3%	3,209,239
Total	77,930,572	112,292,588	44.1%	116,307,150

Expenses

We spent $2.6 million more in November 2014 than we did in November 2013. Year to date total spending is now $14.6 million higher than the same period one year ago. ($117.3 million vs. $102.7 million.) We were underspent vs our November budget by 2.6 million ($14.4 million spent vs. $17.0 budget) so our YTD underspending has increased to $20.7 million. $138 million budget vs. $117.3 actual.

Incentive Expenses

Year to date incentives remain 21% below budget. The underspent incentives total $14.6 million, which makes up over 70% of our total underspending for the year. The following graph shows how each program is doing relative to the budgeted Y-T-D amount. The graph is similar to last month's status.



Total Incentives
Year-to-Date 2014

Incentives thru November 2014	Actual	Budget	Variance	Var %
Existing Buildings	13,111,756	19,780,016	6,668,260	34%
New Buildings	5,253,860	6,770,552	1,516,692	22%
Production Efficiency	11,232,705	11,830,348	597,643	5%
Existing Homes	6,732,934	8,805,008	2,072,074	24%
New Homes & Products	10,913,510	9,705,990	(1,207,520)	-12%
Washington Programs - All	317,973	564,087	246,114	44%
Solar	5,379,604	7,291,015	1,911,411	26%
Open Soliciation	1,992,223	4,829,651	2,837,428	59%
Total Incentives	54,934,565	69,576,667	14,642,102	21%
Energy Efficiency Only	**47,562,738**	**57,456,001**	**9,893,263**	**17%**

Total Incentives
Year-to-Year Comparison

November 2014 v Nov 2013	Current Year	Prior Year	Variance	Var %
Existing Buildings	13,111,756	11,060,413	(2,051,343)	-19%
New Buildings	5,253,860	5,083,006	(170,854)	-3%
Production Efficiency	11,232,705	9,597,233	(1,635,472)	-17%
Existing Homes	6,732,934	6,244,641	(488,293)	-8%
New Homes & Products	10,913,510	8,023,144	(2,890,366)	-36%
Washington Programs - All	317,973	326,454	8,481	3%
Solar	5,379,604	3,427,222	(1,952,382)	-57%
Other	1,992,223	1,548,090	(444,133)	-29%
Total Incentives	54,934,565	45,310,199	(9,624,366)	-21%
Energy Efficiency Only	**47,562,738**	**40,334,891**	**(7,227,847)**	**-18%**

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

	Nov 2014	Oct 2014	DEC 2013	Nov 2013	Change from one month ago	Change from Beg. of Year	Change from one year ago
Current Assets							
Cash & Cash Equivalents	60,771,440	63,313,945	76,484,638	95,297,836	(2,542,505)	(15,713,198)	(34,526,396)
Restricted Cash (Escrow Funds)	0	0	0	252,735	0	0	(252,735)
Investments	62,650,476	59,551,723	25,270,363	5,979,054	3,098,754	37,380,114	56,671,422
Restricted Investments (Escrow Funds)	0	0	77,988		0	(77,988)	0
Receivables	314,390	240,318	8,276	47,652	74,072	306,114	266,738
Prepaid Expenses	463,190	488,183	526,087	456,235	(24,993)	(62,897)	6,954
Advances to Vendors	1,224,036	1,870,351	2,015,420	1,214,633	(646,314)	(791,384)	9,404
Current Portion Note Receivable							
Total Current Assets	**125,423,532**	**125,464,520**	**104,382,771**	**103,248,145**	**(40,988)**	**21,040,761**	**22,175,387**
Fixed Assets							
Computer Hardware and Software	1,634,233	1,634,233	1,401,967	1,401,967	0	232,266	232,266
Software Development	892,121	704,911			187,209	892,121	892,121
Leasehold Improvements	318,964	313,333	313,333	313,333	5,631	5,631	5,631
Office Equipment and Furniture	610,910	600,662	600,662	600,662	10,248	10,248	10,248
Total Fixed Assets	**3,456,229**	**3,253,140**	**2,315,962**	**2,315,962**	**203,089**	**1,140,266**	**1,140,266**
Less Depreciation	(1,796,201)	(1,752,118)	(1,500,494)	(1,473,054)	(44,083)	(295,707)	(323,148)
Net Fixed Assets	**1,660,027**	**1,501,022**	**815,468**	**842,909**	**159,006**	**844,559**	**817,119**
Other Assets							
Rental Deposit	135,340	64,461	61,461	61,461	70,879	73,879	73,879
Deferred Compensation Asset	586,872	577,003	552,641	476,258	9,869	34,231	110,614
Long Term Portion Note Receivable	100,000	100,000			0	100,000	100,000
Total Other Assets	**822,212**	**741,464**	**614,102**	**537,720**	**80,748**	**208,110**	**284,492**
Total Assets	**127,905,771**	**127,707,006**	**105,812,341**	**104,628,774**	**198,766**	**22,093,430**	**23,276,998**
Current Liabilities							
Accounts Payable and Accruals	13,965,246	9,768,496	26,326,508	10,225,636	4,196,749	(12,361,262)	3,739,610
Salaries, Taxes, & Benefits Payable	703,609	695,780	631,548	647,384	7,829	72,061	56,225
Total Current Liabilities	**14,668,855**	**10,464,276**	**26,958,055**	**10,873,020**	**4,204,578**	**(12,289,201)**	**3,795,835**
Long Term Liabilities							
Deferred Rent	352,470	353,540	364,244	365,314	(1,070)	(11,774)	(12,844)
Deferred Compensation Payable	586,872	577,003	552,641	476,258	9,869	34,231	110,614
Other Long-Term Liabilities	4,995	5,035	6,830	6,890	(40)	(1,835)	(1,895)
Total Long-Term Liabilities	**944,336**	**935,578**	**923,714**	**848,462**	**8,759**	**20,623**	**95,875**
Total Liabilities	**15,613,191**	**11,399,854**	**27,881,769**	**11,721,481**	**4,213,337**	**(12,268,578)**	**3,891,710**
Net Assets							
Temporarily Restricted Net Assets	0	0	77,988	252,735	0	(77,988)	(252,735)
Unrestricted Net Assets	112,292,580	116,307,151	77,852,585	92,654,557	(4,014,571)	34,439,996	19,638,023
Total Net Assets	**112,292,580**	**116,307,151**	**77,930,572**	**92,907,292**	**(4,014,571)**	**34,362,008**	**19,385,288**
Total Liabilities and Net Assets	**127,905,771**	**127,707,006**	**105,812,341**	**104,628,774**	**198,766**	**22,093,430**	**23,276,998**

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

	January	February	March	April	May	June	July	August	September	October	November	Year to Date
Operating Activities:												
Revenue less Expenses	12,906,165	10,113,897	6,583,587	6,287,830	215,826	(1,174,025)	1,620,932	1,407,466	1,000,196	(585,297)	(4,014,571)	$ 34,362,008
Non-cash items:												
Depreciation	27,123	27,123	28,713	28,418	28,418	28,473	28,298	62,618	(1,256)	33,428	44,083	335,439
Loss on disposal of assets												
Receivables	3,902	(49)	-	-	174	(1,003)	1,003	(1,096)	-	-	-	2,931
Interest Receivable	1,292	663	(27,109)	(112,939)	(33,215)	25,187	(12,245)	(13,634)	(15,869)	(47,104)	(74,072)	(309,045)
Advances to Vendors	680,371	678,630	(1,650,387)	365,028	768,936	(865,080)	165,479	679,314	(1,259,628)	582,406	646,315	791,384
Prepaid expenses and other costs	(151,035)	100,837	11,507	42,345	(28,712)	(209,651)	(5,022)	120,515	63,297	93,823	24,993	62,897
Accounts payable	(19,456,433)	(797,502)	1,417,700	(423,975)	1,401,061	464,334	(594,512)	(205,635)	1,321,061	389,245	4,196,750	(12,287,906)
Payroll and related accruals	70,280	(88,799)	76,891	(14,227)	38,978	15,743	(37,257)	(541)	13,762	13,764	17,698	106,292
Deferred rent and other	(3,988)	51,851	(945)	(10,714)	(13,739)	(113,739)	(9,882)	(13,739)	(7,953)	(17,013)	(81,858)	(221,719)
Cash rec'd from / (used in) Operating Activities	(5,922,323)	10,086,651	6,439,957	6,161,766	2,377,727	(1,829,761)	1,156,794	2,035,268	1,113,610	463,252	759,335	$ 22,842,281
Investing Activities:												
Investment Activity (1)	992,503	992,840	(232,102)	(18,552,646)	(4,712,080)	(713,502)	(5,178,372)	56,118	(1,742,101)	(5,187,381)	(3,098,753)	(37,375,476)
(Acquisition)/Disposal of Capital Assets	-		(46,620)	-	-	(368,159)	(162,039)	(190,275)	(53,967)	(155,848)	(203,089)	(1,179,996)
Cash rec'd from / (used in) Investing Activities	992,503	992,840	(278,722)	(18,552,646)	(4,712,080)	(1,081,661)	(5,340,411)	(134,157)	(1,796,068)	(5,343,229)	(3,301,842)	$ (38,555,472)
Cash at beginning of Period	76,484,637	71,554,817	82,634,307	88,795,542	76,404,658	74,070,305	71,158,883	66,975,266	68,876,378	68,193,921	63,313,942	76,484,637
Increase/(Decrease) in Cash	(4,929,820)	11,079,491	6,161,235	(12,390,880)	(2,334,353)	(2,911,422)	(4,183,617)	1,901,111	(682,458)	(4,879,977)	(2,542,504)	(15,713,202)
Cash at end of period	$ 71,554,817	$ 82,634,307	$ 88,795,542	$ 76,404,658	$ 74,070,305	$ 71,158,883	$ 66,975,266	$ 68,876,378	$ 68,193,921	$ 63,313,945	$ 60,771,440	$ 60,771,440

(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 2014
	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	11,442,506	11,823,698	11,801,651	12,144,325	13,283,583	10,418,891	10,600,000
From other sources	3,902	(49)	12,500	-	1,074	(1,003)	1,003	(1,096)	-	-	-	-
Investment Income	12,036	10,159	(15,526)	(95,411)	(10,883)	49,508	12,626	11,234	12,264	(18,851)	(40,449)	25,000
Total cash in	17,742,715	18,550,043	16,483,805	15,183,461	12,445,698	11,491,011	11,837,327	11,811,789	12,156,589	13,264,732	10,378,442	10,625,000
Cash Out:	22,672,537	7,470,551	10,322,571	27,574,340	14,780,049	14,402,435	16,020,945	9,910,673	12,839,047	18,144,710	12,920,947	21,200,000
Net cash flow for the month	(4,929,822)	11,079,492	6,161,234	(12,390,879)	(2,334,351)	(2,911,424)	(4,183,618)	1,901,116	(682,458)	(4,879,978)	(2,542,504)	(10,575,000)
Beginning Balance: Cash & MM	76,484,640	71,554,817	82,634,309	88,795,543	76,404,659	74,070,305	71,158,882	66,975,263	68,876,378	68,193,922	63,313,944	60,771,440
Ending cash & MM	**71,554,817**	**82,634,309**	**88,795,543**	**76,404,659**	**74,070,305**	**71,158,882**	**66,975,263**	**68,876,378**	**68,193,921**	**63,313,945**	**60,771,440**	**50,196,440**

Future Commitments

Renewable Incentives	20,900,000	21,000,000	14,200,000	14,200,000	14,300,000	17,100,000	16,800,000	16,100,000	14,500,000	13,900,000	13,200,000	11,700,000
Efficiency Incentives	39,500,000	47,800,000	44,400,000	44,100,000	43,000,000	49,400,000	49,400,000	48,500,000	52,200,000	53,600,000	61,600,000	50,900,000
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	71,500,000	71,200,000	69,600,000	71,700,000	72,500,000	79,800,000	67,600,000

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: 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
Cash Flow Projection
January 2014 - December 2015

	2015 Round 2 Projection (Final Draft Version)											
	Budget R2 January	**Budget R2 February**	**Budget R2 March**	**Budget R2 April**	**Budget R2 May**	**Budget R2 June**	**Budget R2 July**	**Budget R2 August**	**Budget R2 September**	**Budget R2 October**	**Budget R2 November**	**Budget R2 December**
Cash In:												
Public purpose and Incr funding	15,000,000	15,400,000	14,000,000	13,300,000	11,100,000	10,300,000	11,200,000	10,600,000	11,200,000	11,500,000	11,100,000	13,400,000
From other sources												
Investment Income	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000
Total cash in	15,024,000	15,424,000	14,024,000	13,324,000	11,124,000	10,324,000	11,224,000	10,624,000	11,224,000	11,524,000	11,124,000	13,424,000
Cash Out:	48,500,000	10,800,000	11,900,000	11,400,000	11,300,000	13,600,000	11,300,000	11,300,000	14,200,000	13,100,000	13,900,000	30,600,000
Net cash flow for the month	(33,476,000)	4,624,000	2,124,000	1,924,000	(176,000)	(3,276,000)	(76,000)	(676,000)	(2,976,000)	(1,576,000)	(2,776,000)	(17,176,000)
Beginning Balance: Cash & MM	50,196,440	16,720,440	21,344,440	23,468,440	25,392,440	25,216,440	21,940,440	21,864,440	21,188,440	18,212,440	16,636,440	13,860,440
Ending cash & MM	**16,720,440**	**21,344,440**	**23,468,440**	**25,392,440**	**25,216,440**	**21,940,440**	**21,864,440**	**21,188,440**	**18,212,440**	**16,636,440**	**13,860,440**	**(3,315,561)**
Future Commitments												
Renewable Incentives	11,800,000	12,300,000	12,300,000	12,300,000	12,300,000	12,300,000	12,300,000	12,300,000	12,300,000	12,300,000	12,300,000	12,300,000
Efficiency Incentives	50,100,000	47,900,000	45,500,000	45,500,000	45,500,000	45,500,000	45,500,000	45,500,000	45,500,000	45,500,000	45,500,000	45,500,000
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	66,900,000	65,200,000	62,800,000	62,800,000	62,800,000	62,800,000	62,800,000	62,800,000	62,800,000	62,800,000	62,800,000	62,800,000
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
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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
Income Statement - Actual and Prior Yr Comparison
For the Eleven Months Ending November 30, 2014
(Unaudited)

	November				YTD			
	Actual	Actual Prior Year	Prior Year Variance	Variance %	Actual	Actual Prior Year	Prior Year Variance	Variance %
REVENUES								
Public Purpose Funds-PGE	2,737,964	2,591,536	146,428	6%	34,266,784	31,568,502	2,698,282	9%
Public Purpose Funds-PacifiCorp	1,971,917	1,942,160	29,758	2%	25,085,372	23,674,517	1,410,855	6%
Public Purpose Funds-NW Natural	648,423	1,260,462	(612,040)	-49%	16,520,556	20,934,487	(4,413,932)	-21%
Public Purpose Funds-Cascade	66,776	252,457	(185,680)	-74%	2,267,952	1,939,065	328,887	17%
Total Public Purpose Funds	**5,425,080**	**6,046,614**	**(621,535)**	**-10%**	**78,140,663**	**78,116,571**	**24,092**	**0%**
Incremental Funds - PGE	3,270,829	3,631,928	(361,099)	-10%	45,399,377	45,114,328	285,048	1%
Incremental Funds - PacifiCorp	1,722,984	1,870,319	(147,335)	-8%	23,735,128	23,539,489	195,639	1%
NW Natural - Industrial DSM			0		3,073,052	1,727,838	1,345,214	78%
NW Natural - Washington			0		1,054,355	1,291,102	(236,747)	-18%
Contributions			0		13,400	13,430	(30)	
Revenue from Investments	33,623	9,457	24,166	256%	235,752	85,638	150,114	175%
TOTAL REVENUE	**10,452,515**	**11,558,318**	**(1,105,803)**	**-10%**	**151,651,727**	**149,888,397**	**1,763,330**	**1%**
EXPENSES								
Program Subcontracts	4,854,913	4,400,393	(454,521)	-10%	44,826,671	41,668,305	(3,158,365)	-8%
Incentives	8,222,607	6,071,240	(2,151,367)	-35%	54,934,565	45,310,203	(9,624,363)	-21%
Salaries and Related Expenses	779,238	819,553	40,315	5%	9,517,354	8,862,439	(654,915)	-7%
Professional Services	407,488	420,231	12,743	3%	5,859,056	4,437,932	(1,421,125)	-32%
Supplies	3,070	3,096	25	1%	32,752	28,164	(4,589)	-16%
Telephone	4,289	4,409	119	3%	50,673	48,845	(1,828)	-4%
Postage and Shipping Expenses	727	653	(74)	-11%	11,454	8,839	(2,616)	-30%
Occupancy Expenses	52,568	54,407	1,839	3%	590,401	608,502	18,101	3%
Noncapitalized Equip. & Depr.	90,466	47,725	(42,741)	-90%	675,326	576,546	(98,780)	-17%
Call Center	10,297	32,712	22,415	69%	135,130	542,950	407,820	75%
Printing and Publications	3,874	7,517	3,644	48%	108,702	102,210	(6,492)	-6%
Travel	6,618	4,646	(1,972)	-42%	134,319	121,893	(12,426)	-10%
Conference, Training & Mtng Exp	4,713	6,885	2,173	32%	168,332	114,412	(53,920)	-47%
Interest Expense and Bank Fees			0		2,000	5,443	3,443	63%
Insurance	8,630	8,622	(8)	0%	93,443	91,554	(1,889)	-2%
Miscellaneous Expenses			0		3,316	1,090	(2,226)	-204%
Dues, Licenses and Fees	17,588	15,478	(2,110)	-14%	146,223	133,327	(12,896)	-10%
TOTAL EXPENSES	**14,467,086**	**11,897,567**	**(2,569,519)**	**-22%**	**117,289,719**	**102,662,654**	**(14,627,065)**	**-14%**
TOTAL REVENUE LESS EXPENSES	**(4,014,571)**	**(339,249)**	**(3,675,322)**	**-1083%**	**34,362,008**	**47,225,743**	**(12,863,735)**	**-27%**

Energy Trust of Oregon
Income Statement - Actual and YTD Budget Comparison
For the Eleven Months Ending November 30, 2014
(Unaudited)

	November				YTD			
	Actual	**Budget**	**Budget Variance**	**Variance %**	**Actual**	**Budget**	**Budget Variance**	**Variance %**
REVENUES								
Public Purpose Funds-PGE	2,737,964	2,439,936	298,028	12%	34,266,784	31,378,418	2,888,366	9%
Public Purpose Funds-PacifiCorp	1,971,917	2,288,671	(316,754)	-14%	25,085,372	23,821,060	1,264,312	5%
Public Purpose Funds-NW Natural	648,423	803,506	(155,084)	-19%	16,520,556	16,649,761	(129,205)	-1%
Public Purpose Funds-Cascade	66,776	229,645	(162,869)	-71%	2,267,952	1,645,790	622,162	38%
Total Public Purpose Funds	**5,425,080**	**5,761,758**	**(336,678)**	**-6%**	**78,140,663**	**73,495,028**	**4,645,635**	**6%**
Incremental Funds - PGE	3,270,829	4,370,388	(1,099,560)	-25%	45,399,377	45,923,953	(524,576)	-1%
Incremental Funds - PacifiCorp	1,722,984	2,196,468	(473,484)	-22%	23,735,128	23,464,067	271,061	1%
NW Natural - Industrial DSM					3,073,052	3,773,634	(700,582)	-19%
NW Natural - Washington					1,054,355	1,291,102	(236,747)	-18%
Contributions					13,400		13,400	
Revenue from Investments	33,623	6,500	27,123	417%	235,752	71,500	164,252	230%
TOTAL REVENUE	**10,452,515**	**12,335,114**	**(1,882,599)**	**-15%**	**151,651,727**	**148,019,284**	**3,632,443**	**2%**
EXPENSES								
Program Subcontracts	4,854,913	4,494,668	(360,245)	-8%	44,826,671	46,151,176	1,324,505	3%
Incentives	8,222,607	10,643,359	2,420,752	23%	54,934,565	69,576,667	14,642,101	21%
Salaries and Related Expenses	779,238	938,782	159,544	17%	9,517,354	10,616,433	1,099,079	10%
Professional Services	407,488	725,619	318,131	44%	5,859,056	8,768,558	2,909,502	33%
Supplies	3,070	4,588	1,518	33%	32,752	50,472	17,719	35%
Telephone	4,289	5,484	1,195	22%	50,673	60,794	10,121	17%
Postage and Shipping Expenses	727	1,183	456	39%	11,454	13,017	1,562	12%
Occupancy Expenses	52,568	64,275	11,706	18%	590,401	707,024	116,622	16%
Noncapitalized Equip. & Depr.	90,466	70,758	(19,708)	-28%	675,326	888,567	213,240	24%
Call Center	10,297	15,000	4,703	31%	135,130	165,000	29,870	18%
Printing and Publications	3,874	11,858	7,985	67%	108,702	130,442	21,740	17%
Travel	6,618	17,773	11,155	63%	134,319	220,248	85,928	39%
Conference, Training & Mtng Exp	4,713	34,578	29,866	86%	168,332	393,711	225,379	57%
Interest Expense and Bank Fees		417	417	100%	2,000	4,583	2,583	56%
Insurance	8,630	9,167	537	6%	93,443	100,833	7,391	7%
Miscellaneous Expenses		268	268	100%	3,316	2,952	(364)	-12%
Dues, Licenses and Fees	17,588	11,782	(5,806)	-49%	146,223	157,369	11,145	7%
TOTAL EXPENSES	**14,467,086**	**17,049,559**	**2,582,473**	**15%**	**117,289,719**	**138,007,845**	**20,718,125**	**15%**
TOTAL REVENUE LESS EXPENSES	**(4,014,571)**	**(4,714,445)**	**699,874**	**15%**	**34,362,008**	**10,011,439**	**24,350,568**	**243%**

Energy Trust of Oregon
Statement of Functional Expenses
For the Eleven Months Ending November 30, 2014
(Unaudited)

	Energy Efficiency	Renewable Energy	Total Program Expenses	Management & General	Communications & Customer Service	Total Admin Expenses	Total	Budget	Variance	% Var
Program Expenses										
Incentives/ Program Management & Delivery	$92,162,896	$7,598,340	$99,761,236				$99,761,236	$115,727,843	$15,966,607	14%
Payroll and Related Expenses	2,804,186	868,615	3,672,801	1,754,393	878,313	2,632,706	6,305,507	6,775,762	470,255	7%
Outsourced Services	3,387,061	401,625	3,788,686	220,243	1,088,879	1,309,122	5,097,808	7,785,892	2,688,084	35%
Planning and Evaluation	2,157,864	74,386	2,232,250	1,564		1,564	2,233,814	2,426,519	192,705	8%
Customer Service Management	553,189	26,318	579,507				579,507	612,750	33,243	5%
Trade Allies Network	327,833	22,323	350,157				350,157	427,422	77,265	18%
Total Program Expenses	**101,393,030**	**8,991,607**	**110,384,636**	**1,976,200**	**1,967,192**	**3,943,392**	**114,328,028**	**133,756,188**	**19,428,160**	**15%**
Program Support Costs										
Supplies	9,267	2,755	12,022	7,967	3,395	11,362	23,384	35,617	12,233	34%
Postage and Shipping Expenses	3,818	1,257	5,075	1,644	941	2,584	7,660	7,584	(76)	-1%
Telephone	2,312	786	3,097	1,511	1,049	2,560	5,658	12,899	7,241	56%
Printing and Publications	92,923	2,719	95,642	1,132	8,432	9,565	105,207	125,924	20,717	16%
Occupancy Expenses	174,864	59,435	234,298	100,695	58,217	158,912	393,210	459,182	65,972	14%
Insurance	27,676	9,407	37,082	15,937	9,214	25,151	62,233	65,487	3,254	5%
Equipment	13,629	66,069	79,698	6,432	3,719	10,150	89,848	22,023	(67,825)	-308%
Travel	38,238	19,995	58,233	23,466	28,106	51,572	109,805	177,439	67,634	38%
Meetings, Trainings & Conferences	54,854	19,994	74,848	33,115	10,233	43,348	118,196	266,836	148,640	56%
Interest Expense and Bank Fees				2,000		2,000	2,000	4,583	2,583	56%
Depreciation & Amortization	43,635	14,831	58,466	25,127	14,527	39,654	98,120	95,528	(2,592)	-3%
Dues, Licenses and Fees	60,425	17,023	77,448	7,901	5,846	13,746	91,195	113,038	21,843	19%
Miscellaneous Expenses	3,316		3,316				3,316	2,148	(1,168)	-54%
IT Services	1,252,094	160,017	1,412,111	262,427	177,321	439,748	1,851,859	2,863,367	1,011,508	35%
Total Program Support Costs	**1,777,049**	**374,288**	**2,151,338**	**489,354**	**321,000**	**810,353**	**2,961,691**	**4,251,656**	**1,289,965**	**30%**
TOTAL EXPENSES	**103,170,079**	**9,365,895**	**112,535,974**	**2,465,554**	**2,288,190**	**4,753,744**	**117,289,719**	**138,007,845**	**20,718,126**	**15%**
OPUC Measure vs. 9%	**4.6%**									

ENERGY TRUST OF OREGON
Year to Date by Program/Service Territory
For the Eleven Months Ending November 30, 2014
Unaudited

	ENERGY EFFICIENCY								
	PGE	PacifiCorp	Total	NWN Industrial	NW Natural	Cascade	Oregon Total	NWN WA	ETO Total
REVENUES									
Public Purpose Funding	$26,491,122	$19,595,319	$46,086,440	$0	$16,520,556	$2,267,952	$64,874,948	$0	$64,874,948
Incremental Funding	45,399,377	23,735,128	69,134,504	3,073,052			72,207,556	1,054,355	73,261,911
Contributions									
Revenue from Investments									
TOTAL PROGRAM REVENUE	**71,890,498**	**43,330,447**	**115,220,945**	**3,073,052**	**16,520,556**	**2,267,952**	**137,082,504**	**1,054,355**	**138,136,859**
EXPENSES									
Program Management (Note 3)	2,684,887	1,648,430	4,333,315	108,453	956,689	110,115	5,508,572	123,963	5,632,535
Program Delivery	19,979,500	12,689,629	32,669,131	579,309	4,329,268	564,656	38,142,365	269,257	38,411,622
Incentives	25,450,880	14,036,999	39,487,878	883,792	6,212,883	660,213	47,244,766	317,974	47,562,740
Program Eval & Planning Svcs.	1,901,891	1,159,684	3,061,576	49,996	638,595	59,034	3,809,199	51,228	3,860,427
Program Marketing/Outreach	1,989,118	1,241,945	3,231,063	24,420	814,632	63,140	4,133,255	45,903	4,179,158
Program Quality Assurance	35,857	33,962	69,820	0	36,443	1,505	107,767	0	107,767
Outsourced Services	386,083	228,977	615,063	18,809	112,730	11,157	757,759	0	757,759
Trade Allies & Cust. Svc. Mgmt.	362,136	259,572	621,709	4,294	208,960	13,398	848,362	32,660	881,022
IT Services	581,320	371,660	952,982	13,580	237,272	19,088	1,222,920	29,173	1,252,093
Other Program Expenses - all	261,429	153,430	414,859	10,584	67,632	7,468	500,544	24,410	524,954
TOTAL PROGRAM EXPENSES	**53,633,101**	**31,824,288**	**85,457,396**	**1,693,237**	**13,615,104**	**1,509,774**	**102,275,509**	**894,568**	**103,170,079**
ADMINISTRATIVE COSTS									
Management & General (Notes 1 & 2)	1,175,049	697,240	1,872,289	37,097	298,293	33,079	2,240,757	19,599	2,260,356
Communications & Customer Svc (Notes 1 & 2)	1,090,520	647,083	1,737,603	34,428	276,835	30,699	2,079,565	18,189	2,097,754
Total Administrative Costs	2,265,569	1,344,323	3,609,892	71,525	575,128	63,778	4,320,322	37,788	4,358,110
TOTAL PROG & ADMIN EXPENSES	**55,898,670**	**33,168,611**	**89,067,288**	**1,764,762**	**14,190,232**	**1,573,552**	**106,595,831**	**932,356**	**107,528,189**
TOTAL REVENUE LESS EXPENSES	**15,991,828**	**10,161,836**	**26,153,657**	**1,308,290**	**2,330,324**	**694,400**	**30,486,673**	**121,999**	**30,608,672**
NET ASSETS - RESERVES									
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	15,991,828	10,161,836	26,153,657	1,308,290	2,330,324	694,400	30,486,673	121,999	30,608,672
Ending Net Assets - Reserves	**40,474,860**	**21,722,650**	**62,197,503**	**1,664,525**	**10,899,994**	**1,352,660**	**76,114,684**	**595,673**	**76,710,357**
Ending Reserve by Category									
Program Reserves (Efficiency and Renewables)	40,474,860	21,722,650	62,197,503	1,664,525	10,899,994	1,352,660	76,114,684	595,673	76,710,357
Assets Released for General Purpose									
Emergency Contingency Pool									
TOTAL NET ASSETS CUMULATIVE	40,474,860	21,722,650	62,197,503	1,664,525	10,899,994	1,352,660	76,114,684	595,673	76,710,357

Note 1) Management & General and Communications & Customer Service Expenses (Admin) have been allocated based on total expenses.
Note 2) Admin costs are allocated for mgmt reporting only. GAAP for Not for Profits 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
Year to Date by Program/Service Territory
For the Eleven Months Ending November 30, 2014
Unaudited

	RENEWABLE ENERGY				TOTAL			
	PGE	PacifiCorp	Total	Other	All Programs	Approved budget	Change	% Change
REVENUES								
Public Purpose Funding	$7,775,662	$5,490,053	$13,265,716	$0	$78,140,663	$73,495,028	($4,645,635)	6%
Incremental Funding					73,261,911	74,452,756	1,190,844	-2%
Contributions				13,400	13,400		(13,400)	
Revenue from Investments				235,752	235,752	71,500	(164,252)	230%
TOTAL PROGRAM REVENUE	**7,775,662**	**5,490,053**	**13,265,716**	**249,152**	**151,651,727**	**148,019,284**	**(3,632,443)**	**2%**
EXPENSES								
Program Management (Note 3)	443,493	461,788	905,281		6,537,816	6,163,566	(374,250)	-6%
Program Delivery	104,072	85,775	189,846		38,601,468	39,809,755	1,208,287	3%
Incentives	4,133,441	3,238,386	7,371,827		54,934,567	69,576,667	14,642,100	21%
Program Eval & Planning Svcs.	82,855	62,404	145,260		4,005,687	4,707,895	702,208	15%
Program Marketing/Outreach	66,755	37,745	104,499		4,283,657	5,570,221	1,286,564	23%
Program Quality Assurance	0	851	851		108,618	237,082	128,464	54%
Outsourced Services	144,054	81,348	225,402		983,161	2,048,362	1,065,201	52%
Trade Allies & Cust. Svc. Mgmt.	31,370	17,271	48,641		929,663	1,040,173	110,510	11%
IT Services	80,033	79,984	160,017		1,412,110	2,183,424	771,314	35%
Other Program Expenses - all	123,693	90,578	214,271		739,225	814,492	75,267	9%
TOTAL PROGRAM EXPENSES	**5,209,766**	**4,156,130**	**9,365,895**	**-**	**112,535,972**	**132,151,637**	**19,615,665**	**15%**
ADMINISTRATIVE COSTS								
Management & General (Notes 1 & 2)	114,141	91,057	205,198		2,465,554	3,332,295	866,741	26%
Communications & Customer Svc (Notes 1 & 2)	105,930	84,506	190,436		2,288,190	2,523,914	235,724	9%
Total Administrative Costs	220,071	175,563	395,634		4,753,744	5,856,209	1,102,465	19%
TOTAL PROG & ADMIN EXPENSES	**5,429,837**	**4,331,693**	**9,761,529**		**117,289,719**	**138,007,846**	**20,718,130**	**15%**
TOTAL REVENUE LESS EXPENSES	**2,345,825**	**1,158,360**	**3,504,187**	**249,152**	**34,362,008**	**10,011,438**	**24,350,573**	**243%**
NET ASSETS - RESERVES								
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	2,345,825	1,158,360	3,504,187	249,152	34,362,008	10,011,438	24,350,573	161%
Ending Net Assets - Reserves	**14,387,287**	**12,952,075**	**27,339,364**	**8,242,862**	**112,292,580**	**72,621,202**	**9,029,765**	**11%**
Ending Reserve by Category								
Program Reserves (Efficiency and Renewables)	14,387,287	12,952,075	27,339,364	3,242,862	107,292,580	72,621,202	9,029,765	11%
Assets Released for General Purpose								
Emergency Contingency Pool				5,000,000	5,000,000			
TOTAL NET ASSETS CUMULATIVE	14,387,287	12,952,075	27,339,364	8,242,862	112,292,580	72,621,202	9,029,765	11%

Note 1) Management & General and Communications & Customer Service Expenses (Admin) have been allocated based on total expenses.
Note 2) Admin costs are allocated for mgmt reporting only. GAAP for Not for Profits 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 12/31/2012 reflects audited results.

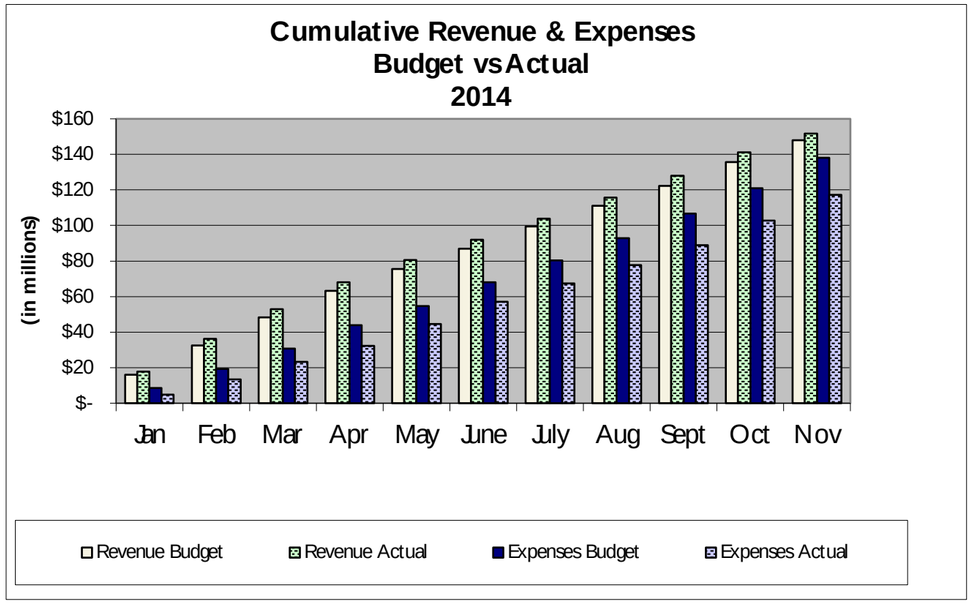
Energy Trust of Oregon
Program Expense by Service Territory
For the Eleven Months Ending November 30, 2014
(Unaudited)

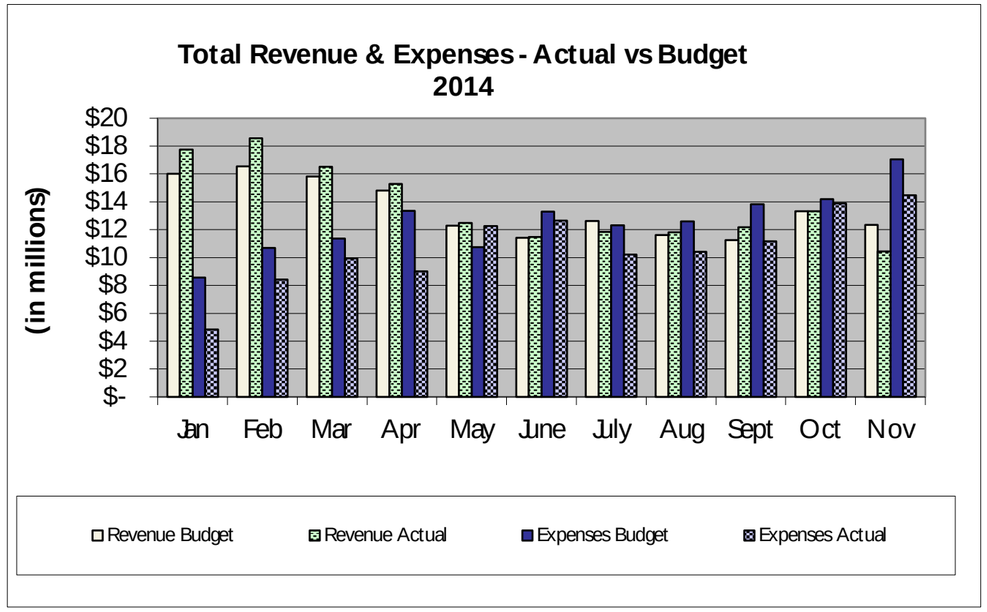
	PGE	Pacific Power	Subtotal Elec.	NWN Industrial	NW Natural Gas	Cascade	Subtotal Gas	Oregon Total	NWN WA	ETO Total	YTD Budget	Variance	% Var
Energy Efficiency													
Commercial													
Existing Buildings	15,920,241	8,521,153	24,441,395	433,300	2,911,104	464,635	3,809,039	28,250,434	334,226	28,584,660	36,620,187	8,035,527	22%
New Buildings	6,627,903	3,013,774	9,641,677	209,879	1,102,150	189,973	1,502,001	11,143,678		11,143,678	13,116,757	1,973,079	15%
NEEA	1,329,942	1,003,290	2,333,231		69,823	4,457	74,280	2,407,511		2,407,511	2,623,191	215,680	8%
Total Commercial	**23,878,086**	**12,538,217**	**36,416,303**	**643,179**	**4,083,077**	**659,065**	**5,385,320**	**41,801,623**	**334,226**	**42,135,849**	**52,360,135**	**10,224,286**	**20%**
Industrial													
Production Efficiency	13,131,609	7,235,098	20,366,708	1,121,584	523,604	248,299	1,893,487	22,260,195		22,260,195	23,664,263	1,404,068	6%
NEEA	518,639	391,255	909,894					909,894		909,894	1,306,545	396,651	30%
Total Industrial	**13,650,248**	**7,626,353**	**21,276,602**	**1,121,584**	**523,604**	**248,299**	**1,893,487**	**23,170,089**	**-**	**23,170,089**	**24,970,808**	**1,800,719**	**7%**
Residential													
Existing Homes	5,822,837	5,515,131	11,337,969		5,981,544	247,065	6,228,609	17,566,578	315,732	17,882,310	21,695,606	3,813,296	18%
New Homes/Products	10,327,875	5,814,455	16,142,330		3,532,184	414,667	3,946,851	20,089,181	282,398	20,371,579	19,520,608	(850,971)	-4%
NEEA	2,219,627	1,674,456	3,894,082		69,823	4,457	74,280	3,968,362		3,968,362	4,121,571	153,209	4%
Total Residential	**18,370,339**	**13,004,042**	**31,374,381**	**-**	**9,583,552**	**666,188**	**10,249,740**	**41,624,121**	**598,130**	**42,222,251**	**45,337,785**	**3,115,534**	**7%**
Energy Efficiency Costs	**55,898,670**	**33,168,611**	**89,067,288**	**1,764,762**	**14,190,232**	**1,573,552**	**17,528,548**	**106,595,831**	**932,356**	**107,528,189**	**122,668,728**	**15,140,539**	**12%**
Renewables													
Solar Electric (Photovoltaic)	4,523,220	2,370,416	6,893,636					6,893,636		6,893,636	9,294,609	2,400,973	26%
Other Renewable	906,617	1,961,278	2,867,893					2,867,893		2,867,893	6,044,504	3,176,611	53%
Renewables Costs	**5,429,837**	**4,331,694**	**9,761,529**	**-**	**-**	**-**	**-**	**9,761,529**	**-**	**9,761,529**	**15,339,113**	**5,577,584**	**36%**
Cost Grand Total	**61,328,507**	**37,500,305**	**98,828,814**	**1,764,763**	**14,190,233**	**1,573,552**	**17,528,548**	**116,357,362**	**932,356**	**117,289,719**	**138,007,845**	**20,718,125**	**15%**

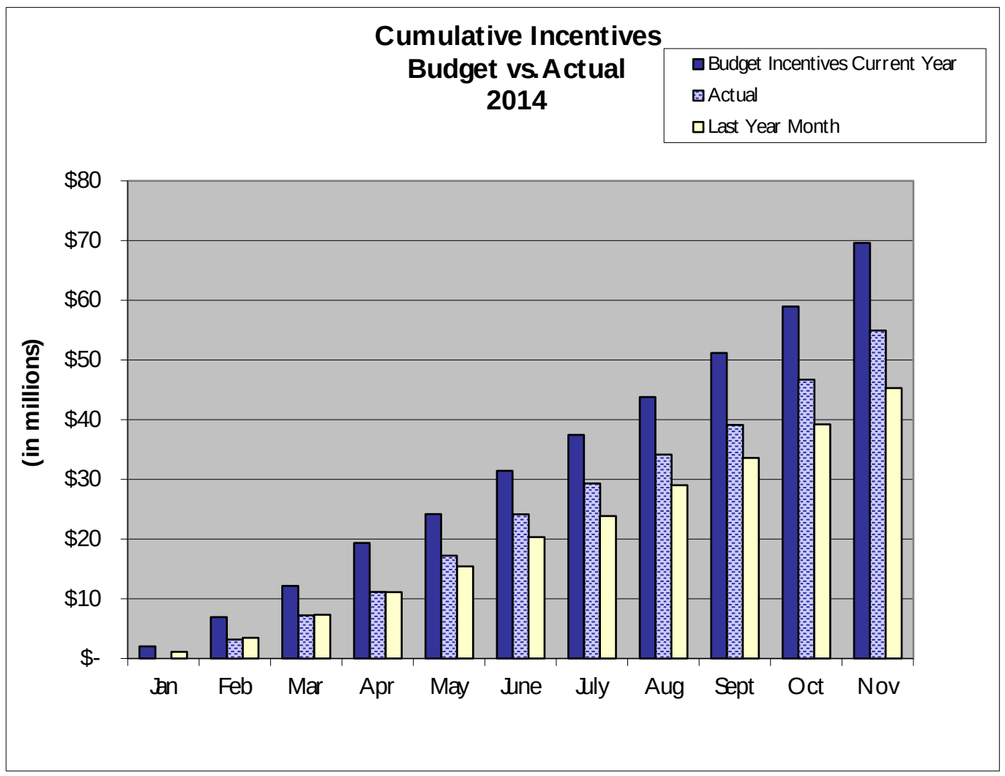
Energy Trust of Oregon
Administrative Expenses
For the 4th Quarter and Eleven Months Ending November 30, 2014
(Unaudited)

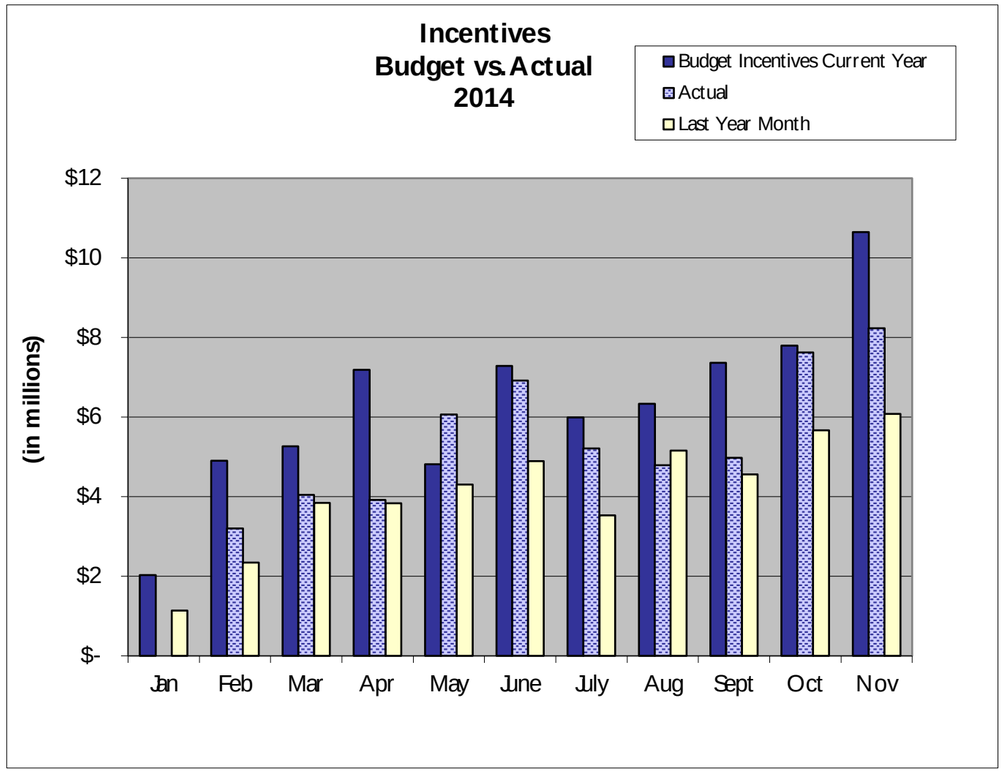
	MANAGEMENT & GENERAL						COMMUNICATIONS & CUSTOMER SERVICE					
	MONTHLY	QUARTERLY	QUARTER	YTD			MONTHLY	QUARTERLY	QUARTER	YTD		
	ACTUAL	BUDGET	REMAINING	ACTUAL	BUDGET	VARIANCE	ACTUAL	BUDGET	REMAINING	ACTUAL	BUDGET	VARIANCE
EXPENSES	-	-		-			-			-		
Outsourced Services	$20,362	$221,018	$200,656	$218,932	$540,397	$321,466	$85,313	$265,300	$179,987	$1,088,879	$972,766	($116,113)
Legal Services		13,750	13,750	1,312	50,417	49,105						
Salaries and Related Expenses	326,189	532,605	206,416	1,754,393	1,942,718	188,325	185,436	298,515	113,078	878,313	1,094,554	216,242
Supplies	1,242	1,950	708	3,299	7,150	3,851	226	240	14	696	880	184
Telephone		545	545	180	1,998	1,818		490	490	280	1,517	1,237
Postage and Shipping Expenses	20		(20)	44		(44)		250	250	16	917	901
Noncapitalized Equipment								250	250		917	917
Printing and Publications	22	75	53	373	275	(98)	1,010	1,750	740	7,993	6,417	(1,577)
Travel	2,641	13,305	10,664	23,466	48,785	25,319	9,997	9,500	(497)	28,106	34,833	6,728
Conference, Training & Mtngs	(962)	51,360	52,323	32,895	149,170	116,275	1,132	5,500	4,368	10,105	20,167	10,061
Interest Expense and Bank Fees		1,250	1,250	2,000	4,583	2,583						
Miscellaneous Expenses		180	180		660	660						
Dues, Licenses and Fees	203	2,150	1,947	7,901	8,113	213	880	400	(480)	5,846	1,467	(4,379)
Shared Allocation (Note 1)	28,835	46,358	17,523	156,769	170,642	13,873	18,309	31,325	13,016	90,637	115,305	24,668
IT Service Allocation (Note 2)	47,283	94,489	47,207	262,427	405,768	143,341	31,949	63,846	31,897	177,321	274,176	96,855
Planning & Eval	239	402	162	1,564	1,618	54						
TOTAL EXPENSES	**426,073**	**979,437**	**553,365**	**2,465,554**	**3,332,294**	**866,741**	**334,253**	**677,366**	**343,113**	**2,288,190**	**2,523,916**	**235,724**

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


Cumulative Revenue & Expenses
Budget vs Actual
2014
(in millions)
$160
$140
$120
$100
$80
$60
$40
$20
$-
Jan
Feb
Mar
Apr
May
June
July
Aug
Sept
Oct
Nov
Revenue Budget
Revenue Actual
Expenses Budget
Expenses Actual


Total Revenue & Expenses - Actual vs Budget
2014
(in millions)
$20
$18
$16
$14
$12
$10
$8
$6
$4
$2
$-
Jan
Feb
Mar
Apr
May
June
July
Aug
Sept
Oct
Nov
Revenue Budget
Revenue Actual
Expenses Budget
Expenses Actual


Cumulative Incentives
Budget vs. Actual
2014
Budget Incentives Current Year
Actual
Last Year Month
(in millions)
$80
$70
$60
$50
$40
$30
$20
$10
$-
Jan
Feb
Mar
Apr
May
June
July
Aug
Sept
Oct
Nov


Incentives
Budget vs. Actual
2014
Budget Incentives Current Year
Actual
Last Year Month
(in millions)
$12
$10
$8
$6
$4
$2
$-
Jan
Feb
Mar
Apr
May
June
July
Aug
Sept
Oct
Nov

R00407

For contracts with costs through: 12/1/2014

Energy Trust of Oregon
Contract Status Summary Report

Report Date: 12/30/2014

Contractor	Description	*City	Est Cost	Actual TTD	Remaining	Start	End
Administration							
		Administration Total:	**7,524,220**	**3,277,912**	**4,246,308**		
Communications & Outreach							
		Communications & Outreach Total:	**3,953,518**	**2,534,826**	**1,418,692**		
Energy Efficiency Programs							
Northwest Energy Efficiency Alliance	Regional Energy Eff Initiative	Portland	39,138,680	33,799,669	5,339,011	1/1/10	7/1/15
Northwest Energy Efficiency Alliance	Regional EE Initiative Agmt	Portland	33,662,505	0	33,662,505	1/1/15	7/1/20
ICF Resources, LLC	PMC BE 2014	Fairfax	9,008,736	7,468,716	1,540,020	1/1/14	12/31/14
CLEAResult Consulting Inc	2014 HES PMC	Austin	7,595,520	6,612,456	983,064	1/1/14	12/31/14
Portland Energy Conservation, Inc.	PMC NHP 2014	Portland	6,965,473	5,927,650	1,037,823	1/1/14	12/31/14
Portland Energy Conservation, Inc.	2014 NBE PMC	Portland	4,735,000	4,162,445	572,555	1/1/14	12/31/14
Lockheed Martin Services, Inc.	2014 MF PMC	Cherry Hill	3,569,068	3,086,011	483,057	1/1/14	12/31/14
Portland General Electric	PDC - PE 2014	Portland	2,314,600	1,954,762	359,838	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	1,700,112	295,888	1/1/14	12/31/14
Cascade Energy, Inc.	PDC - PE 2015 Small Industrial	Walla Walla	1,497,000	0	1,497,000	1/1/15	12/31/15
NEXANT, INC.	PDC - PE 2014	San Francisco	1,429,461	1,274,814	154,647	1/1/14	12/31/14
Evergreen Consulting Group, LLC	PE Lighting PDC 2015	Tigard	1,296,000	0	1,296,000	1/1/15	12/31/15
Cascade Energy, Inc.	PDC - PE 2014 Small Industrial	Walla Walla	1,234,100	1,041,751	192,349	1/1/14	12/31/14
RHT Energy Solutions	PDC - PE 2014	Medford	1,145,000	976,056	168,944	1/1/14	12/31/14
Evergreen Consulting Group, LLC	PE Lighting PDC 2014	Tigard	1,092,000	956,986	135,014	1/1/14	12/31/14
Ecova Inc	Products PMC Transition	Spokane	976,090	571,435	404,655	7/31/14	12/31/14
Northwest Power & Conservation Council	Annual Work Plan		874,652	845,716	28,936	3/20/12	12/31/14
EnergySavvy Inc.	EnergySavvy Online Audit Tool	Seattle	587,500	433,519	153,981	1/1/12	12/31/15
OPOWER, Inc.	OPower Personal Energy Reports	Arlington	399,447	361,373	38,075	8/1/13	7/31/15
The Cadmus Group Inc.	PE Impact Eval 2012	Watertown	345,000	104,789	240,211	4/15/14	8/31/15
Cascade Energy, Inc.	SEM Curriculum	Walla Walla	329,080	171,913	157,167	5/1/14	4/30/16
Craft3	SWR Loan Origination/Loss Fund	Portland	305,000	6,450	298,550	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	218,215	59,385	1/1/14	12/31/14
Clean Energy Works, Inc.	EE Incentive & Services Agmt	Portland	254,600	124,320	130,280	7/1/14	12/31/14
Energy Market Innovations, Inc.	Lighting Controls Savings Est	Seattle	250,000	0	250,000	10/1/14	9/30/15
The Cadmus Group Inc.	BE Impact Evaluation 2012	Watertown	250,000	238,768	11,232	1/1/14	3/31/15
EnerNoc, Inc.	Commercial SEM curriculum	Boston	216,915	115,429	101,486	6/27/14	5/30/15
Home Performance Contractors Guild of Oregon	Existing Homes Program Support	Portland	215,000	177,685	37,315	1/1/12	3/31/15
J. Hruska Global	Quality Assurance Services	Columbia City	215,000	199,450	15,551	1/1/13	12/31/14
HST&V, LLC	CSEM PDC Transition Agreement	Portland	200,000	124,743	75,257	9/1/14	12/31/14
The Cadmus Group Inc.	NBE Program Impact Evaluation	Watertown	196,000	185,605	10,395	1/15/14	12/31/14

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

Contractor	Description	*City	Est Cost	Actual TTD	Remaining	Start	End
CLEAResult Consulting Inc	2015 Products PMC Transition	Austin	193,000	0	193,000	1/1/15	2/28/15
ICF Resources, LLC	NWN WA BE 2014	Fairfax	191,538	140,030	51,508	1/1/14	12/31/14
Northwest Energy Efficiency Alliance	Product Funding Agreement	Portland	171,851	152,619	19,232	6/5/14	12/31/15
Navigant Consulting Inc	CORE Improvement Pilot Eval	Boulder	140,000	111,382	28,618	9/1/12	12/31/15
Abt SRBI Inc.	Fast Feedback Surveys	New York	118,000	47,995	70,005	1/31/14	2/29/16
ICF Resources, LLC	NWN DSM Initiative 2014	Fairfax	113,850	101,005	12,845	1/1/14	12/31/14
CLEAResult Consulting Inc	QA Reinspection Services	Austin	106,316	28,921	77,395	4/28/14	3/30/15
Ecotope, Inc.	Gas Hearth Study	Seattle	105,104	105,096	8	10/10/13	9/1/15
The Cadmus Group Inc.	RTU Tune-up Evaluation	Watertown	105,000	102,841	2,159	1/1/14	3/31/15
ICF Resources, LLC	OSU CHP Performance Monitoring	Fairfax	100,000	33,390	66,610	7/1/13	6/30/16
PWP, Inc.	NBE Process Evaluation	Gaithersburg	95,000	89,210	5,790	1/15/14	2/28/15
1000 Broadway Building L.P.	Pay-for-Performance Pilot	Portland	88,125	0	88,125	10/17/14	11/1/18
The Cadmus Group Inc.	Commercial Op Pilot Eval	Watertown	85,000	85,000	0	7/1/11	9/1/15
The Cadmus Group Inc.	PE SEM Evaluation	Watertown	80,000	3,400	76,601	10/1/14	8/31/15
Research Into Action, Inc.	SWR OnBill Repmt Pilot Eval	Portland	60,000	0	60,000	11/1/14	3/30/16
PWP, Inc.	SEM Intro Pilot Evaluation	Gaithersburg	40,000	21,490	18,510	10/28/13	10/2/15
Research Into Action, Inc.	C&I Qualitative Research	Portland	40,000	16,326	23,674	10/1/14	2/28/15
CLEAResult Consulting Inc	New Homes QA Inspections	Austin	37,100	36,597	503	4/28/14	12/31/14
David Lineweber	Heat Pump Study	Tigard	35,250	27,060	8,190	3/20/14	3/31/15
The Cadmus Group Inc.	Lighting Pilot Evaluation	Watertown	35,000	35,000	0	4/1/12	12/31/14
Apex Analytics LLC	Delphi Panel Study	Boulder	30,000	4,610	25,390	9/1/14	3/31/15
Apex Analytics LLC	Gas Thermostat	Boulder	30,000	1,160	28,840	10/20/14	12/31/15
Btan Consulting	ESP Cert Boot Camp Evaluation	Madison	30,000	16,338	13,663	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	9,485	20,515	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	5,313	24,688	9/25/13	12/31/14
Pivotal Energy Solutions LLC	License Agreement	Gilbert	29,500	24,596	4,904	3/1/14	12/31/14
Issues & Answers Network Inc	Energy Payback Estimator tool	Virginia Beach	28,420	0	28,420	12/5/14	3/15/15
LightTracker, Inc.	CREED Data	Boulder	26,000	0	26,000	10/3/14	8/1/15
Evergreen Economics	Air Sealing Pilot Evaluation	Portland	25,000	0	25,000	10/15/14	12/31/15
Northwest Food Processors Association	NW Industrial EE Summit 2015	Portland	25,000	10,000	15,000	11/30/14	12/31/15
Sustainable Northwest	Klamath PAC Ag Program Aware	Portland	24,992	6,248	18,744	10/1/14	6/10/15
Forrest Marketing	Small Manuf Market Research	Portland	24,500	4,900	19,600	9/30/14	3/30/15
Triple Point Energy Inc.	SEM workshops	Portland	24,240	12,328	11,912	6/10/14	1/31/15
MetaResource Group	Pay-for-Performance Pilot Eval	Portland	20,000	2,250	17,750	8/5/14	12/31/15
Northwest Energy Efficiency Alliance	NEEA Product Funding Agreement	Portland	20,000	20,000	0	2/1/14	3/1/15
Pivotal Energy Solutions LLC	EPS New Home dbase construct	Gilbert	20,000	10,000	10,000	7/1/14	6/30/16
WegoWise Inc	benchmarking license 2015	Boston	20,000	3,756	16,244	6/15/14	12/31/15

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

Contractor	Description	*City	Est Cost	Actual TTD	Remaining	Start	End
Energy 350 Inc	Professional Services	Portland	14,920	0	14,920	12/10/14	12/10/16
Evergreen Economics	Builder Interviews	Portland	13,000	0	13,000	12/1/14	4/30/15
CLEAResult Consulting Inc	PMC Products Transition	Austin	11,613	10,299	1,314	9/1/14	12/31/14
Lane Community College, NEEI Science Division	2014 Scholarship Grant	Eugene	10,600	7,800	2,800	1/1/14	12/31/14
American Council for and Energy Efficient Economy	Extended Motor Products Label		10,000	10,000	0	12/23/13	3/31/15
Research Into Action, Inc.	Professional Services	Portland	9,590	0	9,590	9/1/14	8/31/16
City of Portland Bureau of Planning & Sustainability	Sponsorships - 2015	Portland	8,000	8,000	0	1/1/15	12/31/15
Apose Pty Ltd	Aspose.NET Words Software Lice	Lane Cove	5,045	0	5,045	12/3/14	12/3/15
Cascadia Region Green Building Council	Cascadia Green Bldgs Sponsor	Portland	5,000	5,000	0	1/15/14	1/15/15
Conservations Services Group, Inc.	DSE&SWR Estimator Tool Updates	Portland	3,240	0	3,240	11/11/14	11/11/16
	Energy Efficiency Programs Total:		**127,424,083**	**76,238,011**	**51,186,072**		
Joint Programs							
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		120,132	81,543	38,589	11/7/11	12/31/15
The Cadmus Group Inc.	Evaluation Consultant	Watertown	39,045	29,125	9,920	6/20/13	2/28/15
Watkins and Associates, Inc.	EPS & Solar Valuation Study	Portland	38,000	38,000	0	2/1/14	1/31/15
E Source Companies LLC	E Source Service Agreement	Boulder	36,500	36,500	0	2/1/14	1/31/15
Research Into Action, Inc.	EH Attic Air Sealing Pilot Eva	Portland	30,000	0	30,000	10/8/14	9/30/16
CoStar Realty Information Inc	Property Data	Baltimore	26,420	21,003	5,418	6/1/11	6/28/15
Research Into Action, Inc.	Fast Feedback Analysis	Portland	25,000	19,928	5,073	9/1/14	3/1/15
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
Bruins Analysis and Consulting	Fast Feedback Reporting	Bremerton	6,000	3,000	3,000	6/1/14	4/30/15
	Joint Programs Total:		**497,847**	**297,348**	**200,499**		
Renewable Energy Program							
JC-Biomethane LLC	Biogas Plant Project Funding	Eugene	2,000,000	1,000,000	1,000,000	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	500,000	500,000	10/25/12	10/25/27
Three Sisters Irrigation District	TSID Hydro	Sisters	1,000,000	700,000	300,000	4/25/12	9/30/32
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
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	441,660	0	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
Oak Leaf Energy Partners Ohio, LLC	BVT Sexton Mtn PV	Denver	355,412	0	355,412	5/15/14	12/31/34
CIty of Gresham	City of Gresham Cogen 2		330,000	0	330,000	4/9/14	7/9/34

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

Contractor	Description	*City	Est Cost	Actual TTD	Remaining	Start	End
K2A Properties, LLC	Doerfler Wind Farm Project	Aumsville	230,000	219,867	10,133	5/20/10	5/20/30
Confederated Tribes of the Umatilla Indian Reservation	Small Wind Project Funding	Pendleton	170,992	170,992	0	7/25/13	12/31/28
Klamath Basin Geopower Inc	Henley Proj Dev Assistance	Reno	150,000	43,098	106,903	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	103,783	11,017	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
Clean Power Research, LLC	PowerClerk License	Napa	104,278	102,408	1,870	7/1/14	6/30/15
Gary Higbee DBA WindStream Solar	Solar Verifier Services	Eugene	100,000	13,102	86,898	8/1/14	7/31/16
Wallowa Resources Community Solutions, Inc.	Upfront Hydroelectric Project		100,000	17,290	82,710	10/1/11	10/1/15
Deschutes Valley Water District	Early Development Assistance	Madras	68,373	0	68,373	7/23/13	6/30/15
Mapdwell LLC	Mapdwell Account	Boston	66,381	48,195	18,186	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	58,874	1,126	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
State of Oregon Dept of Geology & Mineral Industries	Lidar Data	Portland	40,000	0	40,000	11/7/14	12/1/15
Clean Energy States Alliance	CESA Year 12 (2015)		39,500	39,500	0	7/1/14	6/30/15
Wallowa Resources Community Solutions, Inc.	Hydroelectric Pipeline		25,000	8,000	17,000	6/26/14	2/28/15
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	17,037	7,088	4/11/07	1/31/24
Solar Oregon	Education & Outreach Services	Portland	24,000	22,000	2,000	1/1/14	12/31/15
Bonneville Environmental Foundation	REC policy analysis	Portland	20,000	5,873	14,128	6/15/14	12/31/14
Solar Oregon	Website Upgrade Grant	Portland	20,000	0	20,000	12/8/14	12/31/15
Ecofys US, Inc.	Renewable Energy Consultant	Corvallis	18,000	18,000	0	4/7/14	3/31/16
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
Lewis & Clark	Solar Soft Cost Analysis	Portland	10,000	0	10,000	12/5/14	4/30/15
Garrad Hassan America Inc	RE Consulting Services	San Diego	6,841	6,841	0	6/11/13	2/28/15
RHT Energy Solutions	Solar Marketing Consulting	Medford	4,500	0	4,500	10/15/14	10/15/16
eFormative Options LLC	RE Evaluation Consultant	Vashon	3,000	3,000	0	3/1/13	2/28/15
	Renewable Energy Program Total:		**12,515,352**	**4,702,947**	**7,812,406**		
	Grand Totals:		**151,915,021**	**87,051,045**	**64,863,976**		

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

Notes on December 2014 Financial Statements

February 3, 2015

Revenue

Year-to-Date Revenues ended up being very close to budgeted amounts.

Revenue through Dec 2014

Dec-14	YTD Actual	YTD Budget	YTD Var	YTD %
PGE	86,101,381	85,295,734	805,647	1%
PAC	52,839,268	52,405,610	433,658	1%
NWN	22,007,534	23,341,695	(1,334,161)	-6%
CNG	2,455,200	1,913,709	541,491	28%
Investment Income	179,694	78,000	101,694	130%
Total	163,583,077	163,034,748	548,329	0%

Reserves

Total Reserves at year end are shown below. Reserves decreased $25 million from November, or well over 22% due to the spike in incentive spending.

Reserves

	Actual 12/31/13 Amount	Actual 12/31/14 Amount	YTD % Change	Actual 11/30/14 Amount
PGE	24,483,032	27,816,059	13.6%	40,474,860
PacifiCorp	11,560,814	15,090,306	30.5%	21,722,650
NW Natural	8,569,670	9,503,289	10.9%	10,899,994
Cascade	658,260	1,156,900	75.8%	1,352,660
NWN Industrial	356,235	580,920	63.1%	1,664,525
NWN Washington	473,674	217,848	-54.0%	595,673
PGE Renewables	12,041,462	13,736,996	14.1%	14,387,287
PAC Renewables	11,793,715	10,937,995	-7.3%	12,952,075
Contingency Reserve	5,000,000	5,000,000	0.0%	5,000,000
Contingency Available	2,993,710	3,186,804	6.4%	3,242,862
Total	77,930,572	87,227,119	11.9%	112,292,588

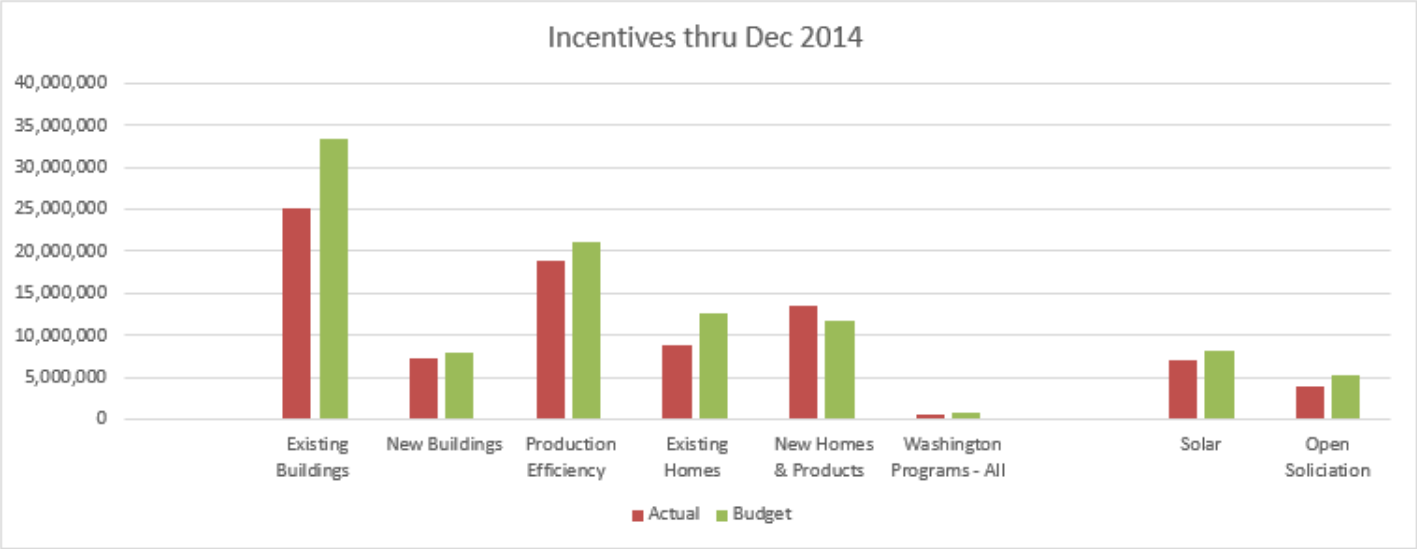
Expenses

We spent a whopping $9.3 million more in December 2014 than we did in December 2013. Year to date total spending ended up $24 million higher than the same period one year ago. ($154 million vs. $130 million.) We were underspent vs our December budget by only $1.1 million ($37 million spent vs. $38.1 budget) so our YTD underspending ended up at $22 million. We ended the year only 12% underspent.

Incentive Expenses

Year to date incentives ended up 16% below budget. All of the programs and the entire company pulled together to record as many valid incentives (and as much savings) as possible in the last few weeks. The underspent incentives total $15.8 million, which makes up 72% of our total underspending for the year. The following graph shows how each program ended up relative to the budgeted Y-T-D amount.

As an indication of overall performance, we ended up paying back over 80% of the possible retainage (vs. only 44% last year) and 54% of the possible efficacy bonuses and milestone awards (vs 42% last year).



Total Incentives
Year-to-Date 2014

Incentives thru December 2014

	Actual	Budget	Variance	Var %
Existing Buildings	25,065,294	33,407,178	8,341,884	25%
New Buildings	7,280,427	7,922,707	642,280	8%
Production Efficiency	18,965,075	21,085,070	2,119,995	10%
Existing Homes	8,725,800	12,666,827	3,941,027	31%
New Homes & Products	13,570,203	11,699,796	(1,870,407)	-16%
Washington Programs - All	611,613	693,806	82,193	12%
Solar	7,074,941	8,139,982	1,065,041	13%
Open Soliciation	3,883,890	5,335,459	1,451,569	27%
Total Incentives	85,177,243	100,950,826	15,773,583	16%
Energy Efficiency Only	**74,218,412**	**87,475,385**	**13,256,973**	**15%**

Total Incentives
Year-to-Year Comparison

December 2014 v Dec 2013

	Current Year	Prior Year	Variance	Var %
Existing Buildings	25,065,294	20,457,969	(4,607,325)	-23%
New Buildings	7,280,427	6,476,122	(804,305)	-12%
Production Efficiency	18,965,075	15,808,003	(3,157,072)	-20%
Existing Homes	8,725,800	7,952,006	(773,794)	-10%
New Homes & Products	13,570,203	10,511,234	(3,058,968)	-29%
Washington Programs - All	611,613	520,849	(90,764)	-17%
Solar	7,074,941	4,360,363	(2,714,577)	-62%
Other	3,883,890	1,677,756	(2,206,134)	-131%
Total Incentives	85,177,243	67,764,298	(17,412,945)	-26%
Energy Efficiency Only	**74,218,412**	**61,726,183**	**(12,492,229)**	**-20%**

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

	Dec 2014	Nov 2014	Dec 2013	Change from one month ago	Change from Beg. of Year	Change from one year ago
Current Assets						
Cash & Cash Equivalents	51,411,367	60,771,440	76,484,638	(9,360,073)	(25,073,271)	(25,073,271)
Investments	64,490,244	62,650,476	25,270,363	1,839,768	39,219,882	39,219,882
Restricted Investments (Escrow Funds)	0	0	77,988	0	(77,988)	(77,988)
Receivables	323,531	314,390	8,276	9,141	315,255	315,255
Prepaid Expenses	405,430	463,190	526,087	(57,760)	(120,657)	(120,657)
Advances to Vendors	1,482,149	1,224,036	2,015,420	258,113	(533,271)	(533,271)
Total Current Assets	**118,112,720**	**125,423,532**	**104,382,771**	**(7,310,812)**	**13,729,949**	**13,729,949**
Fixed Assets						
Computer Hardware and Software	1,653,762	1,634,233	1,401,967	19,529	251,795	251,795
Software Development	1,025,909	892,121		133,788	1,025,909	1,025,909
Leasehold Improvements	318,964	318,964	313,333	0	5,631	5,631
Office Equipment and Furniture	679,343	610,910	600,662	68,433	78,681	78,681
Total Fixed Assets	**3,677,978**	**3,456,229**	**2,315,962**	**221,750**	**1,362,016**	**1,362,016**
Less Depreciation	(1,831,551)	(1,796,201)	(1,500,494)	(35,349)	(331,056)	(331,056)
Net Fixed Assets	**1,846,428**	**1,660,027**	**815,468**	**186,401**	**1,030,960**	**1,030,960**
Other Assets						
Rental Deposit	135,340	135,340	61,461	0	73,879	73,879
Deferred Compensation Asset	630,176	586,872	552,641	43,304	77,536	77,536
Long Term Portion Note Receivable	100,000	100,000		0	100,000	100,000
Total Other Assets	**865,516**	**822,212**	**614,102**	**43,304**	**251,414**	**251,414**
Total Assets	**120,824,664**	**127,905,771**	**105,812,341**	**(7,081,107)**	**15,012,323**	**15,012,323**
Current Liabilities						
Accounts Payable and Accruals	31,924,631	13,965,246	26,326,508	17,959,385	5,598,123	5,598,123
Salaries, Taxes, & Benefits Payable	671,849	703,609	631,548	(31,760)	40,301	40,301
Total Current Liabilities	**32,596,480**	**14,668,855**	**26,958,055**	**17,927,625**	**5,638,424**	**5,638,424**
Long Term Liabilities						
Deferred Rent	349,692	352,470	364,244	(2,778)	(14,552)	(14,552)
Deferred Compensation Payable	632,976	586,872	552,641	46,104	80,336	80,336
Other Long-Term Liabilities	18,395	4,995	6,830	13,401	11,566	11,566
Total Long-Term Liabilities	**1,001,063**	**944,336**	**923,714**	**56,727**	**77,349**	**77,349**
Total Liabilities	**33,597,543**	**15,613,191**	**27,881,769**	**17,984,352**	**5,715,774**	**5,715,774**
Net Assets						
Temporarily Restricted Net Assets	0	0	77,988	0	(77,988)	(77,988)
Unrestricted Net Assets	87,227,121	112,292,580	77,852,585	(25,065,459)	9,374,537	9,374,537
Total Net Assets	**87,227,121**	**112,292,580**	**77,930,572**	**(25,065,459)**	**9,296,549**	**9,296,549**
Total Liabilities and Net Assets	**120,824,664**	**127,905,771**	**105,812,341**	**(7,081,107)**	**15,012,323**	**15,012,323**

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

	January	February	March	April	May	June	July	August	September	October	November	December	Year to Date
Operating Activities:													
Revenue less Expenses	12,906,165	10,113,897	6,583,587	6,287,830	215,826	(1,174,025)	1,620,932	1,407,466	1,000,196	(585,297)	(4,014,571)	(25,065,460)	$ 9,296,548
Non-cash items:													
Depreciation	27,123	27,123	28,713	28,418	28,418	28,473	28,298	62,618	(1,256)	33,428	44,083	35,349	370,788
Change in Reserve on Long Term Note												13,211	13,211
Loss on disposal of assets													
Receivables	3,902	(49)	-	-	174	(1,003)	1,003	(1,096)	-	-	-	(34,196)	(31,265)
Interest Receivable	1,292	663	(27,109)	(112,939)	(33,215)	25,187	(12,245)	(13,634)	(15,869)	(47,104)	(74,072)	25,055	(283,990)
Advances to Vendors	680,371	678,630	(1,650,387)	365,028	768,936	(865,080)	165,479	679,314	(1,259,628)	582,406	646,315	(258,113)	533,271
Prepaid expenses and other costs	(151,035)	100,837	11,507	42,345	(28,712)	(209,651)	(5,022)	120,515	63,297	93,823	24,993	57,760	120,657
Accounts payable	(19,456,433)	(797,502)	1,417,700	(423,975)	1,401,061	464,334	(594,512)	(205,635)	1,321,061	389,245	4,196,750	17,959,385	5,671,479
Payroll and related accruals	70,280	(88,799)	76,891	(14,227)	38,978	15,743	(37,257)	(541)	13,762	13,764	17,698	14,344	120,636
Deferred rent and other	(3,988)	51,851	(945)	(10,714)	(13,739)	(113,739)	(9,882)	(13,739)	(7,953)	(17,013)	(81,858)	(45,892)	(267,611)
Cash rec'd from / (used in) Operating Activities	(5,922,323)	10,086,651	6,439,957	6,161,766	2,377,727	(1,829,761)	1,156,794	2,035,268	1,113,610	463,252	759,335	(7,298,557)	$ 15,543,724
Investing Activities:													
Investment Activity (1)	992,503	992,840	(232,102)	(18,552,646)	(4,712,080)	(713,502)	(5,178,372)	56,118	(1,742,101)	(5,187,381)	(3,098,753)	(1,839,768)	(39,215,244)
(Acquisition)/Disposal of Capital Assets	-		(46,620)	-	-	(368,159)	(162,039)	(190,275)	(53,967)	(155,848)	(203,089)	(221,750)	(1,401,746)
Cash rec'd from / (used in) Investing Activities	992,503	992,840	(278,722)	(18,552,646)	(4,712,080)	(1,081,661)	(5,340,411)	(134,157)	(1,796,068)	(5,343,229)	(3,301,842)	(2,061,518)	$ (40,616,990)
Cash at beginning of Period	76,484,637	71,554,817	82,634,307	88,795,542	76,404,658	74,070,305	71,158,883	66,975,266	68,876,378	68,193,921	63,313,945	60,771,435	76,484,637
Increase/(Decrease) in Cash	(4,929,820)	11,079,491	6,161,235	(12,390,880)	(2,334,353)	(2,911,422)	(4,183,617)	1,901,111	(682,458)	(4,879,977)	(2,542,504)	(9,360,074)	(25,073,275)
Cash at end of period	$ 71,554,817	$ 82,634,307	$ 88,795,542	$ 76,404,658	$ 74,070,305	$ 71,158,883	$ 66,975,266	$ 68,876,378	$ 68,193,921	$ 63,313,945	$ 60,771,440	$ 51,411,367	$ 51,411,367

(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											
	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	11,442,506	11,823,698	11,801,651	12,144,325	13,283,583	10,418,891	12,000,808
From other sources	3,902	(49)	12,500	-	1,074	(1,003)	1,003	(1,096)	-	-	-	(34,196)
Investment Income	12,036	10,159	(15,526)	(95,411)	(10,883)	49,508	12,626	11,234	12,264	(18,851)	(40,449)	(31,003)
Total cash in	17,742,715	18,550,043	16,483,805	15,183,461	12,445,698	11,491,011	11,837,327	11,811,789	12,156,589	13,264,732	10,378,442	11,935,609
Cash Out:	22,672,537	7,470,551	10,322,571	27,574,340	14,780,049	14,402,435	16,020,945	9,910,673	12,839,047	18,144,710	12,920,947	21,295,682
Net cash flow for the month	(4,929,822)	11,079,492	6,161,234	(12,390,879)	(2,334,351)	(2,911,424)	(4,183,618)	1,901,116	(682,458)	(4,879,978)	(2,542,504)	(9,360,073)
Beginning Balance: Cash & MM	76,484,640	71,554,817	82,634,309	88,795,543	76,404,659	74,070,305	71,158,882	66,975,263	68,876,378	68,193,922	63,313,944	60,771,440
Ending cash & MM	**71,554,817**	**82,634,309**	**88,795,543**	**76,404,659**	**74,070,305**	**71,158,882**	**66,975,263**	**68,876,378**	**68,193,921**	**63,313,945**	**60,771,440**	**51,411,367**

Future Commitments

Renewable Incentives	20,900,000	21,000,000	14,200,000	14,200,000	14,300,000	17,100,000	16,800,000	16,100,000	12,300,000	12,300,000	12,300,000	18,000,000
Efficiency Incentives	39,500,000	47,800,000	44,400,000	44,100,000	43,000,000	49,400,000	49,400,000	48,500,000	45,500,000	45,500,000	45,500,000	47,200,000
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	71,500,000	71,200,000	69,600,000	62,800,000	62,800,000	62,800,000	70,200,000

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: 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
Cash Flow Projection
January 2014 - December 2015

	2015 Round 2 Projection (Final Draft Version)											
	Budget R2 January	**Budget R2 February**	**Budget R2 March**	**Budget R2 April**	**Budget R2 May**	**Budget R2 June**	**Budget R2 July**	**Budget R2 August**	**Budget R2 September**	**Budget R2 October**	**Budget R2 November**	**Budget R2 December**
Cash In:												
Public purpose and Incr funding	15,000,000	15,400,000	14,000,000	13,300,000	11,100,000	10,300,000	11,200,000	10,600,000	11,200,000	11,500,000	11,100,000	13,400,000
From other sources												
Investment Income	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000
Total cash in	15,024,000	15,424,000	14,024,000	13,324,000	11,124,000	10,324,000	11,224,000	10,624,000	11,224,000	11,524,000	11,124,000	13,424,000
Cash Out:	32,700,000	10,400,000	11,900,000	11,400,000	11,300,000	13,600,000	11,300,000	11,300,000	14,200,000	13,100,000	13,900,000	30,600,000
Net cash flow for the month	(17,676,000)	5,024,000	2,124,000	1,924,000	(176,000)	(3,276,000)	(76,000)	(676,000)	(2,976,000)	(1,576,000)	(2,776,000)	(17,176,000)
Beginning Balance: Cash & MM	51,411,367	33,735,366	38,759,366	40,883,366	42,807,366	42,631,366	39,355,366	39,279,366	38,603,366	35,627,366	34,051,366	31,275,366
Ending cash & MM	**33,735,366**	**38,759,366**	**40,883,366**	**42,807,366**	**42,631,366**	**39,355,366**	**39,279,366**	**38,603,366**	**35,627,366**	**34,051,366**	**31,275,366**	**14,099,366**
Future Commitments												
Renewable Incentives	17,600,000	17,500,000	17,300,000	19,000,000	21,900,000	22,000,000	22,200,000	22,500,000	20,800,000	20,200,000	20,600,000	20,900,000
Efficiency Incentives	48,400,000	47,100,000	45,700,000	44,600,000	44,700,000	44,800,000	46,200,000	48,900,000	62,200,000	62,700,000	62,000,000	57,300,000
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	71,000,000	69,600,000	68,000,000	68,600,000	71,600,000	71,800,000	73,400,000	76,400,000	88,000,000	87,900,000	87,600,000	83,200,000
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
Income Statement - Actual and Prior Yr Comparison
For the Twelve Months Ending December 31, 2014
(Unaudited)

	December				YTD			
	Actual	Actual Prior Year	Prior Year Variance	Variance %	Actual	Actual Prior Year	Prior Year Variance	Variance %
REVENUES								
Public Purpose Funds-PGE	2,906,230	2,705,103	201,128	7%	37,173,014	34,273,605	2,899,410	8%
Public Purpose Funds-PacifiCorp	2,168,083	2,135,177	32,907	2%	27,253,456	25,809,694	1,443,762	6%
Public Purpose Funds-NW Natural	1,359,571	1,539,431	(179,860)	-12%	17,880,127	22,473,918	(4,593,791)	-20%
Public Purpose Funds-Cascade	187,248	474,416	(287,168)	-61%	2,455,200	2,413,481	41,719	2%
Total Public Purpose Funds	**6,621,133**	**6,854,126**	**(232,993)**	**-3%**	**84,761,796**	**84,970,697**	**(208,901)**	**0%**
Incremental Funds - PGE	3,528,990	3,803,846	(274,856)	-7%	48,928,367	48,918,175	10,192	0%
Incremental Funds - PacifiCorp	1,850,684	2,017,716	(167,032)	-8%	25,585,812	25,557,205	28,607	0%
NW Natural - Industrial DSM			0		3,073,052	1,727,838	1,345,214	78%
NW Natural - Washington			0		1,054,355	1,291,102	(236,747)	-18%
Contributions					13,400	13,430	(30)	0%
Revenue from Investments	(56,058)	10,753	(66,811)	-621%	179,694	96,392	83,303	86%
TOTAL REVENUE	**11,944,749**	**12,686,441**	**(741,692)**	**-6%**	**163,596,476**	**162,574,838**	**1,021,638**	**1%**
EXPENSES								
Program Subcontracts	5,163,336	3,729,590	(1,433,747)	-38%	49,990,007	45,397,895	(4,592,112)	-10%
Incentives	30,242,678	22,454,100	(7,788,578)	-35%	85,177,243	67,764,302	(17,412,941)	-26%
Salaries and Related Expenses	805,698	801,144	(4,554)	-1%	10,323,052	9,663,583	(659,469)	-7%
Professional Services	580,210	481,203	(99,007)	-21%	6,439,266	4,919,134	(1,520,132)	-31%
Supplies	3,477	2,302	(1,176)	-51%	36,229	30,465	(5,764)	-19%
Telephone	4,982	5,318	336	6%	55,655	54,163	(1,492)	-3%
Postage and Shipping Expenses	767	932	165	18%	12,221	9,770	(2,451)	-25%
Occupancy Expenses	54,660	52,396	(2,265)	-4%	645,061	660,898	15,836	2%
Noncapitalized Equip. & Depr.	71,143	48,840	(22,303)	-46%	746,469	625,386	(121,083)	-19%
Call Center	12,088	7,844	(4,244)	-54%	147,218	550,794	403,576	73%
Printing and Publications	7,390	4,683	(2,707)	-58%	116,092	106,893	(9,199)	-9%
Travel	16,602	10,671	(5,931)	-56%	150,921	132,564	(18,357)	-14%
Conference, Training & Mtng Exp	17,734	25,787	8,053	31%	186,066	140,200	(45,867)	-33%
Interest Expense and Bank Fees			0		2,000	5,443	3,443	63%
Insurance	8,630	8,622	(8)	0%	102,073	100,175	(1,897)	-2%
Miscellaneous Expenses	13,343	2,361	(10,982)	-465%	16,659	3,451	(13,208)	-383%
Dues, Licenses and Fees	7,470	27,370	19,900	73%	153,693	160,697	7,004	4%
TOTAL EXPENSES	**37,010,208**	**27,663,161**	**(9,347,047)**	**-34%**	**154,299,927**	**130,325,815**	**(23,974,112)**	**-18%**
TOTAL REVENUE LESS EXPENSES	**(25,065,459)**	**(14,976,720)**	**(10,088,739)**	**-67%**	**9,296,549**	**32,249,023**	**(22,952,473)**	**-71%**

Energy Trust of Oregon
Income Statement - Actual and YTD Budget Comparison
For the Twelve Months Ending December 31, 2014
(Unaudited)

	December				YTD			
	Actual	**Budget**	**Budget Variance**	**Variance %**	**Actual**	**Budget**	**Budget Variance**	**Variance %**
REVENUES								
Public Purpose Funds-PGE	2,906,230	2,844,754	61,476	2%	37,173,014	34,223,172	2,949,842	9%
Public Purpose Funds-PacifiCorp	2,168,083	2,537,535	(369,451)	-15%	27,253,456	26,358,594	894,861	3%
Public Purpose Funds-NW Natural	1,359,571	1,627,198	(267,627)	-16%	17,880,127	18,276,959	(396,832)	-2%
Public Purpose Funds-Cascade	187,248	267,919	(80,671)	-30%	2,455,200	1,913,709	541,491	28%
Total Public Purpose Funds	**6,621,133**	**7,277,406**	**(656,273)**	**-9%**	**84,761,796**	**80,772,434**	**3,989,362**	**5%**
Incremental Funds - PGE	3,528,990	5,148,609	(1,619,619)	-31%	48,928,367	51,072,562	(2,144,195)	-4%
Incremental Funds - PacifiCorp	1,850,684	2,582,949	(732,265)	-28%	25,585,812	26,047,016	(461,204)	-2%
NW Natural - Industrial DSM			0		3,073,052	3,773,634	(700,582)	-19%
NW Natural - Washington			0		1,054,355	1,291,102	(236,747)	-18%
Contributions					13,400		13,400	
Revenue from Investments	(56,058)	6,500	(62,558)	-962%	179,694	78,000	101,694	130%
TOTAL REVENUE	**11,944,749**	**15,015,465**	**(3,070,716)**	**-20%**	**163,596,476**	**163,034,748**	**561,728**	**0%**
EXPENSES								
Program Subcontracts	5,163,336	4,727,019	(436,318)	-9%	49,990,007	50,878,195	888,188	2%
Incentives	30,242,678	31,374,159	1,131,482	4%	85,177,243	100,950,826	15,773,583	16%
Salaries and Related Expenses	805,698	938,782	133,084	14%	10,323,052	11,555,215	1,232,163	11%
Professional Services	580,210	868,263	288,052	33%	6,439,266	9,636,821	3,197,555	33%
Supplies	3,477	4,588	1,111	24%	36,229	55,060	18,831	34%
Telephone	4,982	5,734	752	13%	55,655	66,528	10,873	16%
Postage and Shipping Expenses	767	1,183	417	35%	12,221	14,200	1,979	14%
Occupancy Expenses	54,660	64,275	9,615	15%	645,061	771,298	126,237	16%
Noncapitalized Equip. & Depr.	71,143	70,758	(385)	-1%	746,469	959,325	212,856	22%
Call Center	12,088	15,000	2,912	19%	147,218	180,000	32,782	18%
Printing and Publications	7,390	11,858	4,468	38%	116,092	142,300	26,208	18%
Travel	16,602	26,022	9,421	36%	150,921	246,270	95,349	39%
Conference, Training & Mtng Exp	17,734	50,579	32,845	65%	186,066	444,290	258,224	58%
Interest Expense and Bank Fees		417	417	100%	2,000	5,000	3,000	60%
Insurance	8,630	9,167	537	6%	102,073	110,000	7,927	7%
Miscellaneous Expenses	13,343	268	(13,075)	-4872%	16,659	3,220	(13,439)	-417%
Dues, Licenses and Fees	7,470	20,088	12,618	63%	153,693	177,457	23,764	13%
TOTAL EXPENSES	**37,010,208**	**38,188,161**	**1,177,953**	**3%**	**154,299,927**	**176,196,005**	**21,896,078**	**12%**
TOTAL REVENUE LESS EXPENSES	**(25,065,459)**	**(23,172,696)**	**(1,892,763)**	**-8%**	**9,296,549**	**(13,161,257)**	**22,457,806**	**171%**

Energy Trust of Oregon
Statement of Functional Expenses
For the Twelve Months Ending December 31, 2014
(Unaudited)

	Energy Efficiency	Renewable Energy	Total Program Expenses	Management & General	Communications & Customer Service	Total Admin Expenses	Total	Budget	Variance	% Var
Program Expenses										
Incentives/ Program Management & Delivery	$ 123,992,580	$ 11,174,670	$ 135,167,250				$ 135,167,250	$ 151,829,021	$ 16,661,771	11%
Payroll and Related Expenses	3,036,838	944,823	3,981,661	1,905,242	968,157	2,873,398	6,855,060	7,392,665	537,605	7%
Outsourced Services	3,812,372	431,269	4,243,641	227,953	1,133,504	1,361,457	5,605,098	8,573,321	2,968,223	35%
Planning and Evaluation	2,320,876	80,005	2,400,881	1,682		1,682	2,402,563	2,658,179	255,616	10%
Customer Service Management	601,931	28,631	630,562				630,562	667,406	36,844	6%
Trade Allies Network	351,892	23,961	375,853				375,853	465,433	89,580	19%
Total Program Expenses	**134,116,489**	**12,683,359**	**146,799,849**	**2,134,876**	**2,101,661**	**4,236,537**	**151,036,386**	**171,586,026**	**20,549,640**	**12%**
Program Support Costs										
Supplies	10,313	3,109	13,422	8,610	3,780	12,389	25,811	38,855	13,044	34%
Postage and Shipping Expenses	4,143	1,323	5,467	1,764	1,017	2,781	8,248	8,274	26	0%
Telephone	2,608	894	3,502	1,702	1,166	2,867	6,370	14,279	7,909	55%
Printing and Publications	97,937	4,891	102,828	1,213	8,470	9,682	112,510	137,372	24,862	18%
Occupancy Expenses	190,356	65,237	255,594	111,043	64,660	175,704	431,297	500,926	69,629	14%
Insurance	30,121	10,323	40,444	17,571	10,232	27,803	68,247	71,440	3,193	4%
Equipment	15,139	74,863	90,002	7,396	4,307	11,703	101,705	24,025	(77,680)	-323%
Travel	40,271	21,281	61,551	27,402	34,232	61,634	123,185	199,570	76,385	38%
Meetings, Trainings & Conferences	55,859	20,586	76,445	46,100	11,612	57,712	134,157	296,790	162,633	55%
Interest Expense and Bank Fees				2,000		2,000	2,000	5,000	3,000	60%
Depreciation & Amortization	47,719	16,354	64,073	27,837	16,209	44,046	108,119	103,972	(4,147)	-4%
Dues, Licenses and Fees	63,824	17,023	80,847	8,969	6,145	15,114	95,961	121,506	25,545	21%
Miscellaneous Expenses	16,659		16,659				16,659	2,344	(14,315)	-611%
IT Services	1,372,047	175,347	1,547,394	287,568	194,309	481,877	2,029,270	3,085,626	1,056,356	34%
Total Program Support Costs	**1,946,998**	**411,230**	**2,358,228**	**549,174**	**356,138**	**905,313**	**3,263,541**	**4,609,979**	**1,346,438**	**29%**
TOTAL EXPENSES	**136,063,487**	**13,094,590**	**149,158,077**	**2,684,051**	**2,457,799**	**5,141,850**	**154,299,927**	**176,196,005**	**21,896,078**	**12%**
OPUC Measure vs. 9%	**4.6%**									

ENERGY TRUST OF OREGON
Year to Date by Program/Service Territory
For the Twelve Months Ending December 31, 2014
Unaudited

	ENERGY EFFICIENCY								
	PGE	PacifiCorp	Total	NWN Industrial	NW Natural	Cascade	Oregon Total	NWN WA	ETO Total
REVENUES									
Public Purpose Funding	$28,741,721	$21,298,942	$50,040,662	$0	$17,880,127	$2,455,200	$70,375,988	$0	$70,375,988
Incremental Funding	48,928,367	25,585,812	74,514,179	3,073,052			77,587,231	1,054,355	78,641,586
Contributions									
Revenue from Investments									
TOTAL PROGRAM REVENUE	**77,670,087**	**46,884,754**	**124,554,841**	**3,073,052**	**17,880,127**	**2,455,200**	**147,963,219**	**1,054,355**	**149,017,574**
EXPENSES									
Program Management (Note 3)	2,769,938	1,770,184	4,540,126	110,687	733,268	183,784	5,567,865	112,373	5,680,238
Program Delivery	22,682,288	14,324,327	37,006,615	677,217	4,671,366	584,609	42,939,809	323,395	43,263,204
Incentives	40,215,222	21,973,568	62,188,791	1,812,713	8,672,348	932,945	73,606,799	611,613	74,218,412
Program Eval & Planning Svcs.	2,059,768	1,252,492	3,312,260	64,299	644,979	61,549	4,083,085	54,485	4,137,570
Program Marketing/Outreach	2,301,122	1,422,885	3,724,006	28,925	952,828	69,612	4,775,371	72,428	4,847,799
Program Quality Assurance	39,625	36,525	76,150	0	37,737	1,890	115,776	0	115,776
Outsourced Services	463,005	272,095	735,099	23,452	128,218	12,898	899,667	0	899,667
Trade Allies & Cust. Svc. Mgmt.	397,356	281,168	678,523	5,864	219,183	15,234	918,803	35,021	953,824
IT Services	644,187	407,984	1,052,170	17,756	249,134	21,019	1,340,079	31,967	1,372,046
Other Program Expenses - all	287,360	169,276	456,636	12,536	72,724	7,820	549,713	25,239	574,952
TOTAL PROGRAM EXPENSES	**71,859,871**	**41,910,504**	**113,770,376**	**2,753,449**	**16,381,785**	**1,891,360**	**134,796,967**	**1,266,521**	**136,063,487**
ADMINISTRATIVE COSTS									
Management & General (Notes 1 & 2)	1,293,095	754,166	2,047,260	49,547	294,785	34,034	2,425,627	22,791	2,448,418
Communications & Customer Svc (Notes 1 & 2)	1,184,094	690,592	1,874,688	45,371	269,938	31,166	2,221,160	20,869	2,242,029
Total Administrative Costs	2,477,189	1,444,758	3,921,948	94,918	564,723	65,200	4,646,787	43,660	4,690,447
TOTAL PROG & ADMIN EXPENSES	**74,337,060**	**43,355,262**	**117,692,324**	**2,848,367**	**16,946,508**	**1,956,560**	**139,443,754**	**1,310,181**	**140,753,935**
TOTAL REVENUE LESS EXPENSES	**3,333,027**	**3,529,492**	**6,862,517**	**224,685**	**933,619**	**498,640**	**8,519,465**	**(255,826)**	**8,263,639**
NET ASSETS - RESERVES									
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	3,333,027	3,529,492	6,862,517	224,685	933,619	498,640	8,519,465	(255,826)	8,263,639
Ending Net Assets - Reserves	**27,816,059**	**15,090,306**	**42,906,363**	**580,920**	**9,503,289**	**1,156,900**	**54,147,476**	**217,848**	**54,365,324**
Ending Reserve by Category									
Program Reserves (Efficiency and Renewables)	27,816,059	15,090,306	42,906,363	580,920	9,503,289	1,156,900	54,147,476	217,848	54,365,324
Assets Released for General Purpose									
Emergency Contingency Pool									
TOTAL NET ASSETS CUMULATIVE	27,816,059	15,090,306	42,906,363	580,920	9,503,289	1,156,900	54,147,476	217,848	54,365,324

Note 1) Management & General and Communications & Customer Service Expenses (Admin) have been allocated based on total expenses.
Note 2) Admin costs are allocated for mgmt reporting only. GAAP for Not for Profits 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
Year to Date by Program/Service Territory
For the Twelve Months Ending December 31, 2014
Unaudited

	RENEWABLE ENERGY				TOTAL			
	PGE	PacifiCorp	Total	Other	All Programs	Approved budget	Change	% Change
REVENUES								
Public Purpose Funding	$8,431,294	$5,954,514	$14,385,808	$0	$84,761,796	$80,772,434	$3,989,362	5%
Incremental Funding					78,641,586	82,184,314	(3,542,728)	-4%
Contributions				13,400	13,400		13,400	
Revenue from Investments				179,694	179,694	78,000	101,694	130%
TOTAL PROGRAM REVENUE	**8,431,294**	**5,954,514**	**14,385,808**	**193,094**	**163,596,476**	**163,034,748**	**561,728**	**0%**
EXPENSES								
Program Management (Note 3)	396,403	548,420	944,823		6,625,061	6,995,384	370,323	5%
Program Delivery	118,997	96,842	215,839		43,479,043	43,682,062	203,019	0%
Incentives	5,438,342	5,520,489	10,958,831		85,177,243	100,950,826	15,773,583	16%
Program Eval & Planning Svcs.	82,165	68,714	150,879		4,288,449	5,175,410	886,961	17%
Program Marketing/Outreach	78,211	41,498	119,710		4,967,509	6,084,601	1,117,092	18%
Program Quality Assurance	0	851	851		116,627	259,000	142,373	55%
Outsourced Services	152,200	87,636	239,836		1,139,503	2,249,550	1,110,047	49%
Trade Allies & Cust. Svc. Mgmt.	34,445	18,146	52,591		1,006,415	1,132,840	126,425	11%
IT Services	78,745	96,602	175,347		1,547,393	2,352,904	805,511	34%
Other Program Expenses - all	131,791	104,093	235,884		810,836	894,930	84,094	9%
TOTAL PROGRAM EXPENSES	**6,511,299**	**6,583,291**	**13,094,590**	**-**	**149,158,077**	**169,777,507**	**20,619,430**	**12%**
ADMINISTRATIVE COSTS								
Management & General (Notes 1 & 2)	117,169	118,464	235,633		2,684,051	3,668,794	984,743	27%
Communications & Customer Svc (Notes 1 & 2)	107,292	108,479	215,770		2,457,799	2,749,704	291,905	11%
Total Administrative Costs	224,461	226,943	451,403		5,141,850	6,418,498	1,276,648	**20%**
TOTAL PROG & ADMIN EXPENSES	**6,735,760**	**6,810,234**	**13,545,994**		**154,299,927**	**176,196,005**	**21,896,078**	**12%**
TOTAL REVENUE LESS EXPENSES	**1,695,534**	**(855,720)**	**839,814**	**193,094**	**9,296,549**	**(13,161,257)**	**22,457,806**	**171%**
NET ASSETS - RESERVES								
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	1,695,534	(855,720)	839,814	193,094	9,296,547	(13,161,257)	(22,457,804)	171%
Ending Net Assets - Reserves	**13,736,996**	**10,937,995**	**24,674,991**	**8,186,804**	**87,227,121**	**49,448,507**	**37,778,614**	**76%**
Ending Reserve by Category								
Program Reserves (Efficiency and Renewables)	13,736,996	10,937,995	24,674,991	3,186,804	82,227,121			
Assets Released for General Purpose								
Emergency Contingency Pool				5,000,000	5,000,000			
TOTAL NET ASSETS CUMULATIVE	13,736,996	10,937,995	24,674,991	8,186,804	82,227,121	49,448,507	37,778,614	76%

Note 1) Management & General and Communications & Customer Service Expenses (Admin) have been allocated based on total expenses.
Note 2) Admin costs are allocated for mgmt reporting only. GAAP for Not for Profits 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 12/31/2012 reflects audited results.

Energy Trust of Oregon
Program Expense by Service Territory
For the Twelve Months Ending December 31, 2014
(Unaudited)

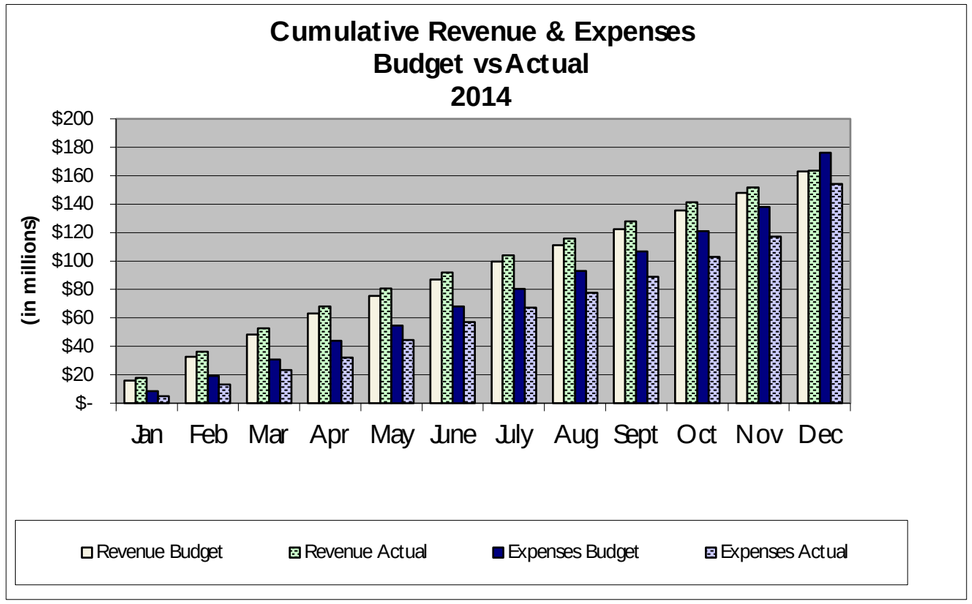
	PGE	Pacific Power	Subtotal Elec.	NWN Industrial	NW Natural Gas	Cascade	Subtotal Gas	Oregon Total	NWN WA	ETO Total	YTD Budget	Variance	% Var
Energy Efficiency													
Commercial													
Existing Buildings	$ 23,588,988	$ 12,259,270	$ 35,848,258	$ 1,089,953	$ 4,025,849	$ 647,668	$ 5,763,470	$ 41,611,728	$ 546,572	$ 42,158,300	$ 52,230,096	$ 10,071,796	19%
New Buildings	8,194,928	3,890,680	12,085,607	221,292	1,199,640	208,223	1,629,155	13,714,762		13,714,762	14,840,860	1,126,098	8%
NEEA	1,511,461	1,140,225	2,651,685		75,623	4,827	80,450	2,732,135		2,732,135	2,874,170	142,035	5%
Total Commercial	**33,295,377**	**17,290,174**	**50,585,550**	**1,311,245**	**5,301,112**	**860,717**	**7,473,075**	**58,058,625**	**546,572**	**58,605,197**	**69,945,126**	**11,339,929**	**16%**
Industrial													
Production Efficiency	18,347,325	10,189,396	28,536,721	1,537,120	642,401	283,023	2,462,544	30,999,265		30,999,265	34,070,949	3,071,684	9%
NEEA	560,764	423,033	983,797					983,797		983,797	1,446,373	462,576	32%
Total Industrial	**18,908,089**	**10,612,429**	**29,520,518**	**1,537,120**	**642,401**	**283,023**	**2,462,544**	**31,983,062**	**-**	**31,983,062**	**35,517,322**	**3,534,260**	**10%**
Residential													
Existing Homes	7,006,529	6,458,294	13,464,823		6,734,962	337,321	7,072,283	20,537,106	400,647	20,937,753	26,756,470	5,818,717	22%
New Homes/Products	12,442,784	6,969,380	19,412,164		4,192,402	470,673	4,663,075	24,075,239	362,960	24,438,199	22,376,484	(2,061,715)	-9%
NEEA	2,684,283	2,024,985	4,709,268		75,623	4,827	80,450	4,789,718		4,789,718	4,614,440	(175,278)	-4%
Total Residential	**22,133,596**	**15,452,659**	**37,586,255**	**-**	**11,002,987**	**812,821**	**11,815,808**	**49,402,063**	**763,607**	**50,165,670**	**53,747,394**	**3,581,724**	**7%**
Energy Efficiency Costs	**74,337,060**	**43,355,262**	**117,692,324**	**2,848,367**	**16,946,508**	**1,956,560**	**21,751,435**	**139,443,754**	**1,310,180**	**140,753,935**	**159,209,842**	**18,455,907**	**12%**
Renewables													
Solar Electric (Photovoltaic)	5,823,514	2,858,344	8,681,858					8,681,858		8,681,858	10,341,314	1,659,456	16%
Other Renewable	912,246	3,951,890	4,864,136					4,864,136		4,864,136	6,644,849	1,780,713	27%
Renewables Costs	**6,735,760**	**6,810,234**	**13,545,994**	**-**	**-**	**-**	**-**	**13,545,994**	**-**	**13,545,994**	**16,986,163**	**3,440,169**	**20%**
Cost Grand Total	**81,072,820**	**50,165,496**	**131,238,318**	**2,848,367**	**16,946,508**	**1,956,560**	**21,751,435**	**152,989,747**	**1,310,180**	**154,299,927**	**176,196,005**	**21,896,078**	**12%**

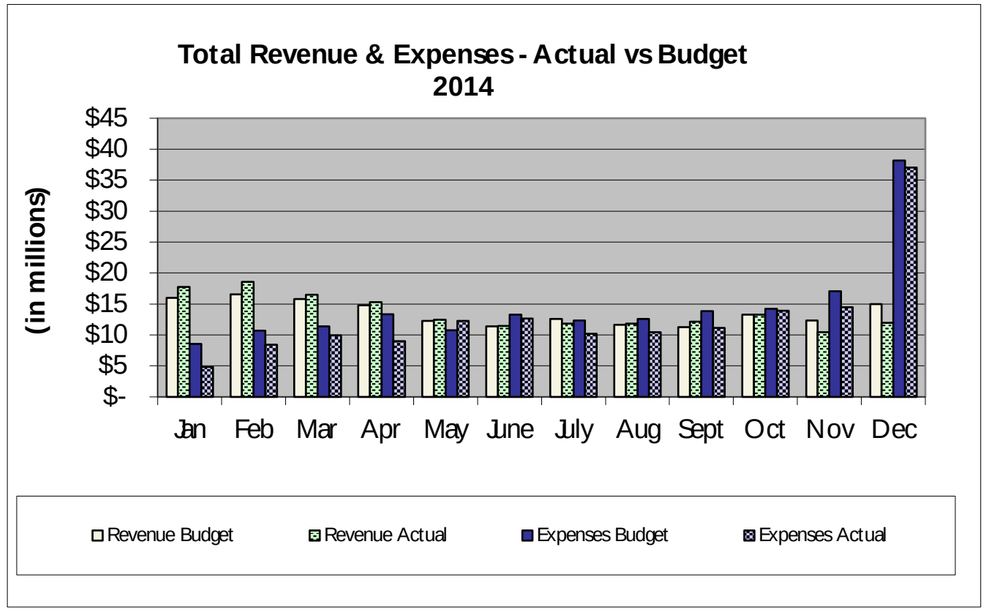
Energy Trust of Oregon
Administrative Expenses
For the 4th Quarter and Twelve Months Ending December 31, 2014
(Unaudited)

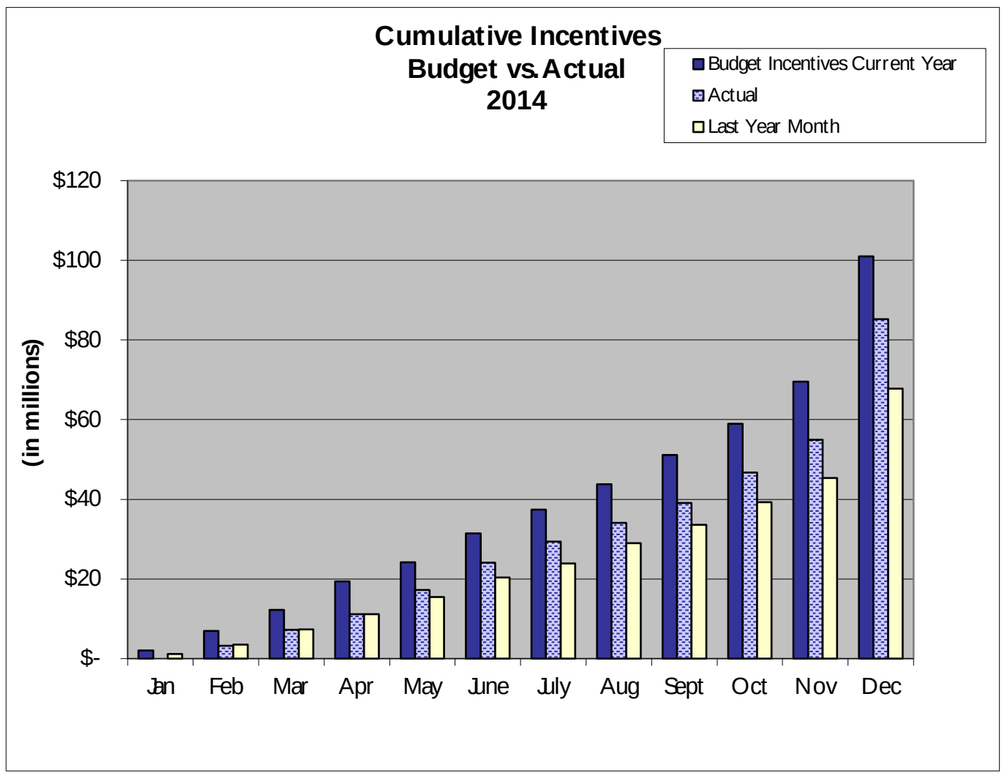
	MANAGEMENT & GENERAL						COMMUNICATIONS & CUSTOMER SERVICE					
	MONTHLY ACTUAL	QUARTERLY BUDGET	QUARTER REMAINING	YTD ACTUAL	YTD BUDGET	YTD VARIANCE	MONTHLY ACTUAL	QUARTERLY BUDGET	QUARTER REMAINING	YTD ACTUAL	YTD BUDGET	YTD VARIANCE
EXPENSES												
Outsourced Services	$27,784	$221,018	$193,234	$226,353	$624,070	$397,717	$129,938	$265,300	$135,362	$1,133,504	$1,061,200	($72,304)
Legal Services	288	13,750	13,462	1,600	55,000	53,401						
Salaries and Related Expenses	477,037	532,605	55,568	1,905,242	2,120,253	215,011	275,281	298,515	23,234	968,157	1,194,059	225,902
Supplies	1,261	1,950	689	3,318	7,800	4,482	229	240	11	698	960	262
Telephone		545	545	180	2,180	2,000		490	490	280	1,680	1,400
Postage and Shipping Expenses	20		(20)	44		(44)		250	250	16	1,000	984
Noncapitalized Equipment								250	250		1,000	1,000
Printing and Publications	44	75	31	395	300	(95)	1,010	1,750	740	7,993	7,000	(993)
Travel	6,577	13,305	6,728	27,402	53,220	25,818	16,124	9,500	(6,624)	34,232	38,000	3,768
Conference, Training & Mtngs	11,936	51,360	39,424	45,794	166,290	120,496	2,461	5,500	3,039	11,434	22,000	10,566
Interest Expense and Bank Fees		1,250	1,250	2,000	5,000	3,000						
Miscellaneous Expenses		180	180		720	720						
Dues, Licenses and Fees	1,271	2,150	879	8,969	8,830	(139)	1,179	400	(779)	6,145	1,600	(4,545)
Shared Allocation (Note 1)	45,571	46,358	788	173,505	186,095	12,590	28,704	31,325	2,621	101,032	125,747	24,715
IT Service Allocation (Note 2)	72,423	94,489	22,066	287,568	437,264	149,696	48,936	63,846	14,910	194,309	295,458	101,149
Planning & Eval	357	402	44	1,682	1,772	90						
TOTAL EXPENSES	**644,570**	**979,437**	**334,868**	**2,684,051**	**3,668,794**	**984,743**	**503,862**	**677,366**	**173,505**	**2,457,799**	**2,749,704**	**291,905**

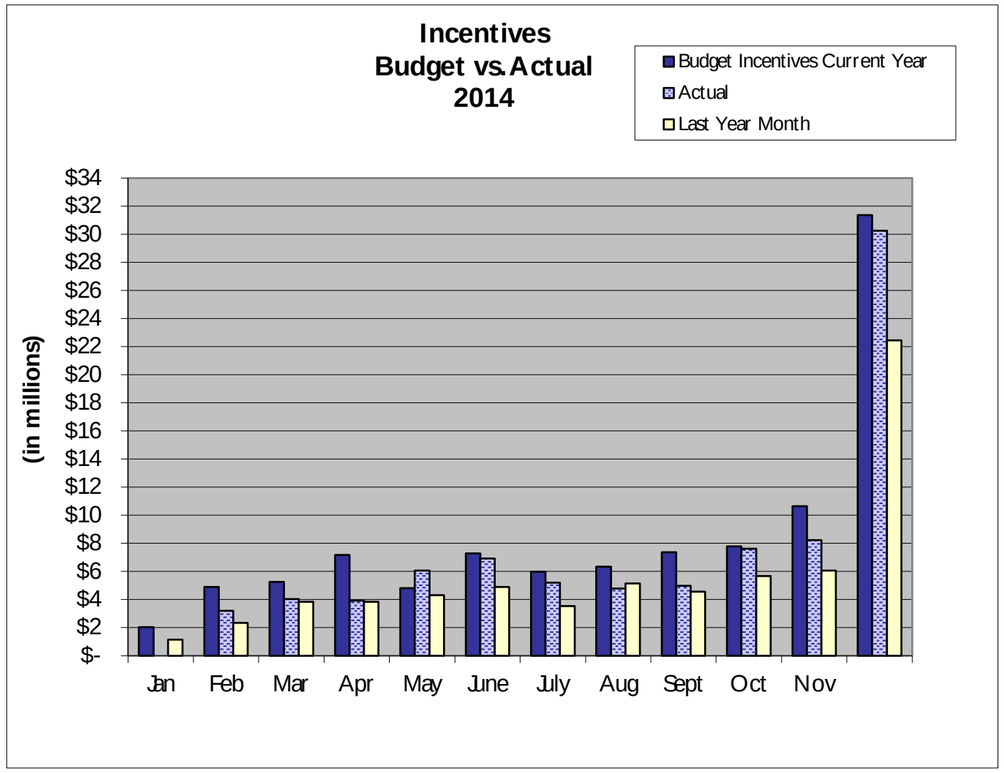
Note 1) Represents allocation of Shared (General Office Management) Costs

Note 2) Represents allocation of Shared IT Costs


Cumulative Revenue & Expenses
Budget vs Actual
2014
(in millions)
$200
$180
$160
$140
$120
$100
$80
$60
$40
$20
$-
Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec
Revenue Budget
Revenue Actual
Expenses Budget
Expenses Actual


Total Revenue & Expenses - Actual vs Budget
2014
(in millions)
$45
$40
$35
$30
$25
$20
$15
$10
$5
$-
Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec
Revenue Budget
Revenue Actual
Expenses Budget
Expenses Actual


Cumulative Incentives
Budget vs. Actual
2014
Budget Incentives Current Year
Actual
Last Year Month
(in millions)
$120
$100
$80
$60
$40
$20
$-
Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec


Incentives
Budget vs. Actual
2014
Budget Incentives Current Year
Actual
Last Year Month
(in millions)
$34
$32
$30
$28
$26
$24
$22
$20
$18
$16
$14
$12
$10
$8
$6
$4
$2
$-
Jan Feb Mar Apr May June July Aug Sept Oct Nov

Contractor	Description	*City	Est Cost	Actual TTD	Remaining	Start	End
Administration							
		Administration Total:	**7,711,033**	**3,457,594**	**4,253,439**		
Communications & Outreach							
		Communications & Outreach Total:	**4,409,964**	**2,610,652**	**1,802,524**		
Energy Efficiency Programs							
Northwest Energy Efficiency Alliance	Regional Energy Eff Initiative	Portland	39,138,680	33,799,669	5,339,011	1/1/10	7/1/15
Northwest Energy Efficiency Alliance	Regional EE Initiative Agmt	Portland	33,662,505	0	33,662,505	1/1/15	7/1/20
ICF Resources, LLC	PMC BE 2014	Fairfax	9,008,736	8,463,323	545,413	1/1/14	12/31/14
CLEAResult Consulting Inc	2014 HES PMC	Austin	7,595,520	7,315,411	280,109	1/1/14	12/31/14
Portland Energy Conservation, Inc.	PMC NHP 2014	Portland	6,965,473	6,723,211	242,262	1/1/14	12/31/14
Northwest Energy Efficiency Alliance	Regional Gas EE Initiative	Portland	6,200,354	0	6,200,354	1/1/15	7/1/20
Portland Energy Conservation, Inc.	2014 NBE PMC	Portland	4,735,000	4,637,895	97,105	1/1/14	12/31/14
Lockheed Martin Services, Inc.	2014 MF PMC	Cherry Hill	3,569,068	3,422,706	146,362	1/1/14	12/31/14
Portland General Electric	PDC - PE 2014	Portland	2,314,600	2,186,729	127,871	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	1,910,360	85,640	1/1/14	12/31/14
Cascade Energy, Inc.	PDC - PE 2015 Small Industrial	Walla Walla	1,497,000	95,417	1,401,583	1/1/15	12/31/15
NEXANT, INC.	PDC - PE 2014	San Francisco	1,429,461	1,349,180	80,281	1/1/14	12/31/14
Evergreen Consulting Group, LLC	PE Lighting PDC 2015	Tigard	1,296,000	0	1,296,000	1/1/15	12/31/15
Cascade Energy, Inc.	PDC - PE 2014 Small Industrial	Walla Walla	1,234,100	1,081,751	152,349	1/1/14	12/31/14
RHT Energy Solutions	PDC - PE 2014	Medford	1,145,000	1,071,203	73,797	1/1/14	12/31/14
Evergreen Consulting Group, LLC	PE Lighting PDC 2014	Tigard	1,092,000	1,068,977	23,023	1/1/14	12/31/14
Ecova Inc	Products PMC Transition	Spokane	976,090	955,799	20,291	7/31/14	12/31/14
Northwest Power & Conservation Council	Annual Work Plan		874,652	845,716	28,936	3/20/12	12/31/14
EnergySavvy Inc.	EnergySavvy Online Audit Tool	Seattle	587,500	433,519	153,981	1/1/12	12/31/15
OPOWER, Inc.	OPower Personal Energy Reports	Arlington	399,447	379,330	20,117	8/1/13	7/31/15
The Cadmus Group Inc.	PE Impact Eval 2012	Watertown	345,000	120,346	224,654	4/15/14	8/31/15
Cascade Energy, Inc.	SEM Curriculum	Walla Walla	329,080	194,557	134,523	5/1/14	4/30/16
Craft3	SWR Loan Origination/Loss Fund	Portland	305,000	8,550	296,450	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	267,599	10,001	1/1/14	12/31/14
J. Hruska Global	Quality Assurance Services	Columbia City	260,000	216,108	43,892	1/1/13	5/31/15
Clean Energy Works, Inc.	EE Incentive & Services Agmt	Portland	254,600	184,740	69,860	7/1/14	12/31/14
Energy Market Innovations, Inc.	Lighting Controls Savings Est	Seattle	250,000	35,867	214,133	10/1/14	9/30/15
The Cadmus Group Inc.	BE Impact Evaluation 2012	Watertown	250,000	242,315	7,685	1/1/14	3/31/15
EnerNoc, Inc.	Commercial SEM curriculum	Boston	216,915	132,052	84,863	6/27/14	5/30/15
Home Performance Contractors Guild of Oregon	Existing Homes Program Support	Portland	215,000	183,745	31,255	1/1/12	3/31/15

HST&V, LLC	CSEM PDC Transition Agreement	Portland	200,000	184,560	15,440	9/1/14	12/31/14
The Cadmus Group Inc.	NBE Program Impact Evaluation	Watertown	196,000	192,513	3,487	1/15/14	4/30/15
CLEAResult Consulting Inc	2015 Products PMC Transition	Austin	193,000	0	193,000	1/1/15	2/28/15
ICF Resources, LLC	NWN WA BE 2014	Fairfax	191,538	175,909	15,629	1/1/14	12/31/14
Northwest Energy Efficiency Alliance	Product Funding Agreement	Portland	171,851	152,619	19,232	6/5/14	12/31/15
Navigant Consulting Inc	CORE Improvement Pilot Eval	Boulder	140,000	116,920	23,081	9/1/12	12/31/15
Abt SRBI Inc.	Fast Feedback Surveys	New York	118,000	52,994	65,006	1/31/14	2/29/16
ICF Resources, LLC	NWN DSM Initiative 2014	Fairfax	113,850	113,818	32	1/1/14	12/31/14
CLEAResult Consulting Inc	QA Reinspection Services	Austin	106,316	48,816	57,500	4/28/14	3/30/15
Ecotope, Inc.	Gas Hearth Study	Seattle	105,104	105,096	8	10/10/13	9/1/15
The Cadmus Group Inc.	RTU Tune-up Evaluation	Watertown	105,000	102,841	2,159	1/1/14	3/31/15
ICF Resources, LLC	OSU CHP Performance Monitoring	Fairfax	100,000	40,943	59,058	7/1/13	6/30/16
PWP, Inc.	NBE Process Evaluation	Gaithersburg	95,000	92,630	2,370	1/15/14	2/28/15
1000 Broadway Building L.P.	Pay-for-Performance Pilot	Portland	88,125	0	88,125	10/17/14	11/1/18
The Cadmus Group Inc.	Commercial Op Pilot Eval	Watertown	85,000	85,000	0	7/1/11	9/1/15
The Cadmus Group Inc.	PE SEM Evaluation	Watertown	80,000	10,737	69,263	10/1/14	8/31/15
Pivotal Energy Solutions LLC	License Agreement	Gilbert	64,500	24,596	39,904	3/1/14	12/31/15
Research Into Action, Inc.	SWR OnBill Repmt Pilot Eval	Portland	60,000	1,300	58,700	11/1/14	3/30/16
PWP, Inc.	SEM Intro Pilot Evaluation	Gaithersburg	40,000	21,490	18,510	10/28/13	10/2/15
Research Into Action, Inc.	C&I Qualitative Research	Portland	40,000	26,143	13,857	10/1/14	2/28/15
CLEAResult Consulting Inc	New Homes QA Inspections	Austin	37,100	37,168	0	4/28/14	12/31/14
David Lineweber	Heat Pump Study	Tigard	35,250	33,745	1,505	3/20/14	3/31/15
Evergreen Economics	Gas Hearth Mrkt Transformation	Portland	35,140	0	35,140	1/1/15	7/1/15
Apex Analytics LLC	Delphi Panel Study	Boulder	30,000	9,250	20,750	9/1/14	3/31/15
Apex Analytics LLC	Gas Thermostat	Boulder	30,000	2,090	27,910	10/20/14	12/31/15
Btan Consulting	ESP Cert Boot Camp Evaluation	Madison	30,000	16,338	13,663	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
Issues & Answers Network Inc	Energy Payback Estimator tool	Virginia Beach	28,420	0	28,420	12/5/14	3/15/15
LightTracker, Inc.	CREED Data	Boulder	26,000	0	26,000	10/3/14	8/1/15
Evergreen Economics	Air Sealing Pilot Evaluation	Portland	25,000	1,155	23,845	10/15/14	12/31/15
Northwest Food Processors Association	NW Industrial EE Summit 2015	Portland	25,000	10,000	15,000	11/30/14	12/31/15
Sustainable Northwest	Klamath PAC Ag Program Aware	Portland	24,992	9,372	15,620	10/1/14	6/10/15
Forrest Marketing	Small Manuf Market Research	Portland	24,500	14,700	9,800	9/30/14	3/30/15
Triple Point Energy Inc.	SEM workshops	Portland	24,240	12,328	11,912	6/10/14	1/31/15
Pivotal Energy Solutions LLC	EPS New Home dbase construct	Gilbert	22,000	21,000	1,000	7/1/14	6/30/16
MetaResource Group	Pay-for-Performance Pilot Eval	Portland	20,000	2,250	17,750	8/5/14	12/31/15
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	6,056	13,944	6/15/14	12/31/15
Energy 350 Inc	Professional Services	Portland	14,920	0	14,920	12/10/14	12/10/16
PWP, Inc.	NBE Satisfaction Survey 2014	Gaithersburg	14,000	0	14,000	1/1/00	1/1/00
Evergreen Economics	Builder Interviews	Portland	13,000	1,600	11,400	12/1/14	4/30/15

CLEAResult Consulting Inc	PMC Products Transition	Austin	11,613	11,129	484	9/1/14	12/31/14
American Council for and Energy Efficient Economy	Extended Motor Products Label		10,000	10,000	0	12/23/13	3/31/15
Research Into Action, Inc.	Professional Services	Portland	9,590	9,570	20	9/1/14	8/31/16
City of Portland Bureau of Planning & Sustainability	Sponsorships - 2015	Portland	8,000	8,000	0	1/1/15	12/31/15
Apose Pty Ltd	Aspose.NET Words Software Lice	Lane Cove	5,045	5,040	5	12/3/14	12/3/15
Conservations Services Group, Inc.	DSE&SWR Estimator Tool Updates	Portland	3,240	2,093	1,148	11/11/14	11/11/16
	Energy Efficiency Programs Total:		**133,614,977**	**81,201,670**	**52,413,375**		
Joint Programs							
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		120,132	81,543	38,589	11/7/11	12/31/15
The Cadmus Group Inc.	Evaluation Consultant	Watertown	39,045	38,960	85	6/20/13	2/28/15
Watkins and Associates, Inc.	EPS & Solar Valuation Study	Portland	38,000	38,000	0	2/1/14	1/31/15
E Source Companies LLC	E Source Service Agreement	Boulder	36,500	36,500	0	2/1/14	1/31/15
Research Into Action, Inc.	EH Attic Air Sealing Pilot Eva	Portland	30,000	1,393	28,608	10/8/14	9/30/16
CoStar Realty Information Inc	Property Data	Baltimore	26,420	22,144	4,276	6/1/11	6/28/15
Research Into Action, Inc.	Fast Feedback Analysis	Portland	25,000	25,000	0	9/1/14	3/1/15
Navigant Consulting Inc	P&E Consultant Services	Boulder	22,530	22,530	0	1/15/14	12/30/15
Bruins Analysis and Consulting	Fast Feedback Reporting	Bremerton	6,000	3,000	3,000	6/1/14	4/30/15
	Joint Programs Total:		**477,127**	**294,070**	**183,058**		
Renewable Energy Program							
Clean Water Services	Project Funding Agreement		3,000,000	0	3,000,000	11/25/14	11/25/39
JC-Biomethane LLC	Biogas Plant Project Funding	Eugene	2,000,000	1,000,000	1,000,000	10/18/12	10/18/32
Oregon Institute of Technology	Geothermal Resource Funding	Klamath Falls	1,550,000	1,550,000	0	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	500,000	500,000	10/25/12	10/25/27
Three Sisters Irrigation District	TSID Hydro	Sisters	1,000,000	700,000	300,000	4/25/12	9/30/32
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
City of Medford	750kW Combined Heat & Power	Medford	450,000	450,000	0	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	441,660	0	10/27/10	10/27/25
RES - Ag FGO LLC	Biogas Manure Digester - FGO	Washington	441,660	183,289	258,371	10/27/10	10/27/25
Oak Leaf Energy Partners Ohio, LLC	BVT Sexton Mtn PV	Denver	355,412	0	355,412	5/15/14	12/31/34
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	224,253	5,747	5/20/10	5/20/30
Confederated Tribes of the Umatilla Indian Reservation	Small Wind Project Funding	Pendleton	170,992	170,992	0	7/25/13	12/31/28
Klamath Basin Geopower Inc	Henley Proj Dev Assistance	Reno	150,000	43,098	106,903	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	103,783	11,017	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
Clean Power Research, LLC	PowerClerk License	Napa	104,278	102,408	1,870	7/1/14	6/30/15
Gary Higbee DBA WindStream Solar	Solar Verifier Services	Eugene	100,000	18,220	81,780	8/1/14	7/31/16
Wallowa Resources Community Solutions, Inc.	Upfront Hydroelectric Project		100,000	17,290	82,710	10/1/11	10/1/15
Deschutes Valley Water District	Early Development Assistance	Madras	68,373	0	68,373	7/23/13	6/30/15
Mapdwell LLC	Mapdwell Account	Boston	66,381	48,195	18,186	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	58,874	1,126	3/18/14	2/28/15
City of Klamath Falls	Klamath Falls Biopower Project	Klamath Falls	49,927	0	49,927	1/9/14	12/31/14
State of Oregon Dept of Geology & Mineral Industries	Lidar Data	Portland	40,000	0	40,000	11/7/14	12/1/15
Clean Energy States Alliance	CESA Year 12 (2015)		39,500	39,500	0	7/1/14	6/30/15
Wallowa Resources Community Solutions, Inc.	Hydroelectric Pipeline		25,000	8,000	17,000	6/26/14	2/28/15
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	17,037	7,088	4/11/07	1/31/24
Solar Oregon	Education & Outreach Services	Portland	24,000	24,000	0	1/1/14	12/31/15
Bonneville Environmental Foundation	REC policy analysis	Portland	20,000	5,873	14,128	6/15/14	12/31/14
Solar Oregon	Website Upgrade Grant	Portland	20,000	0	20,000	12/8/14	12/31/15
Ecofys US, Inc.	Renewable Energy Consultant	Corvallis	18,000	18,000	0	4/7/14	3/31/16
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	1/1/12	12/31/12
Clean Energy States Alliance	CESA ITAC		10,000	10,000	0	1/1/14	12/31/14
Lewis & Clark	Solar Soft Cost Analysis	Portland	10,000	0	10,000	12/5/14	4/30/15
Garrad Hassan America Inc	RE Consulting Services	San Diego	6,841	6,841	0	6/11/13	2/28/15
RHT Energy Solutions	Solar Marketing Consulting	Medford	4,500	4,500	0	10/15/14	10/15/16
eFormative Options LLC	RE Evaluation Consultant	Vashon	3,000	3,000	0	3/1/13	2/28/15
Bonneville Environmental Foundation	REC & WRC Purchase	Portland	2,262	588	1,674	1/20/15	2/28/15
	Renewable Energy Program Total:		**15,527,614**	**6,577,413**	**8,950,201**		
	Grand Totals:		**161,740,715**	**94,141,398**	**67,602,597**		

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

Financial Glossary

(for internal use) - updated April 16, 2014

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.

Reserves

- 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.

Committed Funds

- 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; 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

Tab 7

Policy Committee Meeting

January 29, 2015, 3:30–5:00 pm

Attending by teleconference
Roger Hamilton, Debbie Kitchin, Alan Meyer, John Reynolds, Margie Harris, Kim Crossman

Attending at Energy Trust offices
Scott Clark, Amber Cole, Fred Gordon, Jed Jorgensen, Betsy Kauffman, Steve Lacey, Debbie Menashe, Thad Roth, Peter West

Policies for Review

1. Renewable Energy Certificate (REC) Report and Policy

The Energy Trust REC Policy was scheduled for its regular three-year review in May 2014. At that time, staff proposed, and the Committee agreed, to undertake a study of the current REC market in order to inform possible changes to the REC policy. Since its last regular review in 2011, the REC market, and expectations about the REC market, have changed significantly, and these changes may be relevant to Energy Trust's policy for managing its portfolio of RECs now and in the future. Staff engaged the Bonneville Environmental Foundation (BEF) to complete the market study, and a draft report has been delivered to Energy Trust. Thad Roth presented a summary of the report's key points and distributed copies to committee members. The BEF draft report is comprehensive. Thad described the report's key findings as follows:

- The value of a REC is significantly less than was thought possible at the time Energy Trust's current REC policy was approved, both for the compliance and voluntary markets. The primary driver for the low value is that the market is oversupplied. In addition, Renewable Portfolio Standard (RPS) compliance filings by PGE and Pacific Power indicate that both utilities have sufficient REC supplies to meet their compliance needs through at least 2020.
- The current REC market does not easily accommodate small scale renewable energy projects. Reporting, verification, and marketing requirements, both for the voluntary and compliance markets, limit participation to larger scale projects.
- Energy Trust's current REC portfolio in 2015 is about 160,000 RECs annually and is forecast to achieve ~280,000 RECs in 2025. This represents between 2–5% of PGE and Pacific Power's RPS annual requirements through 2025.
- The majority of RECs produced from Energy Trust's generation portfolio annually come from custom projects (both solar and non-solar technologies). However the contribution of standard solar RECs are forecast to grow from 25% to 40% between 2015 and 2030.
- Energy Trust has made progress on developing processes with each utility, ODOE, and OPUC to deliver the RECs for which we have title to the respective utilities. The processes are currently being implemented for new qualifying facilities while we continue to perfect a process for Standard Solar projects.

Energy Trust staff will continue to review the draft report and has asked committee members to review and comment on the draft by March 10. After that time, and based on the report's final conclusions, staff expects to make some proposals for revisions to the REC policy, such revisions to be presented to the Policy Committee at its April meeting. Following that meeting, if staff proposes revisions, and the committee approves revisions, staff would expect to bring a proposed revised REC policy to the full board for approval.

Pursuant to a previous suggestion of the Policy Committee, staff has also engaged BEF to make a presentation to the full board regarding the REC market as background information for a policy review. That presentation is tentatively scheduled for the board's April 1st meeting.

2. Combined Heat and Power (CHP) Policy

An initial discussion of this policy occurred at the Committee's last meeting and was tabled for this meeting to allow time for additional discussion. The proposed revisions to the policy are intended to: (1) clarify the reasons for the policy in the introduction; (2) clarify that incentives will be offered only if a CHP project reduces electricity or natural gas consumption through increased efficiency in energy use (consistent with Oregon's regulatory definition of energy conservation); (3) recognize that risks posed by CHP projects, like other efficiency measures, can be managed with contract provisions, not only incentive adjustments, and (4) not require staff to compare fossil-fuel CHP incentives with renewable energy CHP incentives, because the comparison is impracticable. Committee members were also provided with a copy of current program CHP Guidelines for more information about program implementation. Kim Crossman, Energy Trust industrial and agriculture sector lead, described program practices and project selection criteria as background for the Committee's discussion of the proposed policy changes.

Committee members support recognizing the risk of CHP projects through both incentive levels and contract terms, and also support eliminating the connection of energy efficiency incentive levels to renewable energy CHP incentives. However, committee members still have questions regarding the actual program screening processes and implementation. Specifically, committee members asked for clarification in two areas: (1) how the cost effectiveness analysis for a CHP project is conducted and (2) why utility buy-sell arrangements are not permitted under the program's internal operating guidelines even though such arrangements are explicitly permitted under the CHP policy. Staff and committee members agreed that committee member Alan Meyer should meet in between upcoming RAC and CAC meetings to discuss these issues. Debbie will arrange the meeting for Wednesday, February 3rd.

Preview of Board Meeting Presentations

1. RTF Five-year Funding Agreement

Fred Gordon briefed the Committee on a proposal for a five-year funding commitment contract to support the work of the Regional Technical Forum (RTF). The proposed contract will exceed $500,000 and will require board approval. In previous years, RTF funding contracts were approved for shorter terms and did not exceed the Executive Director's signing authority. Fred briefly described the work of the RTF and why this longer term financial commitment will benefit Energy Trust. The five-year funding agreement will be presented to the full board for approval at its next meeting.

2. ISI Update

Scott Clark previewed his upcoming full board update on the Integrated Solutions Implementation Project phase 2 (ISI), an IT development project that will replace FastTrack, our existing project, measure, and incentive tracking system.

Brief Updates

Margie Harris and Fred Gordon provided brief updates to the committee on several matters:

- The Oregon Public Utility Commission (OPUC) has opened a docket to address questions regarding the large customer funding cap. Energy Trust will file a petition to intervene in this docket in order to monitor activities and respond to information requests.

- Energy Trust staff is working to identify 3–4 processes for improvement, responding to Management Review and Strategic Plan direction. Margie and Courtney Wilton are heading up this effort.
- Fred Gordon reported on the status of proposal for an “incentive cap” for measures not otherwise cost effective in response to OPUC docket UM 1622. Fred and program staff have engaged with a broad stakeholder group to draft proposed options for OPUC staff consideration.

The meeting adjourned at 5:00 pm. The next meeting of the Policy Committee is scheduled for March 10, 2015.

Board Decision
Amend the Fossil-Fuel Combined Heat and Power Policy

February 25, 2015

RESOLUTION 737
AMENDING THE FOSSIL-FUEL COMBINED HEAT AND POWER POLICY

WHEREAS:

1. **The Combined Heat and Power (CHP) Policy is due for regular review by the Energy Trust board of directors;**
2. **Project developers have continued interest in working with Energy Trust for incentive support for combined heat and power projects, and staff has reviewed the current policy language to whether it supports an effective CHP program and complies with legal requirements;**
3. **As a result of this review, staff proposes four changes to: (1) clarify the reasons for the policy in the introduction; (2) clarify that incentives will be offered only if a CHP project reduces electricity or natural gas consumption through increased efficiency (consistent with Oregon's regulatory definition of energy conservation); (3) recognize that risks posed by CHP projects, like other efficiency measures, can be managed with contract provisions, not just incentive adjustments, and (4) not require staff to compare fossil-fuel CHP incentives with renewable energy CHP incentives, because the comparison is impracticable; and,**
4. **The Policy Committee supports the suggested amendment and recommends approval.**

It is therefore RESOLVED that the Board of Directors hereby approves amendment of the Combined Heat and Power Policy as shown in Attachment 1.

Moved by:		Seconded by:
Vote:	In favor:	Abstained:
	Opposed:	

ATTACHMENT 1: Fossil-Fuel Combined Heat and Power Policy

History			
Source	Date	Action/Notes	Next Review Date
Board Decision	December 19, 2002	Approved (R149)	March 3, 2004
Board	March 3, 2004	Reviewed-No Change	February 2005
Board	February 16, 2005	Reviewed & deferred for 6 months	August 2005
Board	September 7, 2005	Revised (R348)	Report to board in early 2006; review implementation in 9/08
Board	December 19, 2008	Revised (R499)	9/2011
Board	December 16, 2011	Revised (R612)	2/2015

Introduction

Fossil-fueled combined heat and power (CHP) projects may have certain economic and environmental advantages, including potential energy efficiencies, which make them of interest to the Energy Trust. At the same time, CHP raises two concerns that the Energy Trust board addresses in this policy: (1) When is CHP energy efficiency, hence eligible for Energy Trust support, as opposed to a generation resource? (2) How should Energy Trust identify and manage the risks that may attend CHP projects?

~~Energy Trust currently supports only renewable energy CHP projects, small market transformation CHP projects, and the use of waste heat for limited purposes.~~

~~The Oregon Public Utility Commission has encouraged the Energy Trust to support CHP projects that reduce customers' on-site energy requirements.~~

Policy

a. In addition to incentives for other measures, Energy Trust should offer incentives for fossil-fuel CHP generation that increases total system efficiency~~reduces fuel consumption through increased efficiency~~, is more cost-effective than the alternative resource, and would be used on-site. Energy Trust will not offer incentives for fossil CHP power for sale (other than buy-all, sell-all~~utility buy-sell~~ arrangements with the serving utility).
b. Energy Trust will use budgets and structures of existing programs, and adjust incentives and/or develop contract terms to reflect any higher level of risk compared to other projects.
c. Energy Trust will evaluate projects using a cost-effectiveness methodology that is comparable to that used for the same type of facility or dwelling, but which accounts for unique CHP features.
d. Energy Trust will limit eligibility to facilities that use Pacific Power or PGE electricity.
~~e. Energy Trust will provide no higher incentives for CHP projects funded through efficiency programs than comparable CHP projects funded through the renewable program.~~

Tab 8

Energy Trust of Oregon 2014 Preliminary Annual Results

January 30, 2015

The following represents preliminary Energy Trust of Oregon 2014 annual savings and generation results, and progress to energy goals and IRP targets. This report contains the best available data at this time, and reflects net savings. Further review as part of Energy Trust's comprehensive annual reporting process may change the results reported here. The Energy Trust 2014 Annual Report to the Oregon Public Utility Commission will contain the most accurate and comprehensive Energy Trust data, and will be available on April 15, 2015.

A. Preliminary electric efficiency savings

In 2014, electric efficiency programs saved 58.2 average megawatts, achieving **101 percent of Energy Trust's 2014 electric savings goal** of 57.7 aMW.

Preliminary electric efficiency savings	Pacific Power aMW	Portland General Electric aMW	Total aMW
Existing Buildings	5.52	9.86	15.38
New Buildings*	1.70	3.56	5.26
Production Efficiency	6.57	12.07	18.64
New Homes and Products	3.37	5.13	8.49
Existing Homes	2.17	2.94	5.12
NEEA	2.18	3.13	5.31
Total electric efficiency programs	**21.50**	**36.70**	**58.20**

Electric efficiency savings numbers include transmission and distribution savings
**Includes Energy Trust electric market transformation savings acquired separately from NEEA efforts*

B. Preliminary natural gas efficiency savings

In 2014, gas efficiency programs saved 5.7 million annual therms of natural gas, achieving **98 percent of Energy Trust's 2014 gas savings goal** of 5.8 million annual therms.

Preliminary gas efficiency savings	Cascade Natural Gas therms	NW Natural—Oregon therms	Total therms
Existing Buildings	174,332	1,641,261	1,815,593
New Buildings*	61,217	614,723	675,940
Production Efficiency	39,548	975,908	1,015,456
New Homes and Products*	98,853	967,702	1,066,555
Existing Homes	46,564	1,038,891	1,085,454
Total gas efficiency programs	**420,513**	**5,238,485**	**5,658,998**

**Includes Energy Trust gas market transformation savings acquired separately from NEEA efforts*

C. Preliminary renewable energy generation

In 2014, renewable energy programs generated 2.39 aMW, achieving **53 percent of Energy Trust's 2014 renewable generation goal** of 4.49 aMW.

Preliminary renewable energy generation	Pacific Power aMW	PGE aMW	Total Generation aMW
Solar electric	0.43	0.72	1.15
Other renewables	1.24	-	1.24
Total renewable programs	**1.67**	**0.72**	**2.39**

Renewable energy generation numbers include transmission and distribution savings, where appropriate

D. Preliminary NW Natural—Washington gas efficiency savings

In 2014, gas efficiency programs for NW Natural customers in Washington saved 253,988 annual therms of natural gas, achieving **98 percent of Energy Trust's 2014 NW Natural—Washington gas savings stretch goal** of 259,845 annual therms.

Preliminary NW Natural—Washington gas efficiency savings	NW Natural—Washington therms
Existing Buildings	152,676
Existing Homes	45,200
New Homes	56,112
Total NW Natural—Washington gas efficiency programs	**253,988**

E. Preliminary progress to 2014 annual goals by utility

Preliminary progress to goals by utility	Annual Savings	Energy Trust annual goal		Annual IRP target	
		Goal	% Achieved	Goal	% Achieved
PGE	36.70 aMW	37.6 aMW	98%	36.3 aMW	101%
Pacific Power	21.50 aMW	20.1 aMW	107%	19.0 aMW	113%
NW Natural—Oregon	5,238,485 annual therms	5,331,487 annual therms	98%	5,331,487 annual therms	98%
Cascade Natural Gas	420,513 annual therms	470,561 annual therms	89%	470,561 annual therms	89%

Includes savings from NEEA and Energy Trust electric and gas market transformation savings acquired separately from NEEA efforts

F. Preliminary efficiency results by sector

Preliminary efficiency results by sector	Electric efficiency results			Gas efficiency results		
	Annual Savings	Goal	% Achieved	Annual Savings	Goal	% Achieved
Commercial	21.90	21.95	99.8%	2,491,532	2,342,685	106%
Industry and agriculture	18.81	17.67	106%	1,015,456	1,196,420	85%
Residential	17.48	18.08	97%	2,152,009	2,262,943	95%
2014 annual total	**58.20**	**57.70**	**101%**	**5,658,998**	**5,802,048**	**98%**

Includes savings from NEEA and Energy Trust electric and gas market transformation savings acquired separately from NEEA efforts

Briefing Paper
Integrated Solutions Implementation Project Update
February 25, 2015

Summary
The Integrated Solutions Implementation (ISI) project is designed to modernize existing core applications and incorporate business process improvements. The project continued development work through the end of 2014 and into early 2015. The first of three releases of functionality is targeted to go live in late February. The project anticipates going live with the final release by the end of June 2015, adhering to the 2015 annual budget authorization. This briefing paper provides a project status update, highlights specific accomplishments since the October board update, and previews plans for the first half of 2015.

Background
- The ISI project was initiated to achieve several objectives in support of program goals, including process improvements, increased data quality and systems improvements to modernize and strengthen integration among our systems and with external parties.
- Phase 1 of the ISI project completed in October 2012 and included implementation of Microsoft Dynamics Customer Relationship Management (CRM) system, an upgrade to the existing Microsoft Great Plains financial system, and improvements to the budgeting tools and processes.
- Phase 2 began in late 2013 and is targeted for completion in June of 2015. Phase 2 encompasses functionality to replace FastTrack, the system currently used by Energy Trust to track program management and delivery, process incentive payments, and provide the system of record for tracking recognized energy savings and generation.
- The project is planning three releases of functionality to fully replace FastTrack:
    i) Moving activities and data associated with customer sites to CRM
    ii) Managing incentive payments associated with projects
    iii) Managing customer projects and measures

Phase 2 Completed Activities
1. Realigned project ownership: Scott Swearingen of our commercial group was temporarily assigned to the project in the role of product owner. In this role, Scott is leading the prioritization of functionality to align with the highest business value. Scott also leads the business functional team representing all areas of the organization and extending to program management contractors (PMCs). Having a single point person to focus on business needs has already demonstrated the benefit of having a clear path for efficient application development that includes process improvements for all users.
2. Increased engagement with programs and PMC representatives: included testing of individual functionality and mock transactions, and decisions and documentation on any required business process changes.
3. Created a change management plan and began delivering on that plan through various communication channels.

4. Engaged additional developers to meet resource needs necessary to complete work by the end of June.
5. Planned for training, go-live, and post-launch support for release #1 to move sites functionality to CRM in February.
6. Continued requirements validation with stakeholders, development work, and iterative development and demos.
7. Mapped existing data structure to the new CRM data and validated mappings with the project team.
8. Continued development of new application programming interface (API), the functionality to integrate Energy Trust systems with external parties. The API is also foundational to the new components in the application that will replace FastTrack.

Phase 2 Planned Activities

1. Implement training, go-live, and post-launch support for release #1 to move sites functionality to CRM in February.
2. Requirements validation with stakeholders, development work, and iterative development and demos on releases to manage incentive payments and to manage customer projects and measures.
3. User testing, training, go-live, and post launch support for release #2 to manage incentive payments and for release #3 to manage customer projects and measures.
4. Full implementation of change management plan to inform all project stakeholders of deliverables and encourage input on both the deliverables and the processes of the project.
5. Post-project retrospective and final project report.

Timeline

The project is on schedule to complete work by June 30, 2015 consistent with the following anticipated release schedule:

- Customer site functionality in CRM (February)
- Functionality to manage incentive payments (April)
- Functionality to manage customer projects and measures (June)

Budget

- Staff budgeted a total of $2.0 million for completion of ISI Phase 2
- Work on Phase 2 started in Q4 2013. Expenses through December 2014 on Phase 2 totaled $1,030,000.
- The project is currently forecasting expenditures for January 2015 through June 2015 to be $900,000, bringing total cost of Phase 2 to approximately $1.9 million.

Briefing Paper
2015 State Legislation Update

February 25, 2015

Summary

This paper summarizes bills introduced in the 2015 state legislative session. Attached to this paper is a more comprehensive listing, complete with links to the bills themselves (in the "Bill Number" column).

Background

- The legislative session began in February and is expected to adjourn in late June.
- Pursuant to our grant agreement with the OPUC, Energy Trust does not take positions on legislation or engage in political issues. We do routinely brief legislators on Energy Trust and its accomplishments.
- During legislative sessions, we also monitor bills that could impact Energy Trust and respond to legislative requests for information. We coordinate these activities with the OPUC.

Discussion

- Only a fraction of these bills are likely to be enacted, and so in the early stages of the session we do not parse these bills in great detail.
- A bill's "relating" clause gives notice of the bill's purpose. Because it is not unusual for a bill with a broad "relating" clause to be used as a vehicle for legislation that may not have been introduced early in the session, we monitor virtually everything that touches on energy.
- Highlights of this year's introduced legislation:
    - **Public-purpose charge:** Senator Olsen (Canby) is sponsoring two bills:
        - **SB 499** would require the Oregon Department of Administrative Services to hire annually at our expense an independent third party to assess: how we prioritize projects for funding; our criteria for choosing trade ally contractors; how often we update our pool of trade allies; how much we spend on marketing; our internal administrative overhead; an accounting of each trade ally, including aggregate number of customers referred and money we receive back; an estimate of the return on our investment; an estimate of our effect on economic development and jobs; and how much energy our customers save. The same bill was introduced in 2013 and not adopted.
        - **SB 431** would reduce the public purpose charge from 3 to 2 percent of gross electric revenues, and cap these revenues at $100 million per year. As now written, the bill would not affect supplemental electric efficiency funding.
    - **Energy tax credits: HB 2447** would extend a tax credit for alternative energy devices (largely residential renewable energy devices) beginning in 2016. **HB 2448** would do the same for energy conservation projects after August 2015

whose owners enter into performance agreements. **HB 2449** would extend the tax credit for biomass collection or production. **HB 2688** would reinstate the renewable energy tax credit, including the manufacturing credit. **HB 2822** would create a tax credit for business capital improvements (full cost of improvements over $25,000, up to $500,000 for an improvement certified by the Oregon Department of Energy as energy efficient) or homes (full cost of improvements over $5,000, up to $50,000 for an improvement certified by the Oregon Department of Energy as energy efficient) begun before October 1, 2015, or the effective date of the Act, whichever is later. **HB 2942** would authorize a credit for anaerobic digestion projects.

- **Energy conservation and large customers:**
  - **HB 2946** would allow the OPUC to develop a rule authorizing electric utilities to include in rates the cost of cost-effective energy conservation for large electricity consumers above the 3 percent rate now allowed. The OPUC rule would have to: (a) specify each class of retail electricity consumer that benefits from the conservation measure; and (b) allow recovery from each class of consumer in proportion to the benefit. To the extent practicable, the rule must ensure that the funding and implementation benefit each class of retail electricity consumers equally.
- **Appliance standards: SB 20** would amend certain standards (battery chargers, televisions and halogen lamps, see Section 2, subsections 18, 19 and 20).
- **Energy conservation in schools: SB 260** would charge the Oregon Department of Energy with running a high-performance school program with clean energy projects, including a grant program for schools that don't qualify for public purpose funds, and authorizing $20 million in bonds.
- **Woody biomass used for heating (not generation):**
  - **HB 2833** would add woody biomass to the technology types state agencies may use to meet requirement that at least 1.5 percent of contract budget for new buildings or major renovations be devoted to "green energy technology."
- **Renewable energy:**
  - **Solar:**
    - Under **HB 2559 and HB 2574,** solar panels could not be prohibited by the terms of real estate transfers or condominium rules.
    - **HB 2632** would direct the Oregon Department of Administrative Services to establish a program to incentivize solar generation 2 MW or greater, and establish a fund for this purpose. Participants of such program would not be eligible for Energy Trust incentives.
    - **HB 2745** would raise the cumulative capacity of the volumetric incentive rate program, and extend the program to either 2021 or when the capacity cap is reached, whichever occurs first.
    - **HB 2941** would require the OPUC to develop rules requiring utilities to acquire power from "community solar gardens."

- **Wind decommissioning: SB 452** would require the Oregon Department of Energy to adopt rules requiring decommissioning and removal of wind projects within 3 years of the time they are no longer used.
- **Ocean energy:**
  - **HB 2187** would require the Department of State Lands to study regulation and net metering of ocean renewable energy.
  - **HB 2216** would allow the OPUC to authorize electric utilities to include in rates the cost of offshore wind projects, 30 MW and smaller, including above-market costs.
  - **SB 319** would require authorization from Department of State Lands to build a facility.

o **Air emissions, clean fuels and carbon:**

- **Replacing coal: HB 2729 and SB 477** would require electric companies to eliminate coal-derived generation for Oregon customers by 2025 and replace it with resources that are at least 90 percent cleaner than coal generation.
- **Integrated resource plans: HB 2586** would require electric utility integrated resource plans to account for the external cost of carbon, taking into account EPA information on social costs.
- **Carbon fees and taxes:**
  - **HB 2082** would impose a tax on carbon-based fuel sold by fuel suppliers or used to produce electricity for Oregon consumers, to take effect only if **House Joint Resolutions 10 and 11** (amending Oregon Constitution to allow carbon tax) are approved by voters at next regular general election.
  - **HB 2086** would impose a fee on such fuel, based on OPUC calculation of carbon emissions rate, with proceeds distributed to registered voters in equal shares.
  - **HB 2159** would limit such a tax to 6 percent of the value of the fuel and establish a fund to pay for energy conservation projects and low-income energy bill assistance.
  - **SB 21** would create a task force to review a report on carbon taxes and recommend options to generate revenue.
- **Authority to comply with federal carbon rules: HB 2191** would create a task force to study and make recommendations on legislation necessary to respond to rules adopted by Environmental Protection Agency under section 111(d) of Clean Air Act, which addresses carbon emissions from existing power plants.
- **Low-carbon fuels: HB 2192** and **HB 2450** would extend the sunset date of low-carbon fuels standard for transportation fuels. **SB 324** would repeal the sunset provisions and prohibit the Oregon DEQ from requiring compliance with low-carbon fuel standards if economic analysis indicates the cost would exceed 4 percent of expected cost of gas or diesel in Oregon.
- **Natural gas carbon-reduction projects: SB 456** would amend current law, originally SB 844, to allow gas utilities to propose “other incentives” in addition to cost-recovery mechanisms.

- **Return on clean energy investment: HB 2627** would require the Oregon Department of Energy to study Oregon's return on investment from energy conservation and renewable energy, 2007-2014.
- **Energy storage: HB 2193** would allow the OPUC to direct electric utilities to procure energy storage facilities.
- **Clean-energy vehicles: HB 2573** would allow residential tenants to install on-premises and use electric vehicle charging stations for personal use, unless agreed otherwise. **HB 2585** would impose the same provision for condominiums. **HB 2577** would direct the state building code to require new parking facilities to have wiring to accommodate electric vehicle charging stations. **HB 2092** would create a tax credit for contributions to a fund for up to $30 million per biennium in rebates to purchasers of alternative fuel or zero-emission vehicles.
- **Other:**
  - **Oregon Department of Energy's energy resource supplier assessment:** would be capped by **SB 304.**
  - **"Good government" bills: SB 98** would create an office under the Joint Legislative Audit Committee and expand the pool of legislators serving on the committee. **SB 105** would require an advisory committee to do performance evaluations of state agencies and make recommendations for abolition or reorganization. **SB 541** would sunset all state agencies and require legislative committee to conduct performance evaluations and make recommendations whether to abolish, continue or reorganize them.

Report Date: February 17, 2015

Bill Number	Relating Clause	Sponsor
HB 2064 INTRO	Requires Legislative Assembly to use simulation designed by Legislative Revenue Officer as aid in making determinations as to efficiency of economic development, tax expenditure and tax incentive programs.	House Interim Committee on Revenue
HB 2082 INTRO	Imposes tax on each fuel supplier and utility based on amount of carbon in carbon-based fuel that is sold by fuel supplier to consumers in state or that is used to produce carbon-generated electricity supplied by utility to consumers in state.	House Interim Committee on Revenue
HB 2086 INTRO	Imposes fee on fossil fuel or fossil fuel-generated electricity to be paid by vendors.	House Interim Committee on Revenue
HB 2092 INTRO	Creates tax credit for contributions to Zero-Emission Incentive Fund.	House Interim Committee on Revenue
HB 2159 INTRO	Imposes tax on each fuel supplier and utility based on amount of carbon in carbon-based fuel that is sold by fuel supplier to consumers in state or that is used to produce carbon-generated electricity supplied by utility to consumers in state.	House Interim Committee on Revenue
HB 2187 INTRO	Requires Department of State Lands to study issues relating to regulation and net metering of ocean renewable energy.	House Interim Committee on Energy & Environment
HB 2191 INTRO	Establishes Task Force on Air Pollution.	House Interim Committee on Energy & Environment
HB 2192 INTRO	Repeals sunset on provisions related to low carbon fuel standards.	House Interim Committee on Energy & Environment
HB 2193 INTRO	Directs electric companies, if authorized by Public Utility Commission, to procure one or more energy storage systems that have capacity to store specified amount of electricity.	House Interim Committee on Energy & Environment
HB 2216 INTRO	Authorizes Public Utility Commission to include in electric company's rates cost of electricity, including above-market cost of electricity, if electricity is generated under certain conditions.	Rep. MCKEOWN; Sen. ROBLAN
HB 2272 INTRO	Increases tax on motor vehicle fuels.	House Interim Committee on Transportation & Economic Development
HB 2400 INTRO	Provides that submission of certain task force reports prior to January 31, 2015, satisfies requirement to submit reports by July 1, 2014.	At the request of the Governor
HB 2442 INTRO	Changes name of State Housing Council to Oregon Housing Stability Council.	At the request of the Governor for Housing & Community Services Department
HB 2447 INTRO	Extends sunset for tax credit for alternative energy devices.	At the request of the Governor for State Department of Energy

HB 2448 INTRO	Extends sunset for tax credit for energy conservation projects.	At the request of the Governor for State Department of Energy
HB 2449 INTRO	Extends sunset for tax credit for biomass collection or production.	At the request of the Governor for State Department of Energy
HB 2450 INTRO	Repeals sunset on provisions related to low carbon fuel standards.	At the request of the Governor for Department of Environmental Quality
HB 2499 INTRO	Prohibits Environmental Quality Commission from adopting any rule concerning air quality and water quality that imposes requirements, standards or any other limitation that exceeds requirements, standards or any other limitation imposed under federal law.	Rep. WHITSETT; Sen. WHITSETT
HB 2559 INTRO	Prohibits inclusion, in instrument conveying or contracting to convey real property or in declaration or bylaws of planned community or condominium, of provisions prohibiting installation and use of solar panels for obtaining solar access.	Rep. GREENLICK; Reps. BARNHART, BUCKLEY, FREDERICK, GORSEK, HELM, LININGER, READ, REARDON, VEGA PEDERSON, WILLIAMSON at request of Jerry Weinert
HB 2572 INTRO	Mandates carbon footprint labeling on all consumer products sold or offered for sale in state on and after January 1, 2016.	Rep. BARNHART
HB 2573 INTRO	Authorizes residential tenant to install on premises and use electric vehicle charging station for personal, noncommercial use.	Rep. BARNHART; Reps. NATHANSON, REARDON
HB 2574 INTRO	Prohibits inclusion, in instrument conveying or contracting to convey real property or in declaration or bylaws of planned community or condominium, of provisions prohibiting installation and use of solar panels for obtaining solar access.	Rep. BARNHART; Reps. LIVELY, REARDON, SMITH WARNER
HB 2577 INTRO	Makes legislative finding regarding benefit of state building code requiring that new construction of certain parking facilities include electrical supply capacity and conduit system capable of supporting electric vehicle charging.	Rep. BARNHART; Reps. LIVELY, REARDON
HB 2585 INTRO	Modifies authority granted to owner of lot in planned community or unit in condominium to install and use electric vehicle charging station for personal, noncommercial use.	Rep. BARNHART
HB 2586 INTRO	Requires electric companies to account for external cost of carbon in integrated resource plans submitted to Public Utility Commission.	Rep. BARNHART
HB 2627 INTRO	Requires State Department of Energy to conduct study of State of Oregon's return on investment, for period beginning July 1, 2007, and ending June 30, 2014, in programs adopted by state to support clean energy generation, renewable energy generation and energy efficiency.	Rep. LININGER; Rep. NATHANSON
HB 2632 INTRO	Directs Oregon Department of Administrative Services to establish program to incentivize generation of electricity derived from solar energy.	Rep. BENTZ and Sen. ROBLAN; Reps. GILLIAM, HUFFMAN, READ, VEGA

		PEDERSON, Sen. DEMBROW
HB 2688 INTRO	Modifies provisions allowing for optional reduced rates of personal income tax on nonpassive income attributable to partnership or S corporation by limiting amount of income for which reduced rate may be claimed and by decreasing number of annual hours of work required for employee of entity.	Rep. GOMBERG
HB 2729 INTRO	Requires electric companies to reduce allocation of electricity from coal-derived generating resources to zero on or before January 1, 2025, to customers of electric company that are located in this state.	Rep. READ and Sen. EDWARDS; Reps. BUCKLEY, GALLEGOS, GORSEK, Sens. BATES, DEMBROW, MONROE
HB 2745 INTRO	Changes allowed cumulative nameplate capacity of qualifying solar photovoltaic energy systems enrolled in certain pilot programs established by Public Utility Commission.	Rep. READ
HB 2822 INTRO	Creates income tax credit for capital improvements to business facilities or homes that are commenced prior to October 1, 2015, or effective date of Act, whichever is later.	Rep. DAVIS
HB 2833 INTRO	Adds woody biomass to types of green energy technology for which contracting agency must set aside 1.5 percent of contract price to include in public building.	Rep. WITT and Sen. GIROD; Reps BARKER, BOONE, DOHERTY, ESQUIVEL, EVANS, GILLIAM, GORSEK, HOYLE, JOHNSON, KRIEGER, LIVELY, REARDON, WHISNANT, Sens. BAERTSCHIGER JR., DEMBROW, FERRIOLI, HASS, KNOPP, ROBLAN
HB 2941 INTRO	Relating to solar energy.	Rep. HOLVEY
HB 2942 INTRO	Relating to a tax credit for anaerobic digesters	Rep. HOLVEY
HB 2946 INTRO	Relating to cost-effective energy conservation measures.	House Committee on Energy and Environment
HB 2987 INTRO	Relating to compliance with green energy technology mandates for public buildings.	Rep. HOLVEY
HJR 10 INTRO	Proposes amendment to Oregon Constitution allowing Legislative Assembly to impose taxes on carbon emissions for purpose of funding reductions in carbon emissions and carbon fuel use.	House Interim Committee on Revenue
HJR 11 INTRO	Proposes amendment to Oregon Constitution removing limitation of six percent of market value on rate of taxes imposed on oil or natural gas.	House Interim Committee on Revenue

SB 20 INTRO	Modifies applicability of minimum energy efficiency standards to certain products.	Senate Interim Committee on Environment & Natural Resources
SB 21 INTRO	Establishes Task Force on Clean Air Fee or Tax Implementation to review results of report required by chapter 770, Oregon Laws 2013, and develop recommendations or proposals for options to implement clean air fee or tax to generate revenue.	Senate Interim Committee on Environment & Natural Resources
SB 23 INTRO	Directs Department of Environmental Quality to conduct study and develop recommendations for legislation to encourage transition to cleaner burning woodstoves or other cleaner home heating options.	Senate Interim Committee on Environment & Natural Resources
SB 32 INTRO	Directs Public Utility Commission to form work group to study methods by which public utility that furnishes natural gas may expand service to areas that do not have access to natural gas.	Senate Interim Committee on Rural Communities and Economic Development
SB 98 INTRO	Creates Director of Legislative Audit Office appointed by Joint Legislative Audit Committee.	Sen. THATCHER; Rep. STARK
SB 105 INTRO	Creates Sunset Advisory Committee.	Sen. THATCHER; Rep. STARK
SB 258 INTRO	Removes provision that amended site certificate must require both parties to abide by local ordinances and state law and rules of Energy Facility Siting Council in effect on date amended site certificate is executed.	At the request of the Governor for State Department of Energy
SB 259 INTRO	Requires person submitting notice of intent to file for site certificate, request for exemption or request for expedited review to pay fee prior to submitting notice or request to Energy Facility Siting Council.	At the request of the Governor for State Department of Energy
SB 260 INTRO	Directs State Department of Energy by rule to establish and administer high performance schools program within clean energy deployment program to support energy efficiency and clean energy projects in public schools.	At the request of the Governor for State Department of Energy
SB 304 INTRO	Caps energy resource supplier assessment at ___ percent of supplier's gross operating revenue derived within this state in preceding calendar year.	Sen. JOHNSON at request of Oregon People's Utility District Association
SB 319 INTRO	Requires proprietary authorization from Department of State Lands to construct or operate ocean renewable energy facility in Oregon's territorial sea.	Sen. ROBLAN; Sens. JOHNSON, KRUSE, WHITSETT, Reps. BOONE, GOMBERG, MCKEOWN
SB 324 A	Repeals sunset on provisions related to low carbon fuel standards.	Sens. BEYER, GELSER, DEMBROW; Sens. BATES, EDWARDS, MONNES ANDERSON, PROZAN–SKI, ROBLAN, ROSENBAUM
SB 431 INTRO	Reduces public purpose expenditure standard.	Sen. OLSEN

SB 452 INTRO	Requires State Department of Energy to adopt rules requiring decommission, deconstruction and removal of certain wind towers and turbines within three years after permanent cessation of use of tower and turbine for generation of wind energy.	Sen. GIROD
SB 456 INTRO	Clarifies that natural gas utility may receive additional incentives for projects approved by Public Utility Commission under voluntary emission reduction program.	Sen. BEYER
SB 477 INTRO	Requires electric companies to reduce allocation of electricity from coal-derived generating resources to zero on or before January 1, 2025, to customers of electric company that are located in this state.	Sen. EDWARDS, Rep. READ; Sens. BATES, DEMBROW, MONROE, Reps. BUCKLEY, GALLEGOS, GORSEK
SB 499 INTRO	Requires nongovernmental entity, as condition of receiving public purpose charge moneys, to be assessed by independent third party.	Sen. OLSEN
SB 541 INTRO	Creates Sunset Advisory Committee.	Sen. WINTERS
SB 571 INTRO	Relating to data centers	Senate Committee on Finance & Revenue

2014 True Up: Estimate Corrections and True Up of 2002-2013 Savings and Generation

Introduction

True Up is the annual process used to adjust and correct reported energy savings and renewable generation to reflect the best available information at the time of True Up. The 2014 True Up incorporates evaluation results available prior to June 30th, 2014. In the True Up process adjustments are made to past saving and generation data based on corrections to transaction errors, updated measure assumptions, anticipated evaluation results (for years and programs where there is yet to be an evaluation completed), and actual evaluation results.

The 2014 True Up updates reported energy savings for Energy Trust of Oregon funded activities from 2002-2013, although the majority of 2014 True Up adjustments affect savings claimed after 2010.

The purpose of this 2014 True Up report is to summarize adjustments to Energy Trust savings and generation. The three parts of this report discuss (1) definitions for evaluation results by which savings and generation are adjusted, (2) updates made to Energy Trust data by program and (3) the difference between pre True-Up and post True-Up savings and generation estimates.

Summary

The 2014 True Up introduced adjustments to total annual electric and gas savings reported by Energy Trust of Oregon, but reported renewable energy generation was not affected. Total electric savings from 2002-2013 decreased by 0.52%, from 415.6 aMW to 412.4 aMW, and total gas savings from 2003-2013 increased by 1.29%, from 33.1 million therms to 33.5 million therms.

For 2013, reportable electric savings decreased by 1.56% and reportable gas savings decreased by 0.01%, compared to the savings shown in Energy Trust's 2013 annual report.

The largest changes underlying 2014 True Up adjustments were; (1) updated realization rate results for the Existing Buildings and New Buildings programs for 2011, (2) higher free-rider rates for the Existing Buildings program for 2013, (3) updated assumptions for claiming gas furnace market transformation savings, (4) an updated 'hours of use' assumption for calculating gas hearth savings, (5) revised NEEA savings results for 2012 and 2013, (6) revised installation rates for Build-Your-Own Energy Saver kit measures, and (7) revisions to the Market Transformation model used to claim gas savings for New Buildings.

The annual changes to electric and gas savings are summarized by program in the Results section below. Additionally, there is a series of tables that represent overall changes by sector for each year. Lastly, results from True Up 2014 are shown for each funding utility within Energy Trust's service territory.

Definitions

Working Savings/Generation: The estimate of anticipated results which are practical for data entry by program personnel while approving individual projects. These savings are based upon estimates of typical savings or generation for prescriptive measures and site-specific engineering calculations for custom energy efficiency measures. Transmission and distribution line loss savings are not included in working savings, and no adjustments are made for free riders (FR), who are customers that would have installed the measures absent program influence, or spillover, which represents customers who are influenced by the program but did not take the incentive for an efficiency measure. These adjustments are addressed when developing reportable savings/generation values.

The true-up process does not adjust working savings claimed in the past, but *does* incorporate new information used in true up adjustments by updating working savings on a forward looking basis. Reportable savings and generation only are adjusted through the true up process.

Reportable Savings/Generation: The estimate of savings results that are used to report Energy Trust achievements. Several factors are applied to working savings in order to arrive at reportable savings. Reportable energy savings are adjusted and updated annually through the true-up process based on new information. Realization Rates (RR) are used to adjust the initial engineering estimate; a realization rate of 100% indicates that site savings were as expected, on average. Another adjustment is for market effects, also known as a Net-to-Gross (NTG) ratio. The NTG ratio adjusts for free riders and spillover. The final adjustment, which is applied only to electric savings, is for avoided line and transformer losses.

Free-rider rates are determined through Faster Feedback (FF) which is a short phone survey with a sample of recent program participants to assess satisfaction, understand customer decision making, and gather suggestions for program and process improvements. The survey is generally ten or fewer questions and is customized for each program or measure of interest. The goal of Fast Feedback is to get accurate answers to important questions within two months of program participation and to minimize the burden on survey respondents.

True Up adjusts reportable savings and generation estimates in different programs for different reasons. These fall into the following categories:

1) Corrections: Occasionally, through Energy Trust's routine quality assurance processes, transaction errors are discovered in the database, which require corrections. Individual transaction errors (i.e. typos that affect savings) are usually adjusted immediately and generic

transaction errors (i.e. wrong deemed savings value for a measure) are easily fixed once per year during True Up.

2) *New Data:* Projections are updated based upon improved measure simulations and new data on measure performance.

3) *Anticipated Evaluation Results:* Experience shows that evaluated estimates of savings and generation can be either lower or higher than reportable estimates. Reportable estimates are often based on typical savings for prescriptive measures or "as installed" engineering analysis for custom measures. Impact evaluation uses energy use data and/or improved data on post-installation operation to improve reportable estimates. However, impact evaluations cannot be completed until well after programs finish a year's activity. This is due to the need to utilize post-installation energy use data. Based upon Board direction in the July, 2004 Strategic Work Session, staff is attempting to anticipate these effects in reportable savings for programs where there is not yet evaluation information available.

4) *Evaluation Results:* Once finalized, evaluations provide the most reliable representation of realized savings, and can replace the refined projections described above in (2) and (3). Evaluation results may change Energy Trust savings estimates for a single year or all prior years. This is dependent upon what other evaluations have already been performed for prior years and whether results seem applicable to prior years (e.g. similar measures, participants, and circumstances.)

Results: Impacts by Program

Working savings for Energy Trust's commercial and industrial programs are adjusted for reporting to account for market effects by applying an 'Evaluation Factor' at the *program level*, while working savings for Energy Trust's existing homes program are adjusted for market effects at the *measure level*. The evaluation factor applied to a measure or program's working savings, for any given program year, is calculated as follows;

$$Evaluation\ Factor = Realization\ Rate * (1 - Freerider\ Rate + Spillover\ Rate)$$

For program years where savings have not been evaluated for free-ridership or energy savings impact (realization rate), an anticipated evaluation result is applied prospectively until actual evaluation results are obtained and savings can be trued up. Anticipated evaluation results are calculated as the savings weighted average of the last three years of evaluated results.

Existing Buildings

Since last year's True Up, an impact evaluation of the 2011 program year was completed for the Existing Buildings program. The 2014 True Up incorporates the results of that analysis into evaluation factors for 2011, and also in anticipated evaluation factors for 2012-2013 where the average of 2009-2011 impact evaluation results is used prospectively, since an impact evaluation has not yet been completed for those years. In conjunction, the most up-to-date freerider information available, from the 2013 program year, has been incorporated in the 2013 anticipated evaluation factor.

In addition to adjustments based on updated impact evaluation realization rates and 2013 freerider rates, further changes were made to correct errors in savings claimed for multifamily boilers and building tune-up and operation measures recognized between 2010 and 2012. Together these adjustments to savings resulted in a decrease in electric savings 1.5 of million kWh and a reduction in gas savings of 3,300 therms.

Table 1 below describes the evaluations which provide results that have been applied to reportable savings in each program year for the Existing Buildings program;

Table 1: Existing Buildings Evaluations

Program	Year	Source	Type of Adjustment	Notes
Existing Buildings	2002-2010	2002-2010 Impact Evaluations	Evaluation Factor	Closed in Previous True Ups
Existing Buildings	2011	2011 Impact Evaluation	Evaluation Factor	Closed in this True Up
Existing Buildings	2012-2013	2009-2010 Impact Evaluations	Anticipated Evaluation Factor	Realization Rate: 2009-2011 savings wtd. avg.
		2013 Fast Feedback Freerider Rates		Freerider Rate: 2011-2013 savings wtd. avg.

Tables 2 and 3 describe the components of the evaluation factors that have been applied to reportable savings for 2011-2013, where blue shaded cells indicate anticipated evaluation results;

Table 2: Existing Buildings Evaluation Factor Components- Electric

		Market Effects				
Existing Buildings- Electric	Realization Rate	Freerider Rate	Participant spillover	Non-Part. Spillover	Evaluation Factor	Evaluation
2011	91%	30%	1%	7%	71%	2010-2011 Impact Evaluation
2012	95%*	16%	1%	7%	88%	**Anticipated Results**
2013	95%*	38%	1%	7%	67%	**Anticipated Results**

*2012-2013 realization rates are the average of 2009-2011 evaluation results

Table 3: Existing Buildings Evaluation Factor Components- Gas

		Market Effects				
Existing Buildings- Gas	Realization Rate	Freerider Rate	Participant spillover	Non-Part. Spillover	Evaluation Factor	Evaluation
2011	101%	27%	1%	7%	82%	2010-2011 Impact Evaluation
2012	89%*	18%	1%	7%	80%	**Anticipated Results**
2013	89%*	28%	1%	7%	71%	**Anticipated Results**

*2012-2013 realization rates are the average of 2009-2011 evaluation results

Tables 4 and 5 describe the change in total savings claimed for the Existing Buildings program for the program years 2010-2013, for electric and gas savings, respectively;

Table 4: Existing Buildings Savings Change- Electric

Year	Savings Pre True Up (kWh)	Trued Up Savings (kWh)	Change in Savings
2010	107,394,819	107,394,819	0.00%
2011	109,743,944	101,868,204	-7.18%
2012	130,298,603	125,560,012	-3.64%
2013	117,598,620	106,496,579	-9.44%

Table 5: Existing Buildings Savings Change- Gas

Year	Savings Pre True Up (therms)	Trued Up Savings (therms)	Change in Savings
2010	1,476,817	1,490,264	0.91%
2011	1,292,271	1,556,551	20.45%
2012	1,863,749	1,968,065	5.60%
2013	1,687,502	1,589,369	-5.82%

New Buildings

Adjustments were made to savings for the New Buildings program based on the results of the 2011 Impact Evaluation of the New Buildings program for the program years 2011-2013. No new freerider rate information was introduced to savings for New Buildings program in the 2014 True Up to since the program will not receive any freerider deduction from 2013 forward, due to the twin difficulties of free-ridership measurement for new construction and the stringent 2010 building code.

Additionally, the methodology used for calculating gas savings associated with the 2010 code change for commercial buildings, as well as the code compliance assistance provided by the New Buildings program, was updated to better align with the methodology used by NEEA for calculating electric energy savings from the code change. Savings previously claimed were recalculated with the new methodology and adjusted in the 2014 True Up. As a result of this adjustment, electric savings decreased by 2.4 million kWh and gas savings decreased by 99,000 therms across the programs years 2011-2013.

Table 6 describes the evaluation results that have been applied to reportable savings in each program year for the New Buildings program;

Table 6: New Buildings Evaluations

Program	Year	Source	Type of Adjustment	Notes
New Buildings	2002-2010	2002-2010 Impact Evaluations	Evaluation Factor	Closed in Previous True Ups
New Buildings	2011	2011 Impact Evaluation	Evaluation Factor	Closed in this True Up
New Buildings	2012-2013	2009-2010 Impact Evaluations	Anticipated Evaluation Factor	Realization Rate: 2009-2011 savings wtd. avg.
		2013 Fast Feedback Freerider Rates		Freerider Rate: 2011-2013 savings wtd. avg.

Tables 7 and 8 describe the components of the evaluation factors that have been applied to reportable savings for 2011-2013, where shaded cells indicate anticipated evaluation results.

Table 7: New Buildings Evaluation Factor Components- Electric

		Market Effects					
New Buildings-Electric	Realization Rate	Freerider Rate	Participant spillover	2007 Code Evaluation Factor	2010 Code Evaluation Factor	Blended Eval. Factor	Evaluation
2011	93%	34%	1%	62%	94%	80%	2011 Impact Evaluation
2012	95%*	34%	1%	64%	96%	89%	**Anticipated Results**
2013	95%*	0%	1%		96%		**Anticipated Results**

*2012-2013 realization rates are the average of 2009-2011 evaluation results

Table 8: New Buildings Evaluation Factor Components- Gas

		Market Effects					
New Buildings- Gas	Realization Rate	Freerider Rate	Participant spillover	2007 Code Evaluation Factor	2010 Code Evaluation Factor	Blended Eval. Factor	Evaluation
2011	92%	32%	1%	63%	93%	66%	2011 Impact Evaluation
2012	96%*	32%	1%	66%	97%	83%	**Anticipated Results**
2013	96%*	0%	1%		97%		**Anticipated Results**

*2012-2013 realization rates are the average of 2009-2011 evaluation results

Tables 9 and 10 describe the change in total savings claimed for the New Buildings program for the program years 2011-2013, for electric and gas savings, respectively;

Table 9: New Buildings Savings Change- Electric

Year	Savings Pre True Up (kWh)	Trued Up Savings (kWh)	Change in Savings
2011	39,706,555	38,959,857	-7.18%
2012	68,038,738	68,920,652	-3.64%
2013	86,892,815	86,759,958	-9.44%

Table 10: New Buildings Savings Change- Gas

Year	Savings Pre True Up (therms)	Trued Up Savings (therms)	Change in Savings
2011	577,573	552,027	-4.42%
2012	550,885	514,292	-6.64%
2013	493,083	460,795	-6.55%

Production Efficiency

Gas and electric savings for the Production Efficiency program for the 2013 program year were adjusted to reflect the freerider rate findings from the 2013 Fast Feedback survey of program participants. No new impact evaluation findings were introduced to savings for the Production Efficiency program in this year's true up.

Table 11 describes the evaluations which provide results that have been applied to reportable savings in each program year for the Existing Buildings program;

Table 11: Production Efficiency Evaluations

Program	Year	Source	Type of Adjustment	Notes
Production Efficiency	2002-2011	2002-2011 Impact Evaluations	Evaluation Factor	Closed in Previous True Ups
Production Efficiency	2012-2013	2009-2011 Impact Evaluations	Anticipated Evaluation Factor	Realization Rate: 2009-2011 savings wtd. avg.
		2013 Fast Feedback Freerider Rates		Freerider Rate: 2011-2013 savings wtd. avg.

Tables 12 and 13 describe the components of the evaluation factors that have been applied to reportable savings for 2012-2013, where shaded cells indicate anticipated evaluation results;

Table 12: Production Efficiency Evaluation Factor Components- Electric

		Market Effects				
Production Efficiency- Electric	Realization Rate	Freerider Rate	Participant spillover	Non-Part. Spillover	Evaluation Factor	Evaluation
2012	94%*	16%	1%	1%	81%	**Anticipated Results**
2013	94%*	20%	1%	1%	77%	**Anticipated Results**

*2012-2013 realization rates are the average of 2009-2011 evaluation results

Table 13: Production Efficiency Evaluation Factor Components- Gas

		Market Effects				
Production Efficiency- Gas	Realization Rate	Freerider Rate	Participant spillover	Non-Part. Spillover	Evaluation Factor	Evaluation
2012	97%*	26%	1%	1%	74%	**Anticipated Results**
2013	97%*	23%	1%	1%	77%	**Anticipated Results**

*2012-2013 realization rates are the average of 2009-2011 evaluation results

Tables 14 and 15 describe the change in total savings claimed for the New Buildings program for the 2013 program year, for electric and gas savings, respectively;

Table 14: Production Efficiency Savings Change- Electric

Year	Savings Pre True Up (kWh)	Trued Up Savings (kWh)	Change in Savings
2013	147,443,389	145,781,617	-1.13%

Table 15: Production Efficiency Savings Change- Gas

Year	Savings Pre True Up (therms)	Trued Up Savings (therms)	Change in Savings
2013	1,049,445	1,014,179	-3.36%

Existing Homes

The 2014 True Up adjusted savings for the Existing Homes program for the years 2010-2013. A large increase in gas furnace market transformation savings for 2012 and 2013 was introduced in this year's true up as a result of recently obtained market information that indicated a larger Oregon gas furnace market compared to what was assumed initially[1]. Savings from Opower personal energy reports for 2011, 2012 and 2013 were adjusted downward by a total of roughly 3 million kwh and 172 thousand therms to reflect ongoing improvements and fine tuning of the regression model OPower uses to estimate energy savings and the method used to remove savings attributable to other Energy Trust programs.

Savings for 'build-your-own' Energy Saver Kit (ESK) measures were adjusted to reflect recent installation rate findings from the 2013 Existing Homes process evaluation[2]. Savings for bath aerators and lighting measures in ESKs increased as a result of the updated installation rates, but savings for kitchen aerators and showerheads decreased since the updated rates were lower than what was assumed initially for those measures.

Gas savings claimed for gas furnace market transformation in 2013 was increased substantially in this year's True Up as a result of updated furnace market data that was obtained in 2014 which showed a much larger market volume than was previously anticipated, with a higher proportion of high-efficient gas furnaces being sold than expected. The adjustment to savings for gas furnaces accounted for a 529,069 therm increase in savings of across 2012 and 2013.

Lastly, 2013 freerider rates have been applied to measures that receive a freerider rate deduction. The measures initially received a freerider rate deduction based on the savings weighted average of freerider rates from 2010-2012. Savings decreased by 98,000 kWh and 27,000 therms as a result of the freerider rate update for 2013.

Tables 16 and 17 describe the change in total savings claimed for the Existing Homes program for the program years 2010-2013, for electric and gas savings, respectively;

[1] http://energytrust.org/library/reports/HVAC_Market_Update_140527.pdf
[2] http://energytrust.org/library/reports/EH_Process_Eval_0414.pdf

Table 16: Existing Homes Savings Change- Electric

Year	Savings Pre True Up (kWh)	Trued Up Savings (kWh)	Change in Savings
2010	30,767,694	30,767,694	0.00%
2011	44,635,803	43,438,057	-2.68%
2012	64,273,547	62,878,925	-2.17%
2013	36,115,329	36,167,555	0.14%

Table 17: Existing Homes Savings Change- Gas

Year	Savings Pre True Up (therms)	Trued Up Savings (therms)	Change in Savings
2010	1,102,848	1,104,207	0.12%
2011	1,202,031	1,124,756	-6.43%
2012	1,671,315	1,879,654	12.47%
2013	1,057,255	1,219,302	15.33%

New Homes and Products

The 2014 True Up adjusted savings for Air Sealing measures claimed in the New Homes and Products program for the 2012 program year due to an incorrect measure configuration.

Tables 18 and 19 describe the change in total savings claimed for the New Homes and Products program for the program years 2012-2013, for electric and gas savings, respectively;

Table 18: New Homes and Products Savings Change- Electric

Year	Savings Pre True Up (kWh)	Trued Up Savings (kWh)	Change in Savings
2012	45,660,439	45,660,439	0.00%
2013	60,943,588	59,438,941	-2.47%

Table 19: New Homes and Products Savings Change- Gas

Year	Savings Pre True Up (therms)	Trued Up Savings (therms)	Change in Savings
2012	784,764	785,825	0.14%
2013	1,022,265	1,022,265	0.00%

Northwest Energy Efficiency Alliance

The 2014 True Up adjusted savings for claimed for the Northwest Energy Efficiency Alliance (NEEA) in the years 2012 and 2013, as a result of updated regional savings information that was released in conjunction with NEEA's 2013 annual report. Electric savings acquired by NEEA on behalf of Energy Trust of Oregon is reported and adjusted at a sector level.

Table 20 describes the change in total savings claimed for NEEA electric market transformation savings over the program years 2012-2013, by program sector;

Table 20: NEEA Savings Change

Year	Sector	Savings Pre True Up (kWh)	Trued Up Savings (kWh)	Change in Savings
2012	Commercial	18,144,988	23,337,955	28.62%
2012	Industrial	4,207,264	4,207,264	0.00%
2012	Residential	39,425,016	39,714,947	0.74%
2013	Commercial	12,692,230	20,332,939	60.20%
2013	Industrial	1,916,928	6,701,620	249.60%
2013	Residential	42,764,905	36,799,799	-13.95%

Results Summary, Impacts by Sector

The following tables summarize the change in reportable electric and gas savings as a result of the 2014 True Up. In tables below, an average megawatt (aMW) means that loads are reduced by an average of one megawatt or 8760 MWh during each year of a measure's estimated useful life. Where units are listed as *MM therms*, this reflects the annual therm savings achieved in each year of a measure's useful life, in millions of therms.

Tables 21 and 22 below describe the change to total reportable savings claimed for Energy Trust of Oregon, by sector, for the program years 2002-2013;

Table 21: Electric Savings Impact 2002-2013

Sector	Pre True Up Savings (MM therms)	Trued Up Savings (MM therms)	Change (MM therms)	Percent Change
Commercial	144.77	143.35	-1.42	-0.98%
Industrial	131.49	131.85	0.36	0.28%
Residential	138.34	137.23	-1.11	-0.80%
Total	414.6	412.4	-2.16	-0.52%

Table 22: Gas Savings Impact, 2003-2013

Sector	Pre True Up Savings (MM therms)	Trued Up Savings (MM therms)	Change (MM therms)	Percent Change
Commercial	14.03	14.19	0.17	1.19%
Industrial	3.73	3.70	-0.04	-0.95%
Residential	15.29	15.59	0.30	1.93%
Total	33.05	33.48	0.43	1.29%

Results Summary by Utility

The following tables show the final, reportable annual savings results from the 2014 True Up for each Oregon utility provider within Energy Trust service territory;

Table 23: Portland General Electric Savings (aMW), 2002-2013

Sector	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total
Commercial	3.95	4.03	4.24	5.18	3.92	3.78	5.57	7.11	10.47	10.98	14.35	13.09	86.67
Industrial	1.81	0.89	1.17	14.22	2.85	3.75	2.86	4.49	8.77	8.92	10.16	12.71	72.61
Residential	3.61	3.84	5.32	5.01	6.94	8.37	8.22	5.71	7.31	8.51	10.48	9.27	82.61
Total	9.37	8.76	10.74	24.42	13.71	15.90	16.66	17.31	26.54	28.41	34.99	35.07	241.89

Table 24: Pacific Power Savings (aMW), 2002-2013

Sector	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total
Commercial	1.94	1.73	3.14	2.41	1.69	2.05	2.74	3.10	8.12	7.95	10.52	11.30	56.68
Industrial	1.62	2.68	8.66	5.96	4.98	4.00	3.83	3.51	7.06	6.55	5.68	4.69	59.24
Residential	2.11	2.64	3.61	3.36	4.60	6.31	5.51	3.57	5.29	5.33	6.45	5.84	54.63
Total	5.67	7.05	15.41	11.73	11.27	12.36	12.08	10.18	20.47	19.84	22.65	21.83	170.54

Table 25: Northwest Natural Savings (MM therms), 2003-2013

Sector	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total
Commercial	0.002	0.08	0.44	1.29	1.15	1.10	1.10	2.01	1.89	2.32	1.89	13.27
Industrial	0.00	0.00	0.00	0.00	0.00	0.01	0.19	0.54	1.03	0.62	0.96	3.35
Residential	0.61	0.92	0.95	0.95	1.13	1.34	1.20	1.39	1.58	2.52	2.12	14.71
Total	0.61	1.00	1.39	2.24	2.28	2.45	2.49	3.94	4.49	5.46	4.97	31.33

Table 25: Cascade Natural Gas Savings (MM therms), 2005-2013

Sector	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total
Commercial	0.00	0.05	0.02	0.05	0.07	0.20	0.22	0.16	0.16	0.93
Industrial	0.00	0.00	0.00	0.00	0.05	0.05	0.09	0.10	0.06	0.34
Residential	0.00	0.02	0.13	0.12	0.13	0.07	0.11	0.15	0.12	0.85
Total	0.00	0.08	0.15	0.17	0.25	0.32	0.42	0.40	0.34	2.12

Briefing Paper
Market Indicators Report

February 11, 2015

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 changing economic conditions, thereby providing Energy Trust program managers with the ability to respond to changes accordingly.

As 2014 closes, and year-end statistics role in, we continue to assess the progress of the economic recovery after the great recession. 2014 marks roughly the fifth year since the peak of the recession, and the story continues to be positive for both Oregon and the United States as a whole. In 2014, unemployment levels in the US hit their lowest numbers since 2008, dropping from 6.6% at the end of 2013 to 5.6% at the end of 2014. Oregon has been roughly following the trends of the nation, albeit at a reduced pace, but nonetheless its unemployment numbers have decreased from 7.1% at the end of 2013 to 6.7% now and appear poised to continue improving. Construction permits for single-family homes roughly matched 2013 numbers in Oregon, but continue to grow stronger in the multifamily sector. Both the Oregon Employment Department and University of Oregon Economic Forum are projecting continued growth and recovery through 2014.

The Federal Open Market Committee (FOMC) press release issued at the end of January states:

> …economic activity has been expanding at a solid pace. Labor market conditions have improved further, with strong job gains and a lower unemployment rate. On balance, a range of labor market indicators suggests that underutilization of labor resources continues to diminish. Household spending is rising moderately; recent declines in energy prices have boosted household purchasing power. Business fixed investment is advancing, while the recovery in the housing sector remains slow. Inflation has declined further below the Committee's longer-run objective, largely reflecting declines in energy prices.[1] –FOMC, 1/28/2015

Federal Reserve Chair Janet Yellen spoke in November at the International Symposium of the Banque de France in Paris. In her closing remarks, she stated:

> I continue to anticipate that the headwinds associated with the financial crisis will wane. As employment, economic activity, and inflation rates return to normal, monetary policy will eventually need to normalize too, although the speed and timing of this normalization will likely differ across countries based on differences in the pace of recovery in domestic conditions. This

[1] http://www.federalreserve.gov/newsevents/press/monetary/20150128a.htm

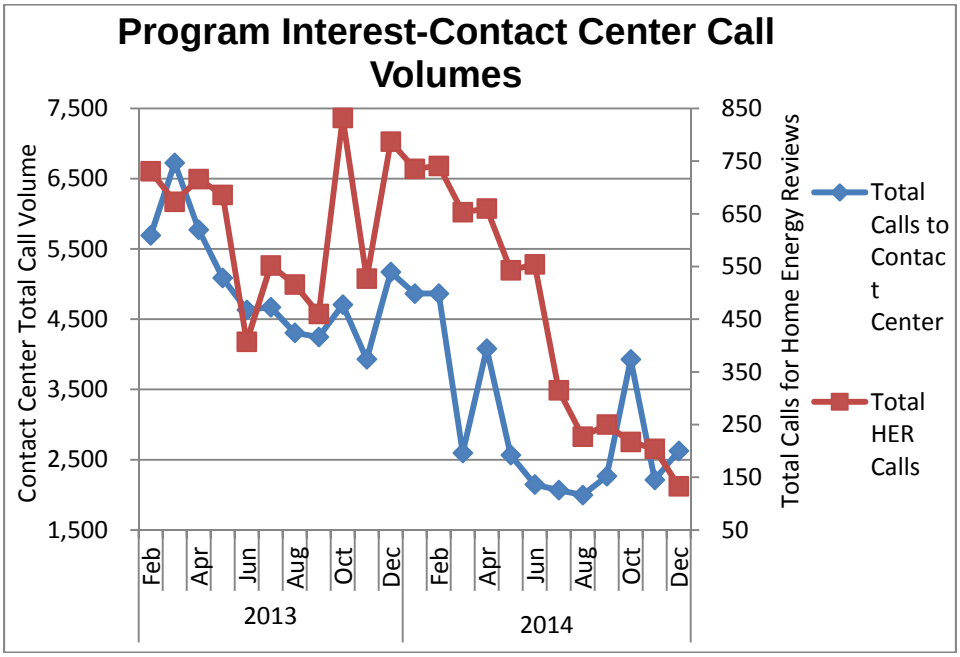
> normalization could lead to some heightened financial volatility. But as I have noted on other occasions, for our part, the Federal Reserve will strive to clearly and transparently communicate its monetary policy strategy in order to minimize the likelihood of surprises that could disrupt financial markets, both at home and around the world. More importantly, the normalization of monetary policy will be an important sign that economic conditions more generally are finally emerging from the shadow of the Great Recession.[2]
> – Janet Yellen, 11/7/2015

1.1 Energy Trust Programmatic Indicators

Activity in Energy Trust's Existing Homes program is presented here in Figure 1.1 as a general indicator of overall Energy Trust program awareness. 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 summer. The noticeable peaks and valleys are generally the result of marketing efforts, initiatives and offerings. There is, however, a noticeable downward trend in the overall total number of calls in 2014 compared to 2013. This is due to several reasons. In 2013 ClearResult provided call-center support to Clean Energy Works (CEW), accounting for almost 3,400 calls, before transferring the line to CEW in November, 2013. Additionally, reductions in calls are due to process improvements that have reduced customer follow-up calls and the continued introduction and use of online webforms and resources.

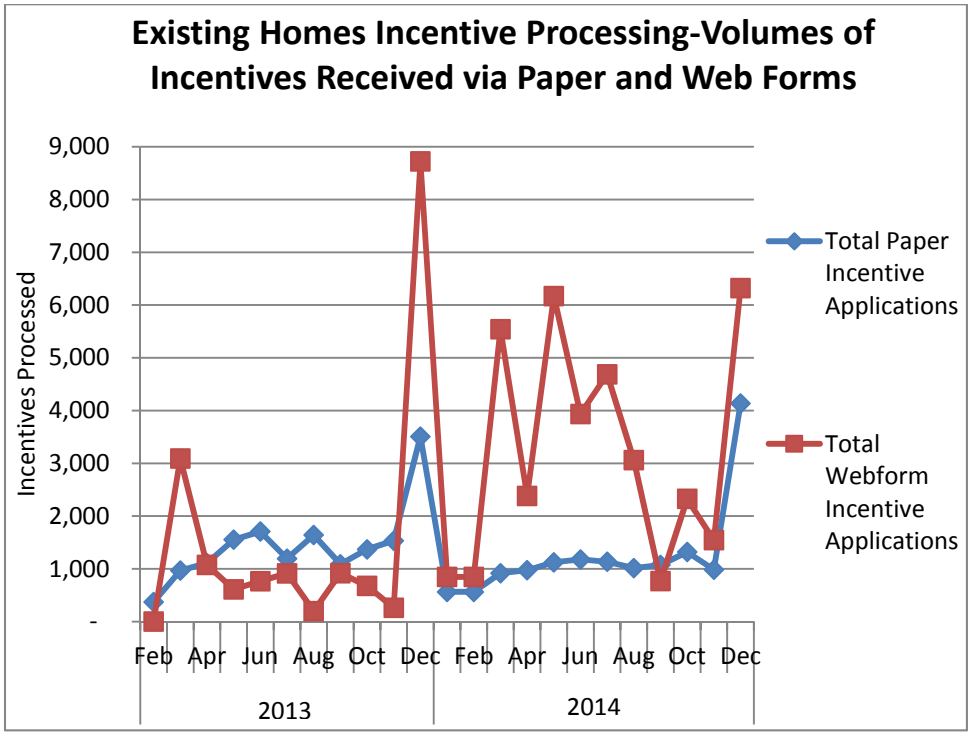
On January 1st, 2015 all language referencing Home Energy Reviews (HERs) was removed from Energy Trust's website, and they will no longer be performed beyond March. The number of HER calls decreased in the fall of 2014 compared to that time frame in 2013. This was a planned decline due to decreased marketing prior to the transition away from HERs.

Figure 1.1



[2] http://www.federalreserve.gov/newsevents/speech/yellen20141107a.htm

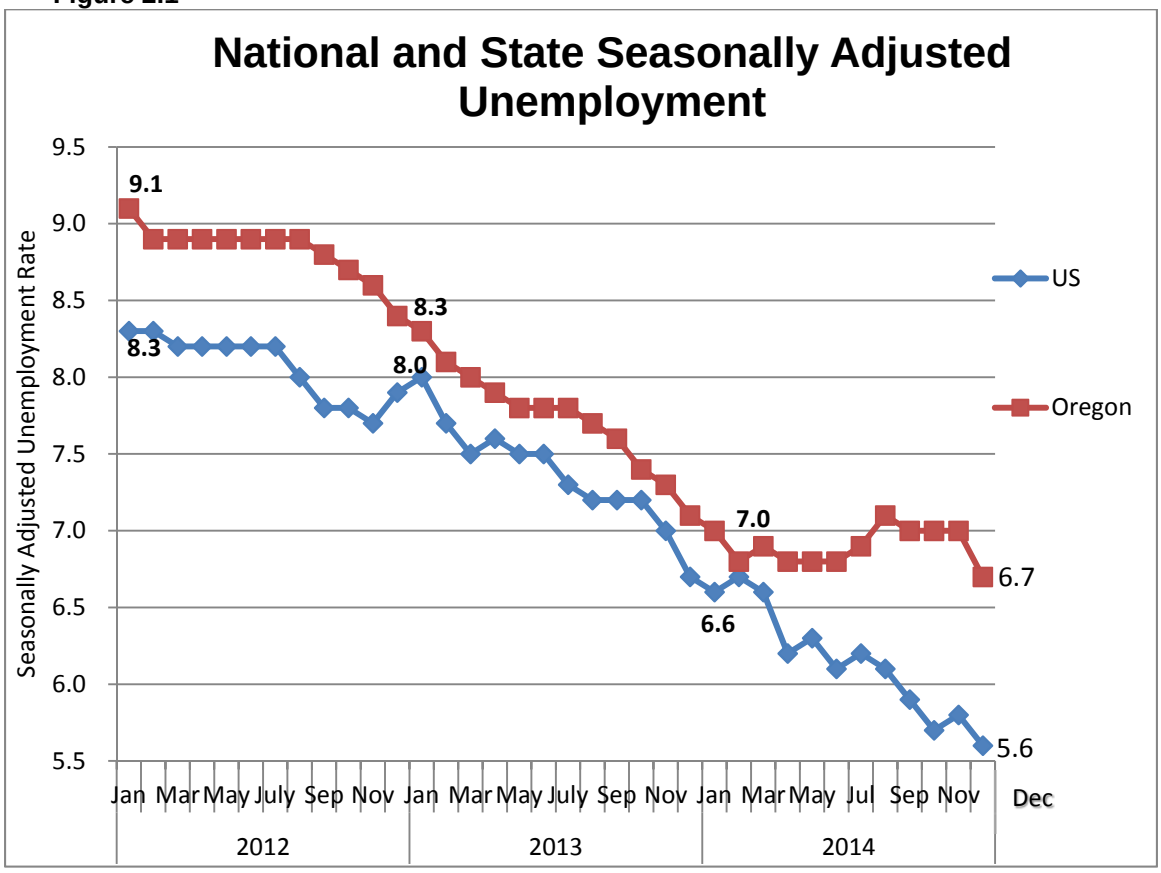
Figure 1.2



The tale of paper vs webform processed incentives has been rewritten over the last two years, as evidenced by Figure 1.2 above. While the number of paper form processed incentives has remained relatively consistent, with a slight decrease from 2013 to 2014, the number of webform processed incentives has greatly increased through the year. The large spikes in end of year activity can be attributed ESK pushes, as well as general end of the year increased project bookings. The spikes in web form applications observed in 2013 and 2014 are due primarily to PMC paid applications from the deployment of ESKs. In 2013, 52% of incentives were web processed, while in 2014 the % of web form-processed applications is at 72%.Overall, there was a combined increase in applications of nearly 20,000 from 2013 to 2014.

2.1 Macroeconomic Indicators

Figure 2.1



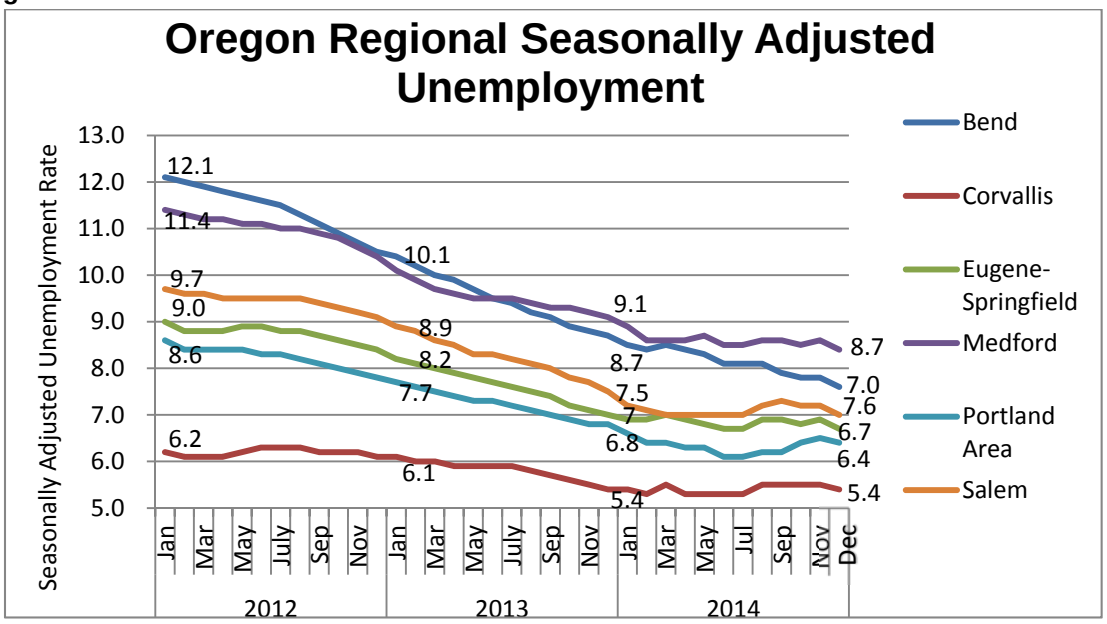
2014 proved to be another good year for Oregon in the post-recession economic recovery. It followed on the heels of an exceptional 2013, and while Oregon was unable to keep pace with either its 2013 rate of reduction in unemployment, nor keep pace with the US as a whole, it did stabilize and continued to increase jobs and reduce unemployment from 7.0% to 6.7% by the end of the year. In late January, 2014 the Oregonian stated, “The December figure is the lowest mark since August 2008, in the months leading up to the financial crisis. The recovery was not always smooth. But five years in, analysts say the state now has more jobs than before the crisis and is rapidly gaining more”.[3]

The US unemployment rate continued to plummet to 5.6% at the end of the year. This was driven by the best year for hiring in 15 years and supports expectations that the US economy will continue to strengthen this year[4]. Two lingering issues however, are high unemployment levels in parts of central and southern Oregon and low wage growth. Parts of Oregon still face unemployment rates twice the national average and across Oregon, the average wage in the private sector is only pennies more than this time last

[3] http://www.oregonlive.com/money/index.ssf/2015/01/oregon_unemployment_rate_falls_to_lowest_point_in_6-plus_years.html#incart_related_stories
[4] http://www.oregonlive.com/money/index.ssf/2015/01/us_unemployment_rate_falls_to_56_percent_as_2014_becomes_best_year_for_hiring_since_1999.html#incart_river

year. Josh Lehner, deputy economist at the Oregon Office of Economic Analysis states, "At some point, we do expect there to be stronger wage gains for the typical worker. That's kind of the last domino to fall".[5]

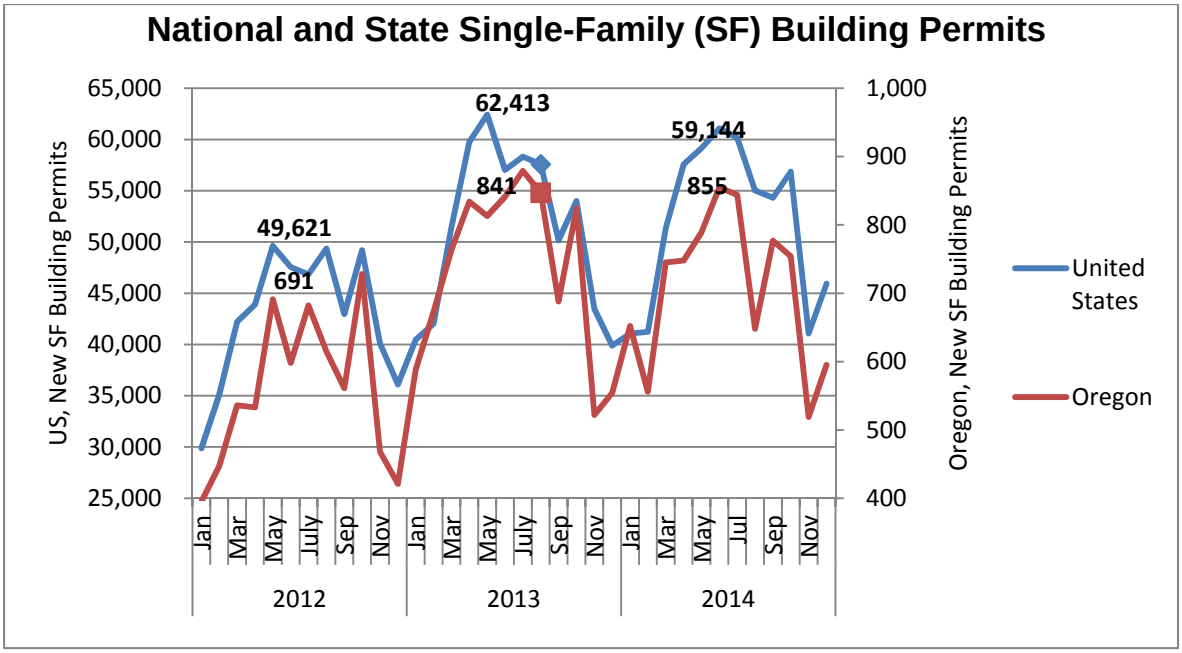
Figure 2.2



The Central and Southern (Bend/Medford) areas continue to have the highest unemployment rate in the state, as they historically have, but they have also seen continued drops in unemployment rates in 2014. Central Oregon closed out 2014 with mixed results. This past year Deschutes County posted its strongest employment gains since before the recession in 2006. This job growth spurred an expansion of the local labor force after years of declines. It was also a good year in Jefferson County, which continued to see sustained employment gains. However, job growth in Crook County vanished in 2014 with recent layoffs as employment levels are little changed from this time last year.[6] In the Medford area, payroll employment rose by 2,940 jobs for a growth rate of 3.7 percent.[7]

[5] http://www.oregonlive.com/money/index.ssf/2015/01/oregons_economic_recovery_accelerates_in_the_final_months_of_2014.html#incart_related_stories
[6] https://www.qualityinfo.org/documents/10182/73818/Employment+in+Central+Oregon?version=1.4
[7] https://www.qualityinfo.org/documents/10182/73818/Employment+in+Jackson+County?version=1.6.

Figure 2.3

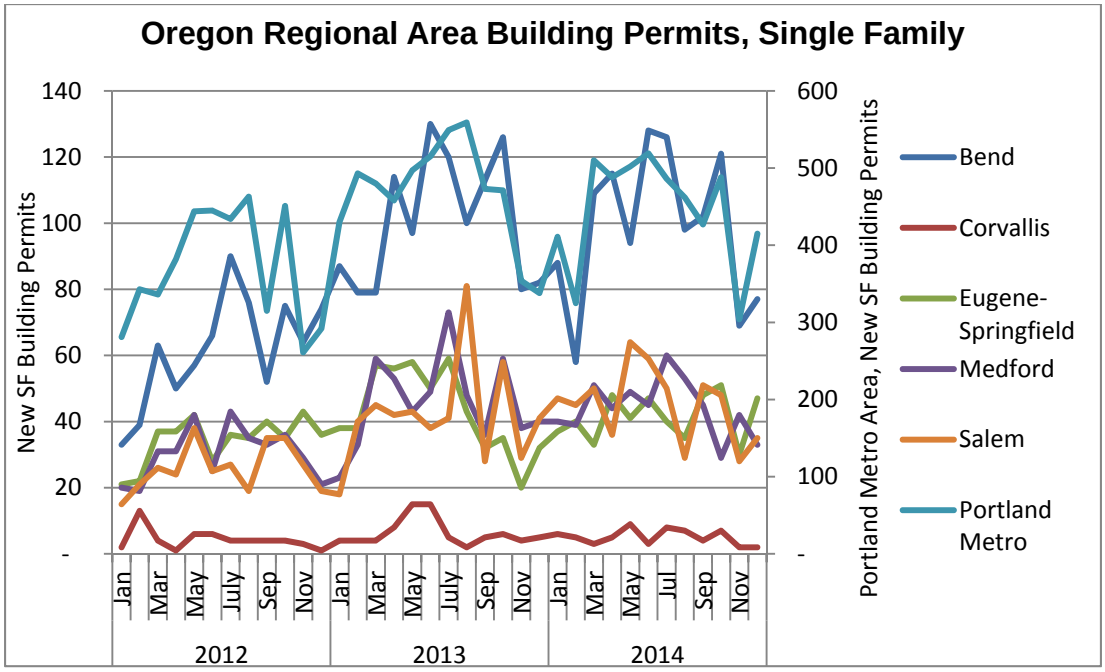


While the construction industry was hit hard during the recession, and accounted for a considerable number of the unemployed and underemployed population, 2013 showed big gains and improvement over 2012 as Oregon continued to closely follow US trends, while outstripping its growth rate in some months. 2014 was essentially the same as 2013, following the US pretty closely and reflecting the unemployment trends, holding steady from last year. The total number of permits in 2014 was 8,482, a slight decline from 2013's 8,826.

In late October, Damon Runberg, Economist with the State of Oregon wrote, "Today, the construction industry remains a shell of its former self during those boom years. On a seasonally adjusted basis, construction employment peaked in August 2007 at 105,400 jobs. Only about 22 percent of the jobs lost have been added back as there remains 30,000 fewer construction jobs today compared with the peak employment month. In the long run we expect to see continued growth in construction, however based on our 2012 to 2022 projections the industry is expected to fall short of its pre-recession peak level by nearly 14,000 jobs"[8]. He follows this thought up with an explanation during a conversation with the Oregonian, where he states, "Construction employment ramped up in a short period in response to a housing bubble…I would argue that instead of calling today a new normal, we are getting back on track with the historic trend. In the long run, the boom and bust were an anomaly. As the industry works towards a new equilibrium I think employment levels from the early 2000s are more likely than those elevated levels seen during the boom years".[9]

[8] https://www.qualityinfo.org/-/construction-rebuilding-itself-behind-recovering-home-prices
[9] http://www.oregonlive.com/front-porch/index.ssf/2014/10/employment_in_oregons_construc.html

Figure 2.4



Similar to the statewide vs. National permit numbers shown in Figure 2.3, Figure 2.4 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. Figure 2.5 below shows the steady upward trend of construction spending and home sales occurring in the US.

Figure 2.5

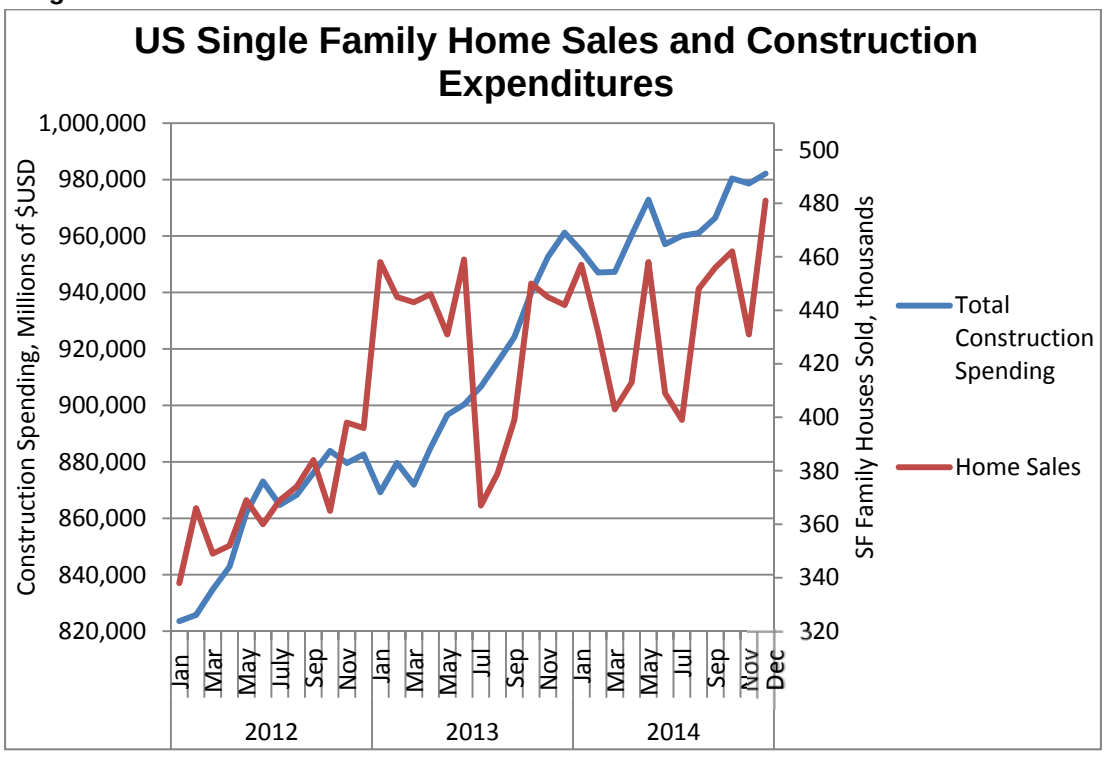


Figure 2.6

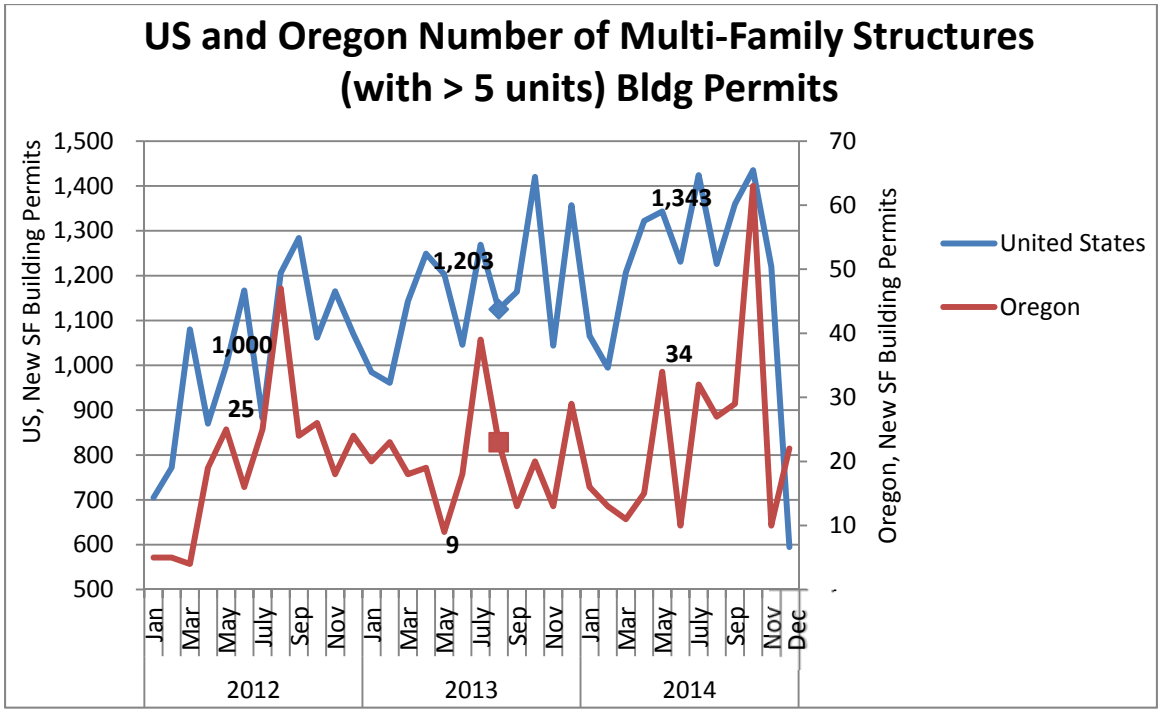
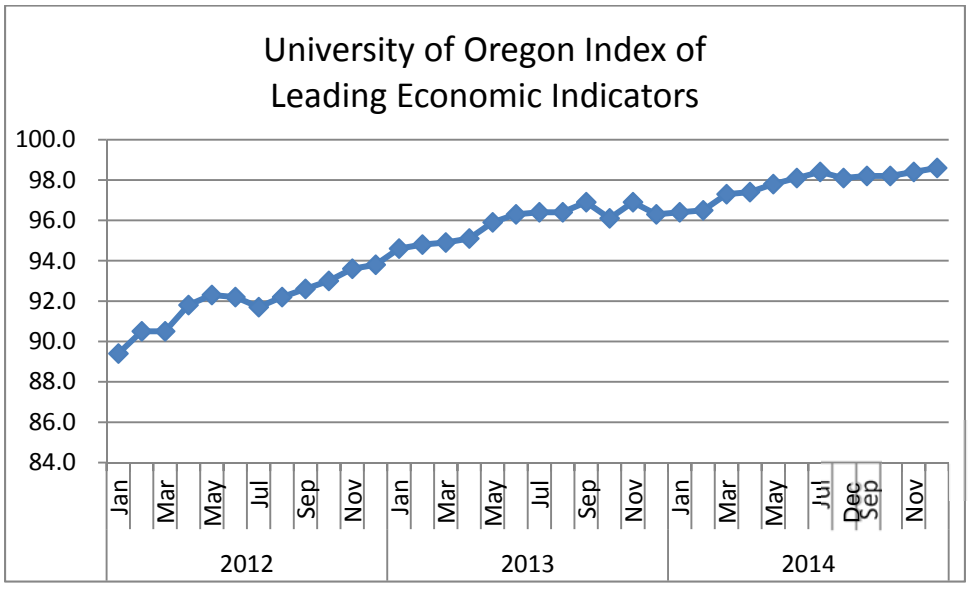


Figure 2.6 delves into the multi-family housing sector. The above graph depicts the number of permits issued in the US and Oregon for structures with 5 units or more. This shows steadily increasing numbers of buildings being permitted and reflects the general health of this construction sector. In total, the numbers have increased from 238 in 2012 to 244 in 2013 and 282 permits in 2014. As economist Damon Runberg notes, "you could probably go one step further and call the construction of residential buildings one of the leading drivers of construction employment". [10]

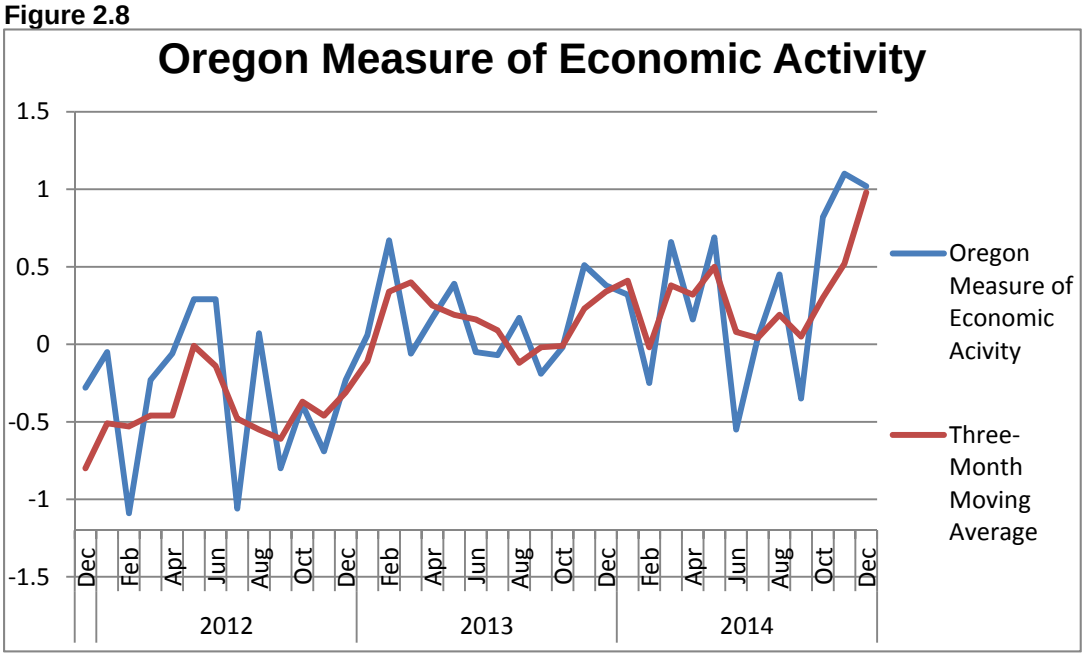
Figure 2.7



[10] http://www.oregonlive.com/front-porch/index.ssf/2014/10/employment_in_oregons_construc.html

The University Of Oregon Index Of Economic Indicators rose 0.2 percent in May and increased in fourteen of the past twenty-four months from the starting point of 93.8 in January of 2013 to 98.6 in December of 2014. Initial unemployment claims moved sideways at low levels consistent with continued job growth. Residential building permits (smoothed), the Oregon weight distance tax (a measure of trucking activity), average hours worked in manufacturing, and core manufacturing orders were all largely unchanged. Consumer confidence rose while frenzied buying of U.S. treasuries drove the interest rate spread lower.[11]

Figure 2.8

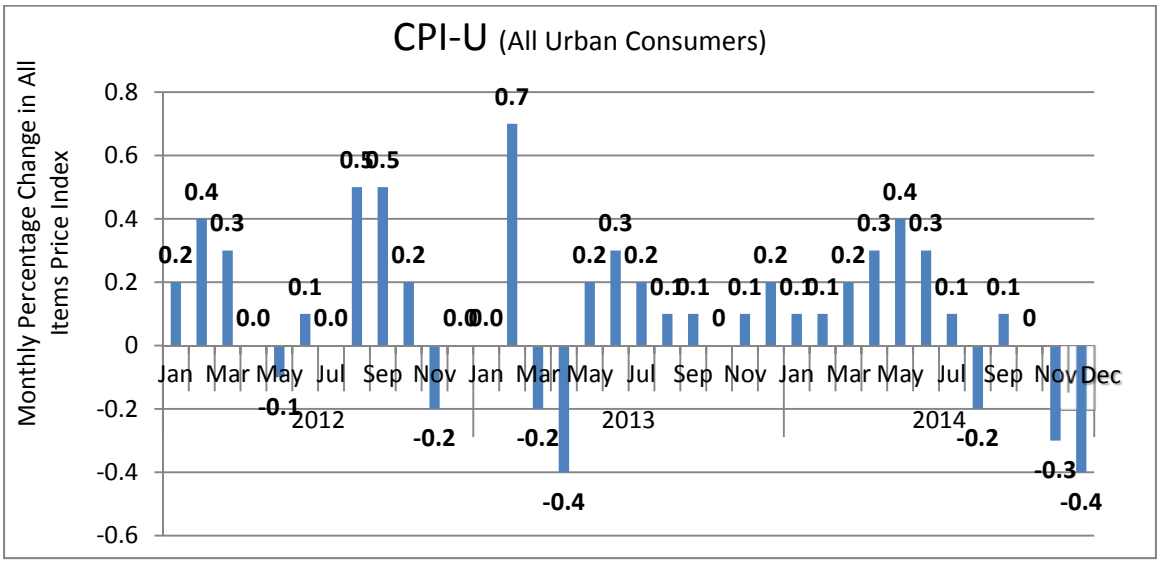


The Oregon Measure of Economic Activity rose in December, and generally held the gains of the previous month to stay above 1.0. The three-month moving average, which smooths month-to-month volatility in the measure, is 0.98 where 'zero' for this measure indicates the average growth rate over the 1990-present period. Manufacturing data remains generally positive, while residential building permits—still the weak spot in this recovery—made a negative contribution to the measures. Initial unemployment claims improved and increased consumer confidence supported the household sector, the latter likely driven higher by the decline in gas prices.

The two indicators suggest ongoing growth in Oregon at an above average pace of activity. The ongoing U.S. economic expansion provides sufficient support to expect that Oregon's economy will continue to grow for the foreseeable future.[12]

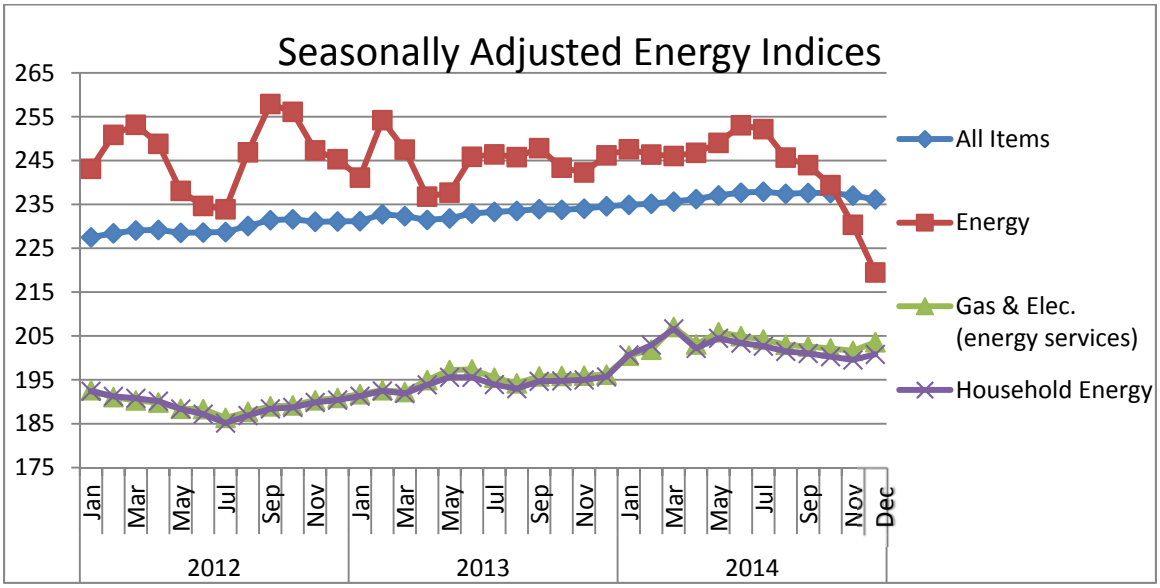
[11] http://econforum.uoregon.edu/2015/02/05/december-2014-state-of-oregon-economic-indicators/
[12] http://econforum.uoregon.edu/2015/02/05/december-2014-state-of-oregon-economic-indicators/

Figure 2.9



The Consumer Price Index for All Urban Consumers (CPI-U) declined 0.4 percent in December on a seasonally adjusted basis. Over the last 12 months, the all items index increased 0.8 percent before seasonal adjustment. The gasoline index continued to fall sharply, declining 9.4 percent and leading to the decrease in the seasonally adjusted all items index. The fuel oil index also fell sharply, and the energy index posted its largest one-month decline since December 2008, although the indexes for natural gas and for electricity both increased. The food index, in contrast, rose 0.3 percent, its largest increase since September.

Figure 2.10



The energy index, which rose slightly in both 2012 and 2013, declined sharply in 2014, falling 10.6 percent, the largest decline since 2008. The gasoline index was the main cause of the decline, falling 21.0 percent, with most of the decrease over the last few months of the year. This followed a 1.0 percent decline in 2013. The fuel oil index

declined as well, falling 19.1 percent in 2014 after a 1.8 percent decline in 2013. In contrast, the energy services index accelerated in 2014, rising 3.7 percent after a 2.4 percent advance in 2013. The electricity index rose 3.1 percent in 2014, similar to its 3.2 percent advance in 2013. The index for natural gas, which fell slightly in 2013, rose 5.8 percent in 2014, ending a streak of five years of declines. Despite the decline in 2014, the energy index has risen at a 3.2 percent annual rate over the past 10 years.

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 January for the 20th consecutive month, and the overall economy grew for the 68th consecutive month. Of the 18 manufacturing industries, 14 are reporting growth in January. 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, "Customers are presenting many new opportunities." A 'Computer & Electronics Products' representative stated, "Sales have stayed very strong even with the dip in oil prices." A representative from the 'Wood Products' industry stated, "Chinese New Year, West Coast port dock slowdowns, coupled with railroad embargo are all creating logistical challenges and increased backlog of orders." This sentiment is repeated by a representative of the 'Paper Products' industry, who states, "West Coast port slowdown is getting serious. Mill has 40+ days of production at the ports and various warehouses".[13]

On this note of port slowdowns, while the author was writing this report, after weeks of conflict between ICTSI Oregon, a Phillippine-owned port management company, and the International Longshore and Warehouse Union, the Oregonian has just published an article announcing that Hanjin Shipping Co. has officially withdrawn from the Port of Portland. According to the Oregonian, Hanjin ships account for 78 percent of the business at Terminal 6, moving 1,600 containers per week. Those shipments moved most Oregon agricultural exports to Asia, and brought apparel for Northwest-based companies like Nike and Columbia Sportswear in and out of the country. According to the Port of Portland, that business generated $83 million annually, supported about 657 jobs, and paid out $33 million in wages per year.[14]

3.1 Utility Roundup and Rate Cases

Natural Gas - Northwest Natural Gas Co.

Oregon
On October 28, 2014, the Oregon Public Utility Commission (OPUC) approved NW Natural's rate request for a 1.7 percent residential increase. This means the average

[13] http://www.ism.ws/ISMReport/MfgROB.cfm?navItemNumber=12942
[14] http://www.oregonlive.com/business/index.ssf/2015/02/hanjin_officially_leaves_port.html#incart_most-commented_mapes_article

homeowner now pays about $1.06 more per month. It also approved a 4.2 percent increase for businesses, which results in $9.54 more per month for the average commercial customer. These rates are effective as of November 1, 2014.

Washington

At the same time, the Washington Utilities and Transportation Commission (WUTC) approved a 6 percent residential rate increase, which equates to $3.65 more per month for the average homeowner. It also approved a 6.4 percent rate increase for businesses, which results in $16.14 more per month for the average commercial customer. These rates are effective as of November 1, 2014.

The reason for the different increases in the two states is because of rate reductions based on previous agreements with Oregon regulators, which offset the gas cost increases collected in Oregon. These are not applicable in Washington.[15]

Natural Gas – Cascade Natural Gas Co.

Cascade Natural Gas Corporation announced on September 15, 2014 that it filed a Purchased Gas Adjustment (PGA) with the Oregon Public Utility Commission to reflect the increase in the cost of natural gas for a 12-month period. A PGA is a mechanism designed to pass the actual costs of gas supplies to customers. It is very common for the company to either under or over collect through the year as the natural gas market changes throughout the year. The actual purchase price usually differs from the projected price. Also, the projected price is based on average weather conditions. The overall request means an approximately 1 percent increase for Cascade customers in Oregon. The increase is stated to be due to the very cold winter last year, which drew down reserves to their lowest levels since 2003. The need to put gas back into storage created a slight increase in the demand.[16]

Natural gas prices

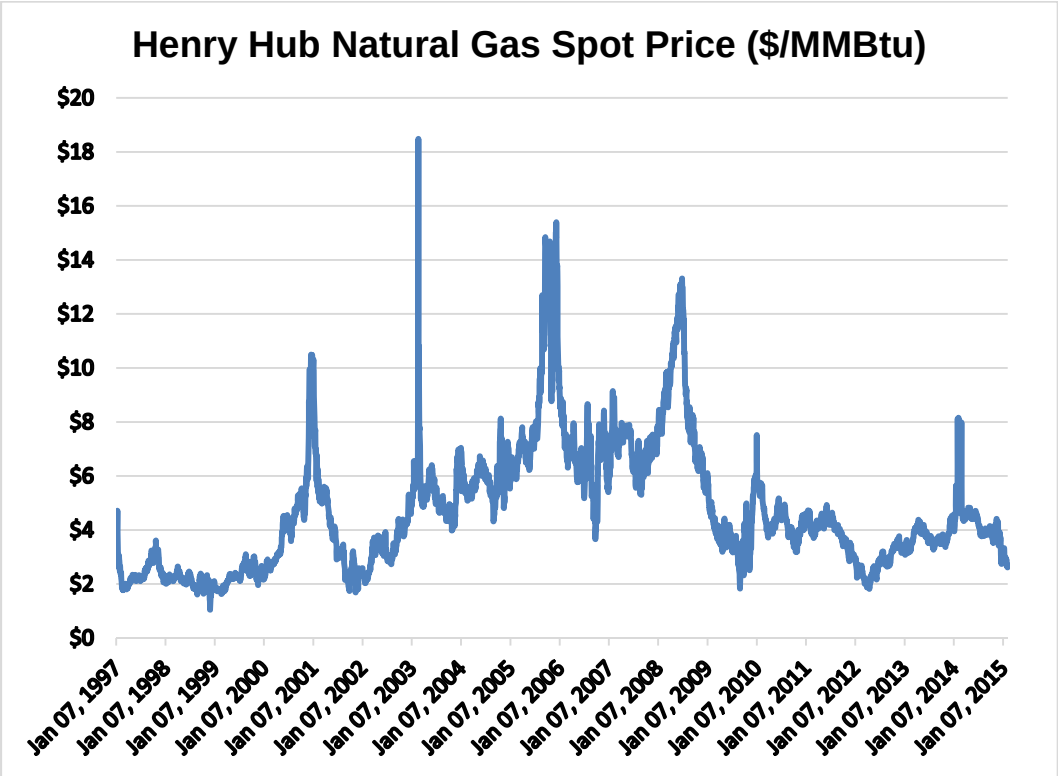
Figure 3.1 below is the complete daily historic price of Henry Hub Natural Gas Spot Price ($/MMBtu), from Jan, 7 1997 to February 9th, 2015 and exhibits the volatility of this fuel over the years and seasons. [17]

[15] https://www.nwnatural.com/AboutNWNatural/RatesAndRegulations/GasPriceInformation

[16] http://www.cngc.com/utility-navigation/news

[17] http://www.eia.gov/dnav/ng/hist/rngwhhdd.htm

Figure 3.1

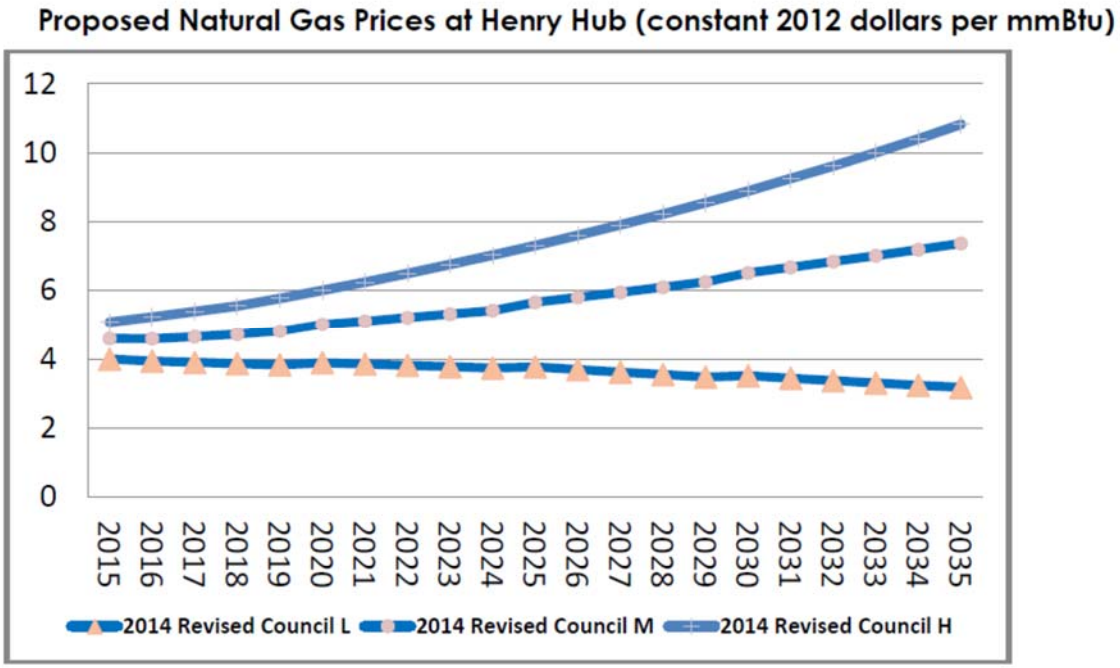


The Northwest Power and Conservation Council states "the natural gas price forecast is the most important fuel forecast for the plan", lower gas prices will mean lower electricity prices and vice versa. "Henry Hub natural gas prices fell to their lowest levels--$2 dollars per mmBtu--in 2012, the result of a milder winter and increasing supplies from shale gas. The low prices were temporary, however, as the price of natural gas in 2013 and first two quarters of 2014 have been in the $3.5-$4.5 dollars per mmBtu range, with a spike of $20-$30 dollars per mmBtu because of the extreme winter experienced in much of the country that year. Recently, the forward market for natural gas prices has tightened, due in part to higher demand from utilities, industrial customers, and the need to refill the storage inventory exhausted during the winter. Analysts are now expecting prices in the $3-$5 per mmBTU range for 2014-2015 at Henry Hub in constant 2012 dollars".[18] Since the Power Council's publication was issued in July, gas prices have continued to slide lower, hovering around the 'low case' of analysts forecast of $3.00/MMBtu during what has been a milder than average winter. At the time of this report, the Henry Hub price is $2.65/MMBtu.

Figure 3.2 is taken from the Power Council's 'Revised Fuel Price Forecasts for the Seventh Power Plan', published in July, 2014. It forecasts a 'low', 'mid' and 'high' case for expected natural gas prices over the next 20 years. [19]

[18] http://www.nwcouncil.org/media/7113626/Council-FuelPriceForecast-2014.pdf
[19] http://www.nwcouncil.org/media/7113626/Council-FuelPriceForecast-2014.pdf

Figure 3.2



Electricity - 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 asked for an overall rate increase of 4.6 percent or $81.5 million annually. The request was 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. During the 10-month public review process, OPUC staff and stakeholders were able to reach agreement and a settlement was determined in September, resulting in an approval of a 1% rate increase.[20] The power plant investments, coupled with changes in PGE's base business costs for 2015, would have resulted in a 2.6 percent rate increase. But they were offset by lower forecast power costs, credits from Bonneville Power Administration, a reduction in the company's allowed return on equity and lower borrowing costs. Customers also benefited from a legal settlement related to the cost of storing spent fuel at the Trojan nuclear reactor. PGE said a typical residential customer who uses 840 kilowatt hours per month will see a monthly bill increase averaging 78 cents, from $98.71 to $99.49.[21]

[20] https://www.portlandgeneral.com/our_company/news_issues/news_releases/12_05_2014_OPUC_approves_pge_price.aspx

[21] http://www.oregonlive.com/business/index.ssf/2014/12/pge_rate_increase_trimmed_to_1.html#incart_related_stories

Pacific Power

There were no rate cases for Pacific Power this year. 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.[22]

Around the State

Portland and Surrounding Areas

Vacasa, a **Portland**-based online vacation property rental company, plans to add more than 6,000 workers next year, including about 500 in Portland. *Portland Business Journal 12/16/2014*

Construction will begin in **Hillsboro** in February on a 110-room **Holiday Inn** and an 82-room **Candlewood Suites**. *Portland Business Journal 12/12/2014*

Portland Development Commission is hiring for 22 positions including building inspectors, mechanical engineers, and planners. *Daily Journal of Commerce 12/03/2014*

Nike will build two office buildings and parking garages at its World Headquarters campus near **Beaverton**, doubling the scope of its expansion project originally envisioned two years ago. *The Oregonian 11/19/2014*

Hilton Worldwide will begin work on a high-end hotel under its **Canopy** brand in **Portland'**s Pearl District next year. *Portland Business Journal 11/03/2014*

SolarWorld Industries America Inc. will add 200 workers at its **Hillsboro** factory. *The Oregonian 10/30/2014*

Netflix will close its DVD customer service center in **Hillsboro** next year, laying off 188 people. *The Oregonian 10/22/2014*

Oregon Iron Works won a contract for steel fabrication work on a $1.9 billion transit hub in San Francisco. It will hire 40 to 50 people to work at its **Vancouver** and **Clackamas** plants for the two-year project. *The Columbian 10/21/2014*

[22] http://apps.puc.state.or.us/orders/2013ords/13-474.pdf

Oregon Coast

Central Lincoln People's Utility District will close its **Depoe Bay** office. *News-Times 01/08/2015*

Oregon Coast Bank will open a branch in **Tillamook** next year. It will employ four to five people. *Headlight-Herald 12/17/2014*

The **Coquille Economic Development Corporation** and **Knutson Towboat Company** will begin using the Ko-Kwel Wharf terminal facility in North Bend to export logs to Pacific Rim customers. *KCBY 10/30/2014*

The Heat Pump Store opened in **Tillamook**. *Headlight-Herald 10/20/2014*

The Port of Toledo secured a $4.7 million **Connect Oregon** grant to expand its boatyard, which will add about 50 jobs. *News-Times 08/27/2014*

The Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians will build the **Three Rivers Casino Coos Bay** on reservation land in **Coos Bay**. It is expected to open in May and will employ 50 to 60 people. *The World 08/07/2014*

Willamette Valley

A four-story, 120-room **Hilton** hotel in will be built in downtown **Eugene**. *The Register-Guard 01/17/2015*

Swanson Group Manufacturing will rebuild its **Springfield** plywood and veneer mill that was destroyed by fire in July. The new mill will focus on specialty wood products and employ 180 to 190 people. *The Register-Guard 01/16/2015*

Two new senior housing projects will open in **Eugene**. The **Waterford Grand** and the **Crescent Park Senior Living** complex will add nearly 270 apartments to the city's senior housing supply. *The Register-Guard 09/21/2014*

Marathon Coach, an RV manufacturer in **Coburg**, will hire 50 people including mechanics, electricians, and cabinetmakers. *The Register-Guard 01/09/2015*

FCR, a Eugene-based call center, will open in **Independence** next year. It will employ 20 to 50 people. *Polk County Itemizer-Observer 12/23/2014*

Construction of the **Oregon State Hospital** campus in **Junction City** is expected to be completed by the end the month. More than 180 positions have been filled and 150 more need to be filled by March. *The Register-Guard 12/10/2014*

Century Management will build two apartment complexes in **Eugene** that will add more than 500 apartment and townhouse units to the city's rental supply by early 2016. *The Register-Guard 10/15/2014*

Eastern Oregon

The **Port of Morrow** began work on a $14 million cold storage rail transload facility. It will have 75,000 square feet of frozen space and 25,000 square feet of refrigerated space. *Northeast Oregon Now 01/07/2015*

Fry Foods will open an onion ring manufacturing plant near **Ontario** this summer. It will employ 300 to 350 people when fully operational. *Argus Observer 01/07/2015*

Yellowhawk Tribal Health Center in **Mission** will break ground on a new 55,000-square-foot health center early next year. Completion is set for the first half of 2017. *East Oregonian 12/16/2014*

Central Oregon/Columbia Gorge

High Desert Information Technologies LLC opened in **Klamath Falls**. It offers web design, database administration, installation, security, and repair services. *Herald and News 01/18/2015*

Deschutes Brewery is expanding its warehouse in **Bend**. *The Bulletin 12/31/2014*

McMenamins Old St. Francis School in **Bend** plans to add two new hotel lodges. *The Bulletin 12/06/2014*

Woodgrain Millwork in **Prineville** will lay off more than 200 workers after a roof collapsed at the facility and ruined machinery. *The Bulletin 11/26/2014*

LED Light Source, a lighting store, will open in **Klamath Falls**. *Herald and News 09/14/2014*

Southern Oregon

Darigold, the last dairy processing plant in **Medford**, will close and lay off 29 workers. *Mail Tribune 01/27/2015*

Umpqua Community College is raising funds to build a $17 million Health, Nursing and Science Center at its **Roseburg** campus. Construction is expected to begin this spring and be completed in time for fall 2016 classes. *The News-Review 01/27/2015*

Polaris Industries Inc. acquired electric motorcycle maker **Brammo Inc.** It will recapitalize Brammo, enabling the **Talent**-based company to focus exclusively on the

design, development, and integration of electric vehicle powertrains. *Mail Tribune 01/15/2015*

Construction began on a new site for **Young's Garden Center** in **Roseburg** that will feature a 12,000 square foot greenhouse. It is expected to be completed this spring. *The News-Review 12/21/2014*

Jackson County Housing Authority will build The Concord, a $12.5 million, 50-unit low-income residential building, in downtown **Medford**. *Mail Tribune 11/13/2014*

WinCo Foods will open a store in **Grants Pass** that will employ 150 to 180 people. *Grants Pass Daily Courier 10/26/2014*

In-N-Out, a fast-food burger joint, plans to open its first Oregon outlet in **Medford**. *Statesman Journal 10/08/2014*

Tab 9

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 semi-conductor 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

AAMA	American Architectural Manufacturers Association	Trade group for window, door manufacturers
A/C	Air Conditioning	
ACEEE	American Council for an Energy-Efficient Economy	Environmental Advocacy, Researcher
AEE	Association of Energy Engineers	
AEO	Annual Energy Outlook	
AESP	Association of Energy Services Professionals	Energy services and energy efficiency trade org
A+E	Architecture + Energy	Outreach program for architects
AFUE	Annual Fuel Utilization Efficiency	The measure of seasonal or annual efficiency of a furnace or boiler
AgriMet	Agricultural Meteorology	Program for soil moisture data
AIA	American Institute of Architects	Trade organization
AIC	Association of Idaho Cities	Local government organization
aMW	Average Megawatt	A way to equally distribute annual energy over all the hours in one year; there are 8,760 hours in a year
AOI	Associated Oregon Industries	
APEM	Association of Professional Energy Managers	
ARI	Air-Conditioning and Refrigeration Institute	AC trade association
ASE	Alliance to Save Energy	Environmental advocacy organization
ASERTTI	Assocation of State Energy Research and Technology Transfer Institutions, Inc.	
ASHRAE	American Society of Heating, Refrigeration, and Air Conditioning Engineers	Technical (engineers) association
ASME	American Society of Mechanical Engineers	Professional organization
ASiMi	Advanced Silicon Materials LLC	Manufacturer of polysilicon with plants in Moses Lake and Butte Mountain
AWC	Association of Washington Cities	Local government trade organization
BACT	Best Achievable Control Technology	
BCR	Benefit/Cost ratio	See definition in text
BEF	Bonneville Environmental Foundation	Nonprofit that funds renewable energy projects
BETC	Business Energy Tax Credit	Oregon tax credit
BOC	Building Operator Certification	Alliance funded project that trains and certifies building operators
BOMA	Building Owners and Managers Association	
BPA	Bonneville Power Administration	Federal power authority
C&RD	Conservation & Renewable Discount	BPA program
CAC	Conservation Advisory Council	
CARES	Conservation and Renewable Energy System	Defunct consortium of Pacific Northwest PUDs
CCS	Communications and Customer Service	A group within Energy Trust
CCCT	Combined Cycle Combustion Turbine	

CEE	Consortium for Energy Efficiency	National energy efficiency group
CEWO	Clean Energy Works Oregon	
CFL	Compact Fluorescent Light bulb	
CHP	Combined Heat and Power	
CNG	Cascade Natural Gas	Investor-owned utility
ConAug	Conservation Augmentation Program	BPA program
CHT	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.
COU	Consumer-Owned Utility	
COP	Coefficient of Performance	The Coefficient of Performance is the ratio of heat output to electrical energy input for a heat pump
CT	Combustion Turbine	
CUB	Citizens' Utility Board of Oregon	Public interest group
Cx	Commissioning	
DG	Distributed Generation	
DSI	Direct Service Industries	Direct Access customers to BPA
DOE	Department of Energy	Federal agency
DSM	Demand Side Management	
EA	Environmental Assessment	
EASA	Electrical Apparatus Service Association	Trade association
ECM	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
EE	Energy Efficiency	
EER	Energy Efficiency Ratio	The cooling capacity of the unit (in Btu/hour) divided by its electrical input (in watts) at standard peak rating conditions
EF	Energy Factor	An efficiency ratio of the energy supplied in heated water divided by the energy input to the water heater
EIA	Energy Information Administration	
EIC	Energy Ideas Clearinghouse	Washington State University program that provides energy-efficiency information, Alliance funded project
EMS	Energy Management System	See definition in text
EPA	Environmental Protection Agency	Federal agency
EPRI	Electric Power Resource Institute	Utility organization

EPS	Energy Performance Score	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
EQIP	Environmental Quality Incentive Program	
EREN	Energy Efficiency and Renewable Energy Network	DOE program
ESS	Energy Services Supplier	
EUI	Energy Use Intensity	See definition in text
EWEB	Eugene Water & Electric Board	Utility organization
FCEC	Fair and Clean Energy Coalition	Environmental advocacy organization
FEMP	Federal Energy Management Program	
FERC	Federal Energy Regulatory Commission	Federal regulator
GHG	Greenhouse gas	
HER	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
HSPF	Heating Season Performance Factor	
HVAC	Heating, Ventilation and Air Conditioning	
ICNU	Industrial Consumers of Northwest Utilities	Trade interest group
ICF	ICF International	Existing Buildings Program Management Contractor
ICL	Institute for Conservation Leadership	
IDWR	Idaho Department of Water Resources	State agency
IEEE	Institute of Electrical and Electronic Engineers	Professional association
IESNA	Illuminating Engineering Society of America	
IOU	Investor-Owned Utility	
IRP	Integrated Resource Plan	
ISIP	Integrated Solutions Implementation Project	
ISM	Instant-Savings Measure	See definition in text
kW	Kilowatt	
kWh	Kilowatt Hours	8,760,000 kWh = 1 aMW
LBL	Lawrence Berkeley Laboratory	
LED	Lighting Emitting Diode	Solid state lighting technology
LEED	Leadership in Energy & Environmental Design	Building rating system from the U.S. Green Building Council
LIHEAP	Low Income Housing Energy Assistance Program	
LIWA	Low Income Weatherization Assistance	
LOC	League of Oregon Cities	Local government organization
MEEA	Midwest Energy Efficiency Alliance	Midwest Market Transformation organization, Alliance counterpart
MLCT	Montana League of Cities and Towns	Local government organization

MLGEO	Montana Local Government Energy Office	Local government organization
MT&R	Monitoring, Targeting and Reporting	See definition in text
MW	Megawatt	Unit of electric power equal to one thousand kilowatts
MWh	Megawatt Hour	Unit of electric energy, which is equivalent to one megawatt of power used for one hour
NAHB	National Association of Home Builders	Trade association
NCBC	National Conference on Building Commissioning	
NEB	Non-Energy Benefit	See definition in text
NEEA	Northwest Energy Efficiency Alliance	
NEEC	Northwest Energy Efficiency Council	Trade organization
NEEI	Northwest Energy Education Institute	Training organization
NEEP	Northeast Energy Efficiency Partnership	Northwest market transformation organization, Alliance counterpart
NEMA	National Electrical Manufacturer's Association	Trade organization
NERC	North American Electricity Reliability Council	
NFRC	National Fenestration Rating Council	
NRC	National Regulatory Council	Federal regulator
NRCS	Natural Resources Conservation Service	
NRDC	Natural Resources Defense Council	
NREL	National Renewable Energy Lab	
NRTA	Northwest Regional Transmission Authority	
NWEC	Northwest Energy Coalition	Environmental advocacy organization
NWBOA	Northwest Building Operators Association	Trade organization
NWFPA	Northwest Food Processors Association	Trade organization
NWN	NW Natural	Investor-owned utility
NWPPA	Northwest Public Power Association	Trade organization
NWPCC	Northwest Power and Conservation Council	Regional energy planning organization, "the council"
NYSERDA	New York State Energy Research & Development Authority	New York public purpose organization
OBA	Oregon Business Association	Business lobby group
OEFSC	Oregon Energy Facility Siting Council	Authority to site energy facilities in Oregon
ODOE	Oregon Department of Energy	Oregon state energy agency
OPUC	Oregon Public Utility Commission	
OPUDA	Oregon Public Utility District Association	Utility trade organization
OPEC	Organization of Petroleum Exporting Countries	
ORECA	Oregon Rural Electric Cooperative Association	Utility trade organization
OSD	Office of Sustainable Development	
OSEIA	Solar Energy Industries Association of Oregon	Volunteer nonprofit organization dedicated to education/promotion
OTED	Office of Trade & Economic Development	Washington State agency
P&E	Planning and Evaluation	A group within Energy Trust
PDC	Program Delivery Contractor	Company contracted with Energy

		Trust to identify and deliver industrial and agricultural services to Energy Trust customers
PEA	Pacific Energy Associates	
PECI	Portland Energy Conservation, Inc.	Energy Trust Program Management Contractor
PGE	Portland General Electric	Investor-owned utility
PG&E	Pacific Gas & Electric	California investor-owned utility
PMC	Program Management Contractor	Company contracted with Energy Trust to deliver a program
PNGC	Pacific Northwest Generating Cooperatives	
PNUCC	Pacific Northwest Utilities Conference Committee	
PPC	Public Power Council	National trade group
PPL	Pacific Power	
PSE	Puget Sound Energy	Investor-owned utility
PTC	Production Tax Credit	
PTCS	Performance Tested Comfort Systems	Alliance project that promotes the efficiency of air-systems in residential homes
PTNZ	Path to Net Zero pilot	See definition in text
PUC	Public Utility Commission	Oregon and Idaho PUCs
PUD	Public Utility District	
PURPA	Public Utility Regulatory Policies Act	See definition in text
QF	Qualifying Facility	
RAC	Renewable Energy Advisory Council	
RE	Renewable Energy	
REIT	Real Estate Investment Trust	
RETC	Residential Energy Tax Credit	Oregon tax credit
RFI	Request for Information	
RFP	Request for Proposal	
RFQ	Request for Qualification	
RNP	Renewable Northwest Project	Renewable energy advocacy group
RSES	Refrigeration Service Engineers Society	Trade association
RTF	Regional Technical Forum	BPA funded research group
RTU	Rooftop HVAC Unit Tune Up	Rooftop HVAC unit tune up, an Existing Buildings incentive offering
SCCT	Single Cycle Combustion Turbine	
SCL	Seattle City Light	Public utility
SEED	State Energy Efficient Design	Established in 1991, requires all state facilities to exceed the Oregon Energy Code by 20 percent or more
SEER	Seasonal Energy Efficiency Ratio	A measure of cooling efficiency for air conditioners; the higher the SEER, the more energy efficient the unit

SGC	Super Good Cents	Alliance project & legacy BPA & utility program that promotes the sales of SGC homes
SIS	Scientific Irrigation Scheduling	Agricultural information program
SNOPUD	Snohomish Public Utility District	Washington State PUD
SEIA	Solar Energy Industries Association	Volunteer nonprofit organization dedicated to education/promotion
SWEEP	Southwest Energy Efficiency Partnership	Southwest market transformation group, Alliance counterpart
T&D	Transmission & Distribution	
TNS	The Natural Step	
TRC	Total Resource Cost	See definition in text
TXV	Thermal Expansion Valve	
	University of Oregon Solar Monitoring Laboratory	Solar resource database
U-Value		The reciprocal of R-Value; the lower the number, the greater the heat transfer resistance (insulating) characteristics of the material
USGBC	U.S. Green Building Council	Sustainability advocacy organization responsible for LEED
VFD	Variable Frequency Drive	An electronic control to adjust motion
WAPUDA	Washington Public Utility District Association	Utility trade organization
WNP	Washington Nuclear Power Plant	
WPPSS	Washington Public Power Supply System	Also called "whoops"
WUTC	Washington Utilities and Transportation Commission	
Wx	Weatherization	
W	Watt	