Energy Trust Board of Directors Meeting

November 5, 2014

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132nd Board Meeting

Wednesday, November 5, 2014
421 SW Oak Street, Suite 300
Portland, Oregon

	Agenda	Tab	Purpose
12:15pm	**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.* • October 1 board meeting minutes	**1**	*Action*
	Board Appointments *(John Reynolds)* ..... • Election of Heather Beusse-Eberhardt to Board—R723 • Election of Edmund Pat Sherman to Board—R724	**2**	*Action*
12:25pm	**President's Report** *(Debbie Kitchin)*		
12:35pm	**Northwest Energy Efficiency Alliance Annual Update** *(Susan Stratton, Executive Director of NEEA)*		*Information*
1:05pm	**Management Review Preliminary Responses** *(Margie Harris & Courtney Wilton)*	**3**	*Information*
1:35pm	**Break**		
1:45pm	**Draft 2015 Annual Budget & Draft 2015-2016 Action Plan** *(Margie Harris, Peter West, Courtney Wilton)*	**Separate Document**	*Information*
3:15pm	**Break**		
3:30pm	**Committee Reports** • Evaluation Committee *(Alan Meyer)* ..... • Finance Committee *(Dan Enloe)*..... • Compensation Committee *(Dan Enloe)*	**4** **5**	*Information* *Information* *Information*
4:00pm	**Adjourn**		

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

Separate Document **Draft 2015 Annual Budget & Draft 2015-2016 Action Plan**

Tab 1 **Consent Agenda**
- October 1 meeting minutes

Tab 2 **Board Appointments**
- Election of Heather Beusse-Eberhardt to Board—R723
- Election of Edmund Pat Sherman to Board—R724

Tab 3 **Management Review Preliminary Responses—DRAFT**

Tab 4 **Evaluation Committee**
- September 26 meeting notes
- 2014 Lighting Retail Store Shelf survey report & staff response
- 2013 Products Process evaluation & staff response
- 2013 Existing Buildings Process evaluation & staff response
- 2013 Fast Feedback report
- Market Lift pilot evaluation & staff response
- CORE Improvement Pilot year 1 evaluation report

Tab 5 **Finance Committee**
- October 24 meeting notes
- Notes on August 2014 financial statements
- August financials and contract summary report
- Notes on September 2014 financial statements
- September financials and contract summary report
- Financial glossary

Tab 6 **Glossary of Acronyms and Terminology**

Advisory Council Notes
- October 22 RAC notes—*notes will be sent via e-mail prior to board meeting*
- October 22 CAC notes—*notes will be sent via e-mail prior to board meeting*

Tab 1

Board Meeting Minutes—131st Meeting

October 1, 2014

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

Board members absent: none

Staff attending: Margie Harris, Ana Morel, Hannah Hacker, Debbie Menashe, Amber Cole, Steve Lacey, Peter West, Courtney Wilton, Fred Gordon, Elaine Prause, Taylor Bixby, Jay Ward, Pati Presnail, Thad Roth, Cheryle Easton, John Volkman, Kim Crossman, Adam Bartini, Phil Degens, Scott Clark

Others attending: Jim Abrahamson (Cascade Natural Gas), Holly Valkama (Coraggio Group), Phil Welker (PECI), Gino Porazzo (CLEAResult), Jennifer Williamson (Bonneville Power Administration), Celeste Becia (CLEAResult), Eric Bell (Westside Drywall and Insulation, Inc.), Christina Cabrales (CSG), Laysan Unger (Cascade Policy Institute), Brian Simmons (CLEAResult), John Morris (CLEAResult), Don Jones, Jr. (PacifiCorp), Lauren Shapton (Portland General Electric), Lisa Wojcicki (PECI), Bob Stull (PECI), Heather Beusse-Eberhardt (EDF Renewable Energy), Jill Eiland (Intel)

Business Meeting

President Debbie Kitchin called the meeting to order at 12:15 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) July 30 Strategic Utility Roundtable meeting notes
2) July 30 Board meeting minutes
3) Revise Equity Policy—R715
4) Revise Economic Development Policy—R716
5) Retire Screening New Opportunities Policy—R717

Moved by: Anne Root		Seconded by: Dave Slavensky
Vote:	In favor: 12	Abstained: 0
	Opposed: 0	

RESOLUTION 715
AMENDING THE EQUITY POLICY

WHEREAS:

1. **The Equity Policy was originally adopted by the board in 2002 to set forth principles for designing energy efficiency programs and allocation of public purpose charge funding among various electricity and gas customer classes;**

2. **The Equity Policy has undergone small revisions since its adoption, and was reviewed by the Policy Committee in August 2014 as part of the Committee's regular cycle of policy reviews**;

3. **Policy Committee members suggested some editing of the current policy to ensure that the policy clearly states the underlying and high level objectives and principles. As a result of the Committee's recommendations, staff revised the policy language as reflected in the suggested amended policy attached as Attachment 1; and**

4. **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 Equity Policy as shown in Attachment 1.

ATTACHMENT 1 (Resolution 715)

4.08.000-P Equity Policy

History			
Source	Date	Action/Notes	Next Review Date
Board Decision	May 22, 2002	Approved (R104)	May 2005
Policy Committee	March 5, 2005	Postpone review	11/05
Board Decision	September 7, 2005	Revised (R352)	September 2008
Policy Committee	December 2, 2008	Replaced references to numerical electric and gas goals	September 2011
Board Decision	October 5, 2011	Revised (R595)	October 2014

Introduction

Recognizing the Energy Trust's long-term goals to save electricity and natural gas, and that other public purpose funds have been earmarked for schools and low income housing needs, the Energy Trust of Oregon, Inc., Board of Directors hereby adopts as policy using the following principles in designing energy efficiency programs and allocating funding among various electricity and gas customer classes:

Policy

- Make programs available to all eligible electricity and gas customer classes by implementing programs in the residential, commercial, and industrial sectors.
- Design and implement programs for private utility electricity and gas customers that have not had access to prior conservation programs and/or where penetration rates have been historically low, such as rural ~~or agricultural~~ customers.
- Monitor penetration rates for all programs and adjust them as needed to ensure that all private utility electricity and gas customer classes are being served. ~~The~~ Energy Trust will pay particular attention to programs for underserved ~~electricity and gas~~ customers ~~to ensure that they achieve penetration rates that are comparable to other successful programs operating to serve these markets~~.

- ~~Improve program effectiveness to increase conservation savings and reduce costs, thereby making it possible to serve more households and businesses.~~
- ~~Improve and disseminate information about the cost and availability of conservation in each private utility electricity and gas customer class.~~

RESOLUTION 716
AMENDING THE ECONOMIC DEVELOPMENT POLICY

WHEREAS:

1. **The Economic Development Policy, originally adopted by the board in 2004 in connection with discussions with State of Oregon economic development personnel, demonstrates Energy Trust's interest in supporting state economic development efforts and outlines a process for quick and coordinated responses to inquiries on economic development matters;**

2. **The Economic Development Policy has not been revised since its adoption, and since its adoption, staff approval limits have increased permitting staff approval of renewable energy incentive funding support of up to $500,000;**
3. **In the interest of ensuring the underlying objective of the Policy to permit quick and coordinated response to economic development inquires, Energy Trust staff recommends that the Policy be amended to increase the authorization for staff to make commitments for renewable energy projects from $125,000 to $500,000 and to make other clarifying editorial revisions as indicated.; and**
4. **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 Economic Development Policy as shown in Attachment 1.

ATTACHMENT 1 (Resolution 716)

4.18.000-P Economic Development Policy

History			
Source	Date	Action/Notes	Next Review Date
Board Decision	April 7, 2004	Approved (R265)	June 2004
Board	June 9, 2004	Econ. Dev. Initiative (R277)	June 2007
Policy Committee	October 3, 2007	No changes	October 2010
Policy Committee	October 12, 2010	No changes	October 2013

RESOLUTION AUTHORIZING ENERGY TRUST INVOLVEMENT IN ECONOMIC DEVELOPMENT INITIATIVES

WHEREAS:

1. **Economic development is a significant side benefit of Energy Trust energy efficiency and renewable energy production, helping to make Oregon businesses more competitive by lowering production costs and increasing operating reserves and profits.**

2. **It is consistent with Energy Trust's strategic plan and ~~mission~~ vision and purpose to cooperate with public entities and utilities that are seeking to convince businesses to come to, expand in, or stay in Oregon.**

It is therefore RESOLVED:

1. **Energy Trust staff should make available information~~develop integrated materials~~ to ~~that~~ help economic development entities understand how Energy Trust programs support new and existing commercial and industrial facilities;**

2. **Staff should provide a ~~single~~ contact person to coordinate quick responses to inquiries on economic development matters from the State of Oregon or others ~~economic development entities based on analysis by the Oregon Department of Energy (or if that is unavailable or impractical, an outside contractor~~);~~,~~ ~~and~~ such responses to be reviewed by ~~an internal~~ Energy Trust ~~team~~staff or a designee. Staff is authorized to contract with an outside consultant to provide a back-up source of information-gathering and analysis.**

3. **For projects with high economic development potential, staff is authorized to make commitments to cost-effective energy efficiency projects consistent with existing program standards, and up to $~~125,000~~500,000 per project for renewable energy projects, consistent with SB 1149's above-market requirement.**

RESOLUTION 717
RETIRING THE SCREENING NEW OPPORTUNITIES POLICY

WHEREAS:

1. **The Screening New Opportunities Policy, attached as Attachment 1, was originally adopted by the board in 2004 to document the board's interest in encouraging Energy Trust to identify and act upon new strategic opportunities and to set out an efficient process to screen and intentionally chose to purpose new strategic opportunities;**

2. **The process identified by the Screening New Opportunities Policy reflects Energy Trust's current operating procedures, particularly with respect to the review of strategic opportunities with the board at its annual strategic planning board retreat and with RAC, CAC, and the Policy Committee outside the annual retreat process.**

3. **The Screening New Opportunities Policy was reviewed by the Policy Committee in September 2014 as part of the Committee's regular cycle of policy reviews;**

4. **Policy Committee members discussed whether the policy is still helpful guidance, given that the processes identified are incorporated into Energy Trust operations. Members believe that the policy is superfluous and, as a result, suggest that it be retired; and**

5. **The Policy Committee supports the suggested policy retirement and recommends approval through the board's consent agenda.**

It is therefore RESOLVED that the Board of Directors hereby approves retirement of the Screening New Opportunities Policy.

ATTACHMENT 1 (Proposed for Retirement) (Resolution 717)

4.19.000-P Screening New Opportunities

History			
Source	Date	Action/Notes	Next Review Date
Policy Committee/Board	8?24/04,9/8/04, 1/26/05	Review and discussion	2/16/05
Board	2/16/05	Approved (R318)	7/05
Policy Committee/Board	7/05	Reviewed; no changes	7/08
Policy Committee	12/08	Reviewed; deleted reference to 3 Person Team and changed to Strategic Planning Committee	7/2011
Policy Committee	11/11	Reviewed; no changes	11/2014

Introduction

Identifying and acting upon new strategic opportunities is a welcome and continuous part of being

an innovative "learning organization."

An efficient process to screen and intentionally choose to pursue new strategic opportunities is desirable.

Assessments of new strategic opportunities will be concentrated within, and not limited to, the action plan update and budget preparation cycle initiated with the joint board/staff planning meeting held publicly each summer.

Policy

That the Energy Trust of Oregon, Inc., Board of Directors authorizes the Executive Director, in cooperation with the Strategic Planning Committee and other interested parties, to screen major new strategic opportunities using the following pre-screening and minimum full-screening criteria:

1. Pre-screening - Staff proposes to pre-screen opportunities to determine if there is an obvious fit for the Energy Trust, if the opportunity is plausible, is within existing budget and resources and can be absorbed into current efforts. The result of pre-screening can be either an immediate action to absorb such opportunities within existing efforts or programs, to transfer the opportunity to another potentially interested party or to not pursue the opportunity at all.

2. Minimum Full-screening - At a minimum, opportunities that warrant additional consideration beyond pre-screening will be assessed as follows:
   - Does it meet Energy Trust legal requirements?
   - Would it help us to achieve organization mission and goals?
   - Are the costs and benefits anticipated reasonable?
   - What would be the timing and what resources would it require?
   - Are partnership and leverage opportunities present?
   - Are the resources required plausible?
   - Other considerations?

3. Board and staff will plan for and include an analysis of strategic opportunities and corresponding choices for discussion as a focus of the annual board/staff public planning meeting held each year, usually in summer.

4. Ideas outside of the annual planning meeting will follow the usual course of business, being analyzed by staff with involvement from interested board members for presentation to the CAC and/or RAC and policy committee prior to consideration during a public board meeting.

5. An Energy Trust board member from either the strategic planning and/or policy committee will update the full board on the status of ideas being considered and, for those items requiring board action, bring such new ideas forward for action during public board meetings.

President's Report

President Debbie Kitchin provided information on recent eco-district presentations delivered during meetings of the Building Owners and Managers Association and the Portland Business Alliance. A few years ago, the City of Portland chose approximately six areas to pilot eco-districts, two of which are further along in development. The purpose of the eco-district is to take a smaller geographic area, like a business district or neighborhood, and have the residents collaborate on being more sustainable in the areas of waste management, water management, energy, equity and others. Energy Trust works on sites and projects individually, but an eco-district looks at the area as a whole. For example, the Lloyd District is a business improvement district that has had a large impact on alternative modes of transportation in its zone. Lloyd District owners, occupants, neighbors and residents formed an eco-district to make the community more sustainable. Eco-districts are grassroots in that they choose the activities to pursue and secure funding to carry out those activities. The area South of Market, called SOMA, is another eco-district that is showing leadership in energy efficiency. Margie Harris mentioned Energy Trust has been monitoring eco-districts for quite some time and program staff look for opportunities to be involved. The board suggested a future board presentation could highlight Energy Trust's involvement with eco-districts.

Audit Committee

Ken Canon introduced Holly Valkama of Coraggio Group to present on the Energy Trust 2014 Management Review. Under the grant agreement with the Oregon Public Utility Commission (OPUC), Energy Trust must perform a Management Review every five years. The review is one of the primary focus areas of the board Audit Committee. The committee has been working on the review since the beginning of 2014. The OPUC grant agreement directs the Management Review to focus on administrative costs and program operations. The Audit Committee also added benchmarking with notable, regional utilities successful in delivering energy-efficiency programs. After developing the scope, Coraggio Group was selected through a competitive Request for Proposals process. The majority of work was completed from May to June. Since then, the committee and staff have been working on the Management Review in draft form. There was plenty of interaction with Energy Trust staff from all levels of the organization to ensure Coraggio Group understood aspects of Energy Trust that might be different from other entities. The board mentioned the Coraggio Group provided good pace and timing for the development of the Management Review.

Holly presented on the Management Review Report, highlighting various areas and directed the board to the full report for all the details and recommendations. She reviewed the four main areas their review addressed: administrative cost efficiency and effectiveness, administrative cost allocation and productivity, program delivery, and staffing planning and levels. Coraggio Group interviewed Energy Trust staff, the OPUC, board members, funding utilities, Program Management Contractor (PMC) staff, evaluation firms and marketing firms. For the benchmarking exercise, Coraggio Group interviewed and reviewed data from Avista, Puget Sound Energy, Seattle City Light and Snohomish Public Utility District (PUD). She noted Puget Sound Energy was closest to Energy Trust in terms of funding.

There are two major themes in the report. First, Energy Trust's performance and practices are generally strong and well-respected by others within the industry. For instance, Energy Trust has one of the most

conservative methods for allocating costs when determining cost-effectiveness, has an organizational environment open to new ideas, and has a culture that shows a willingness to change and improve. Second, as the energy-efficiency industry matures and savings acquisition costs increase, Energy Trust will benefit by bringing additional focus and resources to the efficiency and productivity of its operations. Possible areas include budgeting, forecasting, reporting and resource planning, including staffing justification. Holly noted such changes and transitions are very typical for an organization moving out of an early phase of development to a maturing phase.

Regarding the cycle of acquiring the majority of savings during the last part of the year, the board asked whether changing the fiscal year might have a positive impact and result in a better distribution of completed projects. Holly mentioned organizations interviewed included a company with a fiscal year that ends in September. That company still had a skewed year in terms of the majority of activity coming in at the end of the fiscal year. Due to the annual nature of the budget cycle, the early part of year is focused on startup, affecting the ability to smooth out energy-efficiency acquisition. Customers, especially industrial and agricultural customers, are also working on an annual budget cycle that ends in December. Energy Trust does not influence customers' own budgeting constructs. The California Public Utilities Commission is considering changing some program cycles to be five years to allow for a longer period to plan programs; in effect, smoothing out the heavy year-end activity. Holly mentioned Energy Trust might pilot efforts to see if behavior can be changed. The board mentioned one method could be to modify annual PMC bonuses to be quarterly.

The board noted some organizations reduce span of control and others focus on continuous improvement practices. They asked if Energy Trust increased span of control, does that free up time for continuous improvement. Holly recommended having dedicated staff as managers to ease day-to-day pressures from overtaking time for continuous improvement.

The board discussed why Energy Trust administrative costs and span of control are both very low, when it would seem they would be the inverse of each other. Holly mentioned Energy Trust is generally an organization that takes seriously the fiduciary responsibility of its cost structure and is generally an efficient organization. Energy Trust has a culture of looking at efficiencies. She agreed the correlation is not necessarily intuitive. The board discussed span of control, including pros and cons of staff with main responsibilities being staff management and development and contract management.

The board asked for Courtney Wilton's observations. Courtney mentioned Energy Trust benefits from an outside perspective. The Management Review is a comprehensive report and the Energy Trust management team will meet next week to discuss the recommendations. He noted staff will respond to all recommendations.

The board noted the openness of staff and interest and willingness to continue to improve. Courtney added the benchmarking exercise was educational and beneficial.

The board asked why the level of Snohomish PUD savings growth was greater than Energy Trust's in the same time frame. Coraggio Group will follow up on this question, noting the different ways the organizations deliver their programs is not always an absolute or easy comparison.

The board asked what more continuous improvement looks like. Coraggio Group suggested to start small, with one or two areas, so those doing the work are able to participate and business priorities are still being attended to.

The board asked for Commissioner John Savage's observations. Commissioner Savage noted the report was thorough and clear, especially the comparison against other utilities, and that Energy Trust fared well. Coraggio Group dug into areas the OPUC wanted assessed. The OPUC will still look for key performance metrics or internal operations metrics it can use to gauge how Energy Trust is doing.

The board noted the report provides recommendations and does not offer metrics to provide ability to benchmark Energy Trust against other utilities. The board looks forward to seeing those and being able to use them in the future.

Margie noted appreciation for the work completed by Coraggio Group. Next steps are to develop a matrix of all management review recommendations and suggestions, responding to them and noting the timing of addressing the various recommendations. Staff will bring this matrix to the November board meeting, highlighting what staff intends to pursue. Potential examples include the metrics development especially related to quantifying efficiencies, and options related to our reporting.

The board thanked Coraggio Group for its work and the Management Review Report.

RESOLUTION 718
ACCEPT MANAGEMENT REVIEW REPORT

WHEREAS:

1. **The grant agreement between the Oregon Public Utility Commission (OPUC) and Energy Trust requires Energy Trust to contract at least every five years for an independent review and evaluation of the efficiency and effectiveness of Energy Trust operations.**
2. **In March of 2014, the Energy Trust Board retained Coraggio Group to conduct the review under the auspices of the Audit Committee.**
3. **Coraggio Group submitted the review in final form on September 22, 2014. The Audit Committee reviewed the recommendations and recommended that the board accept the review at its October meeting.**
4. **The Board expresses its appreciation to the Audit Committee, Coraggio Group, the OPUC and Energy Trust staff for their efforts.**

It is therefore RESOLVED:

1. **That the Board of Directors of Energy Trust of Oregon, Inc. accepts the final Coraggio Group management review and instructs the executive director to submit it to the Oregon Public Utility Commission.**

2. **The Board and Executive Director are fully committed to carefully examining the report and taking appropriate follow-up actions in response to its findings and recommendations.**

Moved by: Alan Meyer		Seconded by: Dan Enloe
Vote:	In favor: 12	Abstained: 0
	Opposed: 0	

Strategic Planning Committee

Rick Applegate, speaking by phone, introduced the topic of the 2015-2019 Strategic Plan adoption. He, noted the extensive involvement of the Strategic Planning Committee and the full board in the Plan's development and review. He noted the strategic plan will be a good guide for the organization.

Margie provided an overview of the development of the draft plan and outreach conducted to introduce and promote the plan, including the opportunity for public comment. Margie acknowledged the Strategic Planning Committee's involvement and guidance, and highlighted contributions from staff on delivery of the plan. Strategic plan outreach and promotion included a Portland-based meeting, joint meetings with Pacific Power to speak with business customers, presenting at Cascade Natural Gas customer meetings, a public webinar, other business-oriented meetings and ongoing staff engagement. All events were well attended and provided an introduction to Energy Trust and overview of the draft strategic plan. After a month-long public comment period, Energy Trust received 20 written comments from a variety of audiences. Margie noted she was pleased to have that kind of representation and feedback. The majority of comments fit within four high-level themes: strong support for the energy-efficiency goals and objectives, feedback that the renewable energy generation goal was too modest, agreement and ideas for expanding customer participation, and suggestions to acknowledge risk in meeting goals and objectives. The board packet includes a summary of comments received and staff responses, and all written comments are available on the Energy Trust website.

Staff responded to all comments received and made modifications to the draft plan, presenting the proposed final 2015-2019 Strategic Plan to the board today. Margie highlighted the changes made to the proposed final plan, and described next steps with the final plan, if approved by the board.

The board acknowledged the effort and involvement of the Strategic Planning Committee and staff, and those who participated throughout the process. The board appreciated how the plan dovetails with the Management Review. The comments were noted as being thorough and overall encouraging. The board commented the plan will serve Energy Trust and the state of Oregon well.

RESOLUTION 719
ADOPTING STRATEGIC PLAN

WHEREAS:

1. **Energy Trust is required by its grant agreement with the Oregon Public Utility Commission to adopt and revise a strategic plan every five years. The current plan, which covers the period 2010-2014, expires at the end of 2014.**
2. **In 2013 and 2014, Energy Trust carried out an extensive analytical and consultation process regarding a 2015-2019 strategic plan.**
3. **A draft plan was discussed at the June 2014 board retreat, and released for comment this summer.**
4. **Staff and board members engaged the Oregon Public Utility Commission, Portland General Electric, Pacific Power, NW Natural, Cascade Natural Gas, members of our Conservation and Renewable Advisory Councils, and many stakeholders through webinars and regional meetings throughout the state to invite and collect comments on the draft plan. The staff and board have carefully considered these comments.**

It is therefore RESOLVED that the board of directors of Energy Trust of Oregon, Inc., adopts the attached five-year strategic plan for the period 2015-2019 and authorizes staff to release the attached comment summary and corresponding responses *incorporating any changes made at today's meeting* to the public.

Moved by: Alan Meyer		Seconded by: Roger Hamilton
Vote:	In favor: 12	Abstained: 0
	Opposed: 0	

The board took a break from 1:50 p.m. to 2:00 p.m.

Dan Enloe recused himself from the meeting at 2:00 p.m.

Energy Programs

Waive Program Cap and Authorize Incentive for an Intel Production Efficiency Project—R721, Kim Crossman

Kim introduced Jill Eiland, Intel's Oregon corporate affairs manager. Kim provided background on the project with Intel. In December 2009, Intel started working on D1X, Mod 1 and Mod 2. Intel asked how Energy Trust could help to make the manufacturing site more efficient than what Intel would otherwise construct. The first phase mega project, for Mod 1, was approved by the board in 2011, and it achieved a significant amount of savings. Today, staff is bringing to the board a Production Efficiency project for Mod 2, which is, at a high level, a mirror image of Mod 1. Mod 2 is a discrete and new project, and staff is requesting from the board an exception to the $500,000 incentive cap and permission for Margie to approve incentives. Staff presented to the Policy Committee in September; since then, a slight change was made to the incentive structure and is reflected in the resolution. The proposed incentive would not exceed $2.4 million, payable in annual increments over multiple years. The project before the board today underwent the customary review and analysis by staff to quantify savings and costs, including an Allied Technical Assistance Contractor (ATAC) analysis by California-based Integral Group, which is world-renowned in this type of project.

The criteria needed for the board in its consideration to waive a project incentive cap is that the site will not self-direct for three years after the final incentive payment, the project will save energy at a very low cost to ratepayers and Energy Trust will have available incentive budget for it.

Kim described how the Intel phase two project meets the criteria. This project will bring in savings at 6 cents per first-year kWh. The average for custom projects in the Production Efficiency program is about 17 cents per first-year kWh. Intel phase 2 levelized cost is less than half a cent per kilowatt hour, similar to the levelized cost of phase 1.

Incentives are estimated to be paid out in 2016-2018, with some possibility of a relatively small amount of incentives to be paid in 2015. Kim noted budgets are not yet set for those years, but staff has been making projections in anticipation of 2015 and 2016 budget planning as well as in consideration of the large customer funding cap. Staff completed an analysis this June and July on the large customer funding cap in Portland General Electric (PGE) territory. This analysis revealed that Energy Trust is likely to cross the spending threshold for PGE and will need to scale back spending in that territory as early as 2015. The analysis also indicated, though, that if Energy Trust would need to constrain funding, there would still be roughly $2.5 million to $4 million in incentives per year for large customers in PGE territory. Funding this project could mean there are less incentives for projects about which staff does not yet know. Given these projects, staff anticipates adequate budget, but proposes an annual incentive cap of $800,000 per year to minimize impact on future years' funding for large PGE customer projects.

The board asked if staff has a systematic way to determine future projects participating in the program. Kim described the program's 2015 pipeline and that in any given year, the pipeline accounts for about 30 percent of savings goal. In general, the program does not have a sense that projects are waiting to be funded.

The board modified the resolution to clarify self-direction by Intel will be suspended for three years after the final incentive is paid, incentives will be paid annually with a maximum of $800,000 per year, and the name of the site of the project.

Kim noted staff attention on the project will continue, including concurrent evaluations and verification of savings throughout the project. Kim cited Intel's attention and collaborative working relationship on the efficiency portion of the Mod 2 project.

Jill noted the positive, mutual partnership with Energy Trust. D1X Mod 1 and Mod 2 is a substantial site and the most advanced semi-conductor plant in the world. Energy Trust helped Intel keep focused on energy efficiency. She said Intel competes on a global basis, and three-quarters of its manufacturing is in the U.S. while three quarters of revenue is from outside the U.S. She noted investments in plants can go anywhere. In building Mod 1 and Mod 2, Intel employed 17,000 building tradespeople and 17,000 Intel employees. D1X is a world-class facility that is energy efficient.

The board discussed the project, including the use of a baseline site that is of a different facility when there is a mirror facility in Mod 1. Kim noted that the question of baseline seems to include both technical baseline and the question of influence. On the technical side, use of a highly qualified ATAC for the baseline study and review by multiple engineers and the evaluators have determined that we are using the correct baseline. Regarding influence, the energy-efficiency measures incorporated are not standard practice at Intel. Technical studies provided by Energy Trust informed the design and plans were made to implement based on assumed availability of incentives.

RESOLUTION 721—REVISED
WAIVING PROGRAM INCENTIVE CAP AND APPROVING INCENTIVES
FOR THE INTEL D1X MOD 2 EFFICIENCY PROJECT

WHEREAS:

1. **The Energy Trust Production Efficiency program has worked with Intel to identify comprehensive energy saving measures for a new facility in which to develop advanced technologies. It is expected to be the largest construction project in the Portland metro area.**
2. **Energy efficiency aspects of the project were reviewed through standard Energy Trust processes for complex custom-track industrial projects, including a technical energy analysis study commissioned by Energy Trust and carried out by a nationally-recognized expert in high tech manufacturing efficiency.**
3. **The project's energy savings will cost less than half the cost of savings from the average custom project. The incentive for the project is budgeted at $.06/ first-year kWh, a levelized cost of ~$.004/ kWh; while custom capital projects average $.17/ first-year kWh, or about 1 cent levelized.**
4. **Energy Trust funding would be contingent on Intel's agreement to suspend self-direction at this site for at least three years.**

It is therefore RESOLVED that the board of directors of Energy Trust of Oregon:

1. **Waives the Production Efficiency Program's incentive cap for purposes of this project; and**
2. **Authorizes the executive director to negotiate and sign an incentive agreement with Intel for up to $2.4 million total in incentives payable in annual increments of up to $800,000 over multiple years at a rate of not more than .06 cents per first-year kWh in savings, such incentive commitment contingent on Intel's agreement to suspend self-direction at the D1X Intel site for at least three years after the final incentive payment.**

Moved by: Roger Hamilton Seconded by: Anne Root
Vote: In favor: 11 Abstained: 0
Opposed: 0

Dan Enloe joined the meeting at 2:33 p.m.

Exemption to the board approved Balanced Competition Policy—R720, Debbie Menashe & Peter West

Debbie Menashe introduced the resolution. Portland Energy Conservation, Inc. (PECI) is being acquired by CLEAResult in 2014, which includes acquisition of Energy Trust contracts with PECI. PECI will continue to operate as an Oregon nonprofit organization in the energy efficiency sphere but will not be a deliverer of energy efficiency programs. The acquisition raises a potential conflict and violation of the board's Balanced Competition Policy. If Energy Trust's contracts with PECI are transferred, CLEAResult would become program management contractor for three program management contracts: its current contract on the Existing Homes program and then PECI's current contracts on the New Buildings and New Homes & Products programs. The Balanced Competition Policy states no one program management contractor should hold more than two program management contracts. The stated rationale for this policy, as it relates specifically to program management contractors, is to maintain a robust market. It is also a good policy to mitigate and manage risk for the organization. Staff is asking the board for a temporary exemption to the policy. At this time, if Energy Trust complied with the board policy and did not consent to the transfer of PECI's two contracts to CLEAResult, it would be necessary to end one of the program management contracts immediately and the result would be significant program disruption. Staff believe an exemption is appropriate at this time. The risk to the organization is outweighed by risk to program disruption at this late time of the year when the majority of savings are acquired.

Peter mentioned that over the last year in the energy efficiency realm, AEG, Franklin, CLEAResult, Nexant, ICF International and Ecova have all acquired or been acquired. Other companies, like Opower, have created strategic alliances. He noted there is a large trend of consolidation in the industry. When staff comes back with what steps to take after the temporary exemption, he encouraged the board to have a discussion on what the consolidation trend means to the Balanced Competition Policy. In order to compete, the industry needs to get larger to have competitive, low delivery costs. He notes this is a factor not just in Oregon, it is a national trend.

Peter noted the three programs, Existing Homes, New Buildings and New Homes & Products, are currently running well. CLEAResult will absorb PECI staff currently working on the programs. CLEAResult is currently working on a redesign of the Existing Homes program. Staff is confident the programs will continue doing well after acquisition. If the board did not approve a policy exemption, Energy Trust would have to immediately compete one of the programs, which would be a highly disruptive process, especially at the end of the year. When Energy Trust undergoes a program transition, it is a five-month process. Though there have been attempts to even out participant activity throughout the year, the highest level of activity is still at the end of the year and approximately 60 percent of all Energy Trust savings come in during Quarter 4. Bidding a program during Quarter 4 risks the program's ability to acquire savings and meet goals, and will draw time and resources from other staff. The risk to Energy Trust is fairly low if the policy exception is provided.

The board discussed the extent to which the consolidation trend might continue and its significance to Energy Trust and the Balanced Competition policy. Peter noted such consolidation is also occurring on the evaluation side and will come back to the board on whether this might impact other programs.

The board noted the policy was waived in the past, in 2004, and the next review is not until May 2015. The board discussed Whereas 6 and how it relates to the policy language. Staff said the language is to ensure Energy Trust is brought back in line with the policy in 2015 by selecting one or two of the programs to be rebid. The intent is to provide flexibility for the market until the board reviews the policy next spring. The board struck Whereas 6 from the resolution, noting the wording in the resolution does

not preclude or guarantee changes to the policy. The board requested review of the policy be expedited, especially given the exceptions to the policy in the past and the trend of consolidation in the market.

RESOLUTION 720—REVISED
TEMPORARILY EXEMPTING CERTAIN PROGRAM MANAGEMENT CONTRACTS FROM THE POLICY ON BALANCED COMPETITION

WHEREAS:

1. **The Energy Trust Policy No. 4.09-000-P Rules to Assure Balanced Competition for Energy Trust Program Manager Contracts (the Balanced Competition Policy) provides that no single firm may be a contractor of more than two concurrent Energy Trust program management contracts The purpose of the policy is to ensure competition for Energy Trust program management contracts.**
2. **Portland Energy Conservation, Inc. (PECI) is currently the program management contractor for two Energy Trust programs: the New Homes and Products and the New Buildings programs. PECI was anticipated to be the program management contractor for two programs beginning in 2015: the new Homes and the New Buildings programs.**
3. **CLEAResult LLC (CLEAResult) (formerly operating under the name Fluid Market Strategies) is the program management contractor for the Existing Homes program.**
4. **CLEAResult and PECI recently announced that CLEAResult will acquire PECI's energy efficiency program implementation contracts. Closing of this acquisition transaction is expected between now and the end of 2014. Assuming the transaction is completed, CLEAResult would be the Program Management Contractor for three Energy Trust programs, which would pose an issue of compliance with the Balanced Competition Policy.**
5. **A termination of one of the program management contracts at the time of the CLEAResult acquisition would result in significant program disruption, and Energy Trust proposes a more gradual transition to minimize such disruption.**
6. ~~**Energy Trust proposes to rebid one or more program management contracts during 2015 providing an opportunity to limit the number of program management contracts awarded to CLEAResult to two or less and to thereby restore Energy Trust compliance with the Balanced Competition Policy not later than the end of 2015.**~~

It is therefore RESOLVED that the Board of Directors hereby exempts the New Homes and Products program management contract (through 2014) and New Homes, ~~(beginning in 2015),~~ Existing Homes and New Buildings program management contracts from compliance with Energy Trust Policy No. 4.09.000-P Rules to Assure Balanced Competition for Energy Trust Program Management Contracts until the end of 2015.

Moved by: Mark Kendall		Seconded by: Dan Enloe
Vote:	In favor: 12	Abstained: 0
	Opposed: 0	

The board asked to hear from CLEAResult and PECI representatives on the transition process and acquisition trends in the industry.

Phil Welker, executive director of PECI, spoke about the transaction, which is first "do no harm." The transaction is to bring leverage and more resources to the delivery of energy efficiency programs. There is commitment to put a team together that can bring more resources to Energy Trust without changing

programs or the program management structure. Going forward there may be staff movement as is typical in any organization.

Gino Porazzo, chief operating officer of CLEAResult, mentioned that in terms of activity in the industry, the industry is challenged in being more cost effective in services and delivery. When any company gets to a certain size, it faces cost management, investment and staff advancement decisions. CLEAResult is a collection of entrepreneurial companies that share the same vision and culture. The employee bases of CLEAResult and PECI are remarkably similar and share passion for this industry. The transaction allows a pooling of resources to invest in technology and people. It is hard to predict how much more the industry will consolidate. With PECI staff, CLEAResult will have 1,900 employees; of which, 450 are in Portland. CLEAResult views itself as a local business and Portland is a hub for the company.

Phil mentioned the challenge for the industry is to get deeper savings out of every building and customer interaction and to ensure savings persist. Consumer decision making will become more complex and the industry has to be able to deliver with that complexity in mind, which takes resources. Acquisition is happening not to buy the same thing, but to deliver on new things.

Committee Reports

Evaluation Committee, Alan Meyer
The committee met last Friday and will report out at the next board meeting when the notes are in the packet.

Finance Committee, Dan Enloe
The May Finance Committee meeting notes are in the board packet. Highlights include revenue tracking above last year, incentives ahead of the same time last year, Existing Buildings behind budget, Production Efficiency on budget and New Homes & Products ahead of budget. Energy Trust is working on a fairly strong year. Available cash was $112.9 million at the end of May and $115.9 million by the end of August.

The committee looked at banking services, and is considering changing banks. Umpqua is doing a good job, though shows weakness in e-business. To be competitive, it needs to get strong in e-business quickly and the committee is awaiting Umpqua's answers to questions in this area before making decisions on how to proceed.

The committee reviewed Energy Trust's line of credit and decided not to renew given strong cash availability.

Nominating Committee, John Reynolds
The committee recently interviewed four candidates and selected a replacement for Kenneth Mitchell-Phillips, Jr. The committee will present a resolution at the November meeting to elect to the board Heather Beusse-Eberhardt of EDF Renewable Energy.

Policy Committee, Roger Hamilton
The August and September committee meeting notes are in the packet. Today's consent agenda included resolutions on amendments to the Equity Policy and Economic Development Policy, which the committee also reviewed. There were minor changes to the policies. The Equity Policy was streamlined by removing details thought to be unnecessary, such as details on what is meant by equity and participation rates of gas customers. The Economic Development Policy was revised to align the mention of the incentive cap with $500,000.

The committee approved membership of Elizabeth McNannay, owner of Resource Consultants, to the Renewable Energy Advisory Council.

The committee suggested retiring the Screening New Opportunity Policy, as its operating practice at Energy Trust. The policy was retired with the board's consent agenda. The committee also reviewed the Intel resolution. The committee requested review of the Eligibility of Self-Direct Businesses for Energy Trust Incentives Policy and whether three years is the right term length or whether it should vary depending on the amount of the incentive.

Staff Report

Highlights, Margie Harris

Margie described the Boise Cascade Kinzua Lumber Mill's recent participation in the Production Efficiency Strategic Energy Management initiative. The mill set a goal of 5 percent annual energy savings, and by implementing continuous energy management strategies, the mill actually saved 14 percent on annual energy consumption.

Yesterday, the OPUC Commissioners ruled on the gas cost-effectiveness docket (UM 1622, Order 13-256). Staff will send follow-up information to the board detailing this decision. For more than two years, staff has been working with OPUC staff on this docket. Energy Trust's role throughout the process was as a technical resource. The OPUC staff memorandum went forward almost unchanged from the Commissioners' decision; the Commission added consideration of an incentive cap for moderate- and low-income homes. Margie reviewed the measures given an exception to cost effectiveness and those measures no longer excepted. Impacts are largely for the gas portion of the Existing Homes program, and changes will be addressed as staff develops the 2015 annual budget and two-year action plan. The benefit/cost ratio of the Existing Homes program will continue to be evaluated as a combined electric- and gas-saving program. An OPUC annual performance measure for pilots will be developed. Margie noted the Existing Homes redesign is already underway as the program worked to anticipate these changes. Upcoming presentations on the draft budget will highlight reductions staff plan on making in the delivery of the Existing Homes program, as well as changes in administrative, management and general budgets.

The board discussed the OPUC decision, and how changes in natural gas prices may impact cost effectiveness going forward. Margie noted the importance of communicating with customers around their expectations that natural gas prices will go up. The board asked if there will be any reflection in the amount requested in rates with utilities for the 2015 annual budget. Staff will discuss with gas companies as funding negotiations get underway, which will start mid-October.

Margie previewed the 2015 annual budget development schedule. The first round of the budget is in development and will be informed by the Management Review, 2015-2019 Strategic Plan, cost-effectiveness dockets and ongoing operational efficiency strategies. The board will review the draft budget at the November meeting and a final proposed budget in December.

Margie described recent outreach activities, including hiring Southern Oregon outreach manager Karen Chase, program outreach efforts, draft Strategic Plan outreach events, and community relations activities and state legislator briefings by senior community relations manager, Jay Ward. She reviewed Energy Trust engagement on OPUC rulemaking with SB 844 and tracking on the Environmental Protection Agency's 111(d) rules. Staff recently completed improvements to program processes, including various solar soft cost reduction efforts, and integrating Oregon Department of Energy Residential Energy Tax Credit applications with Energy Trust's software for solar incentive applications. A delegation from Pakistan recently visited Energy Trust. Energy Trust was ranked by Oregon Business magazine as one of the best nonprofits to work for in Oregon.

Margie concluded her report with an update on the recently completed Edward C. Allworth Veterans Home in Lebanon, which includes high-efficiency design and equipment and a 336-panel rooftop solar electric system supported by Energy Trust incentives.

Integrated Solutions Implementation quarterly update, Scott Clark

The purpose of the Integrated Solutions Implementation (ISI) project is to support program goals, process improvements, productivity gains through ease of use, improved data quality, and overall system improvements to modernize and strengthen integration of systems among internal and external systems. Phase two of the project is replacement of FastTrack, Energy Trust's system of record for energy savings and generation, and the main program management and delivery tracking system. FastTrack replacement will occur through three releases. The first release is to move customer and site information into the Customer Relationship Management system. The second release is administration of master data, such as measures, markets and offerings. The third and final release is core functionality of FastTrack, which is tracking customer projects, measures, savings and generation. Staff has nearly completed the first release, and minor modifications remain. The ISI team is providing program staff time to review and test the first release prior to implementing and to avoid added work during the large amount of activity that occurs in Quarter 4. While the ISI team is engaging with staff on release 1, work has begun on the other two releases. Scott reviewed the timeline for the three releases, February 2015 for release 1, April 2015 for release 2 and June 2015 for release 3. The third release in June 2015 will mark completion of the overall ISI project.

Energy Trust first started working on the ISI project in 2011. Margie reviewed the details, cost and timing to phase one of the project. Scott provided information on the budget for phase two. Staff expects phase two to cost approximately $400,000 more than originally budgeted due to the complexity of the data model, additional engagement with program and PMC staff, and extended time in the project to allocate resources to the PMC transitions in 2013. This amount will be included in the draft 2015 annual budget the board will review in November.

The board asked whether e-banking is part of the ISI project. The functionality is available in Great Plains, and would be in addition to the current scope of work for the ISI Project. The board discussed budgeting strategies around long-term projects like these, particularly as there are new discoveries and information gathered throughout the project that may modify the scope or budget two or three years into the project.

Adjourn

The meeting adjourned at 4:05 p.m.

The next regular meeting of the Energy Trust Board of Directors will be held Wednesday, November 5, 2014, 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
Electing Heather Beusse-Eberhardt to Energy Trust Board

November 5, 2014

Summary

Elect Heather Beusse-Eberhardt to the board seat vacated by Kenneth Mitchell-Phillips.

Background

- 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.
- On July 20, 2014 Mr. Mitchell-Phillips resigned from this seat due to scheduling conflicts.
- The board nominating committee, having reviewed candidates, nominates Heather Beusse-Eberhardt. Ms. Beusse-Eberhardt is Director of Technology Evaluation and Implementation-Solar at EDF Renewable Energy in Portland, Oregon. She also held the positions of Structured Finance Manager and Project Finance Manager at EDF Renewable Energy, where she has worked since 2008. Prior to this, Ms. Beusse-Eberhardt was Director of Partnership Development at GLOBIO. She also worked at Intel as a Platform Planner, Sr. Financial Analyst, Analyst to LAN Access Division, and founded and led the Intel Employee Sustainability Network.
- Ms. Beusse-Eberhardt serves on the board of Burke E. Porter Machinery and volunteers as a member of the Social Venture Partners. She was a middle school math instructor for Teach For America and a Business English Instructor in South America.

Recommendation

Adopt the resolution below.

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: Seconded by:

Vote: In favor: Abstained:

Opposed:

Board Decision
Electing Edmund Pat Sherman to Energy Trust Board

November 5, 2014

Summary

Elect Edmund Pat Sherman to the board seat vacated by Rick Applegate.

Background

- On October 14, 2014 Rick Applegate announced his retirement from the Energy Trust board; his current term expires February 2015.
- The board nominating committee, having reviewed candidates, nominates Edmund Pat Sherman, Principal with Against the Current Consulting Group of Portland, Oregon. Previously, Mr. Sherman has held positions with ONABEN: A Native American Business Network, National Indian Child Welfare Association, Denver Indian Family Resource Center, Colorado Indigenous Games Society, Native American Community Development Corporation, Life Skills Alternative High School, and was a Senior Fellow at El Pomar Foundation.
- Mr. Sherman currently serves on the board of the Native American Youth and Family Center (NAYA) and co-chairs the Steering Committee for JustPortland.

Recommendation

Adopt the resolution below.

RESOLUTION 724
ELECTING EDMUND PAT SHERMAN TO
THE ENERGY TRUST BOARD OF DIRECTORS

WHEREAS:

1. **Rick Applegate has retired from his position on the Energy Trust board. His term expires in February 2015.**
2. **The board nominating committee has reviewed candidates for the open board seat and nominates Edmund Pat Sherman, Principal with Against the Current Consulting Group of Portland, Oregon to fill Mr. Applegate's remaining term and complete a full successive term.**

It is therefore RESOLVED:

That the Energy Trust of Oregon, Inc., Board of Directors elects Edmund Pat Sherman to the Energy Trust Board of Directors to a term expiring February 2018, subject to all requirements of the Bylaws of Energy Trust.

Moved by: Seconded by:

Vote: In favor: Abstained:

Opposed:

Tab 3

Preliminary Responses to Coraggio Group Management Review and Evaluation Report—DRAFT

November 5, 2014

Coraggio Group completed an independent Management Review and Evaluation Report for Energy Trust of Oregon in which a number of recommendations were made. Energy Trust appreciates and values the recommendations and below has prepared preliminary management responses. These draft responses will be shared with our Board of Directors, the OPUC and other stakeholders during the draft 2015 annual budget and 2015-2016 draft action plan outreach period. Feedback received will be considered in the development of final responses and corresponding actions to address the management review recommendations.

1. Continue current investments in IT systems improvements, in particular business intelligence capabilities, and ensure that potential reduction/elimination of workload and/or additional capacity created as a result of investments is documented.

   Response: We agree with the recommendation and have planned and budgeted to continue to invest in ongoing IT improvements. This includes both Business Intelligence systems and core tracking systems using the Agile development process. Energy Trust systems improvements are driven by business value with authorization made through the staff's Information Technology Steering Committee. The committee updated the authorization process in September 2014 to require documentation of potential business value of the proposed systems and process improvements. Method for measuring and documenting actual value is to be included in the project charter for each project. Valuation of the projects is used as one of the criteria to prioritize enhancement work to best serve the organization.

2. Working with the OPUC and its funding utilities, consider moving to a two-year budget cycle.

   Response: While it is true Energy Trust spends considerable time developing its budget and action plans, we continue to derive value by engaging with utilities, advisory council members, the OPUC, board members and other stakeholders on an annual basis. The opportunity for others to know and help shape our direction and the transparency associated with the process itself continues to benefit the organization. We do question the advantages of shifting to a two-year budget cycle. Our reluctance is because:

   a. *We operate in a highly dynamic market characterized by frequent changes. Because we currently experience challenges in our ability to accurately forecast expenditures within a single year, we believe it would be even more difficult to predict and address changes over a two year period.*

   b. *We engage in an effective and productive annual planning process with our utility partners. The approach accounts for completed and pending projects and corresponding savings/generation estimates, determines program reserve requirements, estimates revenue requirements and results in savings targets and generation goals. Program concepts are developed every year and shared early with utilities and advisory councils. This pattern and frequency has been refined over time and enables us to be flexible, address changing markets, incorporate trends, technologies and products, and account for economic, regulatory and other differences impacting our assumptions and plans.*

c. *Our grant agreement with the OPUC requires that an annual calendar year budget be prepared. A public hearing of this budget is also scheduled annually and is accompanied by a staff report and recommendations.*

d. *We continue to derive significant benefit from the outreach and feedback received each year.*

3. Conduct process improvement on forecasting and budgeting process to reduce non-value added steps.

Response: We agree with this recommendation and have made a number of significant changes to the budget process this year. They are as follows:

a. *Managers were provided with three years of actual cost data for comparison purposes and given a budget target based on past spending.*

b. *A coordinating meeting was scheduled at the front end of the preparation cycle during which program and support staff convened to discuss and compare plans, identified areas for clarification and follow-up, and ensured alignment and coordination of plans and resources for budging purposes.*

c. *Managers were asked to budget and forecast as accurately and "tightly" as possible with the understanding that new program reserves would be available as needed to acquire all cost effective savings and meet goals.*

d. *The timing of coordination with utilities regarding rate requirements was shifted from July to October, thereby allowing staff to eliminate a redundant forecasting step and improving the accuracy of information provided to staff and utilities resulting from gaining two additional months of actual cost data helpful to funding negotiations and budgeting.*

We believe these changes will result in a more accurate and efficient budget. We will continue to look for other efficiencies to save time and better predict revenues and expenditures.

4. Identify opportunities for streamlining all of Energy Trust's marketing expenditures, especially in the Sectors.

Background: Energy Trust implements marketing activities largely through Program Management Contractors (PMCs) in especially high volume commercial and residential programs, and by in-house staff for industrial and renewable energy programs. PMCs and program-based marketing managers produce program marketing collateral and content utilizing brand guidelines and, for in-house programs, shared marketing and production services provided by Energy Trust's Communications & Customer Service (CCS) Group. Energy Trust staff work to ensure all marketing activities are coordinated and align with Energy Trust's overall purpose and marketing objectives. This decentralized structure for marketing management and implementation has enabled programs to be flexible and nimble in their design and promotion of customer-focused services and incentives.

Response: Energy Trust agrees with the recommendation and believes opportunities exist to streamline marketing efforts and expenditures while maintaining program flexibility to market services and incentives. In response to this recommendation, the 2015 draft budget includes an initial opportunity to realize cost savings by centralizing media advertising

procurement for business programs in CCS. This will be implemented on a trial basis in 2015 and may be extended to residential programs in the future. In addition, Energy Trust marketing managers will undertake a project next year to assess marketing activities and expenditures implemented by PMCs, program-based marketing staff, and CCS Group staff and contractors to identify the best approach for future delivery of marketing activities and associated expenditures. We believe these two efforts will help streamline our marketing approach.

5. Pursue discussion with funding utilities to further leverage their marketing efforts for broader outreach and reduced cost.

   Background: Energy Trust currently collaborates with each utility throughout the year to identify ways to leverage utility customer channels and communications to market Energy Trust programs, and to pursue joint marketing opportunities. As part of the budget and action planning process, Energy Trust shares early program concepts with each utility and solicits utility comments on proposed activities of particular interest. These early concepts are refined into program action plans using utility input. Eventually the approaches are incorporated into annual marketing plans and schedules, reflecting communications planned for utility marketing channels, customer outreach activities, and other joint efforts. Energy Trust marketing managers organize quarterly marketing coordination meetings with each utility, and interim meetings as needed, to update plans and identify new opportunities as program needs change.

   Response: Energy Trust will continue this general approach, which has been developed and refined in consultation with utilities. In addition, in the first quarter of 2015, Energy Trust will convene meetings with each utility to review the annual marketing plan and determine what additional opportunities may exist for Energy Trust to further leverage utility marketing efforts for broader outreach and reduced cost. Energy Trust will prioritize collaborative utility marketing opportunities that align with our strategic plan strategy to broaden and expand participation, program savings targets and available resources for implementation. Special attention will be paid to utility insights, data, knowledge and experiences reaching and serving diverse customers throughout their service territories.

6. Regarding the cost allocation methodology, we do not recommend incurring additional time to further evaluate or distribute costs based on slight shifts in the cost drivers.

   Response: The current system of allocating costs between administration, management and programs is relatively easy to administer and stable. The consistency of the methodology also allows for accurate multi-year comparisons of key data points. We therefore support the consultant's recommendation that the current approach be retained.

7. Consider whether to allocate these more general/shared services type costs at the portfolio versus program level when reporting cost effectiveness test results, using either TRC or UCT.

   Response: We are aware that utilities operating similar programs to Energy Trust do utilize different methodologies for determining and reporting cost effectiveness, including a portfolio view. Currently Energy Trust reports cost-effectiveness to the OPUC only for major programs. The recommendation would require a new added level of analysis to report an overall benefit/cost ratio. We currently have no indication from the OPUC that providing benefit/cost ratio information at the portfolio level is preferred or would warrant additional work. By contrast, the OPUC remains very interested in program-specific performance. Given that administrative costs are typically consistent at ~5-6% of total

revenue, we do not anticipate a significant change in benefit/cost ratios. For these reasons we propose not to pursue this recommendation.

8. Request the OPUC to work with Energy Trust to reduce reporting content for the first quarter and fourth quarter reports.

   Response: We very much agree with this recommendation. Energy Trust adopted a formal continuous improvement approach to OPUC reporting in 2013 and welcomes the opportunity to further streamline report content to meet OPUC needs, maintain public accountability and transparency, and reduce staff time associated with report content and preparation. Energy Trust is currently developing a proposal to the OPUC outlining different content for the Q4 and Q1 reports and identifying sections that could be eliminated. We expect to reach agreement with the OPUC on an implementation plan by the end of this calendar year and to submit new streamlined reports for the fourth quarter of 2014 in February and for the first quarter of 2015 in May.

9. Review reporting elements with the funding utilities with a goal of improving efficiency without a loss to sharing valuable information.

   Response: We support this recommendation. Energy Trust developed quarterly utility activity summaries in early 2011 in response to specific, repeated utility requests for quarterly data on program activities, incentives, expenditures, savings and generation. With the establishment of a data sharing agreement in 2013, and the subsequent monthly transfer of Energy Trust program data to utilities, we believe the need for utility-specific quarterly activity summaries is greatly reduced. After data sharing was established, Energy Trust notified its utility liaisons that we would allow some time for utilities to become accustomed to Energy Trust data, and then we would consider reductions in utility reporting content. Energy Trust is developing a proposal that it will share with each utility early in 2015, identifying aggregate data we can easily extract from reporting systems by utility. We plan to implement streamlined utility activity summaries in Q1 2015.

10. Identify, set goals, and track progress on 3-4 administrative-focused productivity metrics in the context of a continuous improvement process.

    Response: In 2015, Energy Trust staff will identify specific areas where productivity improvements are needed and where metrics can be established to measure continuous improvements. We plan to engage with a consultant whose expertise in this area can assist us with quantifying results. We anticipate having an approach in place by mid-2015 and will share progress with staff, the board and OPUC.

11. Adopt a strategic initiative to pursue continuous improvement in all core processes of the organization—both program and administrative-related.

    Response: We support this recommendation and view it as consistent with strategies approved in Energy Trust's 2015-2019 Strategic Plan. The Strategic Plan references and requires continuous improvement activities in each goal area: Energy Efficiency, Renewable Energy, and Operations. The 2015 proposed budget supports initial continuous improvement efforts in specific areas like program design, LEAN process improvement, improved electronic forms and procurement automation and benchmarking.

12. Pilot various changes to the management of programs relative to savings goal timing.

Response: Energy Trust agrees there are opportunities to explore improvements related to this recommendation. Hot and cold weather, the push to complete projects within the construction season, certain tax benefits associated with year-end project completions and corresponding budgets result in a majority of activity being completed at the end of the calendar year. This pattern is well established, results in significant uncertainties and makes program management challenging.

We propose several steps to begin to explore the issue in 2015:

a. *Learn more about how other program administrators and utilities manage projects and distribute activity more throughout the year.*

b. *Extend the use of contract incentives and requirements for program management and program deliver contractors to place greater emphasis on completing projects earlier in the year.*

c. *Consider re-arranging bonuses to more often reward early action.*

d. *Survey market participants on what factors may motivate them to act sooner.*

13. Explore whether the use of an internal verification team is more cost effective than using outside firms.

Response: We appreciate this suggestion based on procedures employed at Puget Sound Energy and agree to explore it further. To assess this recommendation, we first needed to better understand the meaning of the term "verification" within Energy Trust's quality management system. Energy Trust employs quality control, quality assurance, and evaluation as the major complimentary steps for quality management. After some examination and reflection, we have concluded that the services employed at Puget Sound Energy were most analogous to our "Quality Assurance" process. This is where spot-checking records and sometimes installations occur to ensure both data and program quality control processes are effectively applied. At Energy Trust, this work is performed through a combination of financial staff and program contractors, with the data issues handled primarily by program staff.

Our staff quality assurance lead does, in fact, provide suggestions for program streamlining as part of her work as does the team at Puget. During the first half of 2015 we will review the roles of staff and contractors in quality assurance at Energy Trust to see if they are effective at minimizing costs and providing the most constructive advice for improving program effectiveness.

14. Consider a pilot of expanding span of control in some program areas to test whether the layers of management are necessary and are positively impacting the development and management of programs.

Response: Energy Trust will follow up on parts of this recommendation. As noted by Coraggio, Energy Trust has the lowest span of control among the five benchmarked organizations measured. What was also noted is that unlike the other benchmark organizations, Energy Trust outsources the vast majority of its operating expenses, such that most internal managers supervise both staff and contractors. We understand each entity functions somewhat differently, which hinders a true "apples to apples" comparison.

Changing management structures, especially on a temporary or pilot basis, can be disruptive to operations. Further, there are benefits to a lower span of control in the form of accelerated employee development and adequate supervision of staff and contractors. However, we do agree with the recommendation that there may be advantages to increasing this span in certain organizational areas. Energy Trust appreciates the benchmark data and analysis provided by Corragio, and will remain cognizant of span of control considerations in the normal course of making staffing decisions. Span of control will be added as a factor to evaluate when making staffing decisions (see recommendation #16).

15. Conduct the administrative support staffing level needs assessment that was recommended in the 2010 Management Review.

    Response: Energy Trust agrees that an assessment of staffing should be conducted and has budgeted for this to occur in 2015. Staff will continue to manage administrative needs in other ways until the assessment helps inform organization administrative needs and options. Consideration of any administrative staffing changes derived from the assessment will be made during the 2016 budget process.

16. Establish clear staffing justification criteria to give guidance to the organization when considering staffing additions or reductions and to ensure a transparent process for staff budgeting.

    Response: We agree with the recommendation to develop additional criteria to prioritize and make staffing decisions. Such guidelines will be prepared and communicated with internal staff and external stakeholders. Staffing criteria should guide and inform decision-making, be in the best interests of ratepayers, and retain flexibility for managers to make informed business decisions based on each unique situation.

    Energy Trust recommends establishing multiple "factors" to evaluate any proposed additions, changes, or reductions to staffing levels including:

    - *Ability to achieve strategic plan goals*
    - *Ability to achieve energy savings and renewable energy generation targets in a cost effective manner*
    - *Performance improvements using automation, outsourcing, restructuring or other means*
    - *Opportunities to reduce operating costs or gain administrative efficiencies*
    - *Positive/negative consequences to business operations and delivery of services to customers*
    - *Workload and staff retention*
    - *Span of control*

    Once established, we will update current staffing justification forms to reflect new decision-making criteria and promote their use through staff training.

Tab 4

Evaluation Committee Meeting

September 26, 2014 12:00-3:00 pm

Attendees

Evaluation Committee Members
Alan Meyer, Board Member, Committee Chair
Mark Kendall, Board Member
Anne Root, Board Member (phone)
Ken Keating, Expert Outside Reviewer
Tom Eckman, 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
Dan Rubado, Evaluation Project Manager
Anna Kelly, Evaluation Intern
Spencer Haley, Planning and Evaluation Data Analyst
Anna Kelly, Evaluation Intern
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Jackie Goss, Planning Engineer
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Oliver Kesting, Commercial Sector Lead
Scott Swearingen, Program Manager, Multifamily
Diane Ferington, Residential Sector Lead
Marshall Johnson, Program Manager, Existing Homes
Matt Braman, Sr. Program Manager, New Homes and Products
Kate Scott, Sr. Project Manager, Residential

Other Attendees
Christopher Frye - NEEA

1. Free Ridership Discussion

Presented by Erika Kociolek

Introduction: Free ridership has been discussed in past committee meetings. In those meetings, we decided that we would require 30 or more respondents to calculate free rider rates for any one measure or program. If fewer than 30 responses from eligible participants are available in a given year, then we will use data from past years until we achieve the minimum sample of 30 in that category.

There were several follow up questions that we mentioned at the last meeting, including:

- Can we increase the number of surveys done with customers in certain categories to achieve the minimum sample size, specifically for custom projects?

- Are there differences between projects surveyed through Fast Feedback and the population of projects in terms of project size and track?
- Are there differences in responses to the "Energy Trust influence" vs. "project change" survey questions? (The responses to these questions are used to calculate free ridership rates).
- What are the trends in free rider rates over time and how do quantitative responses compare to qualitative (verbatim) responses?

Findings: We conducted analysis of Fast Feedback data to investigate the first two issues and we will be looking into the others at a later date. To the first point, we found we were calling almost all of eligible customers we could through Fast Feedback and couldn't significantly increase the number of completed surveys, particularly in categories where the sample size was small to begin with, such as custom. For customer service reasons, we only call individual customers once per year for surveys. We could potentially increase this, but it would have customer service implications, especially since we are contacting some customers multiple times per year for other evaluation efforts, including impact and process evaluations.

To the second point, we found some discrepancies between the Fast Feedback sample and the project population for the Existing Buildings (EB) program. Custom projects accounted for a higher proportion of savings in the sample than in the project population. Lighting savings comprised a smaller proportion of the sample than in project population. Alan asked for clarification on how the savings proportions were calculated, which Erika further explained.

Fast Feedback survey quotas are intended to be equal between program tracks for EB and Production Efficiency (PE) so that certain project types, for example, lighting, don't dominate the survey responses. This does have an impact on free rider rates though, so we are considering changing this so that the sample better represents the project population. Anne clarified that the population referred to the population of projects in the program eligible to be surveyed and Erika confirmed this.

The analysis found that there were large projects in both the project population and sample in similar proportions. Large projects in the population ranged from 2 to 6% of savings for electric and 8 to 44% of savings for gas. The Multifamily and PE programs each had several very large gas projects representing 31 to 44% of annual savings.

Proposal: Starting with 2014, free rider rates for EB and PE programs will be estimated by track (custom, standard, and lighting), and then those track-level estimates will be weighted by the proportion of savings of each track in the population. If there are fewer than 30 respondents in each track, then we will do something else, such as continue to use the prior methods. When we went back and estimated free ridership rates using the new method, we did see an impact. For the EB program, electric free rider rates calculated using the new method were lower over the past several years. This is due to lighting having a lower free rider rate and making up a relatively larger portion of savings in the population than in the survey sample. For the PE program, there wasn't much difference in electric free rider rates calculated using the two different methods, because the survey sample was very similar to the project population. The EB gas free rider rates showed only minor differences using the new method.

For PE gas, the number of responses in the custom and standard tracks by year are too small to use for free rider rates (4 to 9 observations in each track in each year). This is too few to do anything with, even if we combined survey responses from several years. Since we don't have 30 respondents for each track, we will continue to compute the free rider rate overall for gas

using the prior methods. Phil clarified that this is an interim method until we have large enough numbers of participants to compute free rider rates by track and then roll up to the program level. We want to move to this new methodology because we believe it will be more representative of the project population. Ken said that he doesn't know if this makes the sample more representative of the population or not but is fine with the method.

Discussion: Anne asked if we do surveys of customers not using Energy Trust services to look at spillover. Phil responded that we occasionally do surveys of non-participants to see what they are doing and to calculate spillover savings. It is hard to determine what was actually done at those sites, though. Anne asked if we track what people do when they are turned down for an incentive or project. Sarah said that doesn't happen very often. Phil mentioned that we have looked at what people do after they get a technical study done and don't move forward with a project. When we surveyed industrial customers who had done studies in the past, but not followed through to get an incentive from the program, we found most of them had actually done an efficiency project. Alan said that it is much easier to measure free ridership than spillover, but it may be that a lot of firms are influenced by Energy Trust activities and the firms just don't tell us about what they are doing. Anne said she wonders how much of the total population Energy Trust is influencing and how many customers are doing things on their own. Phil said that on the spillover front, California is doing something new. They made a policy decision to have a 5% portfolio-level spillover rate. This is acknowledging that there are market effects but they are difficult or futile to measure. Ken said that the decision was made that there were market effects after utilities tried to do several multi-million dollar studies to quantify spillover. Some were done with secondary research from other utilities. Ultimately, California decided that 5% makes sense, is probably conservative, and can be used as a placeholder until they can find a better number. Broad-based spillover studies are still in the works, but for now the 5% number works for people.

Phil said that for a number of technologies, the Northwest Energy Efficiency Alliance (NEEA) calculates the market effects of market transformation efforts in the Northwest. Ken said that the market effects of programs are much bigger than any spillover for individual measures installed outside of the program. Tom said that the longer Energy Trust is in existence, the greater the funnel of market effects gets as we change peoples' social norms. Anne said that she wants people to recognize that Energy Trust is making a difference on the social norms of the state. Ken said what Energy Trust gets credit for and what it determines to spend ratepayer money on in the future need to use different metrics. Spillover and market effects are part of the organization's impact, but free ridership rates help determine what should be done next. The fact that we have high free ridership rates and a lot of spillover tells you that the program is attracting a lot of attention and has made big changes in the market, but that you might want to change where you go next to get the most from your investments. Fred said that this message is complicated by the fact that we need to achieve savings goals with our money. We need, procedurally, to figure out how we are going to book savings in a given year and a lot of times we don't get credit for market transformation and spillover or they can't be factored in. Ken said that the adjustment to forecasting free rider rates we are suggesting makes sense and has been discussed elsewhere. However, while the free rider rate of the future program that is being planned for may be different from the past program, it could also be the same. Phil concurred that our best customers are generally our past customers.

Proposal for large projects: Given the small number of gas projects for Multifamily and PE and the influence they exert on the program free ridership rates, our proposal for forecasting and budgeting purposes is to exclude large projects comprising more than 30% of annual population savings from free rider rates. Such large projects in a small sample may or may not be

anomalous but can heavily swing the results one way or the other. So, for the purposes of forecasting only we would like to exclude them. They will remain in the calculations for free ridership rates used in True Up because they do represent what happened in the past. Erika asked Scott if he would like to explain how higher free ridership rates impact program forecasting and budgeting. Scott responded that in Multifamily, the program has a mix of capital projects and direct install measures. Direct install measures are not really affected by free ridership or program realization rates. However, on the capital project side, the savings are roughly cut in half by the high free rider rate, which makes the cost of implementing those measures twice as high. So the program has a big incentive to just go after direct install projects to obtain savings because it is cheaper.

Erika continued, saying that the free rider rate was 51% for Multifamily for 2013, which includes 2011-2013 survey responses. If the one large project (more than 30% of program gas savings) is removed from the sample, we get 42%. Since we can't be certain this was an outlier or not, if we take the midpoint of these two numbers (51% and 42%), we get a free rider rate of 47%, which is what we propose to use for forecasting. The 51% will still be used for True Up. It is the reality of what we saw in the data, but this large gas project could be an outlier, so we don't want to weigh down future projections with it.

The committee decided to accept all of the proposals for calculating free ridership.

2. 2014 Lighting Shelf Space Survey

Presented by Sarah Castor

Introduction: DNV GL (formerly KEMA) has conducted annual lighting shelf space surveys for Energy Trust for many years. The main contract is with NEEA, and Energy Trust contracts with DNV GL for an oversample of 20 stores. Store visits took place between December 2013 and January 2014, and include a representative mix of store types, such as do-it-yourself (DIY), wholesale clubs, drug and grocery, mass merchandise, and small hardware. DIY and wholesale clubs are referred to as "big box" stores and all other store types are "non-big box" stores. We refer to results from the current report as "2013 results" and results from last year's report as "2012 results." All of the results presented here are for Oregon only, although we refer to the Northwest as a whole when relevant. Ideally, we would like to have sales data, but in the absence of that, we look at what retailers are stocking.

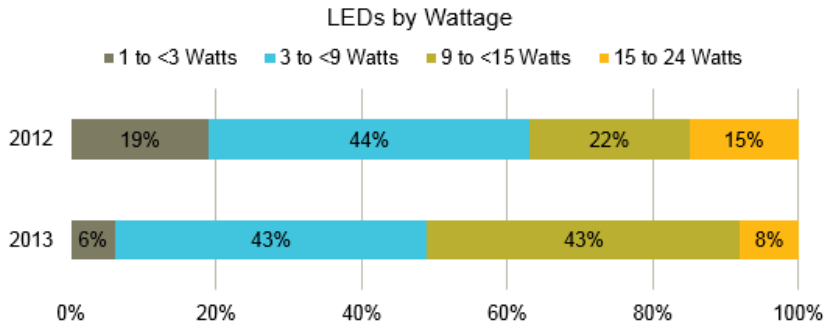
Findings: For this shelf survey, we looked at a variety of characteristics of lighting stock, including availability, diversity, and pricing.

Findings – Availability: The overall number of lamps is down from 2012, and this was true for all store types except for wholesale clubs. The number of light emitting diode (LED) and halogen lamps increased, and compact fluorescent lamp (CFL) and incandescent stock decreased. 74% of stores were stocking LEDs (compared to 66% in 2012). The share of Energy Star qualifying LEDs doubled, to 43%. LED share doubled, but it is only 4% of overall stock.

The share of CFLs dropped slightly in Oregon, but not in the Northwest. The share of Energy Start qualifying bulbs was down, from 81% to 74%. The share of incandescents declined while the share of halogens increased by 80% in Oregon, which is likely related to the Energy Independence and Security Act (EISA). The share of EISA qualifying lamps was up in all brightness categories this year.

Findings – Diversity: The following findings are around the number of different models, or Stock Keeping Units (SKUs) available in stores. Bulb diversity is still greatest in incandescents (62 models per store) vs. 29 for halogens, which had the next highest number of models per store on average. CFLs and LEDs had many fewer models per store. The greatest increase observed was in halogens – up 11 models per store. LED models increased from 4 to 6 per store on average, and there was very little change in general purpose and specialty CFLs. Ken asked if the 62 incandescent models included EISA-exempt bulbs, such as refrigerator lights. Sarah responded that the 62 models include non-standard bulbs.

There were few changes for CFLs in terms of wattage. We saw fewer LEDs in the highest and lowest wattage bins, as shown in the graph below.



EISA is reducing the stock of incandescents in the highest wattage bins (60W and above), although there is still a lot of stock in the 60-75W bin (retailers are selling through their stock of these bulbs). Halogens are shifting between the lower wattage categories.

When we look at lamps by lumen bin, we see that there have been no big changes by lumen bins for CFLs. LEDs, halogens and incandescents are shifting toward lower lumen bins, and this trend is consistent across store types and for the Northwest region as a whole. We are also seeing a related decline in halogens in the medium-low, medium, and high brightness lumen bins (a shift from brighter to dimmer lamps). We are not sure what is driving this.

Findings - CFL Pricing: For this study, we did collect prices for all bulbs, but for this presentation, we will report on CFL pricing only. The average price of a CFL in Oregon was $4.97 at the time of the study, and in the Northwest, was $4.44 ($0.50 lower than Oregon). CFL prices are higher across the board than in the Northwest as a whole (consistently across different bulb types and store types). Tom commented that it's important to remember this is shelf space, not sales. Fred added that average *sales* prices might be lower than this – we don't know.

CFL prices have increased 6% in Oregon stores since 2012 (2% in the Northwest). General purpose bulbs are up 8% and specialty bulbs are down 1%.

Lumen Bin/Lamp Technology	MSB A-lamps			MSB Globe			MSB Reflector			SSB Candelabra			MR16 Lamps		
	Total # of lamps (across all stores)	Watt-age (avg)	Shelf price (avg)	Total # of lamps (across all stores)	Watt-age (avg)	Shelf price (avg)	Total # of lamps (across all stores)	Watt-age (avg)	Shelf price (avg)	Total # of lamps (across all stores)	Watt-age (avg)	Shelf price (avg)	Total # of lamps (across all stores)	Watt-age (avg)	Shelf price (avg)
1490-2600 lumens															
CFL	0	-	-	0	-	-	0	-	-	-	-	-	-	-	-
LED	21	21	$35.94	0	-	-	0	-	-	-	-	-	-	-	-
Incandescent	123	123	$2.37	17	150	$4.08	13	250	$5.98	-	-	-	-	-	-
Halogen	1,636	76	$2.09	0	-	-	852	85	$11.51	-	-	-	-	-	-
1050-1489 lumens															
CFL	126	20	$9.83	0	-	-	439	24	$9.67	-	-	-	-	-	-
LED	133	15	$24.40	0	-	-	688	18	$24.38	-	-	-	-	-	-
Incandescent	853	77	$0.70	101	100	$5.41	0	-	-	-	-	-	-	-	-
Halogen	1,740	59	$2.25	0	-	-	1,091	66	$8.28	-	-	-	-	-	-
750-1049 lumens															
CFL	790	15	$6.06	338	14	$5.62	3,387	16	$5.08	-	-	-	-	-	-
LED	2,515	11	$12.79	0	-	-	1,737	14	$20.06	-	-	-	0	-	-
Incandescent	7,390	61	$0.69	0	-	-	254	65	$5.47	-	-	-	0	-	-
Halogen	2,224	46	$2.04	25	60	$4.40	517	51	$12.72	-	-	-	108	53	$5.82
310-749 lumens															
CFL	630	11	$7.15	442	11	$6.22	1,557	14	$7.15	461	11	$4.43	-	-	-
LED	3,103	8	$6.83	2,160	8	$7.14	1,166	9	$18.50	15	5	$9.97	99	8	$24.59
Incandescent	6,161	46	$1.09	3,151	48	$2.25	5,171	62	$4.17	4,260	51	$1.00	74	50	$3.60
Halogen	7,370	48	$1.84	245	54	$4.22	2,474	50	$8.28	434	57	$2.42	866	50	$6.45
0-309 lumens															
CFL	14	7	$5.99	0	-	-	0	-	-	275	7	$4.20	-	-	-
LED	102	4	$10.01	48	2	$12.60	30	6	$29.52	1,696	3	$10.85	219	4	$19.69
Incandescent	1,661	21	$1.39	864	26	$1.95	672	37	$5.04	2,851	28	$1.22	77	34	$3.21
Halogen	138	39	$3.27	637	39	$3.29	155	38	$12.04	327	35	$2.73	335	23	$7.62

The table above is a summary of number of lamps, average wattage, and price for different bulb types, technologies, and lumen bins. The yellow cells indicate gaps that we'd like to see filled in the market. In the highest lumen bins, there is a shortage of CFLs and LEDs, specifically A-lamps, globes, and reflectors. CFLs and LEDs are missing in the medium lumen bin for globes and candelabras. Alan noted that in the highest lumen bin, the number of lamps and wattage were the same for CFLs and LEDs – is this a coincidence, or not? We will check on these numbers and get back to the committee. [Update: We did verify the numbers are correct. It is a coincidence that they are the same.] Phil commented that this table helps us determine where we want to do buy-downs with manufacturers – in some places, there are clear gaps, and in others, there is so much action we don't want to provide incentives. Chris asked what the zeroes in the table mean. Sarah responded that this means nothing is stocked there.

Alan asked how we are using this information. Paul responded that there are three main areas where we use these data. First, we use the cost of efficient equipment in our cost-effectiveness calculators. Second, we use the cost of baseline equipment in our cost-effectiveness calculators. Third, these data are our source of information about baseline wattages. Fred added that if we got sales data, we would be in much better shape, but we continue to work on getting sales data. Phil noted that if bulbs are not selling, they will disappear from shelves, and we have been seeing this, since the number of bulbs has been shrinking over the past few years. In this way, the shelf space survey factors in sales, since if a product is not selling, retailers will replace it with something else that will sell. Ken responded that it takes some time for these changes to happen. Fred commented that for the baseline, if we see 1-2 bulbs on a shelf, we would not use that to estimate volume; it's too small to be a good indicator. As a region, we are trying to get sales data from a broad enough variety of stores to be informative.

Findings - Lighting Controls: 5% of Oregon stores carry dimmer switches in the light bulb aisle (compared with 6% in the Northwest), and 5% of Oregon stores carry wirelessly controllable LEDs. The majority of stores carrying dimmer switches in the light bulb aisle and wireless controllable LEDs were big box stores.

Findings - Promotional Materials: The most common messages were energy and money savings, and utility promotions. Some messaging was around Energy Star, low pricing, and length of life. Big box stores tended to focus on utility promotions and low pricing; non-big box stores focused more on energy savings. 58% of stores displayed some promotional materials, which was down from the previous year; the opposite was true in the Northwest, going from 54% to 69%. All stores used wall or shelf signs and a small number used brochure or ceiling signs.

59% of stores put materials in the lighting aisle itself, a few used end-cap displays, and none used front-of-store or check-out displays. Materials were mostly focused on CFLs, though more than half of stores also featured materials on LEDs. About a third of stores featured materials on halogens and incandescents.

Findings - Linear Fluorescents: The percent of stores stocking T12s is up, and the percent stocking T8s is down. This is contrary to the Northwest, where stocking of both T12s and T8s is down. The overall quantity of linear fluorescents was down 43% from last year (which hopefully means stores are selling through their stock). The share of T12s increased relative to T8s. Only 4% of linear fluorescents meet the 2012 Department of Energy (DOE) efficiency standard – a decline from last year. Lamp models decreased for both T8s and T12s. Alan noted that this trend seems counterintuitive. Ken suggested that customers might be buying these lamps for shops, garages, and kitchen lights. Phil commented that some customers might be buying these lights for commercial applications (T12s cannot be sold for commercial use anymore).

Energy Trust Take: EISA is helping to shift the market away from stocking incandescents although the slack appears to be taken up by halogens (and maybe a few LEDs) but not CFLs. The share of Energy Star qualifying CFLs is down, which suggests to us that there is still a role for CFL and LED incentives. We saw a shift in stock towards lower wattage/lumen categories. It is not clear what's driving this shift, and why there is not more stock in the higher brightness categories. More stores are stocking T12s (though the number of total bulbs is down), and fewer are stocking T8s. We don't know where these bulbs are coming from and why.

Next Steps: Another shelf survey will begin late this year. Energy Trust and NEEA are working to get Consortium for Retail Energy Efficiency Data (CREED) data (lighting sales by SKU for all technologies), which is expected early next year. We are also working at a regional level to get better market data to show our impact and claim savings.

Tom asked what our future plans are for efficient lighting. Matt commented that based on the data we have, we need to support the general purpose CFL and LED markets. We currently have general purpose CFLs, specialty CFLs, LED downlights, CFL downlights, and LED lamps in the mix of measures at retail right now. We are looking for niches and identifying products in those areas.

Ken noted that in California, they separate big box store pricing from that of non-big box stores because the average prices in each are really different. He recommended separating them if we can. Matt commented that the Products program is transitioning implementers, from PECI to Ecova, and Ecova proposed an incentive model where the per-bulb amount is not the same for

every store, which will allow us to get into stores we could not reach previously. Ken noted that LED manufacturers are resistant to reducing their prices because they won't make money on replacements due to the long lamp life of LED bulbs. Fred noted that as lamp stock consolidates, we want to make sure the products that survive are good ones, which is one of the reasons why we are still in the market.

3. Nest Pilot Evaluation

Presented by Dan Rubado

Background: The Nest thermostat is an advanced internet-connected device that uses internet weather data, learning algorithms, a motion sensor, and other strategies to save energy on heating and cooling. It has some features specific to heat pumps that have the potential to reduce the reliance of heat pumps on auxiliary electric resistance heating. Fred commented that we picked a product and brand with features that other products do not offer, namely, controlling the cutover to electric resistance heating for heat pumps. Dan continued, noting that the heat pump balance feature was of primary interest for saving energy. The Nest learns how much time it takes to heat a home, and schedules the compressor to turn on early and run longer to achieve the target temperature and minimize backup heat.

There are other features that have the potential to save energy, including:

- Auto Schedule, which remembers occupants' preferred set points and schedule
- Auto Away, which uses an onboard motion sensor to detect occupancy and set back the temperature if it senses occupants are away
- Filter reminders, which, based on runtime, alerts users that their filter needs to be replaced
- Remote adjustment, which allows for thermostat adjustment online or via smartphone app
- Nest Leaf, which indicates that the thermostat is set to a temperature where it will save energy
- Energy History and reports show energy runtime data and provide feedback via comparisons with other Nest users

Pilot: The Nest pilot was proposed as a potential alternative to Energy Trust's current heat pump advanced controls measure, which has not had good uptake and several drawbacks. The measure relies on contractors to run a wire to the outside unit and set controls to lockout backup heat at the appropriate outside temperature. Nest does not require either of those things. The Existing Homes program implemented this pilot to test the Nest in homes with heat pumps. The energy savings were assumed to be the same as the savings for the current heat pump advanced controls measure, 836 kWh per year.

Past Home Energy Review and Home Energy Profile participants that had not installed any measures were randomized into a treatment and comparison group. About 1,600 customers were contacted and offered a free Nest thermostat. Interested customers were screened by phone and 222 site visits were conducted. 185 Nest thermostats were installed in homes, and 11 were uninstalled due to technical issues, for a grand total of 174 installs. There were also 299 comparison homes, which were never contacted.

Research Questions: The key research questions were: How much energy does the Nest save? Which features save energy? Are customers motivated to save energy? Do customers change

the heat pump balance setting? Which features did they use? Were they satisfied with Nest and the comfort of their home? What problems were encountered?

Evaluation Methods: Apex Analytics conducted the evaluation. They reviewed pilot data and the implementation report from CLEAResult, interviewed program staff working on the pilot, conducted two participant web surveys, and reviewed the methods and findings from a billing analysis conducted in-house. We also recently received aggregated data from Nest Labs on actual heat pump balance settings and runtime for auxiliary heat.

Participant Surveys: A web survey was fielded mid-heating season. We sent 177 letters inviting customers to participate with e-mail follow-ups. 110 responded, yielding a 62% response rate. The first survey was focused on customers' motivation to participate, installation and setup, attitudes and use of thermostat, problems encountered, use of thermostat features and value of the thermostat, impact on home comfort, and satisfaction with the thermostat and the pilot. A second web survey was fielded post-heating season, focused on changes in customers' experiences and opinions from the first survey.

Billing Analysis: The analysis period was 1/1/2012-8/11/2013 (pre-pilot period) and 12/16/2013-5/31/2014 (post-pilot period). Participant and comparison group data were merged with monthly electric usage data and weather data. Daily averages were computed for billing periods. Homes were removed from analysis based on exclusion criteria summarized in the table below.

Phase of Analysis	Participants		Comparison	
	N	%	N	%
All Nest pilot sites	177	100%	299	100%
Sites matched to billing data	159	90%	251	84%
Sites removed with solar PV	154	87%	249	83%
Sites with billing data in both pre and post periods	145	82%	234	78%
Sites removed with Energy Trust projects	122	69%	220	74%
Sites with valid square footage data	117	66%	215	72%
Outliers removed with <1,000 kWh annual usage	116	66%	215	72%
Outliers removed with >55,000 kWh annual usage	116	66%	214	72%
Outliers removed with large changes in annual usage	116	66%	211	71%
Sites removed where Nest uninstalled	113	64%	211	71%
Total sites available for analysis	**113**	**64%**	**211**	**71%**

We started with everyone that had Nest installed, and lost sites because we weren't able to match them to billing data. We removed sites with solar PV, sites that did not have billing data in the pre- and post-pilot period, sites that did Energy Trust projects, sites with invalid or missing square footage data, sites with outliers in usage, sites with extremely large changes in usage, and sites where the Nest was uninstalled. Chris asked why sites with solar PV were excluded. Dan explained that metered data from sites that installed solar are unusable because we don't know the site's consumption.

We used a panel regression model predicting average daily electric usage, controlling for heating degree-days (HDD) and cooling degree-days (CDD), home square footage, and year built. We added variables to compare pre- and post-period usage between the participant and comparison groups. The annual savings were calculated from coefficients using the typical meteorological year, version 3 (TMY3) long run HDDs. We performed sensitivity analysis using

different model specifications and different HDD and CDD reference temperatures. The results were fairly similar, which increased our confidence in the results.

Findings: Participant and comparison average square footage, year built, and proportion of site built homes were quite similar. There were slightly higher proportions of customers in the participant group that received solar PV incentives and participated with Energy Trust than in the comparison group, although this doesn't influence the results since we remove folks in those categories from the billing analysis.

The geographic distribution of sites was fairly similar between the participant and comparison groups. 50-60% were in the Portland Metro area, 16% in the Willamette Valley, and 25-35% in Southern Oregon. 75% of participants said their previous thermostat was programmable, and 85% said their previous programmable thermostat was programmed. Of those that reported having a manual thermostat, 79% said they adjusted the thermostat daily. 6% had thermostats with backup heat lockout capabilities.

Fred commented that these findings are pretty informative regarding control deployment on heat pumps, because all we currently have is an 8-year old regional study that says contractors set up thermostats with strip heat lockout correctly about half the time. This shows that it's a lot worse than that. Fred asked if this was self-reported data or if it was collected by the contractor. Dan clarified that it is what collected by the program during installation visits. Marshall said that we don't really know how many existing heat pumps currently have lockout, but the 2012 code change requires that new heat pumps be installed with lockout controls programmed to lock out strip heat at 40 degrees. However, there are a lot of heat pumps out there that were installed prior to this code requirement. Since the code change, more units have been installed with controls, but we still think there is a need for a heat pump control measure for new heat pumps, because the controls are often not programmed properly or are not set to lockout at 40 degrees.

On average, participant and comparison group homes' pre-pilot annual usage was 17,000 kWh per year. We collected demographic data about participants through the two surveys; participants were more educated, more affluent, and a bit older than the general population. The majority of homes were occupied by 1-2 people.

There were some installation challenges, including customers with ineligible equipment (those that thought they had a heat pump, but actually did not; customers with multiple heat pumps; and one ground source heat pump). Additionally, there were many wi-fi and router problems, including lost wi-fi passwords and incompatible routers (Nest requires continuous access to the internet, even when the thermostat is in power save mode, and not all routers support that). Some thermostats had low signal strength, and mobile wi-fi hotspots were not sufficient.

There were also some technical issues. 5-7% of first generation Nest sub-bases were defective, but the second generation hardware appeared to fix the issue. There were wiring challenges with newer heat pumps with integrated controls, which necessitated rewiring the system to connect to the Nest. Elderly and non-tech savvy participants had difficulty resetting the Nest schedule, which caused a number of calls to the program hotline.

Through the two surveys, we asked participants about their use of specific features of the Nest. The most frequently used features were the Nest Leaf, Auto Schedule, and Energy History. We also asked about the usefulness of specific features; the most useful features were the same features that were most frequently used. We asked how often participants adjusted the Nest; in the first survey, most said, "every day" or "a few times per week." In the second survey, more

participants said, “a few times per week” or “several times a month.” Dan noted that the idea with Nest is if you adjust the thermostat, it remembers your preferred set points and better adapts to your schedule.

The heat pump balance setting controls the use of backup resistance heat, and is one of the primary features of the Nest thermostat thought to save energy. The Nest was installed with a setting of Max Savings, and participants were asked to not change this setting. Other settings were: Max Comfort, Balance, or Off (a manual lockout temperature has to be entered if this setting is turned off). Eight percent reported changing this setting in the first survey, and 13% reported changing this in the second survey. Of those who changed the setting, 2/3 changed to “Balance” and 2 participants set it to “Off.” The most common reason for changing the setting was that the house was too cold. We received data from Nest Labs on the percent of participants with thermostats set to something other than “Max Savings” – 14% of thermostats were set to something other than Max Savings. Fred commented that this is rare to see alignment of people remembering what they did and data on what they actually did. Dan noted that there were high response rates for both surveys, and participants were very engaged with the pilot; this corroboration suggests that participants responded accurately to the survey.

Twenty percent of respondents reported turning off Auto Away, which was initially set to “On” by the installer. The primary reason was that Auto Away was triggered when people were at home.

Forty-one percent of respondents reported some sort of problem in the first survey; most of the problems related to operating the thermostat, issues with wi-fi connection, and the house being too cold. The proportion of respondents reporting problems dropped off during the second survey (17% reported a problem in the second survey). Fifty-seven percent of respondents who had a problem reported that it had been resolved by the time of the first survey. Forty-four percent of those who experienced a problem did not seek assistance.

The vast majority of respondents reported that the Nest was somewhat or very easy to use. Respondents’ favorite aspects of the Nest included: energy savings, ability to control remotely and automated scheduling. Sixty-two percent believed the Nest was worth the full retail price of $250 (no major differences in response by income level). Thirty-four percent believed it was worth the full retail price even without any energy savings. Even so, lower bills and energy savings were the primary reasons reported for participating in the pilot. Marshall asked if this suggested a non-energy benefit. Dan responded that we didn’t collect sufficient information to quantify non-energy benefits of the Nest, but this does suggest that there are non-energy benefits, such as comfort and convenience.

Most respondents reported that they were satisfied with the Nest (this increased between the first and second surveys). And most reported that they would recommend the Nest to a friend of family member.

We estimated the energy savings of the Nest using billing analysis. The energy savings were found to be 780 kWh per year, which is 93% of the savings estimated for the heat pump advanced controls measure. These savings are not from the entire year; cooling load is not included. The savings represent 4.7% of the average annual electric usage of the sample and 12% of heating load based on the Residential Building Stock Assessment, or RBSA (this is all homes in RBSA, not heat pump only homes).

We wanted to see if a Nest measure could be cost-effective based on these estimated savings. We looked at a contractor or direct install measure (savings of 780 kWh), and a targeted

contractor or direct install measure with higher savings (savings of 1,200 kWh). These numbers do not include non-energy benefits. We found that the measure could be cost-effective under a couple of different scenarios.

We also looked at savings by various subgroups. These findings should be taken with a grain of salt for a few reasons: we are working with much smaller sample sizes, more homes are excluded due to missing data, some variables are correlated, and a bevy of comparisons translates to potential random fluctuations in the results. Alan asked about the comparison group, which we didn't contact, and what we think the savings would have been if we had made people in the comparison group more aware of their existing thermostat. Dan noted that only 6% of homes in the pilot had the electric resistance lockout capability; we would not be able to get the kind of savings we saw with Nest, even if we had a good setback program, from normal thermostats. Chris asked if we know that none of the homes in comparison group had a Nest thermostat. Dan responded that we don't. Marshall added that we have seen some data from Nest Labs showing a very small number of installed thermostats in our service territory.

We looked at savings by electricity usage; not unsurprisingly, the highest users (more than 18,000 kWh) achieved the highest savings, and the lowest users (less than 13,000 kWh) had zero savings. Higher users had larger homes, more of the homes were site-built, and there were more occupants. Looking at savings by region, Portland Metro participants had higher savings on average, and more and younger occupants than other regions. Looking at savings by construction type, manufactured homes had higher savings than site-built homes. Looking at savings by age, the oldest group had zero savings, and the middle group (50 to 64 years old) had high savings. Looking at savings by income, the lowest income group had much higher savings. So did the group with the least education (less than a college degree).

Homes where the Nest replaced a programmable thermostat appeared to have higher savings than those that previously had manual thermostats. Participants who reported using the smart phone app to adjust the thermostat may have had slightly higher savings, although it was too close to call. Also, participants who reported using the Nest filter reminders appeared to have higher savings than those that did not (we can't attribute the difference to filters actually being replaced – participants that noticed or used the reminders maybe paid more attention or used the device more effectively in general). Chris asked how often people were reminded about the filter. Dan responded that the reminders popped up after a certain amount of runtime.

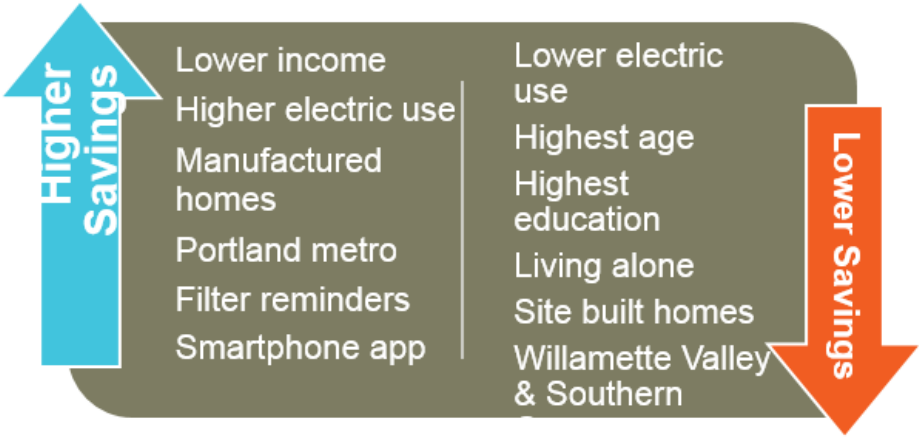
We received data from Nest Labs about electric resistance heat backup runtimes by heat pump balance settings. For those with a setting of Max Savings, there was a 7.7% use of backup heat, and for other settings, there was a 15.4% use of backup heat. So, the runtime of electric resistance backup heat was half with the Max Savings setting compared to other settings. Fred commented that we have worried in the past about undersizing heat pumps; based on how infrequently the resistance heat is running, it doesn't look like heat pumps are undersized.

There are additional factors which may play a role in Nest energy savings, but we were unable to analyze them due to small numbers or lack of data. These include: prior thermostat's ability to lockout backup heat, use of Auto Schedule, use of Auto Away, technological savvy of participants, and cooling season savings. Dan noted that once we have sufficient data, we will be able to analyze cooling savings as well.

Conclusions & Recommendations: We found significant heating savings despite issues with the pilot. The pilot used the best possible installation scenario. Participants may not have been the best candidates due to the pilot's recruitment strategy. We found a low prevalence of

participants who changed energy saving settings. Also, these are preliminary findings; we need one year of follow-up data. However, we recommend that these results be used as the savings estimate for direct install Nest thermostats with heat pumps.

Savings did vary, but point estimates were not reliable. Differences in savings by subgroup (which are summarized in the graphic below) could be used to help with program design; for example, targeting income qualified households.



We had a relatively low participation rate in the pilot; 10% of the people solicited ended up with a thermostat installed in their home. We found that letters followed by phone calls worked better for recruitment as opposed to just calling customers. A large number of customers were disqualified, and there were numerous technical issues. Some of those issues could have been identified in advance; for example, the sub-base issue was identified and well-documented by early 2013. A recommendation is to provide a troubleshooting guide and support to participants to address the most common issues.

Most participated in the pilot primarily to save energy. Participants liked the energy savings, ability to control the Nest remotely, and the automatic scheduling. Participants provided high satisfaction ratings across the board. The evaluator recommends providing greater support to participants on Nest's features, and recruiting customers by selling energy savings, as this was the thing people were primarily interested in. Most technical, logistical, and participant-related challenges were overcome in the pilot.

Energy Trust Take: The program can move forward with promoting Nest for heat pump homes, considering a direct install or contractor install delivery method with heat pumps. Targeting a technologically savvy population, high users, income qualified households, and manufactured homes would be useful (these were all groups that saw high savings and/or reported few problems with the Nest). The program is moving forward with a gas furnace smart thermostat pilot that will include a new Honeywell product as well as Nest thermostats.

Alan asked if the Nest measure would be for new heat pumps or existing heat pumps. Marshall responded that Nest fits into the existing heat pump advanced controls measure and incentives are currently available for contractors to install it. Marshall noted that a new measure is in development for advanced controls for newly installed heat pumps, which Nest would also fit in. This measure would be for any new heat pump installed in Oregon, whether or not it meets the HSPF requirement to receive an incentive for the heat pump itself. It would include controls, similar to the current measure for existing heat pumps, and savings would come from the

incremental improvement in strip heat control from the code baseline. This would allow us to get heat pump controls installed, which code requires, but with a 35 degree lockout temperature in lieu of the 40 degrees required by code, and claim the incremental savings. Marshall also noted that HVAC installers are hesitant to tune-up existing equipment because it doesn't align with their business model. So, we may have more uptake with a measure for newly installed heat pumps.

Ken asked, if this was a self-install measure, can the program work with Nest Labs or others to provide quality assurance to know installations were done properly. Dan responded that we hope to learn through the gas pilot about self-installation and how that works. Dan added that Nest Labs is wary of sharing information. However, Nest Labs does a lot of different things with utilities. If we made the case that it is important to verify that thermostats are installed correctly, they may come around. They have that information – they can pull up the wiring diagram and may agree to share that with us.

Alan asked about differences in wiring between gas furnaces and heat pumps. Dan responded that gas furnaces have simpler wiring. Customers can go online, create an account, register their device, and verify that they did the wiring correctly. Fred commented that there is a small class of high-end gas furnaces with proprietary controls, but most furnaces are not those units. Jackie commented that we could provide a small incentive in-store, and then maybe also offer an incentive for installation. Ken commented that is an interesting hybrid approach. It is inevitable that people will have trouble with installations, so the program should provide assistance if needed. Mark asked if the rebate could be conditional on providing a "correct install" certificate from Nest. Dan commented that the program has toyed with asking for a screenshot of an e-mail from Nest in order for customers to get the rebate.

Marshall commented that the next effort will be more targeted; participants will be recruited from NW Natural customers that pay their bills online. Fred noted that there are challenges with gas cost-effectiveness. Dan responded that the cost would be cut considerably if this was a self-install measure, and for gas furnaces, it would be easier. Ken asked if there are different units for heat pumps versus gas furnaces. Dan responded no. Gas savings are predicated on occupancy sensing and auto scheduling, better setbacks, the Nest Leaf, and the Energy Reports.

4. Short Take: Market Lift Pilot Evaluation

Presented by Erika Kociolek

Introduction: This pilot was testing a mid-stream approach to influencing the lighting market. There were several parties involved in implementation. Energy Trust provided the funding and incentives for retailers. Bonneville Power Administration and CLEAResult provided field services to retailers. D&R International provided overall coordination and data collection. The goal was to recruit high-volume lighting retailers and provide them with direct, per-bulb incentives for increasing their lighting sales in certain stores above an established baseline. There were also milestone incentives for retailers to conduct sales associate training and develop in-store sales strategies. Establishing a baseline and estimating the "lift" in lighting sales required detailed sales data before and during the pilot period.

Results: We only recruited one retailer for the pilot. The retailer, unfortunately, was not focused on lighting and only stocked lighting products as a very small part of their sales. The pilot was implemented from March-October 2013. There were four designated treatment stores where lift

was evaluated and six comparison stores to serve as the baseline. The retailer did not receive any of the milestone incentives due to lack of participation. In addition, sales data was very difficult to obtain from the retailer. They were reluctant to share their sales data, but ultimately, Energy Trust did receive all the necessary data and was able to calculate the lift in lighting sales attributable to the effort.

The data showed that there was essentially no lift in sales of efficient lighting products in the treatment stores. However, this was Energy Trust's first foray into this type of mid-stream and upstream program designs. It was a success in the sense that we were able to eventually capture sales data to estimate the impact and create a relationship with a retailer.

Matt clarified that our current buy down approach is a mid-stream approach, but this pilot was for more of a performance-based mid-stream approach. This model put all the risk on the retailer, so we are unlikely to move forward with this in the future. We need a model that shares the benefits and risks between parties better. Mark asked if there was a consolidated place for training sales staff for this type of pilot. Erika responded that it depends on the retailer that is involved. Christopher asked if this model would ever work for retailers. Matt responded that the retailer told us they thought it could work, but really it seems like it isn't that viable.

Evaluation Tasks: The evaluation of the pilot was conducted by DNV GL and involved interviews with pilot collaborators (retailer and manufacturer staff) and the pilot team (implementers, field staff and Energy Trust staff). The goals were to identify and document pilot barriers and challenges, successes and suggestions for improvements and lessons learned.

Evaluation Findings: The retailer that participated in the pilot was not focused on lighting and had very low baseline lighting sales. The pilot team thought the product being promoted might be too expensive for the customer base of this retailer. In addition, the pilot incentive structure was complicated and the retailer did not understand it, which limited their motivation to fully participate. In addition, there were communication issues between the pilot team and pilot collaborators, a lack of in-store promotional activities and sales training, low stock of bulbs, and poor placement of promoted bulbs. The manufacturer of the bulbs being promoted may have been able to help overcome some of these problems, but they were involved too late in the game to have any influence.

The pilot helped to test this performance-based mid-stream program model, captured sales data, and cultivated relationships with retailers and other parties. Although there was no lift in sales of efficient lighting products, there were many learnings about how to work with retailers. The Products program is planning to launch a similar mid-stream pilot in 2015, possibly focused on refrigerators.

Recommendations: The evaluator recommended that only retailers that have a focus on the product category being incented should be recruited for this type of effort. There was an incentive for training and sales planning, but the evaluator thought that it might be good to require this for such a program. However, we're not sure if this would actually be feasible in implementing a program. Rather than going through a third party, communicating directly with retailers would be more effective and less confusing. It would also be useful to involve manufacturers in helping to promote products in stores.

Kate said that the retailer was enthusiastic about this concept but couldn't get the right staff and individual stores engaged and involved. Mark said that big box retailers are not into sales. They only stock products and do transactions but don't conduct sales activities. Alan said that this is

valuable because we know what doesn't work. Phil agreed that it is an important thing to know what doesn't work. Ken said that this has been tried elsewhere and is being tried some more. The worst example of this type of experiment was a pilot that worked with a retailer to raise the average efficiency of multiple product categories simultaneously. It was way too complicated and way too much data was required to figure out if there is any lift and it ultimately failed. Erika said that D&R has implemented similar lift pilots to this one in two other locations and had relatively similar findings.

5. Short Take: Building Performance Tracking and Control (BPTaC) Pilot Evaluation

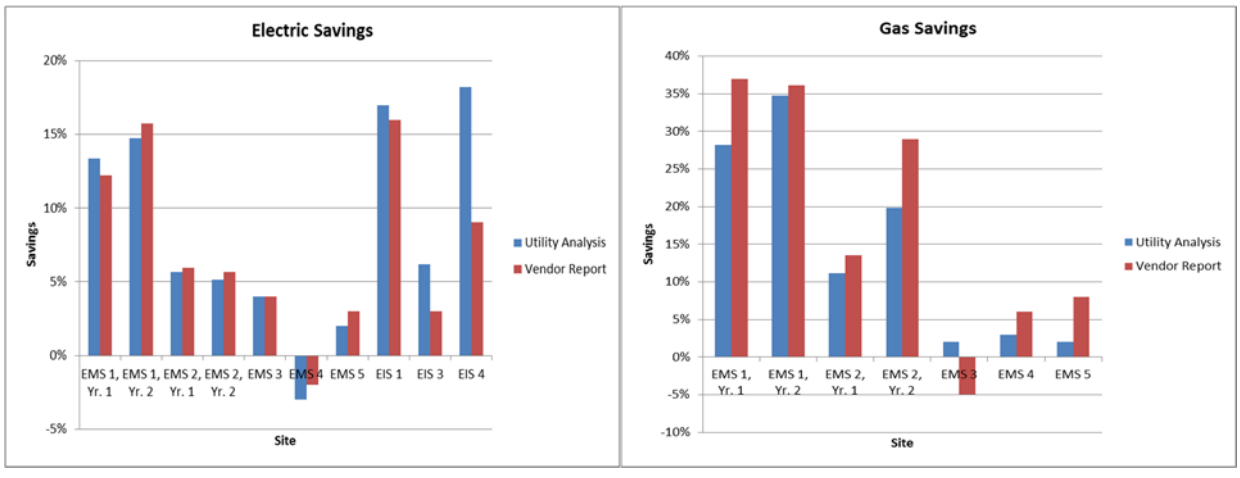
Presented by Phil Degens

Introduction: The BPTaC pilot is one of Energy Trust's longest running pilots. It started back in June 2011. This is the last in a series of reports on this pilot, which tested control systems and energy reporting systems in commercial buildings. The systems tested also came with a three year subscription service, which provided ongoing analysis, reporting, and operations tips to participants. Energy Management Systems (EMS) were intended for smaller buildings and had forecasted savings of 15%. Energy Information Systems (EIS) were intended for larger buildings with direct digital controls with a forecast of 5% savings.

Goals: Ascertain if vendors' reported savings are consistent with billing analysis and determine how well pilot savings are likely to represent future BPTaC projects.

Evaluation Methods: Cadmus conducted weather normalized pre/post billing analysis for each site in the pilot. They then did a comparison of their billing analysis savings with the savings reported by the EMS and EIS vendors. One site was dropped because the baseline usage was so different between the vendor reports and billing data.

The graphs below show the comparison of electric and gas billing analysis results with the savings reported by the vendors for each site in the pilot, labeled by technology type.



On the whole, with one exception, the electric savings were fairly similar between vendor reports and billing analysis. Most discrepancies were due to different weather normalization methods used. Baseline periods also differed in some cases. Gas savings saw slight discrepancies between vendor reports and billing analysis – slightly larger than with electric.

Gas is even more sensitive to weather, so differences in the weather normalization techniques had a bigger impact on savings estimates. EIS gas savings were not reported by vendors, so no gas savings comparison could be done for EIS sites. Based on billing analysis of gas savings at EIS sites, there were three cases where savings were above the initial target. In one case, gas use increased. In general, second year savings seemed to trend higher than first year. This makes sense since we don't expect customers and buildings operations to be static. The three year subscription service may also have motivated people to take action and helped them make changes over time.

Conclusions and Recommendations: Vendors do not have a standard savings reporting format, which interfered with our ability to track system performance and compare results across facilities and system types. The evaluator recommended that Energy Trust should develop a standard reporting format that includes documentation of both electric and gas savings.

The EMS vendor reported electric savings which were close to evaluated savings. There were larger differences with gas, attributed to the different methods of weather normalization used. The EIS vendor did not have transparent normalization and savings methods, so it was not possible to determine the reasons for differences in reported and evaluated savings. This vendor also did not report gas savings. Energy Trust should require that vendors use standardized analysis methods and reporting.

For validating savings of whole building improvements, energy use regression analysis can be improved by increasing the number of data points. The evaluator suggested that Energy Trust work with utilities to obtain interval data when possible. However, this may not be possible.

The level of variability observed in savings is to be expected and savings should continue to vary due to site-specific factors, making a deemed savings approach unreliable for these technologies. The evaluator recommended that Energy Trust should not use a deemed savings approach, but expected savings targets are useful for setting participant expectations and for use in cost-effectiveness calculations. The table below shows the recommended revised savings targets.

Type	Original Target Savings	Target Electric Savings (kWh)	Target Gas Savings (therms)
EIS	5%	9%	8%
EMS	15%	9%	16%

Energy Trust Take: The adoption of control systems in the program as a custom measure is appropriate. They are a difficult sell and are not flying off the shelves but can be effective in achieving savings with the right customer. Using this study's recommended savings targets should be fine for estimating savings. We should look at changes in year to year savings because they do change over time and can increase, as seen in this pilot.

Alan asked if EIS is still cost-effective at 9% savings. Phil said that the savings were fairly large, but it depends on size of the building. Also, the program wouldn't be paying the full cost of the system but the incremental cost. Alan said it seems strange that we use first year savings to calculate the savings targets and not the second year savings, when savings clearly improved over time and second year savings were much better. Phil said they were just being conservative in the estimates and that we did not have complete second year data for many sites.

6. Short Take: Customer Engagement Pilot Evaluation

Presented by Erika Kociolek

This topic will be covered at the next committee meeting.

Wrap-Up & Next Steps

There are a number of upcoming evaluations to be discussed at future committee meetings. In the next week, Erika will send out a Doodle poll in with potential dates and times in early November.

2013-2014 Energy Trust of Oregon Lighting Retail Store Shelf Survey Report

Prepared by: DNV GL – Energy
Oakland, California

Prepared for: Energy Trust of Oregon
Portland, Oregon

September 25, 2014

INTRODUCTION

DNV GL (formerly DNV KEMA and KEMA, Inc.) has conducted regional residential lighting market tracking efforts for the Northwest Energy Efficiency Alliance (NEEA) on roughly an annual basis since 2004. During this timeframe, DNV GL has periodically contracted with Energy Trust of Oregon to replicate some of this research in Oregon.

NEEA contracted with DNV GL during the third quarter of 2012 to conduct another Northwest residential lighting tracking study, which included comprehensive lighting retail store shelf inventories (shelf surveys). Energy Trust of Oregon representatives contacted the DNV GL project manager to request that we add additional sample sites in Oregon to support Oregon-specific analyses of shelf survey results. The DNV GL team thus included additional sample sites in Oregon for the 2012-2013 study period and again during the 2013-2014 study period.

This report presents the methodology used to collect the shelf survey data (including the sampling approach) as well as the results for Oregon stores compared to the Northwest as a whole (Idaho, Montana, Oregon, and Washington). Appendix A includes details on the sources cited in this report (a bibliography) and Appendix B includes the shelf survey data collection instrument. Appendix C includes data tables that demonstrate the number of sample points for report figures where this information is not included and Appendix D includes additional data tables with detailed information on the number of lamps, lamp models, wattage, and pricing across all store types for specific lamp technologies and styles by lumen bin among Oregon stores in the 2013-2014 sample.

SUMMARY OF FINDINGS

Below, we summarize findings regarding the availability and diversity of general purpose CFLs, specialty CFLs, LED lamps, halogen lamps, incandescent lamps, and four-foot T8 and T12 linear fluorescent lamps found in retail stores throughout Oregon and the Northwest during the 2012/2013 and 2013/2014 shelf surveys. We also summarize findings regarding pricing for general purpose and specialty CFLs, availability of select lighting control systems, and promotional materials present in Oregon and Northwest retail stores.

Percentage of Stores Stocking Lamps. The percentage of stores stocking LED lamps increased in both Oregon and the Northwest region between 2012 and 2013; this increase was greater in the Northwest than in Oregon. Aside from a slight increase in the percentage of stores stocking halogen lamps, there were no noteworthy changes in the percentage of stores carrying other lamp technologies in the same timeframe. Among linear fluorescent lamps, more stores in Oregon stocked T12 and T8 lamps than stores in the Northwest region in 2013 (this was also the case in 2012). The percentage of stores in the Northwest stocking T12 and T8 lamps declined between

2012 and 2013. While the percentage of Oregon stores stocking T8 lamps declined during the same timeframe, the percentage of Oregon stores stocking T12 lamps increased between years.

Share of Lamp Stock – Incandescent Lamps. Incandescent lamp stocking declined in Oregon and the Northwest between 2012 and 2103 both in terms of the percentage of total lamp stock comprised by incandescent lamps and the absolute quantity of lamps stocked. The quantity of incandescent lamps dropped by roughly one-fourth between 2012 and 2013, and wholesale clubs stocked no incandescent lamps in either year. The decline in incandescent lamp share and the quantity of lamp stock was likely a result of the continued phase-in of EISA standards.

Share of Lamp Stock – Halogen Lamps. Halogen lamp share in in Oregon and the Northwest increased between 2012 and 2013 both in terms of the percentage of total lamp stock comprised by halogen lamps and the absolute quantity of lamps stocked. The quantity of halogen lamps increased by more than 80 percent in Oregon stores and by nearly two-thirds in stores in the Northwest between 2012 and 2013. As was the case with incandescent lamps, wholesale clubs stocked no halogen lamps in either year. The increase in halogen lamp share and quantity of lamp stock was likely a result of EISA standards coming into effect.

Share of Lamp Stock – CFLs. The share of CFL stock declined slightly in Oregon between 2012 and 2013 and remained the same in the Northwest between years. The quantity of CFLs stocked dropped by roughly one-fifth in Oregon and by 15 percent in the Northwest between 2012 and 2013.

Share of Lamp Stock – LED lamps. The overall share of LED lamps stocked doubled between 2012 and 2013 in Oregon and the Northwest, but the proportion of LED lamps stock among all technologies continues to be relatively low (4% in both regions in 2013). The majority of this change can be attributed to an increase in stocking of LED A-lamps. The absolute quantity of LED lamps stocked increased by approximately 125 percent in Oregon and more than 130 percent in the Northwest and.

Share of Linear Fluorescent Lamp Stock. In Oregon, the share of total T8 and T12 four-foot linear fluorescent lamp stock comprised by T12 lamps was over 60 percent and roughly two-thirds of all T8 and T12 lamps stocked in the Northwest in 2013. The proportion of linear fluorescent lamp stock comprised by T12 lamps grew between 2012 and 2013 in Oregon, but remained nearly the same in the Northwest between years.

Energy Star Qualifying Lamps. Energy Star qualifying general purpose and specialty CFLs as a share of total CFLs declined overall between 2012 and 2013 both in Oregon (from 81% to 74% among all CFLs) and the Northwest (from 81% to 79% among all CFLs). The decline in the share of Energy Star qualifying lamps for general purpose and specialty CFLs (and all CFLs) occurred in big box stores in both Oregon and the Northwest. The share of specialty CFLs that were Energy Star qualifying also declined in non-big box stores in Oregon and the Northwest between years. The share of Energy Star general purpose CFLs and all CFLs increased slightly in non-big

box stores in the Northwest between years. The proportion of Energy Star qualifying LED lamps effectively doubled in Oregon and the Northwest between 2012 and 2013.

EISA Qualifying Lamps. The proportion of MSB incandescent A-lamps that met the EISA standards at the time of the 2013 shelf survey visits was significantly greater in both Oregon and the Northwest region than in 2012. EISA standards took effect for lamps in the high brightness bin (roughly equivalent to traditional 100 watt incandescent A-lamps) on January 1, 2012, and the percentage of lamps that met the standard in this lumen bin was somewhat higher in the Northwest than in Oregon in 2013 (98% qualifying in the Northwest versus 93% in Oregon). In the medium high brightness bin (roughly equivalent to traditional 75 watt incandescent A-lamps), EISA standards took effect on January 1, 2013 (approximately one year prior to the 2012/2013) shelf surveys). More than 60 percent of MSB incandescent A-lamps in the Northwest and half of MSB incandescent A-lamps in Oregon met the standard for these lamps in 2013; this was a dramatic increase from 2012 when only a small fraction of lamps met the standard in both regions. EISA standards went into effect for medium low brightness and low brightness MSB incandescent A-lamps on January 1, 2014; field researchers were in stores conducting shelf surveys before and after this date. The proportion of lamps meeting this standard increased in both lumen bins in Oregon and the Northwest between years, but still remains relatively low with roughly one-fifth to one-quarter of lamps in both lumen bins and both regions meeting the standard.

Linear Fluorescent Lamps Meeting 2012 DOE Efficiency Standards. There were no T12 lamps observed in stores in the Northwest and Oregon that met new efficiency standards set forth by the DOE in 2012. There was only a small percentage of T8 lamps that met the new standards in 2012 and 2013 in both regions. Interestingly, the percentage of linear fluorescent lamps that met the standard declined in Oregon (from 8% to 4%) and in the Northwest (from 10% to 6%) between years.

1.1 Diversity

Average Number of Lamp Models Stocked per Store – CFLs, LED, Halogen, and Incandescent Lamps. By this metric, diversity was greatest among incandescent lamps across all store types in Oregon and in the Northwest both in 2012 and 2013. Lamp model diversity increased the most between 2012 and 2013 among halogen lamps across all stores (and in both big box and non-big box stores) in Oregon and the Northwest; the average number of halogen lamp models per store increased by 11 models per store in Oregon and 8 models per store in the Northwest. The average number of models per store decreased between years for incandescent lamps overall in the Northwest (which dropped by roughly 6 models per store), but the average number of incandescent lamp models per store remained the same in Oregon across all stores during the same timeframe. In Oregon, the average number of LED lamp models increased overall between 2012 and 2013 (from 4 to 6 models per store), while the average number of LED lamp models per store in the Northwest remained the same overall between years. There were

minimal changes with respect to lamp model diversity among general purpose and specialty CFLs between 2012 and 2013.

Average Number of Linear Fluorescent Lamps per Store. The average number of lamp models per store declined for T8 and T12 lamps in Oregon and Northwest stores between 2012 and 2013. The average number of T8 lamp models per store declined from 1.5 to 1.0 in Oregon and 1.4 to 0.8 in the Northwest, while the average number of T12 lamp models per store declined from 2.7 to 2.4 in Oregon and from 2.6 to 1.7 in the Northwest. The decline in T8 and T12 lamp model diversity occurred across the board in big box and non-big box stores in both regions between years.

Lamp Stock by Wattage -- CFLs. The greatest share in terms of the percentage of CFLs stocked was in the 13W to less than 19W range in both Oregon and the Northwest in 2012 and 2013. However, the share of CFLs in the 13W to less than 19W range decreased overall in Oregon and the Northwest between 2012 and 2013. There was a corresponding increase in the share of CFLs stocked overall in the 9W to less than 13W and the 19W to less than 30W ranges in both regions between years. The 30W to 65W range had the smallest share of total CFLs stocked in 2012 and 2013 in big box and non-big box stores and in both regions.

Lamp Stock by Wattage – LED Lamps. A plurality of LED lamps stocked was in the 3W to less than 9W category in Oregon and Northwest stores in 2012 and 2013. However, LED lamps in Oregon stores in the 9W to less than 15W range had roughly the same share of total LED stock as lamps in the 3W to 9W category in 2013 (stock in both categories had a 43% share). The share of LED stock in the 9W to less than 15W category grew between 2012 and 2013 in both store categories and overall in Oregon and the Northwest stores. This trend did not carry over into the 15W to less than 24W category, however; the share of lamps in this wattage bin declined in both store categories and overall in Oregon stores and declined in big box stores and overall in the Northwest between 2012 and 2013.

Lamp Stock by Wattage – Incandescent Lamps. The largest share of incandescent lamps stock was in the 60W to less than 75W category in Oregon and the Northwest stores (overall and in both store categories) in 2012 and 2013. The share of 75W to 100W and 100W or greater lamps declined overall between 2012 and 2013 in Oregon and the Northwest. The decline in share for these wattage categories was likely a result of EISA regulations.

Lamp Stock by Wattage – Halogen Lamps. The proportion of 29W to less than 43W lamps and 53W to less than 72W lamps increased in big box and non-big box stores in both Oregon and the Northwest, while the share of 43W to less than 53W lamps decreased. The increase in the share of halogen lamps in the 53W to less than 72W category is likely a result of EISA standards that went into effect one year earlier (January 1, 2013).

Lamp Stock by Lumens – CFLs, Incandescent Lamps, and LED Lamps. The distribution of lamp stock in four lumen categories (310-749 lumens; 750-1049 lumens; 1050-1489 lumens;

1490-2600 lumens) changed the most for halogen, incandescent, and LED lamp stock in Oregon and the Northwest between 2012 and 2013. A majority of LED, halogen, and incandescent lamps were stocked in the lowest lumen bin (310-749 lumens) in Oregon and the Northwest in 2013, while lamp share in the 710-1049 lumen bin declined for LED and halogen lamps in Oregon and the Northwest between years. The distribution of CFL stock remained relatively static in Oregon and the Northwest between years.

1.2 CFL Pricing

Average Shelf Price. In 2013, the average shelf price for a CFL in Oregon was $4.97, $0.53 higher per lamp, on average, than in the Northwest ($4.44). The average shelf price for a CFL increased by 6 percent in Oregon from 2012 to 2013 and by 2 percent in the Northwest; this increase was driven by an 8 percent increase in the price of a general purpose CFL in Oregon (increasing from $3.78 per lamp in 2012 to $4.09 per lamp in 2013) and a 5 percent increase in the price of a general purpose CFL in the Northwest (increasing from $3.45 per lamp in 2012 to $3.60 per CFL in 2013). The price for a specialty CFL declined by 1 percent in Oregon ($6.93 per CFL in 2013) and 2 percent in the Northwest ($6.75 per CFL in 2013). In both regions, the average price per lamp for general purpose and specialty CFLs was much lower in big box stores than in non-big box stores in both regions and in both years.

1.3 Lighting Control Systems

Field researchers gathered details on dimmer controls observed in lighting aisles as well as wirelessly controllable LED lamps during the 2013 shelf survey visits. Very few stores stocked dimmer control switches in the lighting aisle in 2013, with only 5 percent of Oregon stores, overall, and 6 percent of Northwest retail stores, overall, stocking dimmer controls in the lighting aisle. This was also the case in terms of the percentage of stores carrying wirelessly controllable LED lamps, where 5 percent of Oregon stores and 6 percent of stores in the Northwest carried these lamps.

1.4 Promotional Materials

Nearly 60 percent of Oregon stores displayed one or more promotional materials related to replacement lamps in 2013 compared to nearly 70 percent of Northwest stores. The percentage of Oregon stores stocking promotional materials was down in 2013 compared to 2012 (74% of Oregon stores had promotional materials in 2012), while the percentage of stores across the Northwest displaying promotional materials was up in 2013 compared to 2012 (54% of Northwest stores had promotional materials in 2012).

Promotional Messages. The most common messages conveyed in the lighting promotional materials shown in stores in Oregon and the Northwest in 2013 related to energy/money savings

and utility promotions (these were also the most common messages in 2012). A slightly higher percentage of stores in the Northwest had promotional messages related to utility programs than Oregon stores, while a slightly higher percentage of Oregon stores had messages related to energy savings than Northwest stores. Other messages related to low pricing, Energy Star, comparing lumens to watts, cross-technology comparisons, light color, brightness, and rated life.

Types and Positioning of Promotional Materials. All of the stores displaying promotional materials in the Northwest and Oregon in 2013 displayed wall or shelf signs (as was the case in 2012); only a small fraction used brochures or ceiling signs. Sixty-three percent of all Northwest stores and 58 percent of all Oregon retail stores positioned their promotional materials in the lighting aisle, while a small percentage of Northwest and Oregon stores had promotional materials positioned on end-cap displays. An even smaller percentage of Northwest stores had promotional materials near the front of the store or near the cash register, while there were no stores observed in Oregon with promotional materials in the front of the store or near the cash register.

Technologies Promoted. Throughout the region, materials focused primarily on CFLs in 2013 (this was also the case in 2012). Nearly 60 percent of Oregon stores and approximately two-thirds of stores in the Northwest displayed CFL promotional materials. More than half of Oregon stores and more than a third of Northwest stores had promotional materials related to LED lamps. More than a third of stores in the Northwest and Oregon displayed materials regarding energy-efficient incandescent lamps. About a third of Oregon stores and less than a third of stores in the Northwest had promotional materials related to traditional incandescent lamps.

MEMO

Date: October 9, 2014
To: Board of Directors
From: Sarah Castor, Evaluation Sr. Project Manager
Kate Scott, Sr. Residential Project Manager
Subject: Staff Response to the 2014 Lighting Shelf Space Survey

The results of the 2014 Lighting Shelf Space Survey show that the Energy Independence and Security Act of 2007 (EISA) is generating shifts in lighting stocking practices of retailers, away from inefficient incandescent lamps. However, the reduction in stocking of incandescent bulbs is being filled by increased stocking of halogen bulbs (which only meet the minimum EISA standard), not by stocking more efficient compact fluorescent lamps (CFLs) and light emitting diode (LED) bulbs. CFL stocking of both general purpose and specialty bulbs has remained almost the same as the previous year. In the absence of sales data for lighting technologies, the findings indicate that there is still an important role for retail incentives for CFLs and LEDs and Energy Trust plans to continue its current incentive offerings.

We are pleased to see that LEDs have gained some ground in stocking, even though they still account for a very small percent of all bulbs on shelves. More retailers are stocking LEDs, new LED models are appearing frequently and the quality and diversity of bulbs had improved significantly over the past few years. It was also interesting to note that LED A-lamp prices have declined notably from 2012 – likely due to economies of scale in production and more competition in the market – while prices for CFL A-lamps have increased compared to last year.

It was surprising this year to see an increase in the percent of Oregon retailers stocking less efficient T12 linear fluorescent lamps and a decrease in those stocking more efficient T8 lamps. The fact that the total quantity of such bulbs available in stores has decreased indicates that perhaps stores are selling through their stock. We will be interested to see how these figures change in the next shelf survey.

Energy Trust is working with the Northwest Energy Efficiency Alliance (NEEA) to acquire retail lighting sales data by stock keeping unit (SKU) from the Consortium for Retail Energy Efficiency Data, expected to be available sometime next year. In the meantime, we plan to once again piggyback on NEEA's lighting shelf space survey late in 2014 to obtain updated, representative information on lighting stocking practices in Oregon and further assess trends in the market.

Final Report

Process Evaluation of the 2013 Products Program

April 22, 2014

Final Report

Process Evaluation of 2013 Products Program

April 22, 2014

Funded By:

Energy Trust of Oregon

Prepared By:

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Executive Summary

In this report, Research Into Action, Inc. presents findings from its process evaluation of Energy Trust of Oregon's (Energy Trust) Products program ("the program"). Since the program's inception in 2004, this is the first process evaluation focused on the program as a whole.

This evaluation relied on a review of program documents and primary data Research Into Action collected through interviews with 8 program staff (Energy Trust staff, the program management contractor, and its subcontractors), and 11 retailers' and manufacturers' corporate contacts; mystery shopper visits at 14 participating stores (6 retailers); ride alongs with 4 appliance and lighting field service staff at 21 stores; and analysis of the program's refrigerator incentive data.

Below, we present a summary of key findings drawn from multiple data sources, and our conclusions and recommendations.

Key Findings

Key Finding #1: Sales of low-cost qualifying refrigerators dropped in 2012 and 2013.

The number of incented refrigerator models at the lowest price points dropped sharply in 2012 and 2013, likely because low-cost qualified models were no longer available to consumers. In the refrigerator incentive data, we found qualified units priced under $1,000 made up 68% of units in the highest efficiency tier in 2011, but in 2013, this dropped to 27%. Mystery shoppers also found retailers' assortment of qualified refrigerators at all price points was considerably smaller than for other appliances.

Key Finding #2: There are important differences between lighting and appliances in the retail environment and customers' purchase decision process that the program is not sufficiently addressing.

Customers rarely buy appliances without speaking to a sales associate, but typically buy lighting products without that assistance. Nevertheless, assistance of sales associates is influential to customers in their appliances and lighting purchases. Mystery shoppers found appliance sales associates were considerably more trained and knowledgeable about the program and qualified products than were the lighting sales associates.

Key Finding #3: An abundance of new lighting technologies will require consumers to change the way they make lighting purchase decisions.

Customers face questions about lighting levels, light quality, mercury in CFLs, cost, and new technologies, but they do not always find sufficient answers from sales associates or point-of-purchase materials. In the absence of information, customers often make decisions based solely on price or habit, and they continue to have doubts about efficient lighting technologies.

Key Finding #4: There are benefits and challenges to regional collaboration in the Simple Steps, Smart Savings program.

Benefits: The regional collaboration has generated cost-effective and satisfactory savings, and has the potential to provide efficiency programs with enough consistency and leverage in the market to motivate retailers to increase their utility program engagement at the corporate level. Challenges: The regional collaboration constrains the ability of the Products program to design its own promotions and can create communication and reporting challenges.

Key Finding #5: Sales associates promote their store's appliance pick-up service more than Energy Trust's.

Mystery shoppers found sales associates promote their store's appliance pick-up service to customers more often than they do Energy Trust's recycling program. Changes to the refrigerator recycling component in 2014 to emphasize the collection of older refrigerators likely will accelerate this trend.

Conclusions and Recommendations

Conclusion #1: The cause of the decrease in availability of low-priced efficient refrigerators likely lies upstream in the supply chain. Additional research to locate the barrier to efficiency at a more precise point in the supply chain is required to help Energy Trust design a targeted program intervention.

Recommendations:

- Conduct follow-on research of retailers' and manufacturers' assortment data to identify the barriers to efficiency upstream in the supply chain.
- Implement a pilot to test the impact of an increased incentive amount for low-price refrigerators.
- Consider adding an incentive tier slightly less stringent than the 30% or better tier, for example, "25-29% better."

Conclusion #2: Promotion strategies for lighting and appliances should reflect their very different conditions within the retail environment. Training for sales associates about lighting technologies must reflect the reality that many stores typically do not have dedicated lighting staff. Point-of-purchase (POP) materials must target the appropriate audience – while customers are the primary audience for lighting POP, both sales associates and customers are equally important audiences for appliance POP.

Recommendations:

- Increase the number of sales associates trained on lighting.
- Design trainings to support information retention.
- Design lighting POP to be used by customers, without the assistance of sales associates.
- Design appliance POP to inform both customers and sales associates.

Conclusion #3: Consumers need better information at the point of purchase to support increasingly complicated efficient lighting purchase decisions. With the explosion of new energy efficient lighting technologies, and the phase-out/elimination of incandescent options, current POP and sales associate assistance are insufficient to meet customers' need for information.

Recommendations:

- Expand placement of the Bulb Finder POP signage in stores, and develop other, smaller materials that provide the same level of detailed information.
- Make lighting product information available to shoppers through a smartphone app or mobile website.
- Expand efforts with retailers, manufacturers, and regional workgroups to roll out special price reductions and displays that coincide with the retail marketing calendar—particularly Earth Day and Daylight Savings Time.
- Integrate special displays that show actual working bulbs side-by-side, potentially alongside CFL recycling depots.
- Anticipate that consumers will make repeat purchases of products they like, and make them easy to find.
- Conduct in-store intercept research with shoppers to better understand price sensitivity, information needs, barriers to purchase, and reaction to proposed messaging.

Conclusion #4: Despite its challenges, regional collaboration continues to offer greater benefits to lighting retailers than lighting programs run by individual organizations. The regional model emphasizes consistency and ease of use for retailers and manufacturers, and has obtained satisfactory savings despite the challenges of EISA. The current regional model also yields important benefits associated with stronger retailer participation, leverage in negotiations with retail partners, and higher program cost-effectiveness.

Recommendations:

- Work with BPA and regional partners to identify and promote improvements to the implementation of Simple Steps, Smart Savings, including training of sales associates as well as improvements to the POP and other marketing materials.

Conclusion #5: Many appliance retailers offer their own appliance pick-up services, making it more convenient for the customer to dispose of a refrigerator or freezer that way than by using Energy Trust's recycling service. Retailers, especially those with their own pick-up service, have little incentive to promote Energy Trust's refrigerator recycling offering, especially with the decrease in Energy Trust incentive amounts and the more complicated incentive structure Energy Trust launched in 2014. In addition, retail stores' haul-away service may be more convenient to customers since it is coordinated with the delivery of a new refrigerator.

Recommendation:

- Consider adding an element to the recycling program targeted at gaining retailers as participants.

MEMO

Date: 8 September 2014
To: Board of Directors
From: Erika Kociolek, Evaluation Project Manager
Matt Braman, Sr. Program Manager, New Homes and Products
Subject: Staff Response to the 2013 Products Process Evaluation

Energy Trust undertook a process evaluation of the Products program in 2013. Although evaluations of select program initiatives, such as refrigerator recycling, were conducted previously, this was the first process evaluation of the program as a whole. The goal of the process evaluation was to obtain feedback and market intelligence to improve the program.

The evaluator analyzed a wide range of program data, and performed a detailed analysis on incented new refrigerators. Evaluator staff participated in ride-alongs with field staff and conducted mystery shopper visits to gain intelligence about retail sales associates' knowledge of energy efficiency and the program, and program field staff interaction with associates. Interviews with corporate retailers, manufacturers, and program staff provided information into how the program operates.

These activities helped create a snapshot of the current program design and structure, which is helpful as the program is in the midst of a variety of changes, including a transition to a new implementer (Ecova). The results of these activities provide insight into opportunities for the program moving forward, which may be less focused on consumer rebates as savings decline, and more focused on working with retailers and upstream actors to influence price and product availability.

The key take-aways from the evaluation are:

- The marked decline in incented refrigerator models is likely due to the loss of incentives for relatively less efficient refrigerators (20-29% or better than ENERGY STAR), and a decrease in units at lower price points in the higher (30% or better) tier. More research is needed to determine where in the supply chain this problem lies; additional information could help the program develop a midstream or upstream incentive to encourage retailers to stock or boost sales of high efficiency refrigerators, or encourage manufacturers to design qualified units. The program is reaching out to distributors and manufacturers to learn more about the reasons for the decrease in low-cost, high efficiency models in the market, and possibly develop a strategy for increasing the share of low-cost, high efficiency models in the program.

- Regional collaboration in the Simple Steps, Smart Savings program for lighting and showerheads has benefits and challenges, and the evaluator concluded that the regional model offers greater benefits compared to programs run by individual organizations due to consistency and ease of use for retailers. Although the program is moving away from Simple Steps by having the PMC deliver field services to retailers in Energy Trust's territory beginning January 1, 2015, the program will continue to coordinate closely with Simple Steps. The move away from Simple Steps will allow the program to increase Energy Trust branding to promote lighting and showerheads, and vary incentive amounts by retailer, enabling the program to drive increased participation for harder-to-reach populations. Energy Trust will also continue to participate in the regional stakeholder collaboration groups Western Regional Utility Network and Northwest Regional Retail Collaborative, which are engaging with retailers on promotions and working to identify solutions to common barriers in working with retailers to drive energy efficient products at retail.

- There are key differences in the way retailers staff lighting and appliance departments that present challenges for efficiency programs. Staff in appliance departments were primarily responsible for assisting customers with appliance purchases, whereas associates in lighting often had other responsibilities. The evaluator found that associates in the lighting department lacked awareness of the Simple Steps program and the point-of-purchase (POP) materials identifying qualified products. There exist further opportunities to train and educate sales associates, especially in the lighting section where the majority of the savings are expected to continue to come from. In 2015, the PMC will enhance POP and training materials to more clearly communicate the value of energy-efficient products to both customers and retail staff.

- Field representatives have deep knowledge of the program and of efficient appliance and lighting technologies. They serve an important role as the face of the program to retail staff, and are available to answer questions and provide information. Corporate retailer staff reported they highly value the support provided by energy efficiency programs, especially local visits by field staff.

Final Report

Existing Buildings 2013 Process Evaluation Final Report

May 20, 2014

Draft Report

Existing Buildings 2013 Process Evaluation Draft Report

May 20, 2014

Funded By:

Energy Trust of Oregon

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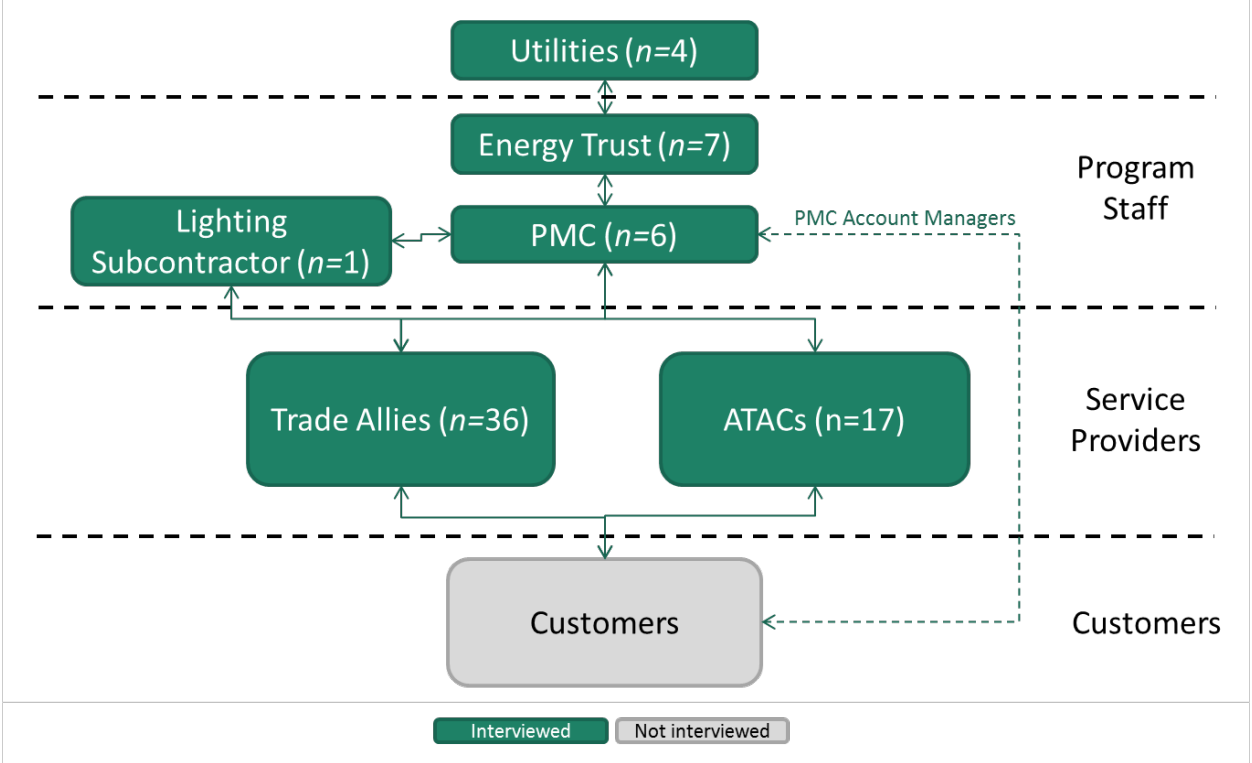
Executive Summary

In this report, Research Into Action, Inc. presents findings from its process evaluation of Energy Trust of Oregon's (Energy Trust) Existing Buildings program ("EB", "EB program" or "the program"). In 2012, Energy Trust selected ICF International (ICF) to replace Lockheed Martin (Lockheed) as the program management contractor (PMC) from January 1, 2013 through December 31, 2014 with the option to renew its contract in subsequent years. ICF subcontracts with Evergreen Consulting Group (Evergreen) to assist with program implementation in the commercial lighting market and to provide outreach and program representation in Energy Trust service territory in NE Oregon and with RHT Energy Solutions to provide outreach and program representation services. This evaluation focused on the transition to a new PMC, identified changes made as a result of the transition, and identified ways the transition affected Allied Technical Assistance Contractors (ATACs) and trade allies.

This evaluation relied on a review of program documents and data; interviews with 13 program staff (Energy Trust staff, implementer, or its subcontractor), 17 ATACs, and representatives of Energy Trust's four funding utilities; and a survey of 36 trade allies. Figure ES-1 shows the relationship among all program market actors, with the number of interviews or survey completions with each group. Following, we present key findings by data source and a summary of our conclusions and recommendations.

Figure ES-1: Program Market Actors



Key Findings

Document and Data Review

The review of program documents and data helped inform the creation of our interview guides and provided us with background about the program and the context in which the program operates. We learned that the program saw a notable drop off in savings related to HVAC gas measures from 2012 to 2013, but this loss of savings was somewhat mitigated by savings from food service related measures. There has been a decrease in office projects from 2012 to 2013, that has been somewhat offset by an increase in restaurant and other food service projects.

Staff Feedback

In general, staff reported the transition to a new PMC went smoothly with few disruptions to the services they provide to ATACs, trade allies, and customers. Energy Trust and ICF staff reported clarifying basic requirements and relationships early on in the transition process and fostering effective communication throughout the critical first phases of the transition. Energy Trust, ICF, and Evergreen staff held regularly scheduled and *ad hoc* meetings, and ICF provided Energy Trust with electronic weekly, monthly, quarterly, and annual progress reports documenting program planning and implementation activities and progress toward goals. All of these processes helped foster good communication and coordination among the parties.

ICF's greater interest in Energy Trust's Solar program has improved cross-program coordination. Energy Trust Solar staff is concerned that lack of explicit direction or goals and lack of importance from Energy Trust could limit the degree of coordination. Changes in ICF's 2014 contract with Energy Trust largely address this issue. In 2014, ICF has solar related milestones to achieve, including referring 15 leads to the Solar program and developing ways to better coordinate across the two programs.

Staff noted four key challenges to program success as a result of the process evaluation activities:

- a maturing market, making it harder to find projects;
- the need for small and medium-sized businesses to move beyond lighting projects for deeper savings;
- the fact that large businesses' capital planning processes sometimes devalue efficiency; and,
- growing saturation of the efficient interior lighting market.

In 2013, ICF and Energy Trust, working together, took the following steps to address some of the challenges outlined above:

- emphasized greater "account management" in outreach to help customers fold efficiency planning into their business planning cycles and conducted more targeted marketing to segments that have not traditionally participated in the program;
- introduced process changes to speed up the processing of lighting applications and technical studies and streamline decision-making for less-complex projects (such as prescriptive and less costly projects);
- ensured that all new trade allies receive program orientation; and
- revised and streamlined the program implementation manual to make processes clearer and easier to follow.

Plans for the program in 2014 include integrating new measures into the program portfolio; launching a commercial kitchen initiative; and improving the program website, the lighting calculator, and data sharing among Energy Trust, ICF, and Evergreen.

Allied Technical Assistance Contractors (ATACs)

Interviews with ATACs indicated generally high program satisfaction and positive responses to the new PMC. In particular, interviewed ATACs reported that the frequency or quality of program communication had improved under ICF. ATACs appreciated the regular conference calls with ICF and ICF actively seeking feedback from ATACs about their experience with the program. More than half the ATACs reported that ICF's feedback on studies was an improvement over the previous PMC. These improvements included more contact between the PMC and the ATAC and improved timeliness in getting feedback from the PMC. Nobody commented specifically on the content of feedback received on reports. About half of ATACs noted any changes to technical study guidelines or processes or to the PMC's outreach to commercial customers. Comments were predominantly positive among those who reported changes. Consistent with staff reports of changes to outreach and marketing, some ATACs noted a more targeted approach to large energy users and increased customer awareness of program options. Notably, although ICF had considerably decreased the length of the program implementation manual, several ATACs commented on the greater level of detail in study guidelines.

Increased customer satisfaction was the most commonly reported effect of program changes under ICF. There were no consistently reported transition-related challenges, although lack of program visibility or response early in the PMC changeover period resulted in two cases of project cancellation or delay. We also saw no consistent pattern in reported customer concerns. Two interviewed ATACs each reported some common concerns – cost and project timing issues. One respondent each noted concerns about building comfort, operations and maintenance issues, life-cycle cost, timing of equipment replacement, and general reluctance to try something new.

Trade Allies

The transition was largely invisible to trade allies, with few allies noting any changes to the program in 2013 or any effects on themselves or the services they provide. Consistent with past evaluations, trade allies were largely satisfied with the program, particularly with timely and clear responses to questions from program staff. Dissatisfaction was predominantly about the speed of incentive processing and challenges with application forms, which trade allies have consistently mentioned in past evaluations.

We investigated trade allies' involvement in the project lifecycle (from project acquisition to installation and inspection) to provide insights into how the program can best support them to provide savings. Trade allies rely largely on their personal contacts with customers and print collateral, rather than TV or radio advertisements, to promote the program. Few use Energy Trust supplied materials, but include Energy Trust logos on their own marketing materials. A notable finding was that trade allies that deal only with lighting, reported more proactive efforts at project acquisition than those dealing in non-lighting equipment, whose customers approached them to do the work.

Most trade allies reported involvement in project design, preparing applications, and installing equipment. Nearly one-third also reported involvement in technical studies, mostly in conducting audits or energy analyses to support studies. The interviews did not determine whether or not the trade allies had direct contact with ATACs or provided their analyses to their customers, who then shared them with the ATACs. The latter may be more likely, given findings from our previous process evaluation of the EB program, in which few ATACs reported that customers' contractors were involved in technical studies.

The typical duration of project involvement varied widely among the surveyed trade allies, from less than two weeks to five years, and the typical duration did not appear to be related to their role in project design or support for technical studies. When project delays occur, trade allies reported that they are largely a result of customers' inability to get the necessary approvals needed to proceed.

Utility Communication and Coordination

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

Conclusions and Recommendations

The Existing Buildings program is performing well under the new PMC. The PMC is proving operationally and administratively strong. The final 2013 savings results came in after the majority of the activities associated with this process evaluation were completed. In 2013, the PMC exceeded conservative kWh savings goals in Portland General Electric (PGE) and Pacific Power territories, but fell short of conservative therm targets in NW Natural and Cascade Natural Gas territories, even though the stretch goal for NW Natural demand-side management customers was far exceeded in 2013. After the close of 2013, program staff reported that final savings were impacted by the following factors:

1. The impact of initially limiting the roof-top tune-up offer to units less than five tons and later discontinuing the offer altogether in reaction to evaluation results that demonstrated that the savings being realized were lower than expected;
2. difficulties associated with the PMC refining the forecasting process to accurately estimate project completion dates, especially for some large custom projects that either failed to materialize or shifted into 2014; and,
3. the diminished pipeline that the incoming PMC encountered after the outgoing PMC had worked hard to close all existing projects to realize the savings in 2012.

The PMC has taken these factors into account for 2014 and appears to be on track to achieving savings targets in 2014 with a strong pipeline in the first few months of the year.

Good communication and coordination among Energy Trust, ICF, and Evergreen ensured a smooth transition. ATACs and trade allies continue to be generally satisfied with the program, and the PMC transition was largely invisible to trade allies. Because of good communication and collaboration between Energy Trust and the utilities, customers generally are clear about program offerings and how to access them. Collaboration can continue to improve through greater and earlier information sharing in program planning, and greater collaboration in the use and training of trade allies and outreach contractors.

Conclusion: ICF's emphasis on greater "account management," more targeted marketing, and marketing to previously underrepresented segments may be showing positive results. ATACs noted a more targeted approach to large energy users and increased customer awareness of program options, and some reported increased diversity of customers served. For example, the program delivered custom studies and projects in Washington, in 2013, whereas the program delivered almost no custom projects in 2012. Compared to 2012, the program was able to deliver studies and custom projects in Washington, in 2013 that resulted in almost 25,000 more program therm savings. ATAC respondents noted that even more opportunities could exist in Washington with closer coordination with Clark Public Utilities. .

> **Recommendation:** Energy Trust and ICF should maintain and enhance their approach in Washington to continue to deliver savings. One possible enhancement could be seeking ways to increase or improve coordination with Clark Public Utilities commercial efficiency incentives.

Conclusion: While trade allies continue to be largely satisfied with the program, incentive processing speed still leads to dissatisfaction among this group. Follow-up research with trade allies to gather additional information on issues related to dissatisfaction with processing speed, including how frequently delays occur and whether trade allies that express dissatisfaction with "incentive processing speed" are referring only to the period from project completion and inspection to receipt of the incentive or to the entire application process.

> **Recommendation:** If it does not already do so, ICF should alert customers any time a project has remained at a particular stage longer than 30 days without advancing to the next stage (including advancing from project completion to incentive payment) and provide the reason(s) that the project has remained at the stage and what, if anything, it needs from the customer and/or the customers' contractor(s) to move the project to the next stage.

Conclusion: Under the new PMC, ATACs continue to bring large custom projects to Energy Trust, using the program and the studies as a way to maintain relationships with their customers and train new staff. Some less-active ATACs are disappointed when Energy Trust does not assign studies to them.

> **Recommendation:** ICF should communicate to ATACs that most studies result from ATACs' own efforts to promote studies and projects to their customers and should explain how it decides to assign studies that result from customer direct requests.

MEMO

Date: June 2, 2014
To: Board of Directors
From: Erika Kociolek, Evaluation Project Manager
Spencer Moersfelder, Commercial Sr. Program Manager
Mark Wyman, Senior Project Manager
Subject: Staff Response to the 2013 Existing Buildings Process Evaluation

Energy Trust undertook a process evaluation of the Existing Buildings program in 2013, primarily to assess the effect of the transition to ICF International as program management contractor (PMC). The evaluator reviewed program data and documents, and conducted interviews with trade allies, allied technical assistance contractors (ATACs) and a wide range of program staff, including staff from Planning and Finance departments that support multiple programs and the Solar program. This evaluation also included interviews with utility staff and Energy Trust staff on their work on collaborative marketing and program implementation.

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

Overall, the transition went relatively smoothly; staff reported that communication and collaboration among Existing Buildings program staff and staff from other programs is going well. Few trade allies reported any program changes; the transition appeared to be largely invisible to them. About half of interviewed ATACs reported positive program changes, including regular conference calls between program staff and ATACs, revised technical study guidelines, and targeted outreach to large energy users.

Key changes to the Washington program, including paying the full cost of technical studies (in the past, the program paid for about half of the cost and only after a measure was installed) and targeting commercial kitchen measures, appear to have increased activity in Washington in 2013. The loss of the rooftop unit tune-up measure in mid-2013 appeared to have the effect of decreasing the amount of collaboration between Energy Trust and Clark Public Utilities, which provided incentives for electric savings from tune-ups. The evaluator recommended that the program work with Clark Public Utilities to find new ways to increase coordination. The program meets regularly with program managers from Clark Public Utilities and is focused on coordinating and finding new ways to collaborate.

The evaluator also recommended that the program alert customers when projects remain in a particular stage. The program is already addressing this recommendation by working to modify ICF's VisionDSM system to warn managers when a project lingers in a particular stage.

The program is focused on developing a strong pipeline of projects in 2014, and has plans for new measure development, continuing to recruit new trade allies and ATACs, and creating bonus offerings early in 2014 to drive program activity. Energy Trust staff is also working with the PMC to refine forecasting to improve accuracy.

Fast Feedback Results

2013 Report

Prepared by
Bruins Consulting & Analysis
May 22, 2014

Energy Trust of Oregon

Executive Summary

Overview of Fast Feedback

- Fast Feedback is a short phone survey of 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 10 questions or less, is customized for each program or measure of interest, and is designed to take no more than 5 minutes to complete.

- There are quarterly quotas for each program or measure of interest based on the project volume expected in that quarter. We attempt to survey enough participants to achieve 90% confidence and 10% precision each quarter. Calls are made each month to randomly selected participants whose incentive check was processed in the previous month and who have not been surveyed in the previous 12 months. Results are summarized and distributed quarterly to program staff. There is at least one opportunity in each survey for the respondent to give feedback that is recorded verbatim, and this feedback is provided with anonymity to program staff on a monthly basis (not included in this report).

- A total of 3,026 participants that completed projects between January and December 2013 were surveyed between June 2013 and January 2014. We strive to survey customers about a month after they receive their incentive check, but surveying for the first half of 2013 was delayed due to a transition to a new survey contractor. This means that some customers were surveyed as much as six months after they completed their project.

- We made several changes to Fast Feedback in 2013. Standalone air and duct sealing measures are no longer included in Fast Feedback due to the removal of incentives for these measures in the Existing Homes standard track. Ductless heat pumps are now included in the heat pump quota group, and we added a quota group for gas fireplaces. Also, New Buildings program participants are no longer surveyed through Fast Feedback as of Q1 2013. New Buildings projects often involve numerous market actors (architect, engineer, developer, owner and more) at different project stages, so it is difficult to reach a project representative who is able to respond to questions about satisfaction. Satisfaction with the New Buildings program is obtained from interviews with program participants as part of annual program process evaluations.

- Satisfaction and influence throughout this report are calculated as the percentage of respondents providing a rating a of 4 or 5 out of 5, excluding “don’t know” responses.

- Please see Appendix A for a description of changes to methods for calculating free ridership.

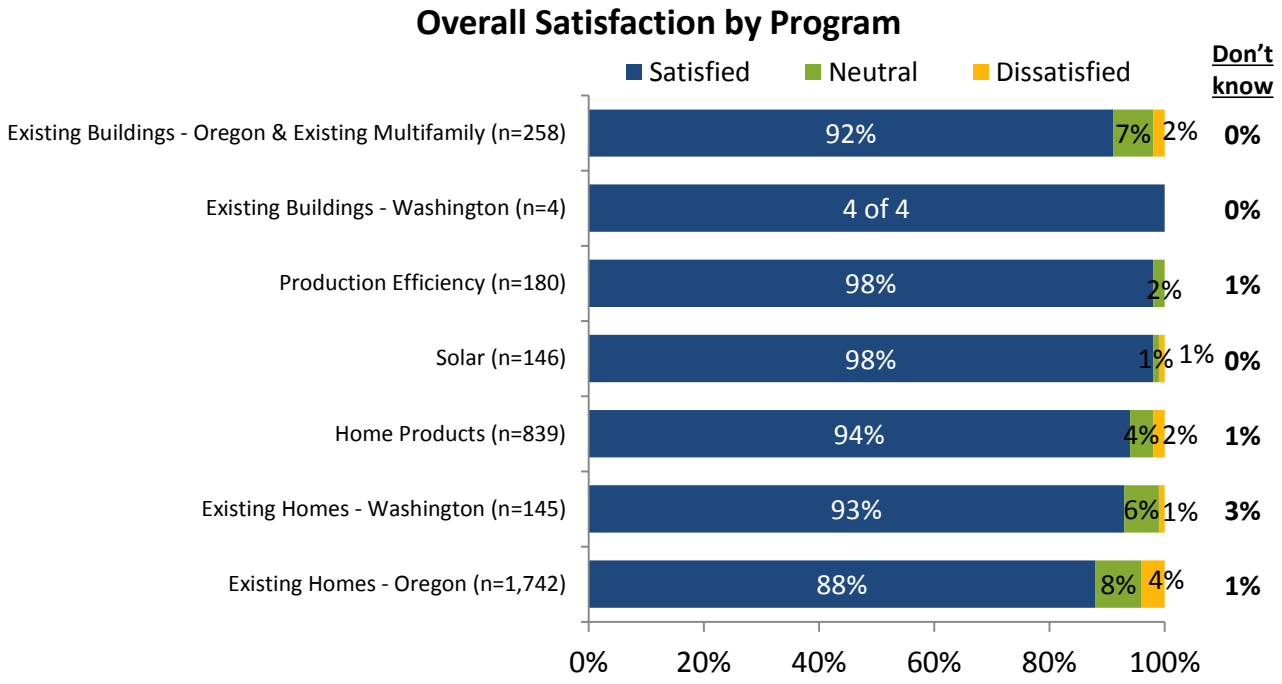
History of Fast Feedback

- Fast Feedback began as a pilot in mid-2009 for participants in the Existing Buildings and Production Efficiency programs, and was extended to most Energy Trust programs in the second quarter of 2010. A report on methods and results from Q2 2010 is available on the Energy Trust website (link); Fast Feedback continues to follow the general methods cited in that report.

- From Q2 2011 to Q4 2012, survey calls were made by Gilmore Research Group. As of Q1 2013, AbtSRBI has been making Fast Feedback survey calls.

Summary of Results

- Satisfaction with overall experience was high for the program groupings shown below, ranging from a high of 98% each for Production Efficiency and Solar to 88% for Existing Homes - Oregon.

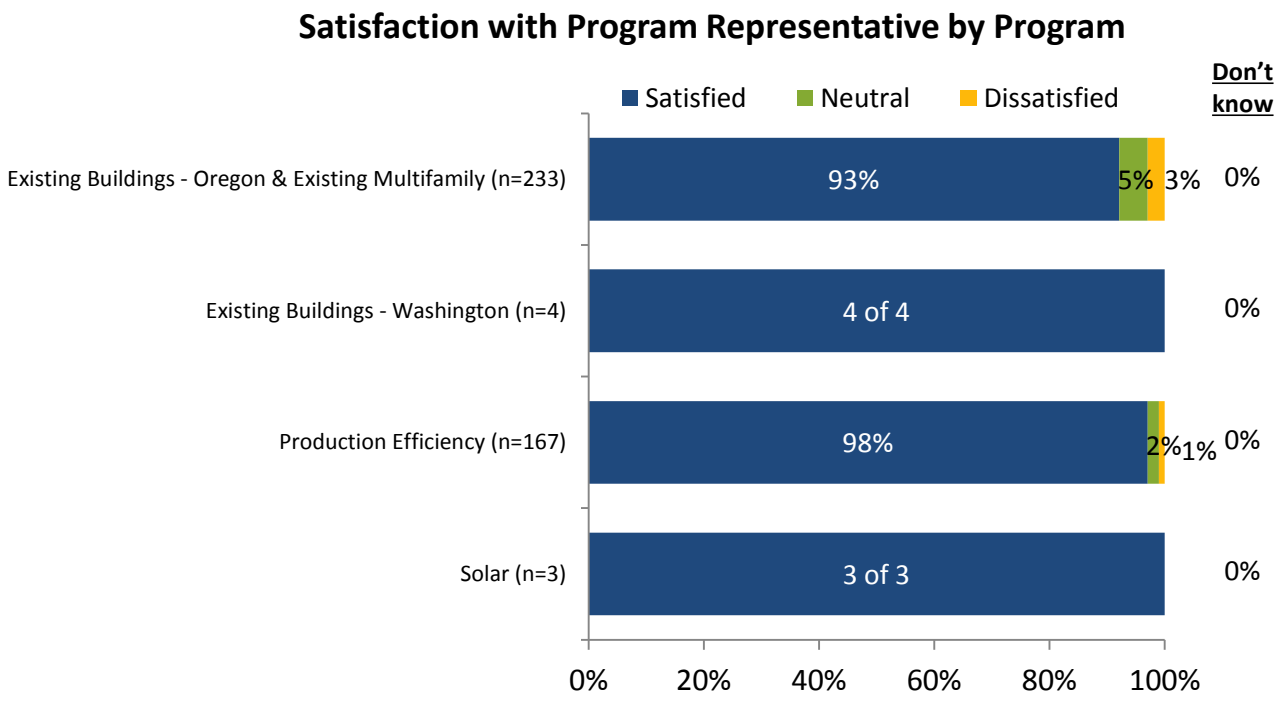


- Free ridership – the portion of participants who would have made energy efficient improvements or upgrades without incentives or information from Energy Trust – was much more variable than satisfaction and ranged from a high of 53% for clothes washers and refrigerators to a low of 18% for Multifamily electric projects. See Appendix A for an explanation of free ridership calculations.

- For many programs and measures, the Energy Trust incentive was the most influential of the program aspects in the decision to undertake an energy efficient improvement or upgrade. Other aspects investigated included information provided by Energy Trust, the contractor, and other features unique to certain programs or measures, such as free pick-up for refrigerator recycling.

Summary of Results

- Satisfaction with program representatives is only asked of commercial and industrial respondents. Since residential customers have varying degrees of interaction with program representatives (many may not have any interaction), and because it is not possible to identify customers who did have interaction to survey, residential customers are not questioned on this topic. Satisfaction was high for the program groupings shown below. We were not able to survey any Existing Buildings – Washington participants. We were able to survey five commercial solar participants, but two responded that this question was not applicable to them.



Summary of Results

Program	Respondents	Percent Satisfied	Free Ridership‡	
Commercial and Industrial				
			Electric	**Gas**
Existing Buildings – Oregon	185	90%	38%	28%
Existing Buildings – Washington	4	4 of 4	--†	--†
Existing Multifamily	69	94%	18%	51%*
Production Efficiency	180	98%	20%	23%*
Solar				
Commercial Solar Electric and Water Heating	5	5 of 5	--†	
Residential Solar Electric	133	98%	--†	
Residential Solar Water Heating	8	8 of 8	--†	
Home Products				
Clothes Washers	281	94%	53%	
Refrigerators	280	92%	53%	
Refrigerator Recycling	280	95%	28%	
Existing Homes				
Ceiling Insulation	203	88%	40%	
Floor Insulation	204	89%	37%	
Wall Insulation	127	81%	40%	
Duct Insulation	108	92%	36%	
Heat Pumps	123	92%	45%	
Ductless Heat Pumps	115	94%	35%	
Gas Fireplaces	174	92%	47%	
Water Heaters	123	95%	43%[α]	
Windows	240	88%	47%	
Home Performance	89	85%	33%	
Home Energy Review	236	85%	--	
Existing Homes – Washington***	145	93%	--†	
Existing Homes – Oregon	1,742	88%	--	
Other Renewables				
Small Wind	0	--	--	

* Free ridership numbers are calculated using respondents that completed projects in 2011, 2012, and 2013 due to small sample sizes. See Appendix A for more information.

***Projects also included in other Existing Homes measure totals.

† Free ridership is not calculated through Fast Feedback.

‡ Free ridership estimates for residential measures are calculated for Oregon respondents only. However, the number of respondents and the satisfaction numbers for Existing Homes measures includes both Oregon and Washington respondents.

[α] 0.67 residential gas water heaters are part of a market transformation effort; free ridership is shown for information only and will not be the basis for programmatic decisions about the measure.

Summary of Results

- Existing Homes participants were asked about satisfaction with their contractors; 90% were satisfied with their contractor overall. Satisfaction with the quality of installation work was also very high at 92%. Roughly 36% of Existing Homes participants considered Energy Trust's list of approved trade allies when selecting their contractor.

	Percent satisfied with contractor	Percent who considered trade ally list
Ceiling Insulation	87%	36%
Floor Insulation	93%	33%
Wall Insulation	90%	49%
Duct Insulation	94%	38%
Heat Pumps	94%	29%
Ductless Heat Pumps	95%	47%
Gas Fireplaces	91%	29%
Water Heaters	89%	43%
Windows	92%	23%
Home Performance	81%	63%

Memo to:
Erika Kociolek
Energy Trust of Oregon

From: DNV GL - Energy

Date: August 29, 2014

Prepared by: Ben Huntington, Jenna Canseco, Ben Kiner

Subject:
Market Lift Pilot Process Evaluation – Summary of Findings

Background

In early 2014, Energy Trust of Oregon (Energy Trust) contracted with DNV GL (formerly DNV KEMA and KEMA Inc.) to conduct a process evaluation of the Market Lift Pilot. The Market Lift Pilot was designed to provide incentives to retailers for increased sales of select energy-efficient lighting products over a predetermined sales baseline (which included historical sales at the Pilot stores and sales at comparison stores). Energy Trust's goal was to achieve a measurable and cost-effective increase in efficient lighting sales through the Market Lift Pilot. If proven successful, the Market Lift model could be expanded to other non-lighting products such as consumer appliances (i.e. refrigerators, dishwashers, etc.).

Energy Trust worked with several organizations, including Bonneville Power Administration (BPA), D&R International, and CLEAResult (formerly Fluid Market Strategies) on this Pilot. D&R International served as Pilot implementer, coordinating this and two other Market Lift pilots (one in Massachusetts and one in Vermont). D&R was the primary point of contact, leading ongoing planning and working meetings, communicating with retail contacts, and handling retailer data. Energy Trust and BPA served as Pilot sponsors, collaborating with D&R on recruiting retailers and determining strategic direction. Energy Trust offered incentives to retailers for specific levels of "market lift" and milestone incentives to encourage sales associate training and the development of strategies to increase lift. BPA contracted with CLEAResult to provide a menu of field services including staff training, regular in-person store visits to assess and assist with product displays, and overall marketing support to help retailers achieve a "market lift" of efficient lighting sales. CLEAResult also tracked and documented in-store developments.

Planning and recruitment for the Pilot began in 2012. The one retailer that ultimately participated in the Pilot committed in November 2012. The Pilot period was March 1, 2013 to October 31, 2013. Six Pilot and six comparison stores were selected, although due to store closures, only 4 comparison stores were ultimately used to estimate lift. As part of the design of the Market Lift Pilot, retailers were required to share historic sales data to establish a baseline as well as sales data for the Pilot period so any "market lift" achieved could be calculated.

Although the participating retailer did experience some "market lift" and received incentives for both A2-4 and A5 bulbs sold during the Pilot period, baseline sales volume was very small, as were increases in the volume of efficient lamps sold during the Pilot period, making it difficult to say for certain whether the observed increases were caused by the Pilot. In addition to per-bulb incentives, Energy Trust offered milestone incentives to the retailer for 1) completing a program plan summarizing the activities the retailer planned to undertake to increase lift and 2) developing training materials and training staff in Pilot stores within the first month of the program. The retailer did not complete these activities, and did not receive the milestone incentives.

Lessons Learned and Recommendations

After carefully considering the responses from the Pilot Team and Pilot Collaborator interviews, DNV GL offers the following lessons learned and recommendations to improve future Market Lift efforts and other efforts involving close coordination with retailers and other market actors.

Recruit Retailers with a Focus on Lighting

- **Lesson Learned** - The Market Lift model was designed to incentivize high-volume retailers to sell more energy efficient products than they would normally sell (baseline sales). An important lesson learned by the Market Lift Pilot was that the Market Lift model does not work with Retail Collaborators that are relatively new to the lighting market and have historically modest sales volume for lighting products.

- **Recommendation** - To fully test the effectiveness of the Market Lift model, DNV GL recommends that Energy Trust seek Retail Collaborators with a track record of high-volume sales of the targeted product (i.e. lighting, appliances, etc.). To attract high-volume retailers, Energy Trust must find a way to overcome the significant barrier of getting retailers to share their sales data, which prevented higher-volume retailers from participating in the Pilot. Unfortunately, procuring sales data from retailers has been a long standing challenge of energy-efficiency program implementers and will likely require large scale regional or national coordination to overcome.

Require Planning and Trainings

- **Lesson Learned** - The Market Lift Pilot offered assistance and incentives to encourage Retail Collaborators to develop project plans and training for sales staff. However, the Retail Collaborators did not complete a project plan or adequately train sales staff as neither element was mandatory. The project plan and sales staff training are crucial elements that must be completed by Retail Collaborators at the beginning of the Pilot period to ensure an appropriate level of engagement from Retail Collaborators.

- **Recommendation** - To promote the success of future Market Lift efforts or other efforts involving close coordination with retailers and other market actors, Energy Trust should require Retail Collaborators to complete a detailed program plan that includes a training component for sales staff.

Direct Communication

- **Lesson Learned** - Energy Trust was not communicating directly with Pilot Collaborators at the beginning of the Pilot period which resulted in Energy Trust's expectations and the Pilot timeline not getting adequately conveyed to Pilot Collaborators.

- **Recommendation** - For new pilots and programs with unfamiliar processes and incentive structures such as the Market Lift Pilot, Energy Trust should have a direct line of communication with all Pilot Collaborators to ensure their expectations are being properly conveyed and initial barriers are quickly addressed.

Require Manufacturer Participation

- **Lesson Learned** - Multiple respondents indicated that one of the main barriers preventing success of Market Lift Pilot was the fact that qualifying energy-efficient lighting products were either inadequately stocked or not stocked at all in participating retail stores. Midway through the Market Lift Pilot period, Energy Trust engaged the retailer's manufacturer, who immediately addressed the stocking issue.

- **Recommendation** - By engaging with manufacturers from the outset of a Market Lift effort, Energy Trust can eliminate the stocking barrier that the Market Lift Pilot faced.

MEMO

Date: 8 September 2014
To: Board of Directors
From: Erika Kociolek, Evaluation Project Manager
Matt Braman, Sr. Program Manager, New Homes and Products
Subject: Staff Response to Market Lift Pilot Process Evaluation

The Market Lift Pilot was one of Energy Trust's first attempts to implement a performance-based, midstream program design. The Pilot provided incentives to retailers for increased sales of select energy-efficient lighting products over a pre-determined baseline. The goal of the Pilot was to realize energy savings using a program design that provides retailers flexibility in increasing sales of efficient products. This Pilot involved a Pilot Team, comprised of staff from Energy Trust's Products program (contributing incentives), Bonneville Power Administration (contributing resources for field services), CLEAResult (contractor delivering field services), and D&R International (coordinating with stakeholders and retailer staff). The Team worked with two Collaborators, a national retailer and its manufacturer. Energy Trust contracted with DNV GL to interview staff from all organizations listed above about their experience with the Pilot. The goal of these interviews was to summarize and document what elements of the Pilot worked well, what did not work well and why, suggestions for improvement, and lessons learned.

Although the Pilot did not result in significant increases in sales of energy-efficient lighting, Pilot Team respondents reported that the effort was effective in testing the model, capturing retailer sales data, and cultivating relationships with retailers and other market actors. Pilot Collaborators felt that the Pilot helped raise awareness of energy efficient lighting in stores and helped demonstrate their commitment to energy efficiency.

Pilot Team respondents highlighted a number of challenges, including lack of in-store strategies to promote sales of efficient lighting product and sales associate training, poor placement of efficient lighting, and low stock of bulbs. Pilot Collaborators also felt that placement of bulbs was a challenge, and mentioned that the short (8 month) Pilot period was insufficient to train sales associates. They reported that the incentive model was difficult to understand. Both Pilot Team and Collaborator respondents felt that addressing the issues of placement and stocking would improve outcomes, and that it would be helpful to engage earlier to establish clear expectations.

For future efforts, the evaluator recommended recruiting retailers with a focus on products of interest, requiring retailer planning and trainings, have more direct

communication with retailers and manufacturers, and, if working primarily with retailers, involving manufacturers in conversations early on.

The experience of working on the Pilot and the lessons learned that were identified through this evaluation will be helpful for future midstream and upstream efforts planned by the program.

NAVIGANT

Evaluation of Energy Trust of Oregon's CORE Improvement Pilot

Year 1 Report

Prepared for:
Energy Trust of Oregon

Navigant Consulting, Inc.
1 Market St., Spear St. Tower, Ste. 1200
San Francisco, CA 94114

www.navigant.com

September 4, 2014

MEMO

Date: October 27, 2014
To: Board of Directors
From: Kim Crossman, Sector Lead, Industry and Agriculture
Dan Rubado, Evaluation Project Manager
Subject: Staff Response to the Evaluation of the CORE Improvement Pilot

This is the first of two evaluation reports on the CORE Improvement Pilot which was developed and implemented by the Production Efficiency (PE) program beginning in 2012 to help medium-sized industrial customers adopt strategic energy management (SEM) practices. This first report covers findings from staff and participant interviews, as well as a technical review of the Monitoring, Tracking &Reporting (MT&R) tools used by customers, from the first CORE cohort. The second report, to be completed in 2015, will provide findings from the second CORE cohort, as well as verification and persistence of savings and assessment of follow through with capital projects from the first cohort.

The results of this first evaluation report demonstrate that medium-sized industrial customers are fully capable of success with Strategic Energy Management (SEM). CORE participants were able to achieve significant energy savings through the pilot. The demonstrated success of CORE and the relatively large market of potential participants caused the PE program to expand this offering to additional cohorts and to other regions of the state.

Many of the recommendations made in this evaluation report are to refine the delivery of SEM in areas that are working well or are related to energy tracking and the methods used to quantify savings. The PE program and SEM technical service contractors will use the findings from this report as a guide to help continue improving the CORE offering as it expands and evolves. In addition, the program will consider making changes to the MT&R models and savings estimation methodology where it make sense and the changes are feasible, based on the recommendations in the report.

Executive Summary

The CORE Improvement (CORE) pilot is an offering within Energy Trust of Oregon's (Energy Trust) Production Efficiency program that helps medium-sized industrial customers (i.e., those spending $50,000 to $500,000 annually on electricity and natural gas combined) implement strategic energy management (SEM) practices at their facilities. The CORE pilot is implemented by Triple Point Energy (Triple Point), an energy consulting firm specializing in delivering strategic energy management programs to the industrial market. The CORE pilot is modeled after the successful Industrial Energy Improvement (IEI) initiative also offered by Energy Trust and implemented by Triple Point. The goal of the IEI is to put into operation at each participant facility a process of continuous energy management improvements which enable energy savings and reductions in energy intensity. The CORE pilot is an experiment to see if the concepts of SEM can be successfully delivered to medium-sized industrial customers.

The initial CORE pilot consists of two cohorts; the first cohort began with 11 participants and concluded with nine. The first cohort conducted activities throughout a 15-month process to identify, implement, and evaluate SEM practices. This report discusses the activities conducted by the first cohort.

Evaluation Objectives

The purpose of the CORE Improvement pilot evaluation is to verify whether smaller industrial customers can embrace and adopt SEM practices and embed them in their corporate culture given the inherent time and resource constraints of smaller industrial sites. The evaluation will test and refine the delivery model, compile feedback and lessons learned and determine which types of companies are successful with SEM. In addition, the evaluation will verify the energy savings resulting from the pilot, assess the persistence of those savings, determine how many customers follow through with capital projects, and identify the best methods for evaluating the impacts of the CORE.

Evaluation Methodology

For this first year report, the Navigant team conducted an initial program evaluation and an initial review of the participants' Monitoring, Tracking, & Reporting (MT&R) tools and reports.

For the program evaluation, Navigant conducted in-depth interviews to assess whether the CORE pilot is operating effectively, delivering value to participants, and promoting the adoption of SEM practices among small industrial customers. Navigant interviewed the following parties:

- Energy Trust program management staff;
- Program Delivery Contractors (PDCs) serving the participants;
- Representatives from Triple Point;
- One participant who dropped out during the CORE pilot; and
- Each of the nine participants who completed the first year of the CORE pilot program.

For the initial review of the MT&R tools and reports used by the participants, Navigant:

- Reviewed all participants' MT&R models to evaluated the state of participants' energy tracking and reporting capabilities; and
- Reviewed a sample of MT&R models from a statistical standpoint in order to assess the level of statistical rigor and determine if there are methods that can be adopted to increase the MT&R's accuracy at predicting participant energy savings.

Key Findings and Recommendations of Program Evaluation

Findings

Program Management Findings:

- Thus far, the pilot program has shown that medium-sized industrial customers are just as capable of being successful at SEM as larger companies.
- Energy Trust found that recruiting was more difficult for the CORE program than for IEI.
- Although employee engagement of CORE in general was not as strong as in IEI, one major advantage of working with smaller companies is that Energy Trust found it easier to engage executive sponsors because they are more involved in the day-to-day business of the firm.
- Energy Trust was very impressed with Triple Point's work on the CORE pilot.
- Energy Trust noted that the program savings estimates were slightly higher than they expected, but they have had a difficult time substantiating the savings.
- Energy Trust supported expansion of the CORE initiative, noting that it is a good complement to IEI and that it allows them to reach a different market segment of smaller customers.

PDC Interview Findings:

- In general, PDCs believed that they are well-positioned to leverage their existing relationships with customers to identify candidates and effectively recruit for the pilot program.
- PDCs believed that the CORE pilot would increase their customers' awareness of and interest in energy efficiency when initiating capital projects, but some were concerned that participation in CORE may cause customers to divert resources away from capital projects already in progress.
- In terms of expanding the CORE program, PDCs thought that about a third of their active customers would be good candidates for CORE.

Triple Point Interview Findings:

- Triple Point spent more time and had more difficulty than they anticipated in training participants to use the MT&R and identifying production variables (some sites lacked detailed production data, requiring additional work to generate this MT&R input). However, they recognized the need to balance keeping the MT&R simple for participants and gathering enough data to quantify program savings. Triple Point observed that a pre-defined measurement period was not appropriate for smaller production facilities because of the variation in production schedules and increments of the energy and production data.
- PDCs have the potential to be a valuable resource, particularly in activities that can benefit from their expertise, such as on-site energy scans. PDCs can also assist in recruiting by drawing on their existing networks.

Participant Interview Findings (Including Drop-out):

- Most participants felt that they had received value from their participation in CORE, and most anticipated that they would continue with many of the energy-saving practices they had learned through CORE. Additionally, all of the participants who completed the pilot said that they would recommend CORE to other companies in the future—indeed, some already had. This trend was also observed with the IEI.
- Participants observed that levels of participant engagement with CORE principles were related to the effectiveness of the energy team, the technical skill level of team members, the level of engagement with other employees, and the level of support from management. The IEI reported similar findings, especially with regard to management support.
- Many participants felt that the MT&R model was not easy to use, though they believed that it did provide them with useful information. Some participants had difficulty generating or

accessing MT&R inputs, such as production and utility data. A few incurred a cost to obtain utility data electronically.

- Some participants were able to leverage the information provided by the MT&R to demonstrate the effect of the energy savings on the firm's bottom line to their management team.
- Participants generally did not see the benefit of certain energy planning activities such as developing an energy policy or energy management plan.
- Even though energy savings from capital projects were not included in CORE savings, and although some PDCs expressed concern that participation in CORE may cause customers to divert resources away from capital projects, participants reported that CORE enhanced their ability to initiate and follow through with capital projects. Specifically, participants reported that during the course of the project, techniques they learned through CORE either helped with the decision-making process or helped evaluate the effect of the capital investment on energy.
- Most participants had a positive existing relationship with their PDC and expressed a willingness to work with them on CORE-related projects. However, others were uncertain about the PDCs' role because they did not have an existing relationship with their PDC.
- Participants found the peer-to-peer networking activities to be one of the most beneficial aspects of the program. This was also a key finding for the IEI.
- Participants were critical of activities during group meetings that they felt did not use their time efficiently (such as filling out worksheets individually, which they could have done on their own time; and discussion of topics related to sustainability but not specific to CORE's focus on electricity or natural gas savings). By the same token, participants had very positive feedback about the on-site meetings because they got a lot of value out of the meetings and felt their time was spent effectively.
- Similar to the IEI, CORE participants gave universally positive feedback to the representatives from Triple Point.

Recommendations

Enhancing the Usability of the MT&R Model:

- Make the MT&R interface more user-friendly and conduct more targeted training on its use, particularly for customers with limited software ability. Training should include both the concepts of regression analysis and the use of Excel-based spreadsheets.
- Provide tools to assist participants with translating MT&R findings into compelling progress reports to their management teams. This could include templates or examples of reports or presentations that past participants have used successfully.

Promoting PDC Integration:

- Draw on the PDCs' experience and networks by integrating them more into CORE elements and processes that benefit from their expertise, such as energy scans and recruitment.
- Highlight mutual benefits of CORE to PDCs. For example, PDCs get credit for capital projects even if they were implemented because of CORE, and customers reported that CORE enhanced their ability to initiate and follow through with capital projects.
- For participants who have not had any contact with their PDC, Energy Trust should leverage the CORE as an opportunity to establish this relationship.

Maintaining or Increasing Participant Engagement:

- Sharpen the focus of the group meetings to use the time for activities that benefit most from having the entire group present, such as directed peer-to-peer interaction.

- Develop activities that make the benefit of participant activities that are strategic in nature more apparent to participants. For example, help participants understand the benefits of developing an energy policy and/or energy management plan.
- Cover the more individualized topics and basic technical coaching at on-site meetings.

Expanding Networking and Recruiting Efforts:

- Build upon existing peer-to-peer networking activities to make networking a more structured element of the program.
- Circulate a cohort roster to help participants communicate with each other outside of the pilot. Cultivate new networks among current and future participants, in order to leverage the goodwill generated by CORE participants to recruit effectively for future CORE cohorts.
- Promote the CORE concept and successes at industry events throughout the year to generate interest and build a waiting list of potential participants for future CORE cohorts.

Key Findings and Recommendations of MT&R Review

Findings

MT&R Review Findings:

- Participants have implemented MT&R systems and are actively using them to track energy consumption and savings. Generally, participants find that the reports and energy information make sense, are understandable to the customers and are useful and actionable.
- The reports contain enough information to reasonably use them for tracking energy consumption and savings, and the assumptions and models used to track energy usage and savings are reasonable.
- The reports establish a solid baseline for facility-level energy consumption against which energy savings can be measured. No baselines were established at the equipment level.
- Although IPMVP option C is not preferable for evaluating energy savings for those sites with predicted energy savings less than 10 percent, it is a necessary approach because other methods of estimating facility savings may be infeasible in the context of this program. If hourly energy consumption data and at least daily production data are available, evaluation using the facility level billing analysis described in IPMVP option C could be done with more accuracy.

Statistical Review Findings:

- Using pre/post statistical models, such as those used in the MT&R reports, is the best available practice for the CORE pilot. However, there exists a strong potential for omitted variable bias, due to temporal correlation of observable variables with the measurement period.
- Stepwise regression, where the choice of variables is carried out by a procedure of examining significance, is generally not preferred due to possible bias in parameter estimation, inconsistencies among model selection algorithms, and overreliance on a single best model where data are often inadequate to justify such confidence. Generally the econometric literature favors an alternative approach in which all relevant variables are included in the analysis.
- Standard errors[1] on savings estimates were not provided in the MT&R and have been estimated for purposes of this report. The estimated standard errors are generally large, though the 90% confidence bounds do not cross zero. Consequently, statistical confidence in the savings

[1] Standard error is the standard deviation of the sampling distribution of a statistic.

estimates is low. However, if daily usage data were available, it is likely that the standard errors would be smaller, and the confidence in savings estimates higher.

Recommendations

Recommendations for enhancing statistical confidence in the model include the following:

- Continue current practice of estimating baseline regression models at the end of the baseline period and sending them to Energy Trust (or a third-party evaluator) before the measurement period begins. The model should not be revised during any period of time in which savings are being estimated. However, a new baseline model should be developed any time changes in production or other factors that affect energy use occur. Related to this, current engineering estimates of the effects of activities during the measurement period can be verified in future estimates of the baseline model.
- Seek to track production and weather variables for all sites, to provide the opportunity to examine the sensitivity of savings estimates to model specifications.
- Standardize the treatment of weather in models. To the extent a weather variable deviates from the standard, an explanation should be provided. It is recommended to include AVE TEMP^2 in addition to AVE TEMP (or HDD^2 or CDD^2, in addition to HDD or CDD), to be able to capture a non-linear relationship.
- Provide standard errors on savings estimates for Triple Point and Energy Trust use. Standard errors provide a measure of precision and are the basis for confidence intervals.
- Use the most granular time period available, down to the day when possible. Increases in granularity are likely to reduce standard errors.
- Ideally, for energy use which is seasonally driven, baseline and measurement periods are one full year each. Otherwise there is some risk that unobserved seasonal effects are biasing savings estimates.

Tab 5

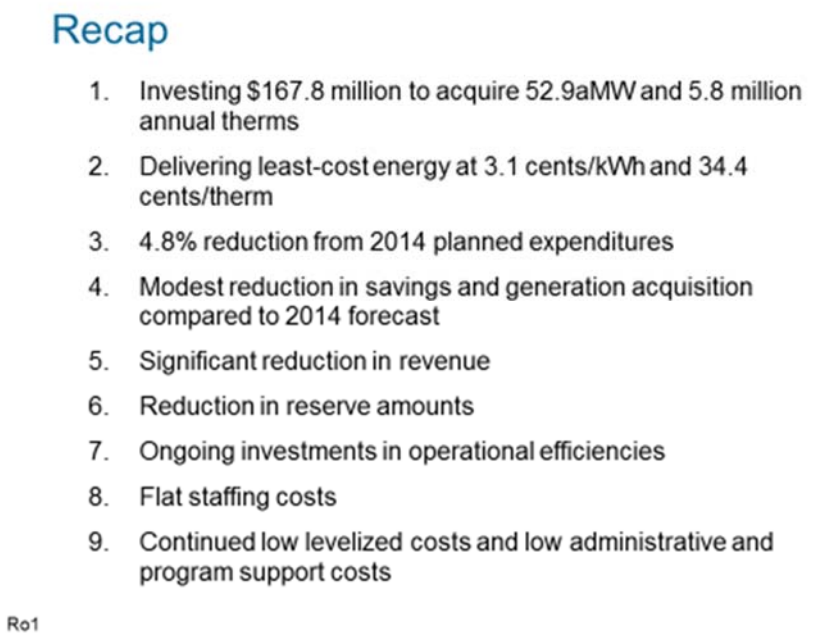
Finance Committee Meeting Notes

October 24, 2014

The Finance Committee met at 10:00 AM on Friday, October 24, 2014 via teleconference. Present during the meeting were Dan Enloe, Finance Committee chair, Susan Brodahl, board member, Anne Root, board member, and Dave Slavensky, board member. Staff present were Margie Harris, Executive Director; Courtney Wilton, CFO; Amber Cole, CCS Director, and Pati Presnail, Diane Ferington and Brian DiGiorgio.

Review of August meeting notes
Approved as submitted.

Budget Sneak Peak
Margie provided a quick review of upcoming proposed 2015 budget. Highlights are as follows:



Discussion regarding benefits of flat staffing in 2015—how efficiencies from lower medical, unemployment and agency staffing costs are expected to largely offset other staff cost increases (new employees and normal compensation adjustments) such that overall totals should be up less than one percent. This is good news and speaks to our efforts to find savings when possible.

Review of and discussion of third quarter financial statements

- Revenue is still tracking slightly above last year's totals for the same period (2%) and budget (5%). Due to hot summer weather, September revenue was overall 8% over last year—a definite surprise given mid-year rate reductions. PGE/PAC electric revenue was over by a lot—20% and 18% respectively—because of air conditioning load. We will likely end the year slightly over budget as a result. Interest revenue is about double last year to date given change in investment strategy, though still small potatoes in the scheme of things. Total YTD revenue of 116.7m is $2.6m over last year to date and $5.5m over budget.
- September incentives were 9% over last year for the same month—definitely up but tailing a bit. Year to date they are still up significantly—$5.5m /16% over last year—$39.1.1m vs. $33.6m. All other costs are up $3.8m, or about 8%. Total spending is up 12% over last year to date.

- A snap shot of budget-actual variances by sector is below. As you know, only about 50% of annual spending occurs through September, with the other half happens in last quarter, so these trends while a definite indicator may change.
- Balance sheet remains very strong. Retained earnings at 09/30/14 was $116.9m vs. $89.4m last year—$25.7m higher. It actually grew slightly in September which is unusual. This is due to slightly lower than expected September incentives and much higher than expected revenues. For context, we always run a surplus in the first six month of year, and a loss in the second half due primarily to year-end incentive activity, i.e. the hockey stick. Last year retained earnings dropped about $11m between 09/30/13 and 12/31/13. The drop this year will likely be more given utility rate adjustments and higher incentive levels. But, ending reserve levels in the neighborhood of $90-$95m are still likely in my opinion. For context, we also will likely have around $50m in outstanding incentive commitments at year end on projects that have not been completed. These are not accrued as liabilities on the year-end financial statements. Further, it is not required that current reserve levels cover these commitments; in fact, additional revenues will be received in 2015 to cover. However, it is more conservative to use today's dollars to cover today's commitments vs. committing tomorrow's dollars today. All that being said, the plan is to draw this balance down next year to the extent we can coordinate with utilities additional rate reductions this upcoming budget cycle.
- A quick year-end forecast indicates a likely ending reserve of around $91m.
- Dan inquired about CCS over-expenditure—306k at the end of third quarter. Amber indicated it was due to an advertising campaign. It is likely that year-end spending will be within budget. Overage is due to the lumpiness of this expenditure. We agreed it would be a good idea to alert the committee in advance if such overages occur in future.

Bank Service Agreement
Staff are still gathering information. Have extended agreement with Umpqua during interim. Meeting with US Bank in near term to understand their electronic payment platform. It is likely we will solicit RFP once we have more information.

Update on Planned Utility Adjustments
Significant revenue reductions planned in 2015. This is due to lower anticipated spending and to plans to draw down reserves. A table of possibilities was provided as illustrated below.

	ONE TIME RETURN	2015 RATE ADJUSTMENT
PGE	10.00	3.00
PAC	8.50	2.50
NWNG	9.00	4.50
CNG	0.75	0.25
TOTAL	28.25	10.25

Other topics of Interest
Updates were provided on management review. Brian DiGiorgio and Diane Ferington provided an update on a potential financing program though USDA that staff are pursuing. Funds are targeted to rural areas, tied to Treasury bill rate and inexpensive relative to traditional bank financing. We are still gathering information and will be back to discuss specifics if it looks like program is feasible.

Schedule next meeting Ana to be in touch regarding 2015 schedule

Notes on August 2014 Financial Statements

September 29, 2014

Revenue

August revenues continued to look similar to what we've seen this year.

Aug-14	YTD Actual	YTD Budget	YTD Var	YTD %
PGE	59,587,121	57,029,889	2,557,232	4%
PAC	36,531,062	34,891,731	1,639,331	5%
NWN	17,322,593	17,891,104	(568,511)	-3%
CNG	2,114,998	1,263,048	851,950	67%
Investment Income	145,743	52,000	93,743	180%
Total	115,701,516	111,127,772	4,573,744	4%

Reserves

Total Reserves at the end of August are shown below. All of the gas utilities (as well as PAC Renewables) showed a decrease in their reserves this month.

Reserves

	Actual 12/31/13 Amount	Actual 8/31/14 Amount	YTD % Change	Actual 7/31/14 Amount
PGE	24,483,032	41,121,787	68.0%	39,767,710
PacifiCorp	11,560,814	22,272,278	92.7%	21,060,362
NW Natural	8,569,670	13,513,855	57.7%	14,192,144
Cascade	658,260	1,664,841	152.9%	1,741,293
NWN Industrial	356,235	1,296,342	263.9%	1,472,676
NWN Washington	473,674	382,897	-19.2%	466,163
PGE Renewables	12,041,462	14,680,867	21.9%	14,211,445
PAC Renewables	11,793,715	12,806,538	8.6%	13,445,004
Contingency Reserve	5,000,000	5,000,000	0.0%	5,000,000
Contingency Available	2,993,710	3,152,672	5.3%	3,127,985
Total	77,930,572	115,892,079	48.7%	114,484,784

Expenses

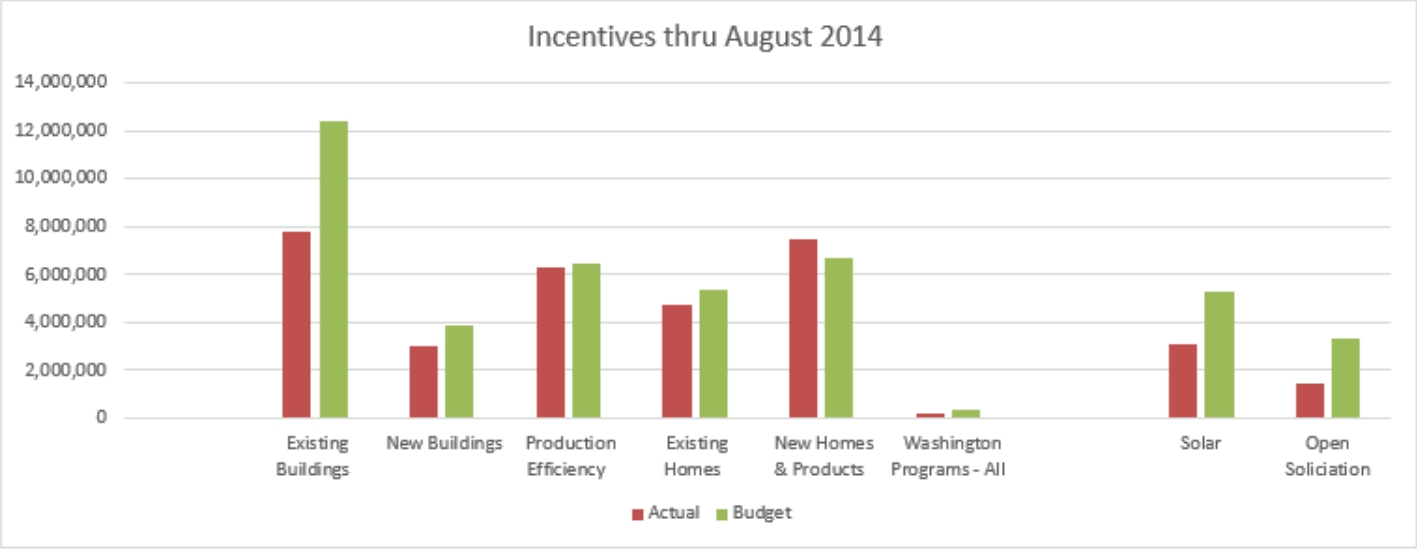
We spent almost exactly the same amount in August 2014 as we did in August 2013. Year to date spending is $8 million higher than the same period one year ago. ($78 million vs. $70 million.) We are $15 million below our budgeted spending of $93 million year to date.

Incentive Expenses

In August we were short of budgeted incentives by $1.5 million (24%). 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. Most of the programs are fairly close to budget.

The Existing Buildings program is underspent by $4.6 million compared to budget. We still expect that Existing Buildings incentive expenditures will increase significantly by December with bonuses, caps and other actions taking effect.

Renewables incentives are underspent by $4.4 million. As discussed previously, projects from solar have been delayed and are expected to occur in either late 2014 or 2015. A $1.55 million payment to OIT for a geothermal project has been pushed back to later this year. We did make a $.7 million payment for the Three Sisters Hydro project in August.



Total Incentives
Year-to-Date 2014

Incentives thru August 2014

	Actual	Budget	Variance	Var %
Existing Buildings	7,777,564	12,416,604	4,639,040	37%
New Buildings	3,051,809	3,856,746	804,937	21%
Production Efficiency	6,299,077	6,471,773	172,696	3%
Existing Homes	4,770,009	5,380,406	610,397	11%
New Homes & Products	7,469,036	6,723,655	(745,381)	-11%
Washington Programs - All	203,383	362,256	158,873	44%
Solar	3,074,745	5,245,257	2,170,512	41%
Open Soliciation	1,473,061	3,320,843	1,847,782	56%
Total Incentives	34,118,684	43,777,540	9,658,856	22%
Energy Efficiency Only	**29,570,878**	**35,211,440**	**5,640,562**	**16%**

Total Incentives
Year-to-Year Comparison

August 2014 v August 2013

	Current Year	Prior Year	Variance	Var %
Existing Buildings	7,777,564	5,912,207	(1,865,357)	-32%
New Buildings	3,051,809	3,546,142	494,333	14%
Production Efficiency	6,299,077	6,243,804	(55,273)	-1%
Existing Homes	4,770,009	4,336,140	(433,869)	-10%
New Homes & Products	7,469,036	5,720,577	(1,748,459)	-31%
Washington Programs - All	203,383	203,819	436	0%
Solar	3,074,745	2,208,126	(866,619)	-39%
Other	1,473,061	853,283	(619,778)	-73%
Total Incentives	34,118,684	29,024,094	(5,094,590)	-18%
Energy Efficiency Only	**29,570,878**	**25,962,689**	**(3,608,189)**	**-14%**

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

	Aug 2014	Jul 2014	DEC 2013	Aug 2013	Change from one month ago	Change from Beg. of Year	Change from one year ago
Current Assets							
Cash & Cash Equivalents	68,876,378	66,975,266	76,484,638	86,154,586	1,901,112	(7,608,260)	(17,278,208)
Restricted Cash (Escrow Funds)	0	0	0	252,712	0	0	(252,712)
Investments	52,622,241	52,678,359	25,270,363	5,976,013	(56,117)	27,351,879	46,646,228
Restricted Investments (Escrow Funds)	0	0	77,988		0	(77,988)	0
Receivables	177,345	162,615	8,276	4,027	14,731	169,069	173,319
Prepaid Expenses	645,303	765,818	526,087	696,195	(120,514)	119,216	(50,892)
Advances to Vendors	1,193,129	1,872,443	2,015,420	982,447	(679,314)	(822,291)	210,682
Current Portion Note Receivable	10,000	10,000			0	10,000	10,000
Total Current Assets	**123,524,397**	**122,464,500**	**104,382,771**	**94,065,980**	**1,059,897**	**19,141,626**	**29,458,417**
Fixed Assets							
Computer Hardware and Software	1,469,009	1,434,324	1,401,967	1,368,867	34,684	67,041	100,141
Software Development	660,321	504,730			155,591	660,321	660,321
Leasehold Improvements	313,333	313,333	313,333	313,333	0	0	0
Office Equipment and Furniture	600,662	600,662	600,662	600,662	0	0	0
Total Fixed Assets	**3,043,325**	**2,853,050**	**2,315,962**	**2,282,863**	**190,275**	**727,362**	**760,462**
Less Depreciation	(1,719,946)	(1,657,328)	(1,500,494)	(1,390,756)	(62,618)	(219,451)	(329,190)
Net Fixed Assets	**1,323,379**	**1,195,722**	**815,468**	**892,107**	**127,657**	**507,911**	**431,273**
Other Assets							
Rental Deposit	64,461	64,461	61,461	61,461	0	3,000	3,000
Deferred Compensation Asset	557,265	544,596	552,641	458,301	12,669	4,624	98,964
Long Term Portion Note Receivable	90,000	90,000			0	90,000	90,000
Total Other Assets	**711,727**	**699,058**	**614,102**	**519,763**	**12,669**	**97,624**	**191,964**
Total Assets	**125,559,503**	**124,359,280**	**105,812,341**	**95,477,850**	**1,200,223**	**19,747,161**	**30,081,653**
Current Liabilities							
Accounts Payable and Accruals	8,058,190	8,263,825	26,326,508	4,646,699	(205,635)	(18,268,317)	3,411,492
Salaries, Taxes, & Benefits Payable	687,992	698,402	631,548	621,463	(10,410)	56,444	66,529
Total Current Liabilities	**8,746,182**	**8,962,227**	**26,958,055**	**5,268,162**	**(216,045)**	**(18,211,873)**	**3,478,020**
Long Term Liabilities							
Deferred Rent	355,681	356,751	364,244	353,838	(1,070)	(8,563)	1,843
Deferred Compensation Payable	557,265	547,396	552,641	458,301	9,869	4,624	98,964
Other Long-Term Liabilities	8,123	8,123	6,830	14,164	0	1,293	(6,041)
Total Long-Term Liabilities	**921,069**	**912,270**	**923,714**	**826,303**	**8,799**	**(2,645)**	**94,765**
Total Liabilities	**9,667,251**	**9,874,497**	**27,881,769**	**6,094,465**	**(207,246)**	**(18,214,518)**	**3,572,786**
Net Assets							
Temporarily Restricted Net Assets	0	0	77,988	252,712	0	(77,988)	(252,712)
Unrestricted Net Assets	115,892,252	114,484,783	77,852,585	89,130,673	1,407,469	38,039,667	26,761,579
Total Net Assets	**115,892,252**	**114,484,783**	**77,930,572**	**89,383,385**	**1,407,469**	**37,961,680**	**26,508,867**
Total Liabilities and Net Assets	**125,559,503**	**124,359,280**	**105,812,341**	**95,477,850**	**1,200,223**	**19,747,161**	**30,081,653**

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

	January	February	March	April	May	June	July	August	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	$ 37,961,678
Non-cash items:									
Depreciation	27,123	27,123	28,713	28,418	28,418	28,473	28,298	62,618	259,183
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)	(172,000)
Advances to Vendors	680,371	678,630	(1,650,387)	365,028	768,936	(865,080)	165,479	679,314	822,291
Prepaid expenses and other costs	(151,035)	100,837	11,507	42,345	(28,712)	(209,651)	(5,022)	120,515	(119,216)
Accounts payable	(19,456,433)	(797,502)	1,417,700	(423,975)	1,401,061	464,334	(594,512)	(205,635)	(18,194,962)
Payroll and related accruals	70,280	(88,799)	76,891	(14,227)	38,978	15,743	(37,257)	(541)	61,068
Deferred rent and other	(3,988)	51,851	(945)	(10,714)	(13,739)	(113,739)	(9,882)	(13,739)	(114,895)
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	$ 20,506,078
Investing Activities:									
Investment Activity (1)	992,503	992,840	(232,102)	(18,552,646)	(4,712,080)	(713,502)	(5,178,372)	56,118	(27,347,241)
(Acquisition)/Disposal of Capital Assets	-		(46,620)	-	-	(368,159)	(162,039)	(190,275)	(767,093)
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)	$ (28,114,334)
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	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	(7,608,260)
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	$ 68,876,378

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

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

	Actual								Adjusted Budget			
	January	**February**	**March**	**April**	**May**	**June**	**July**	**August**	**September**	**October**	**November**	**December**
Cash In:												
Public purpose and Incr funding	17,726,777	18,539,933	16,486,831	15,278,872	12,455,507	11,442,506	11,823,698	11,801,651	10,200,000	12,800,000	11,000,000	13,500,000
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	25,000	25,000	25,000	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	10,225,000	12,825,000	11,025,000	13,525,000
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	15,200,000	14,800,000	18,200,000	38,300,000
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	(4,975,000)	(1,975,000)	(7,175,000)	(24,775,000)
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	63,901,379	61,926,379	54,751,379
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**	**63,901,379**	**61,926,379**	**54,751,379**	**29,976,379**
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	15,600,000	15,800,000	16,000,000	16,000,000
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	47,400,000	47,300,000	47,900,000	48,900,000
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	68,000,000	68,100,000	68,900,000	69,900,000
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 Budget											
	January	**February**	**March**	**April**	**May**	**June**	**July**	**August**	**September**	**October**	**November**	**December**
Cash In:												
Public purpose and Incr funding	15,500,000	16,100,000	15,400,000	14,100,000	11,800,000	11,000,000	11,900,000	11,100,000	10,700,000	12,600,000	11,800,000	14,400,000
From other sources												
Investment Income	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000
Total cash in	15,508,000	16,108,000	15,408,000	14,108,000	11,808,000	11,008,000	11,908,000	11,108,000	10,708,000	12,608,000	11,808,000	14,408,000
Cash Out:	20,600,000	9,500,000	13,400,000	11,100,000	9,700,000	14,300,000	13,300,000	11,300,000	13,800,000	12,200,000	14,800,000	41,000,000
Net cash flow for the month	(5,092,000)	6,608,000	2,008,000	3,008,000	2,108,000	(3,292,000)	(1,392,000)	(192,000)	(3,092,000)	408,000	(2,992,000)	(26,592,000)
Beginning Balance: Cash & MM	29,976,379	24,884,379	31,492,379	33,500,379	36,508,379	38,616,379	35,324,379	33,932,379	33,740,379	30,648,379	31,056,379	28,064,379
Ending cash & MM	**24,884,379**	**31,492,379**	**33,500,379**	**36,508,379**	**38,616,379**	**35,324,379**	**33,932,379**	**33,740,379**	**30,648,379**	**31,056,379**	**28,064,379**	**1,472,379**
Future Commitments												
Renewable Incentives	16,000,000	16,000,000	16,000,000	16,000,000	16,000,000	16,000,000	16,000,000	16,000,000	16,000,000	16,000,000	16,000,000	16,000,000
Efficiency Incentives	48,900,000	48,900,000	48,900,000	48,900,000	48,900,000	48,900,000	48,900,000	48,900,000	48,900,000	48,900,000	48,900,000	48,900,000
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	69,900,000	69,900,000	69,900,000	69,900,000	69,900,000	69,900,000	69,900,000	69,900,000	69,900,000	69,900,000	69,900,000	69,900,000
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 Eight Months Ending August 31, 2014
(Unaudited)

	August				YTD			
	Actual	Actual Prior Year	Prior Year Variance	Variance %	Actual	Actual Prior Year	Prior Year Variance	Variance %
REVENUES								
Public Purpose Funds-PGE	2,959,623	2,707,871	251,752	9%	25,236,795	23,478,548	1,758,247	7%
Public Purpose Funds-PacifiCorp	2,276,538	2,130,506	146,032	7%	18,594,061	17,551,922	1,042,139	6%
Public Purpose Funds-NW Natural	628,067	768,343	(140,276)	-18%	14,746,714	18,194,415	(3,447,701)	-19%
Public Purpose Funds-Cascade	54,760	68,557	(13,797)	-20%	2,114,998	1,490,694	624,304	42%
Total Public Purpose Funds	**5,918,987**	**5,675,277**	**243,711**	**4%**	**60,692,568**	**60,715,578**	**(23,011)**	**0%**
Incremental Funds - PGE	3,778,427	3,913,060	(134,633)	-3%	34,350,326	33,429,179	921,147	3%
Incremental Funds - PacifiCorp	2,104,235	2,120,485	(16,250)	-1%	17,937,002	17,458,532	478,469	3%
NW Natural - Industrial DSM			0		2,048,702	1,151,892	896,810	78%
NW Natural - Washington			0		527,177	645,551	(118,374)	-18%
Contributions			0		13,400	930	12,470	1341%
Revenue from Investments	24,868	7,767	17,101	220%	145,743	58,236	87,506	150%
TOTAL REVENUE	**11,826,517**	**11,716,589**	**109,928**	**1%**	**115,714,917**	**113,459,899**	**2,255,018**	**2%**
EXPENSES								
Program Subcontracts	3,938,991	3,791,092	(147,899)	-4%	30,790,562	29,479,569	(1,310,993)	-4%
Incentives	4,786,697	5,155,383	368,686	7%	34,118,684	29,024,097	(5,094,587)	-18%
Salaries and Related Expenses	820,288	798,126	(22,163)	-3%	6,923,983	6,387,482	(536,501)	-8%
Professional Services	627,186	446,992	(180,194)	-40%	4,344,728	3,067,688	(1,277,040)	-42%
Supplies	(3)	1,761	1,765	100%	23,809	19,966	(3,842)	-19%
Telephone	5,695	4,580	(1,115)	-24%	36,731	35,014	(1,717)	-5%
Postage and Shipping Expenses	1,937	882	(1,055)	-120%	9,144	7,113	(2,031)	-29%
Occupancy Expenses	53,333	55,245	1,911	3%	429,674	442,983	13,309	3%
Noncapitalized Equip. & Depr.	94,741	57,062	(37,679)	-66%	486,712	426,316	(60,396)	-14%
Call Center	12,971	43,667	30,696	70%	99,840	437,148	337,307	77%
Printing and Publications	1,044	4,880	3,836	79%	79,586	87,827	8,242	9%
Travel	26,333	7,417	(18,916)	-255%	99,818	93,024	(6,794)	-7%
Conference, Training & Mtng Exp	31,124	8,459	(22,665)	-268%	132,742	82,835	(49,907)	-60%
Interest Expense and Bank Fees		5,000	5,000	100%	2,000	5,443	3,443	63%
Insurance	8,339	8,622	283	3%	67,844	65,688	(2,156)	-3%
Miscellaneous Expenses		410	410	100%	3,016	1,000	(2,016)	-202%
Dues, Licenses and Fees	10,372	27,278	16,905	62%	104,365	94,871	(9,493)	-10%
TOTAL EXPENSES	**10,419,048**	**10,416,855**	**(2,192)**	**0%**	**77,753,237**	**69,758,064**	**(7,995,173)**	**-11%**
TOTAL REVENUE LESS EXPENSES	**1,407,469**	**1,299,733**	**107,736**	**8%**	**37,961,680**	**43,701,835**	**(5,740,155)**	**-13%**

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

	August				YTD			
	Actual	**Budget**	**Budget Variance**	**Variance %**	**Actual**	**Budget**	**Budget Variance**	**Variance %**
REVENUES								
Public Purpose Funds-PGE	2,959,623	2,721,988	237,635	9%	25,236,795	23,600,709	1,636,086	7%
Public Purpose Funds-PacifiCorp	2,276,538	2,172,992	103,547	5%	18,594,061	17,510,192	1,083,869	6%
Public Purpose Funds-NW Natural	628,067	622,034	6,033	1%	14,746,714	14,729,796	16,918	0%
Public Purpose Funds-Cascade	54,760	57,411	(2,652)	-5%	2,114,998	1,263,048	851,950	67%
Total Public Purpose Funds	**5,918,987**	**5,574,424**	**344,563**	**6%**	**60,692,568**	**57,103,745**	**3,588,823**	**6%**
Incremental Funds - PGE	3,778,427	3,913,060	(134,633)	-3%	34,350,326	33,429,180	921,146	3%
Incremental Funds - PacifiCorp	2,104,235	2,130,706	(26,470)	-1%	17,937,002	17,381,540	555,462	3%
NW Natural - Industrial DSM			0		2,048,702	2,515,756	(467,054)	-19%
NW Natural - Washington			0		527,177	645,551	(118,374)	-18%
Contributions			0		13,400		13,400	
Revenue from Investments	24,868	6,500	18,368	283%	145,743	52,000	93,743	180%
TOTAL REVENUE	**11,826,517**	**11,624,690**	**201,827**	**2%**	**115,714,917**	**111,127,771**	**4,587,146**	**4%**
EXPENSES								
Program Subcontracts	3,938,991	4,324,543	385,553	9%	30,790,562	32,849,894	2,059,332	6%
Incentives	4,786,697	6,327,818	1,541,121	24%	34,118,684	43,777,541	9,658,857	22%
Salaries and Related Expenses	820,288	939,615	119,327	13%	6,923,983	7,799,255	875,272	11%
Professional Services	627,186	748,286	121,100	16%	4,344,728	6,415,096	2,070,369	32%
Supplies	(3)	4,588	4,592	100%	23,809	36,707	12,898	35%
Telephone	5,695	5,484	(211)	-4%	36,731	44,092	7,361	17%
Postage and Shipping Expenses	1,937	1,183	(754)	-64%	9,144	9,467	323	3%
Occupancy Expenses	53,333	64,275	10,942	17%	429,674	514,199	84,525	16%
Noncapitalized Equip. & Depr.	94,741	70,816	(23,925)	-34%	486,712	636,293	149,581	24%
Call Center	12,971	15,000	2,029	14%	99,840	120,000	20,160	17%
Printing and Publications	1,044	11,858	10,814	91%	79,586	94,867	15,281	16%
Travel	26,333	17,773	(8,560)	-48%	99,818	158,680	58,862	37%
Conference, Training & Mtng Exp	31,124	32,195	1,071	3%	132,742	271,485	138,743	51%
Interest Expense and Bank Fees		417	417	100%	2,000	3,333	1,333	40%
Insurance	8,339	9,167	828	9%	67,844	73,333	5,489	7%
Miscellaneous Expenses		268	268	100%	3,016	2,147	(869)	-40%
Dues, Licenses and Fees	10,372	11,839	1,467	12%	104,365	120,108	15,744	13%
TOTAL EXPENSES	**10,419,048**	**12,585,125**	**2,166,077**	**17%**	**77,753,237**	**92,926,496**	**15,173,259**	**16%**
TOTAL REVENUE LESS EXPENSES	**1,407,469**	**(960,435)**	**2,367,905**	**247%**	**37,961,680**	**18,201,275**	**19,760,405**	**109%**

Energy Trust of Oregon
Statement of Functional Expenses
For the Eight Months Ending August 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	$60,226,436	$4,682,809	$64,909,245				$64,909,245	$76,627,435	$11,718,190	15%
Payroll and Related Expenses	2,042,127	628,424	2,670,550	1,272,596	593,005	1,865,601	4,536,151	4,924,221	388,070	8%
Outsourced Services	2,359,383	239,666	2,599,049	195,249	923,487	1,118,736	3,717,785	5,630,096	1,912,311	34%
Planning and Evaluation	1,664,456	57,377	1,721,833	1,206		1,206	1,723,039	1,818,000	94,961	5%
Customer Service Management	422,184	17,408	439,592				439,592	447,851	8,259	2%
Trade Allies Network	249,541	11,294	260,835				260,835	312,639	51,804	17%
Total Program Expenses	**66,964,126**	**5,636,978**	**72,601,105**	**1,469,051**	**1,516,492**	**2,985,543**	**75,586,648**	**89,760,241**	**14,173,593**	**16%**
Program Support Costs										
Supplies	7,209	1,992	9,201	5,404	2,325	7,729	16,930	25,903	8,973	35%
Postage and Shipping Expenses	3,184	1,016	4,200	1,226	671	1,897	6,097	5,516	(581)	-11%
Telephone	1,708	561	2,269	1,138	802	1,940	4,209	9,259	5,050	55%
Printing and Publications	71,149	2,381	73,530	880	2,647	3,527	77,057	91,581	14,524	16%
Occupancy Expenses	129,907	42,626	172,533	72,881	39,701	112,582	285,115	333,951	48,836	15%
Insurance	20,512	6,730	27,242	11,508	6,269	17,776	45,019	47,627	2,608	5%
Equipment	10,682	40,237	50,919	4,613	2,513	7,126	58,045	16,016	(42,029)	-262%
Travel	31,194	14,654	45,848	18,475	14,245	32,719	78,568	127,547	48,979	38%
Meetings, Trainings & Conferences	43,858	13,222	57,080	29,168	7,968	37,136	94,216	181,485	87,269	48%
Interest Expense and Bank Fees				2,000		2,000	2,000	3,333	1,333	40%
Depreciation & Amortization	32,677	10,722	43,400	18,333	9,986	28,319	71,719	70,195	(1,524)	-2%
Dues, Licenses and Fees	38,289	13,823	52,112	6,838	4,496	11,334	63,446	89,766	26,320	29%
Miscellaneous Expenses	3,016		3,016				3,016	1,562	(1,454)	-93%
IT Services	920,314	117,616	1,037,930	192,889	130,334	323,224	1,361,153	2,162,513	801,360	37%
Total Program Support Costs	**1,313,699**	**265,580**	**1,579,279**	**365,353**	**221,957**	**587,309**	**2,166,589**	**3,166,254**	**999,665**	**32%**
TOTAL EXPENSES	**68,277,826**	**5,902,558**	**74,180,384**	**1,834,404**	**1,738,449**	**3,572,853**	**77,753,237**	**92,926,496**	**15,173,259**	**16%**

OPUC Measure vs. 9%	**4.5%**

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

	ENERGY EFFICIENCY								
	PGE	PacifiCorp	Total	NWN Industrial	NW Natural	Cascade	Oregon Total	NWN WA	ETO Total
REVENUES									
Public Purpose Funding	$19,499,955	$14,491,825	$33,991,781		$14,746,714	$2,114,998	$50,853,492		$50,853,492
Incremental Funding	34,350,326	17,937,002	52,287,327	2,048,702			54,336,029	527,177	54,863,206
Contributions									
Revenue from Investments									
TOTAL PROGRAM REVENUE	**53,850,281**	**32,428,827**	**86,279,108**	**2,048,702**	**14,746,714**	**2,114,998**	**105,189,522**	**527,177**	**105,716,699**
EXPENSES									
Program Management (Note 3)	1,717,560	1,030,696	2,748,258	75,564	683,329	80,841	3,587,993	90,949	3,678,942
Program Delivery	14,237,445	8,636,190	22,873,636	312,321	2,965,081	414,654	26,565,690	162,945	26,728,635
Incentives	15,549,935	8,669,651	24,219,586	594,007	4,122,628	431,274	29,367,496	203,384	29,570,880
Program Eval & Planning Svcs.	1,506,847	841,850	2,348,700	40,464	522,802	48,172	2,960,137	41,370	3,001,507
Program Marketing/Outreach	1,388,727	836,759	2,225,486	10,309	559,296	44,049	2,839,142	37,058	2,876,200
Program Quality Assurance	25,686	23,928	49,615	0	27,353	1,170	78,137	0	78,137
Outsourced Services	168,200	111,334	279,533	3,949	68,612	6,011	358,106	0	358,106
Trade Allies & Cust. Svc. Mgmt.	273,863	194,790	468,653	2,974	171,873	10,558	654,059	17,667	671,726
IT Services	434,140	261,263	695,406	10,399	178,496	14,573	898,872	21,443	920,315
Other Program Expenses - all	199,210	112,964	312,171	7,666	52,623	6,182	378,643	14,742	393,385
TOTAL PROGRAM EXPENSES	**35,501,613**	**20,719,425**	**56,221,044**	**1,057,653**	**9,352,093**	**1,057,484**	**67,688,275**	**589,558**	**68,277,826**
ADMINISTRATIVE COSTS									
Management & General (Notes 1 & 2)	877,918	512,370	1,390,287	26,155	231,267	26,150	1,673,860	14,579	1,688,439
Communications & Customer Svc (Notes 1 & 2)	831,995	485,568	1,317,563	24,787	219,169	24,783	1,586,304	13,817	1,600,121
Total Administrative Costs	1,709,913	997,938	2,707,850	50,942	450,436	50,933	3,260,164	28,396	3,288,560
TOTAL PROG & ADMIN EXPENSES	**37,211,529**	**21,717,363**	**58,928,892**	**1,108,593**	**9,802,532**	**1,108,417**	**70,948,434**	**617,951**	**71,566,385**
TOTAL REVENUE LESS EXPENSES	**16,638,755**	**10,711,464**	**27,350,214**	**940,107**	**4,944,185**	**1,006,581**	**34,241,083**	**(90,777)**	**34,150,306**
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	16,638,755	10,711,464	27,350,214	940,107	4,944,185	1,006,581	34,241,083	(90,777)	34,150,306
Ending Net Assets - Reserves	**41,121,787**	**22,272,278**	**63,394,060**	**1,296,342**	**13,513,855**	**1,664,841**	**79,869,094**	**382,897**	**80,251,991**
Ending Reserve by Category									
Program Reserves (Efficiency and Renewables)	41,121,787	22,272,278	63,394,060	1,296,342	13,513,855	1,664,841	79,869,094	382,897	80,251,991
Assets Released for General Purpose									
Emergency Contingency Pool									
TOTAL NET ASSETS CUMULATIVE	41,121,787	22,272,278	63,394,060	1,296,342	13,513,855	1,664,841	79,869,094	382,897	80,251,991

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 Eight Months Ending August 31, 2014
Unaudited

	RENEWABLE ENERGY				TOTAL			
	PGE	PacifiCorp	Total	Other	All Programs	Approved budget	Change	% Change
REVENUES								
Public Purpose Funding	$5,736,840	$4,102,236	$9,839,075		$60,692,568	$57,103,745	$3,588,823	6%
Incremental Funding					54,863,206	53,972,026	$891,180	2%
Contributions				13,400	13,400		$13,400	
Revenue from Investments				145,743	145,743	52,000	$93,743	180%
TOTAL PROGRAM REVENUE	**5,736,840**	**4,102,236**	**9,839,075**	**159,143**	**115,714,917**	**111,127,771**	**4,587,146**	**4%**
EXPENSES								
Program Management (Note 3)	257,735	397,355	655,091		4,334,033	4,401,240	67,207	2%
Program Delivery	51,838	56,499	108,337		26,836,972	28,336,857	1,499,885	5%
Incentives	2,326,612	2,221,194	4,547,806		34,118,686	43,777,541	9,658,855	22%
Program Eval & Planning Svcs.	54,327	46,485	100,813		3,102,320	3,479,195	376,875	11%
Program Marketing/Outreach	46,910	25,209	72,119		2,948,319	4,034,951	1,086,632	27%
Program Quality Assurance	0	851	851		78,988	171,332	92,344	54%
Outsourced Services	74,643	48,617	123,261		481,367	1,480,593	999,226	67%
Trade Allies & Cust. Svc. Mgmt.	18,549	10,153	28,702		700,428	760,490	60,062	8%
IT Services	51,870	65,746	117,616		1,037,931	1,648,996	611,065	37%
Other Program Expenses - all	79,745	68,218	147,964		541,349	594,516	53,167	9%
TOTAL PROGRAM EXPENSES	**2,962,229**	**2,940,327**	**5,902,558**		**74,180,384**	**88,685,711**	**14,505,327**	**16%**
ADMINISTRATIVE COSTS								
Management & General (Notes 1 & 2)	69,419	76,545	145,964		1,834,404	2,397,500	563,096	23%
Communications & Customer Svc (Notes 1 & 2)	65,787	72,541	138,329		1,738,449	1,843,289	104,840	6%
Total Administrative Costs	135,206	149,086	284,293		3,572,853	4,240,789	667,936	**16%**
TOTAL PROG & ADMIN EXPENSES	**3,097,437**	**3,089,414**	**6,186,851**		**77,753,237**	**92,926,493**	**15,173,256**	**16%**
TOTAL REVENUE LESS EXPENSES	**2,639,405**	**1,012,823**	**3,652,222**	**159,143**	**37,961,680**	**18,201,271**	**19,760,409**	**109%**
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	2,639,405	1,012,823	3,652,222	158,962	37,961,680	18,201,271	19,760,409	109%
Ending Net Assets - Reserves	**14,680,867**	**12,806,538**	**27,487,399**	**8,152,672**	**115,892,252**	**80,811,035**	**35,081,217**	**43%**
Ending Reserve by Category								
Program Reserves (Efficiency and Renewables)	14,680,867	12,806,538	27,487,399	3,152,672	110,892,252	80,811,035	35,081,217	43%
Assets Released for General Purpose								
Emergency Contingency Pool				5,000,000	5,000,000			
TOTAL NET ASSETS CUMULATIVE	14,680,867	12,806,538	27,487,399	8,152,672	115,892,252	80,811,035	35,081,217	43%

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.

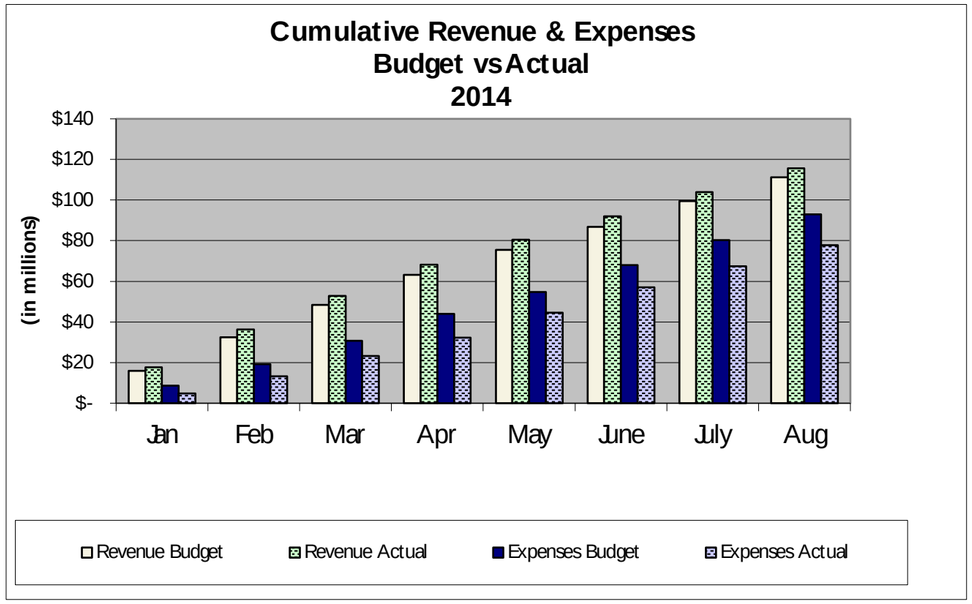
Energy Trust of Oregon
Program Expense by Service Territory
For the Eight Months Ending August 31, 2014
(Unaudited)

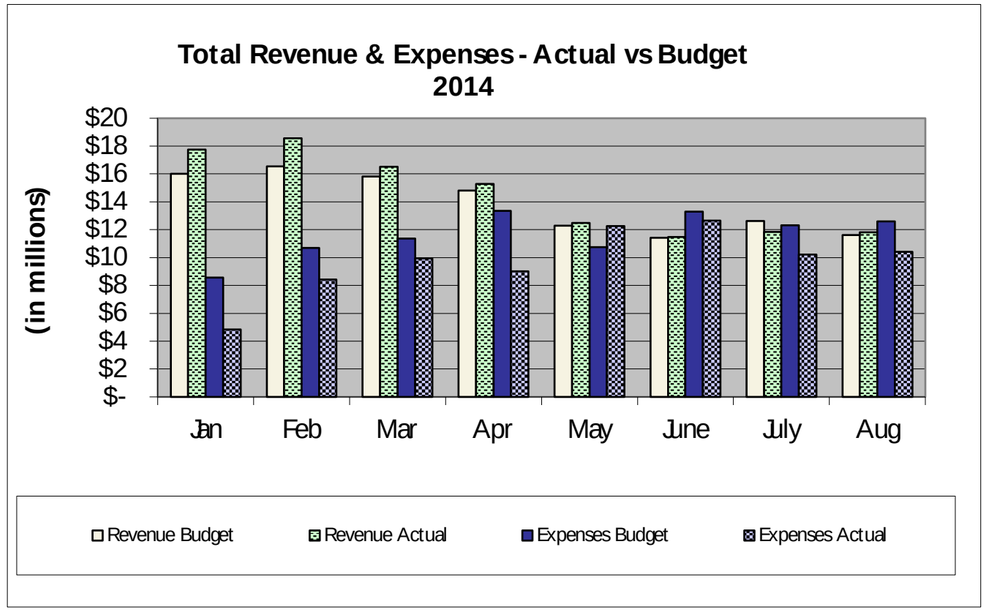
	PGE	Pacific Power	Subtotal Elec.	NWN Industrial	NW Natural Gas	Cascade	Subtotal Gas	Oregon Total	NWN WA	ETO Total	YTD Budget	Variance	% Var
Energy Efficiency													
Commercial													
Existing Buildings	10,318,689	5,632,109	15,950,798	240,650	1,908,142	326,438	2,475,230	18,426,028	204,065	18,630,093	24,426,418	5,796,325	24%
New Buildings	5,009,232	1,136,624	6,145,856	214,237	747,904	103,549	1,065,690	7,211,546		7,211,546	8,418,594	1,207,048	14%
NEEA	1,012,233	763,615	1,775,848		43,316	2,765	46,082	1,821,930		1,821,930	1,856,909	34,979	2%
Total Commercial	**16,340,154**	**7,532,349**	**23,872,503**	**454,887**	**2,699,363**	**432,751**	**3,587,001**	**27,459,504**	**204,065**	**27,663,569**	**34,701,921**	**7,038,352**	**20%**
Industrial													
Production Efficiency	7,947,659	4,919,923	12,867,582	653,706	308,200	223,087	1,184,993	14,052,575		14,052,575	14,997,768	945,193	6%
NEEA	395,367	298,260	693,627					693,627		693,627	895,793	202,166	23%
Total Industrial	**8,343,026**	**5,218,183**	**13,561,209**	**653,706**	**308,200**	**223,087**	**1,184,993**	**14,746,202**		**14,746,202**	**15,893,561**	**1,147,359**	**7%**
Residential													
Existing Homes	4,087,353	3,807,604	7,894,957		4,419,023	188,972	4,607,995	12,502,952	221,711	12,724,663	14,695,952	1,971,289	13%
New Homes/Products	6,917,782	4,010,136	10,927,918		2,332,630	260,842	2,593,472	13,521,390	192,175	13,713,565	13,990,619	277,054	2%
NEEA	1,523,213	1,149,091	2,672,305		43,316	2,765	46,081	2,718,386		2,718,386	2,697,169	(21,217)	-1%
Total Residential	**12,528,349**	**8,966,831**	**21,495,180**		**6,794,970**	**452,579**	**7,247,548**	**28,742,728**	**413,886**	**29,156,614**	**31,383,740**	**2,227,126**	**7%**
Energy Efficiency Costs	**37,211,529**	**21,717,363**	**58,928,892**	**1,108,593**	**9,802,532**	**1,108,417**	**12,019,542**	**70,948,434**	**617,951**	**71,566,385**	**81,979,222**	**10,412,837**	13%
Renewables													
Solar Electric (Photovoltaic)	2,710,034	1,365,762	4,075,796					4,075,796		4,075,796	6,729,394	2,653,598	39%
Other Renewable	387,402	1,723,653	2,111,055					2,111,055		2,111,055	4,217,877	2,106,822	50%
Renewables Costs	**3,097,437**	**3,089,414**	**6,186,851**					**6,186,851**		**6,186,851**	**10,947,271**	**4,760,420**	43%
Cost Grand Total	**40,308,966**	**24,806,777**	**65,115,743**	**1,108,593**	**9,802,532**	**1,108,417**	**12,019,542**	**77,135,285**	**617,951**	**77,753,237**	**92,926,493**	**15,173,256**	**16%**

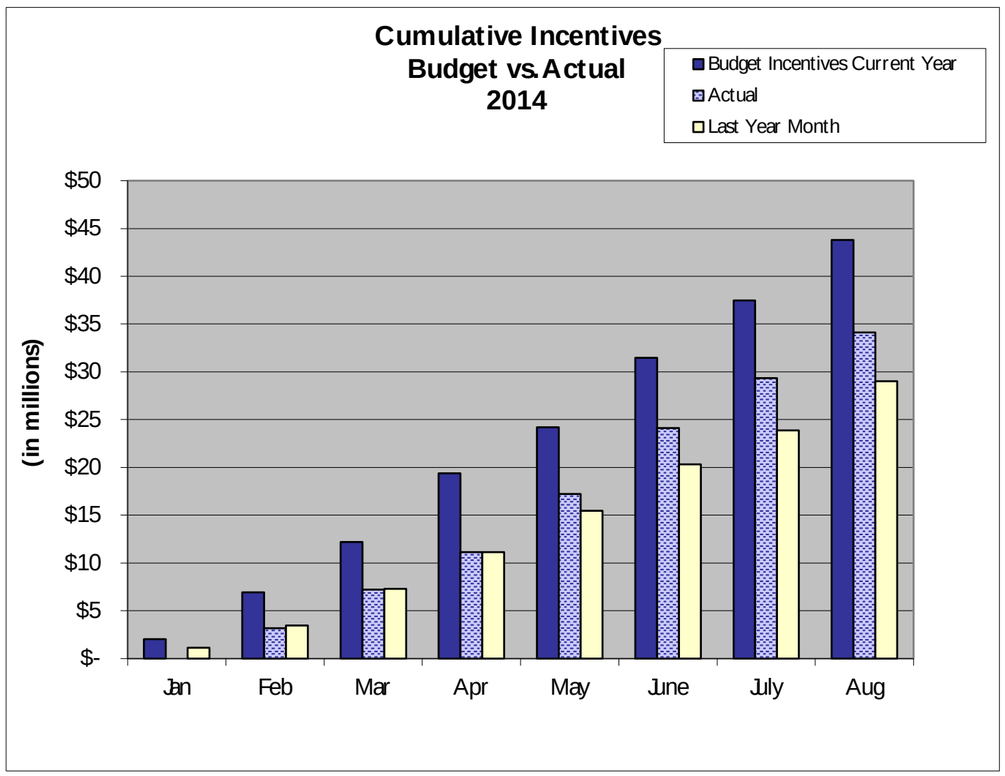
Energy Trust of Oregon
Administrative Expenses
For the 3rd Quarter and Eight Months Ending August 31, 2014
(Unaudited)

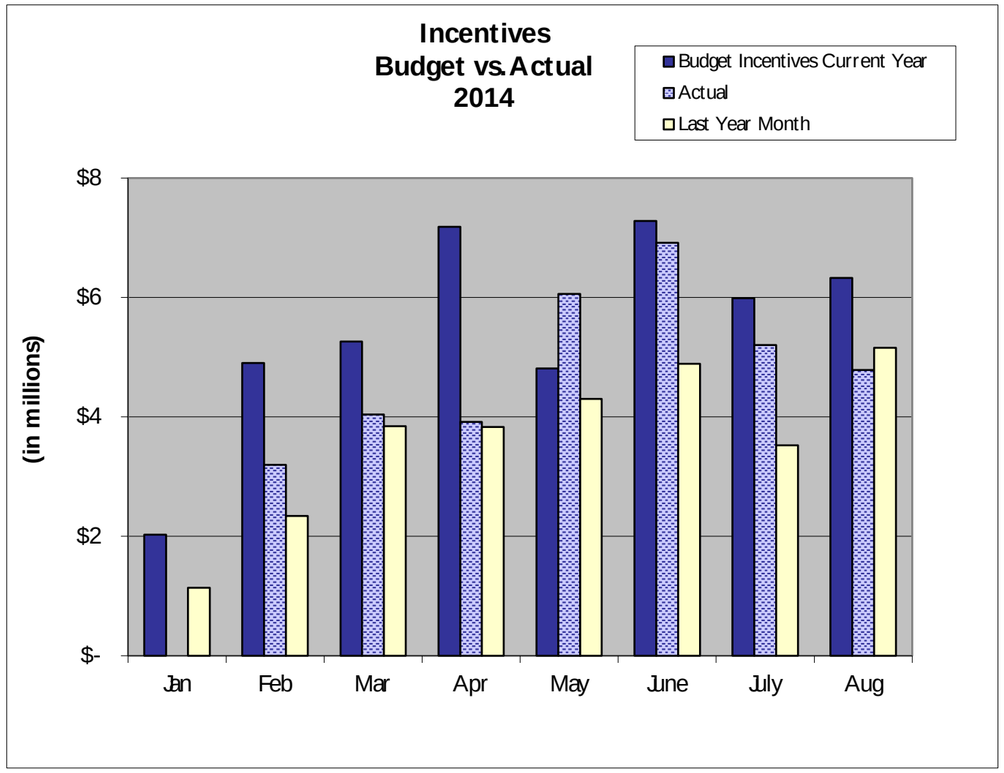
	MANAGEMENT & GENERAL						COMMUNICATIONS & CUSTOMER SERVICE					
	MONTHLY	QUARTERLY	QUARTER	YTD			MONTHLY	QUARTERLY	QUARTER	YTD		
EXPENSES	ACTUAL	BUDGET	REMAINING	ACTUAL	BUDGET	VARIANCE	ACTUAL	BUDGET	REMAINING	ACTUAL	BUDGET	VARIANCE
Outsourced Services	$28,495	$107,017	$78,523	$193,937	$367,380	$173,443	$491,579	$265,300	($226,279)	$923,487	$707,466	($216,021)
Legal Services	560	13,750	13,190	1,312	36,667	35,355						
Salaries and Related Expenses	319,125	535,105	215,980	1,272,596	1,409,280	136,684	153,747	298,515	144,768	593,005	796,039	203,035
Supplies	971	1,950	979	1,999	5,200	3,201	89	240	151	470	640	170
Telephone		545	545	180	1,453	1,273	120	490	370	280	1,027	747
Postage and Shipping Expenses				24		(24)	16	250	234	16	667	651
Noncapitalized Equipment								250	250		667	667
Printing and Publications	22	75	53	284	200	(84)	1,541	1,750	209	2,323	4,667	2,344
Travel	6,128	13,305	7,177	18,475	35,480	17,005	5,342	9,500	4,158	14,245	25,333	11,089
Conference, Training & Mtngs	8,812	44,210	35,398	28,948	100,193	71,245	3,648	5,500	1,852	7,849	14,667	6,818
Interest Expense and Bank Fees		1,250	1,250	2,000	3,333	1,333						
Miscellaneous Expenses		180	180		480	480						
Dues, Licenses and Fees	3,500	2,380	(1,120)	6,838	5,887	(951)	1,400	400	(1,000)	4,496	1,067	(3,429)
Shared Allocation (Note 1)	28,167	46,437	18,270	113,716	124,284	10,568	15,025	31,378	16,353	61,945	83,980	22,036
IT Service Allocation (Note 2)	38,334	101,017	62,683	192,889	306,450	113,561	25,902	68,257	42,355	130,334	207,067	76,733
Planning & Eval	247	409	162	1,206	1,212	6						
TOTAL EXPENSES	**434,361**	**867,630**	**433,269**	**1,834,404**	**2,397,499**	**563,095**	**698,407**	**681,829**	**(16,578)**	**1,738,449**	**1,843,286**	**104,838**

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)
$140
$120
$100
$80
$60
$40
$20
$-
Jan
Feb
Mar
Apr
May
June
July
Aug
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
Revenue Budget
Revenue Actual
Expenses Budget
Expenses Actual


Cumulative Incentives
Budget vs. Actual
2014
Budget Incentives Current Year
Actual
Last Year Month
(in millions)
$50
$45
$40
$35
$30
$25
$20
$15
$10
$5
$-
Jan
Feb
Mar
Apr
May
June
July
Aug


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

R00407

For contracts with costs through: 9/1/2014

Energy Trust of Oregon
Contract Status Summary Report

Report Date: 10/10/2014

Contractor	Description	*City	Est Cost	Actual TTD	Remaining	Start	End
Administration							
		Administration Total:	**7,618,563**	**2,983,486**	**4,635,077**		
Communications & Outreach							
		Communications & Outreach Total:	**3,174,113**	**2,315,947**	**858,167**		
Energy Efficiency Programs							
Northwest Energy Efficiency Alliance	Regional Energy Eff Initiative	Portland	39,138,680	33,120,355	6,018,325	1/1/10	7/1/15
ICF Resources, LLC	PMC BE 2014	Fairfax	9,008,736	5,255,574	3,753,162	1/1/14	12/31/14
CLEAResult Consulting Inc	2014 HES PMC	Austin	7,595,520	4,589,144	3,006,376	1/1/14	12/31/14
Portland Energy Conservation, Inc.	PMC NHP 2014	Portland	6,965,473	4,071,767	2,893,707	1/1/14	12/31/14
Portland Energy Conservation, Inc.	2014 NBE PMC	Portland	4,735,000	2,845,305	1,889,695	1/1/14	12/31/14
Intel Corporation	Intel D1X Megaproject	Hillsboro	4,000,000	4,000,000	0	11/15/12	12/31/14
Lockheed Martin Services, Inc.	2014 MF PMC	Cherry Hill	3,569,068	2,122,704	1,446,364	1/1/14	12/31/14
Portland General Electric	PDC - PE 2014	Portland	2,314,600	1,291,610	1,022,990	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	1,208,046	787,954	1/1/14	12/31/14
NEXANT, INC.	PDC - PE 2014	San Francisco	1,429,461	910,396	519,065	1/1/14	12/31/14
Cascade Energy, Inc.	PDC - PE 2014 Small Industrial	Walla Walla	1,234,100	754,871	479,229	1/1/14	12/31/14
RHT Energy Solutions	PDC - PE 2014	Medford	1,145,000	710,942	434,058	1/1/14	12/31/14
Evergreen Consulting Group, LLC	PE Lighting PDC 2014	Tigard	1,092,000	722,545	369,455	1/1/14	12/31/14
Ecova Inc	Products PMC Transition	Spokane	976,090	63,424	912,667	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
Evoworx Inc.	EnergySavvy Online Audit Tool	Seattle	472,500	405,384	67,116	1/1/12	12/31/14
OPOWER, Inc.	OPower Personal Energy Reports	Arlington	399,447	343,415	56,032	8/1/13	7/31/15
The Cadmus Group Inc.	PE Impact Eval 2012	Watertown	345,000	43,774	301,226	4/15/14	8/31/15
Cascade Energy, Inc.	SEM Curriculum	Walla Walla	329,080	34,199	294,881	5/1/14	4/30/16
Craft3	SWR Loan Origination/Loss Fund	Portland	305,000	4,500	300,500	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	152,215	125,385	1/1/14	12/31/14
The Cadmus Group Inc.	BE Impact Evaluation 2012	Watertown	250,000	222,542	27,458	1/1/14	12/31/14
EnerNoc, Inc.	Commercial SEM curriculum	Boston	216,915	34,856	182,059	6/27/14	5/30/15
J. Hruska Global	Quality Assurance Services	Columbia City	215,000	178,470	36,531	1/1/13	12/31/14
The Cadmus Group Inc.	NBE Program Impact Evaluation	Watertown	196,000	172,854	23,146	1/15/14	12/31/14
ICF Resources, LLC	NWN WA BE 2014	Fairfax	191,538	77,695	113,843	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
Abt SRBI Inc.	Fast Feedback Surveys	New York	118,000	32,998	85,002	1/31/14	2/29/16
Navigant Consulting Inc	CORE Improvement Pilot Eval	Boulder	115,000	95,673	19,327	9/1/12	9/1/15
ICF Resources, LLC	NWN DSM Initiative 2014	Fairfax	113,850	58,796	55,054	1/1/14	12/31/14
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	81,840	23,160	1/1/14	12/31/14
CLEAResult Consulting Inc	QA Reinspection Services	Austin	96,116	15,183	80,933	4/28/14	3/30/15

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Contractor	Description	*City	Est Cost	Actual TTD	Remaining	Start	End
PWP, Inc.	NBE Process Evaluation	Gaithersburg	95,000	58,290	36,710	1/15/14	12/31/14
The Cadmus Group Inc.	Commercial Op Pilot Eval	Watertown	85,000	81,200	3,801	7/1/11	9/1/15
PWP, Inc.	Comm SEM Initiative Evaluation	Gaithersburg	52,000	50,799	1,201	7/1/12	9/30/14
KEMA Incorporated	NEEA 2014 Lighting Survey	Oakland	50,500	23,750	26,750	12/2/13	10/31/14
PWP, Inc.	SEM Intro Pilot Evaluation	Gaithersburg	40,000	21,490	18,510	10/28/13	10/2/15
CLEAResult Consulting Inc	New Homes QA Inspections	Austin	37,100	20,811	16,289	4/28/14	12/31/14
The Cadmus Group Inc.	Lighting Pilot Evaluation	Watertown	35,000	28,204	6,796	4/1/12	12/31/14
Apex Analytics LLC	Nest Pilot Evaluation	Boulder	32,000	30,390	1,610	11/15/13	10/31/14
David Lineweber	Heat Pump Study	Tigard	30,500	15,875	14,625	3/20/14	3/31/15
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
Seattle City Light	Lighting Design Lab	Seattle	30,000	30,000	0	1/1/14	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	9,838	19,662	3/1/14	12/31/14
Sustainable Northwest	Klamath PAC Ag Program Aware	Portland	24,992	0	24,992	10/1/14	6/10/15
Portland General Electric	PGE Efficiency Seminars 2014	Portland	24,950	24,950	0	1/1/14	12/31/14
Forrest Marketing	Small Manuf Market Research	Portland	24,500	0	24,500	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	0	20,000	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	3,456	16,544	6/15/14	12/31/15
KEMA Incorporated	Market Lift Pilot Evaluation	Oakland	19,500	17,546	1,955	3/1/14	10/1/14
Consortium for Energy Efficiency	Membership Dues - 2014		18,889	18,889	0	4/16/14	12/31/14
Navigant Consulting Inc	SEM workshop	Boulder	15,875	2,328	13,548	6/15/14	10/31/14
Consumer Opinion Services Inc	Residential Phone Surveys	Seattle	12,000	11,076	924	9/1/13	10/31/14
Lane Community College, NEEI Science Division	2014 Scholarship Grant	Eugene	10,600	0	10,600	1/1/14	12/31/14
American Council for and Energy Efficient Economy	High Participation Rates		10,000	10,000	0	12/23/13	12/31/14
American Council for and Energy Efficient Economy	Extended Motor Products Label		10,000	10,000	0	12/23/13	3/31/15
Pivotal Energy Solutions LLC	EPS New Home dbase construct	Gilbert	10,000	6,000	4,000	7/1/14	6/30/16
Research Into Action, Inc.	Professional Services	Portland	9,590	0	9,590	9/1/14	8/31/16
Energy Efficiency Funding Group Inc	Hardcover Book Purchase	San Francisco	8,937	8,937	0	9/3/14	10/3/14
Bridgetown Printing Company	January 2014 Bill Insert	Portland	8,509	8,509	0	1/1/14	12/31/14
City of Portland Bureau of Planning & Sustainability	City of Portland Workshops	Portland	8,000	8,000	0	1/1/14	12/31/14
TRC Engineers Inc.	SEM workshop	Irvine	7,400	6,545	855	6/15/14	10/31/14
Northwest Environmental Business Council	Future Energy Conference 2014	Portland	6,500	6,500	0	2/13/14	12/31/14
Cascadia Region Green Building Council	Cascadia Green Bldgs Sponsor	Portland	5,000	5,000	0	1/15/14	1/15/15

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Contractor	Description	*City	Est Cost	Actual TTD	Remaining	Start	End
The Cadmus Group Inc.	SEM workshop	Watertown	4,800	4,800	0	6/15/14	10/31/14
	Energy Efficiency Programs Total:		**93,412,526**	**67,398,881**	**26,013,645**		
Joint Programs							
D&R International LTD	Better Data Better Design	Silver Spring	133,500	25,000	108,500	4/30/13	7/31/14
Evergreen Economics	P&E Consultant	Portland	100,000	0	100,000	10/22/12	10/22/16
Portland State University	Technology Forecasting		87,437	58,598	28,839	11/7/11	12/31/14
Research Into Action, Inc.	Residential Awareness Study	Portland	70,882	14,730	56,153	5/1/14	12/31/14
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	18,735	19,265	2/1/14	11/30/14
E Source Companies LLC	E Source Service Agreement	Boulder	36,500	36,500	0	2/1/14	1/31/15
CoStar Realty Information Inc	Property Data	Baltimore	26,420	19,861	6,559	6/1/11	6/28/15
Research Into Action, Inc.	Fast Feedback Analysis	Portland	25,000	0	25,000	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
American Council for and Energy Efficient Economy	ACEEE Sponsorships - 2014		7,500	7,500	0	1/1/14	12/31/14
Bruins Analysis and Consulting	Fast Feedback Reporting	Bremerton	6,000	0	6,000	6/1/14	4/30/15
	Joint Programs Total:		**613,534**	**253,299**	**360,235**		
Renewable Energy Program							
JC-Biomethane LLC	Biogas Plant Project Funding	Eugene	2,000,000	676,056	1,323,944	10/18/12	10/18/32
Oregon Institute of Technology	Geothermal Resource Funding	Klamath Falls	1,550,000	0	1,550,000	9/11/12	9/11/32
Central Oregon Irrigation District	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
K2A Properties, LLC	Doerfler Wind Farm Project	Aumsville	230,000	211,832	18,168	5/20/10	5/20/30
Confederated Tribes of the Umatilla Indian Reservation	Small Wind Project Funding	Pendleton	170,992	0	170,992	7/25/13	12/31/28
Klamath Basin Geopower Inc	Henley Proj Dev Assistance	Reno	150,000	42,490	107,510	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	94,883	19,917	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	98,935	5,343	7/1/14	6/30/15

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Contractor	Description	*City	Est Cost	Actual TTD	Remaining	Start	End
Gary Higbee DBA WindStream Solar	Solar Verifier Services	Eugene	100,000	2,205	97,795	8/1/14	7/31/16
Gary Higbee DBA WindStream Solar	Small Wind Verifier	Eugene	100,000	0	100,000	8/1/14	7/31/16
Wallowa Resources Community Solutions, Inc.	Upfront Hydroelectric Project		100,000	15,790	84,210	10/1/11	10/1/15
Deschutes Valley Water District	Early Development Assistance	Madras	68,373	0	68,373	7/23/13	12/31/14
Mapdwell LLC	Mapdwell Account	Boston	66,381	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	23,406	36,594	3/18/14	12/31/14
City of Klamath Falls	Klamath Falls Biopower Project	Klamath Falls	49,927	0	49,927	1/9/14	12/31/14
Clean Energy States Alliance	CESA Year 12 (2015)		39,500	39,500	0	7/1/14	6/30/15
Energy Efficiency Funding Group Inc	Learning to SEE training	San Francisco	34,825	15,000	19,825	7/7/14	9/30/14
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	11,641	12,484	4/11/07	1/31/24
Solar Oregon	Education & Outreach Services	Portland	24,000	16,000	8,000	1/1/14	12/31/15
Bonneville Environmental Foundation	REC policy analysis	Portland	20,000	0	20,000	6/15/14	12/31/14
Ecofys US, Inc.	Renewable Energy Consultant	Corvallis	18,000	12,641	5,360	4/7/14	3/31/16
Farmers Conservation Alliance	Small-Scale Hydro Plant Review	Hood River	17,500	10,000	7,500	1/2/14	10/30/14
Warren Griffin	Griffin Wind Project	Salem	13,150	9,255	3,895	10/1/05	10/1/20
Clean Energy States Alliance	CESA ITAC		10,000	10,000	0	1/1/14	12/31/14
Garrad Hassan America Inc	RE Consulting Services	San Diego	6,841	6,841	0	6/11/13	2/28/15
OSEIA-Oregon Solar Energy Industries Assoc	OSEIA 2014 Conference		5,000	5,000	0	2/6/14	12/31/14
Solar Oregon	Solar Now! University Sponsor	Portland	5,000	5,000	0	3/28/14	12/31/14
eFormative Options LLC	RE Evaluation Consultant	Vashon	3,000	3,000	0	3/1/13	2/28/15
	Renewable Energy Program Total:		**12,603,177**	**4,151,503**	**8,451,674**		
	Grand Totals:		**117,421,913**	**77,103,116**	**40,318,797**		

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Notes on September 2014 Financial Statements

October 20, 2014

Revenue

There were no surprises with the September revenues. Our status remains slightly above forecast.

Sep-14	YTD Actual	YTD Budget	YTD Var	YTD %
PGE	66,697,735	63,758,806	2,938,929	5%
PAC	40,971,663	38,797,322	2,174,341	6%
NWN	17,877,890	18,434,665	(556,775)	-3%
CNG	2,152,814	1,320,459	832,355	63%
Investment Income	173,876	58,500	115,376	197%
Total	127,873,978	122,369,752	5,504,226	4%

Reserves

Total Reserves at the end of September are shown below. All of the gas reserves showed another month of slight declines. The electric reserves are still increasing.

Reserves

	Actual 12/31/13 Amount	Actual 9/30/14 Amount	YTD % Change	Actual 8/31/14 Amount
PGE	24,483,032	42,497,581	73.6%	41,121,787
PacifiCorp	11,560,814	22,836,009	97.5%	22,272,278
NW Natural	8,569,670	13,015,882	51.9%	13,513,855
Cascade	658,260	1,522,748	131.3%	1,664,841
NWN Industrial	356,235	1,131,673	217.7%	1,296,342
NWN Washington	473,674	265,084	-44.0%	382,897
PGE Renewables	12,041,462	14,747,417	22.5%	14,680,867
PAC Renewables	11,793,715	12,695,066	7.6%	12,806,538
Contingency Reserve	5,000,000	5,000,000	0.0%	5,000,000
Contingency Available	2,993,710	3,180,986	6.3%	3,152,672
Total	77,930,572	116,892,448	50.0%	115,892,079

Expenses

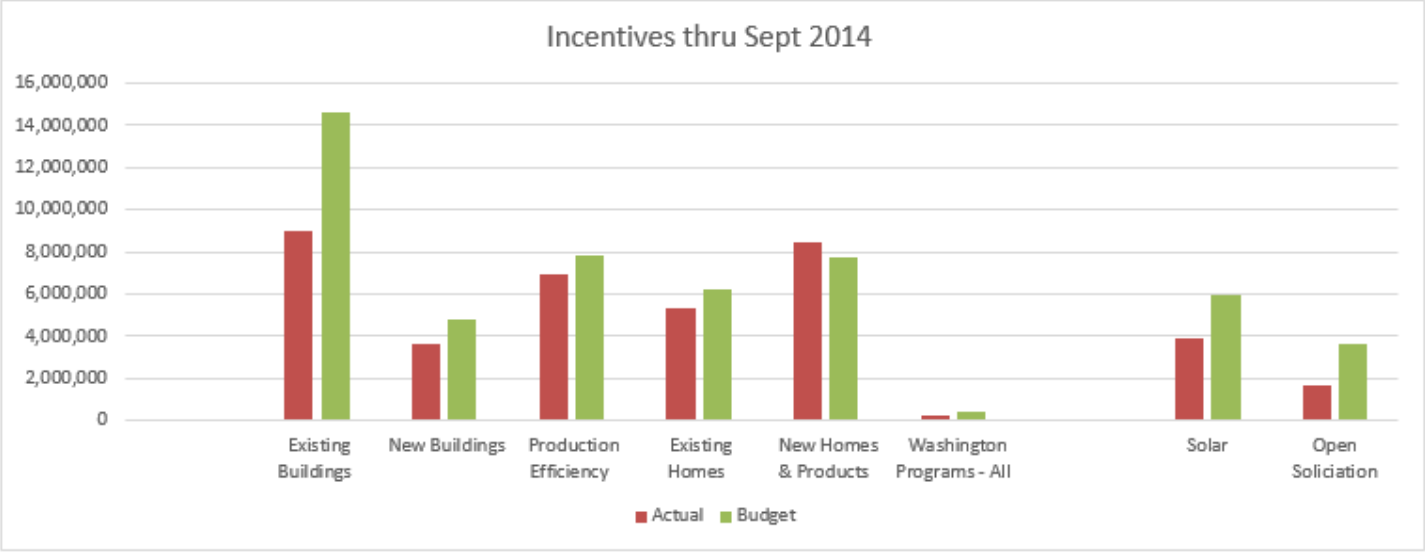
We spent $1.3 million more in September 2014 than we did in September 2013. Year to date spending is now $9.3 million higher than the same period one year ago. ($88.9 million vs. $79.6 million.) However, we underspent our September budget by $2.7 million and are now $18 million below our budgeted spending of $107 million year to date.

Incentive Expenses

In August we were short of budgeted incentives by $2.3 million (32%). 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. Most of the programs are fairly close to budget.

The Existing Buildings program is currently underspent by $5.6 million compared to budget. Their latest forecast for 2014 shows they expect to be $6.7 below budgeted incentives at year end.

Renewables incentives are underspent by $4.0 million. As discussed previously, projects from solar have been delayed and are expected to occur in either late 2014 or 2015. The latest forecast for 2014 shows Renewables expects to end the year $2.1 million below budget, so they will make up some of the current shortage. Both Solar and Custom anticipate about a $1 million shortage vs. budget in 2014.



Total Incentives
Year-to-Date 2014

Incentives thru September 2014

	Actual	Budget	Variance	Var %
Existing Buildings	9,027,211	14,648,373	5,621,162	38%
New Buildings	3,630,018	4,783,260	1,153,242	24%
Production Efficiency	6,963,013	7,798,731	835,718	11%
Existing Homes	5,309,251	6,214,554	905,303	15%
New Homes & Products	8,405,921	7,701,142	(704,779)	-9%
Washington Programs - All	247,326	419,827	172,501	41%
Solar	3,863,361	5,944,518	2,081,157	35%
Open Soliciation	1,644,053	3,627,843	1,983,790	55%
Total Incentives	39,090,154	51,138,248	12,048,094	24%
Energy Efficiency Only	**33,582,740**	**41,565,887**	**7,983,147**	**19%**

Total Incentives
Year-to-Year Comparison

September 2014 v Sept 2013

	Current Year	Prior Year	Variance	Var %
Existing Buildings	9,027,211	7,506,369	(1,520,842)	-20%
New Buildings	3,630,018	3,838,744	208,726	5%
Production Efficiency	6,963,013	7,129,404	166,391	2%
Existing Homes	5,309,251	4,910,519	(398,732)	-8%
New Homes & Products	8,405,921	6,569,836	(1,836,085)	-28%
Washington Programs - All	247,326	223,476	(23,850)	-11%
Solar	3,863,361	2,537,334	(1,326,027)	-52%
Other	1,644,053	862,383	(781,670)	-91%
Total Incentives	39,090,154	33,578,061	(5,512,093)	-16%
Energy Efficiency Only	**33,582,740**	**30,178,348**	**(3,404,392)**	**-11%**

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

	Sep 2014	Aug 2014	DEC 2013	Sep 2013	Change from one month ago	Change from Beg. of Year	Change from one year ago
Current Assets							
Cash & Cash Equivalents	68,193,921	68,876,378	76,484,638	89,463,097	(682,457)	(8,290,717)	(21,269,176)
Restricted Cash (Escrow Funds)	0	0	0	252,720	0	0	(252,720)
Investments	54,364,342	52,622,241	25,270,363	5,976,151	1,742,101	29,093,980	48,388,191
Restricted Investments (Escrow Funds)	0	0	77,988		0	(77,988)	0
Receivables	193,214	177,345	8,276	4,728	15,869	184,938	188,486
Prepaid Expenses	582,006	645,303	526,087	623,994	(63,297)	55,919	(41,987)
Advances to Vendors	2,452,757	1,193,129	2,015,420	2,439,851	1,259,628	437,337	12,906
Current Portion Note Receivable	10,000	10,000			0	10,000	10,000
Total Current Assets	**125,796,241**	**123,524,397**	**104,382,771**	**98,760,540**	**2,271,844**	**21,413,470**	**27,035,701**
Fixed Assets							
Computer Hardware and Software	1,634,233	1,469,009	1,401,967	1,377,967	165,225	232,266	256,266
Software Development	549,063	660,321			(111,258)	549,063	549,063
Leasehold Improvements	313,333	313,333	313,333	313,333	0	0	0
Office Equipment and Furniture	600,662	600,662	600,662	600,662	0	0	0
Total Fixed Assets	**3,097,292**	**3,043,325**	**2,315,962**	**2,291,962**	**53,967**	**781,329**	**805,329**
Less Depreciation	(1,718,690)	(1,719,946)	(1,500,494)	(1,417,980)	1,256	(218,196)	(300,710)
Net Fixed Assets	**1,378,602**	**1,323,379**	**815,468**	**873,983**	**55,223**	**563,134**	**504,619**
Other Assets							
Rental Deposit	64,461	64,461	61,461	61,461	0	3,000	3,000
Deferred Compensation Asset	564,334	557,265	552,641	468,265	7,069	11,693	96,069
Long Term Portion Note Receivable	90,000	90,000			0	90,000	90,000
Total Other Assets	**718,795**	**711,727**	**614,102**	**529,726**	**7,069**	**104,693**	**189,069**
Total Assets	**127,893,638**	**125,559,503**	**105,812,341**	**100,164,249**	**2,334,135**	**22,081,297**	**27,729,389**
Current Liabilities							
Accounts Payable and Accruals	9,379,251	8,058,190	26,326,508	7,312,091	1,321,061	(16,947,256)	2,067,160
Salaries, Taxes, & Benefits Payable	691,885	687,992	631,548	611,023	3,893	60,337	80,862
Total Current Liabilities	**10,071,136**	**8,746,182**	**26,958,055**	**7,923,115**	**1,324,954**	**(16,886,919)**	**2,148,022**
Long Term Liabilities							
Deferred Rent	354,611	355,681	364,244	357,664	(1,070)	(9,633)	(3,053)
Deferred Compensation Payable	567,134	557,265	552,641	468,265	9,869	14,493	98,869
Other Long-Term Liabilities	8,308	8,123	6,830	6,620	185	1,478	1,688
Total Long-Term Liabilities	**930,052**	**921,069**	**923,714**	**832,548**	**8,984**	**6,338**	**97,504**
Total Liabilities	**11,001,189**	**9,667,251**	**27,881,769**	**8,755,663**	**1,333,938**	**(16,880,581)**	**2,245,526**
Net Assets							
Temporarily Restricted Net Assets	0	0	77,988	252,720	0	(77,988)	(252,720)
Unrestricted Net Assets	116,892,449	115,892,252	77,852,585	91,155,867	1,000,198	39,039,865	25,736,582
Total Net Assets	**116,892,449**	**115,892,252**	**77,930,572**	**91,408,587**	**1,000,198**	**38,961,877**	**25,483,863**
Total Liabilities and Net Assets	**127,893,638**	**125,559,503**	**105,812,341**	**100,164,249**	**2,334,135**	**22,081,297**	**27,729,389**

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

	January	February	March	April	May	June	July	August	September	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	$ 38,961,874
Non-cash items:										
Depreciation	27,123	27,123	28,713	28,418	28,418	28,473	28,298	62,618	(1,256)	257,928
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)	(187,869)
Advances to Vendors	680,371	678,630	(1,650,387)	365,028	768,936	(865,080)	165,479	679,314	(1,259,628)	(437,337)
Prepaid expenses and other costs	(151,035)	100,837	11,507	42,345	(28,712)	(209,651)	(5,022)	120,515	63,297	(55,919)
Accounts payable	(19,456,433)	(797,502)	1,417,700	(423,975)	1,401,061	464,334	(594,512)	(205,635)	1,321,061	(16,873,901)
Payroll and related accruals	70,280	(88,799)	76,891	(14,227)	38,978	15,743	(37,257)	(541)	13,762	74,830
Deferred rent and other	(3,988)	51,851	(945)	(10,714)	(13,739)	(113,739)	(9,882)	(13,739)	(7,953)	(122,848)
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	$ 21,619,689
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)	(29,089,342)
(Acquisition)/Disposal of Capital Assets	-		(46,620)	-	-	(368,159)	(162,039)	(190,275)	(53,967)	(821,060)
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)	$ (29,910,402)
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	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)	(8,290,718)
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	$ 68,193,921

(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	12,200,000	10,400,000	12,700,000
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	25,000	25,000	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	12,225,000	10,425,000	12,725,000
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	13,600,000	18,800,000	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)	(1,375,000)	(8,375,000)	(8,475,000)
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	66,818,922	58,443,922
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**	**66,818,922**	**58,443,922**	**49,968,922**
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 (approved 12/31/14)											
	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	15,500,000	16,100,000	15,400,000	14,100,000	11,800,000	11,000,000	11,900,000	11,100,000	10,700,000	12,600,000	11,800,000	14,400,000
From other sources												
Investment Income	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000
Total cash in	15,508,000	16,108,000	15,408,000	14,108,000	11,808,000	11,008,000	11,908,000	11,108,000	10,708,000	12,608,000	11,808,000	14,408,000
Cash Out:	41,100,000	9,700,000	13,400,000	11,100,000	9,700,000	14,300,000	13,300,000	11,300,000	13,800,000	12,200,000	14,800,000	41,000,000
Net cash flow for the month	(25,592,000)	6,408,000	2,008,000	3,008,000	2,108,000	(3,292,000)	(1,392,000)	(192,000)	(3,092,000)	408,000	(2,992,000)	(26,592,000)
Beginning Balance: Cash & MM	49,968,922	24,376,922	30,784,922	32,792,922	35,800,922	37,908,922	34,616,922	33,224,922	33,032,922	29,940,922	30,348,922	27,356,922
Ending cash & MM	**24,376,922**	**30,784,922**	**32,792,922**	**35,800,922**	**37,908,922**	**34,616,922**	**33,224,922**	**33,032,922**	**29,940,922**	**30,348,922**	**27,356,922**	**764,922**
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
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 Nine Months Ending September 30, 2014
(Unaudited)

	September				YTD			
	Actual	Actual Prior Year	Prior Year Variance	Variance %	Actual	Actual Prior Year	Prior Year Variance	Variance %
REVENUES								
Public Purpose Funds-PGE	3,173,789	2,673,715	500,074	19%	28,410,584	26,152,263	2,258,321	9%
Public Purpose Funds-PacifiCorp	2,330,726	2,126,157	204,569	10%	20,924,787	19,678,079	1,246,708	6%
Public Purpose Funds-NW Natural	555,297	734,137	(178,841)	-24%	15,302,011	18,928,552	(3,626,541)	-19%
Public Purpose Funds-Cascade	37,816	95,226	(57,410)	-60%	2,152,814	1,585,921	566,893	36%
Total Public Purpose Funds	**6,097,628**	**5,629,236**	**468,392**	**8%**	**66,790,195**	**66,344,814**	**445,381**	**1%**
Incremental Funds - PGE	3,936,826	4,025,713	(88,887)	-2%	38,287,151	37,454,892	832,260	2%
Incremental Funds - PacifiCorp	2,109,874	2,189,498	(79,624)	-4%	20,046,875	19,648,030	398,845	2%
NW Natural - Industrial DSM			0		2,048,702	1,151,892	896,810	78%
NW Natural - Washington			0		527,177	645,551	(118,374)	-18%
Contributions			0		13,400	930	12,470	1341%
Revenue from Investments	28,133	8,169	19,964	244%	173,876	66,406	107,470	162%
TOTAL REVENUE	**12,172,460**	**11,852,616**	**319,845**	**3%**	**127,887,377**	**125,312,515**	**2,574,862**	**2%**
EXPENSES								
Program Subcontracts	4,510,941	3,814,900	(696,040)	-18%	35,301,502	33,294,469	(2,007,033)	-6%
Incentives	4,971,470	4,553,967	(417,503)	-9%	39,090,154	33,578,063	(5,512,090)	-16%
Salaries and Related Expenses	897,048	836,260	(60,788)	-7%	7,821,031	7,223,742	(597,290)	-8%
Professional Services	624,085	421,678	(202,407)	-48%	4,968,813	3,489,365	(1,479,447)	-42%
Supplies	2,548	2,799	251	9%	26,357	22,765	(3,592)	-16%
Telephone	4,835	4,681	(154)	-3%	41,567	39,696	(1,871)	-5%
Postage and Shipping Expenses	572	604	32	5%	9,716	7,717	(1,999)	-26%
Occupancy Expenses	55,516	55,993	477	1%	485,190	498,976	13,786	3%
Noncapitalized Equip. & Depr.	27,551	56,558	29,008	51%	514,263	482,875	(31,388)	-7%
Call Center	12,107	37,750	25,643	68%	111,947	474,898	362,950	76%
Printing and Publications	13,932	474	(13,458)	-2838%	93,518	88,301	(5,217)	-6%
Travel	10,037	12,053	2,016	17%	109,855	105,077	(4,778)	-5%
Conference, Training & Mtng Exp	23,713	12,672	(11,041)	-87%	156,455	95,507	(60,948)	-64%
Interest Expense and Bank Fees			0		2,000	5,443	3,443	63%
Insurance	8,339	8,622	283	3%	76,183	74,310	(1,873)	-3%
Miscellaneous Expenses	300	90	(210)	-233%	3,316	1,090	(2,226)	-204%
Dues, Licenses and Fees	9,268	8,313	(956)	-11%	113,633	103,184	(10,449)	-10%
TOTAL EXPENSES	**11,172,263**	**9,827,413**	**(1,344,849)**	**-14%**	**88,925,499**	**79,585,477**	**(9,340,022)**	**-12%**
TOTAL REVENUE LESS EXPENSES	**1,000,198**	**2,025,202**	**(1,025,005)**	**-51%**	**38,961,877**	**45,727,037**	**(6,765,160)**	**-15%**

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

	September				YTD			
	Actual	**Budget**	**Budget Variance**	**Variance %**	**Actual**	**Budget**	**Budget Variance**	**Variance %**
REVENUES								
Public Purpose Funds-PGE	3,173,789	2,655,574	518,214	20%	28,410,584	26,256,283	2,154,301	8%
Public Purpose Funds-PacifiCorp	2,330,726	1,979,255	351,471	18%	20,924,787	19,489,447	1,435,340	7%
Public Purpose Funds-NW Natural	555,297	543,562	11,734	2%	15,302,011	15,273,358	28,652	0%
Public Purpose Funds-Cascade	37,816	57,411	(19,595)	-34%	2,152,814	1,320,459	832,355	63%
Total Public Purpose Funds	**6,097,628**	**5,235,803**	**861,825**	**16%**	**66,790,195**	**62,339,548**	**4,450,648**	**7%**
Incremental Funds - PGE	3,936,826	4,073,343	(136,517)	-3%	38,287,151	37,502,523	784,628	2%
Incremental Funds - PacifiCorp	2,109,874	1,926,336	183,538	10%	20,046,875	19,307,875	739,000	4%
NW Natural - Industrial DSM					2,048,702	2,515,756	(467,054)	-19%
NW Natural - Washington					527,177	645,551	(118,374)	-18%
Contributions					13,400		13,400	
Revenue from Investments	28,133	6,500	21,633	333%	173,876	58,500	115,376	197%
TOTAL REVENUE	**12,172,460**	**11,241,982**	**930,478**	**8%**	**127,887,377**	**122,369,753**	**5,517,624**	**5%**
EXPENSES								
Program Subcontracts	4,510,941	4,311,946	(198,994)	-5%	35,301,502	37,161,840	1,860,338	5%
Incentives	4,971,470	7,360,708	2,389,238	32%	39,090,154	51,138,249	12,048,095	24%
Salaries and Related Expenses	897,048	939,615	42,567	5%	7,821,031	8,738,870	917,838	11%
Professional Services	624,085	895,424	271,339	30%	4,968,813	7,310,520	2,341,708	32%
Supplies	2,548	4,588	2,040	44%	26,357	41,295	14,938	36%
Telephone	4,835	5,734	899	16%	41,567	49,826	8,259	17%
Postage and Shipping Expenses	572	1,183	611	52%	9,716	10,650	934	9%
Occupancy Expenses	55,516	64,275	8,759	14%	485,190	578,474	93,284	16%
Noncapitalized Equip. & Depr.	27,551	110,758	83,207	75%	514,263	747,051	232,788	31%
Call Center	12,107	15,000	2,893	19%	111,947	135,000	23,053	17%
Printing and Publications	13,932	11,858	(2,074)	-17%	93,518	106,725	13,207	12%
Travel	10,037	26,023	15,986	61%	109,855	184,703	74,848	41%
Conference, Training & Mtng Exp	23,713	48,070	24,357	51%	156,455	319,555	163,100	51%
Interest Expense and Bank Fees		417	417	100%	2,000	3,750	1,750	47%
Insurance	8,339	9,167	828	9%	76,183	82,500	6,317	8%
Miscellaneous Expenses	300	268	(32)	-12%	3,316	2,415	(901)	-37%
Dues, Licenses and Fees	9,268	20,165	10,897	54%	113,633	140,273	26,640	19%
TOTAL EXPENSES	**11,172,263**	**13,825,200**	**2,652,937**	**19%**	**88,925,499**	**106,751,696**	**17,826,196**	**17%**
TOTAL REVENUE LESS EXPENSES	**1,000,198**	**(2,583,218)**	**3,583,415**	**139%**	**38,961,877**	**15,618,057**	**23,343,820**	**149%**

Energy Trust of Oregon
Statement of Functional Expenses
For the Nine Months Ending September 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	$68,731,548	$5,660,108	$74,391,656				$74,391,656	$88,300,089	$13,908,433	16%
Payroll and Related Expenses	2,300,455	708,706	3,009,161	1,428,205	692,876	2,121,081	5,130,242	5,541,957	411,715	7%
Outsourced Services	2,747,650	346,853	3,094,503	199,881	1,003,566	1,203,447	4,297,950	6,443,020	2,145,070	33%
Planning and Evaluation	1,827,550	62,999	1,890,550	1,324		1,324	1,891,874	2,055,575	163,701	8%
Customer Service Management	462,158	19,775	481,932				481,932	503,436	21,504	4%
Trade Allies Network	276,385	18,822	295,207				295,207	351,399	56,192	16%
Total Program Expenses	**76,345,745**	**6,817,263**	**83,163,008**	**1,629,410**	**1,696,442**	**3,325,852**	**86,488,861**	**103,195,476**	**16,706,615**	**16%**
Program Support Costs										
Supplies	7,931	2,257	10,187	5,872	2,626	8,498	18,685	29,141	10,456	36%
Postage and Shipping Expenses	3,346	1,079	4,425	1,319	748	2,067	6,492	6,205	(287)	-5%
Telephone	1,956	650	2,606	1,279	901	2,180	4,786	10,639	5,853	55%
Printing and Publications	79,690	2,478	82,168	1,103	7,409	8,512	90,680	103,029	12,349	12%
Occupancy Expenses	146,018	48,521	194,540	82,014	46,367	128,382	322,921	375,694	52,773	14%
Insurance	22,927	7,619	30,546	12,878	7,280	20,158	50,704	53,580	2,876	5%
Equipment	12,064	48,975	61,039	5,395	3,050	8,444	69,484	18,018	(51,466)	-286%
Travel	31,740	15,590	47,330	20,825	18,108	38,933	86,263	149,678	63,415	42%
Meetings, Trainings & Conferences	53,889	15,743	69,632	34,076	9,096	43,172	112,805	208,930	96,125	46%
Interest Expense and Bank Fees				2,000		2,000	2,000	3,750	1,750	47%
Depreciation & Amortization	36,440	12,109	48,549	20,468	11,571	32,039	80,588	78,639	(1,949)	-2%
Dues, Licenses and Fees	43,224	13,823	57,047	7,698	4,966	12,664	69,711	98,310	28,599	29%
Miscellaneous Expenses	3,316		3,316				3,316	1,758	(1,558)	-89%
IT Services	1,026,499	131,186	1,157,686	215,145	145,372	360,517	1,518,203	2,418,848	900,645	37%
Total Program Support Costs	**1,469,042**	**300,030**	**1,769,072**	**410,071**	**257,496**	**667,567**	**2,436,639**	**3,556,219**	**1,119,580**	**31%**
TOTAL EXPENSES	**77,814,787**	**7,117,293**	**84,932,081**	**2,039,481**	**1,953,938**	**3,993,419**	**88,925,499**	**106,751,696**	**17,826,197**	**17%**
OPUC Measure vs. 9%	**4.5%**									

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

	ENERGY EFFICIENCY								
	PGE	PacifiCorp	Total	NWN Industrial	NW Natural	Cascade	Oregon Total	NWN WA	ETO Total
REVENUES									
Public Purpose Funding	$21,956,152	$16,319,973	$38,276,125		$15,302,011	$2,152,814	$55,730,949		$55,730,949
Incremental Funding	38,287,151	20,046,875	58,334,027	2,048,702			60,382,729	527,177	60,909,906
Contributions									
Revenue from Investments									
TOTAL PROGRAM REVENUE	**60,243,303**	**36,366,848**	**96,610,151**	**2,048,702**	**15,302,011**	**2,152,814**	**116,113,678**	**527,177**	**116,640,855**
EXPENSES									
Program Management (Note 3)	1,992,436	1,219,828	3,212,265	88,396	757,296	94,651	4,152,605	106,029	4,258,634
Program Delivery	16,228,055	9,977,188	26,205,243	396,183	3,332,201	481,906	30,415,534	197,457	30,612,991
Incentives	17,608,188	10,029,160	27,637,346	633,558	4,560,486	504,023	33,335,414	247,326	33,582,740
Program Eval & Planning Svcs.	1,675,826	960,535	2,636,362	44,335	556,758	54,173	3,291,627	44,628	3,336,255
Program Marketing/Outreach	1,548,582	953,153	2,501,736	17,710	621,708	51,094	3,192,249	40,239	3,232,488
Program Quality Assurance	29,421	28,089	57,510	0	30,618	1,301	89,430	0	89,430
Outsourced Services	240,448	152,313	392,761	11,803	81,907	8,194	494,666	0	494,666
Trade Allies & Cust. Svc. Mgmt.	303,248	216,518	519,766	3,649	175,785	11,686	710,887	27,657	738,544
IT Services	482,592	297,636	780,227	11,508	194,409	16,439	1,002,582	23,918	1,026,500
Other Program Expenses - all	223,572	130,428	354,000	8,943	57,125	7,003	427,070	15,472	442,542
TOTAL PROGRAM EXPENSES	**40,332,368**	**23,964,848**	**64,297,216**	**1,216,085**	**10,368,293**	**1,230,470**	**77,112,064**	**702,726**	**77,814,787**
ADMINISTRATIVE COSTS									
Management & General (Notes 1 & 2)	968,504	575,471	1,543,974	29,202	248,974	29,548	1,851,697	16,875	1,868,572
Communications & Customer Svc (Notes 1 & 2)	927,882	551,334	1,479,213	27,977	238,532	28,308	1,774,032	16,166	1,790,198
Total Administrative Costs	1,896,386	1,126,805	3,023,187	57,179	487,506	57,856	3,625,729	33,041	3,658,770
TOTAL PROG & ADMIN EXPENSES	**42,228,756**	**25,091,652**	**67,320,407**	**1,273,262**	**10,855,798**	**1,288,324**	**80,737,791**	**735,766**	**81,473,557**
TOTAL REVENUE LESS EXPENSES	**18,014,549**	**11,275,195**	**29,289,748**	**775,438**	**4,446,212**	**864,488**	**35,375,885**	**(208,590)**	**35,167,295**
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	18,014,549	11,275,195	29,289,748	775,438	4,446,212	864,488	35,375,885	(208,590)	35,167,295
Ending Net Assets - Reserves	**42,497,581**	**22,836,009**	**65,333,594**	**1,131,673**	**13,015,882**	**1,522,748**	**81,003,896**	**265,084**	**81,268,980**
Ending Reserve by Category									
Program Reserves (Efficiency and Renewables)	42,497,581	22,836,009	65,333,594	1,131,673	13,015,882	1,522,748	81,003,896	265,084	81,268,980
Assets Released for General Purpose									
Emergency Contingency Pool									
TOTAL NET ASSETS CUMULATIVE	42,497,581	22,836,009	65,333,594	1,131,673	13,015,882	1,522,748	81,003,896	265,084	81,268,980

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 Nine Months Ending September 30, 2014
Unaudited

	RENEWABLE ENERGY				TOTAL			
	PGE	PacifiCorp	Total	Other	All Programs	Approved budget	Change	% Change
REVENUES								
Public Purpose Funding	$6,454,432	$4,604,815	$11,059,246		$66,790,195	$62,339,548	$4,450,647	7%
Incremental Funding					60,909,906	59,971,705	938,201	2%
Contributions				13,400	13,400		13,400	
Revenue from Investments				173,876	173,876	58,500	115,376	197%
TOTAL PROGRAM REVENUE	**6,454,432**	**4,604,815**	**11,059,246**	**187,276**	**127,887,377**	**122,369,753**	**5,517,624**	**5%**
EXPENSES								
Program Management (Note 3)	291,508	447,199	738,707		4,997,341	4,949,945	(47,396)	-1%
Program Delivery	61,497	61,197	122,695		30,735,686	32,079,795	1,344,109	4%
Incentives	2,803,020	2,704,394	5,507,414		39,090,154	51,138,248	12,048,094	24%
Program Eval & Planning Svcs.	64,450	54,317	118,769		3,455,024	3,980,955	525,931	13%
Program Marketing/Outreach	62,025	33,614	95,639		3,328,127	4,545,991	1,217,864	27%
Program Quality Assurance	0	851	851		90,281	193,250	102,969	53%
Outsourced Services	130,871	63,722	194,595		689,261	1,727,694	1,038,433	60%
Trade Allies & Cust. Svc. Mgmt.	24,608	13,989	38,596		777,140	854,834	77,694	9%
IT Services	57,706	73,481	131,186		1,157,686	1,844,461	686,775	37%
Other Program Expenses - all	90,223	78,620	168,843		611,385	674,828	63,443	9%
TOTAL PROGRAM EXPENSES	**3,585,908**	**3,531,384**	**7,117,293**		**84,932,081**	**101,990,001**	**17,057,920**	**17%**
ADMINISTRATIVE COSTS								
Management & General (Notes 1 & 2)	83,026	87,883	170,908		2,039,481	2,689,357	649,876	24%
Communications & Customer Svc (Notes 1 & 2)	79,543	84,197	163,740		1,953,938	2,072,338	118,400	6%
Total Administrative Costs	162,569	172,080	334,648		3,993,419	4,761,695	768,276	16%
TOTAL PROG & ADMIN EXPENSES	**3,748,475**	**3,703,465**	**7,451,940**		**88,925,499**	**106,751,696**	**17,826,197**	**17%**
TOTAL REVENUE LESS EXPENSES	**2,705,955**	**901,351**	**3,607,303**	**187,276**	**38,961,877**	**15,618,057**	**23,343,820**	**149%**
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	2,705,955	901,351	3,607,306	187,276	38,961,877	15,618,057	23,343,820	149%
Ending Net Assets - Reserves	**14,747,417**	**12,695,066**	**27,442,483**	**8,180,986**	**116,892,449**	**78,227,821**	**38,664,628**	**49%**
Ending Reserve by Category								
Program Reserves (Efficiency and Renewables)	14,747,417	12,695,066	27,442,480	3,180,986	111,892,446	78,227,821	38,664,625	49%
Assets Released for General Purpose								
Emergency Contingency Pool				5,000,000	5,000,000			
TOTAL NET ASSETS CUMULATIVE	14,747,417	12,695,066	27,442,480	8,180,986	116,892,446	78,227,821	38,664,625	49%

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.

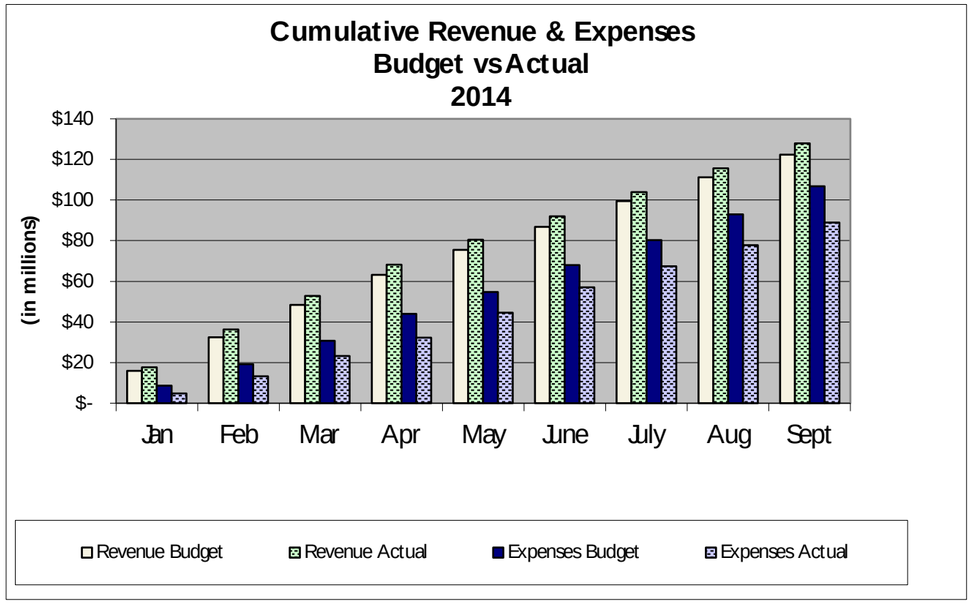
Energy Trust of Oregon
Program Expense by Service Territory
For the Nine Months Ending September 30, 2014
(Unaudited)

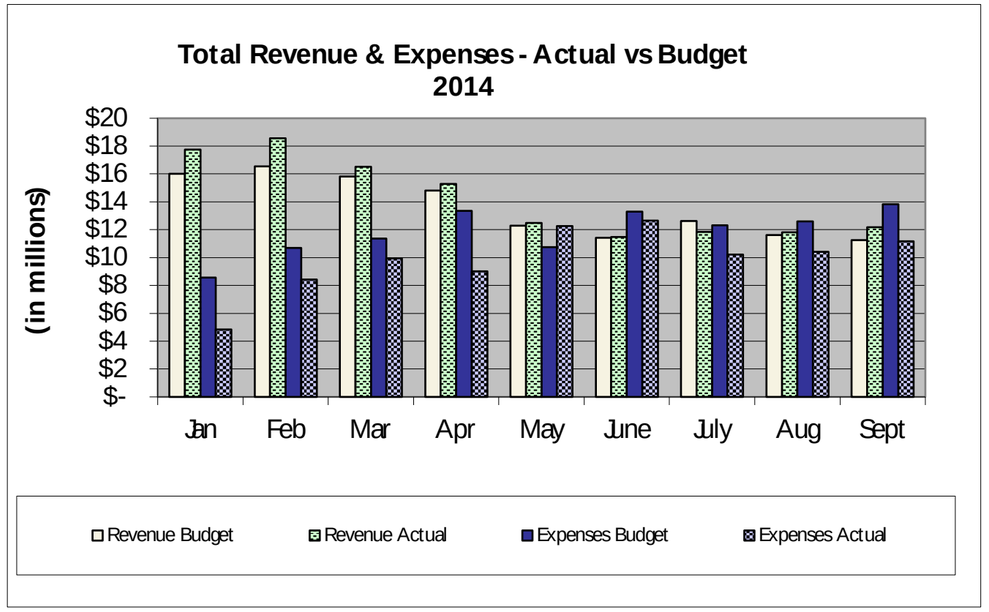
	PGE	Pacific Power	Subtotal Elec.	NWN Industrial	NW Natural Gas	Cascade	Subtotal Gas	Oregon Total	NWN WA	ETO Total	YTD Budget	Variance	% Var
Energy Efficiency													
Commercial													
Existing Buildings	11,890,404	6,634,063	18,524,466	306,027	2,172,229	424,225	2,902,481	21,426,947	268,846	21,695,793	28,247,935	6,552,142	23%
New Buildings	5,730,617	1,414,040	7,144,657	212,770	794,382	105,981	1,113,133	8,257,790		8,257,790	9,925,397	1,667,607	17%
NEEA	1,143,398	862,563	2,005,961		57,347	3,660	61,008	2,066,969		2,066,969	2,110,620	43,651	2%
Total Commercial	**18,764,419**	**8,910,665**	**27,675,085**	**518,797**	**3,023,958**	**533,867**	**4,076,621**	**31,751,706**	**268,846**	**32,020,552**	**40,283,952**	**8,263,400**	**21%**
Industrial													
Production Efficiency	8,831,784	5,617,992	14,449,776	754,465	355,406	237,094	1,346,965	15,796,741		15,796,741	17,409,643	1,612,902	9%
NEEA	434,766	327,982	762,748					762,748		762,748	1,021,886	259,138	25%
Total Industrial	**9,266,550**	**5,945,974**	**15,212,524**	**754,465**	**355,406**	**237,094**	**1,346,965**	**16,559,489**		**16,559,489**	**18,431,529**	**1,872,040**	**10%**
Residential													
Existing Homes	4,556,059	4,349,762	8,905,821		4,807,717	204,322	5,012,038	13,917,859	249,959	14,167,818	16,741,588	2,573,770	15%
New Homes/Products	7,880,162	4,556,350	12,436,512		2,611,370	309,382	2,920,752	15,357,264	216,961	15,574,225	15,913,213	338,988	2%
NEEA	1,761,565	1,328,900	3,090,465		57,347	3,660	61,008	3,151,473		3,151,473	3,113,222	(38,251)	-1%
Total Residential	**14,197,786**	**10,235,012**	**24,432,798**		**7,476,434**	**517,363**	**7,993,798**	**32,426,596**	**466,920**	**32,893,516**	**35,768,023**	**2,874,507**	**8%**
Energy Efficiency Costs	**42,228,756**	**25,091,652**	**67,320,407**	**1,273,262**	**10,855,798**	**1,288,324**	**13,417,384**	**80,737,791**	**735,766**	**81,473,557**	**94,483,504**	**13,009,947**	**14%**
Renewables													
Solar Electric (Photovoltaic)	3,333,355	1,745,337	5,078,692					5,078,692		5,078,692	7,621,356	2,542,664	33%
Other Renewable	415,120	1,958,128	2,373,248					2,373,248		2,373,248	4,646,835	2,273,587	49%
Renewables Costs	**3,748,475**	**3,703,465**	**7,451,940**					**7,451,940**		**7,451,940**	**12,268,191**	**4,816,251**	**39%**
Cost Grand Total	**45,977,231**	**28,795,116**	**74,772,347**	**1,273,262**	**10,855,798**	**1,288,324**	**13,417,384**	**88,189,731**	**735,766**	**88,925,499**	**106,751,695**	**17,826,196**	**17%**

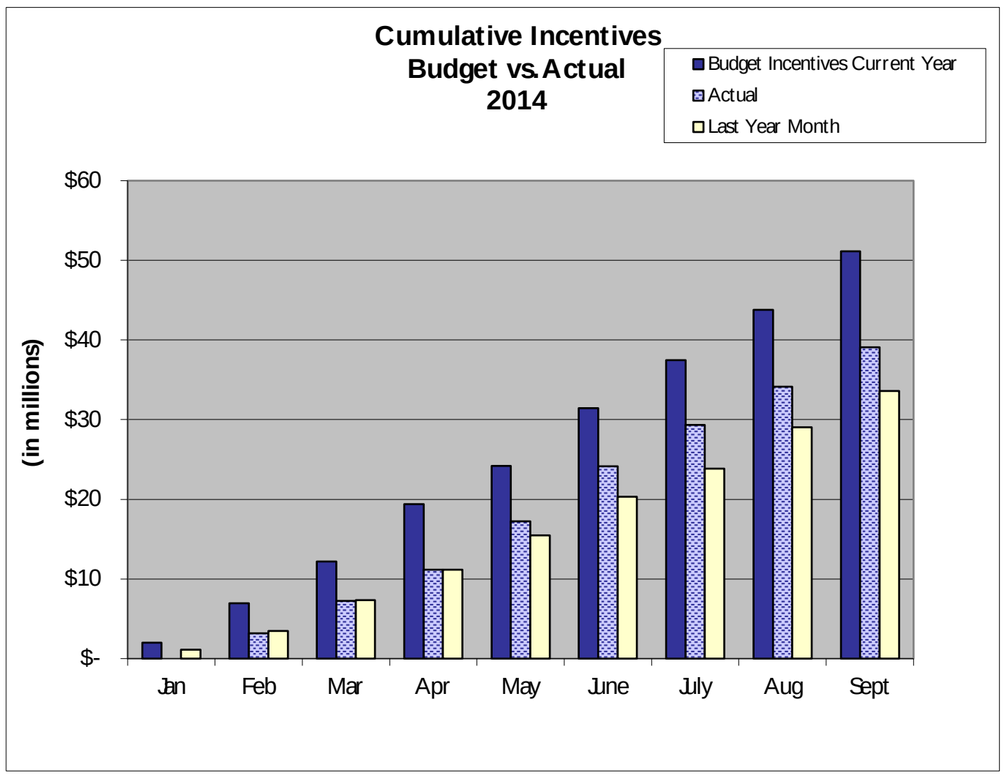
Energy Trust of Oregon
Administrative Expenses
For the 3rd Quarter and Nine Months Ending September 30, 2014
(Unaudited)

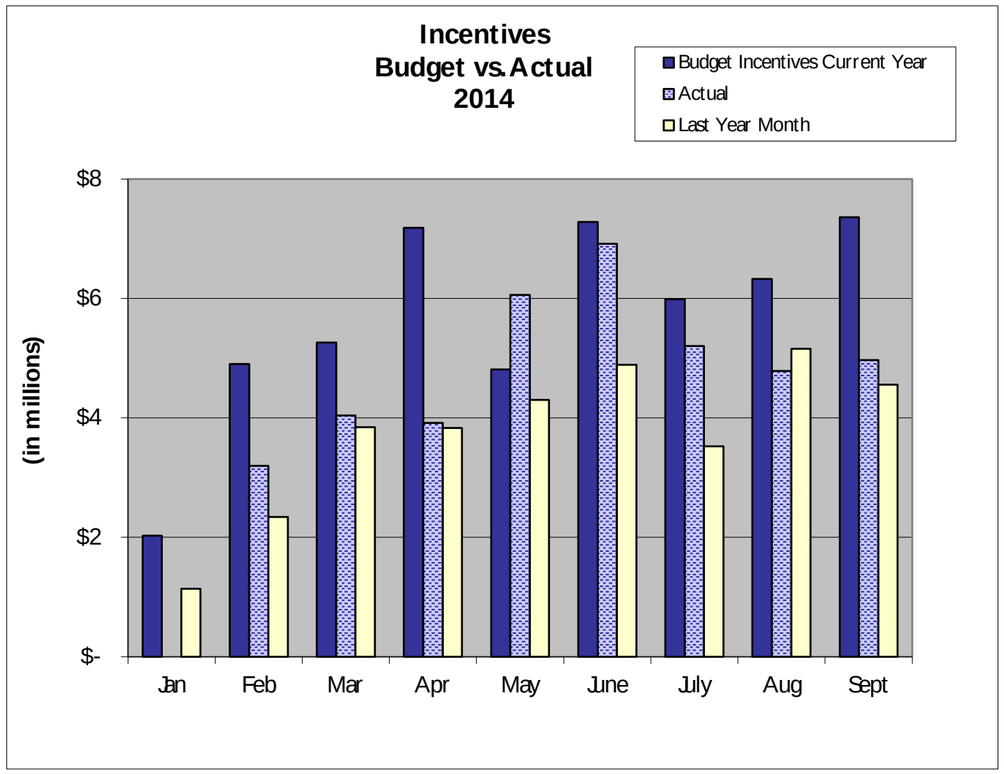
	MANAGEMENT & GENERAL						COMMUNICATIONS & CUSTOMER SERVICE					
	MONTHLY	QUARTERLY	QUARTER	YTD			MONTHLY	QUARTERLY	QUARTER	YTD		
	ACTUAL	BUDGET	REMAINING	ACTUAL	BUDGET	VARIANCE	ACTUAL	BUDGET	REMAINING	ACTUAL	BUDGET	VARIANCE
EXPENSES	-	-		-			-			-		
Outsourced Services	$33,127	$107,017	$73,890	$198,570	$403,052	$204,483	$571,657	$265,300	($306,357)	$1,003,566	$795,900	($207,666)
Legal Services	560	13,750	13,190	1,312	41,250	39,939						
Salaries and Related Expenses	474,733	535,105	60,372	1,428,205	1,587,648	159,443	253,618	298,515	44,897	692,876	895,544	202,668
Supplies	1,029	1,950	921	2,057	5,850	3,793	89	240	151	470	720	250
Telephone		545	545	180	1,635	1,455	120	490	370	280	1,190	910
Postage and Shipping Expenses				24		(24)	16	250	234	16	750	734
Noncapitalized Equipment								250	250		750	750
Printing and Publications	88	75	(13)	351	225	(126)	6,201	1,750	(4,451)	6,983	5,250	(1,733)
Travel	8,479	13,305	4,826	20,825	39,915	19,090	9,205	9,500	295	18,108	28,500	10,392
Conference, Training & Mtngs	13,721	44,210	30,489	33,857	114,930	81,072	4,772	5,500	728	8,973	16,500	7,527
Interest Expense and Bank Fees		1,250	1,250	2,000	3,750	1,750						
Miscellaneous Expenses		180	180		540	540						
Dues, Licenses and Fees	4,360	2,380	(1,980)	7,698	6,680	(1,018)	1,870	400	(1,470)	4,966	1,200	(3,766)
Shared Allocation (Note 1)	42,386	46,437	4,051	127,934	139,736	11,802	25,408	31,378	5,970	72,328	94,422	22,094
IT Service Allocation (Note 2)	60,589	101,017	40,428	215,145	342,775	127,631	40,940	68,257	27,317	145,372	231,612	86,239
Planning & Eval	365	409	44	1,324	1,370	46						
TOTAL EXPENSES	**639,438**	**867,630**	**228,192**	**2,039,481**	**2,689,358**	**649,877**	**913,896**	**681,829**	**(232,067)**	**1,953,938**	**2,072,338**	**118,400**

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)
$140
$120
$100
$80
$60
$40
$20
$-
Jan
Feb
Mar
Apr
May
June
July
Aug
Sept
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
Revenue Budget
Revenue Actual
Expenses Budget
Expenses Actual


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


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

R00407

For contracts with costs through: 10/1/2014

Energy Trust of Oregon
Contract Status Summary Report

Report Date: 10/20/2014

Contractor	Description	*City	Est Cost	Actual TTD	Remaining	Start	End
Administration							
		Administration Total:	**7,618,563**	**3,207,804**	**4,410,759**		
Communications & Outreach							
		Communications & Outreach Total:	**3,155,161**	**2,449,407**	**705,754**		
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
ICF Resources, LLC	PMC BE 2014	Fairfax	9,008,736	6,225,903	2,782,833	1/1/14	12/31/14
CLEAResult Consulting Inc	2014 HES PMC	Austin	7,595,520	5,192,297	2,403,223	1/1/14	12/31/14
Portland Energy Conservation, Inc.	PMC NHP 2014	Portland	6,965,473	4,557,921	2,407,552	1/1/14	12/31/14
Portland Energy Conservation, Inc.	2014 NBE PMC	Portland	4,735,000	3,177,390	1,557,610	1/1/14	12/31/14
Intel Corporation	Intel D1X Megaproject	Hillsboro	4,000,000	4,000,000	0	11/15/12	12/31/14
Lockheed Martin Services, Inc.	2014 MF PMC	Cherry Hill	3,569,068	2,451,554	1,117,514	1/1/14	12/31/14
Portland General Electric	PDC - PE 2014	Portland	2,314,600	1,499,605	814,995	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	1,363,233	632,767	1/1/14	12/31/14
NEXANT, INC.	PDC - PE 2014	San Francisco	1,429,461	1,065,087	364,374	1/1/14	12/31/14
Cascade Energy, Inc.	PDC - PE 2014 Small Industrial	Walla Walla	1,234,100	848,342	385,758	1/1/14	12/31/14
RHT Energy Solutions	PDC - PE 2014	Medford	1,145,000	797,929	347,071	1/1/14	12/31/14
Evergreen Consulting Group, LLC	PE Lighting PDC 2014	Tigard	1,092,000	796,970	295,030	1/1/14	12/31/14
Ecova Inc	Products PMC Transition	Spokane	976,090	182,531	793,559	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
Evoworx Inc.	EnergySavvy Online Audit Tool	Seattle	472,500	405,384	67,116	1/1/12	12/31/14
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	77,078	267,923	4/15/14	8/31/15
Cascade Energy, Inc.	SEM Curriculum	Walla Walla	329,080	72,862	256,218	5/1/14	4/30/16
Craft3	SWR Loan Origination/Loss Fund	Portland	305,000	5,250	299,750	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	175,148	102,452	1/1/14	12/31/14
The Cadmus Group Inc.	BE Impact Evaluation 2012	Watertown	250,000	232,930	17,070	1/1/14	12/31/14
EnerNoc, Inc.	Commercial SEM curriculum	Boston	216,915	34,856	182,059	6/27/14	5/30/15
J. Hruska Global	Quality Assurance Services	Columbia City	215,000	189,762	25,238	1/1/13	12/31/14
HST&V, LLC	CSEM PDC Transition Agreement	Portland	200,000	22,770	177,230	9/1/14	12/31/14
The Cadmus Group Inc.	NBE Program Impact Evaluation	Watertown	196,000	177,591	18,409	1/15/14	12/31/14
ICF Resources, LLC	NWN WA BE 2014	Fairfax	191,538	100,338	91,200	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
Abt SRBI Inc.	Fast Feedback Surveys	New York	118,000	37,997	80,003	1/31/14	2/29/16
Navigant Consulting Inc	CORE Improvement Pilot Eval	Boulder	115,000	95,673	19,327	9/1/12	9/1/15
ICF Resources, LLC	NWN DSM Initiative 2014	Fairfax	113,850	79,043	34,807	1/1/14	12/31/14
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	81,840	23,160	1/1/14	12/31/14

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Contractor	Description	*City	Est Cost	Actual TTD	Remaining	Start	End
CLEAResult Consulting Inc	QA Reinspection Services	Austin	96,116	15,183	80,933	4/28/14	3/30/15
PWP, Inc.	NBE Process Evaluation	Gaithersburg	95,000	79,980	15,020	1/15/14	12/31/14
Clean Energy Works, Inc.	EE Incentive & Services Agmt	Portland	94,600	0	94,600	7/1/14	12/31/14
The Cadmus Group Inc.	Commercial Op Pilot Eval	Watertown	85,000	85,000	0	7/1/11	9/1/15
KEMA Incorporated	NEEA 2014 Lighting Survey	Oakland	50,500	47,500	3,000	12/2/13	10/31/14
PWP, Inc.	SEM Intro Pilot Evaluation	Gaithersburg	40,000	21,490	18,510	10/28/13	10/2/15
CLEAResult Consulting Inc	New Homes QA Inspections	Austin	37,100	20,811	16,289	4/28/14	12/31/14
The Cadmus Group Inc.	Lighting Pilot Evaluation	Watertown	35,000	28,474	6,526	4/1/12	12/31/14
Apex Analytics LLC	Nest Pilot Evaluation	Boulder	32,000	31,530	470	11/15/13	10/31/14
David Lineweber	Heat Pump Study	Tigard	30,500	17,720	12,780	3/20/14	3/31/15
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
Seattle City Light	Lighting Design Lab	Seattle	30,000	30,000	0	1/1/14	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	17,217	12,283	3/1/14	12/31/14
LightTracker, Inc.	CREED Data	Boulder	26,000	0	26,000	10/3/14	8/1/15
Sustainable Northwest	Klamath PAC Ag Program Aware	Portland	24,992	0	24,992	10/1/14	6/10/15
Portland General Electric	PGE Efficiency Seminars 2014	Portland	24,950	24,950	0	1/1/14	12/31/14
Forrest Marketing	Small Manuf Market Research	Portland	24,500	0	24,500	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
WegoWise Inc	benchmarking license 2015	Boston	20,000	3,456	16,544	6/15/14	12/31/15
Consortium for Energy Efficiency	Membership Dues - 2014		18,889	18,889	0	4/16/14	12/31/14
Navigant Consulting Inc	SEM workshop	Boulder	14,900	13,664	1,236	6/15/14	10/31/14
Lane Community College, NEEI Science Division	2014 Scholarship Grant	Eugene	10,600	0	10,600	1/1/14	12/31/14
American Council for and Energy Efficient Economy	High Participation Rates		10,000	10,000	0	12/23/13	12/31/14
American Council for and Energy Efficient Economy	Extended Motor Products Label		10,000	10,000	0	12/23/13	3/31/15
Pivotal Energy Solutions LLC	EPS New Home dbase construct	Gilbert	10,000	10,000	0	7/1/14	6/30/16
Research Into Action, Inc.	Professional Services	Portland	9,590	0	9,590	9/1/14	8/31/16
Energy Efficiency Funding Group Inc	Hardcover Book Purchase	San Francisco	8,937	8,937	0	9/3/14	10/3/14
Bridgetown Printing Company	January 2014 Bill Insert	Portland	8,509	8,509	0	1/1/14	12/31/14
City of Portland Bureau of Planning & Sustainability	City of Portland Workshops	Portland	8,000	8,000	0	1/1/14	12/31/14
TRC Engineers Inc.	SEM workshop	Irvine	7,400	6,545	855	6/15/14	10/31/14
Northwest Environmental Business Council	Future Energy Conference 2014	Portland	6,500	6,500	0	2/13/14	12/31/14
Cascadia Region Green Building Council	Cascadia Green Bldgs Sponsor	Portland	5,000	5,000	0	1/15/14	1/15/15
The Cadmus Group Inc.	SEM workshop	Watertown	4,800	4,800	0	6/15/14	10/31/14

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Contractor	Description	*City	Est Cost	Actual TTD	Remaining	Start	End
	Energy Efficiency Programs Total:		**93,648,651**	**71,899,352**	**21,749,299**		
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		87,437	71,075	16,362	11/7/11	12/31/14
Research Into Action, Inc.	Residential Awareness Study	Portland	70,882	64,330	6,552	5/1/14	12/31/14
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	31,830	6,170	2/1/14	11/30/14
E Source Companies LLC	E Source Service Agreement	Boulder	36,500	36,500	0	2/1/14	1/31/15
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	20,432	5,988	6/1/11	6/28/15
Research Into Action, Inc.	Fast Feedback Analysis	Portland	25,000	0	25,000	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
American Council for and Energy Efficient Economy	ACEEE Sponsorships - 2014		7,500	7,500	0	1/1/14	12/31/14
Bruins Analysis and Consulting	Fast Feedback Reporting	Bremerton	6,000	3,000	3,000	6/1/14	4/30/15
	Joint Programs Total:		**543,534**	**332,042**	**211,492**		
Renewable Energy Program							
JC-Biomethane LLC	Biogas Plant Project Funding	Eugene	2,000,000	676,056	1,323,944	10/18/12	10/18/32
Oregon Institute of Technology	Geothermal Resource Funding	Klamath Falls	1,550,000	0	1,550,000	9/11/12	9/11/32
Central Oregon Irrigation District	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
K2A Properties, LLC	Doerfler Wind Farm Project	Aumsville	230,000	211,832	18,168	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	42,490	107,510	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	94,883	19,917	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	98,935	5,343	7/1/14	6/30/15

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Contractor	Description	*City	Est Cost	Actual TTD	Remaining	Start	End
Gary Higbee DBA WindStream Solar	Solar Verifier Services	Eugene	100,000	6,720	93,280	8/1/14	7/31/16
Wallowa Resources Community Solutions, Inc.	Upfront Hydroelectric Project		100,000	15,790	84,210	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	44,434	15,566	3/18/14	12/31/14
City of Klamath Falls	Klamath Falls Biopower Project	Klamath Falls	49,927	0	49,927	1/9/14	12/31/14
Clean Energy States Alliance	CESA Year 12 (2015)		39,500	39,500	0	7/1/14	6/30/15
Energy Efficiency Funding Group Inc	Learning to SEE training	San Francisco	34,825	20,800	14,025	7/7/14	9/30/14
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	11,641	12,484	4/11/07	1/31/24
Solar Oregon	Education & Outreach Services	Portland	24,000	18,000	6,000	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
Ecofys US, Inc.	Renewable Energy Consultant	Corvallis	18,000	18,000	0	4/7/14	3/31/16
Farmers Conservation Alliance	Small-Scale Hydro Plant Review	Hood River	17,500	17,500	0	1/2/14	10/30/14
Warren Griffin	Griffin Wind Project	Salem	13,150	9,255	3,895	10/1/05	10/1/20
Clean Energy States Alliance	CESA ITAC		10,000	10,000	0	1/1/14	12/31/14
Garrad Hassan America Inc	RE Consulting Services	San Diego	6,841	6,841	0	6/11/13	2/28/15
OSEIA-Oregon Solar Energy Industries Assoc	OSEIA 2014 Conference		5,000	5,000	0	2/6/14	12/31/14
Solar Oregon	Solar Now! University Sponsor	Portland	5,000	5,000	0	3/28/14	12/31/14
eFormative Options LLC	RE Evaluation Consultant	Vashon	3,000	3,000	0	3/1/13	2/28/15
	Renewable Energy Program Total:		**12,503,177**	**4,374,570**	**8,128,607**		
	Grand Totals:		**117,469,086**	**82,263,175**	**35,205,911**		

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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 6

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	