

Energy Trust Board of Directors Meeting

April 5, 2017



149th Board Meeting

Wednesday, April 5, 2017 421 SW Oak Street, Suite 300, Portland, Oregon

	Agenda	Tab	Purpose
10:30 a.m.	Board Meeting—Call to Order (Ken Canon) • 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. • February 22, 2017 Board meeting minutes • Lost Opportunities Policy 4.04.000-P–R799 • Using Reserve Accounts Policy 5.05.010-P–R800 • Corporate Governance Guidelines Policy 2.03.000–R801	1	Action
10:35 a.m.	 President's Report (Ken Canon) PDC Meeting Update ODOE Special Board Advisor Unanimous Written Consent by the Board of Directors In Honor of John Savage–R798 	Document distributed at meeting	Info Info
10:45 a.m.	 Audit Committee (Ken Canon) Presentation and review of results of financial audit by Moss Adams Accept audited financial report for period ending 12/31/16–R802 	2	Action
11:15 a.m.	PMC Program Contract Extension–New Buildings (Jessica Iplikci)	3	Info
11:35 a.m.	Lunch Break		
12:05 p.m.	Committee Report • Evaluation Committee (Alan Meyer) • Finance Committee (Susan Brodahl) • Policy Committee (Roger Hamilton) • Strategic Planning Committee (Mark Kendall) • Compensation Committee (Dan Enloe)	5 6	Info Info Info Info Info
12:50 p.m.	Staff Report • Highlights (Mike Colgrove) • Project Updates (Mike Colgrove) • Energy Trust Staff Diversity Survey Report (Sarah Castor) • Legislative Update (Jay Ward, Hannah Cruz)	8	Info
1:45 p.m.	Adjourn		

The next meeting of the Energy Trust Board of Directors will be the Annual Strategic Workshop on Thursday, May 18 and Friday, May 19, 2017 at 8:00 a.m. at Mercy Corps Northwest, 43 SW Naito Parkway, Portland, OR 97204

Agenda April 5, 2017

Table of Contents

Tab 1 Consent Agenda

- February 22, 2017, Board meeting minutes
- Lost Opportunities Policy 4.04.000-P–R799
- Using Reserve Accounts Policy 5.05.010-P-R800
- Corporate Governance Guidelines Policy 2.03.000-R801

Tab 2 Audit Committee

- Presentation on results of financial audit by Moss Adams
- Report of Independent Auditors and Financial Statements
- Accept audited financial report for period ending 12/31/16–R802

Tab 3 PMC Program Contract Extension

- Briefing Paper–CLEAResult Contract Extension for New Buildings
- Briefing Paper–PMC and PDC Delivery Contract Terms

Tab 4 Evaluation Committee

- Impact Evaluation of the 2013-14 Existing Buildings Program

 Final Report
- 2012-14 Commercial SEM Impact Evaluation Report

 Executive Summary and Staff
 Response

Tab 5 Finance Committee

- Notes on February 2017 Financial Statements
- February 2017 Financial Statements
- Contract Summary Report
- Financial Glossary of Terms

Tab 6 Policy Committee

• March 9, 2017, Meeting Minutes

Tab 7 Strategic Planning Committee

March 14, 2017, Meeting Minutes

Tab 8 Legislative Update

Tab 9 Glossary of Energy Industry Acronyms and Terminology

March 15 Renewable Energy Advisory Council meeting notes will be emailed prior to the board meeting, if available.

Tab 1

Meeting Minutes—148th Meeting



February 22, 2017

Board members present: Susan Brodahl, Heather Beusse Eberhardt (by phone), Ken Canon, Melissa Cribbins (by phone), Dan Enloe, Roger Hamilton, Lindsey Hardy, Mark Kendall, Debbie Kitchin, Alan Meyer, John Reynolds, Anne Root, Steve Bloom (OPUC ex officio), Warren Cook (Oregon Department of Energy special advisor)

Board members absent: Eddie Sherman

Staff attending: Michael Colgrove, Fred Gordon, Peter West, Hannah Cruz, Steve Lacey, Mariet Steenkamp, Corey Kehoe, Alex Novie, Sue Fletcher, Debbie Menashe, Mia Hart, Phil Degens, Mike Bailey, Julianne Thacher, Mark Wyman, Sam Walker, Susan Jamison, Betsy Kauffman

Others attending: Allison Spector (Cascade Natural Gas), Jim Abrahamson (Cascade Natural Gas), Rick Hodges (NW Natural), Amanda Potter (CLEAResult), Anne Snyder Grassman (PGE), Whitney Rideout (Evergreen), JP Batmale (OPUC), Julia Harper (NEEA), Jeremy Litow (NEEA), John Charles (Cascade Policy Institute), Ryan Solomon (public), David White (Research Strategy Content)

Business Meeting

Debbie Kitchin called the meeting to order at 12:15 p.m. She reminded the board that consent agenda items can be changed to regular agenda items at any time.

General Public Comments

The president may defer specific public comment to the appropriate agenda topic.

There were no 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. December 16, 2016, Board meeting minutes
- 2. Program Approval Policy 4.22.000-P-R791

Resolution 791 AMENDING PROGRAM APPROVAL POLICY

WHEREAS:

- 1. The Board Policy on Program Approval, read strictly, applies only to "existing" programs. In fact, Energy Trust follows the policy for all programs, new and existing.
- 2. The policy also says that the Board will review program "management" contracts. In fact, the Board reviews all program-related contracts, whether management contracts or not, consistent with its Policy on Contract Execution and Oversight.
- To clarify the policy in these respects, it is RESOLVED that the Board of Directors of Energy Trust of Oregon, Inc. amends the Program Approval Policy as shown in Attachment 1, so that the policy applies to all programs, new and existing, and Board review and oversight is governed by the Policy on Contract Execution and Oversight.

Moved by: John Reynolds Seconded by: Anne Root

Vote: In favor: 12 Abstained: 0

Opposed: 0

Board Nominating Committee

Election to New Terms of Office-R792

John Reynolds introduced Resolution 792 to nominate five existing board members to new terms on the board.

RESOLUTION 792 ELECTING SUSAN BRODAHL, KEN CANON, MELISSA CRIBBINS, DAN ENLOE AND ROGER HAMILTON TO NEW TERMS ON THE ENERGY TRUST BOARD OF DIRECTORS

WHEREAS:

- 1. The terms of incumbent board members Susan Brodahl, Ken Canon, Melissa Cribbins, Dan Enloe and Roger Hamilton expire in 2017.
- 2. The board nominating committee has recommended that five of these members' terms be renewed.

It is therefore RESOLVED that the Energy Trust of Oregon, Inc., Board of Directors elects Susan Brodahl, Ken Canon, Melissa Cribbins, Dan Enloe and Roger Hamilton, incumbent board members, to new terms of office that end in 2020.

Moved by: Anne Root Seconded by: Lindsey Hardy

Vote: In favor: 12 Abstained: 0

Opposed: 0

The board discussed the cycle of board member terms. Debbie Menashe clarified roughly one-third of the seats expire each year.

Election of Officers-R793

Warren Cook arrived at 12:20 p.m.

RESOLUTION 793 ELECTING OFFICERS OF ENERGY TRUST OF OREGON, INC.

WHEREAS:

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

It is therefore RESOLVED that the Board of Directors hereby elects the following as officers of Energy Trust of Oregon, Inc., for 2017:

- Debbie Kitchin, President
- Ken Canon, Vice President
- Alan Meyer, Secretary
- Susan Brodahl, Treasurer

Moved by: Anne Root Seconded by: Mark Kendall

Vote: In favor: 12 Abstained: 0

Opposed: 0

The board thanked Dan Enloe for his leadership as Treasurer and his contributions to the Finance Committee.

President's Report

Debbie Kitchin reviewed the board committee appointments, which are largely similar to 2016. The main change is appointing Susan Brodahl as chair of Finance Committee and Dan Enloe as a member of the committee. Dan has agreed to continue as chair of the Compensation Committee.

RESOLUTION 794 BOARD COMMITTEE APPOINTMENTS

WHEREAS:

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

It is therefore RESOLVED:

- 1. This resolution supersedes Resolution 765, adopted by the board at its February 24, 2016, meeting.
- 2. That the Board of Directors hereby appoints the following directors to the following committees for terms that will continue until a subsequent resolution changing committee appointments is adopted:

Audit Committee
Ken Canon, Chair
Melissa Cribbins
Mark Kendall
Heather Beusse Eberhardt
Karen Ward, outside expert
Debbie Kitchin (ex officio)
Board Nominating Committee
John Reynolds, Chair
Roger Hamilton
Alan Meyer
Anne Root
Eddie Sherman
Steve Bloom, OPUC (ex officio)
Debbie Kitchin (ex officio)

Compensation Committee (formerly 401(k) Committee)
Dan Enloe, Chair
Melissa Cribbins
Mark Kendall
Debbie Kitchin (ex officio)
Executive Director Review Committee
Melissa Cribbins, Chair
Ken Canon
John Reynolds
Debbie Kitchin (ex officio)
Finance Committee
Susan Brodahl, Chair
Dan Enloe
Anne Root
Debbie Kitchin (ex officio)
Policy Committee
Roger Hamilton, Chair
Ken Canon
Alan Meyer
John Reynolds
Eddie Sherman
Debbie Kitchin (ex officio)
Program Evaluation Committee
Alan Meyer, Chair
Susan Brodahl
Heather Beusse Eberhardt
Lindsey Hardy
Anne Root
Ken Keating, expert outside reviewer
Debbie Kitchin (ex officio)
Strategic Planning Committee
Mark Kendall, Chair
Susan Brodahl
Ken Canon
Lindsey Hardy
John Reynolds
Eddie Sherman
Warren Cook, ODOE (ex officio)
Steve Bloom, OPUC (ex officio)
Debbie Kitchin (ex officio)

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

4. The board also acknowledges that the following board members have committed to attend advisory council meetings:

a. Conservation Advisory Council: Lindsey Hardy and Alan Meyer

b. Renewable Energy Advisory Council: Alan Meyer and John Reynolds

Moved by: Anne Root Seconded by: Roger Hamilton

Vote: In favor: 12 Abstained: 0

Opposed: 0

Committee Reports

Evaluation Committee, Alan Meyer

The committee has held one meeting since the last board meeting. The committee reviewed an impact evaluation of the Existing Buildings program in 2013-2014. The committee had an extensive discussion on whether to use the heating/cooling interaction factor in the realization rate.

The committee also reviewed the process for evaluating large projects in New Buildings. To obtain more detailed evaluations, the program needs to lay the groundwork upfront to ensure building owner agreement to such evaluations. The third study reviewed was the Existing Multifamily Showerhead and Shower Wand Study. The main change resulting from the study is to replace the current instrument used to measure flow rates with microweirs and nanoweirs that reduce variability in the results.

The board reviewed the decision by the committee to not use the heating/cooling interactive factors in the Existing Buildings impact evaluation when the evaluator recommended using them.

Mike Bailey provided additional information on the decision, primarily driven by the need to balance between the accuracy of the information with the complexity of gathering it and its usefulness.

The board discussed the data on non-energy benefits of direct-install action measures noted in the Existing Multifamily Showerhead and Shower Wand Study and the value of incorporating the information into Energy Trust's work. Staff explained the scope of the study and when non-energy benefits are used in cost-effectiveness calculations.

Residential Sector Change Presentation

Thad Roth presented on staff approach to modifying the internal and contract structure for the residential sector. Many aspects of residential program delivery will remain the same. Energy Trust will continue to deliver savings using a Program Management Contractor (PMC) model, and program delivery will not be brought in-house. Staff held a Conservation Advisory Council workshop in January with Conservation Advisory Council members, utilities, trade allies, Bonneville Power Administration, NEEA and others. Feedback from attendees is they understand the impacts and how it would affect the current structure and see the need to make structural changes. Attendees also provided advice on what to pay attention to when transitioning to a single PMC, and noted the fact Energy Trust is moving to a less diverse portfolio approach.

Thad reviewed the current structure, including three programs with three PMC contracts. PMCs manage operations, program budget, forecasting, project tracking, outreach and marketing. The programs are organized by how customers are served, either through trade allies in the Existing Homes program, builders in the New Homes program or retailers in the Product programs.

Challenges are in two forms: savings over next the next three to five years and how best to deliver savings in the future given the changes in savings. Energy Trust expects fewer residential savings, specifically lighting which is currently 90 percent of the Products program's electric savings, and showerheads which are currently about 54 percent of the Existing Homes gas savings.

Also, sources of savings are expected to shift. The structure creates challenges when some technologies are delivered by multiple programs. This requires coordination across PMCs. The same coordination is needed in regards to program strategy and how that rolls up to sector strategy and meeting sector goals. Also, as savings decline for some measures, this takes time and coordination as staff and PMC staff work on developing new measures.

The outcome of the assessment is to move to a structure with one residential program and one PMC contract. There will be built-in flexibility to add Program Delivery Contractors (PDCs). PDCs are subject matter experts for a particular market or technology, and could be useful for new homes construction or retail lighting offerings.

Thad clarified the RFP for a residential program PMC is being drafted for release in March, and will include flexibility for respondents to indicate whether they might engage subcontractors or recommend PDCs. The RFP will also specifically call out the PDC services Energy Trust is interested in exploring. The board might see narrower, targeted contracts for PDC services. Thad noted the PDC needs may not be firmly understood until the selected PMC has assumed program management responsibilities.

The board asked whether staff considered moving to the contracting model used by the Production Efficiency program. That said the residential sector processes a large volume of applications and the PMC model provides what is needed at both the management and delivery level. Mike Colgrove noted economies of scale are realized with PMCs and they assist Energy Trust in serving customers cost effectively.

The board discussed emerging technologies that may intersect with the residential sector. The board requested staff investigate the energy savings and dollar savings associated with Powerwalls and Powerwall controllers, including pairing them with time of use rates. The board encouraged Energy Trust to be ahead of the curve on this technology, and to think about whether the technology is within Energy Trust's purview. Mike said staff will follow-up on this.

Thad described the results staff is looking to realize with the change in the residential program structure. It will simplify the process to develop new measures, improve staff ability to guide strategies across the entire sector, and refocus staff on where savings are coming from today and where new savings will come from in the future. Benefits of the change will be a rebalance of the portfolio in terms of what measures are contributing savings. Also, by consolidating some of the work done by each PMC resource, savings could be realized over time. Energy Trust will continue to provide cost-effectiveness offerings for customers and trade allies. This internal structure will not be visible to customers.

The board discussed the potential interest from bidders and a desire to see multiple bidders. Thad predicted multiple bidders would respond.

The board asked whether incentives for the same measure would still differ by setting, such as in existing or new home. Thad said measures and unit energy savings are not expected to change and currently vary depending on the site.

Thad clarified the PMC contract would be performance based and set using the 2018 budget and goals approved by the board in December 2017.

Staff will return in July with a proposed contract for the board's consideration. If approved, a transition contract will be put in place for the latter half of the year and the new contract will start on January 1, 2018.

Board took a break from 1:18 p.m. to 1:35 p.m.

Committee Reports

Finance Committee, Dan Enloe

The committee reviewed preliminary financial results for 2016. The overall budget deficit variance was 0.01 percent, and overall Energy Trust had very good results. On revenue, there was a drop from Cascade Natural Gas, though overall variances were very small. The revenue budget for the year was \$154 million and Energy Trust received \$151 million.

Reserves were spent down as planned, and now Energy Trust's operating budget has the program and contingencies reserves at the desired levels. Dan reviewed the incentive spending levels by program over the past two years.

Cascade Natural Gas Funding Temporary Adjustment-R795

Mariet Steenkamp reviewed the resolution. In November, the board approved a resolution for staff to transfer up to \$200,000 from the organizational contingency reserve to the Cascade Natural Gas program reserve. The amount was based on the Quarter 4 forecast. When the finalized statements for the year came in, staff identified revenue for Cascade Natural Gas was \$206,000 lower than forecasted and expenses were \$61,000 lower than forecasted. This created a shortfall of \$145,000 in addition to forecasted shortfall of \$190,000. At the Finance Committee, staff recommended the board ratify an additional transfer of \$135,000 from the organizational contingency reserve to the Cascade Natural Gas program reserve. Energy Trust and Cascade Natural Gas will work throughout 2017 to review financial results and will act on any necessary changes. The Finance Committee also recommended the Policy Committee look at the use of the board reserve policy and whether to change the policy to create conditions where a ratification after the effect is stated in the policy. Today's recommendation to the board is to allow the transfer of \$135,865 and to allow the Policy Committee to review the use of the board reserves policy.

The board provided two changes to the resolution. Under the first resolved statement, delete "or" between "transfer" and "up" and under the third resolved statement, change "board or directors" to "board of directors".

The board asked why the forecast was off and how a second request for use of the reserves can be avoided. Mariet said the expenses were very close to target. The mild fall weather impacted revenue, plus Cascade Natural Gas's funding adjustment only impacted revenue from January and on. This is what impacted the forecasted results.

The board asked if there are any learnings for future. Mariet said that now Energy Trust is at targeted reserve levels, staff will pay closer attention and will follow up earlier. Steve Lacey said 2016 was a transitional year for Cascade Natural Gas. The utility's general rate filing was earlier in the year when it consolidated the various contributions to the public purpose charge. Cascade Natural Gas and Energy Trust tried to identify the revenue stream needed. They were close but understood they were going to have a shortfall. The magnitude of the shortfall was not expected. Steve said Energy Trust and Cascade Natural Gas feel they have good grounding and don't anticipate these fluctuations again.

The board asked who proposed resolved statement 3A in the resolution. Steve Lacey said it was a commitment made by Cascade Natural Gas when the first resolution came through and it still holds. Cascade Natural Gas staff Allison Spector and Jim Abrahamson said it has always been Cascade Natural Gas's intention that the public purpose charge be sufficient to cover Energy Trust's budgetary needs, replenish the reserve component and repay any loans provided by Energy Trust to fill short-term fluctuations. Cascade Natural Gas is very supportive of meeting with Energy Trust regularly to try and avoid these situations.

AMENDED RESOLUTION 795 CASCADE NATURAL GAS FUNDING TEMPORARY ADJUSTMENT USING CONTINGENCY RESERVES ACCOUNT ORGANIZATION POOL

WHEREAS:

- 1. Actual Cascade Natural Gas 2016 revenues were \$1.69 million, \$206,000 lower than 4th quarter forecasts.
- 2. In November 2016, based on revenue and expense forecasts available at that time, Energy Trust's board of directors approved a transfer of up to \$200,000 from the Contingency Reserve organization contingency pool to continue program implementation in 2016 and for program reserve replenishment.
- 3. Preliminary results indicate that Energy Trust achieved 111% of its goal in Cascade Natural Gas territory in 2016. While actual expenses to achieve these results were less than forecast, actual revenues for 2016 were also less than projected, and Energy Trust transferred \$335,865 from the organization contingency pool to cover the revenue shortfall, \$135,865 more than authorized by board action in November 2016.
- 4. Energy Trust's Using Reserve Accounts Policy requires that the board acts prior to a transfer from the organization contingency pool, but because of the timing of the discovery of the full shortfall, prior board action could not be obtained if the shortfall was to be covered for year-end financial statements.
- 5. Energy Trust now requests that the board of directors ratify the temporary transfer of \$135,865 from the Contingency Reserve organization contingency pool to the Cascade Natural Gas operating account for 2016 Cascade Natural Gas program implementation.
- 6. Energy Trust's Contingency Reserves Account organization pool of approximately \$4.6 million is adequate to temporarily fund the shortfall.
- 7. Cascade Natural Gas has committed to repay fully any amount taken on its behalf from the Energy Trust organization pool not later than December 31, 2017.
- 8. Energy Trust's Using Reserve Accounts Policy requires prior board approval before utilizing the Contingency Reserves Account organization contingency pool.
- 9. Given timing between board meetings, Energy Trust's transfer of \$135,865 to cover actual year-end shortfall was not the result of prior board action. Such transfer was not, therefore, in compliance with board policy. To address this situation in the future, the board of directors Policy Committee shall review the Using Reserve Accounts Policy in 2017 and shall recommend changes to the Using Reserve Accounts Policy. Such changes shall include specified conditions and provisions, including board ratification, for transfers from the organization contingency pool if prior board action is not practicable.

It is therefore RESOLVED that:

- 1. In November 2016, the board of directors authorized the Executive Director to transfer of up to \$200,000 of Contingency Reserves Account organization contingency pool funds to the Cascade Natural Gas operations account.
- 2. The Executive Director's transfer of an additional \$135,865 of Contingency Reserves Account organization contingency pool funds to the Cascade Natural Gas operations account is hereby ratified.
- 3. This transfer is authorized with:
 - a. The express understanding that Cascade Natural Gas will repay fully the funds transfer not later than December 31, 2017, and
 - b. Direction to the Policy Committee to review the Using Reserve Accounts Policy and recommend changes to the Using Reserve Accounts Policy such that transfers from the Contingency Reserves Account organization contingency pool may be affected prior to board action under specified conditions and provisions including board ratification at the next regularly scheduled board of directors meeting.

Moved by: John Reynolds Seconded by: Ken Canon

Vote: In favor: 12 Abstained: 0

Opposed: 0

Policy Committee, Roger Hamilton

The Policy Committee reviewed proposed changes to the Contract Execution and Oversight Policy, and recommended that the full board approve the changes which, among other things, clarify the executive director may sign contracts under which Energy Trust receives funds in any amount without board approval.

Debbie Menashe noted a discussion on the Corporate Governance Guidelines section on board training will be set with Debbie Kitchin in advance of a proposal to revise this section of the Guidelines.

RESOLUTION 796 CONTRACT EXECUTION AND OVERSIGHT POLICY

WHEREAS:

- 1. The Board Policy on Contract Execution and Oversight requires Board approval for any Energy Trust commitment to expend more than \$500,000.
- 2. The policy does not address receipt of funds. Historically, the Executive Director has signed contracts under which Energy Trust receives funds in any amount.
- 3. During routine review of the policy in 2017, the Policy Committee recommended that the policy be amended to reflect this established practice.

It is therefore RESOLVED that the Board of Directors of Energy Trust of Oregon, Inc. amends the Board policy on contract execution authority as shown in Attachment 1, to clarify that the Executive Director may sign contracts under which Energy Trust receives funds in any amount.

Moved by: Ken Canon Seconded by: Susan Brodahl

Vote: In favor: 12 Abstained: 0

Opposed: 0

Strategic Planning Committee, Mark Kendall

The 2017 Board Strategic Planning Workshop will be held at Mercy Corps Northwest in Portland on May 18 and 19. The agenda is being developed with two main themes: mid-term review for the 2015-2019 Strategic Plan and discussing the vision of the next strategic plan. The workshop will include time to review the Strategic Plan Dashboard and accomplishments to date. Then the board will move into issues that are actively being carried forward from the last retreat and the policy landscape over the next few years. A guest speaker will provide perspective on the energy-efficiency market. Small group sessions will discuss key issues Energy Trust identified last year and how they are going, including the Diversity Initiative and how to embed it into current policies, organizational behavior and planning.

The board discussed energy storage and characteristics in terms of energy savings and grid benefits. The topic may not be within Energy Trust's legislative mandate, yet was also not necessarily envisioned in 1999. Energy Trust may need the OPUC's feedback on this topic and Energy Trust's potential role. The workshop could structure the conversation around what criteria to use to evaluate the topic.

The committee meets two more times before the workshop. Asked whether federal policy changes will be a part of the agenda, Mark noted the keynote speaker will be able to address this topic.

Staff Report

Preliminary 2016 Results (Michael Colgrove)

Mike reviewed Energy Trust's preliminary annual results. The 2016 annual report with official results will be available April 14, 2017. Preliminary results show Energy Trust exceeded all efficiency goals, achieving its highest ever annual.

The board positively noted how close to targets the results are, indicating improved forecasting and implementation.

Mike noted programs were more successful in certain areas, largely due to the economic boom, including residential and commercial new construction, projects completing sooner than anticipated and over achievement in lighting. Energy Trust is tracking well against strategic plan goals.

On the renewable energy side, Mike said the preliminary results show Energy Trust exceeded budgeted goals for standard solar by 25 percent and exceeded the OPUC performance measure. The year ended with a strong pipeline of Other Renewables projects expected to complete in 2018 or beyond, including 14 irrigation districts with about 40 energy efficiency and renewable power projects. One large solar project completed while two were delayed to 2017, as previewed during the board budget presentation in fall 2016. Delays are common in large complex projects. Overall, the two project delays led to a shortfall in the overall generation goal, and Energy Trust achieved 67 percent of the annual goal. Energy Trust is still well positioned to meet the strategic plan goal for renewable generation.

Mike provided high-level preliminary financial information on revenues, expenses and reserve levels. He clarified for the board the reserve levels have reached the desired targets after three years of planned drawdowns and as agreed upon with the utilities and OPUC. Energy Trust's incentive spending in 2016 reached \$110 million, \$2 million over budget and \$14 million more than 2015. Michael highlighted a few key areas that contributed to the successful year.

Melissa Cribbins left the meeting at 2:19 p.m.

Mike highlighted recent projects at Springfield Public Schools, including boiler and water heater upgrades at three schools.

The board asked if levelized costs for the year were yet known. Steve Lacey said preliminary analysis shows Energy Trust is well within the levelized cost budget.

Legislative Update (Jay Ward and Hannah Cruz)

Jay Ward summarized Energy Trust's legislative and policy approach. Energy Trust does not take positions on candidates or legislation. Jay described the federal political landscape, including possible reversal of the Clean Power Plan and potential changes to the ENERGY STAR program. In addition, President Trump's proposed budget currently does not allocate funds to the AmeriCorps program, and Energy Trust currently works with agencies to help sponsor two AmeriCorps interns supporting rural energy-efficiency efforts.

The Oregon legislative session began in February and will go through July 10. Oregon is facing a \$1.8 billion deficit for the next biennium. Governor Brown released a budget proposing both cuts and new revenue. Governor Brown and a bipartisan group of legislators are also working to draft a statewide transportation funding package. Both chairs are new for the House Energy & Environment Committee and Senate Environment & Natural Resources Committee.

Hannah Cruz referenced a legislative briefing paper in the board packet featuring 80 bills that are related to energy. There are 2,000 bills introduced in the legislature so far.

The bills that may most directly impact Energy Trust relate to the public purpose charge. SB 539 would change Energy Trust's receipt of SB 1149 funds and direct portions of the fund to cities, counties and schools for energy conservation.

The board requested the full text of the bill and an indication of sponsoring legislators' political party and district area, which Hannah will provide by email after the meeting.

Hannah reviewed three other public purpose charge bills introduced by Senator Olsen.

The board asked what the legislature is trying to solve with the public purpose charge bills. Hannah said there's interest in ensuring appropriate oversight of Energy Trust spending. Energy Trust does have oversight through the OPUC and reports quarterly and annually to the OPUC, as well as biennially to the legislature through a joint OPUC and Oregon Department of Energy report.

Hannah concluded the bill update, noting there are multiple bills related to the Oregon Department of Energy, including those related to energy tax credits. Of particular note is the Residential Energy Tax Credit, which is currently set to expire at the end of 2017. Expiration of the Residential Energy Tax Credit will impact Energy Trust residential efficiency and solar programs. There are a few bills related to transportation electrification.

Jay noted Governor Brown nominated Megan Decker to serve on the OPUC. If confirmed by the Senate on March 8, she would take her seat as OPUC commissioner on April 1.

The board acknowledged Commissioner John Savage's long commitment to energy efficiency as a commissioner and in other roles. The board discussed writing a letter commending him for his years of service. Debbie Menashe added that the board can do a unanimous written consent outside of a meeting to recognize John Savage.

The board suggested inviting local board members to legislative briefings as a way to provide additional perspective on Energy Trust.

Diversity Initiative Update (Debbie Menashe)

Debbie and staff will provide Diversity Initiative updates to the board on a regular basis. The Diversity Team conducted an interactive Diversity Initiative Workshop on January 23. The workshop attendees included board members, staff and guest speakers. During the workshop, attendees reviewed Energy Trust demographic data about staff, the board, customers and trade allies, as well as state and national data. Staff went into the workshop with the goal of identifying desired outcomes. Workshop attendees discussed the varying and multitude of customer stories that need to be understood first. At the conclusion of the workshop, staff came away with specific actions, including planning a diversity day, exploring and describing people's own stories including internally, and most importantly, externally. Other actions include an added focus on job fairs and university programs for intern positions and other job candidates to ensure communities of color are considered. Staff will also apply to the residential request for proposals the lessons learned from adding diversity and inclusion elements to the Existing Buildings request for proposals. In addition, developing a board level policy on diversity and inclusion will further support success of the initiative.

Debbie said that in addition to the workshop, there will be deeper work on individual readiness by building on the Intercultural Effectiveness Survey staff and the board completed in spring 2016. Staff will soon reach out to organizations within Energy Trust's service territory that represent and serve communities of color. Many organizations are required to do this work, and while Energy Trust is not required, the organization has the ability to think deeply about outcomes and what to achieve. Staff also want to build relationships with these organizations to better understand them and understand what the data means. This is all foundational work, and staff hope to develop more concrete, desired outcomes at the board's Strategic Planning Workshop or by the end of the year.

The board discussed findings from the workshop and talked about the problems Energy Trust is looking to solve with the Diversity Initiative. Staff noted that in order to serve customers, more information is needed on their perspectives and goals.

The board talked about diversity in customers, diversity in staff and the intrinsic value in this approach. Discussion continued about elements of diversity, including race, ethnicity, economic, sexual orientation, political orientation and geographic.

Mike noted staff and board are asking important questions. The Diversity Initiative is about ensuring we are serving in an equitable manner all those that contribute to the public purpose charge. We can expand our reach and services while furthering our energy goals. The conversation from the workshop is that we need to have representatives from these communities to help us understand how they characterize their community. Data is not enough. We need to talk to the people to see how they view themselves.

The board discussed the workshop, including the data gathered, whether starting with the data is the best approach, the diversity of the existing board, how Energy Trust could modify hiring approaches, and how the initiative is an ongoing effort, not a project.

Mike provided final announcements for the board. He updated the board on the internal projects launching related to diversity, systems enhancements, an organizational review, a budget review and Lean Startup training for a sample of staff. He recently conducted regional outreach visits to Eastern Oregon and has trips planned to Southern Oregon and Central Oregon in March. Mike's recent conversation with Commissioner Savage asked about the sustainability of Energy Trust's savings achievements, and a discussion with Portland Business Journal's Craig Wessel has led to his additional interest in changing or softening economic indicators.

Adjourn

The meeting adjourned at 3:25 p.m.

The next regular meeting of the Energy Trust Board of Directors will be held Wednesday, April 5, 2017, at 10:30 a.m. at Energy Trust of Oregon, Inc., 421 SW Oak Street, Suite 300, Portland, Oregon.

Alan Meyer, Secretary		

PINK PAPER



Board Decision Amend Lost Opportunities Policy

April 5, 2017

Summary and Background

This policy is up for routine, 3-year review. One of the earliest policies adopted and approved by Energy Trust's board or directors, the policy has less significance that it did originally. Through Energy Trust's current supplemental funding structure, Energy Trust funding is to cover all cost effective energy efficiency, lost opportunities or otherwise. Although prioritization for lost opportunities may, in light of supplemental funding, be different than in earlier years, staff proposes maintaining the policy, with some language revisions, to be consistent with current practice and a statement of direction. The changes shown in the proposed revised policy are meant to be editorial and to reflect current context.

Recommendation

Amend the Lost Opportunities Policy as indicated below.

RESOLUTION 799 AMEND LOST OPPORTUNITIES POLICY

WHEREAS:

- 1. In 2002, Energy Trust's Lost Opportunities Policy was established to document Energy Trust's favoring of "lost opportunities," i.e., situations in which an opportunity to implement an efficient solution will be lost if not done when new equipment is selected and new facilities are constructed.
- 2. Under current funding structures, Energy Trust programs aim to capture all costeffective energy efficiency, so the prioritization for "lost opportunities" has little ongoing effect.
- 3. Notwithstanding the foregoing, Energy Trust staff recommends retaining the Lost Opportunities policy to serve as a statement of the principle and direction with minor editorial revisions to reflect current context.
- 4. Up for its regular three year review at this time, Energy Trust staff presented the recommended revisions to the board's Policy Committee on March 9, 2017. Based on suggestions for clarification from the Policy Committee and with the recommendation of the Policy Committee, staff recommends the policy revisions indicated below at this time.

It is therefore RESOLVED that the Energy Trust policy on lost opportunities is amended as shown below.

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

Opposed:

4.04.000-P Lost Opportunities Policy

History				
Source	Date	Action/Notes	Next Review Date	
Board Decision	February 27, 2002	Approved (R85)	February 2005	
Policy Committee	March 5, 2005	No change	February 2008	
Policy Committee	March 18, 2008	No change	March 2011	
Policy Committee	March 8, 2011	No change	March 2014	
Board Decision	April 2, 2014	Approved (R702)	April 2017	

Marked Version

Summary:

The Energy Trust Board needs to provide guidance to the staff on a number of issues that will be important in designing Trust programs. This decision memo addresses lost opportunities. In their discussions, the Conservation Advisory Council and the Energy Policy Committee concluded that these guidelines are consistent with the PUC guidelines and advance Trust objectives.

Purpose:

Give Trust staffProvide guidance to Energy Trust efficiency programs on technical and policy issues as it develops new Energy Trust programs to avoid lost opportunities — situations in which an opportunity to implement an efficient solution will be lost if not done when new equipment is selected and new facilities are constructed — while also taking advantage of opportunities to maximize efficiency by retrofitting functioning equipment near or at the end of useful life with more efficient equipment and optimizing the efficient operation of new and existing equipment.

Background:

Energy Trust staff has developed a series of issue papers and reviewed them with the CAC and the Energy Policy Committee; here are summaries of these discussions:

Analysis:

Lost Opportunities

Issue: To What Extent should the Energy Trust emphasize avoiding lost opportunities in their efficiency programs?

Lost Opportunities can occur if efficiency is not built in at times when new equipment is being selected and new facilities are constructed. —At these times, efficiency features can be installed that are impractical or much more costly to install at other times. —For example it is may not often be cost-effective to throw away a working air conditioner simply to replace it with a more efficient unit. —However, when that air conditioner fails or is nearing failure, it may be cost-effective to pay for the incremental cost of purchasing the most efficient possible new unit instead of a standard new unit.

The Energy Trust, following the examples set by Oregon's utilities, may set up specialized programs and incentives to work with designers, developers, vendors and customers to assure that high-efficiency equipment and designs are selected and installed during these events.

The key-question is the correcthow to balance between lost opportunities, and "retrofit" and operational program offerings. -Retrofit programs offerings pay encourage customers to replace or augment working equipment with more efficient equipment. Operational offerings help customers run equipment to meet their needs in the most efficient manner. -While there are situations where the Energy Trust can increase emphasis on lost opportunities, it is not clear that there are not enough of these opportunities to completely utilize theachieve Energy Trust's efficiency budgetgoals. -Furthermore, equity considerations argue that programs should be made available for some customers who rarely make capital investments on their own (e.g., small commercial customers and some public entities). Furthermore Finally, given the high levels of Oregon building codes and national equipment standards, some lost opportunity savings are more expensive per kWh than some retrofit savings.

Recommendations Policy:

- The Energy Trust should favor acquisition of avoid lost opportunities and focus appropriate amounts some of its budget and program design efforts in that direction.
- However, tThis should be considered a "decision-tipper" in setting priorities, considered in the context of other issues and values that influence implementation decisions.
- The Energy Trust should encourage comprehensive treatment of an end-use where this is practical to avoid creating lost opportunities by doing half the job.
- Financial resources should also be reserved for retrofit <u>and operational</u> program <u>offering</u>s, especially where these are low cost or serve customers who would not otherwise be served.
- Work with partners who have special resources to efficiently capture lost opportunities, e.g., Northwest Alliance, Consortium for Energy Efficiency, Oregon Office Department of Energy.

The board approved the resolution to direct staff to use the policy recommendations on lost opportunities at its February 27, 2002 board meeting.

CLEAN VERSION:

Purpose:

Provide guidance to Energy Trust efficiency programs to avoid lost opportunities – situations in which an opportunity to implement an efficient solution will be lost if not done when new equipment is selected and new facilities are constructed – while also taking advantage of opportunities to maximize efficiency by retrofitting functioning equipment near or at the end of useful life with more efficient equipment and optimizing the efficient operation of new equipment.

Background:

Lost opportunities can occur if efficiency is not built in at times when new equipment is being selected and new facilities are constructed. At these times, efficiency features can be installed that are impractical or much more costly to install at other times. For example it may not be cost-effective to throw away a working air conditioner simply to replace it with a more efficient unit. However, when that air conditioner fails or is nearing failure, it may be cost-effective to pay for the incremental cost of purchasing the most efficient possible new unit instead of a standard new unit.

Energy Trust may set up specialized programs and incentives to work with designers, developers, vendors and customers to assure that high-efficiency equipment and designs are selected and installed during these events.

The question is how to balance between lost opportunities, "retrofit" and operational program offerings. Retrofit offerings encourage customers to replace or augment working equipment with more efficient equipment. Operational offerings help customers run equipment to meet their needs in the most efficient manner. While there are situations where the Energy Trust can increase emphasis on lost opportunities, there are not enough of these opportunities to achieve Energy Trust's efficiency goals. Furthermore, equity considerations argue that programs should be made available for some customers who rarely make capital investments on their own (e.g., small commercial customers and some public entities). Finally, given the high levels of Oregon building codes and national equipment standards, some lost opportunity savings are more expensive per kWh than some retrofit savings.

Policy:

- Energy Trust should avoid lost opportunities and focus appropriate amounts of its budget and program design efforts in that direction.
- This should be considered in the context of other issues and values that influence implementation decisions.
- Energy Trust should encourage comprehensive treatment of an end-use where this is practical to avoid creating lost opportunities by doing half the job.
- Financial resources should also be reserved for retrofit and operational program offerings, especially where these are low cost or serve customers who would not otherwise be served.
- Work with partners who have special resources to efficiently capture lost opportunities, e.g., Northwest Alliance, Consortium for Energy Efficiency, Oregon Department of Energy.

PINK PAPER



Board Decision Using Reserve Accounts Policy

April 5, 2017

Summary and Background

This policy is not up for its for routine, three-year review, but was reviewed outside of its regular review schedule by the Policy Committee on direction from the full board of directors. One of the earliest policies adopted and approved by Energy Trust's board or directors, the policy has less significance that it did originally. Through Energy Trust's current supplemental funding structure, Energy Trust funding is to cover all cost effective energy efficiency, lost opportunities or otherwise. Although prioritization for lost opportunities may, in light of supplemental funding, be different than in earlier years, staff proposes maintaining the policy, with some language revisions, to be consistent with current practice and a statement of direction. The changes shown in the proposed revised policy are meant to be editorial and to reflect current context.

Recommendation

Amend the Using Reserve Accounts Policy as indicated below.

RESOLUTION 800 AMEND USING RESERVE ACCOUNTS POLICY

WHEREAS:

- 1. The Using Reserve Accounts Policy, in its current form, requires Energy Trust staff to obtain prior board approval before drawing on the organization contingency pool of the contingency reserves account.
- In some circumstances, it is not practicable to obtain prior board approval to draw on the organization contingency pool for permitted purposes, and the board of directors seeks to amend the policy to provide for a compliant path for such circumstances.
- 3. In circumstances where prior board approval is not practicable, Energy Trust's board of directors wishes to authorize the executive director to approve appropriate use of the organization contingency reserve pool with board ratification at the board meeting immediately following executive director authorization.
- 4. Energy Trust staff presented recommended revisions to provide for executive director authorization and ratification to the board's Policy Committee on March 9, 2017. Based on suggestions for clarification from the Policy Committee and with Policy Committee recommendation, staff recommends the policy revisions indicated below at this time.

It is therefore RESOLVED that the Energy Trust policy on using reserve accounts is amended as shown below.

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

Opposed:

MARKED VERSION

5.05.010-P Using Reserve Accounts Policy

History			
Source	Date	Action/Notes	Next Review Date
Board Decision	May 23, 2012	R633	May 2015
Board Decision	September 25, 2013	R677	Sept 2016
Policy Committee	September 8, 2016	no change	Sept 2019

POLICY ON USING RESERVE ACCOUNTS

- 1. Energy Trust shall maintain two categories of reserve accounts, a contingency reserves account and an efficiency program reserves account.
- 2. The Contingency Reserves account shall be divided into two pools, an emergency contingency pool and an organization contingency pool.
 - a. Staff is authorized to use the emergency contingency pool in emergency or other catastrophic situations to maintain or restore operations, provided that staff shall inform the board after such use and clearly identify it in the quarterly report to the board and the OPUC. The emergency contingency pool shall be updated pursuant to an annual risk assessment by staff and reviewed by the Finance committee.
 - b. Staff is authorized to use the organization contingency pool to address other organizational needs such as revenue shortfalls derived from weather, renewable energy projects for which other funds are insufficient or unavailable, or support for energy efficiency projects in the event utility-specific program reserves are otherwise insufficient or unavailable, provided that staff shall obtain prior beoard action authorization or, if such prior board action is not practicable, with executive director authorization and board ratification at the board meeting immediately following the draw uponuse of the shall be required before staff may draw upon the organization contingency pool. In addition, and staff shall identify such use in the monthly financial statements to the board and the OPUC.
- 3. The efficiency program reserves account shall be established in annual funding negotiations with utilities. Board action shall be required only if staff proposes to use more than 50% of any individual utility program reserve-, provided such usage is clearly identified in the quarterly report to the board and the OPUC.

5.05.010-P Using Reserve Accounts Policy

History			
Source	Date	Action/Notes	Next Review Date
Board Decision	May 23, 2012	R633	May 2015
Board Decision	September 25, 2013	R677	Sept 2016
Policy Committee	September 8, 2016	no change	Sept 2019

POLICY ON USING RESERVE ACCOUNTS

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 - b. Staff is authorized to use the organization contingency pool to address other organizational needs such as revenue shortfalls derived from weather, renewable energy projects for which other funds are insufficient or unavailable, or support for energy efficiency projects in the event utility-specific program reserves are otherwise insufficient or unavailable, provided that staff shall obtain prior board authorization or, if prior board action is not practicable, with executive director authorization and board ratification at the board meeting immediately following the use of the organization contingency pool. In addition, staff shall identify such use in the monthly financial statements to the board and the OPUC.
- 3. The efficiency program reserves account shall be established in annual funding negotiations with utilities. Board action shall be required only if staff proposes to use more than 50% of any individual utility program reserve, provided such usage is clearly identified in the quarterly report to the board and the OPUC.

PINK PAPER



Board Decision Corporate Governance Guidelines

April 5, 2017

Summary and Background

This policy is up for its for routine, three-year review. Since its adoption in 2014, the Corporate Governance Guidelines have provided information on board and corporate governance matters and board members and staff have identified no significant concerns requiring revision. The only proposed guideline revision in this review period is intended to provide additional clarification for the board president's decisions on continuing education for board members.

Recommendation

Amend the Corporate Governance Guidelines as indicated below.

RESOLUTION 801 AMEND CORPORATE GOVERNANCE GUIDELINES

WHEREAS:

- 1. The Corporate Governance Guidelines provide useful information to Energy Trust board and staff.
- 2. In order to provide more specific clarification regarding the board president's decisions on continuing education for board members, Energy Trust staff, after conferring with the board president, proposed some slight revisions to the quidelines.
- 3. Energy Trust staff presented its recommended revisions to the board's Policy Committee on March 9, 2017. The Policy Committee recommends that the guidelines revisions as indicated below be forwarded to the full board for approval.

It is therefore RESOLVED that the Energy Trust Corporate Governance Guidelines are amended as shown below.

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

Opposed:

2.03.000 Energy Trust Board of Directors Corporate Governance Guidelines

History			
Source	Date	Action/Notes	Next Review Date
Board Decision	02/26/14	Adopted (R697)	02/17

The following corporate governance guidelines (these "Guidelines") have been approved by the Board of Directors (the "Board") of Energy Trust of Oregon, Inc. ("Energy Trust") to provide a corporate governance framework within which the Board and management can effectively pursue Energy Trust's objectives of acquiring low cost energy efficiency resources and supporting the development of renewable energy for its affiliated utilities. These guidelines, along with Energy Trust's Articles of Incorporation, Bylaws, Public Interest Policy, Conflict of Interest Policy, and the charters of the various Board committees, provide the foundation for Energy Trust's corporate governance. The Board believes that Energy Trust's long-term credibility and success is dependent upon the maintenance of an ethical business and operational environment that focuses on adherence to both the letter and spirit of regulatory and legal mandates, as well as Energy Trust's Public Purpose Policy and Conflict of Interest Policy. The Board expects management to conduct operations in an ethical manner consistent with applicable laws, rules and regulations and Board policies.

I. REGULAR BOARD FUNCTIONS

The Board, directly and through its appropriate committees, shall:

- Review and approve strategic plans;
- Review Energy Trust's financial and strategic performance;
- Oversee and evaluate management's systems for internal control, financial reporting and public disclosure;
- Establish corporate governance standards;
- Select, evaluate and compensate Energy Trust's Executive Director;
- Oversee and evaluate employee compensation frameworks;
- Plan for effective succession of the Executive Director and senior management;
- Set a tone for a climate of trust and confidence;
- Set standards for director qualification;
- Set standards for director orientation and continuing education; and
- Undertake performance assessments of the Board as needed.

The Board, shall also retain legal, accounting and other advisors who report directly to the Board, to the extent the Board deems necessary or appropriate to carry out its responsibilities. Such advisors may be the regular advisors to Energy Trust.

II. SELECTION OF THE BOARD

The Board Nominating Committee is responsible for selecting nominees for the Board and recommending them for election to the Board by the Board. The Board Nominating Committee has primary responsibility for the screening process necessary to identify qualified candidates and recommend such candidates to the Board. The Board Nominating Committee shall regularly review the appropriate experience, skills and qualifications expected of Board member candidates in the context of the current membership of the Board.

This assessment should include, in the context of the perceived needs of the Board at that time, issues of experience, reputation, judgment, diversity and skills. If the Board Nominating Committee determines that adding or replacing a director is advisable, the Committee shall initiate a search for a suitable candidate, which may include working with other directors, management, or a search firm retained to assist in the search, each as the Board Nominating Committee deems necessary or appropriate. The Board Nominating Committee shall establish a process to consider nominations for directors, including but not limited to those received from Energy Trust's advisory committees and shall consider all appropriate candidates. The Board Nominating Committee should evaluate the candidates based on the needs of the Board at that time as identified in the assessment process outlined above to enhance the overall composition of the Board. The Board Nominating Committee shall then meet to consider the selected candidate(s) and submit the approved candidate(s) to the full Board for approval as a nominee.

III. BOARD COMPOSITION

A. Size of the Board

Energy Trust's Articles of Incorporation and Bylaws provide that the number of directors of Energy Trust shall be fixed from time to time by a majority of the Board, but shall never be less than five (5) or more than thirteen (13), not including *ex officio* members. The Board Nominating Committee, in consultation with the President of the Board, shall periodically examine the composition of the Board and determine whether the Board would better serve its purposes with the addition or subtraction of one or more directors. The Board shall determine, after considering the recommendations of the Board Nominating Committee, the number of members of the Board appropriate to provide that all of the necessary or desirable core competencies are possessed by the Board as a whole.

B. Director Interests Reporting

At least once per year, and as required by Oregon law, the Board shall review each relationship that exists between a director and his or her related interests for the purpose of determining whether the director is compliant with Energy Trust's Board Conflict of Interest policy and Oregon's Government Ethics Law. This information shall be collected by Energy Trust's General Counsel and submitted to the Oregon Ethics Board in compliance with Oregon law.

C. Service on Board of Directors

Directors must be willing to devote sufficient time to carrying out their duties and responsibilities effectively. It is expected that, at the time of initial appointment, a director should be committed to regular meeting attendance and participation and to serving on the Board for the full appointed term. In deciding whether to serve on the Energy Trust board, a nominee should consider his or her time commitments and interest in the objectives and mission of Energy Trust. Directors and nominees should also consider the time commitment of service on Energy Trust's board when deciding whether to participate or serve on other organization boards of directors.

The expectation is that board members devote time to actively participate on three of the Board's committees or advisory councils as specified in Section V. of these Guidelines.

D. Term Limits

The Board has determined not to establish formal term limits. However, the Board Nominating Committee shall review each director's continued service on the Board shortly before the end of such director's term.

This review shall be conducted in connection with the Board Nominating Committee's evaluation of governance and Board effectiveness, consideration of nominations to the Board for the annual meeting at which such director's term will expire, and the Board's annual self-evaluation.

IV. BOARD MEETINGS

A. Schedule of Meetings

The President of the Board will work with Energy Trust's Executive Director to determine an appropriate schedule of Board meetings to ensure that the directors can perform their duties responsibly without interfering with the flow of Energy Trust's operations. Energy Trust's Board typically meets in regular board meetings at least eight times annually. Board committee meetings occur regularly throughout the year as well.

B. Selection of Agenda Items for Board Meetings

The President and the Policy Committee of the Board shall work with Energy Trust's Executive Director to establish the agenda for each Board meeting. Each other Board member may suggest the inclusion of items on the agenda. Each director may raise, at any Board meeting, subjects that are not on the agenda for that meeting.

C. Attendance at Board Meetings and Review of Board Materials

Each director is expected to attend all meetings of the Board and committees on which the director serves. In advance of each Board meeting, an agenda and, to the extent feasible or appropriate, information and data that is important to an understanding of the business to be discussed, shall be distributed. Each director shall review these materials prior to the Board meeting.

D. Executive Sessions

The President of the Board shall preside over and prepare or have prepared an agenda for all executive sessions in accordance with the Bylaws of Energy Trust.

V. BOARD COMMITTEES

A. Number, Structure and Independence of Committees

The Board shall establish committees in accordance with the Bylaws of Energy Trust. Currently, the Board has established a Finance Committee, a Policy Committee, a Program Evaluation Committee, a Compensation Committee, an Audit Committee, a Strategic Planning Committee, an Executive Director Review Committee, a Nominating Committee. Board members are also encouraged to participate in the Conservation Advisory Council (CAC) or Renewable Energy Advisory Council (RAC) meetings. Other committees may be established as the need arises.

B. Assignment of Committee Members

The President of the Board shall, with consideration of the desires of individual Board members, recommend to the full Board the assignment of directors to committees and selection of the chairperson of the committees.

C. Committee Meetings

Committee chairpersons, in consultation with committee members, will determine the frequency and length of committee meetings; *provided, however,* that each committee shall meet independently and in separate sessions from the Board's regular or special meetings at least twice per fiscal year. Each committee shall meet as set forth in each committee's charter, and otherwise as frequently as required to carry out its responsibilities.

Committee chairpersons, in consultation with the President of the Board, appropriate members of senior management and staff, will develop the agenda for each committee meeting.

VI. DIRECTOR OBLIGATIONS

A. Ethics and Conflicts of Interest

Directors, as well as officers and employees, must act ethically at all times and should acknowledge their adherence to the Board's Public Interest Policy, Conflict of Interest Policy, law and regulation, and these Guidelines. The Board understands that an actual or potential conflict of interest may be created if Energy Trust provides substantial incentive support to organizations with which a director is affiliated, or if Energy Trust enters into consulting or other contracts with, or provides other direct or indirect compensation to, a director or an organization with which the director is affiliated. If an actual or potential conflict of interest arises in such circumstances or exists for other reasons for a director, the director shall promptly inform the Audit Committee and Board President and the Executive Director. If a significant conflict exists that may impair a director's ability to act in the best interests of Energy Trust and the conflict cannot be resolved, the director should submit his or her resignation to the Board. All directors shall recuse themselves from any discussion or decision affecting their personal or professional interests and disclose the existence of such conflict to the remaining members of the Board.

B. Reliance on Others; Liability Insurance

In discharging their obligations and responsibilities, Energy Trust's directors are entitled to rely, in good faith, on the honesty and integrity of their fellow directors, Energy Trust's management, independent auditors and outside advisors. Further, to promote the ability of each director to act in accordance with the director's good faith business judgment without undue concern for the substantial risk of personal liability faced by public company directors, Energy Trust shall seek to purchase and maintain at all times directors' and officers' liability insurance in amounts deemed reasonably appropriate.

C. Directors Who Change Their Present Job Responsibility

Directors who change their occupation shall notify the President of Board and the Executive Director in order to identify any changes in actual or potential conflict of interests.

VII. DIRECTOR ORIENTATION AND EDUCATION

Energy Trust will establish, or identify and provide access to, appropriate orientation programs, sessions or materials for newly elected directors. The program or materials will include information to acquaint new directors with Energy Trust, including its strategy, action plans, financial statements, these Guidelines, and the Board's Public Interest and Conflicts of Interest Policies. As part of the orientation, new directors will be introduced to Energy Trust's senior management and its independent auditors. The directors will also receive periodic training concerning their fiduciary duties as Energy Trust board members of the Energy Trust board of directors. Additionally, from time to time, directors will receive information and updates on legal and regulatory changes that affect Energy Trust and the directors. All directors are also encouraged to participate in trainings regarding board member governance continuing education programs relating to organizational governance. Reasonable expenses for such programs may be reimbursable- with prior approval by the President of the Board. the Board. the Board. the Board. the Board. the Board.

VIII. DIRECTOR COMPENSATION

The Board has determined not to provide director compensation to members of Energy Trust's board of directors. Members of Energy Trust's board of directors shall be reimbursed for expenses associated with travel to and from, and attendance at, board meetings and committee meetings.

IX. BOARD ACCESS TO SENIOR MANAGEMENT

Board members shall have unrestricted access to Energy Trust's senior management. Furthermore, the Board encourages senior management, from time to time, to bring to Board meetings officers and managers who (a) can provide additional insight to matters before the Board because of such person's involvement in the areas being discussed, or (b) are officers and managers with potential for future advancement that senior management believes should be given exposure to the Board. As necessary and appropriate, Board members shall also have access to outside legal, accounting and other professional advisors to assist them in carrying out their duties and responsibilities as directors.

X. LEADERSHIP DEVELOPMENT

A. Formal Evaluation of the Executive Director

Each year, the full Board and a committee appointed by the Board shall evaluate the performance of the executive director. In evaluating the Executive Director, the full Board and the committee shall take into consideration the executive director's performance in both qualitative and quantitative areas, such as leadership and vision, integrity, keeping the Board informed on matters affecting Energy Trust, and the performance of the business, including the achievement of Oregon Public Utility Commission performance metrics and Integrated Resource Plan goals, as well as financial objectives. The evaluation will be communicated to the Executive Director by a designee of the Board and considered by the Board or a designated committee in the course of its deliberations when establishing the compensation of the Executive Director for the following year.

B. Succession Planning

The Executive Director shall periodically provide to the Board a report regarding succession planning for the position of Executive Director. The Executive Director will also communicate to the President of the Board a recommendation for his or her successor as a result of an unexpected event. This recommendation should be updated by the Executive Director periodically.

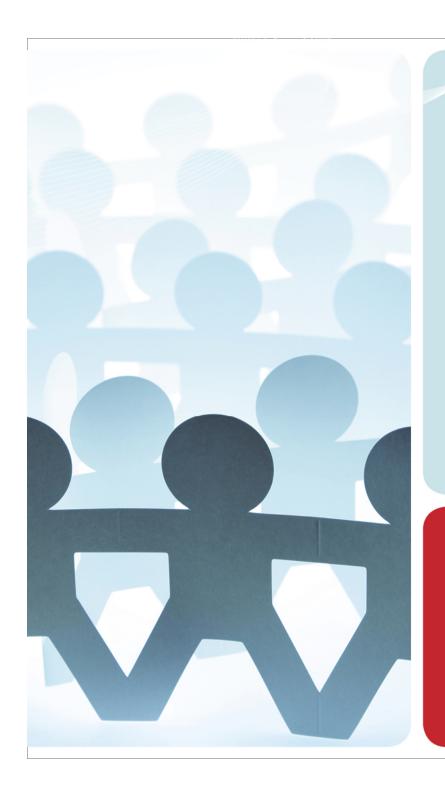
XI. PERIODIC REVIEW OF CORPORATE GOVERNANCE GUIDELINES

These Guidelines and Energy Trust's other board policies shall be reviewed by the Policy Committee on a periodic basis, but not less than every three years. Any recommended changes shall be submitted to the Board for consideration and approval. Energy Trust of Oregon counsel may request independent review of these Guidelines either periodically or as indicated. Recommendations resulting from such review shall be submitted to the Board Policy Committee for consideration and Board review.

XII. DISCLOSURE OF CORPORATE GOVERNANCE GUIDELINES

Energy Trust shall maintain, and update promptly, its website to include these Guidelines.

Tab 2



2016 Audit Results

COMMUNICATION WITH THOSE IN CHARGE OF GOVERNANCE

Energy Trust of Oregon

APRIL 5, 2017

MOSS-ADAMS LLP

Certified Public Accountants | Business Consultants

Agenda

- Auditor's Opinion and Report
- Communication with Those Charged with Governance



Auditor's Opinion & Report

 $MOSS\!-\!\!ADAMS_{\texttt{LLP}}$

Certified Public Accountants | Business Consultants

Auditor's Report on the Financial Statements

Unmodified Opinion

 Financial statements are presented fairly and in accordance with US GAAP.



Communication with Those Charged with Governance



COMMUNICATION WITH GOVERNING BODY

Deficiencies in Internal Control



Any material weaknesses and significant deficiencies in the design or operation of internal control that came to the auditor's attention during the audit must be reported to the audit committee.

Our Comments

- Material weakness
 - None noted
- Significant deficiencies & non-compliance
 - Nothing to communicate
- Recommendations
 - Expense report approval repeat finding resolved subsequent to year-end
 - Electronic payment processing resolved

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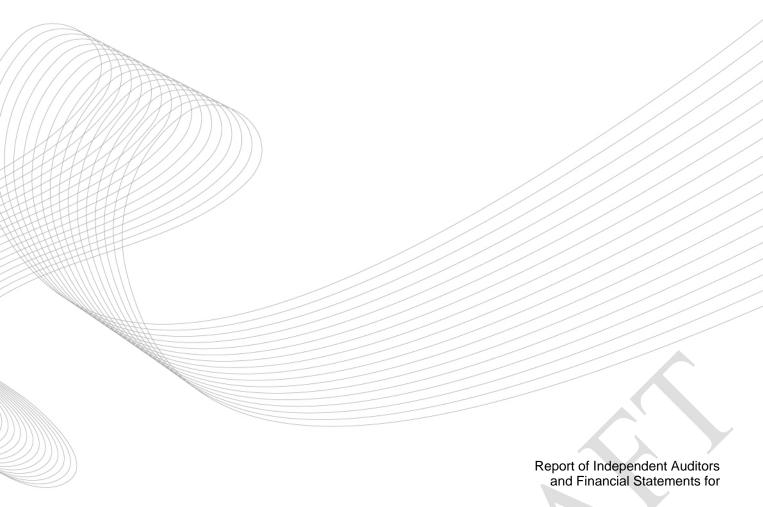
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PINK PAPER



Energy Trust of Oregon, Inc.

December 31, 2016 and 2015



Certified Public Accountants | Business Consultants

CONTENTS

		PAGE
REPORT OF INDEPENDENT AUDITORS		1-2
MANAGEMENT'S DISCUSSION AND ANALYSIS		3-8
FINANCIAL STATEMENTS		
Statements of financial position		9
Statements of activities	· ·	10
Statements of functional expenses		11-12
Statements of cash flows		13
Notes to financial statements		14-26



REPORT OF INDEPENDENT AUDITORS

To the Board of Directors Energy Trust of Oregon, Inc.

Report on the Financial Statements

We have audited the accompanying financial statements of Energy Trust of Oregon, Inc., which comprise the statements of financial position as of December 31, 2016 and 2015, and the related statements of activities, functional expenses, and cash flows for the years then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.



REPORT OF INDEPENDENT AUDITORS (continued)

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Energy Trust of Oregon, Inc. as of December 31, 2016 and 2015, and the changes in its net assets and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Our audit was conducted for the purpose of forming an opinion on the financial statements as a whole. Management's discussion and analysis on pages 3 to 8 is presented for purposes of additional analysis and is not a required part of the financial statements. Such information has not been subjected to the auditing procedures applied in the audit of the basic financial statements, and, accordingly, we do not express an opinion or provide any assurance on it.

Portland, Oregon March ____, 2017



ENERGY TRUST OF OREGON, INC. MANAGEMENT'S DISCUSSION AND ANALYSIS

The following narrative overview and analysis of Energy Trust of Oregon, Inc.'s financial activities is provided for readers of our annual financial statements. This discussion has been prepared by management and should be read in conjunction with the organization's financial statements and notes. Although the primary focus of this document is the results of activity for the calendar year ended December 31, 2016, comparative data is also presented for previous years as a reference point. We offer this supplemental information to illustrate issues and trends related to Energy Trust's financial health. The financial statements, notes and this discussion are the responsibility of management.

Financial Highlights

- Energy Trust's assets exceeded its liabilities at December 31, 2016, by \$33.9 million (net assets).
- During 2016, Energy Trust's total net position decreased by \$34.4 million as planned in Energy Trust's 2016 budget. Following are some significant financial highlights accounting for the decrease from the prior year.
 - Total revenue of \$151.3 million was \$3.3 million (-2%) less than the total amount budgeted of \$154.6 million. Revenues were \$4.9 million greater (3%) than last year. Energy Trust's energy efficiency revenues are established annually in collaboration with its affiliated investor-owned utilities and the Oregon Public Utility Commission in an amount deemed necessary to acquire all cost-effective energy efficiency and conservation. Renewable generation revenues are fixed as a percentage of each electric utility's revenue. Revenue estimates are provided by utilities and are relatively predictable, although weather and other changes in energy consumption do cause some variability. In coordination with utilities, energy efficiency collection rates were relatively flat in order to intentionally draw down reserves from prior year levels.
 - Operating expenses increased by \$20.3 million or 12%from 2015, due to increased demand for projects and corresponding incentive growth. Total expenses of \$185.7 million were within \$3.4 million (-2%) of the total amount budgeted of \$189.1 million. The increase in total spending was mostly due to energy conservation and renewable generation incentive payments which rose by \$14.5 million. Program subcontracts increased \$3.2 million and salaries and related expenses increased by \$1.0 million. All other operating costs were essentially flat, increasing less than 1% or \$1.6 million.

ENERGY TRUST OF OREGON, INC. MANAGEMENT'S DISCUSSION AND ANALYSIS

Energy Goals	2016	2016 goal	compared to goal	2015*	Change '15 to '16
Electric efficiency savings (aMW)	60.0	55.1	4.9	53.1	6.9
Electric renewable generation (aMW)	2.8	4.1	(1.3)	3.9	(1.1)
Gas efficiency savings - Oregon (million therms) Gas efficiency savings - Washington (million therms)	6.7 0.3	5.7 0.3	1.0	6.4 0.2	0.3 0.1
* after true-up					

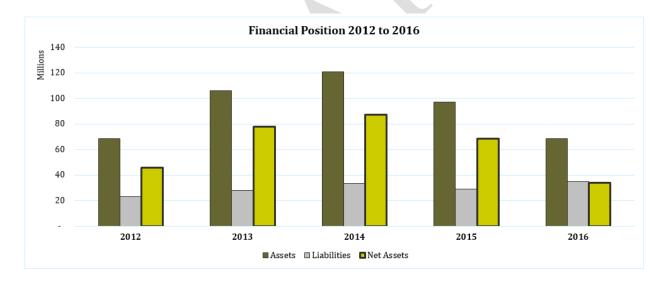
- Energy Trust exceeded electric and gas efficiency savings goals in Oregon and Southwest Washington. Electric efficiency savings totaled 60 average megawatts (aMW), achieving 108.9% of the 2016 goal of 55.1 aMW. Natural gas savings totaled 6.7 million annual therms of gas, achieving 116.9% of the 2016 goal of 5.7 million annual therms. Energy Trust fell short of the goal for electric renewable generation, yet exceeded its annual electric renewable generation performance measure by securing 2.3 aMW of standard solar generation. Some of the ways we achieved energy savings and generation include:
 - We installed more standard solar capacity and generation in 2016 than in any other year, with support for a record 1,200 customer-owned solar systems.
 - o LEDs were in strong demand across all sectors, with residential, commercial and industrial customers installing 4.7 million bulbs.
 - o We engaged Oregon's strong new construction market, completing 426 New Buildings projects and 3,300 homes rated with EPS™, an energy performance score.
 - We completed 1,400 energy-efficiency projects at industrial or agricultural businesses in 2016, roughly the same as in 2015.
 - We processed more than 100,000 customer transactions, roughly on par with 2015.

Overview of the Financial Statements

This discussion and analysis is intended to serve as an overview of Energy Trust's financial statements. The financial statements consist of the following:

The *statements of financial position* show the various assets owned or controlled, related liabilities and other obligations, and the various categories of net assets. As noted earlier, net assets may serve over time as a useful indicator of Energy Trust's financial position. Energy Trust assets exceeded liabilities by \$33.9 million at year end. Almost all Energy Trust assets are held in cash and investments; capital and other assets comprise around 7% of the total. Nearly all of the liabilities at year-end are due to year-end incentive payments. Energy Trust carries no long-term debt.

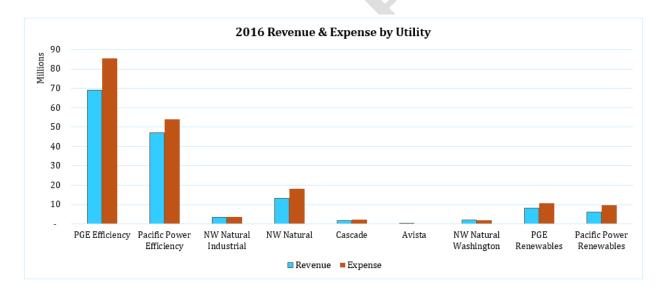
in millions of dollars)		2016	2	2015		nge '15 o '16		2014		hange to '15
Cash & Investments All other Assets	\$	63.8 4.8	\$	91.1 5.8	S	(27.3) (1.0)	s	115.9 4.9	S	(24.8)
Total Assets	S	68.6	5	96.9	5	(28.3)	5	120.8	5	(23.9)
Total Liabilities	S	34.7	\$	28.7	\$	6.0	S	33.6	\$	(4.9)
Board Designated Net Assets				23		2				-
Assets Available for Programs & Operations	_	33.9	_	68.2	_	(34.3)	_	87.2	_	(19.0)
Total Liabilities & Net Assets	5	68.6	S	96.9	5	(28.3)	S	120.8	5	(23.9)



ENERGY TRUST OF OREGON, INC. MANAGEMENT'S DISCUSSION AND ANALYSIS

The *statements of activities* show the various revenues and expenses, reconciling the beginning net assets to the end of year total. These statements show how Energy Trust's net assets changed during the year. As planned, we were able to reduce net assets (reserves) from prior year levels by \$34.4 million. Actual revenues and expenditures were very close to budgeted amounts.

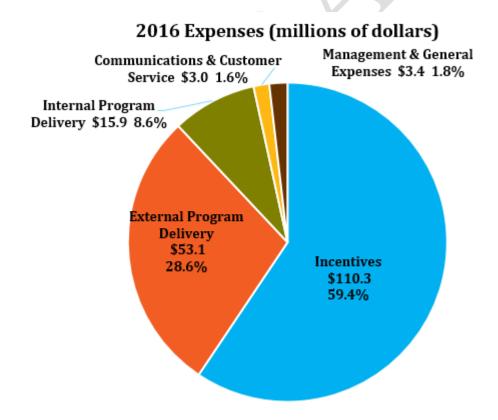
Statements of Activities (in millions of dollars)	2016	2015	Change '15 to '16	2014	Change '14 to '15
Public Purpose Funding Incremental Funding Other Income	\$ 84.2 66.6 0.5	\$ 82.8 63.1 0.5	\$ 1.4 3.5 0.0	\$ 88.9 74.5 0.2	\$ (6.1) (11.4) 0.3
Total Funding	151.3	146.4	4.9	163.6	(17.2)
Program Expenses Administrative Expenses	179.3 6.4	159.9 5.5	19.4 0.9	149.2 5.1	10.7 0.4
Total Expenses	185.7	165.4	20.3	154.3	11.1
Increase (Decrease) in Net Assets	\$ (34.4)	\$ (19.0)	\$ (15.4)	\$ 9.3	\$ (28.3)



The *statement of functional expenses* shows costs by major category organized into program and administrative categories. In 2016, program expenses comprised 96.6% of total costs; administrative expenses of 3.4% made up the remainder. This composition is consistent with the prior year.

Statement of Functional Expenses (in millions of dollars)	2016	2015	Change '15 to '16	2014	Change '14 to '15
Energy Efficiency Renewable Resources	\$ 159.7 19.6	\$ 142.7 17.2	\$ 17.0 2.4	\$ 136.1 13.1	\$ 6.6 4.1
Program Expenses	179.3	159.9	19.4	149.2	10.7
Management & General Communcations & Outreach	3.4	2.9 2.6	0.5	2.7 2.4	0.2 0.2
Administrative Expenses	6.4	5.5	0.9	5.1	0.4
Total Expenses	\$ 185.7	\$ 165.4	\$ 20.3	\$ 154.2	\$ 11.1

Actual expenses increased in all categories as overall spending rose 12% from \$165.4 million to \$185.7 million. However, the percentage breakdown among functions remained relatively consistent. Incentives as a percent of total spending increased from 57.9% to 59.4%; external program delivery costs declined from 30.2% to 28.6%. The percentage of spending in all other categories was up slightly from 11.9% to 12.0% of the total.



ENERGY TRUST OF OREGON, INC. MANAGEMENT'S DISCUSSION AND ANALYSIS

The *statement of cash flows* shows various cash activities by type, reconciling beginning cash and cash equivalents to the ending cash and cash equivalents amount, which is shown in the Statements of Financial Position. Energy Trust cash receipts come primarily from public purpose and supplemental funding, derived from a small percentage charge on utility customer bills. Inflows also include maturing investments. Outflows are predominantly payments for incentives and program contracts, as well as payments for payroll, outsourced services, IT, and other operating expenses. Overall, cash receipts were more than cash payments for the year because of maturing investments we chose to keep in cash rather than reinvesting. Cash and cash equivalents increased by \$17.3 million in 2016 while investments decreased by \$44.5 million. Cash used in operating activities of \$26.8 million is related to the planned reduction in net assets (reserves).

Statement of Cash Flows (in millions of dollars)		2016	:	2015	nge '15 o '16	 2014	hange ł to '15
Net Cash from operating activities Net Cash used for capital assets Net Cash from investing activities	\$	(26.7) (0.0) 44.0	\$	(23.1) (1.0) (0.1)	\$ (3.6) 1.0 44.1	\$ 16.1 (1.4) (39.8)	\$ (39.2) 0.4 39.7
(Decrease) Increase in Cash		17.3		(24.2)	41.5	(25.1)	0.9
Cash Beginning of Year	_	27.2		51.4	(24.2)	 76.5	(25.1)
Cash End of Year	\$	44.5	\$_	27.2	\$ 17.3	\$ 51.4	\$ (24.2)

Key Economic Factors and Budget Information for Next Year

The economy in Oregon continues to improve, unemployment is low, and the population is growing. Due to these and other factors, construction of new commercial buildings and residential homes increased considerably in 2016. We expect to see continued expansion in 2017.

The 2017 budget anticipates revenue of \$192.9 million, and expenditures of \$198.6 million, continuing the multi-year plan of spending down accumulated net assets, and ending the year with program reserves close to the targeted 2% to 5%.

Requests for Information

This financial report is designed to provide a general overview of Energy Trust of Oregon, Inc.'s finances for all those with an interest in the non-profit organization's financial results. All quarterly and annual financial statements, along with quarterly and annual reports, are available on Energy Trust's web site at www.energytrust/reports. Questions concerning any of the information provided in this report should be directed to the following:

Energy Trust of Oregon 421 SW Oak, Suite 300 Portland, Oregon 97204 www.energytrust.org Attention: Mariet Steenkamp, CFO



ASSETS

	December 31,			
	2016	2015		
Cash and cash equivalents Investments Other receivables Notes receivable, net of allowance Accrued interest receivable Advances paid to contractor Prepaid expenses Property and equipment, net	\$ 44,471,034 19,350,135 359 260,891 85,699 2,050,126 280,347 1,133,205	\$ 27,186,506 63,884,186 66,702 85,609 307,913 2,049,018 479,349 2,008,447		
Other assets	1,072,861	857,321		
Total assets	\$ 68,704,657	\$ 96,925,051		
LIABILITIES AND NET AS	SSETS			
LIABILITIES Accounts payable and accrued expenses Accrued payroll and related expenses Deferred rent liability Total liabilities	\$ 32,590,883 1,680,596 559,253 34,830,732	\$ 26,913,992 1,463,292 314,472 28,691,756		
COMMITMENTS AND CONTINGENCIES				
NET ASSETS Unrestricted	33,873,925	68,233,295		
Total net assets	33,873,925_	68,233,295		
Total liabilities and net assets	\$ 68,704,657	\$ 96,925,051		

ENERGY TRUST OF OREGON, INC. STATEMENTS OF ACTIVITIES

	Years Ended I	December 31,
	2016	2015
Funding Public purpose funding	\$ 84,222,567	\$ 82,786,607
Incremental funding	66,568,753	63,057,250
Contribution revenue	-	1,550
Total funding	150,791,320	145,845,407
Investment returns		
Interest and dividends on investments, net of amortization	458,184	534,173
Interest on notes receivable	1,411	1,000
Unrealized gain on investments	72,329	16,358
Total investment returns	531,924	551,531
Total revenues	151,323,244	146,396,938
Expenses		
Program expenses		
Energy efficiency	159,691,338	142,662,351
Renewable resources	19,596,783	17,266,025
Total program expenses	179,288,121	159,928,376
Administrative expenses		
Management and general	3,404,077	2,861,485
Communication and outreach - general	2,961,790	2,600,902
Total administrative expenses	6,365,867	5,462,387
Avista development	28,626	-
Total expenses	185,682,614	165,390,763
DECREASE IN NET ASSETS	(34,359,370)	(18,993,825)
NET ASSETS, beginning of year	68,233,295	87,227,120
NET ASSETS, end of year	\$ 33,873,925	\$ 68,233,295

ENERGY TRUST OF OREGON, INC. STATEMENT OF FUNCTIONAL EXPENSES FOR THE YEAR ENDED DECEMBER 31, 2016

	Energy Efficiency	Renewable Resources	Total Program Expenses	Management and General	Communication and Outreach – General	Total Administrative Expenses	Avista Development	Total Expenses
EXPENSES								
Incentives	\$ 93,736,085	\$ 16,540,433	\$ 110,276,518	\$ -	\$ -	\$ -	\$ -	\$ 110,276,518
Program management	52,639,975	438,645	53,078,620	A. P.	-	-	1,940	53,080,560
Payroll and related expenses	3,400,679	1,043,010	4,443,689	2,348,328	1,353,842	3,702,170	26,686	8,172,545
Outsourced services	4,423,336	874,753	5,298,089	351,539	1,099,537	1,451,076	-	6,749,165
Planning and evaluation	2,332,331	77,526	2,409,857	1,723	-	1,723	-	2,411,580
Customer service management	479,377	123,380	602,757	-	-	-	-	602,757
Trade Allies Network	270,932	18,440	289,372	-	- 1	-	-	289,372
Supplies	8,114	2,760	10,874	8,329	4,161	12,490	-	23,364
Postage and shipping	2,493	849	3,342	2,977	1,214	4,191	-	7,533
Telephone	2,761	940	3,701	1,515	1,094	2,609	-	6,310
Printing and publications	2,656	102	2,758	6,561	118	6,679	-	9,437
Occupancy expenses	241,400	82,175	323,575	132,473	95,595	228,068	-	551,643
Insurance	30,540	10,396	40,936	16,759	12,094	28,853	-	69,789
Equipment	5,436	79,312	84,748	2,983	2,153	5,136	-	89,884
Travel	48,249	23,681	71,930	35,104	51,026	86,130	-	158,060
Meetings, trainings,								
and conferences	30,300	14,554	44,854	53,229	17,265	70,494	-	115,348
Bank fees	-	-	7	1,668	-	1,668	-	1,668
Depreciation	47,221	16,074	63,295	25,913	18,700	44,613	-	107,908
Dues, licenses, and fees	68,951	11,715	80,666	9,041	13,377	22,418	-	103,084
Miscellaneous	117,320	169	117,489	273	12,384	12,657	-	130,146
IT services	1,803,182	237,869	2,041,051	405,662	279,230	684,892		2,725,943
Total expenses	\$ 159,691,338	\$ 19,596,783	\$ 179,288,121	\$ 3,404,077	\$ 2,961,790	\$ 6,365,867	\$ 28,626	\$ 185,682,614

See accompanying notes.

ENERGY TRUST OF OREGON, INC. STATEMENT OF FUNCTIONAL EXPENSES FOR THE YEAR ENDED DECEMBER 31, 2015

	Energy Efficiency	Renewable Resources	Total Program Expenses	Management and General	Communication and Outreach – General	Total Administrative Expenses	Total Expenses
EXPENSES							
Incentives	\$ 81,385,440	\$ 14,404,032	\$ 95,789,472	\$ -	\$ -	\$ -	\$ 95,789,472
Program management	49,436,515	434,437	49,870,952		_	<u>-</u>	49,870,952
Payroll and related expenses	2,999,116	916,972	3,916,088	2,041,291	1,209,638	3,250,929	7,167,017
Outsourced services	3,867,883	981,317	4,849,200	211,437	931,073	1,142,510	5,991,710
Planning and evaluation	2,003,932	66,610	2,070,542	1,480	, -	1,480	2,072,022
Customer service management	576,955	37,575	614,530	· · · · · · · · · · · · · · · · · · ·	-	-	614,530
Trade Allies Network	301,668	20,531	322,199	(4) T	_	-	322,199
Supplies	8,856	3,216	12,072	8,292	4,012	12,304	24,376
Postage and shipping	2,400	2,707	5,107	3,179	1,004	4,183	9,290
Telephone	2,683	888	3,571	1,607	1,242	2,849	6,420
Printing and publications	43,292	1,612	44,904	5,767	4,713	10,480	55,384
Occupancy expenses	185,894	61,533	247,427	111,372	77,787	189,159	436,586
Insurance	29,912	9,901	39,813	17,921	12,516	30,437	70,250
Equipment	6,903	58,153	65,056	4,136	2,889	7,025	72,081
Travel	27,398	15,298	42,696	26,852	53,374	80,226	122,922
Meetings, trainings, and conferences	26,194	15,414	41,608	42,722	13,595	56,317	97,925
Bank fees	-	-	-	1,887	-	1,887	1,887
Depreciation	50,253	16,634	66,887	30,107	21,029	51,136	118,023
Dues, licenses, and fees	67,257	9,430	76,687	(4,156)	21,896	17,740	94,427
Miscellaneous	50,992	176	51,168	157	101	258	51,426
IT services	1,588,808	209,589	1,798,397	357,434	246,033	603,467	2,401,864
Total expenses	\$ 142,662,351	\$ 17,266,025	\$ 159,928,376	\$ 2,861,485	\$ 2,600,902	\$ 5,462,387	\$ 165,390,763

See accompanying notes.

ENERGY TRUST OF OREGON, INC. STATEMENTS OF CASH FLOWS

	Years Ended I	December 31,
	2016	2015
CASH FLOWS FROM OPERATING ACTIVITIES Cash received in public purpose funding Cash received in incremental funding Interest received	\$ 84,222,567 66,568,753 995,209	\$ 82,786,607 63,057,250 1,252,221
Cash received from other sources Cash paid to contractors, suppliers, and employees	(178,543,459)	1,550 (170,205,614)
Net cash from operating activities	(26,756,930)	(23,107,986)
CASH FLOWS FROM INVESTING ACTIVITIES Acquisition of property and equipment Purchases of investments Sales and maturities of investments Issuance of notes receivable	(51,522) (25,035,448) 69,328,428 (200,000)	(1,002,566) (48,834,342) 48,720,035
Net cash from investing activities	44,041,458	(1,116,873)
INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	17,284,528	(24,224,859)
CASH AND CASH EQUIVALENTS, beginning of year	27,186,506	51,411,365
CASH AND CASH EQUIVALENTS, end of year	\$ 44,471,034	\$ 27,186,506
RECONCILIATION OF DECREASE IN NET ASSETS TO NET CASH FROM OPERATING ACTIVITIES Decrease in net assets Adjustments to reconcile change in net assets to net cash	\$ (34,359,370)	\$ (18,993,825)
from operating activities: Depreciation Change in notes receivable allowance Unrealized gain on investments Amortization of bond premium Net changes in:	926,764 24,718 (72,329) 313,400	840,546 1,180 (16,358) 736,723
Other receivables Accrued interest receivable Advances paid to contractor Prepaid expenses Other assets Accounts payable and accrued expenses Accrued payroll and related expenses Deferred rent liability	66,343 222,214 (1,108) 199,002 (215,540) 5,676,891 217,304 244,781	(31,410) (19,675) (566,869) (73,919) (91,805) (5,015,278) 157,924 (35,220)
Net cash from operating activities	\$ (26,756,930)	\$ (23,107,986)

Note 1 - Organization

Energy Trust of Oregon, Inc. (Energy Trust), a nonprofit 501(c)(3) organization, began collecting public purpose revenues in March 2002. By the terms of its grant agreement with the Oregon Public Utility Commission (OPUC), it is charged with investing in cost-effective energy conservation, funding above-market costs of small scale renewable energy resources, and encouraging energy efficiency market transformation efforts in Oregon.

All Energy Trust funds originally came from a 1999 energy restructuring law, which required Oregon's two largest investor-owned utilities to collect a three percent public purpose charge from their customers. A portion of that charge is transferred to Energy Trust, and the remainder is dedicated to energy conservation efforts in low-income housing and K-12 schools, as well as low-income housing improvements. The sunset date for collection of the public purpose charge is 2026.

The law authorized the OPUC to direct a majority of these public purpose funds to a non-governmental entity for investment. Energy Trust was created for this sole purpose. In November 2001, Energy Trust entered into a grant agreement with the OPUC to guide Energy Trust's electric energy work. The grant agreement was developed with extensive input from key stakeholders and interested parties, and it has been amended several times since 2001. The agreement is reviewed annually by the OPUC and is automatically extended annually for an additional three years unless Energy Trust or the OPUC give notice otherwise.

In 2007, the Oregon State Legislature passed Senate Bill 838 (OSB 838) and it was signed by the governor, which allowed electric utilities to request an increase in rates to pursue additional energy conservation opportunities. In 2008, PacifiCorp and Portland General Electric elected to send funds related to OSB 838 to Energy Trust to pursue energy conservation opportunities for retail electricity purchasers of less than one average megawatt. This precludes Energy Trust from providing services with this funding to some larger commercial and industrial customers. These funds are reported separately in the statement of activities as "incremental funding." The funds received from PacifiCorp and Portland General Electric may be used for conservation efforts in addition to activity funded by the public purpose funds.

In addition to its work under the 1999 energy restructuring law, Energy Trust administers natural gas conservation programs for residential and commercial customers of NW Natural. Under the terms of the 2003 agreement with the OPUC, NW Natural collects and transfers to Energy Trust a surcharge of the total monthly amount billed to non-industrial customers. Energy Trust uses these funds for energy efficiency efforts to benefit NW Natural's Oregon residential and commercial customers. In 2009, Energy Trust began administering energy efficiency programs for qualified industrial customers of NW Natural.

Note 1 - Organization (continued)

In 2006, Energy Trust began administering natural gas conservation programs for residential and commercial customers of Cascade Natural Gas Corporation (Cascade) under public purpose agreements. Each agreement provides for a different methodology for determining the amount of funds to be provided to Energy Trust.

In 2009, Energy Trust entered into a Washington Customer's Public Purpose Funds Transfer Agreement with NW Natural. Under the terms of the agreement, NW Natural agrees to transfer funds (Washington Funds) and customer information to Energy Trust to design and administer cost-effective energy efficiency programs for existing homes and businesses to NW Natural customers in Washington. In 2010, the agreement was amended to include similar programs for builders constructing new homes in NW Natural's Washington service territory. The agreement expires on February 1, 2018.

In 2016, Energy Trust entered into a Public Purpose Funds Transfer Agreement with Avista Corporation (Avista). Under the terms of the agreement, Avista agrees to provide funds to Energy Trust for energy conservation programs in Avista's Oregon service areas. Beginning January 1, 2017, Energy Trust will provide for more comprehensive energy efficiency programs. The agreement expires on January 1, 2018.

Note 2 - Summary of Significant Accounting Policies

Basis of accounting – The accompanying financial statements have been prepared on the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America.

Basis of presentation – Energy Trust is required to report information regarding its financial position and activities according to three classes of net assets under generally accepted accounting principles:

- **Unrestricted** Net assets that are not subject to donor stipulations.
- **Temporarily restricted** Net assets subject to donor imposed stipulations that may or will be met, either by actions of Energy Trust and/or the passage of time. When a restriction is met, temporarily restricted net assets are reclassified to unrestricted net assets and reported in the statement of activities as net assets released from restrictions. There were no temporarily restricted net assets at December 31, 2016 or 2015.
- **Permanently restricted** Net assets subject to donor imposed stipulations which must be maintained permanently by Energy Trust. Generally, the donors of these assets permit the use of all or part of the income earned on any related investments for general or specific purposes. There were no permanently restricted net assets at December 31, 2016 or 2015.

Note 2 - Summary of Significant Accounting Policies (continued)

Concentrations of credit risk – Energy Trust's cash and cash equivalents may subject Energy Trust to concentrations of credit risk, as the fair value of securities is dependent on the ability of the issuer to honor its contractual commitments. Energy Trust's non-interest bearing cash balances may exceed federally insured limits. Energy Trust has not experienced any losses in such accounts to date.

Cash and cash equivalents – For purposes of financial statement classification, Energy Trust considers all unrestricted, highly-liquid investments with an initial maturity of three months or less to be cash and cash equivalents.

Investments – Holdings consist of fixed income investments, certificates of deposit, commercial paper, and U.S. government issues. The fixed income funds and certificates of deposit have initial maturities generally ranging from four to twelve months. Certificates are generally non-negotiable and non-transferable, and may incur substantial penalties for withdrawal prior to maturity. Investments are measured at fair value in the statements of financial position. Investment income or loss (including gains and losses on investments, interest, and dividends) is included in the statement of activities as increases or decreases in unrestricted net assets unless the income or loss is restricted by donor or law.

Property and equipment – Property and equipment are stated at cost less accumulated depreciation and are depreciated using the straight-line method over their estimated useful lives, which generally range from three to five years. It is Energy Trust's policy to capitalize property and equipment over \$5,000.

Deferred rent liability – Energy Trust leases office space under a non-cancellable lease. The lease contains a provision for increases in rental rates as well as abated rent. Rent expense is recognized on the straight-line basis with the difference between the expense and rent payments being recognized as deferred rent. Deferred rent was \$559,253 and \$314,472 for the years ended December 31, 2016 and 2015, respectively.

Revenue recognition – All funding is considered available for unrestricted use unless specifically restricted by the donor. Public purpose and incremental funding are recognized when funds are received from the funding source.

Contributions received are recorded as unrestricted, temporarily restricted, or permanently restricted support, depending on the existence or nature of any donor restrictions. Contributions, including unconditional promises to give, are recognized as revenue in the period pledged. Contributions of assets other than cash are recorded at their estimated fair value on the date of their contribution.

Expense allocation – The costs of providing various programs and supporting services have been summarized on a functional basis in the statements of functional expenses. Accordingly, certain costs have been allocated among the programs and supporting services benefited.

Note 2 - Summary of Significant Accounting Policies (continued)

Advertising – Energy Trust expenses advertising costs as incurred. Advertising costs include activities to create or stimulate a desire to use Energy Trust's services that are provided without charge. Advertising expense amounted to \$1,867,384 and \$1,680,666 for the years ended December 31, 2016 and 2015, respectively.

Income taxes – Energy Trust is exempt from federal and state income taxes under Section 501(c)(3) of the Internal Revenue Code. No provision for income taxes is made in the accompanying financial statements, as Energy Trust has no activities subject to unrelated business income tax. Energy Trust is not a private foundation.

Energy Trust recognizes the tax benefit from uncertain tax positions only if it is more likely than not that the tax positions will be sustained on examination by the tax authorities, based on the technical merits of the position. The tax benefit is measured based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate settlement. Energy Trust recognizes interest and penalties related to income tax matters, if any, in administrative expense.

Energy Trust had no unrecognized tax benefits at December 31, 2016 or 2015. No interest and penalties were accrued for the years ended December 31, 2016 or 2015. Energy Trust files an exempt organization return in the U.S. federal jurisdiction.

Renewable energy certificates – In the process of funding above-market costs of renewable energy resources, Energy Trust negotiates the contractual ownerships of Renewable Energy Certificates (REC) with funding recipients. A single REC represents one megawatt-hour of generation of qualifying electricity from eligible resources including, among others, solar, wind, and biomass. In 2011, Energy Trust amended policy 4.15.000-P to remove provisions allowing the sale of RECs. As of December 31, 2016 and 2015, the fair value of RECs has not been recorded as it is not considered material to the financial statements.

Use of estimates – The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires that management make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Fair value of financial instruments – At December 31, 2016 and 2015, the carrying values of cash and cash equivalents, receivables, accounts payable and accrued expenses, and accrued payroll and related expenses approximate fair value due to the short-term nature of these instruments. Energy Trust has determined these financial instruments to be Level 1 measurements in the fair value hierarchy. See Note 5.

Note 2 - Summary of Significant Accounting Policies (continued)

Subsequent events – Subsequent events are events or transactions that occur after the statement of financial position date but before the financial statements are issued. Energy Trust recognizes in the financial statements the effects of all subsequent events that provide additional evidence about conditions that existed at the date of the statement of financial position, including the estimates inherent in the process of preparing the financial statements. Energy Trust's financial statements do not recognize subsequent events that provide evidence about conditions that did not exist at the date of the statement of financial position but arose after the statement of financial position date and before the financial statements are issued.

Energy Trust has evaluated subsequent events through _______, 2017, which is the date the financial statements were issued.

Note 3 - Investments

Investments are stated at fair value as determined by quoted market prices and consist of the following at December 31:

	2016	2015
Fixed income investments	\$ 7,942,280	\$ 34,498,318
Certificates of deposit greater than 90 days	9,419,115	22,355,428
Commercial paper	1,988,740	-
U.S. government issues		7,030,440
	\$ 19,350,135	\$ 63,884,186

Note 4 - Property and Equipment

Property and equipment consist of the following at December 31:

	2016	2015
Computer equipment and software Office equipment and furniture Leasehold improvements	\$ 3,696,232 716,876 318,964	\$ 3,509,829 701,604 318,964
Less accumulated depreciation	4,732,072 3,598,867	4,530,397 2,672,098
Work in process	1,133,205	1,858,299 150,148
	\$ 1,133,205	\$ 2,008,447

At December 31, 2015, work in process consisted of various software projects that were placed into service during 2016.

Note 5 - Fair Value Measurements

Accounting literature defines fair value as the price that would be received to sell an asset, or paid to transfer a liability, in an orderly transaction between market participants at the measurement date. Energy Trust determines fair value based on quoted prices when available or through the use of alternative approaches, such as matrix or model pricing, when market quotes are not readily accessible or available. The valuation techniques used are based on observable and unobservable inputs. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect Energy Trust's market assumptions.

Note 5 - Fair Value Measurements (continued)

These two types of inputs create the following fair value hierarchy:

Level 1 – Quoted prices in active markets for identical assets or liabilities.

Level 2 – Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active.

Level 3 – Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the asset or liability. Unobservable inputs are used to measure fair value to the extent that observable inputs are not available. Energy Trust's own data used to develop unobservable inputs is adjusted for market consideration when reasonably available.

Energy Trust used the following methods and significant assumptions to estimate fair value for its assets measured and carried at fair value in the financial statements:

Investments – Investments are comprised of fixed income investments, certificates of deposit, commercial paper, and U.S. government issues. Investments fair values are based on quoted market prices. If a quoted market price is not available, fair value is estimated using quoted market prices for similar securities.

Deferred compensation assets – Deferred compensation assets are comprised of U.S. mutual funds and a guaranteed investment contract. For U.S. mutual funds, the fair value is obtained from an independent pricing service. The fair value measurements consider observable data that may include dealer quotes, cash flows, or the U.S. Treasury yield curve. The guaranteed investment contract is valued at fair value by discounting the related cash flows based on current yields of similar instruments with comparable duration. Fair value approximates contract value. Deferred compensation assets are recorded in other assets within the statements of financial position.

There were no changes in the valuation methodologies or assumptions used by Energy Trust for the years ended December 31, 2016 or 2015.

It is Energy Trust's policy to recognize transfers of investments between levels in the fair value hierarchy on December 31st of each year.

Note 5 - Fair Value Measurements (continued)

The following table presents the fair value measurements of assets recognized in the accompanying statements of financial position measured at fair value on a recurring basis, and indicates the fair value hierarchy of the valuation techniques utilized by Energy Trust to determine such fair value:

	Fair Value Measurements at Report Date Using:							
	Quoted Prices in							
	Fair Value at		Active Markets for		Significant Other		Significant	
	December 31,		Identical Assets		Observable Inputs		Unobservable	
		2016	(Level 1)	(Level 2)		Inputs (Level 3)	
Deferred compensation assets:								
U.S. mutual funds	\$	571,396	\$	571,396	\$	-	\$	-
Guaranteed investment contract		278,126		-		278,126		-
						_		
Total deferred compensation								
assets		849,522		571,396		278,126		-
Investments:								
Fixed income investments		T 016 060		F 01 C 0 C 0				
U.S. corporate bonds		5,016,060		5,016,060		-		-
Canadian corporate bonds		2,000,540		2,000,540		-		-
Municipal bonds		925,680		925,680		0.410.115		-
Certificates of deposit		9,419,115		-		9,419,115		-
Commercial paper		1,988,740	-			1,988,740		
Total investments		19,350,135		7,942,280		11,407,855		
Total assets measured				~				
at fair value	\$	20,199,657	\$	8,513,676	\$	11,685,981	\$	

Note 5 - Fair Value Measurements (continued)

	Fair Value Measurements at Report Date Using:							
	Fair Value at Active M December 31, Identic		red Prices in we Markets for ntical Assets (Level 1)	rkets for Significant Other Assets Observable Inputs		Significant Unobservable Inputs (Level 3)		
Deferred compensation assets: U.S. mutual funds Guaranteed investment contract	\$	496,137 228,844	\$	496,137 -	\$	- 228,844	\$	<u>-</u>
Total deferred compensation assets		724,981		496,137		228,844		<u>-</u>
Investments: Fixed income investments U.S. corporate bonds Canadian corporate bonds Other foreign corporate bonds Municipal bonds Certificates of deposit Commercial paper U.S. government issues		25,513,017 4,007,020 4,018,540 959,741 22,355,428 - 7,030,440		25,513,017 4,007,020 4,018,540 959,741 - 7,030,440		- - - 22,355,428 - -		- - - - - -
Total investments		63,884,186		41,528,758		22,355,428		
Total assets measured at fair value	\$	64,609,167	\$	42,024,895	\$	22,584,272	\$	<u>-</u>

Assets are to be classified in the table above by recurring or non-recurring measurement status. Recurring assets are initially measured at fair value and are required to be remeasured at fair value in the financial statements at each reporting date. There were no assets measured on a non-recurring basis at December 31, 2016 or 2015.

As of December 31, 2016 and 2015, Energy Trust does not have any liabilities that are required to be measured in accordance with fair value standards.

Note 6 - Notes Receivable

Energy Trust has entered into an agreement with Craft3 to loan up to \$300,000 in support of the Savings Within Reach Loan Program. At December 31, 2016 and 2015, Energy Trust had loaned \$300,000 and \$100,000, respectively, which accrues interest at 1%, and is payable quarterly. The note receivable is due and payable ten years from the date of the final disbursement, but shall not extend beyond June 30, 2025. At December 31, 2016 and 2015, total accrued interest receivable associated with the notes receivable was \$683 and \$250, respectively. Energy Trust was committed to loan an additional \$200,000 in \$100,000 increments, which could be requested once the previous advance was 75% depleted, which had to occur prior to June 30, 2015. During 2015, the agreement was amended to extend the disbursement period to December 31, 2016. The final \$200,000 was requested and disbursed on October 17, 2016.

Allowances for doubtful accounts are established based on prior collection experience and current economic factors which, in management's judgment, could influence the ability of loan recipients to repay the amounts outstanding per the terms of the agreement. Balances are written off only when they are deemed to be uncollectible. At December 31, 2016 and 2015, the allowance for doubtful accounts was \$39,109 and \$14,391, respectively.

Note 7 - Public Purpose Funding and Incremental Funding

Public purpose funding and incremental funding received are as follows for the years ended December 31:

	2016	2015
Public purpose funding		
Portland General Electric	ф 20.127.42 <i>(</i>	ф 20 7 22 127
Energy efficiency Renewable resources	\$ 28,127,436 8,105,815	\$ 28,723,137 8,312,211
	36,233,251	37,035,348
PacifiCorp	24.544.556	04.464.456
Energy efficiency Renewable resources	21,541,576 6,052,225	21,164,176 5,925,092
	27,593,801	27,089,268
Northwest Natural - Oregon Energy efficiency	16,613,855	15,931,563
Northwest Natural - Washington Energy efficiency	1,937,679	1,435,515
Cascade Energy efficiency	1,687,981	1,294,913
Avista Energy efficiency	156,000	_
Total public purpose funding	\$ 84,222,567	\$ 82,786,607
Incremental funding		
Portland General Electric PacifiCorp	\$ 41,012,913 25,555,840	\$ 42,053,468 21,003,782
Total incremental funding	\$ 66,568,753	\$ 63,057,250

Note 8 - Operating Lease Commitments

Energy Trust leases its administrative offices under an operating lease agreement which expires in June 2025. At December 31, 2016, the aggregate annual commitments under the terms of these leases are payable as follows for the years ending December 31:

2017	\$ 430,115
2018	715,822
2019	616,435
2020	1,006,895
2021	1,039,348
Thereafter	 4,481,923
	\$ 8,290,538

Total rent expense under operating leases was \$784,667 and \$619,517 for the years ended December 31, 2016 and 2015, respectively.

Note 9 - Retirement Plans

Retirement plan – Energy Trust provides all employees with a qualified profit sharing retirement plan as prescribed under Section 401(k) of the Internal Revenue Code. Generally, employees who have completed at least three consecutive months of work may elect to make voluntary contributions to the plan on a pre-tax basis, up to the limits allowed by law. Employees select from various investment options. On a discretionary basis, as determined annually by the Board of Directors, Energy Trust may make contributions to the plan. For each of the years ended December 31, 2016 and 2015, Energy Trust contributed to the plan an amount equal to 6% of the compensation earned by each eligible employee during the period. Employees are immediately vested in all contributions to the plan. Retirement plan expense recorded by Energy Trust was \$519,654 and \$456,234 for the years ended December 31, 2016 and 2015, respectively.

Deferred compensation plan – Energy Trust sponsors a non-qualified deferred compensation plan for selected employees. Investments are owned by Energy Trust and managed individually by each participant. At the time an employer contribution is made, the Board will, in its sole discretion, determine whether the employer contribution will be initially fully vested or will become vested in accordance with vesting terms designated by the Board of Directors. Until paid to participants, plan assets are subject to the claims of Energy Trust's creditors.

Energy Trust did not make discretionary contributions to the plan during the years ended December 31, 2016 or 2015. Energy Trust recorded an asset and a liability in the amount of \$849,522 and \$853,072 and \$724,981 and \$727,781 as of December 31, 2016 and 2015, respectively.

Note 9 - Retirement Plans (continued)

The deferred compensation asset and liability are recorded in other assets and accrued payroll and related expenses, respectively, in the statements of financial position.

Note 10 - Contractual Commitments

Energy Trust enters into contract commitments for various goods and services. As of December 31, 2016, Energy Trust expects to pay approximately \$66,000,000 in future periods under these commitments. Expenditures for these commitments are recorded in the period in which they are incurred.

Energy Trust entered into incentive funding agreements for energy efficiency and renewable resource projects not completed as of December 31, 2016 totaling no more than \$75,000,000. These amounts will be paid in the period in which they are completed.

Energy Trust also has projects and incentive payment requests in progress that did not meet its recognition criteria at both December 31, 2016 and 2015. These amounts are unquantifiable and, as such, not disclosed in the notes to the financial statements.

Note 11 - Related Party Transactions

Energy Trust, along with a number of other northwest regional utilities, provides funding to Northwest Energy Efficiency Alliance (NEEA). Energy Trust benefits from the arrangement by achieving low cost, long lasting electric energy savings through NEEA's regional market transformation activities. Effective September 9, 2016, the Executive Director retired from Energy Trust and had served on NEEA's board of directors since 2010. Total payments to NEEA were approximately \$9,402,000 and \$7,039,000 for the years ended December 31, 2016 and 2015, respectively.

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Board Decision Audited Financial Statements

April 5, 2017

RESOLUTION 802 ACCEPTANCE OF AUDITED FINANCIAL REPORT

BE IT RESOLVED: That Energy Trust of Oregon, Inc., Board of Directors accepts the auditor's report on the financial statements, including an unmodified opinion, submitted by Moss Adams LLP for the calendar year ended December 31, 2016.

Moved by: Seconded by:

Vote: In favor: Abstained:

Opposed:

Tab 3



Briefing Paper CLEAResult Contract Extension for New Buildings

April 5, 2017

Summary

Absent board objection, Energy Trust staff proposes to extend the contract for the New Buildings program management contractor (PMC) with CLEAResult for the final one-year extension period, from January 1, 2018 to December 31, 2018. The initial term of this PMC contract with CLEAResult was for two years from January 1, 2014 to December 31, 2015, with the option of three additional year extensions. Staff previously reported on, and the board did not object to, a two year extension of this contract through December 31, 2017. Staff proposes to extend the contract for the third and final year, from January 1, 2018 to December 31, 2018.

Background

- The New Buildings program provides technical assistance and financial incentives for new buildings, major renovations and tenant improvements. The program also provides training and education to allies to advance design and construction practices and broaden the application of new savings strategies through offerings including Path to Net Zero and Market Solutions for small commercial building owners and businesses.
- In September 2013 (resolution 676), the board authorized a contract with PECI for program management and delivery services with a first-year budget of \$4,500,000 and future annual budgets consistent with board-approved annual budgets and action plans. Following CLEAResult's acquisition of PECI contracts, CLEAResult assumed the New Buildings PMC contract.
- The 2013 authorizing resolution included an initial term of two years and a provision allowing staff to offer up to three additional year extensions if the PMC meets certain established performance criteria, and the board resolution also directed staff to report to the board on the PMC's progress toward meeting contract extension criteria, and recommend whether to extend the contract.
- In May of 2015, staff recommended and the board did not object to a two year extension of the PMC contract through December 31, 2017.
- Staff have now again reviewed the contract extension criteria and are recommending to extend the contract for a third and final year.
- If the board does not object to the recommended third year extension, and as this PMC contract approaches the end of its extended term, staff will be authorized to extend the PMC contract term through December 31, 2018 consistent with the 2018 board approved budget and action plans.

Performance Criteria Discussion

Staff has assessed PMC performance against the following criteria and determined that the PMC has satisfactorily performed in these areas in this contract period:

1. <u>Cross-program coordination</u>: PMC has been responsive in meeting Energy Trust's needs and proactive in coordinating with Energy Trust staff and other programs on a

wide range of needs; customer satisfaction is consistently strong; complaints don't arise; PMC is able to address challenges that arise and provides timely notice to Energy Trust; cross-program referrals are happening; and the PMC's regional market engagement has been well planned, coordinated and managed in the field. Overall responsiveness and effective coordination is enabling comprehensive program delivery and supporting achievement of overall goals, contributing to strong customer satisfaction and serving all Energy Trust service territories.

- 2. Project pipeline: PMC has consistently built and managed a strong pipeline of projects statewide, reaching projects in the early stages to influence design and construction decisions that save energy. With the program's regional market engagement model and ability to manage staff located throughout the state, half of the projects enrolled each year since 2015 were outside the Portland Metro area and annual enrollment targets doubled between 2014 and 2016. In 2014, 364 projects completed and another 327 were enrolled; in 2015, 333 projects completed and 614 were enrolled; and by 2016, 426 completed and 631 were enrolled.
- 3. <u>Innovation</u>: PMC is developing new strategies, measures and pilots in effort to create comprehensive and streamlined offerings. The launch of market solutions six building-type-specific incentive packages was a well-timed launch to meet emerging market opportunities with new construction growth and the packages allow new measures to be integrated as cost-effective technologies emerge. Overall the program is positioned to serve business customers and key market actors involved in advancing building design and technology ahead of codes and standards and is driving market adoption of high efficiency and net zero energy buildings in Oregon.
- 4. <u>Teamwork</u>: Offerings and program delivery are developed in coordination with Energy Trust, involve engineering, marketing, and result in tailored solutions that set achievable but high standards resulting in value to customers and significant energy saved. PMC has expanded statewide program delivery and expanded training and education to advance design practice among architects, engineers and design consultants and contractors. This level of collaboration and teamwork is contributing to consistently high overall customer satisfaction that ranged between 89% and 100% from 2013-2016.
- Deliverables: PMC has provided complete contract deliverables on time, met savings goals at levelized cost targets, managed to the budget, provided exceptional customer service, quality marketing, and consistent data management and quality control.

In 2013, PMC achieved 204% electric and 125% of their gas savings goals, achieving 86.8 million kWh and 461,000 therms.

In 2014, PMC achieved 105% electric and 121% of their gas savings goals, achieving 46 million kWh and 676,000 therms.

In 2015: PMC achieved 138% electric and 139% of their gas savings goals, achieving 50 million kWh and 552,000 therms.

In 2016: PMC achieved 128% electric and 123% of their gas savings goals, achieving 59 million kWh and 733,000 therms.

Next Steps

Absent board objection, staff is authorized to extend the New Buildings program management contract with the PMC through December 31, 2018.

PINK PAPER



Briefing Paper Program Management and Program Delivery Contract Terms

April 5, 2017

Summary

To provide context for contract extension and approval recommendations, staff has prepared a summary of Energy Trust's Program Management Contracts and Program Delivery Contracts, their possible durations, remaining extension term potential, and timing information about upcoming competitive RFP and/or RFQ processes. Staff will be available at the meeting to answer questions.

PMC	Program	End Date of Initial Term	Current Expiration Date	Possible Extensions to Initial Term	Extension Years Approved (Board Briefing Date(s))	Next Anticipated Extension Presentation	File #
CLEAResult Consulting, Inc.	Existing Homes	12/31/14	12/31/17	3 years	3/3 (7/29/15 for 1yr) (6/8/16 for 1 yr)	Re-bid in 2017	1806
Ecova, Inc.	Products	12/31/16	12/31/17	3 years	1/3 (6/8/16 for 1 yr)	Re-bid in 2017	2181
CLEAResult Consulting, Inc.	New Homes	12/31/16	12/31/17	3 years	1/3 (6/8/16 for 1 yr)	Re-bid in 2017	2182
ICF Resources, LLC	Existing Buildings	12/31/17	12/31/19	3 years	0/2	2019	2505
CLEAResult Consulting, Inc.	New Buildings	12/31/15	12/31/18	3 years	3/3 (5/20/15 for 2 yrs) (4/5/17 for final 1 yr – if no board objection)	N/A	1962
Lockheed Martin Corporation	Existing Buildings - Multifamily	Through 12/31/18	12/31/18	2 years	0/2	2018	2366

PDC	Program	End Date of Initial Term	Current Expiration Date	Possible Extensions to Initial Term	Extension Years Approved (Board Briefing Date(s) if applicable)	Next Anticipated Extension Presentation	File #
Energy 350, Inc.	Production Efficiency	12/31/16	12/31/17	2 years	1/2 (7/20/16 for 1 yr)		1960
RHT Energy, Inc.	Production Efficiency	12/31/16	12/31/17	2 years	1/2 (7/20/16 for 1 yr)	2016	1957
Portland General Electric Company (PGE- CTS)	Production Efficiency	12/31/16	12/31/17	2 years	1/2 (7/20/16 for 1 yr)		1959
Evergreen Consulting, LLC	Production Efficiency)	12/31/17	12/31/19	2 years	0/2	2019	2526
Cascade Energy, Inc.	Production Efficiency	12/31/17	12/31/19	2 years			2525

[Continues on next page]

	PMC		
PMC	Program	Final End Date ¹	Anticipated RFP (if contract extended for all possible extensions)
CLEAResult Consulting, Inc.	Existing Homes	12/31/17	Spring 2017
Ecova, Inc.	Products	12/31/17 – will not	Spring 2017
		be requesting	
		further extensions	
CLEAResult Consulting, Inc.	New Homes	12/31/17 – will not	Spring 2017
		be requesting	
		further extensions	
ICF Resources, LLC	Existing Buildings	12/31/21	Spring 2021
CLEAResult Consulting, Inc.	New Buildings	12/31/18	Spring 2018
Lockheed Martin, Inc.	Existing Buildings – Multifamily	12/31/20	Spring 2020

	PDC		
PDC	Program	Final End Date ²	Anticipated RFP/Q (if contract extended for all possible extensions)
Energy 350, Inc.	Production Efficiency – Custom Track	12/31/18	Spring 2018
RHT Energy, Inc.	Production Efficiency – Custom Track	12/31/18	Spring 2018
PGE-CTS	Production Efficiency – Custom Track	12/31/18	Spring 2018
Evergreen Consulting, LLC	Production Efficiency – Streamlined Track	12/31/21	Spring 2021
Cascade Energy, Inc.	Production Efficiency – Streamlined Track	12/31/21	Spring 2021

¹ Assumes each of the possible extension years are offered and accepted by the PMC ² Assumes each of the possible extension years are offered and accepted by the PDC

Tab 4

Final Report: Impact Evaluation of the 2013-2014 Existing Buildings Program

Prepared for: Energy Trust of Oregon

February 9, 2017

Prepared by:



ADM Associates, Inc.

3239 Ramos Circle Sacramento, CA 95827 (916) 363-8383

1. Executive Summary

ADM Associates was selected as an independent third party to evaluate the energy impacts garnered from the Existing Buildings (EB) program during the 2013 and 2014 program years (PY).

The EB program offers incentives for the installation of electric and gas energy efficiency measures in existing commercial buildings in Oregon, as well as gas energy efficiency measures commercial buildings served by NW Natural in Washington.¹ The program is implemented on behalf of Energy Trust by a program management contractor (PMC), ICF International (ICF), who has delivered the program since 2013. Prior to 2013, Lockheed Martin delivered the EB program; some projects completed in 2013 were initiated under Lockheed Martin's tenure. In 2013 and 2014, the program had three main tracks²:

- Standard: Prescriptive measures in categories such as HVAC, appliances, refrigeration, insulation, food service, domestic hot water, and IT. Savings for these projects were estimated using deemed savings or simplified calculation workbooks.
- Lighting: Includes both lighting fixtures and lighting controls. The Lighting track is implemented by Evergreen Consulting Group under subcontract to the PMC. In addition to projects in the Lighting track, lighting measures may also be part of Standard or Custom track projects. For this evaluation, lighting measures from all tracks were grouped under the Lighting track.
- Custom: Measures that are more comprehensive or interactive than prescriptive measures. They also usually involve more complex energy savings analysis than prescriptive measures.

The impact evaluation was designed around the following overarching evaluation goals:

- Develop estimates of actual EB program gas and electric savings to establish realization rates for the 2013 and 2014 program years individually.
- Report observations from the evaluation and make recommendations to help Energy Trust understand substantial deviations from claimed savings and to improve ex ante savings estimates and the effectiveness of future engineering studies and impact evaluations of Existing Buildings projects.

¹ Washington projects were not included in this impact evaluation. Since the program is implemented identically in Oregon and Washington, it is ADM's understanding that the findings from Oregon gas projects will be applied to Washington.

² Other tracks and pilots comprised a small percentage of projects and savings for 2013 and 2014, and were not included in this impact evaluation.

ADM employed a site-specific approach in which the M&V method(s) were tailored to each unique measure evaluated. The M&V methods leveraged were consistent with industry standards including the International Performance Measurement & Verification Protocols (IPMVP)³ Options A, C, and D.⁴ Site visits were performed, except for a subset of small lighting measures, to collect primary data used to derive the ex post energy impacts. Site visits were also used to verify that the expected measure(s) were installed and still operating. The sub-set of lighting measures not visited received phone interviews from which primary data was collected and measure operability verified. Two measure categories, custom building controls and custom HVAC measures, received in-depth focus in this evaluation through increased sample sizes for those categories within the sample frames.⁵

A summary of the program's performance for the 2013 and 2014 program years is provided here in the executive summary while a more thorough discussion of our results, key findings, and recommendations can be found in Section 3. Table 1-2 summarizes overall the combined ex post program impacts for the 2013 and 2014 program years. We also note here that current Energy Trust policy is to estimate prescriptive and custom lighting measure savings without heating & cooling interactive factors (HCIFs) and previous evaluation results have been reported consistent with this policy. However; one of the primary goals for this evaluation was to report actual program electric and gas impacts. Since lighting measures represent most of the EB program impacts and affect both electric and gas fuel sources, ADM recommends that it is important to include HCIFs for such measures to meet this evaluation goal. Thus, we provide Table 1-1 which demonstrates the impact(s) these HCIFs have on program level savings. For the remainder of this report all numbers will be provided without HCIFs.

Table 1-1 Lighting HCIF Impacts on Program Savings

	Electric	Gas	MMBTU
2013	-0.3%	-27%	-7%
2014	0.2%	-38%	-9%
Total	-0.1%	-32%	-8%

It can be seen in Table 1-1 that the lighting HCIFs have a negligible impact on program level electric savings. However; they do have a demonstrated impact on the gas savings,

Executive Summary 5

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³ Published by the Efficiency Valuation Organization. http://evo-world.org/en/

⁴ Note that IPMVP Option B was not a viable approach since this was a post hoc evaluation. There was no opportunity to collect primary baseline data through sub-metering affected equipment.

⁵ The final sample frame and sampling approach is detailed in Section 2.1

⁶ HCIFs account for the impact lighting system improvements have on facility heating and cooling loads. Efficient lighting systems introduce less waste heat into their surroundings. When located within conditioned space the result is a reduction in cooling loads and an increase in heating loads.

resulting in an overall reduction to program savings by 8% on an MMBTU basis. Thus, one of our recommendations includes reviewing the current HCIF policy.

Table 1-2 Summary of 2013 and 2014 Program Populations & Sample Frame

	# of Projects	# of Measures	Ex ante Electric Savings (kWh)	Ex ante Gas Savings (therms)
2013 Population	2,696	5,699	90,673,022	1,365,946
2013 Sample	59	120	18,572,110	544,034
Percent of 2013 Population in Sample	2%	2%	20%	40%
2014 Population	3,145	6,182	102,559,554	1,349,209
2014 Sample	66	117	25,792,780	430,560
Percent of 2014 Population in Sample	2%	2%	25%	32%

Table 1-3 Total Ex Post Program Impacts (2013 & 2014 Program Years Combined)

# Projects	# Measures	Electric		Gas		
	# ivieasures	kWh	RR	Therms	RR	
5,837	11,881	162,310,809	84%	1,885,065	69%	

1.1. Summary of Estimates of EB Program Gas and Electric savings

The final, verified energy impacts for the 2013 and 2014 EB program years are summarized individually in Table 1-4 below. The sample frame was designed to report program impacts with 10% precision at the 90% confidence interval (for each program year). The final sample achieved 9% precision for the 2013 PY and 10% precision for the 2014 PY.⁷ A detailed accounting of the sampling frame is provided in Section 2.1.

Table 1-4 Summary of Program Impacts by Year

Program # Projects		# Measures	Electric Imp	Gas Imp	acts	
Year # Projects	# ivieusures	kWh	RR	Therms	RR	
2013	2,696	3,141	79,612,150	88%	911,922	67%
2014	5,699	6,182	82,698,659	81%	973,143	72%

⁷ At the 90% confidence interval

The two program years share several similarities including how measures were implemented, how ex ante estimates were derived, and their verified performances. Notably, the key findings identified within each measure category were common across program years. Given these similarities, ADM found it suitable to combine the two sample frames into a single frame in order to review the performance of particular measure categories which is summarized in Table 1-5. Measure category results are discussed in further detail, and presented separately by program year, in Section 3.

Table 1-5 Summary of Impacts by Measure Category

Measure Category	Electric		Ga	Sampling	
ivieasure category	kWh	RR	Therms	RR	Precision
Custom: Building Controls	14,788,702	65%	479,412	65%	10%
Custom: HVAC	14,676,234	72%	298,266	80%	11%
Custom: Other	6,482,960	61%	280,976	63%	11%
Lighting: Controls	7,400,315	80%	0	N/A	46%
Lighting: Fixtures	92,330,541	93%	0	N/A	8%
Lighting: Street	17,675,633	110%	0	N/A	4%
Standard: All	8,459,433	56%	667,003	58%	32%

It can be seen in the table above that the *Lighting: Fixtures* measure category represents the majority of program savings (roughly 55%) garnered through the EB program. In fact, the three lighting-focused measure categories combined represent about 72% of the program savings of 2013 and 2014 together.

1.2. Summary of Observations and Recommendations

The program was observed to perform relatively consistent with previous years (e.g. number of projects and magnitude of impacts), though the realization rates are lower for PY 2013 and PY 2014 relative to past program years.

⁸ While some issues were identified, they were common across both program years.

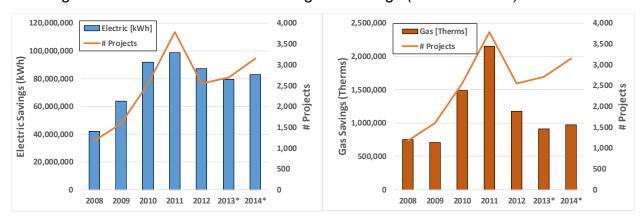


Table 1-6 Program Savings by Year and Fuel Source

Drogram		<u>Verified</u>	Realization Rates		
Program Year	# Projects	Electric (kWh)	Gas (Therms)	Electric	Gas
2008	1,170	41,887,080	746,564	99%	87%
2009	1,590	63,537,310	705,644	85%	75%
2010	2,544	91,884,445	1,486,729	107%	86%
2011	3,778	98,776,194	2,148,020	91%	101%
2012	2,543	86,910,648	1,174,676	95%	79%
2013	2,696	79,612,150	911,922	88%	67%
2014	3,141	82,698,659	973,143	81%	72%

The trends in program performance over time can be seen in Figure 1-1. In general, the magnitude of the verified program savings follows closely with the number of projects. However; it also appears that as the program has matured the magnitude of the savings on a per project basis has decreased (particularly evident for gas impacts). This may largely be due to all the "low hanging fruit" being harvested during earlier program years, but it is also likely an indication that the program is having an impact on the overall market. As commercial facilities become more efficient, subsequent projects will have a lower savings potential.

Figure 1-1 Illustration of Verified Program Savings (Gas & Electric) Over Time



Program documentation was generally very thorough and included the requisite materials to understand the project's scope and a general overview of how the ex ante energy savings were calculated. Many of the projects for which simulations were used to derive the ex ante savings estimates included both a Technical Analysis Study (TAS) as well as the simulation files (typically TraneTRACE or eQuest). The set of documents we received was generally consistent; however about 20% of the custom projects were missing either the simulation files or live calculations (e.g. spreadsheet) used to generate the ex ante savings estimates. For such projects, it was more difficult to provide a thorough explanation regarding the deviances. Furthermore, since many of the measures were implemented as part of a larger project, the key findings (as they relate to realization

rates) are shared across measure categories and the final realization rates for individual measure categories are somewhat contingent upon that of other measure categories.⁹

When we reviewed the recommendations from the previous program impact evaluation (2012) we observed that most of the recommendations had been implemented at least partially. Two of the recommendations that had not been fully implemented at the time of the 2013/2014 program implementation did impact the program's performance¹⁰ for this current impact evaluation:

- Improve the post-installation inspection process
- Implement "sanity" checks on ex ante savings values

Some examples of the above seen in the 2013/2014 program evaluation include one site for which a VFD was found programmed to run at full speed (60 Hz)¹¹ as well as several sites for which the ex ante savings estimates exceeded the total consumption of the facility. The most common findings from this evaluation are listed in Table 1-7.

Table 1-7 List of Common Findings and Their Frequency

		# of Me	easures	# of Projects	
Category	Description		2014 N=117	2013 N=68	2014 N=78
Operating Assumptions	Assumed operating conditions (e.g. set-points, fan schedules, equipment sequencing) were different on-site from what was assumed in the ex ante calculations.	56	56	30	33
Model Calibration	Issues were found with the level or accuracy of ex ante energy model calibration.	29	22	14	9
Hours of Use	The assumed hours of use (HOU) differed from the actual HOU observed on-site.	25	23	7	10
Controls Savings Factors	Observed differences between the savings assumed for lighting controls and those sourced by the evaluation.	18	8	3	2
Measure Stacking	Interactions between measures (where multiple measures were implemented) were not appropriately accounted for.	13	4	4	2

⁹ This is due to the fact that the savings for many measures are "interactive." Take for example a lighting fixture retrofit that included lighting controls (two important measure categories in this program). If the lighting hours of operation are found to be lower for the fixtures this will also impact the savings for the controls which are dependent on the fixtures.

Executive Summary 10

-

¹⁰ Realization rates

¹¹ And for which a post-installation inspection photo of this VFD was found also running at 60 Hz

		# of Me	easures	# of Projects	
Category	Description	2013 N=120	2014 N=117	2013 N=68	2014 N=78
Fixture Counts	Observed fixture counts differed from the assumed fixture counts.	7	8	2	2
Lack of Sanity Checks	Ex ante savings estimates exceeded or represented an unreasonable majority of the utility meter consumption at the facility.	8	7	4	5
Weather Normalization	Where weather normalized, ex ante estimates were normalized to TMY2 rather than TMY3 weather data.	7	5	3	4
Missing Measure(s)	The scope of the project implemented differed from that expected per the Technical Analysis Study (TAS) and ex ante calculations.	6	5	4	4

The following is a summary of our recommendations, which are based on the findings summarized above:

- Several issues related to the ex ante energy simulation process were identified. Specifically, ADM noted that the calibration process was either not completed, was only partially complete (e.g. only executed for one fuel source when it should have been done for both), or complete but executed incorrectly. We recommend that Energy Trust and the PMC work together to develop and distribute a Modeling Guidelines Document to ensure that simulations are calibrated and executed appropriately. This document can be distributed to trade allies and energy auditing firms commonly submitting project applications.
- Several projects were reviewed for which a simple comparison between the ex ante savings estimate and facility billing histories would have immediately identified problems with the savings magnitude. ADM recommends that, to the extent resources allow, a "billing data sanity check" be added to the current application review process for custom track measures/projects. If it is intractable to perform this for a census of projects, then ADM recommends that a threshold be established such that a census of projects whose savings exceed the threshold receive the sanity check and then sample the remaining projects.
- Many of the measure approval documents lack a clear description of the assumptions, methods, and specific inputs used to generate the ex ante prescriptive savings. Where inputs were found, some were inconsistent with the RTF (floating head and suction pressure controls, for example). We expect that many of the measures exhibit the issues identified. ADM recommends that Energy Trust execute a review of the current Unit Energy Savings estimates for standard

track measures and update the assumptions such that they are consistent with current standard sources. We expect that the RTF and Energy Star will represent the most applicable sources for most measures. While a review of the approval documents for all measures would be beneficial, it would also require a significant (and potentially intractable) amount of labor. Thus, it may make more sense to target specific, "high impact", measures in this review. Because a minority of measures comprise the majority of savings for standard measures one can capture 90% of the measure category gas and electric savings by reviewing the following measure types:

- 1. Anti-sweat heater controls (Electric)
- 2. Lighting (Electric)
- 3. Food equipment (Gas and Electric)
- 4. Ceiling insulation (Electric)
- 5. Floating head pressure controls and floating suction pressure controls (Electric)
- 6. Heat pump (Electric)
- 7. Electrically commutated motors for refrigeration (Electric)
- 8. Boiler (Gas)
- 9. Radiant heat (Gas)
- The Energy Trust lighting calculator has a formula that overwrites the calculated fixture savings (column T) if the measure description results in a case in which a "cooling credit" is calculated in Column AI. The formula that is entered resulted in a significant overestimate of kWh savings for the one instance in which a "Cooling Credit" was observed. We recommend that the lighting calculator receive a thorough review and update such that the reported savings are consistent with the values calculated in the Fixture table.
- The ex ante lighting calculations assume 4,380 hours of use annually for exterior lighting.¹⁴ While this can be used as a rough approximation, the evaluation opted to use a slightly more rigorous value for Dawn to Dusk hours per year in the Portland area which is 4,112 hours. This value was calculated using Dusk and Dawn times published by the U.S. Naval Observatory.¹⁵
- As mentioned, current Energy Trust policy omits HCIF factors on lighting measures for both custom and prescriptive projects. Given the large saturation of gas heating

¹² Some measures may require additional sources. Potential sources may include the Database for Energy Efficiency Resources (DEER), the Idaho Power Technical Reference Manual (TRM), or regional studies on specific end-use consumption(s).

¹³ As observed in the 2013/2014 program population.

¹⁴ Derived by dividing the total number of hours in a year (8,760) by two.

¹⁵ http://aa.usno.navy.mil/data/docs/Dur_OneYear.php

in Oregon (and the relatively large contribution of lighting projects to the EB program), ADM found that the gas "penalty" associated with lighting efficiency improvements are non-negligible. We understand that it is unproductive to penalize the gas programs due to activities in the electric programs; however, it is also important to account for impacts (both positive and negative) across fuel sources. One way to do this is to only incorporate the impacts on all fuel sources when determining the cost effectiveness of certain measures (Total Resource Cost, Utility Cost Test, etc.). This would help programs to more thoroughly evaluate the costs/benefits of measures without penalizing gas (or electric) utility programs due to activities of the other.

■ A real-time evaluation of the program would enable evaluation staff to work with program participants as projects are implemented, making the recruiting of customers and data collection efforts significantly more efficient. Furthermore, it would also allow for more accurate characterization of baseline/existing conditions. Finally, a more proximate evaluation will help identify currently relevant recommendations. When the evaluation occurs several years following implementation, its recommendations are often based on 'stale' information as the program design and implementation adapts and evolves over time. If real-time evaluation does not fit within Energy Trust's evaluation framework, then ADM recommends that the evaluation occur within one year of its implementation.

Our key findings are discussed in more detail by measure category in Section 3.1 and a detailed listing of recommendations can be found in Section 4.

MEMO



Date: February 9, 2017 **To:** Board of Directors

From: Jay Olson, Sr. Program Manager, Commercial Sector

Sarah Castor, Evaluation Sr. Project Manager

Subject: Staff Response to the 2013-2014 Existing Buildings Program Impact Evaluation

The 2013-2014 impact evaluation for the Existing Buildings program observed that the program performed relatively consistently across both years, though not quite as well as in previous years. It provided the first look at program realization rates under the new program management contractor (PMC), ICF International. Based on changes to the program since the evaluated projects were completed, we expect to see improvements in the realization rates for program year 2015 and later.

The evaluator, ADM Associates, noted several opportunities for improvement with regard to custom track projects, mostly around methods used to model estimated savings: better calibration of models to energy usage data, changes to measure stacking order and the use of up-to-date weather data. Some of these needed improvements were also noted in the 2012 Impact Evaluation, completed in early 2015, but changes to the program were not able to be implemented in time to affect 2013 and 2014 projects. We note that the issues identified by the evaluator were less prevalent in 2014 measures/projects than in 2013, indicating that the program was already starting to make positive changes to methods by that time. ICF began comparing project savings to overall building energy use (which the evaluator called a "sanity check") for custom track projects in late 2014 and will continue this practice, as recommended. Also under ICF's management, the program maintains a guide to modeling that provides recommendations to Allied Technical Assistance Contractors (ATACs) on general modeling practices. Based on findings and recommendation in this evaluation, the program reviewed the modeling guide in late 2016 and will incorporate more detail on specific modeling requirements in its 2017 revisions.

The evaluation revealed greater variation in standard track measure performance than expected or seen in previous impact evaluations, possibly due to the relatively small number of standard track projects sampled for the evaluation. The evaluator recommended reviewing the measure approval documents and savings estimation methods for nine of the most common standard measures. After discussions with ADM about specific projects and measures, Energy Trust planning staff have identified a few measures, such as insulation and food equipment, where a detailed review of savings estimation methods or breaking the measure into specific use cases (by building hours of use or equipment size) would improve the measures, and possibly realization rates.

Staff will explore these changes in the course of regularly scheduled updates to these measures.

Lighting projects generally performed well, and in line with previous impact evaluations. The evaluator recommended reviewing the lighting calculator tool for an error in a particular cell, affecting a small number of measures. Staff will examine the lighting tool and make any necessary correction, if it has not already been made. The evaluator made a separate recommendation to revise the assumed hours of use for exterior lighting. The current assumption has been in use for many years, and program and planning staff believe it is reasonable. For now, the program will continue using the current assumption, and will look to the next evaluation for further information on whether it is appropriate or should be revised.

The last recommendation about lighting was to review current Energy Trust policy with regard to accounting for the impacts of efficient lighting on energy use for heating and cooling. While the evaluator felt that the increase in gas use caused by installing efficient lighting was significant enough to require accounting in overall program savings, Energy Trust believes that the heating and cooling interaction factors (HCIFs) used by the evaluator, originally from the Regional Technical Forum, are not precise enough to give a valid estimate of the interactive effects for our lighting measures. The HCIFs are based on regional data, have wide error bands, and the cumulative effects seen in the evaluation seem to be larger than reasonable given Oregon's relatively mild climate. In addition, making adjustments for HCIFs to estimated lighting savings would be a complicated process, if not impossible in the case of midstream lighting offerings, and take the measures from standard to custom. Energy Trust will keep in mind the possible interactive effects for lighting when making decisions about the lighting portfolio and individual measure cost-effectiveness.

As noted above, recommendations from the 2012 impact evaluation were received too late to affect 2013 and 2014 projects; however, we expect to see improvements in 2015 and 2016 projects, which will be evaluated in 2017. This will conform with the recommendation by the evaluator to conduct evaluation closer to program implementation. Going forward, Energy Trust plans to conduct impact evaluation for the Existing Buildings program one year after implementation.

PINK PAPER

DNV-GL

Impact Evaluation of Commercial Strategic Energy Management Final Report

Energy Trust of Oregon

Date: October 20, 2016





Table of contents

1 EXECUTIVE SUMMARY	1
1.1 Program and Evaluation Overview	1
1.2 Summary of Results	1
1.3 Recommendations	2
2 INTRODUCTION ERRO	R! BOOKMARK NOT DEFINED.
2.1 Study Objectives	Error! Bookmark not defined.
2.2 Background	Error! Bookmark not defined.
2.3 Program Description	Error! Bookmark not defined.
2.4 Report Organization	Error! Bookmark not defined.
3 EVALUATION ACTIVITIES ERRO	R! BOOKMARK NOT DEFINED.
3.1 Evaluation Tasks	Error! Bookmark not defined.
3.2 M&V sample design	Error! Bookmark not defined.
3.3 Model Review	Error! Bookmark not defined.
3.4 Program Staff Interviews	Error! Bookmark not defined.
3.5 Participant Interviews	Error! Bookmark not defined.
3.6 On-Site Data Collection	Error! Bookmark not defined.
4 GROSS SAVINGS METHODS ERRO	R! BOOKMARK NOT DEFINED.
4.1 Determination of Capital Project Savings	Error! Bookmark not defined.
4.2 Method 1: Program parameters approach	Error! Bookmark not defined.
4.3 Method 2: Degree Day approach	Error! Bookmark not defined.
5 EVALUATION RESULTS ERRO	R! BOOKMARK NOT DEFINED.
5.1 Site Results	Error! Bookmark not defined.
5.2 Method 1: Program Results	Error! Bookmark not defined.
5.3 Method 2: Program Results	Error! Bookmark not defined.
6 CONCLUSIONS AND RECOMMENDATIONS ERRO	R! BOOKMARK NOT DEFINED.
APPENDIX A. SAMPLING COHORT RESULTS ERRO	R! BOOKMARK NOT DEFINED.
APPENDIX B. DETAILED RESULTS ERRO	R! BOOKMARK NOT DEFINED.
APPENDIX C. PROGRAM STAFF INTERVIEW GUIDE ERRO	R! BOOKMARK NOT DEFINED.
APPENDIX D. PARTICIPANT INTERVIEW GUIDE ERRO	R! BOOKMARK NOT DEFINED.
APPENDIX E. SAMPLING MEMO ERRO	R! BOOKMARK NOT DEFINED.
APPENDIX F. MODEL DIAGNOSTICS SUMMARY MEMO ERRO	R! BOOKMARK NOT DEFINED.

DNV GL – www.dnvgl.com October 20, 2016 Page i

List of figures

Figure 1: SEM engagement timeline
List of tables
Table 1: Cumulative Energy Savings, 2013-2015, Claimed and Evaluated, by fuel and cohort
able 5: Claimed Cumulative Energy Savings, 2013-2015, by fuel and cohort Error! Bookmark not
Table 6: Table formatting key
Table 16: Site 2501, cumulative kWh savings by model and energy savings period Error! Bookmark not
lefined.
able 17: Site 2501, measured incremental kWh savings by model and associated program year Error! Bookmark not defined.
Table 18: Method 1 Total Sample Results by measurement period

DNV GL – www.dnvgl.com October 20, 2016 Page ii

1 EXECUTIVE SUMMARY

This report presents DNV GL's impact evaluation of Energy Trust of Oregon's Commercial Strategic Energy Management (SEM) offering, which is part of the Existing Buildings (EB) program. The impact evaluation is specific to the energy savings achieved by participants in 2013, 2014, and 2015. The evaluation concludes that over these three years the program achieved 51,541 MWh and 984,063 therms of energy efficiency savings by enabling and supporting improved energy management practices in commercial buildings. This report provides multiple performance metrics for the Energy Trust to consider for future program reporting.

1.1 Program and Evaluation Overview

Commercial SEM at Energy Trust is a program offering designed to deliver comprehensive energy services to large commercial customers, and focuses on behavioral and operational changes, as well as identifying capital projects. Energy consulting firms, known as Program Delivery Contractors (PDCs), hold workshops, help identify energy savings opportunities and provide training and technical support to participants over the course of a year. Energy Trust claims savings based on a top-down analysis of building-level energy use and pays performance-based incentives to participants.

Energy Trust enrolled its first group of participants in Commercial SEM in the fall of 2011. Now in its fifth year, Commercial SEM has evolved into a large portion of Energy Trust's EB program, with significant annual gas and electric savings. In 2014, SEM comprised 27% of the EB program's gas savings and 13% of its electric savings.

The primary results of this evaluation are the determination of achieved energy savings and associated realization rates. In addition, the evaluation provides recommendations to improve the accuracy of energy savings estimates and feedback from participants on how the SEM is impacting their energy consumption. The activities completed during this evaluation include interviews with program staff, PDCs, and participants; visits to participant locations; and analysis of participant consumption. The evaluation estimated overall savings achievements by extrapolating results from an analyzed stratified random sample.

1.2 Summary of Results

Table 1 shows the evaluated energy savings achieved for calendar years 2013, 2014, and 2015. These savings are net of capital project savings reported through other Energy Trust programs. The table compares the evaluated energy savings to the savings claimed to be occurring during the calendar year, irrespective of the program year of savings acquisition. The table shows that the accuracy of savings estimation has improved year over for both gas and electric fuels. Evaluators believe this is due to both improvements in savings estimation and the increase in the program population. Section **Error! Reference ource not found.** contains further details about these results.

Table 1: Cumulative Energy Savings, 2013-2015, Claimed and Evaluated, by fuel and cohort

Resource	Savings	Claimed	Evaluated	Realization	Baseline	% of Baseline
Fuel	Year	Savings	Savings	Rate	Consumption	Consumption
	2013	5,299,318	7,350,568	139%	175,140,706	4.2%
Electric (kWh)	2014	14,024,257	16,338,244	116%	318,777,912	5.1%
	2015	26,959,489	27,852,207	103%	394,271,281	7.1%
	2013	126,942	-18,452	-15%	4,001,720	-0.5%
Gas (therms)	2014	496,277	155,938	31%	7,340,910	2.1%
	2015	926,966	846,577	91%	13,051,759	6.5%

Table 2 compares the claimed and evaluated first year savings by program year. The total first-year savings in this table equals the 2015 calendar year program savings since the savings acquired in PY2012 and PY2013 still occur at the meter in calendar year 2015. The evaluation believes there are multiple reasons for the variance between claimed and evaluated first-year savings. One reason is the different time periods used to estimate these values and the inherent challenge faced by the program in estimating 12-months of future SEM savings based on a partial year of facility consumption.

Table 2: Incremental savings acquired in each program year

able 2. Incremental savings acquired in each program year					
Resource	Program	Claimed	Evaluated	Realization	
Fuel	Year	Savings	Savings	Rate	
Electric (kWh)	PY2012	5,299,318	7,350,568	139%	
	PY2013	8,724,939	8,987,675	103%	
	PY2014	12,935,232	11,513,963	89%	
	Total	26,959,489	27,852,207	103%	
	PY2012	126,942	-18,452	-15%	
Gas (therms)	PY2013	369,335	174,390	47%	
	PY2014	430,689	690,639	160%	
	Total	926,966	846,577	91%	

1.3 Recommendations

This evaluation produced the following recommendations. These recommendations are a direct result of the activities completed as part of this impact evaluation.

- DNV GL recommends changing the modeling methodology used for SEM. The majority of program savings reviewed were determined using models based on the average temperature during the program period. DNV GL recommends utilizing degree-day estimates as independent variables: heating, cooling, or both. DNV GL also recommends avoiding the use of a polynomial term in any regressions; use of linear degree-day estimates more closely aligns with the inherent energy consumption processes in commercial buildings and provides results that are more intuitive. Use of a polynomial regression term may provide a better fit to the data, but is risky when extreme conditions occur. However, the evaluation results show that the methodology used by the program did reasonably estimate savings for the program has a whole so this change is not critical. DNV GL shared this recommendation with Energy Trust during the evaluation, and Energy Trust is currently working with a separate contractor to develop a standard savings estimation methodology covering all of its SEM programs. DNV GL believes the results of this impact evaluation will influence the proposed standard estimation methodology.
- DNV GL recommends changing the savings calculation method. Program practice is to forecast the energy savings that will be achieved in the next calendar year, based on consumption during the current year. This forecast has typically occurred in the fall, with the first calculation occurring at the end of the initial engagement year. This initial forecast often relied on trends in consumption over only a few months. DNV GL recommends that Energy Trust consider calculating savings for the program year at the end of each program year, based on the consumption and weather that occurred within that year. This calculation would take about the same time as the current process, but be completed a year later. The benefit to this methodology is that it reduces and, in many cases, eliminates the risk of over- or underestimating savings. The challenge to this methodology is that the program must operate longer

without claiming a full calendar-year savings for a site. However, DNV GL recommends that the program also calculate achieved savings at the end of the initial engagement year. DNV GL observed many cases in which savings began occurring during the initial engagement year, but these savings went unclaimed.

- DNV GL recommends enhancing program tracking records. The program data we received did not include any identifiers other than a participant name and site name to connect SEM participants with participation records in Energy Trust's traditional energy efficiency programs. As a result, identifying capital projects that occurred at participant locations required substantial evaluation effort. Given the relative size of the SEM program, DNV GL recommends updating the program tracking records to include a site identifier that aligns with other program databases. This will reduce the risk that the program and future evaluations incorrectly account for savings occurring at each site.
- DNV GL recommends enhancing program tracking data. Utility meter data supporting the top down estimation of savings for each site was stored in unique Microsoft Excel files for each site. However, program tracking data did not include a comprehensive list of the utility accounts and meters associated with program sites. As a result, compiling utility meter data and associated account numbers required substantial additional evaluation efforts. DNV GL recommends that Energy Trust consider updating the program tracking data to include the account and meter numbers associated with each participating site. The program also should validate these numbers against the utility data received by Energy Trust before claiming program savings. This change will reduce the evaluation burden and risk on the SEM program.



MEMO

Date: February 28, 2017 **To:** Board of Directors

From: Kathleen Belkhayat, Commercial Sector Program Manager

Dan Rubado, Evaluation Project Manager

Subject: Staff Response to 2012-2014 Commercial SEM Impact Evaluation

The impact evaluation of Energy Trust's Commercial Strategic Energy Management program found that from 2012-2014, the program realized 104 percent of its claimed electric savings and 91 percent of its claimed gas savings. Although the realization rates varied over time as the program changed and refined its energy modelling and forecasting methods, the overall program realization rates are very good. Of note, gas realization rates were very low in the first two years of the program, but appear to have improved over time. The program has directly addressed several of the factors that likely contributed to these low initial realization rates. On average, participating SEM sites achieved evaluated electric savings of 7.1 percent and gas savings of 6.5 percent. In general, participants were highly engaged and continued to hold energy team meetings, track energy use, and prioritize energy projects after the initial SEM engagement ended. This evaluation was not able to draw any conclusions about the persistence of savings.

The evaluator provided valuable feedback on the program's modelling and forecasting methods. These recommendations influenced and enhanced the SEM modelling guidelines that Energy Trust was developing at the same time. These guidelines have now been finalized and are being implemented with 2017 SEM participants. They include the evaluator's recommendations for establishing the baseline period and selecting model parameters. Energy Trust significantly changed the way the program forecasts and claims savings in 2016 and this was strongly reinforced as a good decision in the evaluator's recommendations.

The evaluator noted that some SEM sites were not individually recorded in Energy Trust's project tracking database. The evaluator recommended recording each individual site and its identifier in the database to improve project tracking and to simplify the process of connecting SEM sites to capital efficiency projects. This change was made prior to the evaluation, but the decision to do so was reinforced by the evaluator.

Commercial SEM is becoming a mature program in Oregon with 8 cohorts completed to date, including about 60 participants and around 500 buildings. Two more cohorts are getting started in 2017. One of the largest administrative changes to the program is the Existing Buildings PMC taking over management of SEM and the implementation contractors in 2017. In addition, the SEM continuation cohorts will be combined by geographic region, and may include first year participants. This will provide some delivery efficiencies, make it easier for participants to connect, and provide them with more customized topic areas. The next SEM impact evaluation will be conducted as part of the Existing Buildings program impact evaluation. A single evaluation will allow Energy Trust to better analyze the interactions between capital project and SEM energy savings.

Tab 5



Notes on February 2017 Financial Statements

March 23, 2017

Revenue

Revenues remain below budget because the January budget figures for PGE and NWN were based on rate increases that didn't take effect until a month later. February revenue receipts are much closer to budgeted amounts.

	YTD Actual	YTD Budget	YTD Var	YTD %	PY
PGE	17,540,350	20,818,082	(3,277,732)	-16%	15,975,394
PAC	12,863,616	11,089,757	1,773,858	16%	9,941,310
NWN	5,617,527	7,914,397	(2,296,870)	-29%	4,361,125
CNG	893,092	674,473	218,619	32%	455,642
Avista	301,068	241,152	59,916	25%	
Investment Income	46,615	60,000	(13,385)	-22%	143,840
Total	37,262,267	40,797,861	(3,535,593)	-9%	30,877,310

Reserves

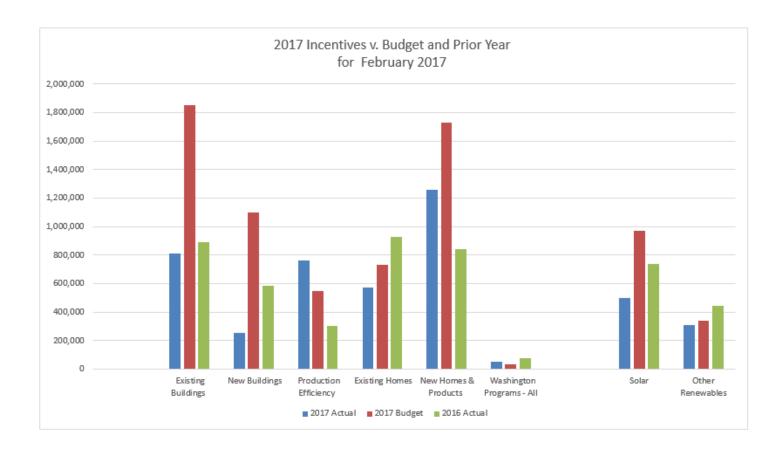
As is typical at this time of year, reserves begin building again after the year end low. February reserves are \$12 million more than January reserves.

Reserves	F 0100117		
	2/28/17	Actual 12/31/16	% Change
	<u>Amount</u>	<u>Amount</u>	from Year End
PGE	14,899,440	6,507,279	129%
PacifiCorp	7,174,214	644,839	1013%
NW Natural	5,453,847	1,485,656	267%
Cascade	341,686	0	
Avista	297,027	68,620	333%
NWN Industrial	773,205	1,028,150	-25%
NWN Washington	91,279	283,171	-68%
PGE Renewables	8,660,557	7,543,333	15%
PAC Renewables	7,871,108	7,376,941	7%
Program Reserves	45,562,363	24,937,989	83%
Contingency Reserve	5,000,000	5,000,000	0%
Contingency Available	4,318,424	3,935,314	10%
Total	54,880,777	33,873,295	62%

Expenses

Year-to-date expenses are \$16.3 million, \$4.6 million below budget. Total expenses are \$148K higher than last year. The slow start is typical.

Incentives remain low for February. Year-to-date we have spent \$2.2 million less than budgeted, but only \$300K less than last year.

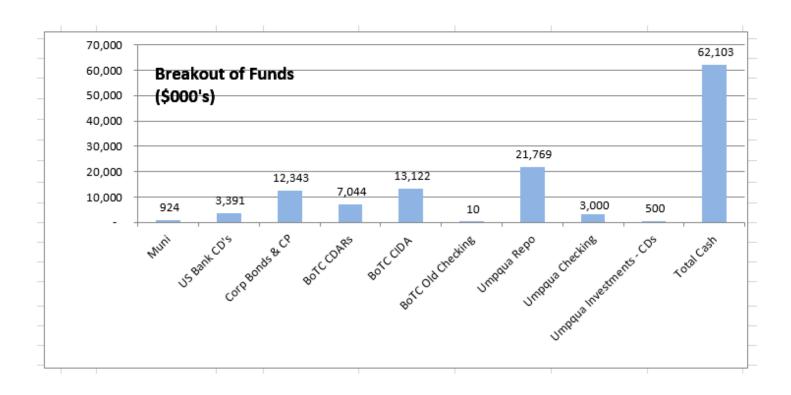


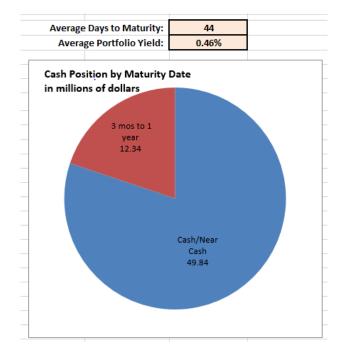
Incentives thru February 2017	Total Incentives Year-to-Date 2017				
meenaves and residuly 2017	<u>Actual</u>	<u>Budget</u>	<u>Variance</u>	Var %	
Existing Buildings	810,445	1,851,139	1,040,695	56%	
New Buildings	256,435	1,098,026	841,590	77%	
Production Efficiency	762,228	548,016	(214,212)	-39%	
Existing Homes	571,333	735,056	163,723	22%	
New Homes & Products	1,258,428	1,729,756	471,328	27%	
Washington Programs - All	50,921	34,026	(16,895)	-50%	
Solar	496,870	970,867	473,997	49%	
Other Renewables	308,777	342,576	33,799	10%	
Total Incentives	4,515,436	7,309,461	2,794,025	38%	
Energy Efficiency Only	3,709,789	5,996,019	2,286,230	38%	

	Total Incentives				
February 2017 vs. February 2016	Year-to-Year Comparison				
	Current Year	Prior Year	<u>Variance</u>	<u>Var %</u>	
Existing Buildings	810,445	890,086	79,641	9%	
New Buildings	256,435	582,164	325,729	56%	
Production Efficiency	762,228	304,053	(458,175)	-151%	
Existing Homes	571,333	929,610	358,277	39%	
New Homes & Products	1,258,428	841,957	(416,470)	-49%	
Washington Programs - All	50,921	78,502	27,581	35%	
Solar	496,870	738,563	241,693	33%	
Other Renewables	308,777	446,959	138,182	31%	
Total Incentives	4,515,436	4,811,894	296,454	6%	
Energy Efficiency Only	3,709,789	3,626,372	(83,417)	-2%	

Investment Status

The graphs below show the type of investments we hold and the locations where our funds are held. Because the next few months are relatively stable in terms of inflow and outflow, we are beginning to invest a little more in very short term bonds and CDARs. Our investment rate should improve slightly over the next few months.





Page 4 of 4

PINK PAPER

Energy Trust of Oregon BALANCE SHEET February 28, 2017 (Unaudited)

	Feb 2017	Jan 2017	Dec 2016	Feb 2016	Change from one month ago	Change from Beg. of Year	Change from one year ago
Current Assets							
Cash & Cash Equivalents	37,901,164	31,664,245	44,471,035	27,288,108	6,239,614	(6,569,870)	10,613,056
Investments	24,094,792	20,342,830	19,350,134	60,088,398	3,749,267	4,744,658	(35,993,606)
Receivables	129,460	91,360	86,058	360,959	38,100	43,402	(231,499)
Prepaid Expenses	601,011	262,960	280,347	673,237	338,051	320,664	(72,226)
Advances to Vendors	729,142	1,389,634	2,050,126	796,747	(660,492)	(1,320,984)	(67,605)
Total Current Assets	63,455,569	53,751,030	66,237,700	89,207,449	9,704,539	(2,782,131)	(25,751,880)
Fixed Assets							
Computer Hardware and Software	3,696,232	3,696,232	3,696,232	3,509,829	-	-	186,403
Software Development in Progress	-	-	-	150,314	-	-	(150,314)
Leasehold Improvements	326,158	318,964	318,964	318,964	7,194	7,194	7,194
Office Equipment and Furniture	716,264	716,876	716,876	701,604	(612)	(612)	14,660
Total Fixed Assets	4,738,654	4,732,072	4,732,072	4,680,711	6,582	6,582	57,943
Less Depreciation	(3,739,488)	(3,669,588)	(3,598,867)	(2,824,273)	(69,900)	(140,621)	(915,215)
Net Fixed Assets	999,166	1,062,483	1,133,205	1,856,438	(63,318)	(134,039)	(857,272)
Other Assets							
Deposits	237,314	223,339	223,339	132,340	13,975	13,975	104,974
Deferred Compensation Asset	857,091	856,482	849,522	751,600	610	7,569	105,491
Note Receivable, net of allowance	263,669	263,669	260,891	85,609	0	2,779	178,061
Total Other Assets	1,358,075	1,343,490	1,333,752	969,549	14,585	24,323	388,526
Total Assets	65,812,809	56,157,003	68,704,656	92,033,436	9,655,806	(2,891,847)	(26,220,627)
Current Liabilities							
Accounts Payable and Accruals	8,607,097	10,993,771	32,588,773	7,180,128	(2,386,674)	(23,981,677)	1,426,969
Salaries, Taxes, & Benefits Payable	874,922	835,390	827,526	789,352	39,532	47,396	85,570
Total Current Liabilities	9,482,019	11,829,161	33,416,299	7,969,479	(2,347,142)	(23,934,281)	1,512,539
Long Term Liabilities							
Deferred Rent	587,253	573,253	559,253	305,158	14,000	28,000	282,095
Deferred Compensation Payable	860,641	857,232	853,072	751,600	3,410	7,569	109,041
Other Long-Term Liabilities	2,110	2,110	2,110	3,990	-	-	(1,880)
Total Long-Term Liabilities	1,450,004	1,432,595	1,414,435	1,060,748	17,409	35,569	389,257
Total Liabilities	10,932,023	13,261,756	34,830,735	9,030,227	(2,329,733)	(23,898,712)	1,901,796
Net Assets							
Unrestricted Net Assets	54,880,787	42,895,248	33,873,922	83,003,209	11,985,539	21,006,865	(28,122,423)
Total Net Assets	54,880,787	42,895,248	33,873,922	83,003,209	11,985,539	21,006,865	(28,122,423)
Total Liabilities and Net Assets	65,812,809	56,157,003					(26,220,627)

Energy Trust of Oregon Cash Flow Statement-Indirect Method Monthly 2017

	<u>January</u>	<u>February</u>	Year to Date
Operating Activities:			
Revenue less Expenses	\$ 9,021,323 \$	11,985,541	\$ 21,006,864
Non-cash items: Depreciation Change in Reserve on Long Term Note Loss on disposal of assets	70,722 -	70,512	141,234 - -
Receivables Interest Receivable Advances to Vendors Prepaid expenses and other costs Accounts payable Payroll and related accruals Deferred rent and other	9 (5,311) 660,492 17,387 (21,595,003) 12,024 4,262	(38,100) 660,492 (338,051) (2,386,675) 42,941 (585)	9 (43,411) 1,320,984 (320,664) (23,981,678) 54,965 3,677
Cash rec'd from / (used in) Operating Activities	(11,814,095)	9,996,075	(1,818,020)
Investing Activities: Investment Activity (1) (Acquisition)/Disposal of Capital Assets Cash rec'd from / (used in) Investing Activities	(992,696) - (992,696)	(3,751,962) (7,194) (3,759,156)	(4,744,658) (7,194) (4,751,852)
Cash at beginning of Period Increase/(Decrease) in Cash	44,471,035 (12,806,791)	31,664,245 6,236,919	44,471,035 (6,569,872)
Cash at end of period	\$ 31,664,245 \$	37,901,164	\$ 37,901,164

⁽¹⁾ As investments mature, they are rolled into the Repo account.

Investments that are made during the month reduce available cash.

	Actu	al					Adjusted E	Budget				
	January	February	March	April	Мау	June	July	August	September	October	November	December
Cash In:												
Public purpose and Incr funding	15,758,534	21,457,118	16,454,548	15,215,663	13,764,225	12,864,316	16,966,052	14,218,018	14,400,156	19,185,511	14,618,793	17,814,067
Investment Income	17,648	(14,444)	19,557	13,038	13,038	13,038	6,519	6,519	6,519	6,519	6,519	6,519
From Other Sources	9	0										
Total cash in	15,776,191	21,442,674	16,474,105	15,228,701	13,777,263	12,877,354	16,972,571	14,224,537	14,406,675	19,192,030	14,625,312	17,820,586
Cash Out:	(27,590,279)	(11,453,791)	(17,708,630)	(12,005,935)	(16,743,092)	(18,584,328)	(20,230,164)	(15,009,711)	(17,271,321)	(15,313,350)	(16,087,450)	(18,681,519)
Net cash flow for the month	(11,814,088)	9,988,883	(1,234,525)	3,222,766	(2,965,829)	(5,706,974)	(3,257,593)	(785,174)	(2,864,646)	3,878,680	(1,462,138)	(860,933)
Cash Flow from/to Investments	(992,696)	(3,751,962)	-	-	-	-	-	-	-	-	-	-
Beginning Balance: Cash & MM	44,471,035	31,664,245	37,901,164	36,666,641	39,889,407	36,923,578	31,216,604	27,959,011	27,173,837	24,309,192	35,113,921	37,584,371
Ending cash & MM	31,664,245	37,901,164	36,666,641	39,889,407	36,923,578	31,216,604	27,959,011	27,173,837	24,309,192	28,187,872	37,584,371	36,723,438
Future Commitments	0.700.000			- 400 000			4=00000	4=0000	4 = 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			
Renewable Incentives	6,700,000	5,800,000	5,400,000	5,100,000	4,900,000	4,900,000	4,700,000	4,700,000	4,700,000	4,600,000	4,600,000	4,600,000
Efficiency Incentives	69,500,000	69,100,000	63,700,000	70,900,000	71,300,000	68,500,000	68,700,000	84,900,000	84,900,000	84,900,000	84,900,000	84,900,000
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	81,200,000	79,900,000	74,100,000	84,300,000	81,200,000	78,400,000	78,400,000	94,600,000	94,600,000	94,500,000	94,500,000	94,500,000

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

Dedicated funds adjustment:
Committed funds adjustment:
Cash reserve:
Escrow:

reduction in available cash for commitments to Renewable program projects with board approval, or when board approval not required, with signed agreements reduction in available cash for commitments to Efficiency program projects with signed agreements reduction in available cash to cover cashflow variability and winter revenue risk

dedicated funds set aside in separate bank accounts

						2019 P2 P	udgot					
						2018 R2 B	uaget					
	January	February	March	April	Мау	June	July	August	September 5	October	November	December
Cash In:												
Public purpose and Incr funding	19,000,000	20,400,000	17,800,000	17,700,000	13,900,000	13,000,000	15,800,000	14,400,000	15,700,000	17,200,000	14,800,000	18,100,000
Investment Income	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
From Other Sources												
Total cash in	19,010,000	20,410,000	17,810,000	17,710,000	13,910,000	13,010,000	15,810,000	14,410,000	15,710,000	17,210,000	14,810,000	18,110,000
Cash Out:	(32,300,000)	(11,000,000)	(13,300,000)	(12,800,000)	(13,000,000)	(17,000,000)	(14,100,000)	(13,500,000)	(16,700,000)	(16,600,000)	(18,200,000)	(20,400,000
Net cash flow for the month	(13,290,000)	9,410,000	4,510,000	4,910,000	910,000	(3,990,000)	1,710,000	910,000	(990,000)	610,000	(3,390,000)	(2,290,000
Cash Flow from/to Investments	l - I	-	-	-	-	-	-	-	-	-	-	-
Beginning Balance: Cash & MM	36,723,000	23,433,000	32,843,000	37,353,000	42,263,000	43,173,000	39,183,000	40,893,000	41,803,000	40,813,000	41,423,000	38,033,000
Ending cash & MM	23,433,000	32,843,000	37,353,000	42,263,000	43,173,000	39,183,000	40,893,000	41,803,000	40,813,000	41,423,000	38,033,000	35,743,000
Future Commitments												
Renewable Incentives	4,600,000	4,600,000	4,600,000	4,600,000	4,600,000	4,600,000	4,600,000	4,600,000	4,600,000	4,600,000	4,600,000	4,600,000
Efficiency Incentives	84,900,000	84,900,000	84,900,000	84,900,000	84,900,000	84,900,000	84,900,000	84,900,000	84,900,000	84,900,000	84,900,000	84,900,000
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	94,500,000	94,500,000	94,500,000	94,500,000	94,500,000	94,500,000	94,500,000	94,500,000	94,500,000	94,500,000	94,500,000	94,500,000

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

Dedicated funds adjustment:
Committed funds adjustment:
Cash reserve:

reduction in available cash for commitments to Renewable program projects with board approval, or when board approval not required, with signed agreements reduction in available cash for commitments to Efficiency program projects with signed agreements reduction in available cash to cover cashflow variability and winter revenue risk

dedicated funds set aside in separate bank accounts

Energy Trust of Oregon Income Statement - Actual and YTD Budget Comparison For the Two Months Ending February 28, 2017 (Unaudited)

		Februa	ary			YTE		
	Actual	Budget	Budget Variance	Variance %	Actual	Budget	Budget Variance	Variance %
<u>REVENUES</u>								
Public Purpose Funds-PGE	4,117,821	3,892,814	225,008	6%	7,595,745	7,636,658	(40,912)	-1%
Public Purpose Funds-PacifiCorp	3,265,591	2,745,104	520,487	19%	5,927,238	5,373,266	553,973	10%
Public Purpose Funds-NW Natural	3,622,283	3,230,353	391,930	12%	5,617,527	5,649,701	(32,174)	-1%
Public Purpose Funds-Cascade	466,234	211,708	254,525	120%	893,092	674,473	218,619	32%
Public Purpose Funds-Avista	129,242	75,694	53,548	71%	301,068	241,152	59,916	25%
Total Public Purpose Funds	11,601,171	10,155,674	1,445,497	14%	20,334,671	19,575,249	759,422	4%
Incremental Funds - PGE	5,963,905	6,799,546	(835,641)	-12%	9,944,604	13,181,424	(3,236,820)	-25%
Incremental Funds - PacifiCorp	3,892,043	2,924,686	967,357	33%	6,936,377	5,716,491	1,219,886	21%
NW Natural - Industrial DSM		1720596	-1720596			1720596	-1720596	
NW Natural - Washington		544100	-544100			544100	-544100	
Revenue from Investments	23,656	30,000	(6,344)	-21%	46,615	60,000	(13,385)	-22%
TOTAL REVENUE	21,480,775	22,174,601	(693,827)	-3%	37,262,267	40,797,861	(3,535,593)	-9%
<u>EXPENSES</u>								
Program Subcontracts	4,474,509	4,668,735	194,226	4%	8,516,694	9,316,407	799,714	9%
Incentives	3,424,958	5,227,028	1,802,070	34%	4,515,436	7,309,461	2,794,025	38%
Salaries and Related Expenses	1,029,592	1,140,955	111,363	10%	2,067,801	2,281,910	214,109	9%
Professional Services	326,937	735,439	408,502	56%	690,512	1,470,878	780,366	53%
Supplies	2,005	4,050	2,045	51%	4,401	8,100	3,699	46%
Telephone	6,977	5,825	(1,152)	-20%	12,340	11,650	(690)	-6%
Postage and Shipping Expenses	786	1,500	714	48%	2,358	3,000	642	21%
Occupancy Expenses	76,992	79,203	2,211	3%	152,813	158,406	5,592	4%
Noncapitalized Equip. & Depr.	104,075	105,610	1,535	1%	193,283	209,042	15,760	8%
Call Center	12,240	16,667	4,427	27%	22,256	33,333	11,078	33%
Printing and Publications	617.88	1,171	553	47%	617.88	2,342	1,724	74%
Travel	9,421	16,308	6,887	42%	18,129	32,617	14,488	44%
Conference, Training & Mtng Exp	9,853	14,537	4,685	32%	17,094	29,075	11,981	41%
Interest Expense and Bank Fees	178.16	958	780	81%	178.16	1,917	1,739	91%
Insurance	8,607	9,167	560	6%	17,214	18,333	1,119	6%
Miscellaneous Expenses	140	250	110	44%	3,674	500	(3,174)	-635%
Dues, Licenses and Fees	7,348	9,450	2,102	22%	20,602	18,900	(1,702)	-9%
TOTAL EXPENSES	9,495,236	12,036,853	2,541,617	21%	16,255,402	20,905,871	4,650,469	22%
TOTAL REVENUE LESS EXPENSES	11,985,539	10,137,748	1,847,790	18%	21,006,865	19,891,990	1,114,875	6%
								

Energy Trust of Oregon Income Statement - Actual and Prior Yr Comparison For the Two Months Ending February 28, 2017 (Unaudited)

		Febru				YTD		
	Actual	Actual Prior Year	Prior Year Variance	Variance %	Actual	Actual Prior Year	Prior Year Variance	Variance %
REVENUES								
Public Purpose Funds-PGE	4,117,821	3,761,609	356,213	9%	7,595,745	7,379,277	216,469	3%
Public Purpose Funds-PacifiCorp	3,265,591	2,837,479	428,112	15%	5,927,238	5,554,119	373,119	7%
Public Purpose Funds-NW Natural	3,622,283	2,493,578	1,128,705	45%	5,617,527	4,361,125	1,256,402	29%
Public Purpose Funds-Cascade	466,234	143,020	323,214	226%	893,092	455,642	437,450	96%
Public Purpose Funds-Avista	129,242		129,242		301,068		301,068	
Total Public Purpose Funds	11,601,171	9,235,686	2,365,485	26%	20,334,671	17,750,162	2,584,508	15%
Incremental Funds - PGE	5,963,905	4,434,247	1,529,658	34%	9,944,604	8,596,117	1,348,487	16%
Incremental Funds - PacifiCorp	3,892,043	2,244,586	1,647,457	73%	6,936,377	4,387,191	2,549,186	58%
NW Natural - Industrial DSM								
NW Natural - Washington								
Revenue from Investments	23,656	47,550	(23,894)	-50%	46,615	143,840	(97,225)	-68%
TOTAL REVENUE	21,480,775	15,962,070	5,518,705	35%	37,262,267	30,877,310	6,384,957	21%
<u>EXPENSES</u>								
Program Subcontracts	4,474,509	4,014,146	(460,363)	-11%	8,516,694	8,033,507	(483,187)	-6%
Incentives	3,424,958	3,867,139	442,181	11%	4,515,436	4,811,894	296,458	6%
Salaries and Related Expenses	1,029,592	963,352	(66,240)	-7%	2,067,801	1,920,631	(147,170)	-8%
Professional Services	326,937	566,012	239,076	42%	690,512	907,855	217,343	24%
Supplies	2,005	2,967	962	32%	4,401	6,508	2,108	32%
Telephone	6,977	8,464	1,487	18%	12,340	9,392	(2,949)	-31%
Postage and Shipping Expenses	786	675	(111)	-16%	2,358	1,722	(636)	-37%
Occupancy Expenses	76,992	53,021	(23,972)	-45%	152,813	105,928	(46,885)	-44%
Noncapitalized Equip. & Depr.	104,075	95,319	(8,756)	-9%	193,283	189,015	(4,267)	-2%
Call Center	12,240	14,322	2,082	15%	22,256	29,603	7,348	25%
Printing and Publications	617.88	582	(36)	-6%	617.88	853	235	28%
Travel	9,421	10,883	1,462	13%	18,129	18,352	223	1%
Conference, Training & Mtng Exp	9,853	11,242	1,389	12%	17,094	26,500	9,406	35%
Interest Expense and Bank Fees	178.16	25	(153)	-613%	178.16	121	(57)	-47%
Insurance	8,607	8,486	(121)	-1%	17,214	16,969	(245)	-1%
Miscellaneous Expenses	140	19,299	19,159	99%	3,674	19,479	15,806	81%
Dues, Licenses and Fees	7,348	2,985	(4,363)	-146%	20,602	9,067	(11,535)	-127%
TOTAL EXPENSES	9,495,236	9,638,919	143,683	1%	16,255,402	16,107,397	(148,005)	-1%
TOTAL REVENUE LESS EXPENSES	11,985,539	6,323,151	5,662,388	90%	21,006,865	14,769,913	6,236,951	42%

Energy Trust of Oregon Statement of Functional Expenses For the Two Months Ending February 28, 2017 (Unaudited)

	Energy Efficiency	Renewable Energy	Total Program Expenses	Management & General	Communications & Customer Service	Total Admin Expenses	Total	Budget	Variance	% Var
Program Expenses										
Incentives	3,709,789	805,647	4,515,436				4,515,436	7,309,461	2,794,025	38%
Program Management & Delivery	8,445,177	71,517	8,516,694				8,516,694	9,316,407	799,713	9%
Payroll and Related Expenses	550,774	175,016	725,790	392,625	267,003	659,628	1,385,418	1,523,766	138,348	9%
Outsourced Services	355,591	130,535	486,126	49,041	94,952	143,993	630,119	1,403,452	773,333	55%
Planning and Evaluation	384,940	12,795	397,735	284		284	398,019	462,433	64,414	14%
Customer Service Management	57,604	21,970	79,573				79,573	91,857	12,284	13%
Trade Allies Network	44,460	3,026	47,486				47,486	65,602	18,116	28%
Total Program Expenses	13,548,335	1,220,505	14,768,840	441,950	361,955	803,905	15,572,746	20,172,979	4,600,233	23%
Program Support Costs										
Supplies	1,226	393	1,619	730	662	1,393	3,011	5,922	2,911	49%
Postage and Shipping Expenses	321	103	424	1,421	150	1,570	1,994	2,116	122	6%
Telephone	481	154	635	275	224	499	1,134	1,396	262	19%
Printing and Publications	32	10	42	525	15	540	582	1,843	1,261	68%
Occupancy Expenses	43,760	14,026	57,787	25,002	20,430	45,432	103,218	107,693	4,475	4%
Insurance	4,930	1,580	6,510	2,816	2,301	5,118	11,627	12,464	837	7%
Equipment	397	25,430	25,827	227	185	412	26,239	21,023	(5,216)	-25%
Travel	3,571	1,698	5,269	4,598	5,268	9,866	15,135	29,117	13,982	48%
Meetings, Trainings & Conferences	2,143	3,872	6,015	5,722	1,301	7,023	13,038	17,675	4,637	26%
Interest Expense and Bank Fees				178		178	178	1,917	1,739	91%
Depreciation & Amortization	3,397	1,089	4,486	1,941	1,586	3,527	8,012	10,006	1,994	20%
Dues, Licenses and Fees	5,508	3,990	9,498	2,909	7,092	10,001	19,499	14,250	(5,249)	-37%
Miscellaneous Expenses	3,381	38	3,419	67	55	122	3,541	340	(3,201)	-941%
IT Services	314,504	41,488	355,992	70,754	48,702	119,456	475,448	507,129	31,681	6%
Total Program Support Costs	383,649	93,871	477,520	117,164	87,972	205,137	682,657	732,892	50,235	7%
TOTAL EXPENSES	13,931,984	1,314,376	15,246,360	559,114	449,927	1,009,041	16,255,402	20,905,871	4,650,469	22%

OPUC Measure vs. 8%

4.0%

Program Support Costs
Total Administrative Expenses
Total Support and Administrative
Total Utility Revenue (without Int Income)

477,520
1,009,041
1,486,561
divided by
37,215,652

OPUC % 4.0%

ENERGY TRUST OF OREGON Summary of All Units For the Two Months Ending February 28, 2017

ENERGY EFFICIENCY

	PGE	PacifiCorp	Total	NWN Industrial	NW Natural	Cascade	Avista	Oregon Total	NWN WA	ETO Total
REVENUES										
Public Purpose Funding	5,892,474	4,617,750	10,510,224	-	5,617,527	893,092	301,068	17,321,911	-	17,321,911
Incremental Funding	9,944,604	6,936,377	16,880,981					16,880,981		16,880,981
Contributions										
Revenue from Investments										
TOTAL PROGRAM REVENUE	15,837,078	11,554,127	27,391,205	-	5,617,527	893,092	301,068	34,202,892	-	34,202,892
EXPENSES										
Program Management (Note 3)	505,225	320,737	825,960	27,713	99,220	13,376	6,871	973,140	17,280	990,420
Program Delivery	3,951,347	2,511,890	6,463,235	114,854	703,213	113,974	34,762	7,430,037	87,286	7,517,323
Incentives	1,691,784	1,326,119	3,017,902	75,975	499,965	52,687	12,340	3,658,869	50,921	3,709,790
Program Eval & Planning Svcs.	266,445	172,046	438,490	9,029	62,207	6,535	2,854	519,114	8,241	527,355
Program Marketing/Outreach	293,293	193,158	486,451	2,422	87,243	7,715	6,623	590,456	3,546	594,002
Program Legal Services	-	-	-	_,	-		-	-	-	-
Program Quality Assurance	_	_	_	_	_	_	_	_	_	-
Outsourced Services	54,541	36,480	91,021	3,509	10,982	1,387	485	107,385	0	107,385
Trade Allies & Cust. Svc. Mgmt.	43,165	31,513	74,678	574	20,184	1,365	1,070	97,871	4,193	102,064
IT Services	142,928	98,134	241,061	3,529	55,774	4,153	2,759	307,278	7,225	314,503
Other Program Expenses - all	34,050	22,767	56,816	1,515	8,166	969	387	67,856	1,289	69,145
TOTAL PROGRAM EXPENSES	6,982,778	4,712,844	11,695,614	239,120	1,546,954	202,161	68,151	13,752,006	179,981	13,931,984
ADMINISTRATIVE COSTS										
ADMINISTRATIVE COSTS	050.074	470.000	100 001	0.700	50 700	-	0.400	504.040	0.000	540.040
Management & General (Notes 1 & 2)	256,074	172,830	428,901	8,768	56,730	7,414	2,499	504,313	6,600	510,913
Communications & Customer Svc (Notes 1	206,065	139,078	345,142	7,057	45,652	5,966	2,011	405,828	5,311	411,139
Total Administrative Costs	462,139	311,908	774,043	15,825	102,382	13,380	4,510	910,141	11,911	922,052
TOTAL PROG & ADMIN EXPENSES	7,444,917	5,024,752	12,469,657	254,945	1,649,336	215,541	72,661	14,662,147	191,892	14,854,039
TOTAL REVENUE LESS EXPENSES	8,392,161	6,529,375	14,921,548	(254,945)	3,968,191	677,551	228,407	19,540,745	(191,892)	19,348,853
-										
NET ASSETS - RESERVES										
Cumulative Carryover at 12/31/16	6,507,279	644,839	7,152,117	1,028,150	1,485,656	-	68,620	9,734,531	283,171	10,017,701
Net Assets Reattributed from prior year						(335,865)		(335,865)		(335,865)
Change in net assets this year	8,392,161	6,529,375	14,921,548	(254,945)	3,968,191	677,551	228,407	19,540,745	(191,892)	19,348,853
Ending Net Assets - Reserves	14,899,440	7,174,214	22,073,665	773,205	5,453,847	341,686	297,027	28,939,411	91,279	29,030,689
Ending Reserve by Category										
Program Reserves (Efficiency and Renewabl	14,899,440	7,174,214	22,073,665	773,205	5,453,847	341,686	297,027	28,939,411	91,279	29,030,689
Operational Contingency Pool	17,000,440	1,114,214	22,073,003	113,203	5,755,047	J+1,000	231,021	20,333,411	31,273	29,000,009
Emergency Contingency Pool										
TOTAL NET ASSETS CUMULATIVE	14,899,440	7,174,214	22,073,665	773,205	5,453,847	341,686	297,027	28,939,411	91,279	29,030,689
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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.

ENERGY TRUST OF OREGON Summary of All Units For the Two Months Ending February 28, 2017

	REN	EWABLE EN	ERGY		TOTAL			
_	PGE	PacifiCorp	Total	Other	All Programs	Approved budget	Change	% Change
REVENUES								
Public Purpose Funding	1,703,271	1,309,488	3,012,760	_	20,334,671	19,575,249	759,422	4%
Incremental Funding	1,703,271	1,309,400	3,012,700	_	16,880,981	21,162,611	(4,281,630)	
Contributions					10,000,001	21,102,011	(4,201,000)	2070
Revenue from Investments				46,615	46,615	60,000	(13,385)	-22%
TOTAL PROGRAM REVENUE	1,703,271	1,309,488	3,012,760	46,615	37,262,267	40,797,861	(3,535,594)	-9%
EXPENSES	00.074	100 = 11	4=0.000		4.40=.400	4 000 404	440.000	00/
Program Management (Note 3)	69,971	106,711	176,682	-	1,167,102	1,280,131	113,029	9%
Program Delivery	42,720	27,130	69,850	-	7,587,173	8,182,859	595,686	7%
Incentives	303,209	502,438	805,647	-	4,515,437	7,309,463	2,794,026	38%
Program Eval & Planning Svcs.	4,113	8,682	12,795	-	540,150	829,156	289,006	35%
Program Marketing/Outreach Program Legal Services	41,228	26,812	68,039	-	662,041	969,759 3,334	307,718 3,334	32% 100%
Program Quality Assurance	-	-	<u>-</u>	_	_	14,167	3,33 4 14,167	100%
Outsourced Services	30,084	32,412	62,496	_	169,881	329,280	159,399	48%
Trade Allies & Cust. Svc. Mgmt.	15,102	9,894	24,996	_	127,060	155,792	28,732	18%
IT Services	15,168	26,321	41,488	_	355,991	369,959	13,968	4%
Other Program Expenses - all	28,074	24,310	52,383	_	121,528	127,571	6,043	5%
TOTAL PROGRAM EXPENSES	549,669	764,710	1,314,376	-	15,246,363	19,571,471	4,325,108	22%
		-						
ADMINISTRATIVE COSTS								
Management & General (Notes 1 & 2)	20,157	28,044	48,201	-	559,114	689,947	130,832	19%
Communications & Customer Svc (Notes 1	16,221	22,567	38,788	-	449,927	644,456	194,529	30%
Total Administrative Costs	36,378	50,611	86,989	-	1,009,041	1,334,402	325,361	24%
TOTAL PROG & ADMIN EXPENSES	586,047	815,321	1,401,365	-	16,255,402	20,905,871	4,650,469	22%
TOTAL REVENUE LESS EXPENSES	1,117,224	494,167	1,611,395	46,615	21,006,865	19,891,990	(1,114,875)	6%
								_
NET ASSETS - RESERVES	==40.000	- 0-0 0 4 4	44.000.070	0.00=.044	00.070.004	00 000 005	4 = 44 000	=0.4
Cumulative Carryover at 12/31/16	7,543,333	7,376,941	14,920,276	8,935,944	33,873,921	32,329,685	1,544,236	5%
Net Assets Reattributed from prior year	4 4 4 7 00 4	40.4.407	4 044 005	335,865	-	40.004.000	4 4 4 4 0 7 5	00/
Change in net assets this year	1,117,224	494,167	1,611,395	46,615	21,006,865	19,891,990	1,114,875	6%
Ending Net Assets - Reserves	8,660,557	7,871,108	16,531,671	9,318,424	54,880,787	52,221,675	(2,659,112)	5%
Ending Reserve by Category								
Program Reserves (Efficiency and Renewabl	8,660,557	7,871,108	16,531,671		54,880,787	52,221,675	(2,659,112)	
Operational Contingency Pool	2,220,001	.,,		4,318,424	2 .,200,. 0.	,	(=,000,2)	
Emergency Contingency Pool				5,000,000				
TOTAL NET ASSETS CUMULATIVE	8,660,557	7,871,108	16,531,671	9,318,424	54,880,787	52,221,675	(2,659,112)	5%
=								

Energy Trust of Oregon Program Expense by Service Territory For the Two Months Ending February 28, 2017 (Unaudited)

	PGE	Pacific Power	Subtotal Elec.	NWN Industrial	NW Natural Gas	Cascade	Avista	Subtotal Gas	Oregon Total	NWN WA	ETO Total	YTD Budget	Variance	% Var
Energy Efficiency														
Commercial														
Existing Buildings	1,938,083	1,575,049	3,513,132	59,557	315,320	85,729	10,198	470,804	3,983,936	64,896	4,048,832	6,070,900	2,022,068	33%
New Buildings	879,172	361,498	1,240,670	12,306	154,400	22,328	2,528	191,562	1,432,232	•	1,432,232	2,548,550	1,116,318	44%
NEEA	289,178	200,954	490,131		24,232	2,595		26,827	516,959	2,728	519,687	378,693	(140,994)	-37%
Total Commercial	3,106,433	2,137,501	5,243,934	71,863	493,952	110,653	12,726	689,193	5,933,127	67,624	6,000,751	8,998,143	2,997,392	33%
Industrial														
Production Efficiency	1,791,152	1,100,190	2,891,342	183,084	61,301	32,269	641	277,295	3,168,637		3,168,637	2,974,804	(193,833)	-7%
NEEA	15,568	10,820	26,388						26,388		26,388	44,388	18,000	41%
Total Industrial	1,806,721	1,111,009	2,917,730	183,084	61,301	32,269	641	277,295	3,195,025	-	3,195,025	3,019,192	(175,833)	-6%
Residential														
Existing Homes	650,815	580,658	1,231,472	-	684,290	18,551	35,122	737,963	1,969,435	48,320	2,017,755	2,414,652	396,897	16%
New Homes/Products	1,426,274	879,623	2,305,897	-	312,425	43,639	24,174	380,238	2,686,135	64,985	2,751,120	3,634,739	883,619	24%
NEEA	454,671	315,959	770,629		97,368	10,427		107,795	878,425	10,961	889,386	840,576	(48,810)	-6%
Total Residential	2,531,759	1,776,239	4,307,999	-	1,094,084	72,617	59,295	1,225,996	5,533,995	124,266	5,658,261	6,889,967	1,231,706	18%
Energy Efficiency Program Costs	7,444,917	5,024,752	12,469,657	254,945	1,649,336	215,541	72,661	2,192,484	14,662,147	191,892	14,854,039	18,907,302	4,053,265	21%
Renewables														
Solar Electric (Photovoltaic)	556,565	357,447	914,012						914,012		914,012	1,414,549	500,537	35%
Other Renewable	29,480	457,874	487,354						487,354		487,354	584,020	96,666	17%
Renewables Program Costs	586,047	815,321	1,401,365	-	-	-	-	-	1,401,365	-	1,401,366	1,998,569	597,203	30%
Cost Grand Total	8,030,964	5,840,073	13,871,022	254,945	1,649,336	215,541	72,661	2,192,484	16,063,512	191,892	16,255,402	20,905,871	4,650,469	22%

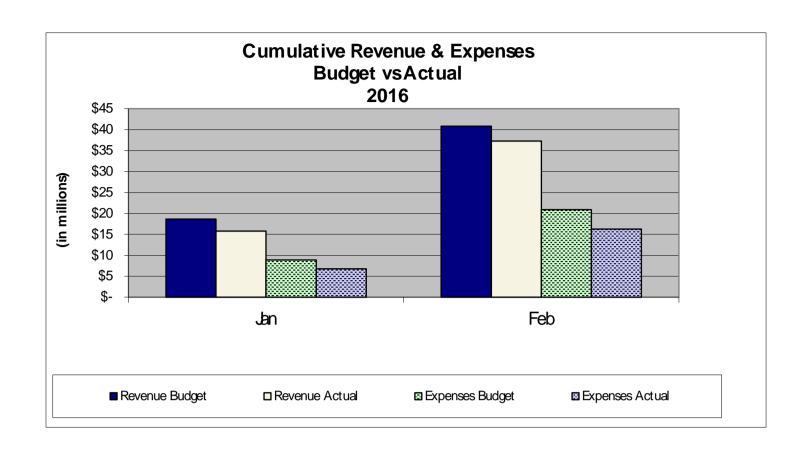
Energy Trust of Oregon Administrative Expenses For the Two Months Ending February 28, 2017 (Unaudited)

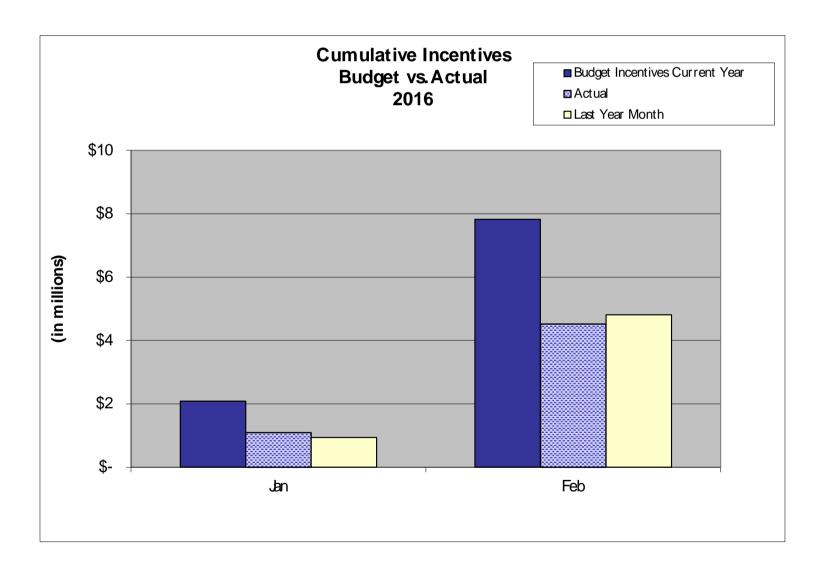
		MANAGEMENT & GENERAL					COMMUNICATIONS & CUSTOMER SERVICE					
		QUARTERLY	•		YTD	_		QUARTER	LY		YTD	_
	ACTUAL	BUDGET	REMAINING	ACTUAL	BUDGET	VARIANCE	ACTUAL	BUDGET	REMAINING	ACTUAL	BUDGET	VARIANCE
<u>EXPENSES</u>												
Outsourced Services	\$47,761	\$160,792	\$113,031	\$47,761	\$107,194	\$59,434	\$94,952	\$355,250	\$260,298	\$94,952	\$236,833	\$141,881
Legal Services	1,280	3,000	1,720	1,280	2,000	720						
Salaries and Related Expenses	392,625	663,679	271,054	392,625	442,452	49,828	267,003	429,351	162,348	267,003	286,234	19,231
Supplies	30	1,500	1,470	30	1,000	970	90	250	160	90	167	77
Postage and Shipping Expenses	1,237	625	(612)	1,237	417	(821)						
Printing and Publications	507	1,125	618	507	750	243		375	375		250	250
Travel	4,598	15,362	10,764	4,598	10,242	5,644	5,268	11,250	5,982	5,268	7,500	2,232
Conference, Training & Mtngs	5,722	13,462	7,741	5,722	8,975	3,253	1,301	3,125	1,824	1,301	2,083	782
Interest Expense and Bank Fees	178	2,875	2,697	178	1,917	1,739						
Dues, Licenses and Fees	2,909	4,737	1,828	2,909	3,158	249	7,092	4,125	(2,967)	7,092	2,750	(4,342)
Shared Allocation (Note 1)	31,229	51,008	19,779	31,229	34,006	2,776	25,519	39,966	14,447	25,519	26,644	1,125
IT Service Allocation (Note 2)	70,754	115,377	44,624	70,754	76,911	6,157	48,702	90,400	41,698	48,702	60,261	11,558
Planning & Eval	284	1,387	1,103	284	925	640		32,602	32,602		21,734	21,734
TOTAL EXPENSES	559,114	1,034,931	475,816	559,114	689,947	130,832	449,927	966,694	516,767	449,927	644,456	194,529

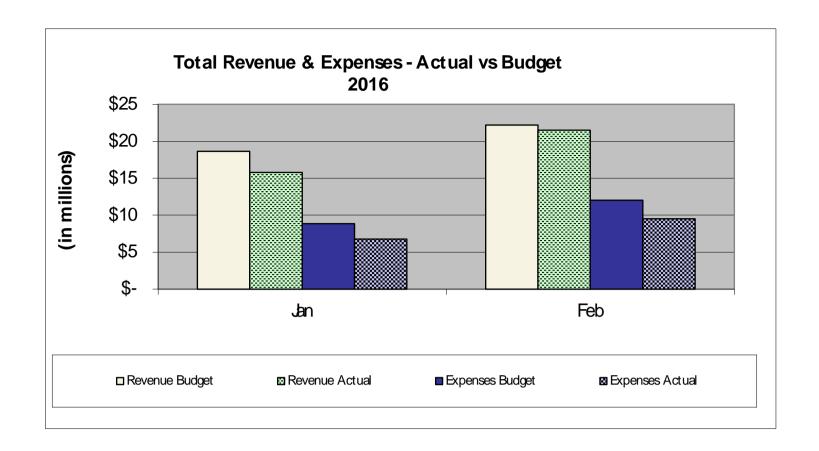
Note 1) Represents allocation of Shared (General Office Management) Costs

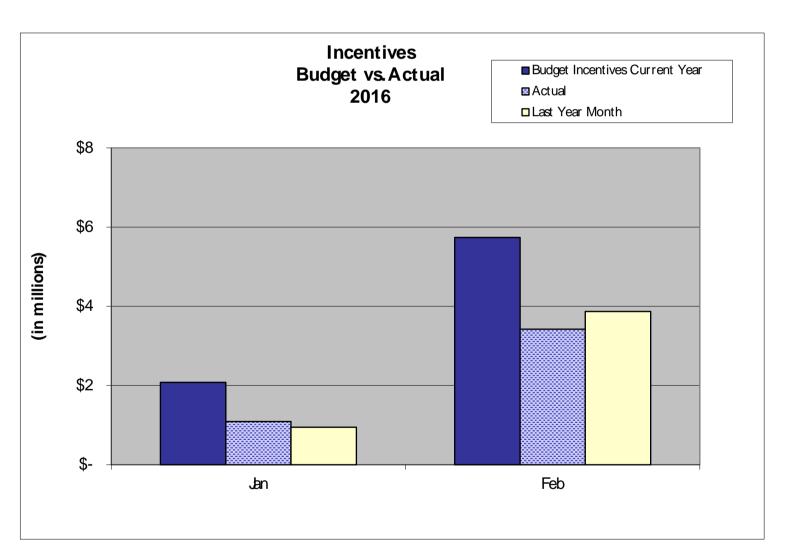
Note 2) Represents allocation of Shared IT Costs

Administrative Expenses 2nd Month of Quarter









PINK PAPER

For contracts with costs through: 3/1/2017

Page 1 of 4

Report Date: 3/23/2017

CONTRACTOR	Description	City	EST COST	Actual TTD	Remaining	Start	End
Administration							
	Admir	istration Total:	13,019,386	3,976,771	9,042,615	•	
Communications							
	Commu	nications Total:	3,595,439	1,645,750	1,949,689	•	
Energy Efficiency							
Northwest Energy Efficiency Alliance	Regional EE Initiative Agmt	Portland	33,662,505	14,850,935	18,811,570	1/1/2015	7/1/2020
ICF Resources, LLC	2017 BE PMC	Fairfax	14,232,588	1,795,799	12,436,789	1/1/2017	12/31/2017
CLEAResult Consulting Inc	2017 HES PMC	Austin	6,540,508	843,186	5,697,322	1/1/2017	12/31/2017
CLEAResult Consulting Inc	2017 NBE PMC	Austin	6,207,078	857,702	5,349,376	1/1/2017	12/31/2017
Northwest Energy Efficiency Alliance	Regional Gas EE Initiative	Portland	6,200,354	1,416,125	4,784,229	1/1/2015	7/1/2020
Lockheed Martin Corporation	2017 MF PMC	Grand Prairie	4,586,068	552,059	4,034,009	1/1/2017	12/31/2017
Ecova Inc	2017 Products PMC	Spokane	3,907,587	514,816	3,392,771	1/1/2017	12/31/2017
Energy 350 Inc	PDC - PE 2017	Portland	3,144,460	528,807	2,615,653	1/1/2017	12/31/2017
CLEAResult Consulting Inc	2017 NH PMC	Austin	3,137,693	403,647	2,734,046	1/1/2017	12/31/2017
Intel Corporation	EE Project Incentive Agmt	Hillsboro	2,400,000	0	2,400,000	11/13/2015	12/31/2019
Portland General Electric	PDC - PE 2017	Portland	2,017,000	369,328	1,647,672	1/1/2017	12/31/2017
Northwest Power & Conservation Council	RTF Funding Agreement		1,825,000	989,020	835,980	2/25/2015	12/31/2019
Cascade Energy, Inc.	PDC - PE 2017	Walla Walla	1,784,368	291,972	1,492,396	1/1/2017	12/31/2017
RHT Energy Inc.	PDC - PE 2017	Medford	1,740,434	266,504	1,473,930	1/1/2017	12/31/2017
Evergreen Consulting Group, LLC	PE Lighting PDC 2017	Tigard	1,555,700	224,385	1,331,315	1/1/2017	12/31/2017
SBW Consulting, Inc.	PE Program Impact Evaluation	Bellevue	450,000	265,965	184,035	5/1/2016	4/30/2017
Michaels Energy, Inc.	New Buildings '14 Impact Evalu	La Crosse	328,000	327,997	3	5/23/2016	5/31/2017
Craft3	Loan Agreement	Portland	300,000	100,000	200,000	6/1/2014	6/20/2025
CLEAResult Consulting Inc	2017 HES WA PMC	Austin	285,746	46,865	238,881	1/1/2017	12/31/2017
ICF Resources, LLC	2017 BE DSM PMC	Fairfax	274,746	38,801	235,945	1/1/2017	12/31/2017
EnergySavvy Inc.	Optix Engage Online Audit Tool	Seattle	273,600	95,667	177,933	6/1/2016	5/31/2018
Pivotal Energy Solutions LLC	License Agreement	Gilbert	270,500	133,862	136,638	3/1/2014	12/31/2017
Balanced Energy Solutions LLC	New Homes QA Inspections	Portland	248,625	82,267	166,358	4/27/2015	12/31/2017
ICF Resources, LLC	2017 BE NWN WA PMC	Fairfax	246,200	29,866	216,334	1/1/2017	12/31/2017
Alternative Energy Systems Consulting, Inc.	PE Mobile App Scoping Tool	Carlsbad	229,830	165,757	64,073	6/1/2016	5/31/2017
Alliance For Sustainable Energy, LLC	Technical Services Agreement	Lakewood	104,989	89,215	15,774	10/30/2015	11/30/2017
1000 Broadway Building L.P.	Pay-for-Performance Pilot	Portland	88,125	58,750	29,375	10/17/2014	11/1/2018
WegoWise Inc	benchmarking license	Boston	77,472	30,400	47,072	6/15/2014	12/31/2018
CLEAResult Consulting Inc	Professional Services/Trans	Austin	70,613	59,735	10,878	10/15/2014	10/15/2017

For contracts with costs through: 3/1/2017

Page 2 of 4

Report Date: 3/23/2017

through: 3/1/2017						Pa	age 2 01 4
Abt SRBI Inc.	Fast Feedback Surveys 2017	New York	66,500	0	66,500	2/1/2017	2/28/2018
Abt SRBI Inc.	Fast Feedback Surveys 2016	New York	62,200	62,200	0	7/8/2016	4/15/2017
Apex Analytics LLC	Nest Seasonal Savings Eval	Boulder	59,000	16,854	42,146	8/29/2016	12/31/2017
The Cadmus Group Inc.	Existing Homes Pilot Eval	Watertown	53,000	41,321	11,679	2/18/2016	12/31/2017
Green Motors Practice Group	Green Motors Incentive Funding	Boise	50,000	0	50,000	1/1/2017	12/31/2017
KEMA Incorporated	O&M & SEM Persistence Research	Oakland	45,000	0	45,000	12/1/2016	5/31/2017
MetaResource Group	Intel DX1 Mod 1&2 Megaproject	Portland	45,000	27,516	17,484	4/1/2015	5/1/2017
Consortium for Energy Efficiency	Program Performance Benchmark		40,379	0	40,379	9/23/2016	12/31/2017
KEMA Incorporated	Billing Analysis Review	Oakland	35,000	2,146	32,855	3/15/2015	12/31/2017
KEMA Incorporated	SEM Model Review	Oakland	33,000	22,451	10,549	12/6/2016	2/10/2017
The Cadmus Group Inc.	Air Conditioning Measures	Watertown	32,950	19,930	13,020	8/22/2016	8/22/2018
Northwest Energy Efficiency Council	Tool Lending Lbry Sponsorship	Seattle	30,500	30,500	0	9/21/2016	12/31/2017
BASE zero LLC	Quality Assurance Services	Bend	27,325	12,325	15,000	3/1/2016	12/31/2017
Abt SRBI Inc.	NH Gas Fireplace Survey 16-17	New York	25,697	0	25,697	4/12/2016	7/31/2017
Energy Center of Wisconsin	Billing Analysis Review	Madison	25,000	1,710	23,290	3/15/2015	12/31/2017
Northwest Food Processors Association	NW Industrial EE Summit 2017	Portland	25,000	0	25,000	1/1/2017	12/31/2017
Sustainable Northwest	Klamath Industiral/Ag Programs	Portland	24,992	6,248	18,744	1/1/2017	11/1/2017
Forrest Marketing	Indoor Cannabis MarketResearch	Portland	24,500	0	24,500	3/8/2017	9/30/2017
Consortium for Energy Efficiency	Perform. Benchmark Sponsorship		22,255	22,255	0	1/1/2017	12/31/2017
Consortium for Energy Efficiency	Membership Dues - 2017		21,448	21,448	0	1/1/2017	12/31/2017
Ecotope, Inc.	NB VRF Pilot Evaluation	Seattle	20,000	9,540	10,460	1/1/2016	5/31/2017
Michaels Energy, Inc.	NB '11-'12 Impact Evaluation	La Crosse	20,000	19,992	9	7/1/2016	4/30/2017
Energy 350 Inc	Professional Services	Portland	19,528	14,920	4,608	12/10/2014	12/10/2018
EES Consulting, Inc	Professional Services Agmt	Kirkland	14,800	2,700	12,100	10/1/2016	9/30/2018
PWP, Inc.	NBE Satisfaction Survey 2016	Gaithersburg	14,500	10,482	4,018	12/28/2016	3/31/2017
Flink Energy Consulting	Smart Grid Modeling	Portland	12,120	12,120	0	7/12/2016	7/30/2017
Bridgetown Printing Company	2017 Bill Insert	Portland	9,764	9,674	90	1/18/2017	12/31/2017
Research Into Action, Inc.	Professional Services	Portland	9,590	9,570	20	9/1/2014	8/31/2017
Evergreen Economics	NH Gas Fireplace Survey	Portland	9,020	1,875	7,145	4/12/2016	7/31/2017
City of Portland Bureau of Planning & Sustainability	Sponsorhip - 2017	Portland	8,000	8,000	0	1/5/2017	12/31/2017
Northwest Energy Efficiency Council	BOC 2017 Sponsorship	Seattle	6,000	6,000	0	2/14/2017	12/31/2017
FMYI, INC	Subscription Agreement	Portland	5,150	5,150	0	4/25/2016	3/1/2017
CLEAResult Consulting Inc	CSEM 2017 Transition Agreement	Austin	3,000	1,086	1,914	1/1/2017	2/10/2017
HST&V, LLC	CSEM 2017 Transition Agreement	Portland	3,000	2,995	5	1/1/2017	2/10/2017

For contracts with costs through: 3/1/2017 Page 3 of 4

Report Date: 3/23/2017

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	Energy l	Efficiency Total:	97,093,007	25,830,440	71,262,567		
Joint Programs		'		•	ı	l	
E Source Companies LLC	E Source Service Agreement	Boulder	133,350	133,350	0	2/1/2014	1/31/2018
Portland State University	GIS Data Research		71,992	0	71,992	1/1/2017	9/30/2017
Structured Communications Systems, Inc.	ShoreTel Phone System Install		63,245	0	63,245	1/1/2017	12/31/2017
CoStar Realty Information Inc	Property Data	Baltimore	40,820	37,184	3,636	6/1/2011	5/31/2017
Grounded Research and Consulting, LLC	Education Background Research	Oakland	25,000	0	25,000	3/13/2017	6/30/2017
American Council for and Energy Efficient Economy	ACEEE Sponsorship - 2017		12,500	12,500	0	1/1/2017	12/31/2017
Navigant Consulting Inc	Resource Assessment Updates	Boulder	10,600	0	10,600	8/26/2016	8/26/2018
	Joint	Programs Total:	357,507	183,034	174,473		
Renewable Energy							
Clean Water Services	Project Funding Agreement		3,000,000	1,013,106	1,986,894	11/25/2014	11/25/2039
JC-Biomethane LLC	Biogas Plant Project Funding	Eugene	2,000,000	1,500,000	500,000	10/18/2012	10/18/2032
Steel Bridge Solar, LLC	Project Funding Agreement	Seattle	2,000,000	1,500,000	500,000	3/27/2015	12/15/2040
Oregon Institute of Technology	Geothermal Resource Funding	Klamath Falls	1,550,000	1,550,000	0	9/11/2012	9/11/2032
Farm Power Misty Meadows LLC	Misty Meadows Biogas Facility	Mount Vernon	1,000,000	750,000	250,000	10/25/2012	10/25/2027
Three Sisters Irrigation District	TSID Hydro	Sisters	1,000,000	1,000,000	0	4/25/2012	9/30/2032
Farmers Irrigation District	FID - Plant 2 Hydro	Hood River	900,000	900,000	0	4/1/2014	4/1/2034
Klamath Falls Solar 2 LLC	PV Project Funding Agreement	San Mateo	850,000	0	850,000	7/11/2016	7/10/2041
Deschutes Valley Water District	Opal Springs Hydro Project	Madras	750,000	0	750,000	12/5/2016	12/4/2036
Old Mill Solar, LLC	Project Funding Agmt Bly, OR	Lake Oswego	490,000	0	490,000	5/29/2015	5/28/2030
City of Medford	750kW Combined Heat & Power	Medford	450,000	450,000	0	10/20/2011	10/20/2031
City of Pendleton	Pendleton Microturbines	Pendleton	450,000	150,000	300,000	4/20/2012	4/20/2032
RES - Ag FGO LLC	Biogas Manure Digester Project	Washington	441,660	441,660	0	10/27/2010	10/27/2025
RES - Ag FGO LLC	Biogas Manure Digester - FGO	Washington	441,660	438,660	3,000	10/27/2010	10/27/2025
Clean Power Research, LLC	PowerClerk License	Napa	383,068	380,398	2,670	7/1/2014	6/30/2017
SunE Solar XVI Lessor, LLC	BVT Sexton Mtn PV	Bethesda	355,412	355,412	0	5/15/2014	12/31/2034
Clty of Gresham	City of Gresham Cogen 2		350,000	334,523	15,477	4/9/2014	7/9/2034
Farmers Conservation Alliance	Outreach Activities	Hood River	200,000	26,305	173,695	1/1/2017	12/31/2017
City of Astoria	Bear Creek Funding Agreement	Astoria	143,000	143,000	0	3/24/2014	3/24/2034
Solar Oregon	2015 Outreach Agreement	Portland	123,300	70,700	52,600	1/1/2015	4/30/2018
BSA Enterprises Inc	Solar Verifier Services	Sisters	100,000	46,343	53,657	8/1/2016	7/31/2018
Gary Higbee DBA WindStream Solar	Solar Verifier Services	Eugene	100,000	40,751	59,249	8/1/2016	7/31/2018
Luxurious Plumbing and Heating, Inc.	Solar Verifier Services	West Linn	100,000	58,030	41,970	8/1/2016	7/31/2018

Report Date: 3/23/2017

For contracts with costs through: 3/1/2017

Page 4 of 4

Chaolysti LLC	Solar Trade Ally Summit	Alameda	11,650	0	11,650	1/1/2017	7/31/2017
Warren Griffin	Griffin Wind Project	Salem	13,150	9,255	3,895	10/1/2005	10/1/2020
Kleinschmidt Associates	Evaluation Services	Pittsfield	23,400	0	23,400	1/1/2017	11/30/2018
Robert Migliori	42kW wind energy system	Newberg	24,125	22,352	1,773	4/11/2007	1/31/2024
Wallowa Resources Community Solutions, Inc.	Renewables Field Outreach		24,999	9,751	15,248	2/1/2016	1/30/2018
University of Oregon	UO SRML Contribution - 2017	Eugene	24,999	0	24,999	3/9/2017	3/8/2018
University of Oregon	UO SRML Contribution - 2016	Eugene	25,000	25,000	0	3/9/2016	3/8/2017
ENERGYneering Solutions Inc	Biopower & Hydro Evaluations	Sisters	25,000	3,126	21,874	12/6/2016	11/30/2018
Clean Energy States Alliance	2017 CESA Sponsorship		39,500	39,500	0	7/1/2016	6/30/2017
OSEIA-Oregon Solar Energy Industries Assoc	Technical Training Course Dev		41,650	8,100	33,550	1/1/2017	4/30/2018
Kendrick Business Services LLC	TA Business Development	Albany	50,000	0	50,000	1/1/2017	12/31/2017
Kendrick Business Services LLC	Small Business Support Agmt	Albany	60,000	2,275	57,725	11/1/2016	6/30/2018
SPS of Oregon Inc	Project Funding Agreement	Wallowa	75,000	75,488	(488)	10/15/2015	10/31/2036
RHT Energy Inc.	Verifier Services Agmt - Solar	Medford	100,000	48,528	51,473	8/1/2016	7/31/2018
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PINK PAPER

Energy Trust of Oregon

Financial Glossary

(for internal use) - updated May 31, 2016

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 unmodified or modified regarding specific items. Energy Trust strives for and has achieved in all its years an unmodified opinion.

- An unmodified 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 unmodified opinion regarding Energy Trust's financial statements.
- 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.

Project Tracking Projects Forecasting

Module developed in Project Tracking system (PT) 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 second 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 PT. 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 Strategic Energy Management programs, where some level of tracking of particular sites and participants is part of the program design.
- Lighting, hot water, and energy control devices through retailer buy down, on line fulfillment, and direct installation.

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 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 <u>direct contact</u> with the project or customer, individually or in groups, <u>and</u> 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

Policy Committee Meeting

March 9, 2017 3:30pm

Attending by teleconference

Roger Hamilton, Ken Canon, Mike Colgrove, Debbie Kitchin, Alan Meyer, John Reynolds, Eddie Sherman

Attending at Energy Trust offices

Fred Gordon, Jessica Iplikci, Corey Kehoe, Oliver Kesting, Steve Lacey, Debbie Menashe, Mariet Steenkamp, Jay Ward, Peter West

Preview Presentation of Extension of New Buildings Contract

Jessica Iplikci reported on the Energy Trust staff proposition to extend the contract for the New Buildings program management contractor (PMC) with CLEAResult for the final one-year extension period from January 1, 2018 to December 31, 2018. The board did not object to the previous contract extension for this project. This will be the third and final year of the contract.

Jessica outlined the criteria for extension. The PMC has met expectations with respect to crossprogram coordination, has been responsive in meeting Energy Trust needs, addresses challenges in a timely manner, and provides frequent updates. The PMC has consistently built and managed solid project pipelines and has afforded a strong marketing engagement by reaching projects in the early stages to influence design and construction decisions in saving energy. Half of the enrolled projects are outside of the Portland Metro area, indicating strength in providing services statement, and annual enrollment targets have doubled between 2014 and 2016. The program is positioned to serve business customers and key market factors involved in advancing building design and technology ahead of codes, and by driving market adoption of high efficiency and net zero energy buildings in Oregon. Tailored solutions have been employed to set achievable and high standards which results in value to customers with significant training and education to advance design practice among architects, engineers, design consultants and contractors. The regional marketing engagement model has significantly contributed to consistently high overall customer satisfaction that ranged between 89% and 100% from 2013-2016. PMC has completed deliverables on time, met savings goals at levelized cost targets, managed to the budget, provided exceptional customer service, quality marketing, and consistent data management and quality control.

Alan Meyer asked what "met their goals" means. Oliver Kesting responded that he can't specifically determine the exact number for each year, but the PMC greatly exceeded their goals in every utility in 2016 and accomplishments have doubled since 2010. At the suggestion of the committee, PMC's performance against goals will be presented in more specific numbers for the board presentation and briefing paper. Unless the board objects to staff's extension proposal, no formal board action is required. Committee members also requested that the board be provided information on the terms of the various PMC and PDC contracts for context and information. Staff will provide that information in the board packet for the next meeting.

Policies for Review

4.04.000-P Lost Opportunities Policy

This policy is up for its regular three-year review. Debbie Menashe said that the Lost Opportunities is one of Energy Trust's original board-adopted policies. Prior to the ability to collect supplemental energy efficiency funding through SB 838, the Lost Opportunities policy provided important guidance on how to prioritize projects. However, given the current funding structure, Energy Trust is able to reach out to all cost effective energy efficiency. Debbie said that staff determined that, although the significance of the policy is somewhat minimized, the policy is still appropriate to maintain and

provides an indication of Energy Trust's interest in lost opportunities. The revisions presented today are editorial in nature in order to place the description more into context with current times.

Debbie asked the Committee for feedback on whether the policy should be retired or the suggested revisions adopted. Committee members suggested some clarifying revisions to the policy, and Debbie will incorporate those.

The Committee also discussed whether the policy continues to be relevant. The Committee determined that it is appropriate to retain the policy as an indication of direction and approved the changes discussed. The Committee agreed to present the revised policy in the board consent agenda at the April 5, 2017 meeting.

5.05.010-P Using Reserve Accounts Policy

Debbie presented the proposed revisions to the Using Reserves Accounts Policy and noted that this change is based on board direction to provide for a ratification process in light of the recent draw on reserves for Cascade Natural Gas. Committee members are comfortable with the change, but requested that language be added to Section 2.b to make it parallel to Section 2.a in describing permitted purposes for the use of the organization contingency pool. Debbie suggested that staff come back with language recommendations and will circulate those updates to the Committee via email for review and approval. Depending on consensus of the new language, the Committee agreed that these corrections should be placed on the consent agenda for the next full board meeting.

2.02.000 Corporate Governance Guidelines Policy

This policy was on the last Committee meeting agenda for a three-year review, however Committee members had questions regarding the location limitations on director training opportunities. Debbie revised the policy language based on discussions with Debbie Kitchin, and the resulting change was presented to the Committee. The Committee approved the revisions and agreed that the revised policy should be placed on the consent agenda for the next full board meeting.

In related information, staff advised the committee that initial development work has begun on Diversity Initiative and Low Income approach policies, and that discussions on these policies will be presented to the committee at future meetings.

Criteria for CAC Membership

Peter West presented a draft for feedback on criteria for selecting Consumer Advisory Council (CAC) and Renewable Energy Advisory Committee (RAC) members. Committee members were supportive of the draft criteria and asked to be kept informed of the discussions at CAC and RAC on final approval. In addition, the Committee suggested that experience in energy efficiency be considered as criteria for CAC membership. Peter agreed, will revise the criteria accordingly, and will continue to keep the Committee informed.

Brief Updates

Constrained Areas

For the past two years, Energy Trust has reached out to funding utilities to talk to them about where there might be opportunities to deploy concentrated efforts in energy efficiency and renewables in areas of system constraint. The Oregon Public Utilities Commission (OPUC) has encouraged this effort. Staff has recently been engaged in discussions with Pacific Power (PAC) about such areas where Energy Trust could possibly assist. Energy Trust's planning team has been meeting with PAC staff and investigating two areas that PAC has identified where energy efficiency could be utilized. Energy Trust staff is very pleased with this opportunity.

Legislative Update

Jay Ward reported on 20 new energy bills introduced that Energy Trust staff is tracking. A full and updated report will be made at the next full board meeting.

In addition, Jay reported that on March 8, 2016, the Senate Rules Committee considered the nomination of Megan Decker for the new OPUC commissioner's seat and her nomination came through without objection. She is scheduled to take office on April 1, 2016.

Air Generate and Heat Pump Water Heaters

Mike said that in early February, 2016, Energy Trust received notification that one of our customers had a garage fire incident near an Air Generate heat pump water heater device. The fire did not result in any injuries. Report on damage to home and garage is mixed. These units have had previous issues. Northwest Energy Efficiency Alliance (NEEA) had incentivized this device through our program and there was a remediation effort to correct some of the early installed units.

Energy Trust staff is continuing to gather information about the incident and will consider appropriate next steps or changes to the current remediation effort. To date, staff does not have enough information to confirm. As a courtesy, NEEA Executive Director Susan Stratton and Mike briefed the NEEA board this week about the incident and she has reached out to the Puget Sound energy representative who has installed the bulk of these units. Staff will continue to keep the board informed of significant developments.

Adjourn

The meeting adjourned at 4:45 pm.

Tab 7

Strategic Planning Committee

March 14, 2017 3:00 p.m.

Attendees: Mark Kendall, *Chair*, JP Batmale (phone), Steve Bloom (phone), Susan Brodahl (phone), Ken Canon (phone), Mike Colgrove, Warren Cook (phone) Hannah Cruz, Lindsey Hardy (phone), Corey Kehoe, Dave McClelland, Debbie Menashe, Spencer Moersfelder, John Reynolds (phone)

Revised Draft Agenda Review

The Committee reviewed the draft agenda for the board strategic planning retreat on May, 18-19, 2017. Under the "Managing Risk" topic, Ken Canon asked for clarification about the reference to the topics listed, and staff agreed to revise the agenda language so that it is reads more clearly. Susan Brodahl noted that using the term "risk management" is a term of art and may not be accurate for the topic of this discussion. The Committee asked staff to change the risk management verbiage to "managing for uncertainty." Staff described how the topic is intended to provide context to the board for analyzing both mid-plan status and the future, especially in light of the current SB 1149 sunset at the end of 2025. The Committee concurred that that managing for uncertainty is a valuable point of discussion for mid-point in the current strategic plan and for future forecasting.

Mark noted that this year, the annual board photo will be taken before the lunch break and then turned to the rest of the agenda.

The Committee engaged in discussion around the afternoon agenda of Day One. This portion of the agenda will give board members and staff and public attendees a chance to brainstorm topics for possible future discussion. The agenda identifies this section as "Topics to Explore in Anticipation of the 2020-2015 Strategic Plan." JP Batmale asked the Committee to include the Oregon Public Utilities Commission (OPUC) and OPUC staff in discussions as these topics are considered. Mike Colgrove noted that the point of brainstorming is to generate ideas and that OPUC staff will be engaged and board members will be advised of any discussions between Energy Trust staff and OPUC staff on topics that are surfaced. Ken suggested to put an "Other" option at the end of the topics list to signal that the list of topics is a starting place and included to generate thinking. Discussion of the topics generated in the brainstorm process will be facilitated in small group and large group discussions by Nick Viele. Public attendees will also have an opportunity to contribute to the group discussion. Staff is working on one-pagers on the topics identified so far, but the brainstorming should be open ended.

On the second day of the retreat, attendees will be asked to screen and rank the brainstormed topics, and Nick will guide this discussion using a matrix staff has developed.

Keynote Speaker

Debbie said that two excellent speakers are interested in participating: Janine Benner, Associate Director of Planning and Energy at the Oregon Department of Energy (ODOE) and Scott Johnstone, outgoing Executive Director of the Vermont Energy Investment Corporation (VEIC). The Committee expressed interest in both, and Mike and Debbie will follow up.

Mark noted that next steps are that Debbie, Mike and Nick will discuss the workshop format, topics and flow in the next few weeks.

Adjourn

The meeting adjourned at 4:17 p.m.

Tab 8



Briefing Paper Update on 2017 State Legislation

April 5, 2017

Summary

This paper reports on bills introduced in the 2017 state legislative session since the February 22, 2017, board meeting and provides specific details on proposed bills that (i) would modify the amount of or requirements for the 3 percent public purpose charge that funds Energy Trust or (ii) would have other significant effects on Energy Trust or other entities that are relevant to Energy Trust's work.

Background

- The session began February 1 and the constitutional sine die is July 10.
- As usual, we monitor bills that could impact Energy Trust, respond to requests for information, coordinate our activities with the Oregon Public Utility Commission (OPUC) and take no positions on bills or legislative concepts.
- The report at the end of this summary lists all the bills that we are tracking, with URL links in the "Bill Number" column. Since the last board meeting, about 25 additional bills have been added to the report.

Discussion

- In February, we reported on four bills that would change the 3 percent public purpose charge:
 - SB 539 (Sen. Thatcher, R-Keizer), reassigning the portion of the charge that is now authorized for energy conservation and market transformation (63 percent of the charge) to cities, counties and schools for energy conservation, and funding energy conservation and market transformation from the portion of the charge that is now authorized for renewable energy (19 percent).
 - SB 656 (Sen. Olsen, R-Canby), requiring an independent management evaluation of the nongovernmental entity that administers public purpose funds every two years instead of every five years.
 - SB 657 (Sen. Olsen, R-Canby), reducing the 3 percent charge to 2 percent, capping funding for the nongovernmental administrator at \$250 million annually and requiring an annual independent financial audit.
 - SB 659 (Sen. Olsen, R-Canby), requiring the OPUC to arrange for the nongovernmental administrator to be "annually assessed by an independent third party selected by the Oregon Department of Administrative Services at the nongovernmental entity's expense."
- Three more bills modifying the 3 percent charge were introduced since February 22:
 - SB 909 (Sen. Ferrioli, R-John Day), reducing the 3 percent charge to 1.5 percent, limiting the amount collected through the charge to the amount collected in 2015, requiring staff

- salaries of the nongovernmental administrator not to exceed the Governor's salary, and limiting staff benefits to 25 percent of salary or less.
- HB 3019 (House Energy & Environment Committee), adding "transportation electrification efforts" to the purposes for which the portion of the charge now authorized for energy conservation and market transformation (63 percent) can be used.
- O HB 3142 (Rep. Buehler, R-Bend), requiring the nongovernmental administrator to use not less than 10 percent of the 3 percent public purpose funds for loans to "acquire, rehabilitate, redevelop, reutilize and restore brownfield properties." In evaluating loan proposals, the administrator must consider, among other things, the project's "potential to fund energy conservation, market transformation, renewable energy and low-income weatherization." Loans are repaid to the administrator and used for those purposes.

Highlights on Bills Introduced (after the last board meeting 2/22)

Oregon Department of Energy

- Oversight: HB 2020, HB 3166, HB 3167, SB 908 and SB 952 establish some form an energy commission, or energy and climate board, as an oversight, advisory body or policy and rulemaking body for the Oregon Department of Energy.
- Studies: HB 2989 requires a study of residential solar incentives in the state, HB 3021 requires an energy conservation study, and HB 3164 requires a study of the residential energy tax credit and need for residential energy incentive programs.
- Tax credits: HB 3163 transfers biomass production or collection tax credit to the Department of Agriculture.

Renewable Energy

- HB 3227 allows tax credit to be claimed by owner or subscriber of a community solar project.
- HB 3050 permits siting of commercial solar photovoltaic systems on land not designated high value farmland, on high value farmland in certain circumstances and as conditional permitted use of land zoned for farm use.
- SB 979 establishes ability of retail electricity consumer to purchase electricity generated by eligible renewable energy resources and certain ancillary services directly from entity that is not distribution utility that meets specified conditions.

Energy Efficiency

- HB 3189 establishes a Department of Building Codes.
- HB 3025 excludes certain battery charger systems from energy-efficiency standards.

Oregon Housing and Community Services

 HB 2961 establishes a Homeownership Repair and Rehabilitation Program within OHCS to provide grants to eligible nonprofit organizations to provide financial assistance for repair and rehabilitation of low-income households.

Electric Utilities

 HB 3348 provides that electric company may use electricity to comply with renewable portfolio standard only if electricity is generated by facility that procures electricity in accordance with certain delivery requirements. SB 978 prohibits electric company from including in its rates cost of electric generation resource or energy storage resource that is capable of generating electricity or storing electricity for not less than five years and has generating or storage capacity of 50 megawatts or more unless electric company must acquire resource to maintain reliability of electrical company's electrical system.

Climate Change, Carbon

- HB 3269 changes the name of the Oregon Global Warming Commission to the Oregon Climate Change Commission.
- HB 3023 requires the Department of Environmental Quality to study carbon pricing.

Report (as of March 21, 2017)

HB 2020 INTRO

Relating to State Department of Energy; prescribing an effective date. Establishes Oregon Energy and Climate Board as oversight and advisory body for Oregon Department of Energy and Climate.

Bill Sponsor: Rep Holvey (D-Eugene)

Current Committee: Energy and Environment (H)

HB 2072 INTRO

Relating to a tax credit for biomass. Extends sunset for tax credit for biomass production or collection for all types of biomass.

Bill Sponsor: Presession filed

Current Committee: Energy and Environment (H)

HB 2074 INTRO

Relating to tax credits for energy conservation projects. Extends sunset for tax credit for energy conservation project.

Bill Sponsor: Presession filed

Current Committee: Energy and Environment (H)

HB 2079 INTRO

Relating to tax credits for renewable energy development contributions. Extends sunset for tax credits for renewable energy development contributions.

Bill Sponsor: Presession filed

Current Committee: Energy and Environment (H)

HB 2081 INTRO

Relating to residential energy. Extends sunset for construction or installation of alternative energy devices.

Bill Sponsor: Presession filed

Current Committee: Energy and Environment (H)

HB 2083 INTRO

Relating to tax credits for transportation projects. Extends sunset for tax credits for transportation projects.

Bill Sponsor: Presession filed

Current Committee: Transportation Policy (H)

HB 2111 INTRO

Relating to solar access for residential real property. Prohibits inclusion of provisions prohibiting installation and use of solar panels for obtaining solar access in declaration or bylaws of planned community.

Bill Sponsor: Rep Greenlick (D-Portland); Rep Helm (D-WA County)

Current Committee: Energy and Environment (H)

HB 2124 INTRO

Relating to wood smoke pollution. Specifies that Department of Environmental Quality may use moneys available in Residential Solid Fuel Heating Air Quality Improvement Fund to provide rebates for replacement or removal of certain solid fuel burning

devices.

Bill Sponsor: Rep Greenlick (D-Portland) (Presession filed.)

Current Committee: Energy and Environment (H)

HB 2132 INTRO

Relating to local government programs to finance improvements to real property; prescribing an effective date. Expands purposes for which improvements may be made under local government financing program to include energy storage, smart electric vehicle charging stations and water efficiency.

Bill Sponsor: Presession filed

Current Committee: Energy and Environment (H)

HB 2133 INTRO

Relating to biomass. Caps electricity generated by any single biomass facility that may be used to meet requirement that certain percentage of electricity in this state be electricity generated by small-scale renewable energy projects or biomass facilities.

Bill Sponsor: Presession filed

Current Committee: Energy and Environment (H)

HB 2134 INTRO

Relating to low-income electric bill payment assistance. Repeals sunset on collection of additional moneys for low-income electric bill payment assistance.

Bill Sponsor: Presession filed

Current Committee: Energy and Environment (H)

HB 2135 INTRO

Relating to entities that contribute to greenhouse gas emissions; declaring an emergency. Repeals greenhouse gas emissions goals and requires Environmental Quality Commission to adopt by rule statewide greenhouse gas emissions goal for 2025, and limits for years 2035 and 2050.

Bill Sponsor: Presession filed

Current Committee: Energy and Environment (H)

HB 2136 INTRO

Relating to small-scale renewable energy projects; declaring an emergency. Creates schedule by which certain percentage of electricity sold by electric company to retail electricity consumers must be electricity generated by qualifying small-scale renewable energy projects.

Bill Sponsor: Presession filed

Current Committee: Energy and Environment (H)

HB 2137 INTRO

Relating to utilities. Redefines scope of Public Utility Commission's general duties and powers.

Bill Sponsor: Presession filed

Current Committee: Energy and Environment (H)

HB 2138 INTRO

Relating to diesel; declaring an emergency. Beginning January 1, 2018, requires certain public improvement contracts to reserve one percent of total contract price for performing repowers or retrofits of certain diesel engines used in course of performing contract.

Bill Sponsor: Presession filed

Current Committee: Energy and Environment (H)

HB 2139 INTRO

Relating to anhydrous ammonia. Directs State Department of Energy to study treating anhydrous ammonia as renewable energy source for purposes of renewable portfolio standard.

Bill Sponsor: Rep Boone (D-Cannon Beach) (Presession filed.)

Current Committee: Energy and Environment (H)

HB 2146 INTRO

Relating to the use of energy-related tax credits by tax-exempt entities; prescribing an effective date.

Prohibits tax-exempt entities from earning or transferring energy-related tax credits.

Bill Sponsor: Rep Johnson (R-Hood River) (Presession filed.)

Current Committee: Energy and Environment (H)

HB 2197 INTRO

Relating to cannabis; prescribing an effective date. Directs Oregon Liquor Control Commission to enter into agreement with nongovernmental entity that conducts or funds research on cannabis and cannabis-derived products.

Bill Sponsor: Presession filed

Current Committee: Marijuana Regulation (J)

HB 2205 INTRO

Relating to cannabis; declaring an emergency. Directs State Department of Agriculture to solicit proposals from third party vendors to create for producers of cannabis efficiency standards for energy and water consumption and certification protocols for meeting those standards.

Bill Sponsor: Presession filed

Current Committee: Agriculture and Natural Resources (H)

HB 2210 INTRO

Relating to affordable rental housing assistance. Directs Housing and Community Services Department to develop and implement Retaining Affordable Rental Housing Program to provide grants to owners of multifamily rental housing to rehabilitate and maintain housing at affordable rental rates.

Bill Sponsor: Rep Vial (R-Scholls) (Presession filed.) Current Committee: Human Services and Housing (H)

HB 2239 INTRO

Relating to energy efficient building codes; declaring an emergency. Establishes Task Force on Energy Efficient Building Codes.

Bill Sponsor: Presession filed

Current Committee: Energy and Environment (H)

HB 2269 INTRO

Relating to air quality; declaring an emergency. Modifies fee schedule for sources subject to federal operating permit program under Title V of federal Clean Air Act.

Bill Sponsor: Presession filed

Current Committee: Energy and Environment (H)

HB 2286 INTRO

Relating to administration of tax credits; prescribing an effective date. Requires that transfer of tax credit follow uniform transfer procedures.

Bill Sponsor: Presession filed Current Committee: Revenue (H)

HB 2330 INTRO

Relating to charges for electricity delivered to the public for electrically powered motor vehicles; declaring an emergency. Permits, rather than requires, state agency to set price for using device that is located on agency premises and that provides electricity to public for motor vehicles that use electricity for propulsion at specific level.

Bill Sponsor: Presession filed

Current Committee: Energy and Environment (H)

HB 2331 INTRO

Relating to state provision of compressed natural gas for motor vehicles. Extends until January 2, 2025, sunset for Oregon Department of Administrative Services program to make compressed natural gas available for use in motor vehicles.

Bill Sponsor: Presession filed

Current Committee: Energy and Environment (H)

HB 2343 INTRO

Relating to comprehensive energy reporting. Replaces requirements for State Department of Energy to complete biennial comprehensive energy plan and biennial energy forecast with requirement for department to complete biennial comprehensive energy report.

Bill Sponsor: Presession filed

Current Committee: Energy and Environment (H)

HB 2433 INTRO

Relating to colocation of low-income senior housing on school district property; declaring an emergency. Directs Housing and Community Services Department to establish pilot program in which

department constructs low-income senior housing development on school district land and school district rents to low-income seniors at reduced rent in exchange for classroom assistance.

Bill Sponsor: Rep Parrish (R-Tualatin/West Linn) (Presession filed.)

Current Committee: Human Services and Housing (H)

HB 2468 INTRO

Relating to air pollution; declaring an emergency. Requires Environmental Quality Commission to adopt by rule certain statewide greenhouse gas emissions limits by no later than January 1, 2018.

Bill Sponsor: Rep Holvey (D-Eugene); Rep Barnhart (D-Lane/Linn Counties); Rep Helm (D-Washington County); Rep Nosse (D-Portland); Rep Power (D-Milwaukie) (Presession filed.)

Current Committee: Energy and Environment (H)

HB 2471 INTRO

Relating to acquisition of service territory of electric utility; declaring an emergency. Extends period of time by which electric utility that acquires service territory of other electric utility without other electric utility's consent must comply with renewable portfolio standard that applies in that service territory.

Bill Sponsor: Rep Bentz (R-Ontario); Rep Boone (D-Cannon Beach) (Presession filed.)

Current Committee: Energy and Environment (H)

HB 2478 INTRO

Relating to greenhouse gas emissions; declaring an emergency. Requires Environmental Quality Commission to adopt by rule program for assessing net impacts of state policies and programs for reducing greenhouse gas emissions.

Bill Sponsor: Rep Bentz (R-Ontario) (Presession filed.) Current Committee: Energy and Environment (H)

HB 2481 INTRO

Relating to indicating the cost per gallon of gasoline of the low carbon fuel standards; declaring an emergency. Requires gas station owner or operator to print, on any receipt that owner or operator provides to customer after customer purchases gasoline, cost to customer per gallon of gasoline of low carbon fuel standards.

Bill Sponsor: Rep Bentz (R-Ontario) (Presession filed.)

Current Committee: Energy and Environment (H)

HB 2502 INTRO

Relating to ocean power districts. Directs Department of State Lands to study and develop recommendations for developing and organizing ocean power districts.

Bill Sponsor: Rep Nathanson (D-Eugene); Rep Boone (D-Cannon Beach) (Presession filed.) Current Committee: Energy and Environment (H)

HB 2510 INTRO

Relating to electric vehicle charging stations; declaring an emergency. Authorizes commercial tenant to install on premises and use electric vehicle charging station.

Bill Sponsor: Rep Barnhart (D-Lane/Linn Counties); Rep Helm (D-Washington County) (Presession filed.)

Current Committee: Energy and Environment (H)

HB 2511 INTRO

Relating to electric vehicle charging stations; declaring an emergency. Authorizes residential tenant to install on premises and use electric vehicle charging station for personal, noncommercial use.

Bill Sponsor: Rep Barnhart (D-Lane/Linn Counties); Rep Helm (D-Washington County) (Presession filed.)

Current Committee: Energy and Environment (H)

HB 2514 INTRO

Relating to electric motor vehicle incentives. Directs Oregon Business Development Department to develop and implement Electric Motor Vehicle Sales Incentive Program to provide per-vehicle sales incentive to salespersons employed by electric motor vehicle dealers for sales, leases or trade-in exchanges of new electric motor vehicles to residents of this state.

Bill Sponsor: Rep Barnhart (D-Lane/Linn Counties) (Presession filed.)

Current Committee: Energy and Environment (H)

HB 2532 INTRO

Relating to transportation. Directs Oregon Transportation Commission to adopt rules establishing quantitative system for scoring and ranking transportation projects that are being considered by commission for inclusion in Statewide Transportation Improvement Program.

Bill Sponsor: Rep Reardon (D-Happy Valley); Rep Helm (D-Washington County); Rep Keny-Guyer (D-Portland); Rep Nosse (D-Portland); Rep Sanchez (D-Portland); Sen Boquist (R-Dallas) (Presession filed.)

Current Committee: Transportation Policy (H)

HB 2568 A

Relating to utilities; declaring an emergency. Specifies, for purposes of exempting certain vehicles from overall allowable length of vehicles under Vehicle Code, that unplanned disruption in services provided by public utility, telecommunications utility, people's utility district or [cooperative rural electrification district] electric cooperative is emergency if disruption occurs outside normal business hours during which public utility, telecommunications utility, people's utility district or electric cooperative may acquire variance permit.

Bill Sponsor: Rep Witt (D-Clatskanie) (Presession filed.) Current Committee: Business and Transportation (S)

HB 2570 NTRO

Relating to nonprofit organizations that provide financial assistance for affordable housing. Directs Housing and Community Services Department to establish Affordable Homeownership Grant Program to provide grants to eligible nonprofit organizations with affordable homeownership programs to provide opportunities for homeownership to persons in low income households.

Bill Sponsor: Rep Witt (D-Clatskanie); Rep Nosse (D-Portland); Rep Whisnant (R-Sunriver); Rep Gomberg (D-Central Coast) (Presession filed.)

Current Committee: Human Services and Housing (H)

HB 2680 INTRO

Relating to renewable energy development; prescribing an effective date. Defines systems that use waste heat to produce energy as renewable energy production systems for which applicants may receive grants from State Department of Energy to install or construct.

Bill Sponsor: Rep Nosse (D-Portland) (Presession filed.)

Current Committee: Energy and Environment (H)

HB 2681 INTRO

Relating to residential energy. Extends sunset for construction or installation of alternative energy devices.

Bill Sponsor: Rep Nosse (D-Portland); Rep Evans (D-Monmout) (Presession filed.)

Current Committee: Energy and Environment (H)

HB 2704 INTRO

Relating to vehicle emission reductions; prescribing an effective date. Requires Environmental Quality Commission to establish program to provide rebates to persons that purchase and register certain low emission vehicles and zero-emission transit buses in this state.

Bill Sponsor: Rep Helm (D-Washington County) (Presession filed.)

Current Committee: Energy and Environment (H)

HB 2710 INTRO

Relating to the reduction of energy use in buildings; declaring an emergency. Sets schedule for Director of Department of Consumer and Business Services to perform certain duties regarding energy efficiency standards and requirements for newly constructed buildings.

Bill Sponsor: Rep Helm (D-Washington County) (Presession filed.)

Current Committee: Energy and Environment (H)

HB 2725 INTRO

Relating to wood smoke pollution; declaring an emergency. Requires Environmental Quality Commission to adopt by rule grant program for providing funding to local service providers to develop and implement woodstove replacement rebate programs.

Bill Sponsor: Rep Helm (D-Washington County); Sen Prozanski; Rep Keny-Guyer (D-Portland); Rep Marsh (D-Ashland); Rep Nosse (D-Portland); Rep Power (D-Milwaukie); Rep Sanchez (D-Portland); Sen Dembrow (D-Portland); Sen Steiner Hayward (D-NW Portland/Beaverton); Rep Malstrom (D-Beaverton); Rep Greenlick (D-Portland) (Presession filed.)

Current Committee: Energy and Environment (H)

HB 2737 INTRO

Relating to construction standards for small homes. Requires Director of Department of Consumer and Business Services to establish special construction standards for homes that have floor area of not more than 250 square feet.

Bill Sponsor: Rep Barnhart (D-Lane/Linn Counties)

Current Committee: Business and Labor (H)

HB 2748 INTRO

Relating to the Residential Solid Fuel Heating Air Quality Improvement Fund. Modifies sources of moneys deposited in Residential Solid Fuel Heating Air Quality Improvement Fund.

Bill Sponsor: Rep Johnson (R-Hood River)
Current Committee: Energy and Environment (H)

HB 2755 INTRO

Relating to determination of values of transferable tax credits; prescribing an effective date. Requires value of transferable tax credit to be determined during calendar quarter in which agreement is reached to transfer credit.

Bill Sponsor: Rep Holvey (D-Eugene); Sen Beyer (D-Springfield)

Current Committee: Revenue (H)

HB 2756 INTRO

Relating to small scale local energy projects; prescribing an effective date. Transfers duties, functions and powers of State Department of Energy related to issuance of loans for small scale local energy projects to Oregon Business Development Department.

Bill Sponsor: Rep Holvey (D-Eugene); Sen Beyer (D-Springfield)

Current Committee: Energy and Environment (H)

HB 2757 INTRO

Relating to energy facility siting; declaring an emergency. Modifies cost recovery formula for site certificate holders.

Bill Sponsor: Rep Holvey (D-Eugene); Sen Beyer (D-Springfield)

Current Committee: Energy and Environment (H)

HB 2758 INTRO

Relating to residential energy conservation for oil-heated dwellings. Transfers administration of fuel oil dealer program from State Department of Energy to Housing and Community Services Department.

Bill Sponsor: Rep Holvey (D-Eugene); Sen Beyer (D-Springfield)

Current Committee: Energy and Environment (H)

HB 2759 INTRO

Relating to state purchase of transferable tax credits; prescribing an effective date. Prohibits transfer of energy-related tax credit held by tax-exempt or governmental entity.

Bill Sponsor: Rep Holvey (D-Eugene); Sen Beyer (D-Springfield)

Current Committee: Energy and Environment (H)

HB 2760 INTRO

Relating to the taxation of alternative energy systems; prescribing an effective date. Extends sunset for property tax exemption for alternative energy systems.

Bill Sponsor: Rep Holvey (D-Eugene)

Current Committee: Energy and Environment (H)

HB 2764 INTRO

Relating to minimum energy supplier assessment level. Changes calculated share of annual energy resource supplier assessment below which energy resource supplier is exempt from payment of assessment from \$250 to \$2,500.

Bill Sponsor: Rep Holvey (D-Eugene); Sen Beyer (D-Springfield)

Current Committee: Energy and Environment (H)

HB 2765 INTRO

Relating to the taxation of alternative energy systems; prescribing an effective date. Extends sunset for property tax exemption for alternative energy systems.

Bill Sponsor: Revenue (H)

Current Committee: Energy and Environment (H)

HB 2775 INTRO

Relating to tax credits for biomass; prescribing an effective date. Limits total amount of biomass tax credit allowed for animal manure that may be claimed annually by all taxpayers.

Bill Sponsor: Revenue (H)

Current Committee: Revenue (H)

HB 2828 INTRO

Relating to utilities. Establishes Oregon Public Utility Homeland Security Commission in Office of Emergency Management.

Bill Sponsor: Veterans and Emergency Preparedness (H)

Current Committee: Veterans and Emergency Preparedness (H)

HB 2853 INTRO

Relating to tax credits for biomass. Limits availability of tax credit allowed for animal manure processed in digester to digester in operation by certain date.

Bill Sponsor: Revenue (H)

Current Committee: Agriculture and Natural Resources (H)

HB 2961 INTRO

Relating to nonprofit organizations that provide financial assistance to persons in low income households to repair residences; declaring an emergency. Establishes Homeownership Repair and Rehabilitation Program within Housing and Community Services Department to provide grants to eligible nonprofit organizations to provide financial assistance to persons in low income households for repair and rehabilitation of residences.

Bill Sponsor: Rep Witt (D-Clatskanie); Rep Whisnant (R-Sunriver); Rep Gomberg (D-Gombrer); Sen Johnson (D-Scappoose); Rep Johnson (R-Hood River)

Current Committee: Human Services and Housing (H)

HB 2989 INTRO

Relating to residential solar; declaring an emergency. Requires State Department of Energy to conduct study on incentives for residential solar in this state.

Bill Sponsor: Rep Johnson (R-Hood River)

Current Committee: Energy and Environment (H)

HB 3019 INTRO

Relating to transportation electrification. Provides that certain amount of moneys collected from retail electricity consumers as public purpose charge may be used for transportation electrification.

Bill Sponsor: Energy and Environment (H)

Current Committee: Energy and Environment (H)

HB 3021 INTRO

Relating to energy conservation; declaring an emergency. Requires State Department of Energy to conduct study on energy conservation.

Bill Sponsor: Energy and Environment (H)

Current Committee: Energy and Environment (H)

HB 3023 INTRO

Relating to carbon pricing; declaring an emergency. Requires Department of Environmental Quality to conduct study on carbon pricing.

Bill Sponsor: Energy and Environment (H)
Current Committee: Energy and Environment (H)

HB 3025 INTRO

Relating to energy efficiency standards for battery charger systems. Excludes certain battery charger systems from definition of "battery charger system" for purposes of energy efficiency standards.

Bill Sponsor: Energy and Environment (H)

Current Committee: Energy and Environment (H)

HB 3032 INTRO

Relating to transferable energy tax credits; prescribing an effective date. Requires value of transferable tax credit to be lower of value determined at time of application for preliminary certification or at time of final certification.

Bill Sponsor: Revenue (H)

Current Committee: Revenue (H)

HB 3050 INTRO

Relating to solar photovoltaic power generation facilities. Permits siting of commercial solar photovoltaic power generation facility on land not designated as high value farmland, on high value farmland under certain conditions and as conditional permitted use of land zoned for exclusive farm use.

Bill Sponsor: Agriculture and Natural Resources (H)

Current Committee: Agriculture and Natural Resources (H)

HB 3142 INTRO

Relating to brownfields; prescribing an effective date. Requires nongovernmental entity that enters into contract with Public Utility Commission for receipt of public purpose charge moneys to administer loan program whereby entity makes loans to public land bank authorities created by local governments for purposes of acquiring, rehabilitating, redeveloping, reutilizing or restoring brownfield properties.

Bill Sponsor: Rep Buehler (R-Bend)

Current Committee: Economic Development and Trade (H)

HB 3163 INTRO

Relating to incentives for residential energy users; prescribing an effective date. Transfers administration of tax credit for biomass production or collection from State Department of Energy to State Department of Agriculture.

Bill Sponsor: Rep Holvey (D-Eugene); Sen Beyer (D-Springfield)

Current Committee: Energy and Environment (H)

HB 3164 INTRO

Relating to incentives for residential energy users; prescribing an effective date. Directs State Department of Energy to study existing residential energy tax credit and need for residential energy incentive programs.

Bill Sponsor: Rep Holvey (D-Eugene); Sen Beyer (D-Springfield)

Current Committee: Energy and Environment (H)

HB 3166 INTRO

Relating to the State Department of Energy; prescribing an effective date. Establishes Oregon Energy and Climate Board as oversight and advisory body for State Department of Energy.

Bill Sponsor: Rep Holvey (D-Eugene); Sen Beyer (D-Springfield)

Current Committee: Energy and Environment (H)

HB 3167 INTRO

Relating to State Department of Energy; prescribing an effective date. Establishes Oregon Energy

Commission as policy and rulemaking body for State Department of Energy.

Bill Sponsor: Rep Holvey (D-Eugene); Sen Beyer (D-Springfield)

Current Committee: Energy and Environment (H)

HB 3189 INTRO

Relating to the regulation of physical changes to real property. Establishes Department of Building Codes.

Bill Sponsor: Rep Rayfield (D-Corvallis)
Current Committee: Business and Labor (H)

HB 3227 INTRO

Relating to incentives for solar energy projects; prescribing an effective date. Allows tax credit for alternative energy device to be claimed by owner or subscriber of community solar project.

Bill Sponsor: Rep Holvey (D-Eugene)

Current Committee: Energy and Environment (H)

HB 3241 INTRO

Relating to local government improvement financing programs for single-family residences. Includes single-family dwellings as qualifying property for purposes of local government programs for financing energy improvements and seismic rehabilitation.

Bill Sponsor: Rep Marsh (D-Ashland)

Current Committee: Energy and Environment (H)

HB 3269 INTRO

Relating to the Oregon Global Warming Commission. Changes name of Oregon Global Warming Commission to Oregon Climate Change Commission.

Bill Sponsor: Rep Power (D-Milwaukie); Rep Helm (D-WA County); Sen Taylor (D-Milwaukie); Rep Lininger (D-Lake Oswego); Rep Lively (D-Springfield); Rep Marsh (D-Ashland); Sen Dembrow (D-Portland); Sen Devlin (D-Tualatin); Sen Prozanski (D-South Lane/North Douglas Counties); Rep

Holvey (D-Eugene); Rep Keny-Guyer (D-Portland) Current Committee: Energy and Environment (H)

HB 3348 INTRO

Relating to utilities. Provides that electric company may use electricity to comply with renewable portfolio standard only if electricity is generated by facility that procures electricity in accordance with certain delivery requirements.

Bill Sponsor: Rep Holvey (D-Eugene); Rep Smith G (R-Heppner)

Current Committee: Energy and Environment (H)

HB 5009 INTRO

Relating to the financial administration of the State Department of Energy; declaring an emergency. Limits biennial expenditures from fees, moneys or other revenues, including Miscellaneous Receipts, but excluding lottery funds and federal funds, collected or received by State Department of Energy.

Bill Sponsor: Presession filed

Current Committee: Ways and Means (J)

HB 5025 INTRO

Relating to the financial administration of the Oregon Business Development Department; declaring an emergency. Appropriates moneys from General Fund to Oregon Business Development Department for biennial expenses.

Bill Sponsor: Presession filed

Current Committee: Ways and Means (J)

SB 99 INTRO

Relating to the Director of the State Department of Energy. Requires Senate confirmation of Director of the State Department of Energy.

Bill Sponsor: Presession filed

Current Committee: Business and Transportation (S)

SB 100 INTRO

Relating to residential energy conservation for oil-heated dwellings; prescribing an effective date.

Repeals fuel oil dealer program. Bill Sponsor: Presession filed

Current Committee: Environment and Environment (H)

SB 159 INTRO

Relating to household tax credit for household energy costs; prescribing an effective date. Creates refundable income tax credit to offset household energy costs for taxpayers meeting income requirements.

Bill Sponsor: Presession filed

Current Committee: Finance and Revenue (S)

SB 168 INTRO

Relating to a tax credit for biomass. Extends sunset for tax credit for biomass production or collection for all types of biomass.

Bill Sponsor: Presession filed

Current Committee: Environment and Natural Resources (S)

SB 170 INTRO

Relating to tax credits for energy conservation projects. Extends sunset for tax credit for energy conservation project.

Bill Sponsor: Presession filed

Current Committee: Business and Transportation (S)

SB 175 INTRO

Relating to tax credits for renewable energy development contributions. Extends sunset for tax credits for renewable energy development contributions.

Bill Sponsor: Presession filed

Current Committee: Environment and Natural Resources (S)

SB 177 INTRO

Relating to residential energy. Extends sunset for construction or installation of alternative energy devices.

Bill Sponsor: Presession filed

Current Committee: Business and Transportation (S)

SB 197 INTRO

Relating to dairy air contaminants. Requires Environmental Quality Commission to adopt by rule program for regulating air contaminant emissions from dairy confined animal feeding operations.

Bill Sponsor: Presession filed

Current Committee: Environment and Natural Resources (S)

SB 285 INTRO

Relating to state financial administration; declaring an emergency. Appropriates moneys from General Fund to Higher Education Coordinating Commission to provide matching funds for Northwest National Marine Renewable Energy Center at Oregon State University to receive federal funds for deepwater test facility for utility scale wave energy converters.

Bill Sponsor: Sen Roblan (D-Coos Bay); Sen Kruse (R-Roseburg); Rep Gomberg (D-Central Coast); Rep McKeown (D-Coos Bay); Rep Smith DB (R-Port Orford)

Current Committee: Environment and Natural Resources (S)

SB 322 INTRO

Relating to the use of hydroelectric energy to comply with renewable portfolio standard. Specifies that electricity generated by hydroelectric facility or other equipment that generates electricity through use of hydroelectric energy may be used to comply with renewable portfolio standard.

Bill Sponsor: Sen Olsen (R-Canby)

Current Committee: Business and Transportation (S)

SB 328 INTRO

Relating to registration of biomass facilities; declaring an emergency. Makes biomass facilities that registered with Western Renewable Energy Generation Information System on or after January 1, 2011, eligible for renewable energy certificates.

Bill Sponsor: Presession filed

Current Committee: Business and Transportation (S)

SB 334 A

Relating to renewable natural gas. Requires State Department of Energy to develop and maintain inventory of biogas and renewable natural gas resources available to this state. Requires department, no later than September 15, 2018, to develop initial inventory and report on initial inventory to appropriate interim committees of Legislative Assembly.

Bill Sponsor: Presession filed

Current Committee: Senate Desk Awaiting Third Reading (S)

SB 339 INTRO

Relating to small-scale renewable energy projects; declaring an emergency. Caps electricity generated by any single biomass facility that may be used to meet requirement that certain percent of electricity in this state be electricity generated by small-scale renewable energy projects or biomass facilities.

Bill Sponsor: Presession filed

Current Committee: Business and Transportation (S)

SB 376 INTRO

Relating to Senate confirmation of appointments. Requires Senate confirmation of appointments by Governor of directors of Housing and Community Services Department and State Department of Energy.

Bill Sponsor: Sen Hansell (R-Athena); Rep Barreto (R-Cove)

Current Committee: Rules (S)

SB 424 INTRO

Relating to allowable green energy technology in public improvement contracts; prescribing an effective date. Expands definition of "green energy technology" for purposes of public improvement contracts.

Bill Sponsor: Sen Ferrioli (R-John Day)

Current Committee: Environment and Natural Resources (S)

SB 425 INTRO

Relating to the use of hydroelectric energy to comply with renewable portfolio standard. Specifies that electricity generated by hydroelectric facility or other equipment that generates electricity through use of hydroelectric energy may be used to comply with renewable portfolio standard.

Bill Sponsor: Sen Ferrioli (R-John Day)

Current Committee: Business and Transportation (S)

SB 426 INTRO

Relating to complete repeal of low carbon fuel standards. Repeals low carbon fuel standards.

Bill Sponsor: Sen Ferrioli (R-John Day)

Current Committee: Environment and Natural Resources (S)

SB 427 INTRO

Relating to elimination of requirements for which a public utility that supplies electricity may request from the Public Utility Commission an increase in rates. Amends certain provisions setting forth renewable portfolio standard requirements and acquisition processes to reinstitute requirements and processes in effect on March 7, 2016.

Bill Sponsor: Sen Ferrioli (R-John Day)

Current Committee: Business and Transportation (S)

SB 539 INTRO

Relating to public purpose charge moneys; prescribing an effective date. Changes distribution of amounts collected as public purpose charge by electric companies and Oregon Community Power.

Bill Sponsor: Sen Thatcher (R-Keizer)

Current Committee: Business and Transportation (S)

SB 557 INTRO

Relating to entities that contribute to greenhouse gas emissions; declaring an emergency. Repeals greenhouse gas emissions goals and requires Environmental Quality Commission to adopt by rule statewide greenhouse gas emissions goal for 2025, and limits for years 2035 and 2050.

Bill Sponsor: Sen Beyer (D-Springfield); Sen Manning Jr (D-Eugene)

Current Committee: Environment and Natural Resources (S)

SB 599 INTRO

Relating to a tax credit for capital improvements; prescribing an effective date. Creates income tax credit for capital improvements to business facilities or homes that are commenced prior to later of September 1, 2017, or effective date of Act.

Bill Sponsor: Sen Knopp (R-Bend)

Current Committee: Business and Transportation (S)

SB 634 INTRO

Relating to using woody biomass as a green energy technology; prescribing an effective date. Adds woody biomass to list of types of energy generating technology that are green energy technology that must be included in constructing, reconstructing or renovating public buildings, and for which contracting agency must set aside 1.5 percent of contract price.

Bill Sponsor: Sen Knopp (R-Bend); Sen Ferrioli (R-John Day)

Current Committee: Environment and Natural Resources (S)

SB 656 INTRO

Relating to increasing the frequency of conducting independent management evaluation of nongovernmental entity that receives public purpose charge moneys. Increases frequency of conducting independent management evaluation of nongovernmental entity's operations, efficiency and effectiveness, if public purpose charge moneys are transferred to nongovernmental entity for specified energy efficiency purposes.

Bill Sponsor: Sen Olsen (R-Canby)

Current Committee: Business and Transportation (S)

SB 657 INTRO

Relating to reduction in expenditures allowed under public purpose charge. Reduces public purpose charge.

Bill Sponsor: Sen Olsen (R-Canby)

Current Committee: Business and Transportation (S)

SB 659 INTRO

Relating to assessment by independent third party of nongovernmental entity that receives public purpose charges; prescribing an effective date. Requires nongovernmental entity, as condition of receiving public purpose charge moneys, to be assessed by independent third party.

Bill Sponsor: Sen Olsen (R-Canby)

Current Committee: Business and Transportation (S)

SB 748 INTRO

Relating to entities that contribute to greenhouse gas emissions; declaring an emergency. Requires Environmental Quality Commission to adopt carbon pollution permit program by rule.

Bill Sponsor: Sen Beyer (D-Springfield)

Current Committee: Environment and Natural Resources (S)

SB 908 INTRO

Relating to the State Department of Energy; declaring an emergency. Establishes Oregon Energy Commission as policy and rulemaking body for State Department of Energy.

Bill Sponsor: Sen Beyer (D-Springfield)

Current Committee: Business and Transportation (S)

SB 909 INTRO

Relating to utility regulation; declaring an emergency. Specifies that public utility that makes sales of electricity may not establish rate for any service that provides public utility with rate of return that exceeds 4.5 percent.

Bill Sponsor: Sen Ferrioli (R-John Day)

Current Committee: Business and Transportation (S)

SB 952 INTRO

Relating to the State Department of Energy; prescribing an effective date. Establishes Oregon Energy Commission as policy and rulemaking body for State Department of Energy.

Bill Sponsor: Sen Olsen (R-Canby); Sen Johnson (D-Scappoose)

Current Committee: Business and Transportation (S)

SB 978 INTRO

Relating to utilities; prescribing an effective date. Prohibits electric company from including in its rates cost of electric generation resource or energy storage resource that is capable of generating electricity or storing electricity for not less than five years and has generating or storage capacity of 50 megawatts or more unless electric company must acquire resource to maintain reliability of electrical company's electrical system.

Bill Sponsor: Business and Transportation (S)

Current Committee: Business and Transportation (S)

SB 979 INTRO

Relating to utilities; prescribing an effective date. Establishes ability of retail electricity consumer to purchase electricity generated by eligible renewable energy resources and certain ancillary services directly from entity that is not distribution utility that meets specified conditions.

Bill Sponsor: Business and Transportation (S)

Current Committee: Business and Transportation (S)

Tab 9



Glossary of Terms Related to Energy Trust of Oregon's Work

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 current and comprehensive information. Last updated July 2015.

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 specifies the methodology for calculating above-market costs. *Reference the Board Cost-Effectiveness Policy and General Methodology*

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, efficient windows and weatherstripping, which reduce the amount of cold air entering or warm air escaping 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 (Btu)

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 and Power, 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. Reference the Board Combined Heat and Power Policy

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). 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. Reference the Board Cost-Effectiveness Policy and General Methodology

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 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. In Oregon, the pilot program was called the Volumetric Incentive Rate program and each investor-owned utility in the state ran separate programs. Solar systems receiving a feed-in tariff rate were not eligible for Energy Trust incentives or a state tax credit.

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 Certificates or RECs)

See the Renewable Energy Certificates entry.

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 reusing heat from the cold outdoors with an electrical system in the winter. Most systems use forced warm-air delivery systems to move heated air throughout the house.

Heating, Ventilation and Air Conditioning (HVAC)

Mechanical systems that provide thermal comfort and air quality in an indoor space. They 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 Btu. 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 a greenhouse gas.

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 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.

Oregon Public Utility Commission (OPUC)

Energy Trust operates under a grant agreement with the OPUC and reports quarterly and annually to the state agency. Reports include quarterly presentations to the commission and an annual update on progress to OPUC minimum annual performance measures.

Path to Net Zero (PTNZ)

The Path to Net Zero pilot was launched in 2009 by the 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. The offer demonstrates that a wide range of buildings can achieve aggressive energy goals using currently available construction methods and technology, as well as by testing innovative design strategies.

Photovoltaic

Direct conversion of sunlight to electric energy through the effects of solar radiation on semiconductor materials. Photovoltaic systems are one type of solar system eligible for Energy Trust incentives.

Program Management Contractor (PMC)

Company Energy Trust contracts with to deliver and implement a program or major program track. PMCs keeps costs low for utility customers, draw from existing expertise and skills in the market, and allow Energy Trust to remain flexible and nimble as the market changes. PMC contracts are competitively selected, reviewed by a committee with internal staff and external representatives, and approved by the board.

Program Delivery Contractor (PDC)

Company Energy Trust contracts with to implement a specific program track. PDCs keeps costs low for utility customers, draw from existing expertise and skills in the market, and allow Energy Trust to remain flexible and nimble as the market changes. PDC contracts are competitively selected, reviewed by a committee with internal staff and external representatives, and approved by the board.

Public Purpose Charge

Established in SB 1149, the public purpose charge is a 3 percent charge from PGE and Pacific Power Oregon customers. Three fund administrators distribute the ratepayer dollars: Energy Trust of Oregon for energy efficiency, market transformation and renewable energy programs; the Oregon Department of Energy for energy efficiency in schools; and Oregon Housing and Community Services for low-income weatherization and housing assistance. Energy Trust is funded through the public purpose charge (SB 1149), supplemental funding (SB 838) and contracts with two gas utilities.

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 Certificates (RECs or Green Tags)

A Renewable Energy Certificate is a tradable commodity that represents the contractual rights to claim the environmental attributes of a certain quantity of renewable electricity. The environmental attributes include the reductions in emissions of pollutants and greenhouse gases that result from the delivery of the renewably-generated electricity to the grid.

Here's how emission reductions occur: When a renewable energy system 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, the renewable energy system causes them to generate fewer emissions of pollutants and greenhouse gases. These reductions in emissions are the primary component of RECs.

RECs 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. RECs 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.

RECs are bought and sold every day in the electricity market. They are measured in units, like electricity. Each kilowatt hour of electricity that a renewable energy system produces also creates a one-kilowatt hour REC. Reference the Board Renewable Energy Certificate Policy

Renewable Energy Resources

- 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, including in Oregon, 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 "gaspaks"). 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 for 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

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 through the Oregon Department of Energy and to low-income customers through Oregon Housing and Community Services. SB 1149 is one stream of funding for Energy Trust, which is also funded through SB 838 to deliver achievable energy efficiency above the 3 percent and identified in utility integrated resource planning processes, and individual contracts with NW Natural and Cascade Natural Gas to deliver natural gas efficiency programs.

SB 838

SB 838, enacted in 2007, augmented Energy Trust's mission in many ways. It provided a vehicle for additional electric efficiency funding for customers under 1 aMW in load by allowing PGE and Pacific Power to fund cost-effective energy efficiency above the 3 percent, and restructured the renewable energy role to focus on renewable energy systems that are 20 MW or less in size. SB 838 is also the legislation creating the state's Renewable Portfolio Standard and extended Energy Trust's sunset year from 2012 to 2026.

SB 838 is often categorized as supplemental funding in Energy Trust budget documents.

Sectors

For energy planning purposes, the economy is divided into four sectors: residential, commercial, industrial and irrigation. At Energy Trust, programs are divided into four sectors: residential, commercial (including multifamily), industrial (including irrigation) and renewable energy.

Self-Directing Consumers

A retail electricity consumer that has used more than one aMW of electricity at any one site in the prior calendar year or an aluminum plant that averages more than 100 aMW 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.

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.

Strategic Energy Management (SEM)

A program offering for both commercial and industrial customers: commercial Strategic Energy Management and industrial Strategic Energy Management. Through SEM, customers engage with Energy Trust for a year or more in a systematic and ongoing approach to lowering energy usage. Energy Trust helps customers track and monitor energy use and performance, identify and implement no-cost and low-cost operations and maintenance changes, develop an energy management plan and more. SEM creates culture change around energy, training employees at all levels that energy use can be tracked, reduced and managed.

Therm

One hundred thousand (100,000) British thermal units (1 therm = 100,000 Btu).

Total Resource Cost Test

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. This test is central to how Energy Trust delivers on its mission. This test is the main test that determines whether Energy Trust can offer an incentive for a project. It also reflects the region's approach to long-term energy planning by prioritizing investment in low-cost energy resources. Reference the Board Cost-Effectiveness Policy and General Methodology

Tidal Energy

Energy captured from tidal movements of water.

Trade Ally Contractor (Trade Ally)

Energy Trust trade allies are valued ambassadors in the field. The network of independent contractors and other allied professionals helps homeowners, businesses, public and nonprofit entities, developers and others complete energy-efficiency and renewable energy projects across Oregon and in southwest Washington. Quite often, trade allies are the first, last and only Energy Trust representative a customer will see.

Trade Ally Network

Energy Trust statewide network of trained contractors and other allied businesses.

Utility Cost Test

This test is used to indicate the incentive amount for a project. It helps Energy Trust determine whether providing an incentive is cost effective for the utility system. *Reference the Board Cost-Effectiveness Policy and General Methodology*

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.

Acronyms Related to Energy Trust of Oregon's Work

	American Architectural Manufacturers	Trade group for window, door
AAMA	Association	manufacturers
A/C	Air Conditioning	manaradaroro
	American Council for an Energy-Efficient	
ACEEE	Economy	Environmental Advocacy, Researcher
AEE	Association of Energy Engineers	•
AEO	Annual Energy Outlook	
		Energy services and energy efficiency
AESP	Association of Energy Services Professionals	trade organization
	A 15 11100 C 500	The measure of seasonal or annual
AFUE	Annual Fuel Utilization Efficiency	efficiency of a furnace or boiler
AIA	American Institute of Architects	Trade organization
AOC	Association of Oregon Counties	A
		A way to equally distribute annual energy over all the hours in one year;
aMW	Average Megawatt	there are 8,760 hours in a year
AOI	Associated Oregon Industries	there are of too hours in a year
APEM	Association of Professional Energy Managers	
ARI	Air-Conditioning and Refrigeration Institute	AC trade association
ASE	Alliance to Save Energy	Environmental advocacy organization
7.02	Association of State Energy Research and	Environmental advesasy erganization
ASERTTI	Technology Transfer Institutions, Inc.	
	American Society of Heating, Refrigeration, and	
ASHRAE	Air Conditioning Engineers	Technical (engineers) association
ASME	American Society of Mechanical Engineers	Professional organization
BACT	Best Achievable Control Technology	
BCR	Benefit/Cost ratio	See definition in text
		Nonprofit that funds renewable
BEF	Bonneville Environmental Foundation	energy projects
BETC	Business Energy Tax Credit	Former Oregon tax credit
BOC	Building Operator Certification	Trains and certifies building operators
BOMA	Building Owners and Managers Association	
BPA	Bonneville Power Administration	Federal power authority
BPS	Bureau of Planning and Sustainability	City of Portland government agency
CAC	Conservation Advisory Council	Energy Trust advisory council to the board
ccs	Communications and Customer Service	A group within Energy Trust
CCCT	Combined Cycle Combustion Turbine	
CEE	Consortium for Energy Efficiency	National energy efficiency group
CEW	Clean Energy Works	
CFL	Compact Fluorescent Light bulb	
СНР	Combined Heat and Power	
CNG	Cascade Natural Gas	Investor-owned utility
ConAug	Conservation Augmentation Program	BPA program

		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 =
CHT	Coefficient of Heat Transmission (U-Value)	1/R-Value.
COU	Consumer-Owned Utility	
СОР	Coefficient of Performance	The ratio of heat output to electrical energy input for a heat pump
		Program Management Contractor for
CR	CLEAResult	Existing Homes, New Homes and
CR	CLEARESUIL	New Buildings Energy Trust's system to capture
		information on program participants
		and non-participants that have
CRM	Customer Relationship Management system	communicated with us
CT	Combustion Turbine	Dublic interest many
CUB	Citizens' Utility Board of Oregon	Public interest group
Cx	Commissioning Distributed Generation	
DG DSI	Direct Service Industries	Direct Access customers to BPA
DOE	Department of Energy	Federal agency
DSM	Demand Side Management	1 ederal agency
EA	Environmental Assessment	
EA	Earth Advantage	
EASA	Electrical Apparatus Service Association	Trade association
		Also known as a variable-speed
		blower motor, can vary the blower
ECM.	Flooring III. Communitation Motor	speed in accordance with the needs
ECM	Electrically Commutation Motor	of the system
EE	Energy Efficiency	
		The cooling capacity of the unit (in
		Btu/hour) divided by its electrical input (in watts) at standard peak rating
EER	Energy Efficiency Ratio	conditions
		An efficiency ratio of the energy
		supplied in heated water divided by
EF	Energy Factor	the energy input to the water heater
EIA	Energy Information Administration	See definition in text
EMS EPA	Energy Management System Environmental Protection Agency	
EPRI	Environmental Protection Agency Electric Power Resource Institute	Federal agency
CFKI	Electric Fower Resource Institute	Utility organization Energy Trust rating that assesses a
		newly built or existing home's energy
		use, carbon impact and estimated
EPS™	Energy Performance Score	monthly utility costs

EQIP	Environmental Quality Incentive Program	
	Energy Efficiency and Renewable Energy	
EREN	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	
		Energy Trust's financial tracking
GP	Great Plains	system
HBA	Home Builders Association	
		Online review of a residential
HER	Home Energy Review	customer's home
HSPF	Heating Season Performance Factor	
HVAC	Heating, Ventilation and Air Conditioning	
IBEW	International Brotherhood of Electrical Workers	
ICNU	Industrial Customers of Northwest Utilities	Trade interest group
ICF	ICF International	Existing Buildings Program Management Contractor
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 Solution Implementation Project	
ISM	Instant-Savings Measure	See definition in text
ITC	Investment Tax Credit	Federal
kW	Kilowatt	
kWh	Kilowatt Hours	8,760,000 kWh = 1 aMW
LBL	Lawrence Berkeley Laboratory	
LED	Lighting Emitting Diode	Solid state lighting technology
		Building rating system from the U.S.
LEED	Leadership in Energy & Environmental Design	Green Building Council
	Low Income Housing Energy Assistance	
LIHEAP	Program	
LIWA	Low Income Weatherization Assistance	E : C AA ICC II D
LM	Lockheed Martin	Existing Multifamily Program Management Contractor
		9
LOC	League of Oregon Cities	Local government organization Midwest Market Transformation
MEEA	Midwest Energy Efficiency Alliance	organization, Alliance counterpart
111-6-7	marroot Energy Emolericy / midnes	See definition in text
MT&R	Monitoring, Targeting and Reporting	233 domination in tox
	, <u>Jan Jan Jan Jan Jan Jan Jan Jan Jan Jan </u>	Unit of electric power equal to one
MW	Megawatt	thousand kilowatts

MWh Megawatt Hour 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 Trade organization NEEI Northwest Energy Efficiency Council Trade organization NEEI Northwest Energy Education Institute Training organization NEEP Northeast Energy Efficiency Partnership Northwest market transformation organization NERC North American Electricity Reliability Council NFRC National Fenestration Rating Council Federal regulator NRC 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 NWPA Northwest Pood Processors Association Trade organization NWPA Northwest Public Power Association Trade organization NWPA Northwest Public Power Association Trade organization NWPA Northwest Power and Conservation Council New York State Energy Research & NWW York State Energy Research & New York energy organization NWSERDA Development Authority Funded by a systems benefit charge NYSERDA Development Authority Funded by a systems benefit charge NYSERDA Development Authority Funded by a systems benefit charge NYSERDA Development Authority Funded by a systems benefit charge
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OBA Oregon Business Association Business lobby group
Authority to site energy facilities in
OEFSC Oregon Energy Facility Siting Council Oregon
Oregon state energy agency and one
of three public purpose charge
ODOE Oregon Department of Energy administrators
One of three public purpose charge
OHCS Oregon Housing and Community Services administrator
OPUC Oregon Public Utility Commission Utility trade organization OPUDA Oregon Public Utility District Association Utility trade organization
ORECA Oregon Rural Electric Cooperative Association Utility trade organization Volunteer nonprofit organization
OSEIA Solar Energy Industries Association of Oregon dedicated to education/promotion
P&E Planning and Evaluation A group within Energy Trust
7. group within Energy Hust
PAC Pacific Power

	<u> </u>	Company contracted with Energy
		Company contracted with Energy Trust to identify and deliver industrial
		and agricultural services, and
		commercial Strategic Energy
		Management services, to Energy
PDC	Program Delivery Contractor	Trust customers
		Portland nonprofit; former Energy
PECI	Portland Energy Conservation, Inc.	Trust PMC
PGE	Portland General Electric	Investor-owned utility
PG&E	Pacific Gas & Electric	California investor-owned utility
2110		Company contracted with Energy
PMC	Program Management Contractor	Trust to deliver a program
PNUCC	Pacific Northwest Utilities Conference Committee	
PPC	Public Power Council	National trade group
PPL	Pacific Power	Formerly Pacific Power and Light
PSE	Puget Sound Energy	Investor-owned utility
FSE	Fuget Sound Energy	Energy Trust's database that tracks
PT	Project Tracking	details on customer projects
	1 Tojout Tracking	Federal incentive that provides
		financial support for the first 10 years
		of a renewable energy facility's
PTC	Production Tax Credit	operation
		Promotes the efficiency of air-systems
PTCS	Performance Tested Comfort Systems	in residential homes
PTNZ	Path to Net Zero	See definition in text
PUC	Public Utility Commission	
PUD	Public Utility District	
PURPA	Public Utility Regulatory Policies Act	See definition in text
QF	Qualifying Facility	
		Energy Trust advisory council to the
RAC	Renewable Energy Advisory Council	board
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	
RNW	Renewable Northwest	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
SCCT	Single Cycle Combustion Turbine	
SCL	Seattle City Light	Public utility
		Established in 1991, requires all state
CEED	State Francy Efficient Design	facilities to exceed the Oregon Energy
SEED	State Energy Efficient Design	Code by 20 percent or more

		A measure of cooling efficiency for air conditioners; the higher the SEER,
SEER	Seasonal Energy Efficiency Ratio	the more energy efficient the unit
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
		Southwest market transformation
SWEEP	Southwest Energy Efficiency Partnership	group
T&D	Transmission & Distribution	
TRC	Total Resource Cost	See definition in text
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
WUTC	Washington Utilities and Transportation Commission	
Wx	Weatherization	
W	Watt	