

Energy Trust Board of Directors

February 22, 2018

156th Board Meeting

Thursday, February 22, 2018

421 SW Oak Street, Suite 300, Portland, Oregon

Agenda		Tab	Purpose
9:00 a.m.	Board Meeting – Call to Order (Debbie Kitchin) • Approve agenda		
	General Public Comment <i>The president may defer specific public comment to the appropriate agenda topic.</i>		
	Consent Agenda <i>The consent agenda may be approved by a single motion, second and vote of the board. Any item on the consent agenda will be moved to the regular agenda upon the request from any member of the board.</i> • December 15, 2017 Board meeting minutes	1	Action
9:05 a.m.	President's Report (Debbie Kitchin)		Info
9:35 a.m.	Nominating Committee (John Reynolds)..... • Election to new terms of office – R831 • Election of officers – R832	2	Action
9:45 a.m.	President's Report (Roger Hamilton) • Committee Assignments – R833.....	Resolution distributed at meeting	Action
9:50 a.m.	Training: Board Responsibilities and Legal Obligations (Debbie Menashe, Kristy Cook, Cook Legal Services)		
11:20 a.m.	PMC Program Contract Extension – Multifamily (Kate Scott).....	3	Info
11:35 a.m.	Working Lunch (get lunch and reconvene)		
11:45 a.m.	Board Learning Topics Presentations (Mike Colgrove)..... • Distribution Systems and Energy Efficiency (Amanda Potter, Thad Roth) • EVs and Transportation (Spencer Moersfelder, Jay Ward, Jeff Allen) • Monetizing Non-Energy Benefits (Mike Colgrove, Sue Hall)	Distributed via email in advance of meeting	Info
1:15 p.m.	Committee Reports • Compensation Committee (Dan Enloe)..... • Evaluation Committee (Alan Meyer)..... • Finance Committee (Susan Brodahl)..... • Policy Committee (Roger Hamilton)..... • Strategic Planning Committee (Mark Kendall).....	4 5 6 7 8	Info Info Info Info Info
1:30 p.m.	Staff Reports • 2017 Preliminary Results, Highlights (Mike Colgrove) • Secretary of State Audit Update (Mike Colgrove) • Staffing Update – Human Resource Manager (Mike Colgrove) • 2018 Legislative Update (Jay Ward, Becky Engel).....	9	Info
1:45 p.m.	Adjourn		

**The next meeting of the Energy Trust Board of Directors will be
Wednesday, April 4, 2018 at 10:30 a.m.
at Energy Trust of Oregon, 421 SW Oak, Suite 300, Portland, OR 97204**

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February 7, 2018, RAC and CAC meeting notes will be emailed prior to the board meeting if available

Tab 1

Board Meeting Minutes—155th Meeting

December 15, 2017

Board members present: Ken Canon, Melissa Cribbins, Roger Hamilton, Lindsey Hardy, Mark Kendall, Debbie Kitchin, Alan Meyer, John Reynolds, Eddie Sherman, Janine Benner (Oregon Department of Energy special advisor), Steve Bloom (Oregon Public Utility Commission ex officio)

Board members absent: Susan Brodahl, Dan Enloe, Anne Root

Staff attending: Gwen Barrow, Kathleen Belkhatay, Scott Clark, Amber Cole, Michael Colgrove, Hannah Cruz, Phil Degens, Juliett Eck, Becky Engel, Sue Fletcher, Fred Gordon, Jed Jorgensen, Susan Jowaiszas, Betsy Kauffman, Corey Kehoe, Judge Kemp, Steve Lacey, Dave Moldal, Alex Novie, Amanda Potter, Lizzie Rubado, Dan Rubado, Thad Roth, Amanda Sales, Kenji Spielman, Cameron Starr, Greg Stokes, Julianne Thacher, Jay Ward, Peter West, Whitney Winsor, Lily Xu

Others attending: Jan Bomen, Emertec; John Charles, Cascade Policy Institute; Carol Dillin, Portland General Electric; Margie Harris; Rick Hodges, NW Natural; Bob Stull, Ecova; Maria Pope, PGE; Dave Rebets, PGE; Anne Snyder-Grassman, PGE

Business Meeting

Debbie Kitchin called the meeting to order at 10:35 a.m. She reminded the board that consent agenda items can be changed to regular agenda items at any time.

There was a change to the agenda. The president's report was moved to after lunch.

General Public Comments

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

There were no public comments.

Consent Agenda

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

MOTION: Approve consent agenda

Consent agenda includes:

1. November 8, 2017 Board meeting minutes
2. Amend and Extend Creative Services Contract with Coates Kokes—R824
3. Authorize a Contract with Affiliated Media for Advertising Costs—R825
4. Annual Determination Regarding REC Registration Requirements Resolution—R826

Moved by: John Reynolds

Seconded by: Mark Kendall

Vote: In favor: 9

Abstained: 0

Opposed: 0

PGE Direction and Vision

Debbie Kitchin introduced Maria Pope, the new chief executive officer of PGE, and Carol Dillon, vice president of customer strategies and business development.

Maria provided an overview of PGE direction and vision. Safety, reliability and affordability are core values for PGE. Customers expect near perfect reliability. PGE has 99.8 percent reliability. Generation plants operate with 90 percent plant availability. Forty percent of PGE's customers are residential, 40 percent are commercial and 20 percent are industrial. About 20 percent of residential customers

struggle to pay bills every month, and many of them receive state and federal subsidies. About 40 percent of residential customers are renters. Customers expect more and more from utilities. They expect clean energy, and they do not expect to pay more for it. They expect a high level of cyber security and data security.

Eddie Sherman joined the meeting at 10:41 a.m.

Maria described the challenges and opportunities ahead. The electric portion of the energy market is expected to double by 2040. Energy is increasingly decentralized and variable, including energy from new technologies such as wind and wave energy. PGE expects to see rapid technology changes. To meet customer needs, PGE must transition to this new future in a cost-effective and reliable fashion.

PGE hired Evolved Energy Partners to explore decarbonization for Oregon. Results of the study will be public. Other utilities are doing similar studies, including in California, New York and Vermont. Key themes are emerging, including decarbonization of the electric supply, expansion of electric uses and focus on smart technologies. PGE is making progress to decarbonize the energy supply. It expects to be 70 percent carbon free by 2040 based on investments driving down greenhouse gas emissions. Energy efficiency is a key part of this.

PGE is working on integration with the Western grid to dispatch the lowest-cost resources from Arizona to British Columbia. This allows the utility to take advantage of wind, solar and hydropower energy available. As California and Arizona generate excess energy, PGE can use it in the Pacific Northwest to increase reliability and keep costs low.

Commissioner Bloom noted he enjoyed a recent meeting with Maria and PGE staff, and requested that OPUC staff also visit PGE.

Maria continued that PGE is leveraging partnerships with software providers. Software and communication costs are coming down and resources are becoming more integrated. Commissioner Bloom noted that PGE computer models anticipate minor issues so that the utility address them prior to an outage.

Maria continued that being able to use distributed resources, such as batteries, will be increasingly important. It's also important how PGE will tie in with substations.

The board asked if PGE plans to integrate renewable energy systems at data centers with the utility's standby generation fleet. Maria responded that PGE is looking into this, including at a pilot in Colorado.

Maria continued that green energy choices are important to customers, and different customers want different things. For example, Multnomah County has decided to go 100 percent green. Working with ambitious customers helps PGE hone its interconnection between systems and move forward more quickly. PGE is working with people across the country to look at how they are handling distributed energy resources. The utility made a request to the OPUC to work with TriMet buses and create more electric charging stations.

The board asked about PGE's comfort with current net-metering policies and practices. Maria responded that the OPUC has opened a docket to look at this. PGE has about 92 megawatts of solar capacity currently. Capacity will be a challenge moving forward. Similar to the cell phone industry,

customers will change from paying for minutes to paying for functionality. The cost of energy will keep declining, but the cost of maintaining reliable system will increase. Utility pricing structure today does not recognize the costs of reliability.

The board asked if PGE is looking at the resource value of solar discussions to consider rewarding other things than amount of electricity generated. Maria responded that PGE is working with stakeholders and OPUC staff regarding this discussion.

The board discussed challenges to achieving its 70 percent carbon free goal by 2040 and the impact on rates for marginalized populations. Maria responded that some customers want to move fast, and PGE wants to bring all other customers along in a cost-effective way. PGE will work with faster customers as leaders to help everyone else move forward. Rates are currently set by rate class, and customer needs no longer segment by rate class. Technology is improving quickly enough that moving to green energy will not need to cost more. It's about balancing lower and higher cost energy sources. Prior technology investments are paying off. For example, PGE installed smart meters nine years ago and is using them now to understand customer needs.

The most aggressive customers want to move to clean energy quickly but don't want to pay more or sacrifice reliability. Marginalized populations are not able to participate at current rates. Large-scale wind today can be built and deployed at less than \$40, down from \$80 to \$120 a few years ago. Solar costs are also dropping. Large-scale solar is nearly as cost-competitive as wind. This is still more expensive than large hydropower, but large hydropower costs are also increasing due to fish management issues. Energy is a commodity, and commodity prices are declining. PGE's cost structure nine years ago was more than 50 percent energy and fuel costs. Today, PGE's cost structure is 25 to 30 percent energy and fuel costs. The utility watches prices carefully and tries to make rates increase at a lower rate lower than inflation. Energy efficiency is also a key part of PGE's future. Energy Trust's energy savings is equivalent to a power plant.

The Pacific Northwest is the third fastest growing region in the country. The Hillsboro area will require three new substations. Another growth example is the Portland South Waterfront expansion, which also requires a new substation. These new substations are very sophisticated and highly efficient.

The board asked if any large customers are interested in expanding their energy investments. Maria responded that this is not the case, but many of our customers have significant plans for growth. PGE is doing more work today to meet new customer needs than in the last decade. The landscape is also much more complicated today. Traffic is an issue. Land use is an issue. Staffing is an issue.

Maria described focus areas to support grid integration. This includes prioritizing communications, including expanding fiber optic networks. The utility is also putting in distributed automation and removing PCBs from transformers. It is also partnering with cities and counties, and each wants different things. The utility is also transforming its transportation fleet to be greener. PGE's goal is to keep energy clean, connected, equitable and affordable for all.

The board asked about the Boardman plant. Maria answered that PGE has proven that it is difficult but possible for the plant to support biomass. PGE is currently modeling air emissions to understand costs.

The board asked what PGE is doing with battery storage. PGE is working on a pilot project with the OPUC for 39 MW of energy storage.

The board asked how Energy Trust can help PGE integrate with battery storage and implement demand response programs. Maria responded that Energy Trust could help with the deployment of batteries, adding storage to renewable energy systems and supporting customer awareness.

Oregon Department of Energy Survey

Janine Benner presented on ODOE's energy survey. ODOE is working on its biennial energy report, and wants feedback from Energy Trust's board. The new report follows guidance from House Bill 2343 and will replace ODOE's biennial energy plan. The report is due on November 1, 2018. ODOE has a survey on its website to solicit input from general public. It is also asking experts like Energy Trust for feedback.

The report will be divided into three sections: understanding Oregon's energy landscape; policies; and opportunities, resource trends and new technologies. Topics will include battery storage, resiliency, renewable energy development and more.

She encouraged board members to think about the questions and submit input, and noted that she already received input from Energy Trust's Management Team.

The board requested to receive the questions and have a follow-up opportunity for input. The board noted that these questions pertain to Energy Trust's Strategic Plan and suggested adding them to a strategic planning committee agenda in early 2018.

Final Proposed 2018 Annual Budget and 2018-19 Action Plan

Michael Colgrove presented Energy Trust's final proposed 2018 annual budget and 2018-2019 action plan, including projected 2017 results and 2018 context, outreach and comments received, highlights of the budget and summary of key takeaways and customer benefits.

Mike summarized forecasted 2017 results. Energy Trust is forecasting strong 2017 year-end electric savings and renewable generation, and solid results for gas savings. Activity is driven by strong economy, new construction, LED adoption and projects at schools.

Energy Trust changed its savings strategy with NW Natural, which affects Energy Trust's ability to meet the NW Natural goal. In Cascade Natural Gas, there were a few projects delayed to 2018.

Overall, Energy Trust expects to achieve savings at lower levelized costs than expected. Staff expect to achieve 152 percent of renewable generation goal, with strong solar generation and strong Other Renewables project pipeline. Expenditures are trending down and reserves are trending above targets.

Context influencing the final proposed 2018 budget includes a stable economy driving high activity; diversifying population; changing policies, markets and technologies; lower savings per project; avoided cost shifts and cost-effectiveness challenges. The 2018 budget and action plan emphasizes diversifying participation, enhancing program methods and strategies, and managing change and preparing for the future. Energy efficiency will continue to be the least-cost energy source, even though it's getting harder to achieve as we go after the next increments of savings.

Energy Trust received public comments following a series of budget outreach activities from August to November. Outreach is an important part of the budget process because it helps the organization remain inclusive and transparent.

Commissioner Bloom noted that OPUC staff was concerned about NW Natural's questions in its budget comments, and asked why NW Natural staff were surprised. Mike responded that Energy Trust staff have had extensive conversations with NW Natural staff regarding that concern. The issue had to do with timing. Final budget numbers are not available until late in the year. The board asked what Energy

Trust is doing to address this issue, and Mike responded that it was one of the reasons for the budget review project. Energy Trust will present a proposed new budget process in early 2018 to OPUC and utility staff, and it will be proposed to board in April 2018. Stakeholder engagement is a high priority for the budget review project. Energy Trust plans to implement a new budget process in 2019 for its 2020 budget.

Mike provided highlights from budget comments, including from utilities, OPUC and other stakeholders. Energy Trust received overall support for the draft 2018 budget and 2018-2019 action plan. Comments mentioned concerns with changes in gas costs and savings, administrative and staffing costs, and the budget schedule and process.

The board asked what was the most unexpected and pertinent comment, and Mike responded that staff were not surprised by the comments. NW Natural's concerns reinforced the need to improve budget communications and timing. Mike added he was not expecting the electric utilities' comments on the use of contingency reserves.

Mike explained the factors shifting EPS new homes costs and savings from electric to gas. This came up at October Conservation Advisory Council meeting. Following that meeting, staff hosted a workshop with all gas utilities. Mike summarized the reason for the shift in savings and costs. First, Oregon's state energy code was updated in October, raising the efficiency baseline and limiting the savings Energy Trust can pursue. Second, Energy Trust received new avoided costs from utilities. Avoided costs for electricity went down so much that it shifted the relative value of electricity to gas savings. Electricity is no longer as valuable as gas savings. In the past, more of the savings and costs of EPS incentives were attributed to electric utilities and less to gas utilities. In 2018, slightly more of the savings and costs will be attributed to gas utilities and less to electric utilities. Another factor is that more new homes are expected to be built in 2018, which magnifies the impacts of these cost shifts.

The board asked if new home construction would eventually drop following economic cycles. Mike responded that at some point the economy will slow and there will be fewer homes built. However, the proportion of energy-efficient homes may change. The board noted that housing shortages and population growth would also have an impact.

The board asked if other factors could influence the shift in EPS new home costs and if Energy Trust's incentives are set correctly. Mike responded that staff review incentives on an ongoing basis, and EPS incentives are set at the level necessary to drive the market forward.

Mike summarized comments received from the OPUC, which included concern about Energy Trust's staffing and administration costs.

The board asked if the OPUC's performance metrics for Energy Trust will be set based on the Secretary of State audit. Mike responded that OPUC staff have already proposed 2018 performance metrics for Energy Trust in its budget comments, and other minimum performance metrics will be set based on savings and costs in the adopted budget. Mike summarized the OPUC's recommended changes to its performance metrics for Energy Trust. OPUC recommended that Energy Trust reduce its cap for staffing costs from 7.75 percent to 7.25 percent of total Energy Trust expenditures. The OPUC also recommended removing the cost of temporary contract employees from staffing costs for this staffing costs metric. Contract employees are a tool for Energy Trust to meet short-term needs without adding new full-time staff. In addition, OPUC staff added a 10 percent year-over-year cap for staffing and administrative costs increases. These caps take effect for the 2019 budget, and Mike noted that Energy Trust is already complying with them in 2018.

In 2018, Energy Trust will invest \$198.9 million to save 56.5 average megawatts and 6.91 million annual therms. Electric savings will increase very slightly and gas savings will decrease very slightly. Renewable generation will decrease due to the expiration of the State of Oregon's Residential Energy

Tax Credit. Energy Trust's overall spending will increase 0.1 percent due to more projects and slightly higher internal costs.

Mike summarized changes made to the draft budget, including reduction of the renewable energy goal due to cancellation of a project, change in allocation of NEEA costs to electric utilities, and reductions to staffing costs. The 2018 staffing costs include agency contractor costs. Without agency costs, Energy Trust's 2018 staffing costs are well below 7.25 percent threshold.

The board asked how the reduction to staffing costs will impact some of the requests from the OPUC. Mike responded that the OPUC's requests will be prioritized and will not be impacted.

Mike previewed projections for 2019, which will include a very slight increase in expenditures and decrease in savings. This is due to the same trends that are impacting the 2018 budget.

The board asked what percentage of healthcare costs are paid by employees. Mike responded that employees pay 8 percent of healthcare costs.

The board asked what contributes to the reduction of electric residential savings from 12 MW in 2016 to 12 MW in 2017. Peter West responded that the reduction is due to market adoption of LEDs due to our influence, changing the baseline for savings that can be acquired going forward.

The board asked about how costs are allocated for EPS. Mike explained that the EPS incentives will remain largely the same, but the portion of costs for gas utilities will go up proportional to costs for electric utilities. It helps builders to have a consistent incentive amount.

Debbie Kitchin asked for public comment on budget. There was no public comment.

The board took a break and convened for an executive session at 12:25 p.m.

Moved by: Roger Hamilton

Seconded by: Eddie Sherman

Vote: In favor: 9

Abstained: 0

Opposed: 0

President's report

The board reconvened at 1:40 p.m.

Debbie Kitchin added an agenda item to vote on resolution 820 to authorize the submission of a community solar program proposal. This is a follow-up to the November board request to vote on approving Energy Trust's ability to respond to a request for proposals (RFP) to administer Oregon's community solar program.

The board noted the community solar program is aligned with and could provide an opportunity to promote Energy Trust's mission. Mike responded that administering the community solar program will help us reach new customers. The board noted the opportunity seems like a natural fit for Energy Trust.

The board asked what community solar projects would look like. Lizzie responded that projects could either be rooftop or ground-mounted. They will not be net-metered, and they would not serve any onsite loads. All electricity would be exported to the utility. Participants can only subscribe to a project in their utility's service territory. Pacific Power customers will be able to participate in projects located anywhere within Pacific Power's Oregon service territory.

The board noted that community solar would give the 40 percent of PGE's customers who are renters an opportunity to participate in solar. Renters don't have the option to make energy-efficiency and solar upgrades, so this gives renters some control.

The board asked if the bill credit will be more or less than the cost of participation. Lizzie responded that there's no guarantee about the economics of participation. There are a variety of models in other states. In Oregon, customers will have the option to pay for their subscription or ownership share on their utility bill and also receive credit on their bill. The board discussed what happens after investments are paid off. Lizzie explained that participants can either subscribe to a project or own a share. The board asked if the administrator has a role in protecting customers and ensuring projects are valid. Lizzie responded that the administrator will perform both of those roles.

The board asked about the source of Energy Trust's \$56,200 in unrestricted reserves that will be used to develop a proposal. Mike responded that these reserves have accumulated from private donations and consulting work. Peter added that the consulting work was from a contract to sell energy efficiency savings to Clark County in Washington. Energy Trust saved more energy at a lower cost than anticipated and therefore accumulated reserves. The \$56,200 in reserves are not derived from ratepayer dollars, however they are in the same reserve fund as dollars that are interest earnings from public purpose charge reserves.

The board commented that 160 MW is a lot of solar and seems ambitious. Lizzie explained that 160 MW is for an initial tier of capacity. The program may ultimately grow to be larger than 160 MW, but this initial capacity tier provides a check point to evaluate the program. In other states, such as Minnesota, there are many hundreds of MW of projects in application queues. In Oregon, there are currently more than 160 MW in the utilities' interconnection queues.

The board asked if there is a technical capacity limit. Lizzie explained that individual projects are limited in size to 3 MW. There is also a prohibition against co-location of projects. The OPUC conducted an extensive stakeholder process, and stakeholders want to allow for project diversity and make sure projects are distributed among communities.

Lizzie explained that projects can only be located in the territories of Oregon's three investor owned electric utilities, PGE, Pacific Power and Idaho Power.

Board members commented that the community solar program is an opportunity to provide more inclusive service delivery to customers who are not currently benefitting from Energy Trust. Eddie approved of Energy Trust's consideration of this opportunity, but noted that it will be a challenge to serve the low-income customers with community solar.

However, the board also reiterated concerns noted in the November board meeting about Energy Trust presenting a new business opportunity through a resolution to approve funding. The board reminded staff of the OPUC's advice that Energy Trust limit spending to the \$56,200 in unrestricted funds for its community solar proposal. The board also discussed potential risks, including potential stakeholder concerns that Energy Trust's attention could be diverted from its core work of securing cost-effective energy efficiency and lowering above-market costs of renewable energy. There are also risks that Energy Trust will not be awarded the community solar contract or that the community solar program will not be successful.

RESOLUTION 829

AUTHORIZING SUBMISSION OF A COMMUNITY SOLAR PROGRAM PROPOSAL

WHEREAS:

- 1. SB 1547, which the Oregon legislature adopted in 2016, directed the OPUC to develop a Community Solar program.**
- 2. Community Solar helps people who want to use solar power, but face barriers to putting panels on their own roof because they are renters, live in places where installation isn't allowed or isn't feasible, or cannot afford their own system.**

3. **The OPUC is inviting proposals for a Community Solar Program administrator to develop and administer a fee-for-service program. The costs required to fund the administrator for starting up the program will be funded through rates collected from all customers; once the program is operational, the administrator will be funded from program revenues collected from participants.**
4. **While submitting a proposal for this work is consistent with the 2015-2019 Strategic Plan, this will be one of the first times Energy Trust has submitted a proposal for non-SB 1149 funds. Because of this, the Board wanted to discuss this matter before a proposal is submitted. The procedure that should be followed in any future submissions will be reviewed by the Policy Committee for consideration by the Board at a future date.**

It is therefore RESOLVED:

1. **Staff is authorized to submit a proposal to the OPUC to administer a Community Solar Program as envisioned by SB 1547.**
2. **The Board Policy Committee is asked to recommend guidelines for submission of future proposals.**

Moved by: John Reynolds

Vote: In favor: 8
Opposed: 0

Seconded by: Melissa Cribbins

Abstained: Alan Meyer

Debbie Kitchin then thanked Corey Kehoe, executive assistant, for all of her work on behalf of the board.

Committee Reports

Debbie Kitchin noted that board committee assignments will be evaluated in February 2018. There will be opportunities for board members to serve on finance committee. Debbie Kitchin anticipated that 2018 will be her last year as board chair.

Debbie Kitchin noted that there is a budget for board members to attend meetings and travel to trainings and events. Board members should get approval from Mike prior to signing up for events.

Audit Committee, Ken Cannon

Energy Trust's annual financial audit is underway, and updates will be provided in March or April.

Evaluation Committee, Alan Meyer

An evaluation concluded that heat pumps on manufactured homes are not cost-effective. A new pilot on ductless heat pumps is in development.

Finance Committee, Debbie Kitchin (for Susan Brodahl)

Through November, revenues were up slightly and expenses were down slightly compared to budget. As a result, reserves are slightly higher than anticipated. A lot of expenditures and revenues occur in November and December.

Policy Committee, Roger Hamilton

Heat pump water heater remediation efforts will sunset on December 31, 2017. Energy Trust had coordinated with Northwest Energy Efficiency Alliance to provide proactive financial assistance to help

customers replace or repair failing AirGenerate heat pump water heaters, but beginning in 2018, these customer support efforts will be wound down.

Strategic Planning Committee, Mark Kendall

The committee is planning for the board strategic planning retreat in May 2018, which will focus on new opportunities for Energy Trust's 2020-2024 Strategic Plan. The planned timeline for the committee's work in this coming year is to aim towards a draft 2020-2024 Strategic Plan for review at the 2019 board strategic planning retreat.

Diversity, Equity and Inclusion Initiative

Debbie Menashe, General Counsel, described Energy Trust's diversity, equity and inclusion initiative. She introduced the staff committee, which includes Peter West, Amanda Sales, Amber Cole, Sue Fletcher, Andy Eiden, Crystal Amaya, Corey Kehoe, Kathleen Belkhatat, Alex Novie, Kenji Spielman, Andy Griguhn, Sarah Castor, Greg Stokes, Betsy Kauffman, Shelly Carlton, Lily Xu, Justin Buttles and Mike Colgrove. Staff also worked with Dani Ledezma, consultant and interim director of the Coalition of Communities of Color. Former executive director Margie Harris contributed as a consultant.

Debbie Menashe provided a history of the diversity, equity and inclusion initiative, described activities completed in 2017 and discussed plans for 2018 and beyond.

In Energy Trust's 2002 grant agreement, it was noted that Energy Trust's board of directors should be diverse and representative of customers. One of Energy Trust's first policies was the equity policy in 2002. In 2014, the board approved Energy Trust's current Strategic Plan with a strategy to expand customer participation. In 2015, Energy Trust made a business case for a diversity initiative. With the board's support, Energy Trust launched a diversity committee focused on organizational readiness; developing a diversity, equity and inclusion operations plan; and developing a diversity, equity and inclusion lens. In 2017, staff focused on operationalizing these efforts.

Staff hosted a workshop in January 2017, and received guidance to slow down and build relationships with communities. Staff paused and spent time developing relationships with leaders and community organizations around the state, and will continue to get feedback and input from these communities. Energy Trust invested in training for staff and hosted a staff diversity day, with guest speakers from organizations working with various communities in Portland.

In 2017, staff developed a diversity, equity and inclusion lens, which is a set of questions to apply to important decisions. Staff identified protocols for using the diversity, equity and inclusion lens, and employees will be trained to use the lens. Over time, staff will naturally apply these questions.

Also in 2017, staff developed a diversity, equity and inclusion operations plan. This is a big step toward operationalizing DEI. Staff will set baselines in 2018 to measure and report out on progress. The plan includes 10 goals. The first goal is data collection and analysis in 2018. The second goal is to engage with 50 culturally specific community based organizations by the end of 2020. The third goal is to increase intercultural effectiveness survey scores for staff and board by 20 percent by the end of 2020. The fourth goal is to increase diversity in recruiting and hiring by 25 percent by the end of 2020, and staff have started development of a strategy to recruit more candidates that are diverse.

The board asked for a definition of diversity in a hiring context. Energy Trust defined diversity in its diversity, equity and inclusion operations plan as any and all differences between and among people. Energy Trust will focus on communities of color, low- and moderate-income customers, and geography.

The board discussed terms used in the diversity, equity and inclusion plan, including class and low- and moderate-income customers and rural and geography. Not all communities outside of Portland are rural. Debbie Menashe acknowledged that staff are still working through definitions to ensure consistent language is used throughout the plan.

The board noted gender is not included as one of Energy Trust's diversity focus areas, yet two goals include increasing participation from women-owned businesses. Debbie Menashe responded that firmographic criteria are still in development. Minority- and Women-Owned Businesses certification is one way to reflect diversity in firms.

Debbie Menashe continued with her presentation. The fifth goal is to increase participation in Trade Ally Network by minority and women-owned business by 50 percent in 2020. The sixth goal is to increase projects completed by minority and women-owned trade ally business by 15 percent by end of 2020. The seventh goal is to increase the number of contracts executed by minority- and women-owned businesses by 15 percent by end of 2020.

The board asked how contracting with minority and women-owned businesses helps Energy Trust reach more customers that are diverse. Debbie Menashe responded that these businesses are part of different communities, and may be able to better serve those communities. For example, Energy Trust contracts with writers who have different perspectives and can write for different audiences.

The board asked if Energy Trust considered diversity, equity and inclusion in its extension of two creative services and media contracts. Debbie Menashe responded that staff do ask these questions regarding contracts. She added that staff just completed a competitive selection process for a web services contract, and staff asked questions related to diversity of candidates. Amber Cole, director of communications and customer service, added that Energy Trust has one main website and several microsites targeted to different customer types, such as business and residential customers.

Debbie Menashe continued that the eighth goal is to increase participation in energy efficiency programs by underserved populations by 20 percent by end of 2020. The ninth goal is to increase participation in RE programs by underserved populations by 20 percent by end of 2020. The tenth goal is to publish the diversity, equity and inclusion operations plan and progress toward goals.

The board discussed Energy Trust's diversity, equity and inclusion goals, and remarked that Energy Trust does not discriminate against any customer groups. Debbie Menashe responded that Energy Trust has no intent to discriminate, but that doesn't mean the organization is serving all customers equitably. Energy Trust needs to prove it is directly serving all customers. The board discussed the perception of some stakeholders that Energy Trust is not directly serving all customers.

Commissioner Bloom noted that the OPUC is invested in making Energy Trust more inclusive and more diverse, and appreciates all board perspectives and concerns being raised during this discussion. He acknowledged that diversity has been a priority for Energy Trust since its inception.

The board discussed phrasing of some aspects of the diversity, equity and inclusion operations plan, and staff noted areas where language could be more consistent. The board also asked why the table showing race and ethnicity of Oregonians adds up to greater than 100 percent, and Dani Ledezma explained that some Oregonians are in multiple census categories and the table is not intended to add to 100 percent.

The board discussed the goal of increasing diversity in recruiting and hiring by 25 percent by the end of 2020, and asked about Energy Trust's staff turnover rate. Debbie Menashe responded that Energy Trust has a staff turnover rate of roughly 7 to 10 percent annually. Some board members raised concerns that this goal will encourage Energy Trust to discriminate against some candidates that do not meet Energy Trust's targeted diversity criteria. Other board members responded that Energy Trust's staff capabilities would not be undercut by diversity goals. Rather, the diversity staffing goal would help Energy Trust find candidates from a larger pool of potential employees. A more diverse staff would strengthen Energy Trust by bringing more diverse perspectives and ideas, and it is necessary for a successful organization or business. The board pointed out that people of color are underrepresented on Energy Trust's staff and board.

The board discussed the focus areas Energy Trust selected for its diversity, equity and inclusion goals, noting that Energy Trust is limiting diversity to just a few categories.

The board discussed the importance of Energy Trust staff and board reflecting the diversity of customers in order to remain credible and serve customers. Another perspective was that focusing on diversity takes attention away from meeting Energy Trust's core goals of achieving cost-effective energy efficiency and renewable energy. The board also pointed out that there are systemic inequities embedded in everyone's experiences.

The board noted the sensitivity of this topic and appreciated the candid conversation.

Dani Ledezma provided background on Energy Trust's diversity, equity and inclusion strategy. The intent is to cultivate more opportunity and encourage innovative thinking. The three diversity focus areas were determined based on data about eligible Energy Trust customers who have not yet participated. By providing more opportunities for diverse staff, board and customers, Energy Trust is not taking opportunities away from other groups. Organizations can create more opportunities for everyone and optimize performance by removing barriers such as race, income and geography. Energy Trust's diversity, equity and inclusion plan shows willingness to grow, stretch and learn.

Debbie Menashe continued that Energy Trust's diversity, equity and inclusion work will continue in 2018, including formalizing roles for the staff committee. Staff and board trainings will also continue.

Roger introduced a resolution to update Energy Trust's diversity, equity and inclusion policy. The proposed policy includes a number of directives including the development of a diversity, equity and inclusion operations plan and the use of a diversity, equity and inclusion lens when making important decisions. The policy also commits the board to setting an ad-hoc board committee in February 2018. The majority of the policy committee recommends the board approve the proposed update policy.

The board requested a few updates to the diversity, equity and inclusion background document in board packets, including adding low-income on page four to make it consistent with the policy and updating the date to December 15, 2017.

In addition, the updated diversity, equity and inclusion policy authorizes Energy Trust to create a new Diversity Advisory Council. Debbie Menashe introduced Margie Harris to explain the recommendation to form a Diversity Advisory Council.

Margie performed contracted work to explore whether a Diversity Advisory Council would serve Energy Trust. Based on interviews with 43 people representing diverse communities, she strongly recommends that Energy Trust form a Diversity Advisory Council. Most of the people Margie interviewed had heard of Energy Trust but had not participated directly in programs or benefited directly from services. People from these communities indicated interest and willingness to help Energy Trust be more effective and serve more customers. A Diversity Advisory Council could enable Energy Trust to hear input more people and serve more communities. It could be a sounding board and provide feedback on strategies and program designs. It is additive to what the organization already does. A Diversity Advisory Council could help build trust and relationships with communities that Energy Trust needs to serve differently and better.

Debbie Kitchin asked if governance of Diversity Advisory Council would be similar to governance of Conservation Advisory Council and Renewable Energy Advisory Council. Margie responded that she envisions a similar structure and governance. Board members would vote on new members and approve meeting minutes. Membership will be different and recruitment will be important. The same topics that are presented to Conservation Advisory Council and Renewable Energy Advisory Council could go to a Diversity Advisory Council, such as proposed budgets and program strategies. A board member would also be on the council. It will be important to invest in council support from staff, board and outside facilitation.

Alan moved to amend the diversity, equity and inclusion policy to remove two instances of “presumed to be.” Ken seconded the motion. All nine board members voted in favor of this proposed revision.

The board also discussed whether to revise the second to last bullet of the policy as follows: “Energy Trust will enhance diversity, equity and inclusion on the board of directors. In order to enhance diversity, equity and inclusion on the board of directors, the board of directors shall appoint an ad hoc committee to identify goals and objectives for achieving this objective.”

Ken then moved to amend the policy to revise the second to last bullet as discussed so that it reads: “Energy Trust will enhance diversity, equity and inclusion on the board of directors. In order to enhance diversity, equity and inclusion on the board of directors, the board of directors shall appoint an ad hoc committee to identify goals and objectives for achieving this objective.” Alan seconded the motion. All nine board members voted in favor of this additional revision.

The board then voted on Resolution 828 regarding the revised proposed policy:

**RESOLUTION 828
DIVERSITY, EQUITY, AND INCLUSION POLICY**

WHEREAS:

- 1. Energy Trust’s board of directors adopted its Equity Policy in 2002 to ensure that Energy Trust are designed, evaluated and monitor programs to ensure they are available to all eligible utility customers.**
- 2. Energy Trust has been engaged in a diversity, equity, and inclusion initiative since 2015 to focus on how the organization can ensure that its programs are designed to be available to and utilized by all eligible customers.**
- 3. As part of the diversity, equity, and inclusion initiative, Energy Trust proposes revisions to its current Equity Policy to (i) outline more specific strategies to ensure that all eligible utility customers benefit from Energy Trust programs and (ii) demonstrate commitment to these strategies by the highest level of the organization.**
- 4. Acknowledging the breadth of revisions to the board’s current Equity Policy that this proposed Diversity, Equity, and Inclusion Policy represents, the Policy Committee inserted an annual review cycle for the policy to permit the Policy Committee and the board to more frequently monitor the application and impact of the policy and to take in and consider stakeholder and community comment on a more frequent basis.**
- 5. Energy Trust’s board Policy Committee has reviewed the proposed policy revision at its committee meetings on September 7, 2017 and November 20, 2017, and recommends forwarding the proposed revision to the full board for its review and approval. The recommendation from the Policy Committee is not unanimous.**

It is therefore RESOLVED that the Energy Trust Equity Policy is revised to be a Diversity, Equity, and Inclusion Policy as shown in Attachment 1.

Moved by: Roger Hamilton

Vote: In favor: 8

Opposed: 0

Seconded by: Eddie Sherman

Abstained: Ken Cannon

ATTACHMENT 1

4.08.000-P Diversity, Equity, and Inclusion Policy

History			
Source	Date	Action/Notes	Next Review Date
Board Decision	May 22, 2002	Approved (R104)	May 2005
Policy Committee	March 5, 2005	Postpone review	11/05
Board Decision	September 7, 2005	Revised (R352)	September 2008
Policy Committee	December 2, 2008	Replaced references to numerical electric and gas goals	September 2011
Board Decision	October 5, 2011	Revised (R595)	October 2014
Board Decision	October 1, 2014	Revised (R714)	October 2017

Introduction

Energy Trust envisions a high quality of life, a vibrant economy and a healthy environment and climate for generations to come, built with renewable energy, efficient energy use and conservation. Energy Trust recognizes that to achieve this vision, all utility customers must benefit from our programs, but certain customers are underserved by our programs such as communities of color, rural communities, and low income customers.

Energy Trust commits to enhancing diversity, equity and inclusion in our programs and in internal operations in order to work to serve all communities and reach critical Energy Trust goals. We will advance diversity, equity and inclusion in our programs and internal operations through meaningful collaboration with our utility funders, trade allies, program allies, and customers and with geographic and culturally specific communities, organizations and businesses.

Policy

- Energy Trust will make programs available to all eligible electricity and gas customer classes by implementing programs in the residential, commercial, and industrial sectors.
- Energy Trust will monitor participation rates for all programs and adjust them as needed to ensure that all investor-owned utility electricity and gas customer classes in Energy Trust territory are being served.
- In addition to providing programs to reach all customer groups, Energy Trust will design and implement program strategies specifically to reach customers who have been underserved by Energy Trust programs, such as rural customers, communities of color, and low-income communities in Energy Trust service territory.
- Energy Trust will use a diversity, equity and inclusion lens through which to:
 - a. strategize and plan for Energy Trust program delivery
 - b. deliver programs and services
 - c. partner and collaborate
 - d. allocate resources
 - e. communicate and market
 - f. build our workforce
 - g. evaluate our work
- Energy Trust will develop a diversity, equity and inclusion operations plan that:
 - includes goals, objectives and activities
 - assesses and measures progress

- learns from mistakes and successes
 - shares progress publicly on no less than an annual basis
- Energy Trust will establish a Diversity Advisory Council to provide advice and resources to the board of directors to support Energy Trust's diversity, equity and inclusion operations plan and to advise the board of directors on assessing and measuring progress toward goals of such plan.
- Energy Trust will enhance diversity, equity and inclusion on the board of directors. In order to enhance diversity, equity and inclusion on the board of directors, the board of directors shall appoint an ad hoc committee to identify goals and objectives for achieving this objective.
- For the first three years after adoption of these 2017 changes, the Energy Trust Policy Committee will review this policy annually to take account of new information and experience.

Staff Report

Mike Colgrove provided a short staff report. The Secretary of State auditors are ready to present draft findings, and staff will hear initial findings next week. Mike will send an email update to the board with any significant results.

Mike thanked Corey Kehoe for her service and introduced Whitney Winsor, interim executive assistant.

Mike reflected on his first full calendar year as executive director of Energy Trust. It has been a record year with significant success and expansive exploration. Staff initiated organizational review and budget review projects. These project teams have gathered inputs from staff, board, OPUC, utilities and other stakeholders. Staff have completed research and synthesized recommendations to share with the board in 2018. Staff have explored new ways of thinking about and understanding customers through the lean startup methodology. Staff will continue to explore lean startup methodology in 2018 with focus on small business owners and low-income renters.

Energy Trust will continue to ensure it is serving and meeting the needs of all of our customers. Energy Trust's diversity, equity and inclusion initiative was a reason Mike was attracted to Energy Trust. The Environmental Protection Agency defines environmental justice as the fair treatment and meaningful involvement of all people regardless of race, color, national origin or income, with respect to the development, implementation and enforcement of environmental laws, regulations and policies. Disadvantaged communities will be disproportionately impacted by climate change. It's important that Energy Trust directly benefit these customers. It's not enough that these customers only benefit indirectly. Energy Trust's diversity, equity and inclusion work is designed to address the disparities in our impact. Regardless of the data, there is a perception that some communities are underserved. Perceptions do matter. Energy Trust will be better able to engage and serve underserved communities by increasing representation from these communities on its board.

Energy Trust has also started exploring expanding its reach, including new sources of funding and serving new customers. Community solar represents one of these opportunities. The organization needs to diversify funding, board, staff and customers. This work has reflected a year of divergence. Staff have re-examined processes, structure and effectiveness through the lens of the future. This will coalesce into next steps in 2018. This was all done while exceeding and meeting goals.

Mike learned a lot this year and will continue to learn and improve in 2018. He appreciates the board's continued patience, support and counsel in the new year.

Adjourn

The meeting adjourned at 4:06 p.m. **The next meeting of the Energy Trust Board of Directors** will be on Wednesday, February 21, 2018 at 10:30 a.m. at Energy Trust, 421 SW Oak, Suite 300, Portland, Oregon.

Alan Meyer, Secretary

Tab 2

Board Decision Terms of Office

February 22, 2018

**RESOLUTION 831
ELECTING MARK KENDALL, LINDSEY HARDY, ANNE ROOT, AND EDDIE
SHERMAN
TO NEW TERMS ON THE ENERGY TRUST BOARD OF DIRECTORS**

WHEREAS:

- 1. The terms of incumbent board members Mark Kendall, Lindsey Hardy, Anne Root, and Eddie Sherman expire in 2018.**
- 2. The board nominating committee has recommended that these members' terms be renewed.**

It is therefore RESOLVED that the Energy Trust of Oregon, Inc., Board of Directors elects Mark Kendall, Lindsey Hardy, Anne Root, and Eddie Sherman incumbent board members, to new terms of office that end in 2021.

Moved by:

Seconded by:

Vote:

In favor:

Abstained:

Opposed: 0

PINK PAPER

Board Decision Election of Officers

February 22, 2018

RESOLUTION 832 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:**
 - Roger Hamilton, President**
 - Alan Meyer, Vice President**
 - Mark Kendall, 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 2018:

- Roger Hamilton, President**
- Alan Meyer, Vice President**
- Mark Kendall, Secretary**
- Susan Brodahl, Treasurer**

Moved by:

Seconded by:

Vote:

In favor:

Abstained:

Opposed:

Tab 3

Briefing Paper

Lockheed Martin Contract Extension for Existing Multifamily Program Management Contract

February 22, 2018

Summary

Absent board objection, Energy Trust staff proposes to extend the contract for the Existing Multifamily program management contractor (PMC) with Lockheed Martin Corporation for the first of two potential one-year extension periods, from January 1, 2019 to December 31, 2019. The initial term of this PMC contract with Lockheed Martin Corporation was for three years from January 1, 2016 to December 31, 2018, with the option of two additional year extensions. Staff proposes to extend the contract for a one-year extension period from January 1, 2019 to December 31, 2019.

Background

- The Existing Multifamily program provides cash incentives and technical assistance for existing multifamily buildings with two or more attached residences. The program also provides and installs free instant savings measures (ISMs) such as LEDs and low-flow water devices in tenant units. The program serves a range of market segments including market rate, affordable housing, campus living, assisted living, homeowners associations (HOAs) and individual unit owners.
- In July 2015 (Resolution 750), the board authorized a contract with Lockheed Martin Corporation for program management and delivery services with a first-year anticipated budget for 2016, including first-year incentives, contracted delivery, and possible performance compensation, of approximately \$9.9 million, and actual 2016 and subsequent annual budgets consistent with board-approved annual budgets and action plans.
- The 2015 authorizing resolution included an initial term of three years and a provision allowing staff to offer up to two additional year extensions if the PMC meets certain established performance criteria. 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.
- Staff has reviewed the contract extension criteria and is recommending to extend the contract for a one year extension period.
- If the board does not object to the recommended extension, staff will be authorized to extend the PMC contract term through December 31, 2019 consistent with the 2019 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. Cross-program coordination: The Existing Multifamily Program involves a significant amount of coordination with other Energy Trust programs including New Buildings,

Existing Buildings, Residential and Solar programs on customer experience, measure development, marketing and messaging, stakeholder engagement and market strategies. Effective processes are in place for transferring customers to appropriate programs as needed, and PMC staff interact regularly with other Energy Trust PMCs and sub-contractors to ensure customers are being served comprehensively. The PMC coordinates closely on measure development with other programs, and has done extensive work to identify and implement opportunities for aligning incentive offerings and requirements with other programs to reduce customer and contractor confusion. Customer satisfaction with the program is very high. Fast Feedback surveys conducted in the current contract term found an average of 93 percent of customers are satisfied with their overall program experience, and an average of 97 percent are satisfied with their interaction with program representatives.

2. Project pipeline: Through an account management approach, PMC energy advisors work closely with customers to identify, prioritize and implement efficiency projects. While the program does not require pre-approval or signed commitments for most projects, energy advisors engage with customers regularly to learn about planned upcoming projects when possible. Activity for the current year has started off strong and the program expects to achieve 2018 goals.
3. Innovation: Within the current contract term, 2016-present, the PMC has broadened the range of HVAC, water heating, weatherization and ISM offerings through adding roughly ten new measures to the program, and expanding eligibility requirements for several more. Several pilots are currently underway which may result in new additional savings opportunities. In 2016 the PMC also revised incentive structures for a range of measures to significantly simplify requirements and eligibility. New strategies have also been developed to enhance outreach to targeted customer groups, increase awareness of energy savings opportunities and support follow-through with installing projects, and the PMC has developed strategic plans for data analysis to inform targeted outreach and program activities.
4. Teamwork: The PMC has been responsive and adaptive to Energy Trust needs and requests. PMC staff are proactive in working with Energy Trust staff on a wide range of tasks and projects, including regularly scheduled meetings with various support groups and ongoing communications. Energy Trust staff members consistently share positive feedback about working with PMC staff.
5. Satisfactory execution of Statement of Work deliverables: PMC consistently provides deliverables on time, achieves high customer satisfaction rates, and consistently achieves milestones for receiving 100 percent on quarterly compliance audits. Engagement rates with marketing email communications are consistently above industry averages. PMC has remained within contracted delivery and total incentive budgets in the current contract term.

In 2016, the PMC acquired 20.8 million kWh and 253,000 therms, achieving 81 percent of electric and 81 percent of gas savings goals. In 2017, the PMC acquired 16 million kWh and 182,000 therms, achieving 72 percent of electric and 113 percent of gas savings goals. Savings shortfalls in both 2016 and 2017 were primarily driven by challenges in the ISM track. These challenges are due to a combination of increasing

market saturation, difficulty in reaching smaller customers, and decreases in measure-level savings. Market analyses completed in 2016 indicated the program had served nearly 40 percent of larger multifamily (50+ units) market rate properties, and 4 percent of properties with less than 10 units.

Based on learnings from 2016 and 2017 and market analyses, program goals for 2018-19 have been adjusted to more realistically reflect the remaining potential in this program track, and alternative delivery models for instant-savings measures are being developed for implementation in 2019.

Next Steps

Absent board objection, staff is authorized to extend the Existing Multifamily program management contract with the PMC through December 31, 2019.

Tab 4

Compensation Committee Meeting

January 10, 2017 3:00 p.m.

Attending by Teleconference

Melissa Cribbins, Dan Enloe-*Compensation Committee Chair*, Debbie Kitchin

Attending at Energy Trust offices

Mark Kendall, Mike Colgrove, Debbie Menashe, Pati Presnail, Whitney Winsor, Cheryle Easton, Energy Trust; Jason Richmond, Mark LaMontagne, The Standard; David Wynde, Wynde Consulting

Review and Approval of August 24, 2017, Meeting Notes

The minutes of August 24, 2017 were reviewed and approved by the Committee as submitted.

Change to HR Team Assignments

Greg Stokes is now working on Organizational Review full-time and has stepped away from the HR team. He now reports to Mike Colgrove directly. Amanda Sales has been promoted to Senior HR Generalist and will be managing day-to-day HR operations. Pati and Debbie will be attending the Compensation Committee meetings as representatives from the Finance and HR teams. The Committee expressed thanks to Greg for his work with the committee.

Update from The Standard

Jason and Mark presented high-level information about current capital markets. Growth continues in part due to a business-friendly political environment and continued growth in the tech sector. S&P 500 Price Index has significantly increased since 2009 and continued to do so in 2017. Unemployment rate is at an all-time low, but wage growth continues to be slow. However, given the low unemployment rate, wage growth is expected to pick up. In a low-interest rate environment, there is a significant amount of cash in the economy not being invested, but the new tax bill incentives may influence investment.

With respect to Energy Trust's retirement funds, Jason and Mark reviewed 2017 financial activity up to Q3. There was one significant rollover, but otherwise distributions in and rollovers out were nearly equal. Jason and Mark also discussed plan investment funds' performance data, noting that there are two funds on the watch list, a green fund and a socially responsible fund for high pricing. This is the first quarter of watch for these funds, and The Standard is not making any recommendation for change at this time.

Update on HR Compensation Philosophy and Pay Equity Program

Debbie Menashe updated the committee on the HR plan to review pay equity and to issue a compensation philosophy document for the organization. Oregon's new pay equity law provides a private right of action for disparate pay, and it has broad coverage. If there are two people in different positions doing the same work but for different pay, there has to be a legitimate rationale. Past salary history, for example, is not legitimate rationale under the new law. The new law does provide a safe harbor for organizations that undertake a pay equity analysis to determine compliance. Energy Trust has engaged a pay equity statistical analysis firm to review its salary structure for this purpose, and results will be returned to Energy Trust in the next few weeks for compliance review.

In addition, Energy Trust has engaged Mammoth HR, an outside consultant to assist staff with preparation of a compensation philosophy document and to help review Energy Trust's current performance review processes and make recommendations for changes.

Dan noted that, based on his experience, people brought in a long time ago at a low pay, who have been receiving nominal raises along the way may show up as concerns in a pay equity analysis. He recommended looking at employees who have been here the longest, and reviewing their pay to determine where they fall.

Retirement Funds Third Party Administrator Selection Process

Debbie Menashe updated the committee on RFQ for retirement plan third party administrator services. Mark and Dan recused themselves from the discussion given their relationships with some of the RFQ respondents.

Cheryle Easton has served as the project manager for the competitive bid process for Energy Trust's retirement funds third party administration processes. Initiated by Mariet Steenkamp, the RFQ process is recommended to occur at least every five years, and staff will work on implementing this recommendation. To assist in preparing the RFQ, Mariet engaged David Wynde. A staff committee was organized to help develop and review the RFQ and evaluate responses. Eight responses were received, and three finalists were interviewed by the staff committee. Following this process, staff has recommended to Energy Trust's management team that it engage a team of the Principal Group and Cable Hill Partners for retirement plan third party administration services.

Debbie Kitchin asked what the burden is to the employees. Cheryle said there will be continued education throughout the process, and that the selected team is experienced in transitions. Debbie Menashe noted that there would be a black-out period for plan activity and changes during the transition, but that staff and the Principal/Cable Hill team will work hard to minimize disruption. Debbie Kitchin asked if employees are aware of the process and if they've expressed concerns. Cheryle reported that information about the process has been provided in all staff meetings and that she had not heard any concerns.

Meeting adjourned at 4:22 p.m.

Next meeting date is March 22, 2018 at 3:00 p.m.

Tab 5

Impact Evaluation

2014 New Buildings Program: Final Report

May 5, 2017

Energy Trust of Oregon

421 SW Oak St #300

Portland | OR 97204

Michaels No.: E9216AAN

Energy Trust of
Oregon

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Executive Summary

Energy Trust of Oregon (Energy Trust) delivers a myriad of energy efficiency programs to Oregon customers of PGE, Pacific Power, and Cascade Natural Gas. Energy Trust also provides energy efficiency programs to both Oregon and Washington customers of NW Natural. Beginning in 2017, Energy Trust began providing these services to Avista natural gas customers in Oregon.

One of these programs is the New Buildings program. Since 2003, New Buildings has supported the design, construction, and major renovation of energy efficient commercial buildings from early design to occupancy, utilizing a variety of services and incentives, including early design assistance, technical service incentives, and installation incentives. The New Buildings program supports projects for customers throughout the Oregon service territory¹, including Avista customers beginning in 2017.

The New Buildings program offers incentives through three distinct types of measures; Prescriptive and Calculated, Market Solutions, and Custom Analysis.

- Prescriptive measures offer standardized savings for straightforward technologies through the use of deemed savings.
- Calculated measures where a deemed algorithm is used to calculate savings with sets of operating parameters that vary depending on specific customer characteristics.
- Market Solutions are pre-packaged sets of prescriptive and calculated measures specific to different building types.
- Custom measures include savings developed using custom-built engineering analyses, as well as whole building energy simulations.

Energy Trust contracted with Michaels Energy to evaluate projects and measures recognized through the New Buildings program in the 2014 program year. The first step in the evaluation process was to develop the sample. The sample for the 2014 program year was designed to achieve the primary goals outlined by Energy Trust, which are listed below:

- Verify the electricity savings (kWh) at the 90/10 confidence and precision level
- Verify the natural gas savings (therm) at the 90/10 confidence and precision level
- Provide robust realization rates for each major building type

An additional goal of the evaluation was to report any important observations about New Buildings projects and make recommendations for specific changes that will help Energy Trust improve the accuracy and effectiveness of future program savings estimates and the results of future impact evaluations.

The Michaels team received an extract of program participation data including all projects and measures that had been recognized in 2014. The sampling plan developed provides broad coverage of the total savings claimed through the program, as can be seen in Table 1. In total, 66% of the energy savings (in MMBTU) were evaluated. Only four of the eleven building categories had less than half of their total energy savings included in the sample. Conversely,

¹ The New Buildings Program does not currently serve NW Natural customers in Washington.

the sample included more than 90% of the savings for each of four building types: assisted living, college/university, data center, and K-12 school.

Table 1 | Summary of Final Sample

Group	Projects	Measures	Electricity Savings (kWh)	Gas Savings (therms)
Program Total	358	1,292	34,618,562	653,764
Sample Total	99	493	22,332,783	454,818
Sample Share of Total	28%	38%	65%	70%

The Michaels team verified the gross savings claimed for the program using a combination of onsite data collection, project file reviews, and engineering analysis. The approach used for each project is shown in Figure 1.

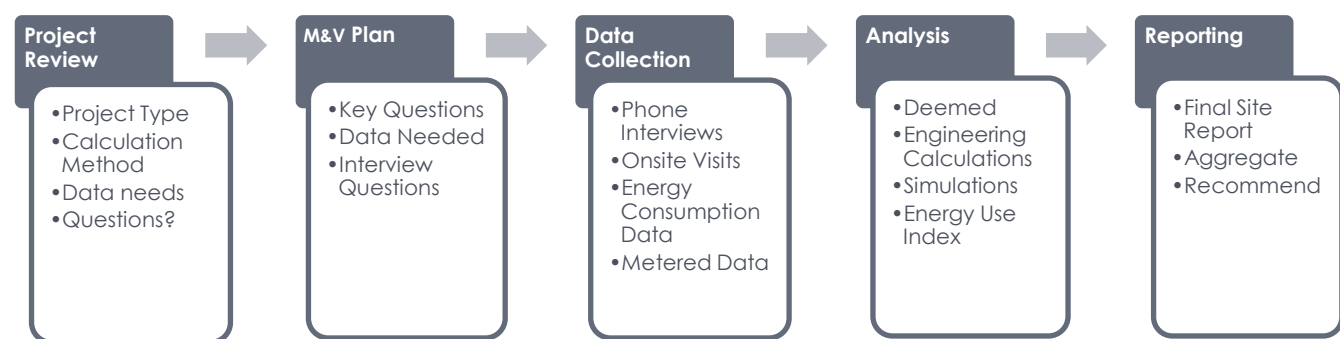


Figure 1 | Impact Evaluation Process

The Michaels team evaluated a total of 99 different projects and 493 individual measures across 11 different building types. The evaluated projects included prescriptive, calculated, market solutions and custom measures for end uses ranging from hot water to lighting and HVAC controls.

The Michaels team completed onsite verification for 71 of the sampled projects and completed project file reviews for the remaining 28. During the onsite visits, Michaels' field engineers verified equipment counts, efficiency levels, and collected metered data from data logger installations or the customers' energy management system.

These collected data were used in conjunction with customer energy usage data to revise engineering savings estimates for each measure in the sample. Prescriptive measure methodologies were not adjusted, but quantities of claimed measures and any other necessary adjustments were made. Operational data collected during the site visits were used to update any calculation templates for custom projects. Finally, energy usage data and operational information were used to update any building simulations that had been used by the program.

The results of the evaluation determined that the program achieved a 96% realization rate for electricity (kWh) savings and a 94% realization rate for natural gas (therm) savings. The final

realization rate relative precision values also exceeded the target of 10% at the 90% confidence level.

Table 2 | New Buildings 2014 Electricity and Gas Verified Savings Summary

Fuel	Ex Ante	Ex Post	Realization Rate	Relative Precision
Electricity (kWh)	34,618,562	33,185,354	96%	3%
Natural Gas (therms)	653,764	614,276	94%	4%

The Michaels team also calculated realization rates for each building type in the sample, which is shown in Table 3. While there wasn't a strict statistical precision requirement around the results reported at the building type level, the stratification strategy provides robust results for each building type, except data centers. The relative precision at the 90% confidence level for each building type ranged from 1% to 30%. However, six out of the eleven different building type categories had a relative precision of 10% or less for both gas and electric fuels. Four of the eleven building types had a relative precision for at least one fuel of 10% or less. Relative precision for data centers was 30%, due to a small sample size and large variance between projects.

Table 3 | Realization Rates and Relative Precision (at the 90% Confidence Level) by Building Type

Building Type	Sampled Projects	Electric (kWh) Realization Rate	Natural Gas (therms) Realization Rate	Electric Relative Precision	Natural Gas Relative Precision
Assisted Living Property	9	100%	104%	3%	10%
College/University	9	90%	84%	5%	7%
Data Center	4	89%	N/A	30%	N/A
Grocery	5	100%	N/A	3%	N/A
K-12 School	10	97%	103%	11%	1%
MultiFamily < 70,000 Ft ²	10	91%	82%	6%	27%
MultiFamily 70,000+ Ft ²	8	91%	104%	5%	24%
Office/Retail	11	110%	64%	8%	29%
Other	12	106%	94%	6%	5%
Restaurant/Lodging/Hotel/Motel	10	95%	107%	2%	4%
Warehouse and Storage	11	94%	79%	9%	10%
Total Program	99	96%	94%	3%	4%

The Michaels team categorized the adjustments made to each measure evaluated. The most common reason for adjustment was that equipment was operated or installed differently. This was found to be true at the program level for both electricity and gas savings, as well as across measure types. Figure 2 shows the savings impact due to each of the adjustment categories. The most significant reason for adjustment for both electric and natural gas measures was that equipment was operated or installed differently. This is as expected for new construction programs since there are no historical data or practices on which to base assumptions for a particular customer.

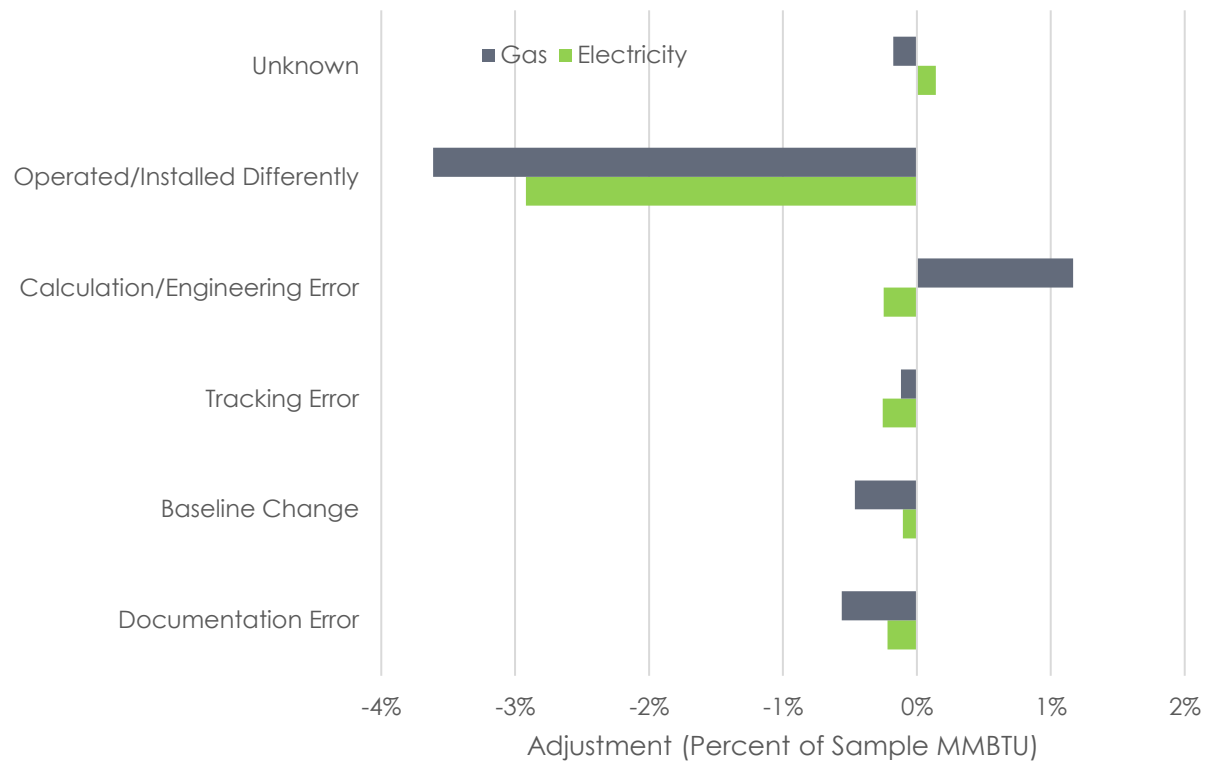


Figure 2 | Savings Impact by Adjustment Type

One important observation from Figure 2 is the minimal impact due to baseline changes. Using the appropriate baseline for new construction measures is second in importance only to the anticipated operation. The small impact that changes to the baseline had on the program savings overall speaks to the careful consideration that takes place for accurately quantifying baselines for custom measures.

Based on the data collected during this evaluation, and the resulting data analysis, the Michaels team found that program implementation staff did an excellent job estimating savings for a majority of projects during the 2014 program year. In order to build on that success and maintain high levels of realized savings, the Michaels team developed several key recommendations for the program to consider:

- Continue improving documentation of modeling files.** Modeling projects and the associated modeling files can be complex. Projects can undergo multiple design iterations, and program staff are not the ones creating the original model files. The 2012 evaluation noted that modeling files were inconsistent and that the evaluator had difficulty analyzing building simulation savings. During the 2014 evaluation, Michaels did not have notable difficulty with incomplete or inconsistent modeling files. This indicates the program made significant strides since 2012. Not all modeling files followed precise naming conventions. However, baseline, as-built, interactive, and measure level models were included with project files or available via request to PMC staff. Continued work

regarding naming conventions will further improve the review process internally by Energy Trust and PMC staff, as well as by evaluators.

- **Connect verification site visit results to the claimed savings.** During the Michaels evaluation, there were several instances where the equipment or specifications needed to be updated based on findings onsite. However, for three of these cases, the same adjustments had already been noted by the PMC's post-construction verification site visits. These notes, and in some instances, photos, were located in the documentation provided to Michaels for the projects. This indicates that there is some missing link in the feedback loop since savings were not adjusted using the findings from the PMC's visits. Michaels recommends that the program makes changes to the verification process. For example, compare the claimed and "verified" savings on the cover sheet of the site visit documentation. This would make any significant difference more visible and help reduce documentation errors.
- **Verify primary or secondary equipment.** One site visited during the evaluation was found to have claimed savings for a condensing boiler that was installed as a backup to a heat pump system. Since the boiler is used only when the heat pump system cannot supply the necessary heat, the operation is significantly less than that of a primary space heating boiler. This project, while small, pointed to a gap in the 2014 verification process, as it does not appear program staff specifically inquired about backup or redundant equipment. The inspection for this project correctly noted that the equipment was installed. However, the savings for this, and many other HVAC measures do not account for backup or redundant equipment. Energy Trust indicated that this practice has been updated since the 2014 program year. Therefore, Michaels recommends that the next evaluation of the New Buildings program include some additional focus on ensuring backup equipment, especially for HVAC equipment and pumping VFDs, are being properly counted.
- **Consider delaying verification of new buildings for as long as possible during the current program year.** The previous (2012) evaluation noted a similar recommendation: having "ramp up" periods for projects. While that recommendation was focused specifically on large projects, a similar process may be helpful for smaller projects. Michaels found that differences in the assumed operation of systems (used to claim savings) and how customers actually operated systems was the most common reason for savings adjustment. One possible way to help mitigate these risks is for the program to complete any onsite verification as late as possible in the program year. This will allow as much time as possible for projects to get "up and running" after completion while still claiming the savings in the current year.
- **Engage customers during late stage project completion about low flow devices.** Low flow faucet aerators, shower wands, and shower heads had a realization rate of 82% for electric savings and 42% for gas savings. This was due in part to customers removing them for satisfaction reasons. Continuing engagement with customers who install these measures could help to keep the customer reminded about their benefits and alert the program to early replacement by the customer.

- **Consider expanding the verification for multifamily buildings.** Similar to the previous recommendation, there were six projects in the evaluation sample (four multifamily and two assisted living) where the claimed quantity of low flow devices and HVAC equipment (PTHPs or ductless mini-splits) did not match the quantities from the project documentation. While onsite verification from program staff is occurring in 10% of the units in a building, there are still discrepancies between the claimed and actual quantities of measures. One way to reduce this is to complete a larger percentage of verifications for each building. However, this can be cost prohibitive and can lay an additional burden on customers. An alternative approach would be to require that a final unit list or map be obtained for each multifamily building and that it be included in the project documentation and project audit file. This would ensure that the final counts of units and the appropriate number of bathrooms are included in the claimed savings.
- **Identify phased projects early and separate them from the “regular” population of projects.** Energy Trust has already begun this process to some extent, as very large industrial customers are already separated from the remainder of the New Buildings Program. There were two large data center projects in the sample for this evaluation that were found to be in various stages of construction. One had finished the third and final phase of the build-out in 2016, so it was included in the evaluation sample. The other was planned to finish the final phase in 2017. This project was ultimately dropped from the sample to ensure the facility was fully operational and to avoid contacting the customer multiple times for each phase evaluation. Energy Trust has recently set up a process for evaluating large and complex new construction projects and is currently soliciting qualifications for a pool of evaluation contractors. Utilizing this process for any significant projects, and identifying these projects early, will aid evaluators considerably, and be more transparent for large customers where “contact fatigue” can be a significant concern.
- **Verify seasonal changes within modeling projects.** One of the modeling projects evaluated, a large university building, had summer and winter schedules for some, but not all, of the equipment. This resulted in a realization rate for the lighting measures of 61%. Most modeling software packages have the ability to apply more than one equipment operating schedule, and more than one internal load schedule (such as people or equipment loads). These seasonal changes can be significant, especially for educational facilities. Model reviewers should take care to validate the equipment and loading schedule to ensure it is consistent with the anticipated operation of the building.
- **Engage and educate data center customers on advanced UPS control functions.** The largest adjustment to the electric realization rate was caused by very low loading for a data center uninterruptible power supply (UPS) system. Data centers will always have some sort of UPS system, and many of the new systems are capable of either variable module management system (VMMS) or energy saving system (ESS) controls. The customer indicated they run their system with the UPS units in parallel to ensure redundancy. This left the UPS units underutilized and operating at low efficiency. Michaels has seen this similar situation for other data centers examined in Energy Trust territory and others. Engaging customers about the benefits of the EES or VMMS controls,

while demonstrating how they do not add operational risk, could help ensure customers are utilizing these controls when available.

- **Consider methodologies for claiming negative measure level interactive savings.** There were several measures identified during the evaluation where negative measure interactions were calculated, but not recorded in Energy Trust tracking system. This is due to current Energy Trust policy which does not allow claiming negative cross fuel savings to avoid penalizing other member utilities unnecessarily. During the 2014 evaluation, these interactions were small, affecting only 2.3% of the measures claimed and 0.5% of the sample kWh savings. However, large dual fuel interactive measures, such as heat recovery chillers, could cause significant discrepancies for future years. Michaels recommends that some additional controls be put in place within the Energy Trust tracking system to verify savings in the tracking system versus the calculated savings at the project level. Energy Trust should check that the total claimed savings at the project level recorded in the tracking system match those provided in the calculation files. This will ensure the savings for the entire project are accurately recorded in the Energy Trust tracking system. Note this only applies when both fuels are provided by member utilities.
- **Consider claiming HVAC interactions for lighting measures.** High efficiency lighting measures, such as LED lighting, have significant interactions with a facility's HVAC systems. These interactions can be both positive and negative. Michaels completed a simplified estimation of the impact of HVAC interactions for lighting measures assuming all customers with lighting were both air conditioned and had natural gas heat. While neither of these assumptions was accurate for the New Buildings Program, it did provide an upper bound on the impact of HVAC interactive effects. Claiming these interactions for lighting would have added approximately 3% in additional electricity savings, but would have penalized the program gas savings by 26%. Michaels recommends that Energy Trust examines methods for tracking and claiming these types of interactions in the future. A possible starting point would be to track the interactive savings at the measure or project level, and then use the evaluation of the program year to "true-up" the negative interactions accumulated during the year. This could be done initially for the New Buildings program on an informational basis. Once the impact is known, further decisions regarding how to implement this change in conjunction with savings goals, payments, and other policy considerations could be made.
- **Set defined criteria for the application of the Technical Guidelines.** During the evaluation, one modeling project was completed during a time frame in which two different versions of the Energy Trust Technical Guidelines (specifically, the modeling requirements in SEED Appendix L) were available. The versions of the Technical Guidelines did not provide clear direction on what versions were applicable to which projects. Michaels recommends that a specific date is used as the effective date for future revisions of the Technical Guidelines. One possible option for this would be the project enrollment date. Using this date would ensure that updated guidelines are in place prior to modeling work beginning on the project. Additionally, this would aid with consistency across the project both from a technical and customer clarity standpoint.

MEMO

Date: December 5, 2017
To: Board of Directors
From: Jessica Iplikci, Commercial Sector Sr. Program Manager
Dan Rubado, Evaluation Project Manager
Subject: Staff Response to 2014 New Buildings Impact Evaluation

The impact evaluation of the 2014 New Buildings program conducted by Michaels Energy demonstrated a strong program that was operating well in 2014 and accurately estimating savings for most projects. In addition to high realization rates, there were no major problems with missing project documentation or simulation modelling files, which have been issues in past evaluations. The evaluator adjusted claimed energy savings based on actual operating conditions. The evaluator identified only minor opportunities for improvement in program operations and savings estimation.

Recommendations mainly focused on incremental improvements to the project verification process, recommendations the program has either already implemented, or which could be incorporated as the program adjusts procedures. Other recommendations targeted specific end uses such as low flow devices in multifamily buildings, and uninterruptible power supply (UPS) controls in data centers.

The evaluator commented on Energy Trust procedures for handling cross-fuel interactive effects at the measure level. Per Energy Trust Commercial Sector program policy, New Buildings does not claim negative interactions for individual custom and calculated measures if the interaction causes savings for a single fuel drop below zero, although these interactions are calculated for measure-level cost-effectiveness screening. In contrast, when both fuels remain above zero, the program does claim the negative interactions. This policy of zeroing-out cross-fuel, measure-level interactions has a small effect on New Buildings program savings (0.5% of electric savings in 2014), but creates an inconsistency between projects with modeled energy savings and those with custom and calculated measures. Energy Trust Planning and Evaluation will investigate this issue further and determine the magnitude of the potential impact on savings across the Commercial and Industrial sectors. If it is determined to be an important issue, Planning and Evaluation will propose a process for tracking these interactions in Energy Trust's systems across programs.

The evaluator identified a related issue, noting that there are significant interactions between lighting measures and HVAC systems that the program does not currently quantify or claim. The program does this in accordance with Energy Trust Commercial Sector program policy, which was intended to ignore these interactions so as not to penalize its gas portfolio for activity in its electric portfolio. The result is that substantial amounts of claimed gas savings may be negated by interactions with efficient lighting systems. However, Energy Trust believes that these interactions are of decreasing importance as the baseline efficiency for building envelopes, lighting, and HVAC systems improves across the board. Planning and Evaluation will investigate this issue further and determine the magnitude of the impact across the Commercial and Industrial sectors. If it is determined to be an important issue, Planning and Evaluation will propose a process for quantifying and tracking the interactions between lighting measures and HVAC energy use across programs.

PINK PAPER



Energy Trust of Oregon Nest Thermostat Seasonal Savings Pilot Evaluation

Prepared by Apex Analytics, LLC and Demand Side Analytics
November 22, 2017

Executive Summary

Energy Trust of Oregon (Energy Trust), in collaboration with their implementation contractor, CLEAResult, and Nest Labs (Nest), offered a Seasonal Savings Pilot (Pilot) to homeowners during the 2016 summer season (summer deployment) and 2016/2017 winter season (winter deployment). This evaluation, led by Apex Analytics (Apex) and Demand Side Analytics (collectively, “the Evaluation Team”), sought to validate the Nest-claimed impacts and compile customer and staff feedback on their experiences with the Pilot.

Pilot Background

Nest Seasonal Savings is a thermostat setback optimization service designed for existing Nest customers. The underlying theory behind the service is that small setpoint and schedule adjustments are imperceptible to occupants but can produce significant savings throughout a heating or cooling season on top of the savings achieved by a Nest thermostat alone. Nest applies a series of optimizations over a three-week period that make small adjustments to the thermostat’s setpoints and schedule. The customer can override any of the adjustments or opt-out at any point.

The Pilot was delivered using an experimental design known as a randomized encouragement design (RED). The RED is like a randomized controlled trial (RCT) often used with behavioral conservation programs like Home Energy Reports, except that it includes an opt-in component. Thermostats in the target population were randomly assigned to either a control group or an intention-to-treat (ITT) group.¹ The thermostats in the ITT group were then screened for eligibility, which entailed being connected to the relevant heating, ventilation, and air conditioning (HVAC) system for the season and operating a heating/cooling schedule.² The thermostats that passed the technical screening were then *offered* the opportunity to participate in the Pilot. Some of the offered participants accepted (opt-in) and others refused (did not accept).

There was no cost to participants, but Energy Trust paid Nest an incentive for each successful opt-in participant. Nest quantifies electric and natural gas savings based on the reduction in heating or cooling runtime of the HVAC systems compared with the average runtime of the control group of Nest devices selected from the same population.

¹ The ITT group are the customers randomly selected to be screened and offered participation in the Pilot.

² Control group participants do not receive the same assignment into qualified versus unqualified groups because these criteria are applied by algorithms sent to each thermostat in the treatment group. It is assumed that the control group has the same proportion of qualified versus non-qualified thermostats.

Evaluation Methodology

The primary objectives of this evaluation were to assess the customer experience (opt-in rates, satisfaction, and changes to home comfort levels), validate the Nest savings estimation methodology, and perform an independent assessment of the electric and natural gas savings estimates associated with the Pilot. To accomplish each of these objectives, the Evaluation Team:

- Developed a customer survey for each seasonal offering
- Reviewed and validated the Nest savings methodology, data, code, and findings
- Developed an independent billing analysis to validate the Nest findings using participant energy usage data

Key Findings and Recommendations

A summary of the findings associated with the key research objectives from the evaluation are noted below.

Research Objective: Document the implementation of the Pilot, its successes, and areas for improvement, including customer opt-in and attrition rates.

Finding: The Pilot was almost seamlessly implemented as a turnkey service, with high opt-in rates among qualified devices for the summer and winter deployments.

Table 1 summarizes the thermostat counts and calculates the key participation metrics among the control and ITT groups. Only 59% of the targeted thermostats qualified for the summer deployment of the Pilot due to a low prevalence of cooling systems operating a cooling schedule during the deployment period. In contrast, 94% of the targeted thermostats qualified for the winter deployment. Among those offered the opportunity to participate in the pilot, the opt-in rate was high and quite similar across seasons (80% for the summer cooling season and 78% for the winter heating season). Attrition over the course of the Pilot was minimal, with less than 5% of the opt-in participants ultimately opting-out.

Table 1: Qualification and Opt-In Rate by Season

Study Group	Summer*	Winter*
Control	5,873	6,024
ITT Group	5,954	9,144
Did Not Qualify	2,459	579
Did Not Accept	705	1,849
Opt-In	2,790	6,716
Qualification Rate	58.7%	93.7%
Opt-In Rate Among Offered	79.8%	78.4%
Effective Opt-In Rate	46.9%	73.4%

*Note. These totals are based on counts of thermostats with valid runtime data in the analysis data set and differ from the counts as provided by Nest in the seasonal memos detailed in Appendices **Error! Reference source not found.** and **Error! Reference source not found.**

Recommendation: Future implementations to expand the Pilot can be planned using the effective opt-in rates noted in this report, but also consider testing multiple modes of communication (e.g., email, phone, postal mail) as well as multiple invitations as a strategy to increase future opt-in rates.

Research Objective: Assess customer satisfaction with the service and the comfort of their home.

Finding: Participants showed high satisfaction and comfort levels with their Nest thermostats across study groups, yet over half of the opt-in survey respondents indicated they noticed temperature changes with the Seasonal Savings settings, one-third of them believed the temperature changes made their homes less comfortable, and in response to the discomfort they overrode some or all of the settings.

Recommendation: Energy Trust should make sure the marketing materials and program communications highlight the lower bills and energy that participants save through the Seasonal Savings program. Utility bill and energy savings were considered the primary drivers for participation and could help reduce the percentage of participants that opt-out or make adjustments that reduce the potential savings. Energy Trust should also monitor participant home comfort over time (either through surveys or tracking the percentage of participants that override the settings), and consider ways to reduce the percentage of participants that find their homes less comfortable (e.g., less aggressive temperature changes from Nest).

Research Objective: Assess the validity of Nest's internal analysis of energy savings.

Finding: The Nest impact analyses were well-organized and consistent with industry best practices for impact evaluation. The Evaluation Team made several adjustments to the Nest savings claim, including the calculation of the opt-in rate for the summer deployment, limiting the summer analysis to a single model (runtime), the average condensing unit size (increased from 2.88 kW to 3.0 kW), and the average natural gas heating system size (decreased from 70 kBtu/hr to 65 kBtu/hr). Table 2 compares the Nest and Evaluated percent and absolute impacts per opt-in thermostat, by season.

Table 2: Comparison of Nest-Reported and Evaluated Impacts per Opt-In Thermostat

Season	Nest Reported		Evaluated Impacts	
	Percent Reduction	Primary Resource Savings	Percent Reduction	Primary Resource Savings
Summer Cooling	2.40%	12 kWh	0.81%	4 kWh
Winter Heating	4.75%	20 therms	4.75%	18 therms

The Nest Seasonal Savings program showed minor summer season cooling savings of only 4 kWh per opt-in thermostat, while winter heating seasonal savings were significant – approximately 18 therms per opt-in thermostat over the course of the 2016/2017 winter season. This finding is driven largely by climate and the intermittent cooling load used by participants. A supplemental cooling analysis found that average annual air conditioning use among participants is only around 784 kWh per year so there is limited opportunity to save energy in the cooling season compared to the winter.

Table 3 shows the runtime reductions per opt-in thermostat on a percentage basis and in the number of hours of runtime reduced. Impacts are presented for the opt-in thermostats (thermostats in the ITT group where the participants were technically qualified and deployed the Seasonal Savings algorithm on their Nest thermostat).

Table 3: Seasonal Savings Runtime Impact Summary Per Opt-in Thermostat

Season	# Opt-In Thermostats	Baseline HVAC Runtime (Hours)	Percent Runtime Reduction	Baseline HVAC Runtime (Hours)	Average Runtime Reduction (Hours)
Summer Cooling	2,790	168	0.81%	168	1.4
Winter Heating	6,716	596	4.75%	596	28.3

In Table 4, the runtime reductions are converted to energy savings using equipment capacity assumptions. The 6,716 opt-in thermostats for the winter season are split primarily between natural gas

furnaces (6,201) and electric heat pumps (440). There were also a small number of thermostats (75) connected to liquid propane and fuel oil heating systems that are included in the calculation of electric fan savings, but not natural gas savings.

Table 4: Seasonal Savings Energy Savings Summary

Season	System	Fuel	Equipment Capacity Assumption	# Opt-In Thermostats	Per Device Impact	Aggregate Impact
Summer Cooling	Central AC and Heat Pump	Electricity	3 kW	2,790	4 kWh	11,379 kWh
Winter Heating	Gas Furnace	Natural Gas	65 kBTU/hour	6,201	18 therms	110,404 therms
		Electricity (Fan)	0.56 kW	6,276	15 kWh	96,275 kWh
	Heat Pump	Electricity	3 kW	440	121 kWh	53,198 kWh

Recommendation: Energy Trust should adopt the per-device savings estimates produced by the runtime analysis and verified in this report. Future savings should be based off the runtime model and the equipment size assumptions presented in this report and agreed to by Nest.

Recommendation: Because the Nest Seasonal Savings service showed robust winter savings and delivered results at low cost, Energy Trust should consider adopting the Seasonal Savings as a full program offering, but only for the winter season – the summer savings are likely to fail cost-effectiveness testing with such low savings. This recommendation is contingent on the winter costs and savings passing cost-effectiveness testing.

Research Objective: Independently evaluate and corroborate energy savings using customer billing data.

Finding: Due to a limited amount of summer cooling and resulting low savings for the summer season, the Evaluation Team only used the billing data to estimate average air conditioner size. For the winter season, however, the Evaluation Team was able to validate the savings analysis using gas billing data. Two different billing analysis approaches returned statistically significant gas savings estimates from the Pilot’s winter deployment.

Billing data were only available for survey respondents (approximately 5% of Pilot homes), so the impact estimates from the analysis of utility consumption records were less precise than the thermostat runtime analysis. However, the two billing analysis approaches used returned gas savings estimates that were slightly higher than the runtime analysis, but with the runtime analysis estimates falling within the confidence interval of the billing analysis results. This independent analysis further demonstrated the ability of Seasonal Savings to produce statistically significant energy savings during the heating season.

Recommendation: Due to lower precision with billing data analysis as a result of a smaller participant sample and longer time intervals, the Evaluation Team recommends that Energy Trust rely on the runtime analysis discussed above to quantify the energy impacts of the Pilot. The billing results should be used as a directional validation of the runtime based savings estimates.

Research Objective: Assess the validity of Nest’s internal analysis of savings persistence.

Finding: The Evaluation Team reviewed persistence by examining the runtime and setpoint differential between the ITT and control groups throughout the entire heating season. There was no indication of any decline in savings or significant attrition from participants by the end of the heating season. Furthermore, the Nest thermostat will continue to run the Seasonal Savings-based scheduling and setpoints during the following season, provided the participant does not override the settings.

Recommendation: A follow-up analysis of the next (2017/2018) winter season runtime differences between RED groups would provide valuable insight into persistence, provided additional Seasonal Savings deployments aren’t layered on top of the winter 2016/2017 algorithm or experimental design.

Research Objective: Determine whether Nest Seasonal Savings is a feasible and cost-effective service that can achieve low-cost, non-equipment-based HVAC savings.

Finding: Cost-effectiveness analysis was not part of the research scope, but the Evaluation Team can confirm that Nest Seasonal Savings is a low-cost measure with strong winter-season savings, equivalent to small domestic hot water measures. Anecdotal feedback from staff indicated the winter deployment was likely to pass cost-effectiveness testing.

Recommendation: Energy Trust should run cost-effectiveness tests on the winter season Pilot results to determine whether it passes internal criteria for being offered as a full program.



MEMO

Date: December 8, 2017
To: Board of Directors
From: Marshall Johnson, Residential Sector Senior Program Manager
Dan Rubado, Evaluation Project Manager
Subject: Staff Response to the Evaluation of the Nest Seasonal Savings Pilot

Energy Trust conducted a pilot to test Nest's Seasonal Savings service during the summer of 2016 and winter of 2016/2017. Nest Seasonal Savings is a thermostat setback optimization service designed for existing Nest customers. The evaluation demonstrated that Seasonal Savings produced substantial heating savings during the winter at a low cost per thermostat. The winter savings should exceed Energy Trust's cost-effectiveness criteria by a wide margin. Energy Trust plans to offer this service to a larger group of Nest customers for the winter of 2017/2018, using the energy saving levels identified from the pilot. The evaluation showed that Seasonal Savings did not produce significant cooling savings during the summer. It is unlikely that this service would produce substantial savings even during an unusually hot summer in Oregon. Energy Trust does not plan to deploy Seasonal Savings during the summer.

The evaluation found that Nest's methods for calculating heating savings using system runtime data were sound, but suggested several minor adjustments that Nest will incorporate in the future. The evaluation team also validated the estimated energy savings through independent, third-party analysis of utility billing data. As a result, Energy Trust will move forward by working with Nest to quantify the energy savings from Seasonal Savings at the end of each season, using their runtime data and the validated analysis methods.

Pilot savings persisted through the winter season, but persistence into subsequent seasons is unknown, although plausible. Energy Trust will collaborate with Nest on analysis in 2018 to determine whether savings persist from one year to the next. Energy Trust may also ask to review Nest's runtime dataset and analysis methods every year or two to ensure they are consistent with the validated methods. Energy Trust may do additional billing analysis, in coordination with Nest, to re-evaluate the energy savings from this service after several years.

The pilot was straightforward to implement, had a high opt-in rate, and reasonably high levels of participant satisfaction. Participant comfort in their homes with the service was lower than with the Nest thermostat without the service. This caused many participants to override some or all of the adjustments to their thermostat settings made by the Seasonal Savings algorithm. Energy Trust will monitor participant comfort and satisfaction in future efforts to ensure that participants are happy with the service so that it is successful. If participant comfort continues to be an issue, then Energy Trust will work with Nest to change the service to improve comfort.

Tab 6

Notes on November 2017 Financial Statements

December 29, 2017

Revenue

YTD Revenues remain slightly above budget and significantly above last year's revenue. We continue to record a small amount of revenue for work done to support a Low Income Solar grant.

	<u>YTD Actual</u>	<u>YTD Budget</u>	<u>YTD Var</u>	<u>YTD %</u>	<u>PY</u>
PGE	94,284,740	93,210,804	1,073,936	1%	71,297,079
PAC	58,888,356	54,987,543	3,900,813	7%	48,554,575
NWN	24,916,657	23,600,878	1,315,779	6%	16,674,448
CNG	2,356,954	2,380,615	(23,660)	-1%	1,454,667
Avista	864,439	851,167	13,272	2%	140,400
Grant Revenue	43,233		43,233		
Investment Income	385,908	200,000	185,908	93%	511,274
Total	181,740,287	175,231,007	6,509,280	4%	138,632,443

Reserves

Reserves in November decreased \$4 million as the year-end incentive payments started to climb. Every utility recorded a decline. We expect a more significant decrease to occur in December. The category called Other Reserves is the Community Solar amount approved by the board, less YTD expenses.

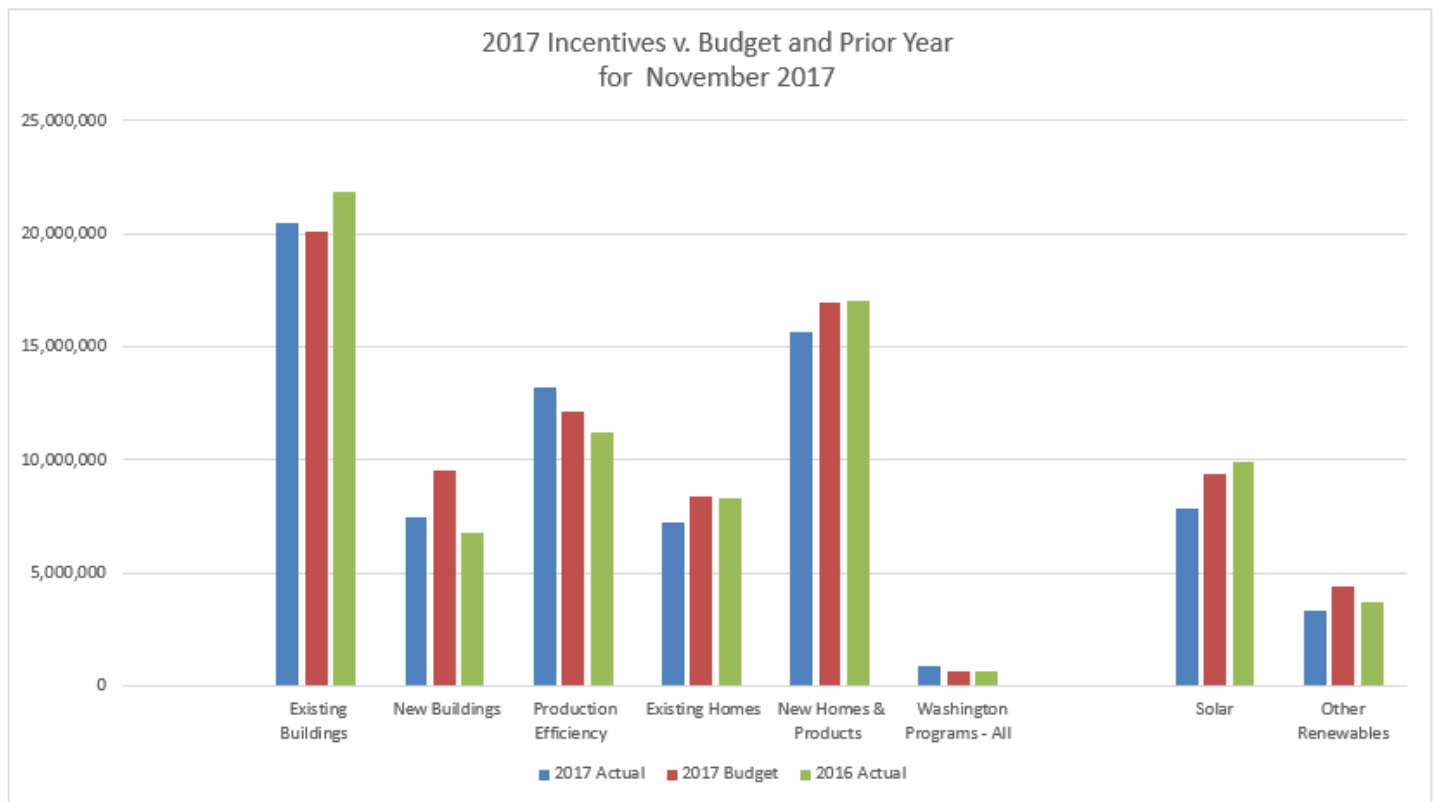
Reserves

	<u>11/30/17 Amount</u>	<u>Actual 12/31/16 Amount</u>	<u>% Change from Year End</u>
PGE	20,518,476	6,507,279	215%
PacifiCorp	12,607,760	644,839	1855%
NW Natural	4,952,526	1,485,656	233%
Cascade	397,057	-	-
Avista	41,916	68,620	-39%
NWN Industrial	4,152,134	1,028,150	304%
NWN Washington	476,785	283,171	68%
PGE Renewables	7,324,783	7,543,333	-3%
PAC Renewables	6,674,219	7,376,941	-10%
Program Reserves	57,145,656	24,937,989	129%
Other Reserves	39,407	-	-
Contingency Reserve	5,000,000	5,000,000	0%
Contingency Available	4,601,517	3,935,314	17%
Total	66,786,574	33,873,295	97%

Expenses

November expenses were very close to budgeted amounts - \$17.4 million actual vs. \$17.7 million budgeted. Year-to-date expenses remain \$9.9 million below budget. The variance is primarily due to lower than expected spending in incentives (\$5.4 million YTD) and Professional services (\$3.3 million YTD). Overall expenses are the same as last year at this time - \$148.8 this year vs. \$148.7 last year.

November incentives came in very close to budgeted amounts. Incentives remain within 7% of the budgeted amount for the year. Total incentives in 2017 are \$3.4 million less than 2016 (\$76 million vs. \$79.4 million).

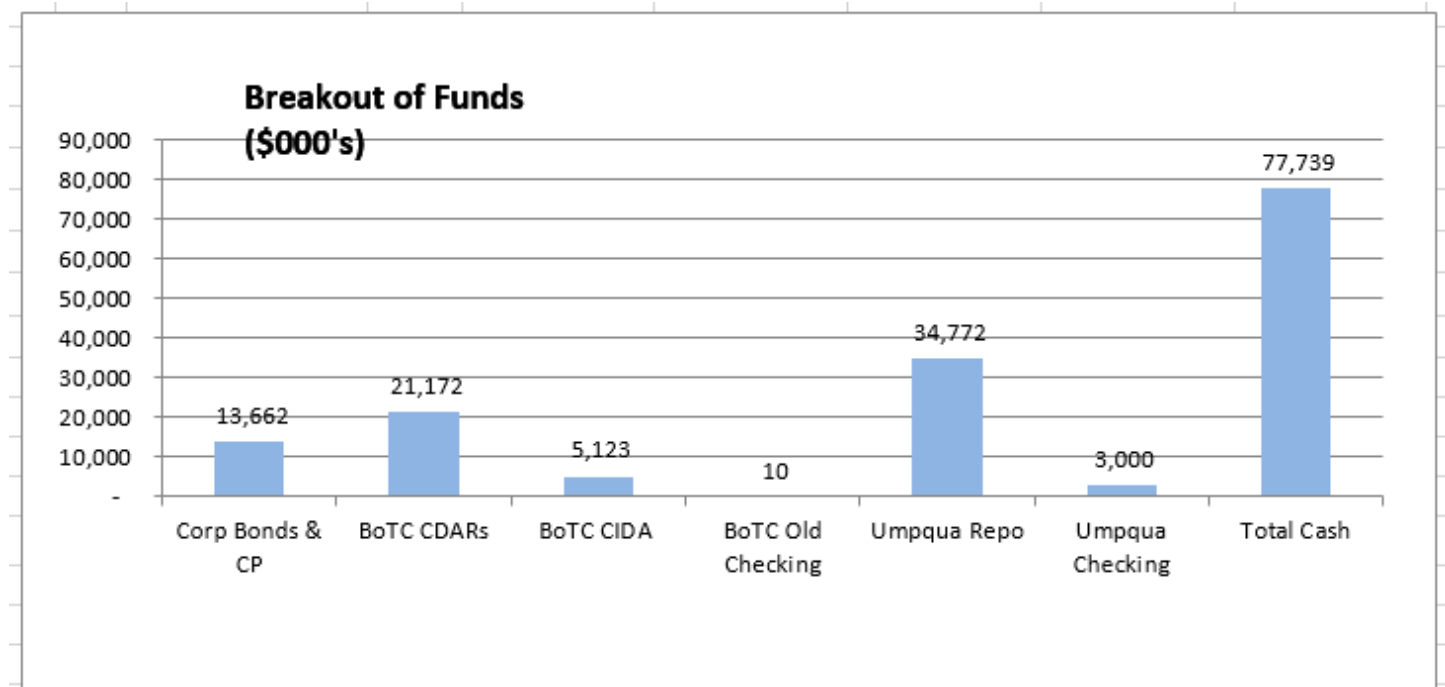


Total Incentives				
Year-to-Date 2017				
Incentives thru November 2017	<u>Actual</u>	<u>Budget</u>	<u>Variance</u>	<u>Var %</u>
Existing Buildings	20,439,230	20,085,312	(353,918)	-2%
New Buildings	7,498,867	9,527,506	2,028,639	21%
Production Efficiency	13,213,790	12,110,936	(1,102,854)	-9%
Existing Homes	7,269,334	8,415,521	1,146,186	14%
New Homes & Products	15,632,242	16,967,984	1,335,742	8%
Washington Programs - All	866,055	636,600	(229,455)	-36%
Solar	7,823,026	9,358,767	1,535,740	16%
Other Renewables	3,345,720	4,433,584	1,087,864	25%
Total Incentives	76,088,265	81,536,210	5,447,945	7%
Energy Efficiency Only	64,919,519	67,743,860	2,824,341	4%

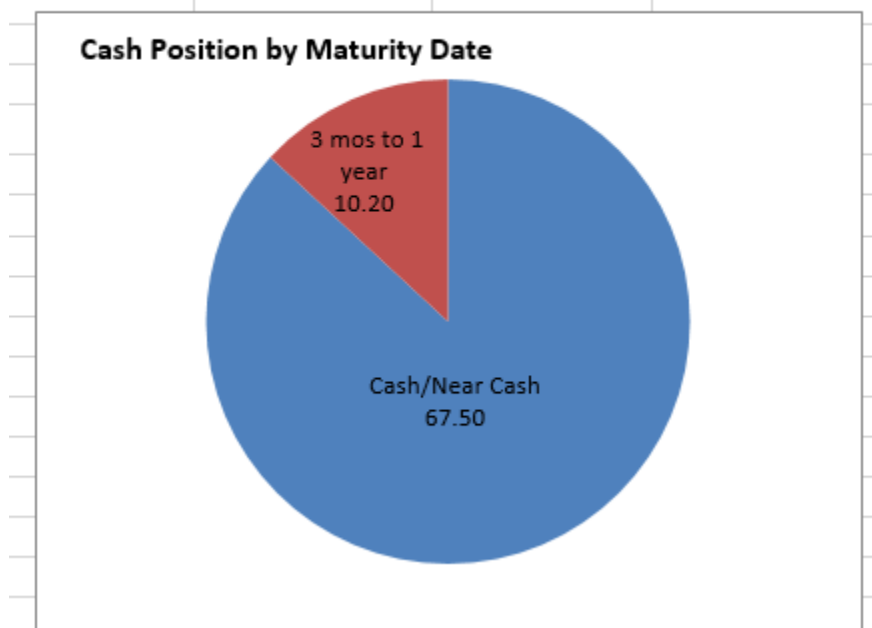
Total Incentives				
Year-to-Year Comparison				
Nov 2017 vs. Nov 2016	<u>Current Year</u>	<u>Prior Year</u>	<u>Variance</u>	<u>Var %</u>
Existing Buildings	20,439,230	21,856,221	1,416,990	6%
New Buildings	7,498,867	6,796,099	(702,768)	-10%
Production Efficiency	13,213,790	11,198,142	(2,015,649)	-18%
Existing Homes	7,269,334	8,324,136	1,054,802	13%
New Homes & Products	15,632,242	17,022,484	1,390,242	8%
Washington Programs - All	866,055	642,529	(223,526)	-35%
Solar	7,823,026	9,940,884	2,117,858	21%
Other Renewables	3,345,720	3,712,665	366,945	10%
Total Incentives	76,088,265	79,493,159	3,404,890	4%
Energy Efficiency Only	64,919,519	65,839,610	920,091	1%

Investment Status

The graphs below show the type of investments we hold and the locations where our funds are held. Investment balances decreased as we used maturing investments to meet and anticipate our future cash needs.



Average Days to Maturity:	32
Average Portfolio Yield:	0.61%



PINK PAPER

Energy Trust of Oregon
BALANCE SHEET
November 30, 2017
(Unaudited)

	November 2017	October 2017	Dec 2016	November 2016	Change from one month ago	Change from Beg. of Year	Change from one year ago
Current Assets							
Cash & Cash Equivalents	50,948,695	48,638,180	44,471,035	37,584,349	2,310,515	6,477,660	13,364,346
Investments	26,717,313	30,736,191	19,350,134	28,885,645	(4,018,877)	7,367,179	(2,168,332)
Receivables	98,665	123,851	86,058	121,741	(25,186)	12,607	(23,077)
Prepaid Expenses	339,455	386,299	280,347	309,354	(46,844)	59,108	30,100
Advances to Vendors	744,663	1,489,306	2,050,126	747,682	(744,643)	(1,305,463)	(3,019)
Total Current Assets	78,848,791	81,373,827	66,237,700	67,648,772	(2,525,036)	12,611,091	11,200,019
Fixed Assets							
Computer Hardware and Software	3,733,082	3,733,082	3,696,232	3,696,232	-	36,849.84	36,850
Software Development in Progress	181,238	178,975	-	-	2,263	181,238	181,238
Leasehold Improvements	595,027	595,027	318,964	318,964	-	276,062	276,062
Office Equipment and Furniture	815,056	815,056	716,876	701,604	-	98,181	113,452
Total Fixed Assets	5,324,403	5,322,140	4,732,072	4,716,800	2,263	592,331	607,603
Less Depreciation	(4,374,848)	(4,306,228)	(3,598,867)	(3,527,790)	(68,620)	(775,981)	(847,058)
Net Fixed Assets	949,555	1,015,911	1,133,205	1,189,010	(66,357)	(183,650)	(239,456)
Other Assets							
Deposits	237,314	237,314	223,339	223,339	-	13,975	13,975
Deferred Compensation Asset	866,528	864,618	849,522	799,737	1,910	17,006	66,791
Note Receivable, net of allowance	263,669	263,669	260,891	288,909	-	2,779	(25,240)
Total Other Assets	1,367,512	1,365,602	1,333,752	1,311,985	1,910	33,760	55,527
Total Assets	81,165,857	83,755,340	68,704,656	70,149,767	(2,589,483)	12,461,201	11,016,090
Current Liabilities							
Accounts Payable and Accruals	11,637,746	10,184,983	32,588,773	9,768,396	1,452,763	(20,951,027)	1,869,350
Salaries, Taxes, & Benefits Payable	891,920	874,048	827,526	839,469	17,872	64,394	52,451
Total Current Liabilities	12,529,666	11,059,031	33,416,299	10,607,865	1,470,635	(20,886,633)	1,921,801
Long Term Liabilities							
Deferred Rent	978,251	964,252	559,253	545,262	14,000	418,998	432,990
Deferred Compensation Payable	870,078	884,918	853,072	802,537	(14,840)	17,006	67,541
Other Long-Term Liabilities	1,290	1,290	2,110	2,110	-	(820)	(820)
Total Long-Term Liabilities	1,849,619	1,850,460	1,414,435	1,349,909	(840)	435,184	499,711
Total Liabilities	14,379,285	12,909,491	34,830,735	11,957,774	1,469,794	(20,451,449)	2,421,511
Net Assets							
Unrestricted Net Assets	66,786,572	70,845,850	33,873,922	58,191,993	(4,059,278)	32,912,650	8,594,579
Total Net Assets	66,786,572	70,845,850	33,873,922	58,191,993	(4,059,278)	32,912,650	8,594,579
Total Liabilities and Net Assets	81,165,857	83,755,340	68,704,656	70,149,767	(2,589,483)	12,461,201	11,016,090

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

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>Year to Date</u>
Operating Activities:												
<i>Revenue less Expenses</i>	\$ 9,021,323	\$ 11,985,541	7,297,639	3,428,944	(906,648)	(4,408,611)	5,943,771	(670,945)	2,841,126	2,439,785	(4,059,278)	\$ 32,912,648
<i>Non-cash items:</i>												
Depreciation	70,722	70,512	69,965	70,662	72,383	70,979	71,372	74,139	68,620	68,620	68,620	776,594
Change in Reserve on Long Term Note	-	-	-	-	-	-	-	-	-	-	-	-
Loss on disposal of assets	-	-	-	-	-	-	-	-	-	-	-	-
Receivables	9	-	(50)	400	136,841	-	136,861	(135,000)	-	(30,890)	(12,362)	95,810
Interest Receivable	(5,311)	(38,100)	11,304	(41,168)	33,111	17,834	(14,056)	(36,218)	80,882	(17,390)	37,548	28,436
Advances to Vendors	660,492	660,492	(1,489,806)	739,643	585,111	(1,239,195)	711,123	711,123	(1,522,806)	744,643	744,643	1,305,463
Prepaid expenses and other costs	17,387	(338,051)	27,347	48,843	(21,451)	93,559	5,575	82,574	11,961	(41,223)	44,934	(68,545)
Accounts payable	(21,595,003)	(2,386,675)	(256,773)	341,108	468,466	(82,140)	(350,716)	792,581	232,268	296,233	1,452,762	(21,087,889)
Payroll and related accruals	12,024	42,941	253,852	(151,351)	19,195	25,628	(67,842)	(31,549)	(19,441)	(5,089)	3,032	81,400
Deferred rent and other	4,262	(585)	14,000	14,205	13,999	14,000	14,000	279,612	13,388	12,975	13,999	393,855
Cash rec'd from / (used in) Operating Activities	(11,814,095)	9,996,075	5,927,478	4,451,286	401,007	(5,507,946)	6,450,088	1,066,317	1,705,998	3,467,664	(1,706,101)	14,437,770
Investing Activities:												
Investment Activity (1)	(992,696)	(3,749,267)	(5,787,813)	2,537,756	(5,555,047)	3,923,246	(2,252,546)	(1,984,708)	3,989,948	(1,514,930)	4,018,878	(7,367,179)
(Acquisition)/Disposal of Capital Assets	-	(7,194)	(75,180)	-	(36,850)	-	(23,612)	(265,612)	(3,256)	(178,975)	(2,263)	(592,942)
Cash rec'd from / (used in) Investing Activities	(992,696)	(3,756,461)	(5,862,993)	2,537,756	(5,591,897)	3,923,246	(2,276,158)	(2,250,320)	3,986,692	(1,693,905)	4,016,615	(7,960,121)
Cash at beginning of Period	44,471,035	31,664,245	37,903,859	37,968,346	44,957,390	39,766,501	38,181,801	42,355,732	41,171,730	46,864,420	48,638,180	44,471,035
Increase/(Decrease) in Cash	(12,806,791)	6,239,614	64,485	6,989,042	(5,190,890)	(1,584,700)	4,173,930	(1,184,003)	5,692,689	1,773,759	2,310,514	6,477,649
Cash at end of period	\$ 31,664,245	\$ 37,903,859	\$ 37,968,346	\$ 44,957,390	\$ 39,766,501	\$ 38,181,801	\$ 42,355,732	\$ 41,171,730	\$ 46,864,420	\$ 48,638,180	\$ 50,948,695	\$ 50,948,695

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

Actual											Adjusted Budget
January	February	March	April	May	June	July	August	September	October	November	December
Cash In:											
Public purpose and Incr funding	15,758,534	21,457,118	21,917,554	17,402,020	15,025,545	13,768,287	15,620,550	14,041,155	16,183,984	16,807,886	13,328,513
Investment Income	17,648	(14,444)	25,634	(2,155)	64,393	53,021	28,294	6,910	128,778	26,251	80,014
From Other Sources	9	0	(50)	400	136,841		136,861	(135,000)	0	(25)	6
Total cash in	15,776,191	21,442,674	21,943,138	17,400,265	15,226,779	13,821,308	15,785,705	13,913,065	16,312,762	16,834,112	13,408,534
Cash Out:											
Net cash flow for the month	(27,590,279)	(11,453,791)	(16,090,835)	(12,948,972)	(14,862,622)	(19,329,250)	(9,359,224)	(13,112,356)	(14,610,016)	(13,545,421)	(15,116,895)
	(11,814,088)	9,988,883	5,852,303	4,451,293	364,157	(5,507,946)	6,426,481	800,708	1,702,746	3,288,690	(1,708,362)
Cash Flow from/to Investments	(992,696)	(3,749,267)	(5,787,813)	2,537,756	(5,555,047)	3,923,246	(2,252,546)	(1,984,708)	3,989,948	(1,514,930)	4,018,878
											-
Beginning Balance: Cash & MM	44,471,035	31,664,245	37,903,859	37,968,345	44,957,390	39,766,501	38,181,805	42,355,732	41,171,741	46,864,420	48,638,180
Ending cash & MM	31,664,245	37,903,859	37,968,346	44,957,390	39,766,501	38,181,801	42,355,732	41,171,730	46,864,420	48,638,180	50,948,695
											36,748,618
Future Commitments											
Renewable Incentives	6,700,000	5,800,000	7,800,000	6,900,000	6,900,000	8,300,000	7,400,000	6,300,000	9,600,000	9,000,000	8,500,000
Efficiency Incentives	69,500,000	69,100,000	81,600,000	80,800,000	80,800,000	86,700,000	86,000,000	86,900,000	88,600,000	88,600,000	86,100,000
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
Total Commitments	81,200,000	79,900,000	94,400,000	92,700,000	92,700,000	100,000,000	98,400,000	98,200,000	103,200,000	102,600,000	99,600,000
											96,800,000

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

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

Committed funds adjustment:reduction in available cash for commitments to Efficiency program projects with signed agreements

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

Escrow:dedicated funds set aside in separate bank accounts

2018 Final R2 Budget												
	January	February	March	April	May	June	July	September	September	October	November	December
Cash In:												
Public purpose and Incr funding	15,700,000	19,800,000	19,400,000	16,900,000	14,700,000	13,600,000	13,800,000	13,800,000	14,400,000	14,600,000	13,700,000	16,500,000
Investment Income	25,000	15,000	15,000	15,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
From Other Sources												
Total cash in	15,725,000	19,815,000	19,415,000	16,915,000	14,720,000	13,620,000	13,820,000	13,820,000	14,420,000	14,620,000	13,720,000	16,520,000
Cash Out:	(30,579,447)	(10,909,637)	(12,198,794)	(13,565,232)	(13,021,066)	(13,636,363)	(15,366,862)	(12,645,596)	(13,862,725)	(15,167,354)	(16,496,728)	(21,864,567)
Net cash flow for the month	(14,854,447)	8,905,363	7,216,206	3,349,768	1,698,934	(16,363)	(1,546,862)	1,174,404	557,275	(547,354)	(2,776,728)	(5,344,567)
Cash Flow from/to Investments	-	-	-	-	-	-	-	-	-	-	-	-
Beginning Balance: Cash & MM	36,748,618	21,894,171	30,799,534	38,015,740	41,365,507	43,064,441	43,048,078	41,501,216	42,675,621	43,232,896	42,685,543	39,908,815
Ending cash & MM	21,894,171	30,799,534	38,015,740	41,365,507	43,064,441	43,048,078	41,501,216	42,675,621	43,232,896	42,685,543	39,908,815	34,564,248
Future Commitments												
Renewable Incentives	7,600,000	8,000,000	8,700,000	8,700,000	8,700,000	8,700,000	8,700,000	8,700,000	8,700,000	8,700,000	8,700,000	8,700,000
Efficiency Incentives	83,500,000	84,300,000	83,000,000	84,000,000	86,200,000	86,200,000	86,200,000	86,200,000	86,200,000	86,200,000	86,200,000	86,200,000
Emergency Contingency Pool	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000
Total Commitments	96,100,000	97,300,000	96,700,000	97,700,000	99,900,000	99,900,000	99,900,000	99,900,000	99,900,000	99,900,000	99,900,000	99,900,000

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

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

Energy Trust of Oregon
Income Statement - Actual and YTD Budget Comparison
For the Eleven Months Ending November 30, 2017
(Unaudited)

	November				YTD			
	Actual	Budget	Budget Variance	Variance %	Actual	Budget	Budget Variance	Variance %
<u>REVENUES</u>								
Public Purpose Funds-PGE	2,824,635	2,558,102	266,532	10%	35,508,982	34,272,798	1,236,184	4%
Public Purpose Funds-PacifiCorp	2,062,972	2,342,323	(279,351)	-12%	26,783,699	24,890,378	1,893,321	8%
Public Purpose Funds-NW Natural	887,210	855,651	31,558	4%	16,975,227	15,659,448	1,315,779	8%
Public Purpose Funds-Cascade	214,415	445,187	(230,772)	-52%	2,356,954	2,380,615	(23,660)	-1%
Public Purpose Funds-Avista	123,916	159,173	(35,257)	-22%	864,439	851,167	13,272	2%
Total Public Purpose Funds	6,113,147	6,360,437	(247,289)	-4%	82,489,301	78,054,406	4,434,895	6%
Incremental Funds - PGE	4,821,946	5,412,449	(590,504)	-11%	58,775,758	58,938,006	(162,249)	0%
Incremental Funds - PacifiCorp	2,393,421	2,738,932	(345,512)	-13%	32,104,657	30,097,165	2,007,492	7%
NW Natural - Industrial DSM			-	-	5,920,596	5,920,596	-	-
NW Natural - Washington			-	-	2,020,834	2,020,834	-	-
Grant Revenue	12,368		12,368	-	43,233		43,233	-
Revenue from Investments	42,466	10,000	32,466	325%	385,908	200,000	185,908	93%
TOTAL REVENUE	13,383,348	14,521,818	(1,138,470)	-8%	181,740,286	175,231,007	6,509,279	4%
<u>EXPENSES</u>								
Program Subcontracts	5,280,865	5,013,081	(267,784)	-5%	52,273,076	52,893,425	620,349	1%
Incentives	10,152,993	10,484,615	331,622	3%	76,088,265	81,536,210	5,447,945	7%
Salaries and Related Expenses	1,135,933	1,149,677	13,744	1%	12,257,892	12,625,282	367,389	3%
Professional Services	617,335	770,097	152,762	20%	5,350,240	8,646,705	3,296,466	38%
Supplies	5,062	4,050	(1,012)	-25%	37,652	44,550	6,898	15%
Telephone	3,830	5,825	1,995	34%	48,258	64,075	15,817	25%
Postage and Shipping Expenses	835	1,500	665	44%	9,841	16,500	6,659	40%
Occupancy Expenses	73,540	79,203	5,663	7%	845,901	871,230	25,329	3%
Noncapitalized Equip. & Depr.	85,150	112,655	27,505	24%	1,060,143	1,229,071	168,927	14%
Call Center	13,202	16,667	3,465	21%	133,215	183,333	50,119	27%
Printing and Publications	634.95	1,171	536	46%	5293.54	15,379	10,086	66%
Travel	14,648	17,753	3,105	17%	190,032	190,947	915	0%
Conference, Training & Mtng Exp	19,590	18,204	(1,386)	-8%	181,466	191,245	9,779	5%
Interest Expense and Bank Fees		125	125	100%	1677.27	3,875	2,198	57%
Insurance	8,803	9,167	364	4%	96,670	100,833	4,164	4%
Miscellaneous Expenses	21,048	250	(20,798)	-8319%	58,418	2,750	(55,668)	-2024%
Dues, Licenses and Fees	9,158	20,357	11,199	55%	189,597	141,768	(47,829)	-34%
TOTAL EXPENSES	17,442,626	17,704,397	261,772	1%	148,827,640	158,757,180	9,929,540	6%
TOTAL REVENUE LESS EXPENSES	(4,059,278)	(3,182,579)	(876,699)	-28%	32,912,649	16,473,828	16,438,822	100%

Energy Trust of Oregon
Income Statement - Actual and Prior Yr Comparison
For the Eleven Months Ending November 30, 2017
(Unaudited)

	November				YTD			
	Actual	Actual Prior Year	Prior Year Variance	Variance %	Actual	Actual Prior Year	Prior Year Variance	Variance %
<u>REVENUES</u>								
Public Purpose Funds-PGE	2,824,635	2,755,022	69,613	3%	35,508,982	33,400,573	2,108,409	6%
Public Purpose Funds-PacifiCorp	2,062,972	2,050,634	12,338	1%	26,783,699	25,358,747	1,424,952	6%
Public Purpose Funds-NW Natural	887,210	682,350	204,860	30%	16,975,227	12,109,716	4,865,510	40%
Public Purpose Funds-Cascade	214,415	147,184	67,232	46%	2,356,954	1,454,667	902,287	62%
Public Purpose Funds-Avista	123,916		123,916	#DIV/0!	864,439	140,400	724,039	516%
Total Public Purpose Funds	6,113,147	5,635,189	477,959	8%	82,489,301	72,464,104	10,025,197	14%
Incremental Funds - PGE	4,821,946	2,990,418	1,831,528	61%	58,775,758	37,896,506	20,879,252	55%
Incremental Funds - PacifiCorp	2,393,421	2,199,417	194,003	9%	32,104,657	23,195,828	8,908,830	38%
NW Natural - Industrial DSM			0		5,920,596	3,027,053	2,893,543	96%
NW Natural - Washington			-	-	2,020,834	1,537,679	483,155	31%
Grant Revenue	12,368		12,368		43,233		43,233	-
Revenue from Investments	42,466	24,306	18,160	75%	385,908	511,274	(125,366)	-25%
TOTAL REVENUE	13,383,348	10,849,330	2,534,018	23%	181,740,287	138,632,443	43,107,844	31%
<u>EXPENSES</u>								
Program Subcontracts	5,280,865	4,537,333	(743,532)	-16%	52,273,076	48,758,600	(3,514,476)	-7%
Incentives	10,152,993	7,564,196	(2,588,797)	-34%	76,088,265	79,493,159	3,404,894	4%
Salaries and Related Expenses	1,135,933	1,057,056	(78,876)	-7%	12,257,892	11,104,387	(1,153,505)	-10%
Professional Services	617,335	611,684	(5,651)	-1%	5,350,240	6,608,966	1,258,727	19%
Supplies	5,062	3,483	(1,580)	-45%	37,652	27,458	(10,194)	-37%
Telephone	3,830	5,794	1,965	34%	48,258	55,965	7,707	14%
Postage and Shipping Expenses	835	685	(150)	-22%	9,841	9,524	(317)	-3%
Occupancy Expenses	73,540	72,329	(1,211)	-2%	845,901	728,768	(117,133)	-16%
Noncapitalized Equip. & Depr.	85,150	96,120	10,971	11%	1,060,143	1,131,745	71,602	6%
Call Center	13,202	8,056	(5,146)	-64%	133,215	145,391	12,176	8%
Printing and Publications	635	3,061	2,426		5,294	8,509	3,215	38%
Travel	14,648	18,565	3,917	21%	190,032	180,802	(9,230)	-5%
Conference, Training & Mtng Exp	19,590	7,925	(11,665)	-147%	181,466	138,540	(42,926)	-31%
Interest Expense and Bank Fees			0		1,677	1,621	(56)	-3%
Insurance	8,803	5,169	(3,634)	-70%	96,670	93,569	(3,101)	-3%
Miscellaneous Expenses	21,048	5,748	(15,300)	-266%	58,418	85,900	27,482	32%
Dues, Licenses and Fees	9,158	7,210	(1,948)	-27%	189,597	100,841	(88,756)	-88%
TOTAL EXPENSES	17,442,626	14,004,415	(3,438,211)	-25%	148,827,640	148,673,746	(153,894)	0%
TOTAL REVENUE LESS EXPENSES	(4,059,278)	(3,155,085)	(904,193)	-29%	32,912,650	(10,041,303)	42,953,953	428%

Energy Trust of Oregon
Statement of Functional Expenses
For the Eleven Months Ending November 30, 2017
(Unaudited)

	Energy Efficiency	Renewable Energy	Solar LMI	Total Program Expenses	Management & General	Communications & Customer Service	Total Admin Expenses	Community Solar Expenses	Total	Budget	Variance	% Var
Program Expenses												
Incentives	64,919,519	11,168,746		76,088,265					76,088,265	81,536,210	5,447,945	7%
Program Management & Delivery	51,823,145	449,931		52,273,076					52,273,076	52,893,425	620,349	1%
Payroll and Related Expenses	3,522,904	1,076,823	24,119	4,623,847	2,195,656	1,525,608	3,721,264	16,426	8,361,536	8,455,490	93,954	1%
Outsourced Services	2,978,264	662,218	13,000	3,653,482	406,766	867,593	1,274,359	190	4,928,032	8,138,361	3,210,329	39%
Planning and Evaluation	2,207,880	132,916		2,340,796	4,923	115,686	120,609		2,461,405	2,686,707	225,302	8%
Customer Service Management	273,354	127,149		400,503					400,503	504,647	104,144	21%
Trade Allies Network	332,887	18,152		351,039					351,039	365,852	14,813	4%
Total Program Expenses	126,057,954	13,635,935	37,119	139,731,008	2,607,345	2,508,887	5,116,232	16,616	144,863,856	154,580,691	9,716,835	6%
Program Support Costs												
Supplies	9,373	3,177	12	12,562	9,741	5,438	15,179		27,742	32,573	4,831	15%
Postage and Shipping Expenses	2,111	716	3	2,829	2,852	957	3,809		6,638	11,640	5,002	43%
Telephone	2,242	760	3	3,005	1,190	1,017	2,207		5,213	7,680	2,467	32%
Printing and Publications	793	138	1	931	3,400	184	3,584		4,515	12,637	8,122	64%
Occupancy Expenses	249,988	84,772	320	335,080	132,726	113,372	246,098		581,178	592,313	11,135	2%
Insurance	28,569	9,688	37	38,293	15,168	12,956	28,124		66,417	68,552	2,135	3%
Equipment	4,966	99,487	6	104,460	2,637	2,252	4,889		109,349	140,626	31,277	22%
Travel	37,749	20,098		57,847	40,414	53,675	94,089	79	152,014	171,697	19,683	11%
Meetings, Trainings & Conferences	30,881	18,768	2,184	51,833	61,871	19,797	81,668	99	133,600	128,545	(5,055)	-4%
Interest Expense and Bank Fees					1,677		1,677		1,677	3,875	2,198	57%
Depreciation & Amortization	26,336	8,931	34	35,301	13,983	11,944	25,927		61,227	55,034	(6,193)	-11%
Dues, Licenses and Fees	98,456	9,535		107,991	10,907	19,410	30,317		138,308	113,477	(24,831)	-22%
Miscellaneous Expenses	56,614	257	1	56,872	402	343	745		57,617	1,870	(55,747)	-2981%
IT Services	1,668,689	240,543	845	1,910,077	397,086	311,122	708,208		2,618,286	2,835,969	217,683	8%
Total Program Support Costs	2,216,767	496,869	3,445	2,717,082	694,055	552,467	1,246,522	177	3,963,781	4,176,489	212,708	5%
TOTAL EXPENSES	128,274,722	14,132,805	40,563	142,448,091	3,301,401	3,061,355	6,362,756	16,793	148,827,640	158,757,180	9,929,540	6%

OPUC Measure vs. 8% 5.0%

Program Support Costs	2,717,082
Total Admin Exp and Community Solar	6,379,549
Total Support and Administrative	9,096,631
	<i>divided by</i>
Total Utility Revenue (without Int Income)	181,311,145
OPUC %	5.0%

ENERGY TRUST OF OREGON
Summary of All Units
For the Eleven Months Ending November 30, 2017

	ENERGY EFFICIENCY									
	PGE	PacifiCorp	Total	NWN Industrial	NW Natural	Cascade	Avista	Oregon Total	NWN WA	ETO Total
REVENUES										
Public Purpose Funding	27,572,984	20,879,451	48,452,434	-	16,975,227	2,356,954	864,439	68,649,054	-	68,649,054
Incremental Funding	58,775,758	32,104,657	90,880,415	5,920,596				96,801,011	2,020,834	98,821,845
Grant Revenue										
Contributions										
Revenue from Investments										
TOTAL PROGRAM REVENUE	86,348,742	52,984,108	139,332,849	5,920,596	16,975,227	2,356,954	864,439	165,450,065	2,020,834	167,470,899
EXPENSES										
Program Management (Note 3)	3,267,450	1,879,232	5,146,683	179,024	617,145	70,856	43,391	6,057,099	107,441	6,164,540
Program Delivery	24,781,499	14,308,770	39,090,270	877,834	4,532,261	597,101	275,793	45,373,256	438,774	45,812,030
Incentives	35,364,687	19,645,592	55,010,279	1,482,345	6,369,865	760,200	430,776	64,053,463	866,055	64,919,518
Program Eval & Planning Svcs.	1,868,209	1,085,367	2,953,576	64,975	321,361	36,227	23,060	3,399,201	140,300	3,539,501
Program Marketing/Outreach	2,309,228	1,383,079	3,692,308	24,330	671,325	52,294	49,563	4,489,819	67,515	4,557,334
Program Legal Services	-	-	-	-	-	-	-	-	-	-
Program Quality Assurance	34,209.00	18,320.00	52,529.00	-	7,844.00	885.00	426.00	61,684.00	8,400.00	70,084.00
Outsourced Services	195,789	120,020	315,809	1,327	57,499	3,589	4,371	382,596	6,113	388,709
Trade Allies & Cust. Svc. Mgmt.	283,109	173,667	456,776	6,918	93,162	7,215	7,002	571,072	35,168	606,240
IT Services	859,656	493,025	1,352,681	28,476	211,620	20,515	15,285	1,628,575	40,112	1,668,687
Other Program Expenses - all	280,001	159,662	439,663	11,787	48,388	5,692	3,349	508,878	39,200	548,078
TOTAL PROGRAM EXPENSES	69,243,837	39,266,734	108,510,574	2,677,016	12,930,470	1,554,574	853,016	126,525,643	1,749,078	128,274,721
ADMINISTRATIVE COSTS										
Management & General (Notes 1 & 2)	1,605,212	910,321	2,515,533	62,054	299,844	36,040	19,783	2,933,255	40,545	2,973,800
Communications & Customer Svc (Notes 1 & 2)	1,488,496	844,132	2,332,629	57,542	278,043	33,418	18,344	2,719,977	37,597	2,757,574
Total Administrative Costs	3,093,708	1,754,453	4,848,162	119,596	577,887	69,458	38,127	5,653,232	78,142	5,731,374
TOTAL PROG & ADMIN EXPENSES	72,337,545	41,021,187	113,358,736	2,796,612	13,508,357	1,624,032	891,143	132,178,875	1,827,220	134,006,095
TOTAL REVENUE LESS EXPENSES	14,011,197	11,962,921	25,974,113	3,123,984	3,466,870	732,922	(26,704)	33,271,190	193,614	33,464,804
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	14,011,197	11,962,921	25,974,113	3,123,984	3,466,870	732,922	(26,704)	33,271,190	193,614	33,464,804
Ending Net Assets - Reserves	20,518,476	12,607,760	33,126,230	4,152,134	4,952,526	397,057	41,916	42,669,856	476,785	43,146,640
Ending Reserve by Category										
Program Reserves (Efficiency and Renewables)	20,518,476	12,607,760	33,126,230	4,152,134	4,952,526	397,057	41,916	42,669,856	476,785	43,146,640
Operational Contingency Pool										
Emergency Contingency Pool										
TOTAL NET ASSETS CUMULATIVE	20,518,476	12,607,760	33,126,230	4,152,134	4,952,526	397,057	41,916	42,669,856	476,785	43,146,640

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 Eleven Months Ending November 30, 2017

	RENEWABLE ENERGY						TOTAL			
	PGE	PacifiCorp	Total	Solar LMI	Community Solar	Other	All Programs	Approved budget	Change	% Change
REVENUES										
Public Purpose Funding	7,935,998	5,904,249	13,840,247	-	-	-	82,489,301	78,054,406	(4,434,895)	-6%
Incremental Funding							98,821,845	96,976,601	(1,845,244)	-2%
Grant Revenue				43,233			43,233		(43,233)	
Contributions									-	
Revenue from Investments						385,908	385,908	200,000	(185,908)	-93%
TOTAL PROGRAM REVENUE	7,935,998	5,904,249	13,840,247	43,233	0	385,908	181,740,286	175,231,007	6,509,279	4%
EXPENSES										
Program Management (Note 3)	581,811	504,179	1,085,990	24,119	16,426		7,291,075	7,142,995	(148,080)	-2%
Program Delivery	252,765	187,999	440,764	-	-		46,252,794	46,664,910	412,116	1%
Incentives	6,219,455	4,949,292	11,168,746	-	-		76,088,264	81,536,210	5,447,946	7%
Program Eval & Planning Svcs.	93,016	73,125	166,141	-	-		3,705,642	4,708,665	1,003,023	21%
Program Marketing/Outreach	101,406	72,728	174,135	-	190		4,731,659	5,164,222	432,563	8%
Program Legal Services	-	-	-	-	-		-	18,334	18,334	100%
Program Quality Assurance	-	-	-	-	-		70,084.00	77,916	7,832	10%
Outsourced Services	199,983	254,874	454,857	13,000	-		856,566	2,357,803	1,501,237	64%
Trade Allies & Cust. Svc. Mgmt.	80,156	55,145	135,301	-	-		741,541	861,332	119,791	14%
IT Services	129,267	111,277	240,543	845	-		1,910,075	2,068,881	158,806	8%
Other Program Expenses - all	149,480	116,846	266,326	2,600	177		817,181	788,723	(28,458)	-4%
TOTAL PROGRAM EXPENSES	7,807,339	6,325,465	14,132,803	40,564	16,793	-	142,464,881	151,389,991	8,925,110	6%
ADMINISTRATIVE COSTS										
Management & General (Notes 1 & 2)	180,196	146,092	326,286	1,315	-		3,301,401	3,807,884	506,482	13%
Communications & Customer Svc (Notes 1 & 2)	167,013	135,414	302,427	1,355	-		3,061,356	3,559,302	497,946	14%
Total Administrative Costs	347,209	281,506	628,713	2,669	-		6,362,756	7,367,186	1,004,430	14%
TOTAL PROG & ADMIN EXPENSES	8,154,548	6,606,971	14,761,516	43,233	16,793		148,827,637	158,757,177	9,929,540	6%
TOTAL REVENUE LESS EXPENSES	(218,550)	(702,722)	(921,269)	-	(16,793)	385,908	32,912,650	16,473,829	16,438,820	-100%
NET ASSETS - RESERVES										
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					56,200	279,665	-			
Change in net assets this year	(218,550)	(702,722)	(921,269)	-	(16,793)	385,908	32,912,650	16,473,829	16,438,821	100%
Ending Net Assets - Reserves	7,324,783	6,674,219	13,999,007	-	39,407	9,601,517	66,786,572	48,803,514	(17,983,058)	37%
Ending Reserve by Category										
Program Reserves (Efficiency and Renewables)	7,324,783	6,674,219	13,999,007	-	39,407		66,786,572	48,803,514	(17,983,058)	
Operational Contingency Pool						4,601,517				
Emergency Contingency Pool						5,000,000				
TOTAL NET ASSETS CUMULATIVE	7,324,783	6,674,219	13,999,007	-	39,407	9,601,517	66,786,572	48,803,514	(17,983,058)	37%

Energy Trust of Oregon
Program Expense by Service Territory
For the Eleven Months Ending November 30, 2017
(Unaudited)

	PGE	Pacific Power	Subtotal Elec.	NWN Industrial	NW Natural Gas	Cascade	Avista	Subtotal Gas	Oregon Total	NWN WA	Solar LMI	Community Solar	ETO Total	YTD Budget	Variance	% Var
Energy Efficiency																
Commercial																
Existing Buildings	24,229,013	13,336,441	37,565,454	1,078,907	2,831,825	633,382	204,971	4,749,084	42,314,538	686,336	-		43,000,874	44,414,228	1,413,354	3%
New Buildings	9,356,796	3,747,754	13,104,550	206,582	1,233,597	222,211	59,630	1,722,019	14,826,569				14,826,569	17,562,561	2,735,992	16%
NEEA	1,220,502	848,145	2,068,648		128,058	13,713		141,772	2,210,419	14,417			2,224,836	2,614,583	389,747	15%
Total Commercial	34,806,312	17,932,340	52,738,652	1,285,489	4,193,480	869,306	264,601	6,612,875	59,351,526	700,753	-		60,052,279	64,591,372	4,539,093	7%
Industrial																
Production Efficiency	15,497,054	8,893,924	24,390,977	1,511,122	427,276	173,199	24,005	2,135,602	26,526,579				26,526,579	25,509,046	(1,017,533)	-4%
NEEA	222,592	154,683	377,275					377,275					377,275	214,288	(162,987)	-76%
Total Industrial	15,719,646	9,048,606	24,768,252	1,511,122	427,276	173,199	24,005	2,135,602	26,903,854	-	-		26,903,854	25,723,334	(1,180,520)	-5%
Residential																
Existing Homes	5,315,413	4,819,586	10,134,999	-	5,101,765	157,882	428,701	5,688,348	15,823,347	425,062	-		16,248,409	18,021,236	1,772,827	10%
New Homes/Products	14,073,406	7,537,032	21,610,437	-	3,200,182	360,927	173,839	3,734,949	25,345,386	635,474	-		25,980,860	27,910,983	1,930,123	7%
NEEA	2,422,766	1,683,623	4,106,389		585,657	62,716		648,373	4,754,763	65,930			4,820,693	4,842,723	22,030	0%
Total Residential	21,811,585	14,040,241	35,851,826	-	8,887,605	581,525	602,540	10,071,670	45,923,496	1,126,466	-		47,049,962	50,774,942	3,724,980	7%
Energy Efficiency Program Costs	72,337,545	41,021,187	113,358,736	2,796,612	13,508,357	1,624,032	891,143	18,820,146	132,178,875	1,827,220	-		134,006,095	141,089,648	7,083,553	5%
Renewables																
Solar Electric (Photovoltaic)	6,039,113	4,154,696	10,193,809	-	-	-	-	-	10,193,809	-	43,233		10,237,042	11,900,004	1,662,962	14%
Other Renewable	2,115,436	2,452,273	4,567,709					4,567,709					4,567,709	5,767,529	1,199,820	21%
Renewables Program Costs	8,154,548	6,606,971	14,761,516	-	-	-	-	-	14,761,518	-	43,233		14,804,751	17,667,533	2,862,782	16%

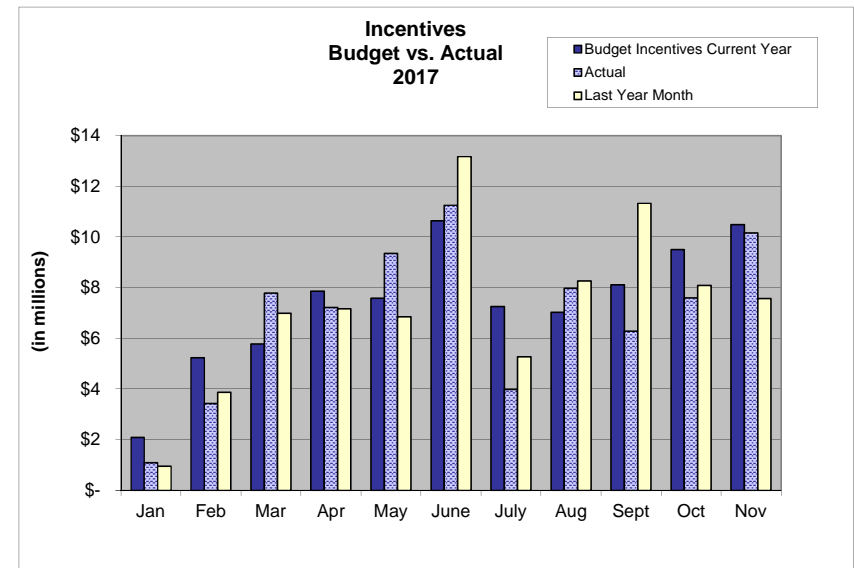
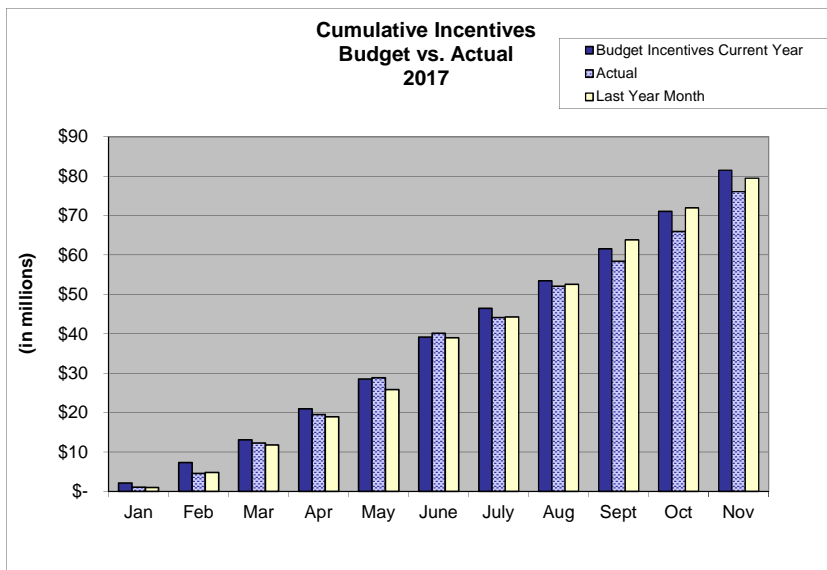
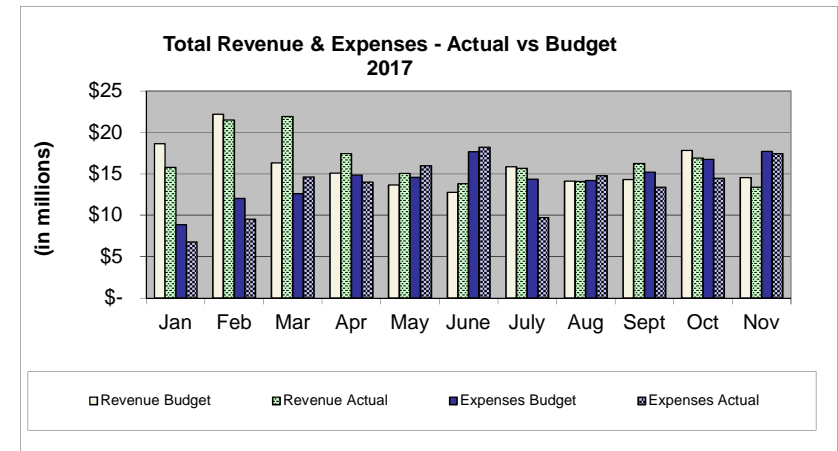
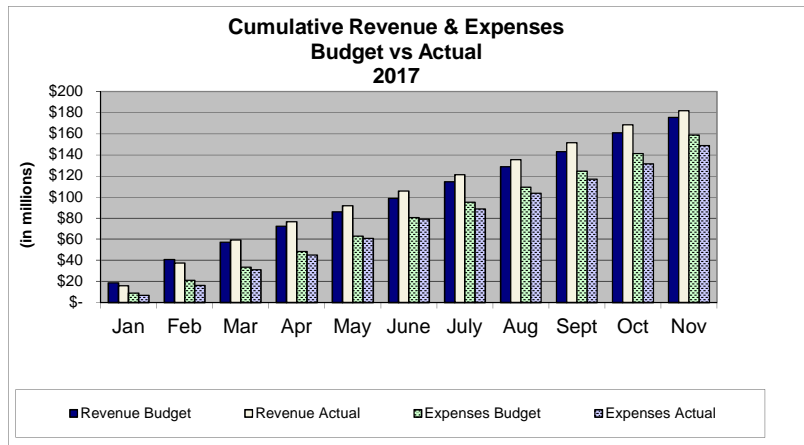
Energy Trust of Oregon
Administrative Expenses
For the Eleven Months Ending November 30, 2017
(Unaudited)

EXPENSES	MANAGEMENT & GENERAL						COMMUNICATIONS & CUSTOMER SERVICE					
	QUARTERLY			YTD			QUARTERLY			YTD		
	ACTUAL	BUDGET	REMAINING	ACTUAL	BUDGET	VARIANCE	ACTUAL	BUDGET	REMAINING	ACTUAL	BUDGET	VARIANCE
Outsourced Services	\$38,415	\$121,625	\$83,210	\$389,099	\$583,625	\$194,526	\$315,553	\$355,250	\$39,697	\$867,593	\$1,302,583	\$434,990
Legal Services	2,548	3,000	452	17,667	11,000	(6,667)						
Salaries and Related Expenses	396,305	663,679	267,373	2,195,656	2,435,988	240,333	298,907	429,351	130,444	1,525,608	1,574,288	48,680
Supplies	1,486	1,500	14	4,774	5,500	726	421	250	(171)	1,195	917	(279)
Postage and Shipping Expenses		625	625	1,731	2,292	560						
Printing and Publications	450	1,125	675	3,184	4,125	941		375	375		3,875	3,875
Travel	5,238	15,363	10,125	40,414	56,329	15,915	13,306	11,250	(2,056)	53,675	41,250	(12,425)
Conference, Training & Mtngs	10,652	21,463	10,811	61,841	68,696	6,855	5,182	3,125	(2,057)	19,770	11,458	(8,312)
Interest Expense and Bank Fees		375	375	1,677	3,875	2,198						
Dues, Licenses and Fees	708	2,938	2,230	10,892	13,951	3,059	1,873	4,125	2,252	19,396	15,125	(4,271)
Shared Allocation (Note 1)	31,502	51,008	19,506	172,456	187,031	14,575	30,089	39,966	9,876	147,307	146,541	(766)
IT Service Allocation (Note 2)	69,455	116,522	47,067	397,086	430,100	33,014	54,419	91,297	36,878	311,122	336,989	25,867
Planning & Eval	1,018	1,529	512	4,923	5,373	451	23,913	35,937	12,025	115,686	126,275	10,589
TOTAL EXPENSES	557,777	1,000,751	442,974	3,301,401	3,807,885	506,482	743,663	970,926	227,263	3,061,356	3,559,301	497,946

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: 12/1/2017

CONTRACTOR	Description	City	EST COST	Actual TTD	Remaining	Start	End
Administration							
Administration Total:			13,373,096	4,855,807	8,517,289		
Communications							
Communications Total:			4,382,770	3,276,035	1,106,735		
Energy Efficiency							
Northwest Energy Efficiency Alliance	Regional EE Initiative Agmt	Portland	36,142,871	19,831,912	16,310,959	1/1/2015	7/1/2020
ICF Resources, LLC	2017 BE PMC	Fairfax	14,298,850	12,101,066	2,197,784	1/1/2017	12/31/2017
CLEAResult Consulting Inc	2017 HES PMC	Austin	6,540,508	5,439,689	1,100,819	1/1/2017	12/31/2017
CLEAResult Consulting Inc	2017 NBE PMC	Austin	6,207,078	5,408,460	798,618	1/1/2017	12/31/2017
Northwest Energy Efficiency Alliance	Regional Gas EE Initiative	Portland	6,200,354	2,168,595	4,031,759	1/1/2015	7/1/2020
Lockheed Martin Corporation	2017 MF PMC	Grand Prairie	4,586,068	3,889,617	696,451	1/1/2017	12/31/2017
Ecova Inc	2017 Products PMC	Spokane	3,907,587	3,233,572	674,015	1/1/2017	12/31/2017
Energy 350 Inc	PDC - PE 2017	Portland	3,144,460	2,881,611	262,849	1/1/2017	12/31/2017
CLEAResult Consulting Inc	2017 NH PMC	Austin	3,137,693	2,510,676	627,017	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	2,122,636	(105,636)	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	1,554,259	230,109	1/1/2017	12/31/2017
RHT Energy Inc.	PDC - PE 2017	Medford	1,740,434	1,496,327	244,107	1/1/2017	12/31/2017
Evergreen Consulting Group, LLC	PE Lighting PDC 2017	Tigard	1,555,700	1,396,090	159,610	1/1/2017	12/31/2017
KEMA Incorporated	EB & SEM 15-16 Evaluation	Oakland	575,000	256,675	318,325	6/8/2017	5/31/2018
SBW Consulting, Inc.	PE Program Impact Evaluation	Bellevue	540,000	514,254	25,746	5/1/2016	1/31/2018
Clean Energy Works, Inc.	EE Incentive & Services Agmt	Portland	457,550	433,370	24,180	7/1/2014	12/31/2017
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	300,000	0	6/1/2014	6/20/2025
CLEAResult Consulting Inc	2017 HES WA PMC	Austin	285,746	231,144	54,602	1/1/2017	12/31/2017
ICF Resources, LLC	2017 BE DSM PMC	Fairfax	274,746	261,263	13,483	1/1/2017	12/31/2017
EnergySavvy Inc.	Optix Engage Online Audit Tool	Seattle	273,600	178,167	95,433	6/1/2016	5/31/2018
Pivotal Energy Solutions LLC	License Agreement	Gilbert	270,500	174,612	95,888	3/1/2014	12/31/2017
Alternative Energy Systems Consulting, Inc.	PE Mobile App Scoping Tool	Carlsbad	249,830	236,364	13,466	6/1/2016	4/30/2018
Balanced Energy Solutions LLC	New Homes QA Inspections	Portland	248,625	137,969	110,656	4/27/2015	12/31/2017
ICF Resources, LLC	2017 BE NWN WA PMC	Fairfax	246,200	203,239	42,961	1/1/2017	12/31/2017
TRC Engineers Inc.	Transition Agreement	Irvine	214,216	130,340	83,876	9/1/2017	12/31/2017
CLEAResult Consulting Inc	RES PMC Transition	Austin	212,603	155,265	57,338	9/1/2017	12/31/2017

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Alliance For Sustainable Energy, LLC	Technical Services Agreement	Lakewood	104,989	89,215	15,774	10/30/2015	11/30/2017
Alternative Energy Systems Consulting, Inc.	PE Review of Technical Studies	Carlsbad	100,000	12,978	87,022	5/22/2017	12/31/2018
1000 Broadway Building L.P.	Pay-for-Performance Pilot	Portland	88,125	58,750	29,375	10/17/2014	11/1/2018
The Cadmus Group Inc.	Residential Air Conditioning	Watertown	83,550	49,669	33,882	7/1/2017	3/31/2018
CLEAResult Consulting Inc	Professional Services/Trans	Austin	81,688	69,170	12,518	10/15/2014	10/15/2018
Evergreen Economics	Research Cannabis Market	Portland	80,130	72,316	7,814	6/23/2017	4/30/2018
WegoWise Inc	benchmarking license	Boston	77,472	34,920	42,552	6/15/2014	12/31/2018
Abt SRBI Inc.	Fast Feedback Surveys 2017	New York	70,000	53,377	16,623	2/1/2017	2/28/2018
Energy 350 Inc	Professional Services	Portland	64,062	63,993	70	12/10/2014	12/10/2018
Apex Analytics LLC	Nest Seasonal Savings Eval	Boulder	59,000	58,356	644	8/29/2016	12/31/2017
The Cadmus Group Inc.	Existing Homes Pilot Eval	Watertown	53,000	52,999	1	2/18/2016	12/31/2017
Research Into Action, Inc.	Evaluation MHR Pilot	Portland	52,000	10,318	41,682	5/1/2017	2/28/2019
Ecotope, Inc.	NB - NEEA Impact Evaluation	Seattle	50,000	11,780	38,220	10/23/2017	12/31/2018
Green Motors Practice Group	Green Motors Incentive Funding	Boise	50,000	17,954	32,046	1/1/2017	12/31/2017
Earth Advantage, Inc.	Home Energy Score Analysis	Portland	45,000	44,000	1,000	6/27/2017	12/31/2017
MetaResource Group	Intel DX1 Mod 1&2 Megaproject	Portland	45,000	29,996	15,004	4/1/2015	12/31/2017
Navigant Consulting Inc	Evaluation Consultant-DSM Proj.	Boulder	45,000	32,701	12,299	6/15/2017	6/1/2019
Evergreen Economics	New Home Pilot- DHP	Portland	44,000	1,723	42,278	11/1/2017	3/31/2019
Brightworks Sustainability LLC	Net Zero Fellowship Grant Agmt	Portland	43,500	0	43,500	4/5/2017	8/31/2018
The Cadmus Group Inc.	Existing Homes DHP Study	Watertown	40,000	37,008	2,992	9/25/2017	3/31/2019
Ecova Inc	RES PDC Transition Agreement	Spokane	39,948	5,848	34,101	9/1/2017	12/31/2017
Cadeo Group LLC	Evaluation Consulting	Washington	35,000	37,500	(2,500)	4/25/2017	3/31/2018
KEMA Incorporated	Billing Analysis Review	Oakland	35,000	3,351	31,649	3/15/2015	12/31/2017
The Cadmus Group Inc.	Air Conditioning Measures	Watertown	32,950	22,660	10,290	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
Cadeo Group LLC	Retail Lighting Mkt Analysis	Washington	29,545	17,514	12,031	7/10/2017	12/31/2017
Research Into Action, Inc.	Lighting Tool-Mrkt Research	Portland	29,022	0	29,022	12/1/2018	4/30/2018
BASE zero LLC	Quality Assurance Services	Bend	27,325	26,706	619	3/1/2016	12/31/2017
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
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
Bridgetown Printing Company	2017 Bill Insert	Portland	20,000	13,356	6,644	1/18/2017	12/31/2017
Evergreen Consulting Group, LLC	Lighting Conslt.-Mrkt Research	Tigard	16,500	0	16,500	12/13/2017	4/30/2018
Portland General Electric	Workshop/Training Agreement	Portland	15,000	8,252	6,748	1/1/2017	12/31/2017

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EES Consulting, Inc	Professional Services Agmt	Kirkland	14,800	10,080	4,720	10/1/2016	9/30/2018
Research Into Action, Inc.	Evaluation - APS Pilot	Portland	14,600	13,240	1,361	7/1/2017	12/31/2018
KEMA Incorporated	New Bldg Evaluation	Oakland	13,000	707	12,293	10/1/2017	3/31/2019
Flink Energy Consulting	Smart Grid Modeling	Portland	12,120	12,120	0	7/12/2016	12/30/2017
LightTracker, Inc.	Lighting Market Analysis	Boulder	12,000	12,000	0	7/17/2017	3/31/2018
FMYI, INC	Subscription Agreement	Portland	11,150	5,150	6,000	4/25/2016	11/1/2017
Earth Advantage, Inc.	2017 Sponsorship	Portland	10,250	10,250	0	3/1/2017	2/28/2018
American Council for and Energy Efficient Economy	Intelligen Effncy Sponsorship		10,000	10,000	0	4/4/2017	12/31/2017
American Council for and Energy Efficient Economy	EE & Wtr Conserv. Sponsorship		10,000	10,000	0	4/4/2017	12/31/2017
Hacker Architects Inc	Special Proj. Grant Agreement	Portland	10,000	0	10,000	11/7/2017	5/30/2018
The Leede Research Group Inc	Evaluation Consultant	Manitowoc	9,000	0	9,000	5/1/2017	12/31/2017
City of Portland Bureau of Planning & Sustainability	Sponsorship - 2017	Portland	8,000	8,000	0	1/5/2017	12/31/2017
The Cadmus Group Inc.	New Bldg Program Impact Eval	Watertown	6,500	6,010	490	4/20/2017	12/31/2017
The Cadmus Group Inc.	NB Evaluation Plan	Watertown	6,500	0	6,500	10/1/2017	3/31/2019
Northwest Energy Efficiency Council	BOC 2017 Sponsorship	Seattle	6,000	6,000	0	2/14/2017	12/31/2017
Shades of Green	Shades of Green Sponsorship	Portland	5,000	5,000	0	11/6/2017	10/30/2018
Social Enterprises Inc.	GoGreen Sponsorship - 2017	Portland	5,000	5,000	0	3/21/2017	12/31/2017
Energy Efficiency Total:			101,809,516	69,690,068	32,119,448		

Joint Programs

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	25,664	46,328	1/1/2017	12/31/2017
Structured Communications Systems, Inc.	ShoreTel Phone System Install		70,345	65,287	5,059	1/1/2017	12/31/2018
CoStar Realty Information Inc	Property Data	Baltimore	48,020	43,308	4,712	6/1/2011	5/31/2018
Grounded Research and Consulting, LLC	Education Background Research	Oakland	25,000	24,972	28	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	9,825	775	8/26/2016	8/26/2018
Joint Programs Total:			371,807	314,905	56,902		

Renewable Energy

Sunway 3, LLC	Prologis PV installation		3,405,000	3,261,044	143,956	9/30/2008	9/30/2028
Clean Water Services	Project Funding Agreement		3,000,000	2,013,106	986,894	11/25/2014	11/25/2039
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	1,000,000	0	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

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Klamath Falls Solar 2 LLC	PV Project Funding Agreement	San Mateo	850,000	0	850,000	7/11/2016	7/10/2041
Old Mill Solar, LLC	Project Funding Agmt Bly, OR	Lake Oswego	490,000	490,000	0	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
SunE Solar XVI Lessor, LLC	BVT Sexton Mtn PV	Bethesda	355,412	355,412	0	5/15/2014	12/31/2034
City of Gresham	City of Gresham Cogen 2		350,000	334,523	15,477	4/9/2014	7/9/2034
BSA Enterprises Inc	Solar Verifier Services	Sisters	200,000	107,011	92,989	8/1/2016	7/31/2018
Farmers Conservation Alliance	Outreach Activities	Hood River	200,000	199,953	47	1/1/2017	12/31/2017
Gary Higbee DBA WindStream Solar	Solar Verifier Services	Eugene	200,000	89,417	110,583	8/1/2016	7/31/2018
Luxurious Plumbing and Heating, Inc.	Solar Verifier Services	West Linn	200,000	133,908	66,092	8/1/2016	7/31/2018
RHT Energy Inc.	Verifier Services Agmt - Solar	Medford	200,000	112,288	87,713	8/1/2016	7/31/2018
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	103,800	19,500	1/1/2015	4/30/2018
Clean Power Research, LLC	PowerClerk License	Napa	109,175	109,175	0	7/1/2017	6/30/2018
SPS of Oregon Inc	Project Funding Agreement	Wallowa	75,000	74,513	488	10/15/2015	10/31/2036
Kendrick Business Services LLC	Small Business Support Agmt	Albany	60,000	3,175	56,825	11/1/2016	6/30/2018
Future Resource Strategies, LLC	Backfill for RE Staff	Salem	50,000	0	50,000	6/7/2017	10/8/2017
Kendrick Business Services LLC	TA Business Development	Albany	50,000	6,839	43,161	1/1/2017	12/31/2017
Kleinschmidt Associates	Evaluation Services	Pittsfield	47,400	47,609	(209)	1/1/2017	11/30/2018
OSEIA-Oregon Solar Energy Industries Assoc	Technical Training Course Dev		41,650	29,100	12,550	1/1/2017	4/30/2018
The Cadmus Group Inc.	Solar Verification	Watertown	41,000	33,226	7,775	8/24/2017	2/28/2018
Clean Energy States Alliance	2017 CESA Sponsorship		39,500	39,500	0	7/1/2016	6/30/2017
Clean Energy States Alliance	CESA Membership 17-18		39,500	39,500	0	7/1/2017	6/30/2018
ENERGYneering Solutions Inc	Biopower & Hydro Evaluations	Sisters	25,000	24,954	46	12/6/2016	11/30/2018
University of Oregon	UO SRML Contribution - 2017	Eugene	24,999	24,999	0	3/9/2017	3/8/2018
Wallowa Resources Community Solutions, Inc.	Renewables Field Outreach		24,999	24,528	471	2/1/2016	1/30/2018
Robert Migliori	42kW wind energy system	Newberg	24,125	24,125	0	4/11/2007	1/31/2024
Clean Power Research, LLC	WattPlan Software	Napa	20,000	20,000	0	11/17/2017	6/30/2018
Warren Griffin	Griffin Wind Project	Salem	13,150	9,255	3,895	10/1/2005	10/1/2020
Oregon Solar Energy Industries Association	Sponsorship 2017	Portland	7,500	7,500	0	1/1/2017	12/31/2017
OSEIA-Oregon Solar Energy Industries Assoc	OSEIA 2018 Conf. Sponsorship		7,500	7,500	0	9/1/2017	12/31/2018
Bonneville Environmental Foundation	REC/WRC Purchase 2016	Portland	7,290	2,430	4,860	1/1/2016	12/31/2018

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

For contracts with costs
through: 12/1/2017

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Community Energy Project, Inc.	LMI Solar Working Group	Portland	5,000	3,200	1,800	9/11/2017	3/31/2018
Verde	LMI Solar Working Group	Portland	5,000	3,200	1,800	9/11/2017	3/31/2018
350 Deschutes	LMI Solar Working Group	Bend	4,000	2,600	1,400	9/11/2017	3/31/2018
Constructing Hope	LMI Solar Working Group	Portland	3,000	1,000	2,000	9/11/2017	3/31/2018
Native American Youth & Family Center	LMI Solar Working Group	Portland	3,000	1,000	2,000	9/1/2017	3/31/2018
REACH Community Development Inc	Solar LMI Strategies	Portland	3,000	2,000	1,000	9/11/2017	3/31/2018
Renewable Energy Total:			16,680,820	13,814,708	2,866,112		
Grand Total:			136,618,008	91,951,522	44,666,486		

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Notes on December 2017 Financial Statements

February 6, 2018

Revenue

Revenues ended the year slightly above budget and significantly above last year's revenue. We continue to record a small amount of revenue for work done to support a Low Income Solar grant.

	<u>YTD Actual</u>	<u>YTD Budget</u>	<u>YTD Var</u>	<u>YTD %</u>	<u>PY</u>
PGE	102,203,949	102,546,777	(342,828)	0%	77,246,163
PAC	63,994,134	60,899,677	3,094,457	5%	53,149,641
NWN	26,500,404	25,333,676	1,166,728	5%	18,551,534
CNG	2,622,395	2,900,000	(277,605)	-10%	1,687,981
Avista	1,036,868	1,036,869	(1)	0%	156,000
Grant Revenue	50,651		50,651	0%	
Investment Income	425,700	210,000	215,700	103%	531,924
Total	196,834,100	192,927,000	3,907,101	2%	151,323,243

Reserves

Reserves in December decreased almost \$19 million from November's balances with the expected rise in year-end incentive payments. However, reserves increased \$14 million over last year's balances when we had budgeted a \$6 million decrease. This is due to almost \$4 million more in revenue and roughly \$16 million less in budgeted expenses. The category called Other Reserves is the Community Solar amount approved by the board, less YTD expenses.

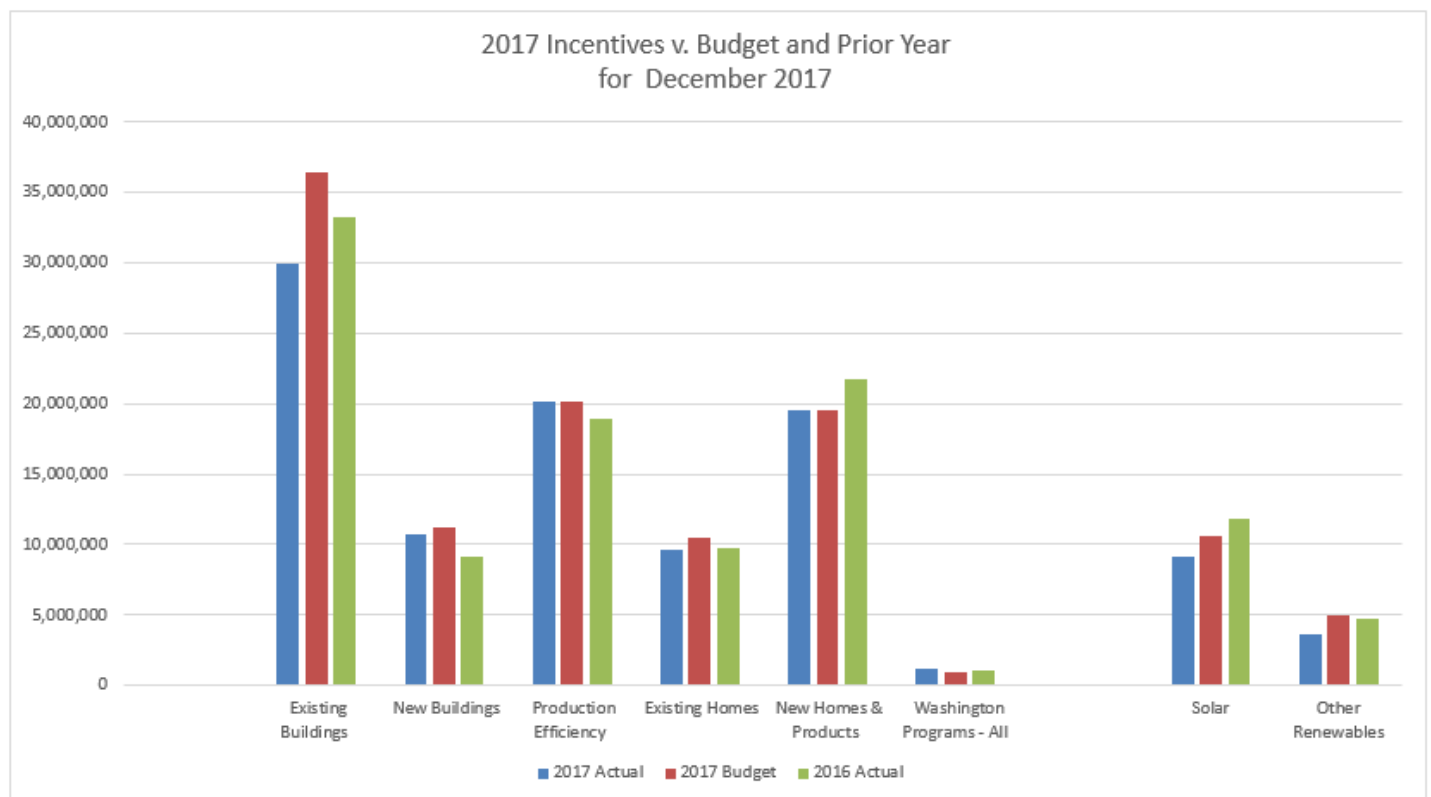
Reserves

	<u>12/31/17 Amount</u>	<u>Actual 12/31/16 Amount</u>	<u>% Change from Year End</u>
PGE	12,210,374	6,507,279	88%
PacifiCorp	6,211,995	644,839	863%
NW Natural	3,527,721	1,485,656	137%
Cascade	262,065	-	-
Avista	75,716	68,620	10%
NWN Industrial	2,647,086	1,028,150	157%
NWN Washington	176,503	283,171	-38%
PGE Renewables	7,073,074	7,543,333	-6%
PAC Renewables	6,268,078	7,376,941	-15%
Program Reserves	38,452,612	24,937,989	54%
Other Reserves	38,710	-	-
Contingency Reserve	5,000,000	5,000,000	0%
Contingency Available	4,641,309	3,935,314	18%
Total	48,132,611	33,873,295	42%

Expenses

December expenses were \$6 million below budget; total annual expenses finished up at \$16 million below budget. The variance is primarily due to lower than expected spending in incentives (\$4.9 million for the month and \$10.4 million for the year). Total spending was \$3.1 million less than last year - \$182.6 vs. \$185.7.

Only Washington came in above budget for incentive spending, and only Washington, Production Efficiency and New Buildings exceeded last year's incentive spending.

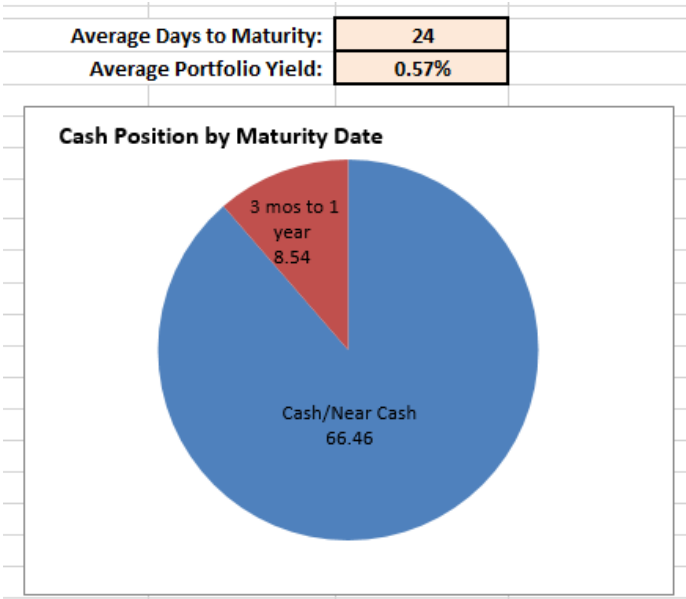
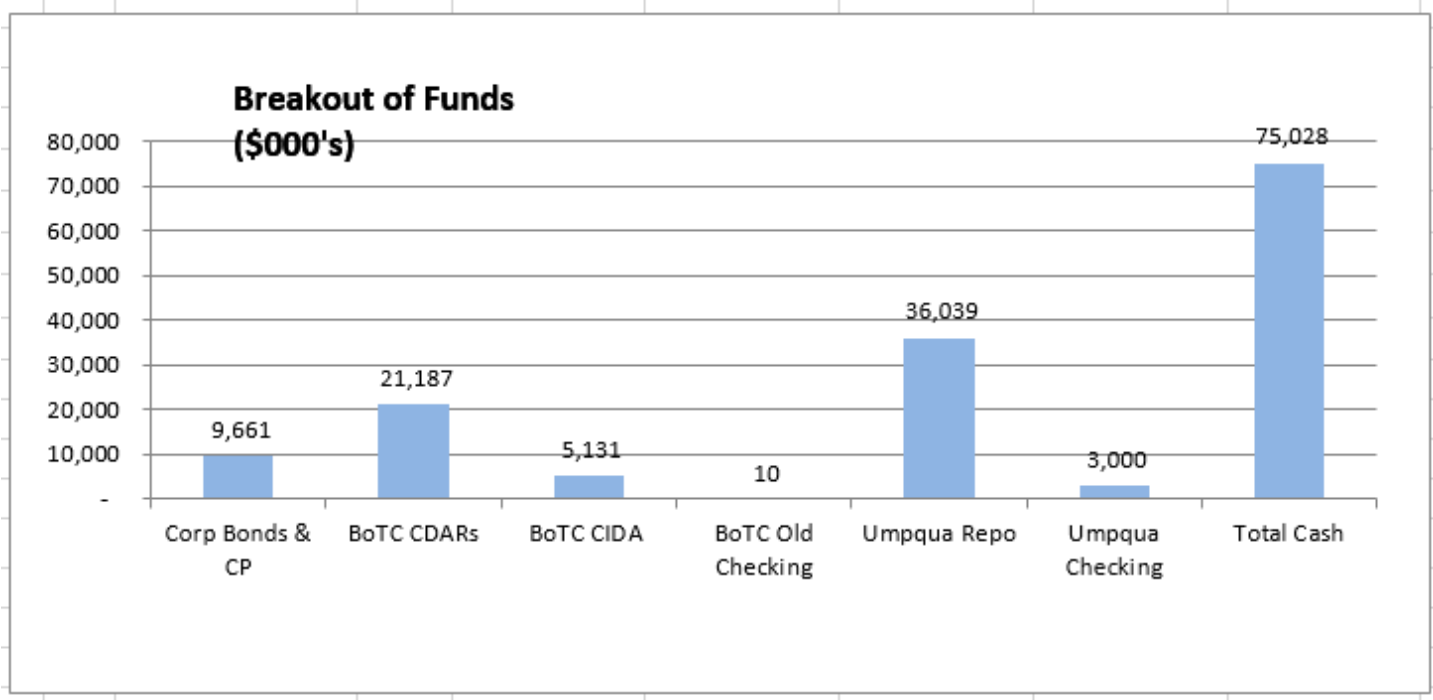


Total Incentives				
Year-to-Date 2017				
Incentives thru December 2017	<u>Actual</u>	<u>Budget</u>	<u>Variance</u>	<u>Var %</u>
Existing Buildings	29,908,147	36,403,678	6,495,532	18%
New Buildings	10,737,412	11,174,545	437,133	4%
Production Efficiency	20,094,046	20,094,731	685	0%
Existing Homes	9,564,525	10,413,197	848,672	8%
New Homes & Products	19,525,232	19,558,916	33,684	0%
Washington Programs - All	1,182,874	889,597	(293,277)	-33%
Solar	9,099,860	10,620,000	1,520,140	14%
Other Renewables	3,642,877	4,967,377	1,324,500	27%
Total Incentives	103,754,973	114,122,042	10,367,069	9%
Energy Efficiency Only	91,012,236	98,534,665	7,522,428	8%

Total Incentives				
Year-to-Year Comparison				
Dec 2017 vs. Dec 2016	<u>Current Year</u>	<u>Prior Year</u>	<u>Variance</u>	<u>Var %</u>
Existing Buildings	29,908,147	33,193,191	3,285,045	10%
New Buildings	10,737,412	9,098,122	(1,639,290)	-18%
Production Efficiency	20,094,046	18,878,315	(1,215,731)	-6%
Existing Homes	9,564,525	9,793,958	229,433	2%
New Homes & Products	19,525,232	21,740,373	2,215,141	10%
Washington Programs - All	1,182,874	1,032,126	(150,748)	-15%
Solar	9,099,860	11,860,041	2,760,180	23%
Other Renewables	3,642,877	4,680,392	1,037,515	22%
Total Incentives	103,754,973	110,276,518	6,521,541	6%
Energy Efficiency Only	91,012,236	93,736,085	2,723,849	3%

Investment Status

The graphs below show the type of investments we hold and the locations where our funds are held. We were intentionally holding large cash reserves at year end to meet anticipated incentive spending. We did not need to hold as much as cash as we did.



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Energy Trust of Oregon
BALANCE SHEET
December 31, 2017
(Unaudited)

	December 2017	November 2017	Dec 2016	December 2016	Change from one month ago	Change from Beg. of Year	Change from one year ago
Current Assets							
Cash & Cash Equivalents	52,223,904	50,948,695	44,471,035	44,471,035	1,275,209	7,752,869	7,752,869
Investments	22,721,392	26,717,313	19,350,134	19,350,134	(3,995,921)	3,371,258	3,371,258
Receivables	119,077	98,665	86,058	86,058	20,413	33,020	33,020
Prepaid Expenses	244,442	339,455	280,347	280,347	(95,013)	(35,905)	(35,905)
Advances to Vendors	2,489,421	744,663	2,050,126	2,050,126	1,744,758	439,295	439,295
Total Current Assets	77,798,237	78,848,791	66,237,700	66,237,700	(1,050,554)	11,560,537	11,560,537
Fixed Assets							
Computer Hardware and Software	3,733,082	3,733,082	3,696,232	3,696,232	-	36,850	36,850
Software Development in Progress	183,687	181,238	-	-	2,449	183,687	183,687
Leasehold Improvements	595,027	595,027	318,964	318,964	-	276,062	276,062
Office Equipment and Furniture	815,056	815,056	716,876	716,876	-	98,181	98,181
Total Fixed Assets	5,326,852	5,324,403	4,732,072	4,732,072	2,449	594,780	594,780
Less Depreciation	(4,442,925)	(4,374,848)	(3,598,867)	(3,598,867)	(68,077)	(844,058)	(844,058)
Net Fixed Assets	883,926	949,555	1,133,205	1,133,205	(65,628)	(249,278)	(249,278)
Other Assets							
Deposits	237,314	237,314	223,339	223,339	-	13,975	13,975
Deferred Compensation Asset	972,828	866,528	849,522	849,522	106,300	123,306	123,306
Note Receivable, net of allowance	263,669	263,669	260,891	260,891	-	2,779	2,779
Total Other Assets	1,473,812	1,367,512	1,333,752	1,333,752	106,300	140,060	140,060
Total Assets	80,155,975	81,165,857	68,704,656	68,704,656	(1,009,882)	11,451,318	11,451,318
Current Liabilities							
Accounts Payable and Accruals	29,180,745	11,637,746	32,588,773	32,588,773	17,542,999	(3,408,028)	(3,408,028)
Salaries, Taxes, & Benefits Payable	874,594	891,920	827,526	827,526	(17,326)	47,068	47,068
Total Current Liabilities	30,055,339	12,529,666	33,416,299	33,416,299	17,525,673	(3,360,960)	(3,360,960)
Long Term Liabilities							
Deferred Rent	990,344	978,251	559,253	559,253	12,093	431,091	431,091
Deferred Compensation Payable	976,378	870,078	853,072	853,072	106,300	123,306	123,306
Other Long-Term Liabilities	1,290	1,290	2,110	2,110	-	(820)	(820)
Total Long-Term Liabilities	1,968,012	1,849,619	1,414,435	1,414,435	118,393	553,576	553,576
Total Liabilities	32,023,351	14,379,285	34,830,735	34,830,735	17,644,066	(2,807,384)	(2,807,384)
Net Assets							
Unrestricted Net Assets	48,132,624	66,786,572	33,873,922	33,873,922	(18,653,948)	14,258,700	14,258,702
Total Net Assets	48,132,624	66,786,572	33,873,922	33,873,922	(18,653,948)	14,258,700	14,258,702
Total Liabilities and Net Assets	80,155,975	81,165,857	68,704,656	68,704,656	(1,009,882)	11,451,318	11,451,318

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

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>	<u>Year to Date</u>
Operating Activities:													
<i>Revenue less Expenses</i>	\$ 9,021,323	\$ 11,985,541	7,297,639	3,428,944	(906,648)	(4,408,611)	5,943,771	(670,945)	2,841,126	2,439,785	(4,059,278)	(18,653,951)	\$ 14,258,697
<i>Non-cash items:</i>													
Depreciation	70,722	70,512	69,965	70,662	72,383	70,979	71,372	74,139	68,620	68,620	68,620	68,077	844,671
Change in Reserve on Long Term Note	-	-	-	-	-	-	-	-	-	-	-	-	-
Loss on disposal of assets	-	-	-	-	-	-	-	-	-	-	-	-	-
Receivables	9		(50)	400	136,841	-	136,861	(135,000)	-	(30,890)	(12,362)	(10,413)	85,397
Interest Receivable	(5,311)	(38,100)	11,304	(41,168)	33,111	17,834	(14,056)	(36,218)	80,882	(17,390)	37,548	(10,000)	18,436
Advances to Vendors	660,492	660,492	(1,489,806)	739,643	585,111	(1,239,195)	711,123	711,123	(1,522,806)	744,643	744,643	(1,744,758)	(439,295)
Prepaid expenses and other costs	17,387	(338,051)	27,347	48,843	(21,451)	93,559	5,575	82,574	11,961	(41,223)	44,934	(11,287)	(79,832)
Accounts payable	(21,595,003)	(2,386,675)	(256,773)	341,108	468,466	(82,140)	(350,716)	792,581	232,268	296,233	1,452,762	17,542,998	(3,544,891)
Payroll and related accruals	12,024	42,941	253,852	(151,351)	19,195	25,628	(67,842)	(31,549)	(19,441)	(5,089)	3,032	88,974	170,374
Deferred rent and other	4,262	(585)	14,000	14,205	13,999	14,000	14,000	279,612	13,388	12,975	13,999	12,093	405,948
Cash rec'd from / (used in) Operating Activities	(11,814,095)	9,996,075	5,927,478	4,451,286	401,007	(5,507,946)	6,450,088	1,066,317	1,705,998	3,467,664	(1,706,101)	(2,718,266)	11,719,505
Investing Activities:													
Investment Activity (1)	(992,696)	(3,749,267)	(5,787,813)	2,537,756	(5,555,047)	3,923,246	(2,252,546)	(1,984,708)	3,989,948	(1,514,930)	4,018,878	3,995,921	(3,371,258)
(Acquisition)/Disposal of Capital Assets	-	(7,194)	(75,180)		(36,850)		(23,612)	(265,612)	(3,256)	(178,975)	(2,263)	(2,449)	(595,391)
Cash rec'd from / (used in) Investing Activities	(992,696)	(3,756,461)	(5,862,993)	2,537,756	(5,591,897)	3,923,246	(2,276,158)	(2,250,320)	3,986,692	(1,693,905)	4,016,615	3,993,472	(3,966,649)
Cash at beginning of Period	44,471,035	31,664,245	37,903,859	37,968,346	44,957,390	39,766,501	38,181,801	42,355,732	41,171,730	46,864,420	48,638,180	50,948,695	44,471,035
Increase/(Decrease) in Cash	(12,806,791)	6,239,614	64,485	6,989,042	(5,190,890)	(1,584,700)	4,173,930	(1,184,003)	5,692,689	1,773,759	2,310,514	1,275,206	7,752,855
Cash at end of period	\$ 31,664,245	\$ 37,903,859	\$ 37,968,346	\$ 44,957,390	\$ 39,766,501	\$ 38,181,801	\$ 42,355,732	\$ 41,171,730	\$ 46,864,420	\$ 48,638,180	\$ 50,948,695	\$ 52,223,904	\$ 52,223,904

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

Energy Trust of Oregon
Cash Flow Projection
January 2017 - December 2018

	Actual											
	January	February	March	April	May	June	July	August	September	October	November	December
Cash In:												
Public purpose and Incr funding	15,758,534	21,457,118	21,917,554	17,402,020	15,025,545	13,768,287	15,620,550	14,041,155	16,183,984	16,807,886	13,328,513	15,046,603
Investment Income	17,648	(14,444)	25,634	(2,155)	64,393	53,021	28,294	6,910	128,778	26,251	80,014	29,792
From Other Sources	9	0	(50)	400	136,841		136,861	(135,000)	0	(25)	6	(2,995)
Total cash in	15,776,191	21,442,674	21,943,138	17,400,265	15,226,779	13,821,308	15,785,705	13,913,065	16,312,762	16,834,112	13,408,534	15,073,400
Cash Out:	(27,590,279)	(11,453,791)	(16,090,835)	(12,948,972)	(14,862,622)	(19,329,250)	(9,359,224)	(13,112,356)	(14,610,016)	(13,545,421)	(15,116,895)	(17,794,109)
Net cash flow for the month	(11,814,088)	9,988,883	5,852,303	4,451,293	364,157	(5,507,946)	6,426,481	800,708	1,702,746	3,288,690	(1,708,362)	(2,720,709)
Cash Flow from/to Investments	(992,696)	(3,749,267)	(5,787,813)	2,537,756	(5,555,047)	3,923,246	(2,252,546)	(1,984,708)	3,989,948	(1,514,930)	4,018,878	3,995,921
Beginning Balance: Cash & MM	44,471,035	31,664,245	37,903,859	37,968,345	44,957,390	39,766,501	38,181,805	42,355,732	41,171,741	46,864,420	48,638,180	50,948,695
Ending cash & MM	31,664,245	37,903,859	37,968,346	44,957,390	39,766,501	38,181,801	42,355,732	41,171,730	46,864,420	48,638,180	50,948,695	52,223,904

Future Commitments

Renewable Incentives	6,700,000	5,800,000	7,800,000	6,900,000	6,900,000	8,300,000	7,400,000	6,300,000	9,600,000	9,000,000	8,500,000	8,400,000
Efficiency Incentives	69,500,000	69,100,000	81,600,000	80,800,000	80,800,000	86,700,000	86,000,000	86,900,000	88,600,000	88,600,000	86,100,000	82,300,000
Emergency Contingency Pool	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000
Total Commitments	81,200,000	79,900,000	94,400,000	92,700,000	92,700,000	100,000,000	98,400,000	98,200,000	103,200,000	102,600,000	99,600,000	95,700,000

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

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

2018 Final R2 Budget												
	January	February	March	April	May	June	July	September	September	October	November	December
Cash In:												
Public purpose and Incr funding	15,700,000	19,800,000	19,400,000	16,900,000	14,700,000	13,600,000	13,800,000	13,800,000	14,400,000	14,600,000	13,700,000	16,500,000
Investment Income	25,000	15,000	15,000	15,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
From Other Sources												
Total cash in	15,725,000	19,815,000	19,415,000	16,915,000	14,720,000	13,620,000	13,820,000	13,820,000	14,420,000	14,620,000	13,720,000	16,520,000
Cash Out:	(24,359,206)	(10,909,637)	(12,198,794)	(13,565,232)	(13,021,066)	(13,636,363)	(15,366,862)	(12,645,596)	(13,862,725)	(15,167,354)	(16,496,728)	(21,864,567)
Net cash flow for the month	(8,634,206)	8,905,363	7,216,206	3,349,768	1,698,934	(16,363)	(1,546,862)	1,174,404	557,275	(547,354)	(2,776,728)	(5,344,567)
Cash Flow from/to Investments	-	-	-	-	-	-	-	-	-	-	-	-
Beginning Balance: Cash & MM	52,223,904	43,589,698	52,495,061	59,711,267	63,061,035	64,759,969	64,743,605	63,196,743	64,371,148	64,928,423	64,381,070	61,604,342
Ending cash & MM	43,589,698	52,495,061	59,711,267	63,061,035	64,759,969	64,743,605	63,196,743	64,371,148	64,928,423	64,381,070	61,604,342	56,259,775
Future Commitments												
Renewable Incentives	8,300,000	8,500,000	8,700,000	6,900,000	7,100,000	7,500,000	7,700,000	8,200,000	8,600,000	9,100,000	9,500,000	10,100,000
Efficiency Incentives	84,300,000	85,700,000	84,700,000	85,100,000	86,800,000	101,200,000	101,200,000	101,200,000	101,200,000	101,200,000	101,200,000	101,200,000
Emergency Contingency Pool	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000
Total Commitments	97,600,000	99,200,000	98,400,000	97,000,000	98,900,000	113,700,000	113,900,000	114,400,000	114,800,000	115,300,000	115,700,000	116,300,000

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

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

Energy Trust of Oregon
Income Statement - Actual and YTD Budget Comparison
For the Twelve Months Ending December 31, 2017
(Unaudited)

	December				YTD			
	Actual	Budget	Budget Variance	Variance %	Actual	Budget	Budget Variance	Variance %
<u>REVENUES</u>								
Public Purpose Funds-PGE	2,927,625	2,982,230	(54,605)	-2%	38,436,607	37,255,027	1,181,580	3%
Public Purpose Funds-PacifiCorp	2,347,229	2,634,221	(286,992)	-11%	29,130,929	27,524,599	1,606,329	6%
Public Purpose Funds-NW Natural	1,483,748	1,732,798	(249,050)	-14%	18,458,974	17,392,246	1,066,728	6%
Public Purpose Funds-Cascade	265,440	519,385	(253,945)	-49%	2,622,395	2,900,000	(277,605)	-10%
Public Purpose Funds-Avista	172,429	185,702	(13,273)	-7%	1,036,868	1,036,868	-	0%
Total Public Purpose Funds	7,196,471	8,054,336	(857,865)	-11%	89,685,772	86,108,742	3,577,031	4%
Incremental Funds - PGE	4,991,585	6,353,744	(1,362,159)	-21%	63,767,342	65,291,750	(1,524,408)	-2%
Incremental Funds - PacifiCorp	2,758,548	3,277,913	(519,364)	-16%	34,863,205	33,375,078	1,488,127	4%
NW Natural - Industrial DSM			-	-	5,920,596	5,920,596	-	-
NW Natural - Washington	100,000		100,000	-	2,120,834	2,020,834	100,000	-
Grant Revenue	7,418		7,418	-	50,651		50,651	-
Revenue from Investments	39,791	10,000	29,791	298%	425,700	210,000	215,700	103%
TOTAL REVENUE	15,093,813	17,695,992	(2,602,179)	-15%	196,834,100	192,927,000	3,907,100	2%
<u>EXPENSES</u>								
Program Subcontracts	4,045,485	5,010,080	964,595	19%	56,318,561	57,903,505	1,584,944	3%
Incentives	27,666,708	32,585,832	4,919,124	15%	103,754,973	114,122,042	10,367,069	9%
Salaries and Related Expenses	1,089,283	1,149,677	60,394	5%	13,347,175	13,774,959	427,784	3%
Professional Services	679,829	775,102	95,273	12%	6,030,069	9,421,807	3,391,738	36%
Supplies	6,057	4,050	(2,007)	-50%	43,709	48,600	4,891	10%
Telephone	4,977	5,825	848	15%	53,235	69,900	16,665	24%
Postage and Shipping Expenses	1,247	1,500	253	17%	11,088	18,000	6,912	38%
Occupancy Expenses	83,737	79,203	(4,535)	-6%	929,638	950,433	20,795	2%
Noncapitalized Equip. & Depr.	102,732	112,112	9,381	8%	1,162,875	1,341,183	178,308	13%
Call Center	12,741	16,667	3,926	24%	145,956	200,000	54,044	27%
Printing and Publications	833	1,171	338	29%	6,127	16,550	10,423	63%
Travel	13,813	37,753	23,940	63%	203,845	228,700	24,855	11%
Conference, Training & Mtng Exp	17,605	18,205	600	3%	199,071	209,450	10,379	5%
Interest Expense and Bank Fees	(1)	125	126	101%	1676.41	4,000	2,324	58%
Insurance	8,803	9,167	364	4%	105,472	110,000	4,528	4%
Miscellaneous Expenses	4,387	250	(4,137)	-1655%	62,805	3,000	(59,805)	-1993%
Dues, Licenses and Fees	9,527	8,784	(743)	-8%	199,124	150,552	(48,571)	-32%
TOTAL EXPENSES	33,747,761	39,815,501	6,067,740	15%	182,575,401	198,572,681	15,997,280	8%
TOTAL REVENUE LESS EXPENSES	(18,653,948)	(22,119,509)	3,465,561	16%	14,258,700	(5,645,681)	19,904,382	-353%

Energy Trust of Oregon
Income Statement - Actual and Prior Yr Comparison
For the Twelve Months Ending December 31, 2017
(Unaudited)

	December				YTD			
	Actual	Actual Prior Year	Prior Year Variance	Variance %	Actual	Actual Prior Year	Prior Year Variance	Variance %
<u>REVENUES</u>								
Public Purpose Funds-PGE	2,927,625	2,832,677	94,948	3%	38,436,607	36,233,250	2,203,357	6%
Public Purpose Funds-PacifiCorp	2,347,229	2,235,054	112,176	5%	29,130,929	27,593,801	1,537,127	6%
Public Purpose Funds-NW Natural	1,483,748	977,086	506,662	52%	18,458,974	13,086,802	5,372,172	41%
Public Purpose Funds-Cascade	265,440	233,314	32,127	14%	2,622,395	1,687,981	934,414	55%
Public Purpose Funds-Avista	172,429	15600	156,829	1005%	1,036,868	156,000	880,868	565%
Total Public Purpose Funds	7,196,471	6,293,730	902,741	14%	89,685,772	78,757,834	10,927,938	14%
Incremental Funds - PGE	4,991,585	3,116,407	1,875,177	60%	63,767,342	41,012,913	22,754,429	55%
Incremental Funds - PacifiCorp	2,758,548	2,360,012	398,536	17%	34,863,205	25,555,840	9,307,365	36%
NW Natural - Industrial DSM		500,000	(500,000)	-100%	5,920,596	3,527,053	2,393,543	68%
NW Natural - Washington	100,000	400,000	(300,000)	-75%	2,120,834	1,937,679	183,155	9%
Grant Revenue	7,418	-	7,418		50,651		50,651	-
Revenue from Investments	39,791	20,650	19,141	93%	425,700	531,924	(106,225)	-20%
TOTAL REVENUE	15,093,813	12,690,800	2,403,013	19%	196,834,100	151,323,243	45,510,856	30%
<u>EXPENSES</u>								
Program Subcontracts	4,045,485	4,321,966	276,481	6%	56,318,561	53,080,565	(3,237,995)	-6%
Incentives	27,666,708	30,783,359	3,116,651	10%	103,754,973	110,276,518	6,521,545	6%
Salaries and Related Expenses	1,089,283	971,857	(117,426)	-12%	13,347,175	12,076,244	(1,270,932)	-11%
Professional Services	679,829	642,963	(36,866)	-6%	6,030,069	7,251,929	1,221,860	17%
Supplies	6,057	5,154	(903)	-18%	43,709	32,612	(11,097)	-34%
Telephone	4,977	4,819	(157)	-3%	53,235	60,785	7,550	12%
Postage and Shipping Expenses	1,247	964	(283)	-29%	11,088	10,488	(600)	-6%
Occupancy Expenses	83,737	78,886	(4,851)	-6%	929,638	807,654	(121,984)	-15%
Noncapitalized Equip. & Depr.	102,732	91,553	(11,179)	-12%	1,162,875	1,223,298	60,423	5%
Call Center	12,741	12,092	(649)	-5%	145,956	157,483	11,527	7%
Printing and Publications	833	1,601	767		6,127	10,109	3,983	39%
Travel	13,813	8,679	(5,133)	-59%	203,845	189,481	(14,363)	-8%
Conference, Training & Mtng Exp	17,605	19,666	2,062	10%	199,071	158,207	(40,865)	-26%
Interest Expense and Bank Fees	(0.86)	46	47		1,676	1,668	(9)	-1%
Insurance	8,803	8,607	(196)	-2%	105,472	102,176	(3,296)	-3%
Miscellaneous Expenses	4,387	44,772	40,386	90%	62,805	130,672	67,868	52%
Dues, Licenses and Fees	9,527	11,888	2,361	20%	199,124	112,729	(86,394)	-77%
TOTAL EXPENSES	33,747,761	37,008,872	3,261,111	9%	182,575,401	185,682,618	3,107,217	2%
TOTAL REVENUE LESS EXPENSES	(18,653,948)	(24,318,072)	5,664,124	23%	14,258,700	(34,359,374)	48,618,075	141%

Energy Trust of Oregon
Statement of Functional Expenses
For the Twelve Months Ending December 31, 2017
(Unaudited)

	Energy Efficiency	Renewable Energy	Solar LMI	Total Program Expenses	Management & General	Communications & Customer Service	Total Admin Expenses	Community Solar Expenses	Total	Budget	Variance	% Var
Program Expenses												
Incentives	91,012,236	12,742,737		103,754,973					103,754,973	114,122,042	10,367,069	9%
Program Management & Delivery	55,825,503	493,058		56,318,561					56,318,561	57,903,505	1,584,944	3%
Payroll and Related Expenses	3,830,092	1,177,751	27,446	5,035,289	2,390,707	1,674,585	4,065,292	17,123	9,117,704	9,226,095	108,391	1%
Outsourced Services	3,272,810	690,885	16,152	3,979,847	459,029	1,136,555	1,595,585	190	5,575,622	8,862,249	3,286,627	37%
Planning and Evaluation	2,392,129	144,008		2,536,136	5,334	125,340	130,674		2,666,810	2,954,873	288,063	10%
Customer Service Management	296,171	138,473		434,644					434,644	550,445	115,801	21%
Trade Allies Network	354,897	19,352		374,248					374,248	399,528	25,280	6%
Total Program Expenses	156,983,837	15,406,263	43,598	172,433,699	2,855,070	2,936,480	5,791,550	17,313	178,242,563	194,018,737	15,776,174	8%
Program Support Costs												
Supplies	10,089	3,446	15	13,550	10,248	9,245	19,493		33,043	35,534	2,491	7%
Postage and Shipping Expenses	2,440	834	4	3,277	3,150	1,111	4,260		7,537	12,698	5,161	41%
Telephone	2,737	935	4	3,677	1,448	1,246	2,694		6,370	8,378	2,008	24%
Printing and Publications	830	139	1	970	3,704	675	4,379		5,349	13,559	8,210	61%
Occupancy Expenses	274,540	93,816	408	368,764	145,224	124,977	270,202		638,966	646,159	7,193	1%
Insurance	31,148	10,644	46	41,838	16,476	14,179	30,656		72,494	74,784	2,290	3%
Equipment	5,102	112,699	8	117,808	2,699	2,323	5,021		122,830	156,138	33,308	21%
Travel	40,246	22,036		62,282	45,048	56,436	101,484	79	163,845	187,700	23,855	13%
Meetings, Trainings & Conferences	31,367	19,443	2,448	53,258	70,843	25,040	95,884	99	149,241	141,050	(8,191)	-6%
Interest Expense and Bank Fees					1,676		1,676		1,676	4,000	2,324	58%
Depreciation & Amortization	29,365	10,035	44	39,443	15,533	13,368	28,901		68,344	60,037	(8,307)	-14%
Dues, Licenses and Fees	101,964	10,335		112,299	10,907	23,268	34,175		146,474	120,102	(26,372)	-22%
Miscellaneous Expenses	60,736	296	1	61,034	458	395	853		61,887	2,040	(59,847)	-2934%
IT Services	1,819,412	262,136	1,056	2,082,603	432,952	339,224	772,177		2,854,780	3,091,764	236,984	8%
Total Program Support Costs	2,409,977	546,793	4,033	2,960,803	760,369	611,486	1,371,855	177	4,332,835	4,553,944	221,109	5%
TOTAL EXPENSES	159,393,820	15,953,059	47,632	175,394,511	3,615,440	3,547,967	7,163,407	17,490	182,575,401	198,572,681	15,997,280	8%

OPUC Measure vs. 8% **5.2%**

Program Support Costs	2,960,803
Total Admin Exp and Community Solar	7,180,897
Total Support and Administrative	10,141,700
	<i>divided by</i>
Total Utility Revenue (without Int Income)	196,357,749
OPUC %	5.2%

ENERGY TRUST OF OREGON
Summary of All Units
For the Twelve Months Ending December 31, 2017

	ENERGY EFFICIENCY									
	PGE	PacifiCorp	Total	NWN Industrial	NW Natural	Cascade	Avista	Oregon Total	NWN WA	ETO Total
REVENUES										
Public Purpose Funding	29,843,360	22,701,600	52,544,960	-	18,458,974	2,622,395	1,036,868	74,663,197	-	74,663,197
Incremental Funding	63,767,342	34,863,205	98,630,547	5,920,596				104,551,143	2,120,834	106,671,977
Grant Revenue										
Contributions										
Revenue from Investments										
TOTAL PROGRAM REVENUE	93,610,702	57,564,805	151,175,507	5,920,596	18,458,974	2,622,395	1,036,868	179,214,340	2,120,834	181,335,174
EXPENSES										
Program Management (Note 3)	3,206,244	1,936,970	5,143,212	130,362	592,022	65,749	40,462	5,971,807	115,058	6,086,865
Program Delivery	26,365,815	15,884,621	42,250,434	936,283	4,855,485	651,313	289,918	48,983,432	469,336	49,452,768
Incentives	48,365,821	28,227,735	76,593,556	2,868,416	8,737,251	1,083,127	547,013	89,829,362	1,182,874	91,012,236
Program Eval & Planning Svcs.	2,004,505	1,208,125	3,212,632	86,492	351,751	40,322	23,980	3,715,176	152,009	3,867,185
Program Marketing/Outreach	2,726,893	1,620,177	4,347,068	46,736	775,057	61,332	55,604	5,285,799	79,298	5,365,097
Program Legal Services	-	-	-	-	-	-	-	-	-	-
Program Quality Assurance	33,993.00	18,320.00	52,313.00	-	7,996.00	1,019.00	354.00	61,684.00	8,400.00	70,084.00
Outsourced Services	240,529	145,523	386,053	2,624	68,143	4,995	4,944	466,762	11,775	478,537
Trade Allies & Cust. Svc. Mgmt.	300,643	187,431	488,074	9,797	100,265	8,092	7,344	613,575	37,494	651,069
IT Services	919,006	549,268	1,468,275	37,911	230,511	22,905	16,075	1,775,677	43,736	1,819,413
Other Program Expenses - all	293,923	178,592	472,516	14,216	53,935	6,153	3,646	550,465	40,101	590,566
TOTAL PROGRAM EXPENSES	84,457,372	49,956,762	134,414,133	4,132,837	15,772,416	1,945,007	989,340	157,253,739	2,140,081	159,393,820
ADMINISTRATIVE COSTS										
Management & General (Notes 1 & 2)	1,741,366	1,030,056	2,771,420	85,206	325,282	40,103	20,406	3,242,419	44,122	3,286,541
Communications & Customer Svc (Notes 1 & 2)	1,708,869	1,010,832	2,719,698	83,617	319,211	39,355	20,026	3,181,905	43,299	3,225,204
Total Administrative Costs	3,450,235	2,040,888	5,491,118	168,823	644,493	79,458	40,432	6,424,324	87,421	6,511,745
TOTAL PROG & ADMIN EXPENSES	87,907,607	51,997,650	139,905,251	4,301,660	16,416,909	2,024,465	1,029,772	163,678,063	2,227,502	165,905,565
TOTAL REVENUE LESS EXPENSES	5,703,095	5,567,156	11,270,257	1,618,936	2,042,065	597,930	7,096	15,536,278	(106,668)	15,429,610
NET ASSETS - RESERVES										
Cumulative Carryover at 12/31/16	6,507,275	644,839	7,152,113	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	5,703,095	5,567,156	11,270,257	1,618,936	2,042,065	597,930	7,096	15,536,278	(106,668)	15,429,610
Ending Net Assets - Reserves	12,210,370	6,211,995	18,422,370	2,647,086	3,527,721	262,065	75,716	24,934,944	176,503	25,111,446
Ending Reserve by Category										
Program Reserves (Efficiency and Renewables)	12,210,370	6,211,995	18,422,370	2,647,086	3,527,721	262,065	75,716	24,934,944	176,503	25,111,446
Operational Contingency Pool										
Emergency Contingency Pool										
TOTAL NET ASSETS CUMULATIVE	12,210,370	6,211,995	18,422,370	2,647,086	3,527,721	262,065	75,716	24,934,944	176,503	25,111,446

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 Twelve Months Ending December 31, 2017

	RENEWABLE ENERGY			Solar LMI	Community Solar	Other	TOTAL	Approved budget	Change	% Change
	PGE	PacifiCorp	Total				All Programs			
REVENUES										
Public Purpose Funding	8,593,247	6,429,328	15,022,575	-	-	-	89,685,772	86,108,742	(3,577,030)	-4%
Incremental Funding							106,671,977	106,608,258	(63,719)	0%
Grant Revenue				50,651			50,651		(50,651)	
Contributions									-	
Revenue from Investments						425,700	425,700	210,000	(215,700)	-103%
TOTAL PROGRAM REVENUE	8,593,247	6,429,328	15,022,575	50,651	-	425,700	196,834,100	192,927,000	3,907,100	2%
EXPENSES										
Program Management (Note 3)	631,013	559,907	1,190,921	27,446	17,123		7,322,355	7,796,091	473,736	6%
Program Delivery	278,851	201,037	479,888	-	-		49,932,656	51,110,194	1,177,538	2%
Incentives	6,999,654	5,743,083	12,742,737	-	-		103,754,973	114,122,041	10,367,068	9%
Program Eval & Planning Svcs.	102,132	82,875	185,008	-	-		4,052,193	5,158,384	1,106,191	21%
Program Marketing/Outreach	101,815	76,308	178,123	-	190		5,543,410	5,613,093	69,683	1%
Program Legal Services	-	-	-	-	-		-	20,000	20,000	100%
Program Quality Assurance	-	-	-	-	-		70,084	85,000	14,916	18%
Outsourced Services	208,065	263,698	471,763	16,152	-		966,452	2,584,049	1,617,597	63%
Trade Allies & Cust. Svc. Mgmt.	85,887	61,938	147,825	-	-		798,894	939,975	141,081	15%
IT Services	139,109	123,027	262,136	1,056	-		2,082,605	2,255,487	172,882	8%
Other Program Expenses - all	162,967	131,691	294,658	2,978	177		888,379	860,054	(28,325)	-3%
TOTAL PROGRAM EXPENSES	8,709,493	7,243,564	15,953,059	47,632	17,490	-	175,412,001	190,544,368	15,132,367	8%
ADMINISTRATIVE COSTS										
Management & General (Notes 1 & 2)	178,754	148,759	327,514	1,385	-		3,615,440	4,144,782	529,341	13%
Communications & Customer Svc (Notes 1 & 2)	175,259	145,868	321,127	1,634	-		3,547,967	3,883,531	335,564	9%
Total Administrative Costs	354,013	294,627	648,641	3,019	-		7,163,407	8,028,313	864,906	11%
TOTAL PROG & ADMIN EXPENSES	9,063,506	7,538,191	16,601,700	50,651	17,490		182,575,401	198,572,681	15,997,280	8%
TOTAL REVENUE LESS EXPENSES	(470,259)	(1,108,863)	(1,579,125)	-	(17,490)	425,700	14,258,700	(5,645,681)	19,904,380	353%
NET ASSETS - RESERVES										
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					56,200	279,665	-			
Change in net assets this year	(470,259)	(1,108,863)	(1,579,125)	-	(17,490)	425,700	14,258,700	(5,645,681)	19,904,381	-353%
Ending Net Assets - Reserves	7,073,074	6,268,078	13,341,151	-	38,710	9,641,309	48,132,624	26,684,004	(21,448,620)	80%
Ending Reserve by Category										
Program Reserves (Efficiency and Renewables)	7,073,074	6,268,078	13,341,151	-	38,710		48,132,624	26,684,004	(21,448,620)	
Operational Contingency Pool						4,641,309				
Emergency Contingency Pool						5,000,000				
TOTAL NET ASSETS CUMULATIVE	7,073,074	6,268,078	13,341,151	-	38,710	9,641,309	48,132,624	26,684,004	(21,448,620)	80%

Energy Trust of Oregon
Program Expense by Service Territory
For the Twelve Months Ending December 31, 2017
(Unaudited)

	PGE	Pacific Power	Subtotal Elec.	NWN Industrial	NW Natural Gas	Cascade	Avista	Subtotal Gas	Oregon Total	NWN WA	Solar LMI	Community Solar	ETO Total	YTD Budget	Variance	% Var
Energy Efficiency																
Commercial																
Existing Buildings	30,460,000	16,539,988	46,999,988	2,186,043	3,742,348	817,381	222,363	6,968,135	53,968,123	848,843	-	-	54,816,966	63,113,338	8,296,372	13%
New Buildings	10,958,022	5,579,976	16,537,998	260,729	1,636,343	270,135	94,387	2,261,594	18,799,592				18,799,592	19,945,341	1,145,749	6%
NEEA	1,252,191	941,039	2,193,230		132,401	14,178		146,580	2,339,810	14,905			2,354,715	2,883,612	528,897	18%
Total Commercial	42,670,213	23,061,003	65,731,217	2,446,772	5,511,092	1,101,695	316,750	9,376,309	75,107,525	863,748	-	-	75,971,273	85,942,291	9,971,018	12%
Industrial																
Production Efficiency	19,350,138	12,204,416	31,554,554	1,854,885	578,042	179,296	28,794	2,641,016	34,195,570				34,195,570	34,708,999	513,429	1%
NEEA	235,193	168,060	403,253						403,253				403,253	240,338	(162,915)	-68%
Total Industrial	19,585,331	12,372,476	31,957,807	1,854,885	578,042	179,296	28,794	2,641,016	34,598,823	-	-	-	34,598,823	34,949,337	350,514	1%
Residential																
Existing Homes	6,539,988	5,734,821	12,274,809	-	5,927,277	193,299	512,714	6,633,290	18,908,099	523,096	-	-	19,431,195	20,951,148	1,519,953	7%
New Homes/Products	16,581,863	8,936,479	25,518,343	-	3,870,893	493,461	171,514	4,535,867	30,054,210	781,034	-	-	30,835,244	31,533,153	697,909	2%
NEEA	2,530,208	1,892,870	4,423,078		529,609	56,714		586,323	5,009,401	59,621			5,069,022	5,370,075	301,053	6%
Total Residential	25,652,060	16,564,171	42,216,230	-	10,327,779	743,473	684,227	11,755,480	53,971,710	1,363,751	-	-	55,335,461	57,854,376	2,518,915	4%
Energy Efficiency Program Costs	87,907,607	51,997,650	139,905,251	4,301,660	16,416,909	2,024,465	1,029,772	23,772,805	163,678,063	2,227,502	-	-	165,905,565	178,746,004	12,840,447	7%
Renewables																
Solar Electric (Photovoltaic)	6,783,711	4,892,125	11,675,836	-	-	-	-	-	11,675,836	-	50,651	-	11,726,487	13,409,947	1,683,460	13%
Other Renewable	2,279,796	2,646,065	4,925,861						4,925,861				4,925,861	6,416,730	1,490,869	23%
Renewables Program Costs	9,063,506	7,538,191	16,601,697	-	-	-	-	-	16,601,697	-	50,651	-	16,652,348	19,826,677	3,174,329	16%

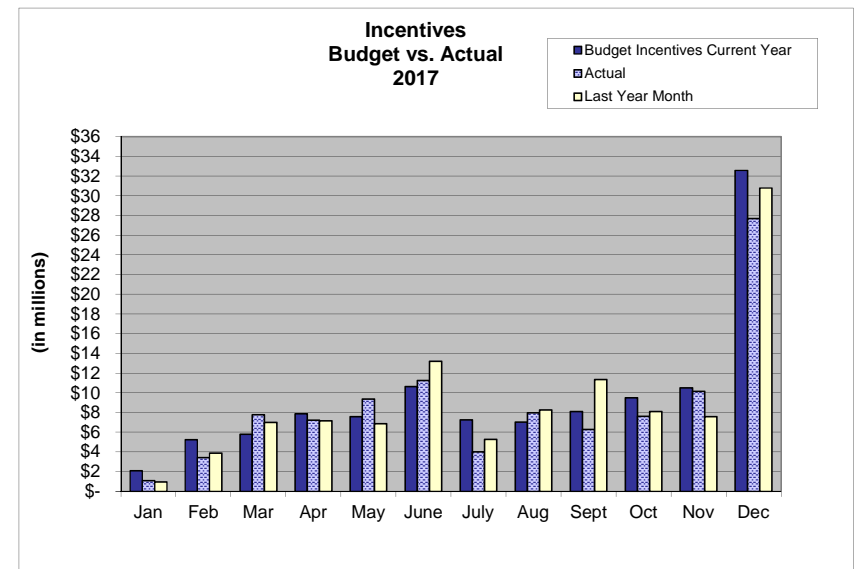
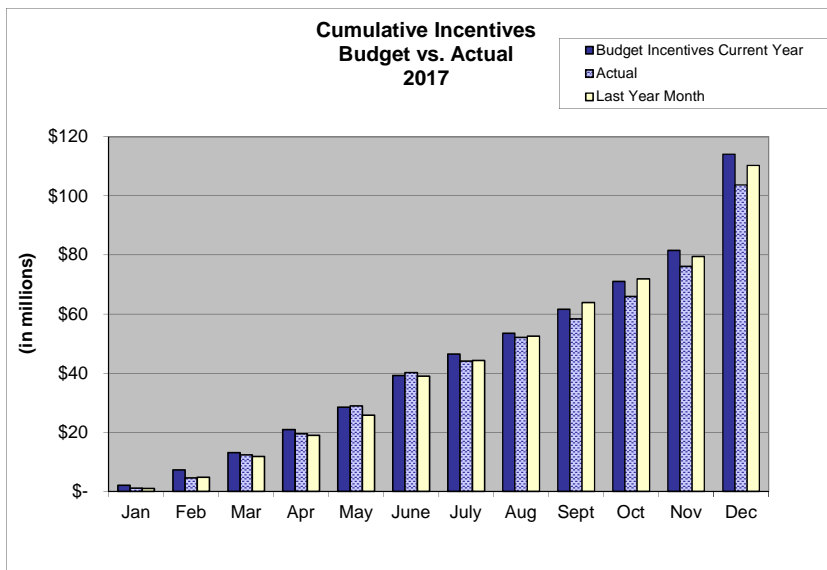
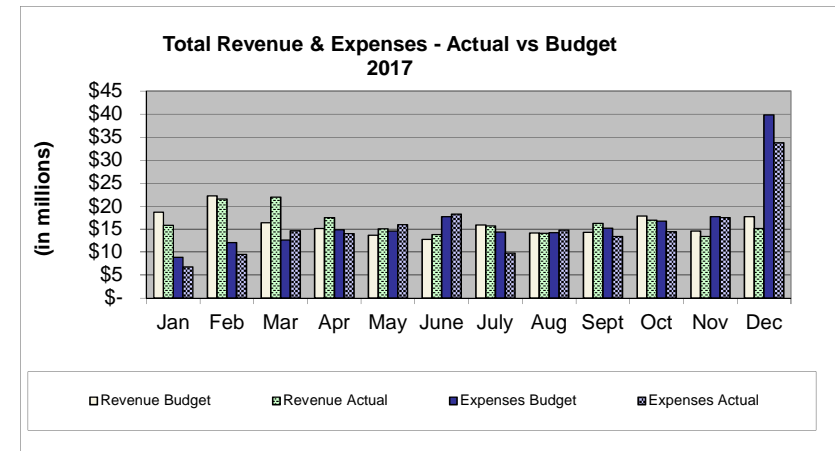
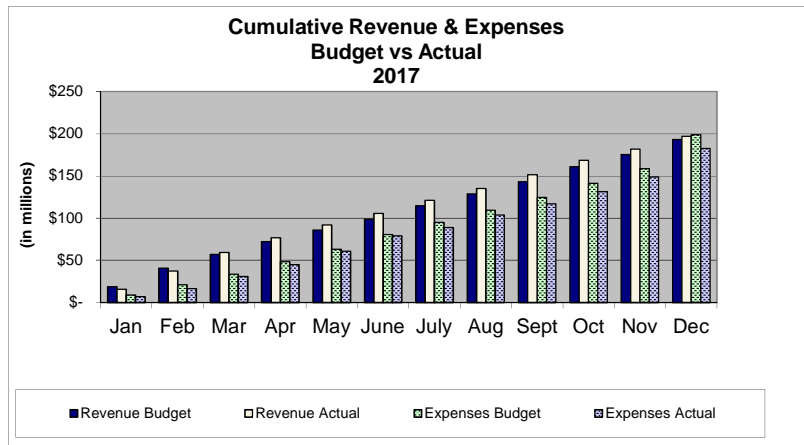
Energy Trust of Oregon
Administrative Expenses
For the Twelve Months Ending December 31, 2017
(Unaudited)

EXPENSES	MANAGEMENT & GENERAL						COMMUNICATIONS & CUSTOMER SERVICE					
	ACTUAL	QUARTERLY BUDGET	REMAINING	YTD			ACTUAL	QUARTERLY BUDGET	REMAINING	YTD		
				ACTUAL	BUDGET	VARIANCE				ACTUAL	BUDGET	VARIANCE
Outsourced Services	\$82,598	\$121,625	\$39,027	\$433,282	\$627,500	\$194,218	\$584,516	\$355,250	(\$229,266)	\$1,136,555	\$1,421,000	\$284,445
Legal Services	10,628	3,000	(7,628)	25,747	12,000	(13,747)						
Salaries and Related Expenses	591,357	663,679	72,322	2,390,707	2,657,215	266,508	447,883	429,351	(18,532)	1,674,585	1,717,405	42,821
Supplies	1,632	1,500	(132)	4,920	6,000	1,080	3,886	250	(3,636)	4,660	1,000	(3,660)
Postage and Shipping Expenses	128	625	497	1,859	2,500	641						
Printing and Publications	756	1,125	369	3,490	4,500	1,010	490	375	(115)	490	4,000	3,510
Travel	9,872	15,363	5,490	45,048	61,450	16,402	16,067	11,250	(4,817)	56,436	45,000	(11,436)
Conference, Training & Mtngs	19,672	21,463	1,791	70,861	75,850	4,989	10,467	3,125	(7,342)	25,055	12,500	(12,555)
Interest Expense and Bank Fees	(1)	375	376	1,676	4,000	2,324						
Dues, Licenses and Fees	708	2,938	2,230	10,892	14,930	4,038	5,732	4,125	(1,607)	23,255	16,500	(6,755)
Shared Allocation (Note 1)	47,716	51,008	3,292	188,670	204,034	15,364	45,148	39,966	(5,182)	162,365	159,863	(2,502)
IT Service Allocation (Note 2)	105,322	116,522	11,200	432,952	468,893	35,941	82,521	91,297	8,776	339,224	367,384	28,160
Planning & Eval	1,428	1,529	101	5,334	5,910	576	33,567	35,937	2,370	125,340	138,879	13,539
TOTAL EXPENSES	871,815	1,000,751	128,936	3,615,440	4,144,782	529,342	1,230,275	970,926	(259,350)	3,547,967	3,883,531	335,566

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

Note 2) Represents allocation of Shared IT Costs

Administrative Expenses 3rd Month of Quarter



PINK PAPER

For contracts with costs
through: 1/1/2018

CONTRACTOR	Description	City	EST COST	Actual TTD	Remaining	Start	End
Administration							
Administration Total:			13,332,983	4,917,069	8,415,914		
Communications							
Communications Total:			4,720,053	2,249,319	2,470,734		
Energy Efficiency							
Northwest Energy Efficiency Alliance	Regional EE Initiative Agmt	Portland	36,142,871	21,573,596	14,569,275	1/1/2015	7/1/2020
ICF Resources, LLC	2018 BE PMC	Fairfax	15,616,683	0	15,616,683	1/1/2018	12/31/2018
ICF Resources, LLC	2017 BE PMC	Fairfax	14,298,850	13,593,327	705,523	1/1/2017	12/31/2017
CLEAResult Consulting Inc	2018 Residential PMC	Austin	8,483,204	0	8,483,204	1/1/2018	12/31/2018
CLEAResult Consulting Inc	2017 HES PMC	Austin	6,540,508	6,057,572	482,936	1/1/2017	12/31/2017
CLEAResult Consulting Inc	2017 NBE PMC	Austin	6,207,078	5,929,383	277,695	1/1/2017	12/31/2017
CLEAResult Consulting Inc	2018 NBE PMC	Austin	6,206,575	0	6,206,575	1/1/2018	12/31/2018
Northwest Energy Efficiency Alliance	Regional Gas EE Initiative	Portland	6,200,354	2,580,568	3,619,786	1/1/2015	7/1/2020
Lockheed Martin Corporation	2018 MF PMC	Grand Prairie	4,655,000	0	4,655,000	1/1/2018	12/31/2018
Lockheed Martin Corporation	2017 MF PMC	Grand Prairie	4,586,068	4,265,697	320,371	1/1/2017	12/31/2017
Ecova Inc	2017 Products PMC	Spokane	3,907,587	3,479,597	427,990	1/1/2017	12/31/2017
Energy 350 Inc	PDC - PE 2017	Portland	3,144,460	3,076,960	67,500	1/1/2017	12/31/2017
CLEAResult Consulting Inc	2017 NH PMC	Austin	3,137,693	2,718,994	418,699	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	2,017,000	0	1/1/2017	12/31/2017
TRC Engineers Inc.	2018 EPS New Const PDC	Irvine	1,946,406	0	1,946,406	1/1/2018	12/31/2018
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	1,707,123	77,245	1/1/2017	12/31/2017
RHT Energy Inc.	PDC - PE 2017	Medford	1,740,434	1,621,299	119,135	1/1/2017	12/31/2017
Ecova Inc	2018 Retail PDC	Spokane	1,645,112	0	1,645,112	1/1/2018	12/31/2018
Evergreen Consulting Group, LLC	PE Lighting PDC 2017	Tigard	1,555,700	1,520,700	35,000	1/1/2017	12/31/2017
KEMA Incorporated	EB & SEM 15-16 Evaluation	Oakland	575,000	446,751	128,249	6/8/2017	5/31/2018
Pivotal Energy Solutions LLC	License Agreement	Gilbert	490,500	212,362	278,138	3/1/2014	12/31/2019
Michaels Energy, Inc.	New Buildings '14 Impact Evalu	La Crosse	328,000	327,997	3	5/23/2016	5/31/2017
Balanced Energy Solutions LLC	New Homes QA Inspections	Portland	321,700	137,969	183,731	4/27/2015	12/31/2018
Craft3	Loan Agreement	Portland	300,000	300,000	0	6/1/2014	6/20/2025
CLEAResult Consulting Inc	2017 HES WA PMC	Austin	285,746	247,786	37,960	1/1/2017	12/31/2017
ICF Resources, LLC	2017 BE DSM PMC	Fairfax	274,746	266,504	8,242	1/1/2017	12/31/2017
EnergySavvy Inc.	Optix Engage Online Audit Tool	Seattle	273,600	178,167	95,433	6/1/2016	5/31/2018

For contracts with costs
through: 1/1/2018

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ICF Resources, LLC	2018 BE PMC - WA	Fairfax	258,286	0	258,286	1/1/2018	12/31/2018
Alternative Energy Systems Consulting, Inc.	PE Mobile App Scoping Tool	Carlsbad	249,830	238,813	11,017	6/1/2016	4/30/2018
ICF Resources, LLC	2017 BE NWN WA PMC	Fairfax	246,200	235,114	11,086	1/1/2017	12/31/2017
CLEAResult Consulting Inc	2018 Residential PMC - WA	Austin	238,129	0	238,129	1/1/2018	12/31/2018
CLEAResult Consulting Inc	RES PMC Transition	Austin	212,603	206,443	6,160	9/1/2017	12/31/2017
CLEAResult Consulting Inc	2018 Residential PMC - CustSvc	Austin	174,000	0	174,000	1/1/2018	12/31/2018
ICF Resources, LLC	2018 BE PMC - DSM	Fairfax	161,119	0	161,119	1/1/2018	12/31/2018
Open Energy Efficiency, Inc.	Automated Meter Data Analysis	Mill Valley	150,000	0	150,000	1/1/2018	12/31/2018
Alliance For Sustainable Energy, LLC	Technical Services Agreement	Lakewood	104,989	89,215	15,774	10/30/2015	11/30/2017
Alternative Energy Systems Consulting, Inc.	PE Review of Technical Studies	Carlsbad	100,000	16,258	83,742	5/22/2017	12/31/2018
Hitachi Consulting Corporation	SOW #20 NB RFP Coordination	Dallas	90,000	0	90,000	1/2/2018	6/30/2018
1000 Broadway Building L.P.	Pay-for-Performance Pilot	Portland	88,125	58,750	29,375	10/17/2014	11/1/2018
The Cadmus Group Inc.	Residential Air Conditioning	Watertown	83,550	68,072	15,479	7/1/2017	3/31/2018
CLEAResult Consulting Inc	Professional Services/Trans	Austin	81,688	69,170	12,518	10/15/2014	10/15/2018
Evergreen Economics	Research Cannabis Market	Portland	80,130	76,416	3,714	6/23/2017	4/30/2018
WegoWise Inc	benchmarking license	Boston	77,472	34,920	42,552	6/15/2014	12/31/2018
Abt SRBI Inc.	Fast Feedback Surveys 2017	New York	70,000	58,918	11,082	2/1/2017	2/28/2018
Energy 350 Inc	Professional Services	Portland	64,062	63,993	70	12/10/2014	12/10/2018
TRC Engineers Inc.	2018 EPS New Const PDC - WA	Irvine	63,456	0	63,456	1/1/2018	12/31/2018
Research Into Action, Inc.	Evaluation MHR Pilot	Portland	52,000	13,084	38,916	5/1/2017	2/28/2019
Ecotope, Inc.	NB - NEEA Impact Evaluation	Seattle	50,000	21,395	28,605	10/23/2017	12/31/2018
Navigant Consulting Inc	Evaluation Consultant-DSM Proj.	Boulder	45,000	34,073	10,927	6/15/2017	6/1/2019
Evergreen Economics	New Home Pilot- DHP	Portland	44,000	2,886	41,114	11/1/2017	3/31/2019
Brightworks Sustainability LLC	Net Zero Fellowship Grant Agmt	Portland	43,500	24,000	19,500	4/5/2017	8/31/2018
BASE zero LLC	Quality Assurance Services	Bend	43,075	26,706	16,369	3/1/2016	12/31/2018
The Cadmus Group Inc.	Existing Homes DHP Study	Watertown	40,000	40,000	0	9/25/2017	3/31/2019
Cadeo Group LLC	Evaluation Consulting	Washington	37,500	37,500	0	4/25/2017	3/31/2018
The Cadmus Group Inc.	Air Conditioning Measures	Watertown	32,950	22,660	10,290	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
American Council for and Energy Efficient Economy	Research Sponsorship - 2018		30,000	0	30,000	1/1/2018	12/31/2018
EES Consulting, Inc	Professional Services Agmt	Kirkland	29,200	11,070	18,130	10/1/2016	9/30/2018
Research Into Action, Inc.	Lighting Tool-Mrkt Research	Portland	29,022	3,994	25,028	12/1/2018	4/30/2018
Evergreen Consulting Group, LLC	Lighting Conslt.-Mrkt Research	Tigard	16,500	0	16,500	12/13/2017	4/30/2018
Research Into Action, Inc.	Research -MF Energy Savings	Portland	15,360	0	15,360	1/5/2018	6/30/2018
FMYI, INC	Subscription Agreement	Portland	15,350	11,150	4,200	4/25/2016	2/15/2018

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Portland General Electric	Workshop/Training Agreement	Portland	15,000	8,252	6,748	1/1/2017	12/31/2017
Research Into Action, Inc.	Evaluation - APS Pilot	Portland	14,600	13,240	1,361	7/1/2017	12/31/2018
KEMA Incorporated	New Bldg Evaluation	Oakland	13,000	1,847	11,153	10/1/2017	3/31/2019
American Council for and Energy Efficient Economy	ACEEE Sponsorship - 2018		12,500	0	12,500	1/1/2018	12/31/2018
LightTracker, Inc.	Lighting Market Analysis	Boulder	12,000	12,000	0	7/17/2017	3/31/2018
Earth Advantage, Inc.	2017 Sponsorship	Portland	10,250	10,250	0	3/1/2017	2/28/2018
Hacker Architects Inc	Special Proj. Grant Agreement	Portland	10,000	5,000	5,000	11/7/2017	5/30/2018
The Leede Research Group Inc	Evaluation Consultant	Manitowoc	9,000	0	9,000	5/1/2017	6/30/2018
Northwest Energy Efficiency Council	BOC 2018 Sponsorship	Seattle	6,520	0	6,520	1/1/2018	12/31/2018
The Cadmus Group Inc.	NB Evaluation Plan	Watertown	6,500	0	6,500	10/1/2017	3/31/2019
Northwest Energy Efficiency Council	BOC 2017 Sponsorship	Seattle	6,000	6,000	0	2/14/2017	12/31/2017
Shades of Green	Shades of Green Sponsorship	Portland	5,000	5,000	0	11/6/2017	10/30/2018
Energy Efficiency Total:			140,158,209	74,805,059	65,353,149		

Joint Programs

E Source Companies LLC	Membership Agreement	Boulder	75,607	0	75,607	1/1/2018	12/31/2018
Structured Communications Systems, Inc.	ShoreTel Phone System Install		70,345	65,287	5,059	1/1/2017	12/31/2018
CoStar Realty Information Inc	Property Data	Baltimore	48,020	43,308	4,712	6/1/2011	5/31/2018
Grounded Research and Consulting, LLC	Education Background Research	Oakland	25,000	24,972	28	3/13/2017	6/30/2017
Navigant Consulting Inc	Resource Assessment Updates	Boulder	10,600	9,825	775	8/26/2016	8/26/2018
Joint Programs Total:			229,572	143,391	86,181		

Renewable Energy

Sunway 3, LLC	Prologis PV installation		3,405,000	3,261,044	143,956	9/30/2008	9/30/2028
Clean Water Services	Project Funding Agreement		3,000,000	2,013,106	986,894	11/25/2014	11/25/2039
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	1,000,000	0	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	382,500	467,500	7/11/2016	7/10/2041
Old Mill Solar, LLC	Project Funding Agmt Bly, OR	Lake Oswego	490,000	490,000	0	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
Deschutes Valley Water District	Opal Springs Hydro Project	Madras	450,000	0	450,000	1/1/2018	4/1/2040
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

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Farmers Conservation Alliance	Program Support	Hood River	367,000	0	367,000	1/1/2018	12/31/2019
SunE Solar XVI Lessor, LLC	BVT Sexton Mtn PV	Bethesda	355,412	355,412	0	5/15/2014	12/31/2034
City of Gresham	City of Gresham Cogen 2		350,000	334,523	15,477	4/9/2014	7/9/2034
BSA Enterprises Inc	Solar Verifier Services	Sisters	200,000	115,929	84,071	8/1/2016	7/31/2018
Gary Higbee DBA WindStream Solar	Solar Verifier Services	Eugene	200,000	104,016	95,984	8/1/2016	7/31/2018
Luxurious Plumbing and Heating, Inc.	Solar Verifier Services	West Linn	200,000	156,657	43,343	8/1/2016	7/31/2018
RHT Energy Inc.	Verifier Services Agmt - Solar	Medford	200,000	138,558	61,443	8/1/2016	7/31/2018
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	106,700	16,600	1/1/2015	4/30/2018
Clean Power Research, LLC	PowerClerk License	Napa	109,175	109,175	0	7/1/2017	6/30/2018
SPS of Oregon Inc	Project Funding Agreement	Wallowa	75,000	74,513	488	10/15/2015	10/31/2036
Kendrick Business Services LLC	Small Business Support Agmt	Albany	60,000	7,525	52,475	11/1/2016	6/30/2018
Future Resource Strategies, LLC	Backfill for RE Staff	Salem	50,000	0	50,000	6/7/2017	10/8/2017
Kleinschmidt Associates	Evaluation Services	Pittsfield	47,400	47,609	(209)	1/1/2017	11/30/2018
OSEIA-Oregon Solar Energy Industries Assoc	Technical Training Course Dev		41,650	29,100	12,550	1/1/2017	4/30/2018
TRC Engineers Inc.	2018 EPS New Const PDC - Solar	Irvine	41,500	0	41,500	1/1/2018	12/31/2018
The Cadmus Group Inc.	Solar Verification	Watertown	41,000	41,000	0	8/24/2017	2/28/2018
Clean Energy States Alliance	2017 CESA Sponsorship		39,500	39,500	0	7/1/2016	6/30/2017
Clean Energy States Alliance	CESA Membership 17-18		39,500	39,500	0	7/1/2017	6/30/2018
ENERGYneering Solutions Inc	Biopower & Hydro Evaluations	Sisters	25,000	24,954	46	12/6/2016	11/30/2018
University of Oregon	UO SRML Contribution - 2017	Eugene	24,999	24,999	0	3/9/2017	3/8/2018
Wallowa Resources Community Solutions, Inc.	Renewables Field Outreach		24,999	25,808	(809)	2/1/2016	1/30/2018
Wallowa Resources Community Solutions, Inc.	Renewables Field Outreach		24,999	0	24,999	2/1/2018	1/30/2020
Robert Migliori	42kW wind energy system	Newberg	24,125	24,125	0	4/11/2007	1/31/2024
Clean Power Research, LLC	WattPlan Software	Napa	20,000	20,000	0	11/17/2017	6/30/2018
Warren Griffin	Griffin Wind Project	Salem	13,150	9,255	3,895	10/1/2005	10/1/2020
Forth	Electric Vehicles Support	Portland	10,000	0	10,000	1/26/2018	3/31/2018
OSEIA-Oregon Solar Energy Industries Assoc	OSEIA 2018 Conf. Sponsorship		7,500	7,500	0	9/1/2017	12/31/2018
Bonneville Environmental Foundation	REC/WRC Purchase 2016	Portland	7,290	4,860	2,430	1/1/2016	12/31/2018
Community Energy Project, Inc.	LMI Solar Working Group	Portland	5,000	3,200	1,800	9/11/2017	3/31/2018
Strategic Environmental Associates	Overview Carbon Mkts to Board	Lake Oswego	5,000	0	5,000	1/16/2018	5/31/2018
Verde	LMI Solar Working Group	Portland	5,000	3,200	1,800	9/11/2017	3/31/2018
350 Deschutes	LMI Solar Working Group	Bend	4,000	2,600	1,400	9/11/2017	3/31/2018
Clean Energy States Alliance	Consulting Solar/Storage		4,000	0	4,000	1/8/2018	3/31/2018
NeighborWorks Umpqua	LMI Solar	Roseburg	4,000	2,600	1,400	9/11/2017	3/31/2018

**Energy Trust of Oregon
Contract Status Summary Report**For contracts with costs
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Constructing Hope	LMI Solar Working Group	Portland	3,000	1,000	2,000	9/11/2017	3/31/2018
Native American Youth & Family Center	LMI Solar Working Group	Portland	3,000	1,000	2,000	9/1/2017	3/31/2018
REACH Community Development Inc	Solar LMI Strategies	Portland	3,000	2,000	1,000	9/11/2017	3/31/2018
Renewable Energy Total:			17,329,819	14,076,785	3,253,034		
Grand Total:			175,770,635	96,191,623	79,579,012		

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Current Portfolio of Investments

Category	12/31/17 Market Value	Ave Return	Percentage of Portfolio	Investment Policy Measure
Invested Cash	36,039,024	0.15%	48.1%	
Compensating Balance	3,000,000	0.00%	4.0%	
CIDA	5,130,580	0.20%	6.8%	
Short Term CDARs	8,044,000	1.16%	10.7%	
BoTC	10,000		0.0%	
Petty	300			
Total Cash	52,223,904	0.30%	69.7%	at least 25% of portfolio
Longer Term CDARs	13,082,669	1.1%	17.5%	
Umpqua CD's	-			
US Bank CD's	-			
Total CD's	13,082,669	1.1%	17.5%	no more than 75% of portfolio
Bond & CP (see page 2)	9,638,723	1.3%	12.9%	no more than 35% of portfolio
Total Investments	22,721,392	1.2%	30.3%	no more than 75% of portfolio
Total Cash & Investments	74,945,296	0.57%	100.0%	

Wtd Ave Days to Maturity

24

Longest Maturity

7/5/2018

Current Portfolio Return

0.57%



Detail of Holdings - Bonds and Commercial Paper

<u>Broker</u>	<u>Type</u>	<u>Institution</u>	<u>S&P</u>	<u>Moody</u>	<u>Matures</u>	<u>Market Value</u>	<u>% of portfolio</u>	<u>Investment Policy Measure</u>
PJ	Bond	Toyota	AA-	Aa3	1/12/2018	1,999,800	3%	no single issue shall exceed 5% of portfolio
CO	Bond	BAC	--	AA3	3/26/2018	1,660,083	2%	no single issue shall exceed 5% of portfolio
PJ	CP	Abbey			1/19/2018	1,998,520	3%	no single issue shall exceed 5% of portfolio
PJ	Bond	WSTP	AA-	Aa3	1/12/2018	1,999,940	3%	no single issue shall exceed 5% of portfolio
CO	CP	JPM			7/5/2018	1,980,380	3%	no single issue shall exceed 5% of portfolio
Total Market Value US Bank						9,638,723		



Projected Cash after Year-End Incentives are paid

	12/31/17	December Expenses Paid in January	Ending Bal after YE Incentives Pd
Cash	52,223,904	(24,500,000)	27,723,904
Investments	22,721,392		22,721,392
Total	<u>74,945,296</u>		<u>50,445,296</u>

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Financial Glossary

(for internal use) - updated December 1, 2017



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.

Administrative costs are part of, but not all of the cost included in an OPUC performance metric. See **Program Delivery Efficiency** metric for further information about the metric.

- 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 2nd round of application; projects that have reached a stage where approval process can begin.
- Committed-Project that has a signed agreement or application reserving incentive dollars until project completion. Energy savings/generations, incentives and completion date by project and by service territory must be documented in project records and in 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 Efficiency Measure

The program delivery efficiency measure is a maximum threshold for administrative and program support costs as a percentage of total annual revenues.

Administrative costs adhere to generally accepted accounting practices for nonprofit organizations. Program support costs were defined in coordination with the Commission to enable comparison with other recipients of public purpose funding. For the purposes of this measure, program support costs are defined as program costs, except for direct program costs, in the following areas: program management, program delivery, program incentives, program payroll and related expenses, outsourced services, planning and evaluation services, customer service management, and trade ally network management. [source: OPUC Docket No. UM 1158]

Program Delivery Expense

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

Program Legal Services

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

Program Management Expense

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

Program Marketing/Outreach

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

Program Quality Assurance

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

Program Reserves

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

Program Support Costs

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

Project Specific Costs (for Renewable Energy)

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

Savings Types

- **Working Savings/Generation:** the estimate of savings/generation that is used for data entry by program personnel as they approve individual projects. They are based on deemed savings/generation for prescriptive measures, and engineering calculations for custom measures. They do not incorporate any evaluation or transmission and distribution factors.
- **Reportable Savings/Generation, also known as Net Savings:** the estimate of savings/generation that will be used for public reporting of Energy Trust results. This includes transmission and distribution factors, and evaluation factors of free riders, spillover and savings realization rates, plus 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.
- **Gross Savings/Generation:** the estimate of savings from program participants, regardless of whether they are free-riders.
- **Contract Savings:** the estimate of savings that will be used to compare against annual contract goals. These savings figures are generally the same as the reportable savings at the time that the contract year started. For purposes of adjusting working savings to arrive at this number, a single adjustment percentage (a SRAF, as defined below) is agreed to at the beginning of the contract year and is applied to all program measures. This is based on the sum of the adjustments between working and reportable numbers in the forecast developed for the program year.
- **Savings Realization Adjustment Factors (SRAF):** are savings realization adjustment factors applied to electric and gas working savings measures in order to reflect more

accurate savings information through the benefit of evaluation and other studies. These factors are determined by the Energy Trust and used for annual contract amendments.

The factors are determined based on the best available information from:

- Program evaluations and/or other research that account for free riders, spill-over effects and measure impacts to date; and
- Published transmission and distribution line loss information resulting from electric measure savings.

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

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

Total Program Expenses (line item on income statement)

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

Trade Ally Programs & Customer Service Management

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

True Up

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

Tab 7

Policy Committee Meeting

January 25, 2018, 3:30 pm

Attending by teleconference

Ken Canon, Roger Hamilton – *Policy Committee Chair*, Debbie Kitchin, Alan Meyer, John Reynolds, Eddie Sherman

Attending at Energy Trust offices

Mike Colgrove, Lindsey Dierksen, Kate Hawley, Steve Lacey, Debbie Menashe, Amanda Potter, Pati Presnail, Kate Scott, Peter West, Whitney Winsor

Board meeting presentation previews

Lockheed Martin Contract Extension for Existing Multifamily Program Management Contract (PMC)

Staff supports a one year and final contract extension for Energy Trust's Existing Multifamily Program Management Contractor (PMC) Agreement with Lockheed Martin. This extension would extend the contract through December 31, 2019. This PMC agreement was approved to begin in 2016 with an initial three-year term and an option for up to two one-year extensions. Kate Scott, Program Manager-Commercial, previewed her board presentation and described how Lockheed Martin has demonstrated sufficient compliance with the extension criteria to warrant the recommendation for extension.

John asked whether Lockheed Martin has any other contracts with Energy Trust, and Kate responded that they do not. Alan asked about goal-setting methodology and whether underperformance in meeting savings goals by one PMC is made up by other contracts. Peter and Kate responded that it is. In addition, staff explained that some of the goal targets may have been set high without enough analysis of how much of the market had already been served. Staff is reviewing its goals setting analysis for this year. Ken asked whether Lockheed Martin's performance compensation award would be less due to performance against goal, and Kate responded that it would be less.

Program updates

Amanda Potter, Lindsey Dierksen, Kate Hawley, Industry and Agriculture Efficiency Program

Amanda Potter, Sector Lead, described plans for an upcoming competitive bid process for the Custom track program delivery contractors (PDCs) in the Industry and Agriculture Efficiency Program. The program currently contracts with three custom track PDCs (PGE, Energy350, and RHT), each covering a different geographic territory. The program also has a separate pool of contractors doing Strategic Energy Management work. The Request for Proposals (RFP) for Custom PDCs is currently in development and will cover both the Custom track and Strategic Energy Management work. The team sees three advantages for integrating this work: streamlining program processes and reducing administrative burden, providing greater flexibility in program design, especially for small to medium customers, and enhancing and simplifying the customer experience in the program. Ken noted that a single point of contact for customers is very important.

Amanda also updated the Policy Committee on information about the Red Rock project, a large project that was presented to the committee and the board in 2016. The project is a large industrial efficiency project associated with a new biofuel aircraft fuel plant proposed for eastern Oregon. Funding for incentives for the project was approved in 2016, with the condition that full project funding was secured before the end of November 2016. Project funding was not secured by that time, but project representatives have now advised staff that funding has been secured. Project developers have returned to Energy Trust requesting reconsideration of the project for incentive

funding. Staff is beginning its review of the project again. More information will be provided to the Policy Committee at a future committee meeting.

Consent and Appointment of Members to the Conservation Advisory Council (CAC)

Mike requested policy committee approval for the appointments of three new members to the CAC. They are: Kari Greer of Pacificorp (replacing Don Jones), Danny Grady of Portland Bureau of Planning and Sustainability (replacing Andria Jacob), and Kerry Meade of the Northwest Energy Efficiency Council (replacing Stan Price). The committee unanimously approved these appointments.

Policies for Review

Using Reserve Accounts Policy

In connection with recent discussions regarding use of the organization contingency reserves, Mike reviewed the current Using Reserves Policy, describing the organization contingency reserves as well as the program reserves which are collected and maintained through annual funding. Committee members expressed interest in ensuring that all reserve funds continue to be used to benefit ratepayers and asked for more background information. Staff will provide more specific information on amounts in each reserve category, and anticipated earnings on these categories for the coming year.

Committee members also asked staff to identify criteria it would use to make recommendations for the use of reserves for supporting external opportunities. In putting together a recommendation like this, Ken suggested staff consider the criteria it used to make recommendations on use of the reserves for the Community Solar Program RFP development work as well other suggested activities. Mike agreed that such a recommendation would be a good next step and also reported that staff will be engaging the Finance Committee as well on this topic.

New Opportunities Process Discussion

Mike opened a discussion of what processes and procedures the committee would like to see to consider external opportunities for funding. Staff and committee members discussed the committee and board role in these discussions. Ken advised that staff he would like to see committee and board engagement with a recommendation from staff early in the consideration process. Mike and staff will return to the Policy Committee with a suggested process built around a scenario of possible external opportunity for consideration.

Meeting adjourned at 5:02 p.m.

Next meeting date is Monday, March 5, 2018 at 3:30 p.m.

Tab 8

Strategic Planning Committee Meeting

February 1, 2018, 3:00 pm

Attending by teleconference

Susan Brodahl, John Reynolds, Eddie Sherman

Attending at Energy Trust offices

Mark Kendall – *Strategic Planning Committee Chair*, Chair, Amber Cole, Mike Colgrove, Debbie Menashe, Spencer Moersfelder, Thad Roth, John Volkman, Jay Ward, Whitney Winsor

Review of Board Learning Topics Presentations and Board Strategic Planning Scheduling

Mike presented the schedule of board learning topics, explaining the dates on which outlines of the topics will be presented to the Strategic Planning Committee and then presented to the full board. Papers will be emailed to board members in advance of the meetings at which they will be presented.

As a reminder, Mike explained that the learning topics paper are intended to provide all board members with some basic information about topics under discussion in the current energy and utility environment to help inform the board in strategic planning discussions. Susan asked if there would be an opportunity for feedback on the papers, and Mike responded that the Strategic Planning Committee meetings provide time for that opportunity.

Debbie then presented a high level proposed schedule for the strategic planning process over the next year and beyond as the committee and staff begin to work on the next Energy Trust strategic plan.

Preview of Board Learning Topics for February 22nd Board Meeting

Distribution Systems: Thad Roth previewed the board learning paper on Distribution Systems for the committee and asked for feedback in order to finalize the paper and presentation for the full board. Mark suggested that the paper include more explicit information on Energy Trust's role as it relates to Distribution Systems. Susan also suggested including a definition list, especially for more technical terms, to assist readers who are not familiar with the topic. John said he enjoyed the paper.

Electric Vehicles (EVs) and Transportation: Spencer and Jay have engaged Forth, formerly Drive Oregon, to assist in drafting a paper and presentation for the board on EVs and transportation. The topic is very broad, and Spencer and Jay asked for committee feedback on which specific areas are of most interest at this time. Committee members expressed interest in state policy related to EVs and transportation that might or might not affect Energy Trust's work. Other areas of interest are charging stations and efficiency.

Monetizing Non Energy Benefits: Mike will provide information to the board on the landscape of issues related to monetization of non-energy benefits, including carbon mitigation, water savings, and health benefits. Mike will provide a more developed draft to committee members and ask for feedback following the committee meeting and before the paper is circulated to the full board.

Review and Discussion of Initial Draft Board Strategic Planning Workshop Agenda

Debbie presented the initial draft agenda for the Strategic Planning workshop in May. The agenda includes time for remarks from Mike, the board president, and Mark Kendall as committee chair. The Strategic Planning Dashboard will again be presented to inform the board on progress towards the current plan goals. Three additional board learning topics will be presented at the workshop, including a paper on long term energy efficiency resource. The draft agenda also contains time for the board to discuss Energy Trust's strength areas in order to begin planning for the new strategic plan development. Nick Viele will be facilitating the workshop again. Mark suggested that Mike's remarks include a reminder of the purpose of the board learning topics. Debbie also let the committee know that logistics planning for the workshop will begin this month.

Meeting adjourned at 4:50 pm.

Next meeting date is Thursday, March 1, 2018 at 3:00 p.m.

Tab 9

Briefing Paper

2018 State Legislation

February 22, 2018

Summary

This briefing paper summarizes bills introduced in the 2018 Oregon legislative session. The first section highlights bills with the most significant implications for Energy Trust; the second section lists all the bills we are tracking, with URL links in the bill number and “Intro.”

Background

- The session began February 5 and will end March 9.
- As usual, in addition to monitoring bills that could impact Energy Trust, we respond to requests for information about how bills might affect us and coordinate our activities with the Oregon Public Utility Commission (OPUC). We take no positions on bills.

Discussion

- **HB 4001/SB 1507, cap-and-invest:** Directs Environmental Quality Commission (EQC) to cap larger sources of greenhouse gas (GHG) emissions, establish auctions in which emission allowances can be traded, and invest revenues from auctions and offset credits to benefit consumers and impacted communities. Specifically, the bills would:
 - Covered entities: Covers entities producing emissions from electric production (including emissions from outside the state attributable to electricity consumed in the state), natural gas, transportation and large industrial sources of more than 25,000 metric tons of emissions per year. Does not cover methane emissions from landfills that generate renewable energy for electricity, transportation fuels or heat (section 13(2)(a)).
 - Goals: Direct the EQC to adopt goals to reduce GHGs to 20 percent below 1990 levels by 2025, 45 percent below 1990 by 2045, and 80 percent below 1990 by 2050.
 - Governance structure:
 - A Joint Legislative Committee on Climate would oversee the emission-reduction program and recommend expenditures and investments of auction proceeds.
 - A 21-member advisory committee would advise the Joint Legislative Committee, the Governor, EQC, DEQ and other agencies on implementing the program. The committee would include environmental justice, Indian tribal, local government, business and industry, labor, environmental, climate science, and public health equity representatives.
 - Program: EQC would develop a program that caps emissions from covered entities beginning in 2021, sets annual allowance budgets, and provides a market-based mechanism for covered entities to demonstrate compliance with the program by surrendering an emissions allowance or offset credit for every ton of emissions.
 - Allocation of allowances: Total allowances for each year would decline annually. For each year, a certain number of allowances (1 ton of GHGs per allowance, totaling the tonnage of each year’s emissions-reduction goal) would be allocated: (1) at no cost to electric and natural gas utilities, for consignment to auction (sec. 14(2)(a), the revenue from which must benefit ratepayers (sec. 16(7)(a)); (2) at no cost to entities with emissions-intensive, trade-

- exposed processes (sec. 14(4)(a); and (3) to a reserve account to mitigate spikes in allowance prices.
- Offsets: Up to 4 percent of an entity's compliance obligation could be met with offset credits for projects that produce real, permanent, quantifiable, verifiable and enforceable emissions reductions not already required by law or would otherwise occur (sec. 15).
 - Allowance auction (sec. 16): The State would administer an allowance auction, where regulated entities could sell or purchase allowances to comply with program.
 - Auction proceeds
 - Utilities would use proceeds to reduce GHGs or to stabilize or reduce energy bills for customers, with priority to low-income customers, bill assistance, weatherization and energy efficiency measures (sec. 23).
 - Revenues dedicated for highway purposes (Oregon Constitution Art. IX, sec. 3(a)) go to the Transportation Decarbonization Investments Fund, to be used for transportation projects consistent with purposes of cap and investment program
 - Remaining revenue:
 - 85 percent goes to Oregon Climate Investments Fund for communities at higher risk from climate change and for natural and working lands (sec. 26), to be used for energy conservation, renewable energy, transit-oriented low-income housing, distributed generation, energy storage, electric vehicles, etc. (sec. 28);
 - 15 percent goes to Just Transition Fund for job training, dislocated workers, etc. (secs. 24, 31-32).
 - Linkages with trading markets in other jurisdictions (Western Climate Initiative) would be built into the system (sec. 17).
- **Residential energy projects/manufactured/affordable/low-income housing:**
 - HB 4121 would require Housing and Community Services Department to develop a program to provide up to \$4,500 in incentive payments per-project to contractors undertaking residential (including affordable rental housing) energy improvement projects. Projects may be construction, reconstruction, alteration or repair, electric or gas, wood or oil, solar or community solar. Contractors must use incentives to reduce cost to owners. Solar incentives start at \$4,500 in 2018 and decline to \$2,000 in 2021. 25 percent of funds reserved to maximize energy efficiency or extend the usable life and improve health and safety of affordable housing; at least 10 percent of funds reserved for low-income housing or water or sewer systems serving manufactured dwellings owned and occupied by low-income persons. Grants available for energy projects in manufactured homes. Program sunsets program January 2, 2022.
 - **Oregon Department of Energy (ODOE)**
 - HB 4148 would establish an advisory board for ODOE.
 - SB 1519/1537 would create an Oregon Energy Commission as a policy and rulemaking for ODOE.
 - **Renewable Energy**
 - HB 4027 would require county with population of less than 775,000, upon request of person in possession or who owns a solar project to enter into agreement exempting solar project from property tax and becoming subject to fee in lieu of taxes. If solar project is in a city, city and county must enter into agreement customer.

List of all bills (as of February 6, 2018)[HB 4001 INTRO](#)

Relating to greenhouse gas emissions; declaring an emergency.

Requires Environmental Quality Commission to adopt by rule program that places cap on greenhouse gas emissions and that provides market-based mechanism for covered entities to demonstrate compliance.

Bill Sponsor: Rep Fahey; Rep Gorsek; Rep Greenlick; Rep Helm; Rep Hernandez; Rep Holvey; Rep Keny-Guyer; Rep Lively; Rep Malstrom; Rep Marsh; Rep McLain; Rep Nosse; Rep Piluso; Rep Power; Rep Reardon; Rep Salinas; Rep Sanchez; Rep Smith Warner; Rep Sollman; Rep Speaker Kotek; Rep Williamson; Sen Beyer; Sen Dembrow; Sen Frederick; Sen Gelser; Sen Manning Jr; Sen Monroe; Sen Prozanski; Sen Riley; Sen Taylor (Presession filed)

Current Committee: Energy and Environment (H)

Next Hearing: 3:00PM 02/07/2018

House Committee

Energy and Environment

Public Hearing

HR F

[HB 4002 INTRO](#)

Relating to fees on air contamination sources; declaring an emergency.

Requires Environmental Quality Commission to establish fee applicable to certain air contamination sources to cover direct and indirect costs of Department of Environmental Quality and commission in developing and implementing program and rules to reduce public health risks of emissions of toxic air contaminants from industrial and commercial air contamination sources.

Bill Sponsor: Presession filed (at the request of House Interim Committee on Energy and Environment)

Current Committee: Energy and Environment (H)

Next Hearing:

[HB 4010 INTRO](#)

Relating to home ownership; declaring an emergency.

Establishes Task Force on Addressing Racial Disparities in Home Ownership.

Bill Sponsor: Rep Alonso Leon; Rep Bynum; Rep Fahey; Rep Greenlick; Rep Hernandez; Rep Keny-Guyer; Rep Meek; Rep Parrish; Rep Piluso; Rep Power; Rep Reardon; Rep Sanchez; Rep Sollman; Rep Speaker Kotek; Rep Witt; Sen Dembrow; Sen Frederick; Sen Manning Jr; Sen Monnes Anderson (Presession filed)

Current Committee: Human Services and Housing (H)

Next Hearing: 8:00AM 02/08/2018

House Committee

Human Services and Housing

Public Hearing and Possible Work Session

HR E

[HB 4022 INTRO](#)

Relating to electricity for motor vehicles; prescribing an effective date.

Permits state agency to locate devices or facilities for providing electricity to public for electric motor vehicles in locations sufficient to meet demand for devices or facilities.

Bill Sponsor: Rep Barnhart; Rep Hernandez; Rep Nosse; Rep Smith DB (Presession filed)

Current Committee: Energy and Environment (H)

Next Hearing: 8:00AM 02/09/2018

House Committee

Energy and Environment

Public Hearing and Work Session

HR D

[HB 4025 INTRO](#)

Relating to emergency preparedness; declaring an emergency.

Requires Legislative Policy and Research Director to study methods for supporting economic resilience in communities affected by emergencies or disasters.

Bill Sponsor: Presession filed (at the request of House Interim Committee on Economic Development and Trade)

Current Committee: Economic Development and Trade (H)

Next Hearing: 8:00AM 02/07/2018

House Committee

Economic Development and Trade

Work Session

HR E

[HB 4027 INTRO](#)

Relating to property taxation; prescribing an effective date.

Defines "solar project" to mean photovoltaic solar power generation facility and land on which facility is located.

Bill Sponsor: Presession filed (at the request of House Interim Committee on Revenue)

Current Committee: Revenue (H)

Next Hearing:

[HB 4028 INTRO](#)

Relating to tax expenditures; prescribing an effective date.

Limits expenses for which dependent care income tax credit may be claimed to lesser of each spouse's income on joint return and to earned income taxable by Oregon.

Bill Sponsor: Presession filed (at the request of House Interim Committee on Revenue)

Current Committee: Revenue (H)

Next Hearing: 1:00PM 02/06/2018

House Committee
Revenue
Public Hearing
HR A

[HB 4042 INTRO](#)

Relating to a workforce development pilot program; declaring an emergency.

Establishes Prosperity 1,000 Pilot Program to provide career coaching, occupational training and job placement services for 1,000 low-income job seekers in east Multnomah County.

Bill Sponsor: Presession filed (at the request of House Interim Committee on Higher Education and Workforce Development)

Current Committee: Higher Education and Workforce Development (H)

Next Hearing: 3:00PM 02/08/2018

House Committee
Higher Education and Workforce Development
Public Hearing and Possible Work Session
HR D

[HB 4060 INTRO](#)

Relating to transportation; prescribing an effective date. Modifies and adds laws related to transportation.

Bill Sponsor: Presession filed (at the request of Joint Committee on Transportation)

Current Committee: Transportation (J)

Next Hearing: 5:30PM 02/07/2018

Joint Committee
Transportation
Public Hearing
HR D

[HB 4086 INTRO](#)

Relating to building codes; declaring an emergency.

Removes requirement that building inspector for municipality be employee of municipality.

Bill Sponsor: Presession filed (at the request of House Interim Committee on Business and Labor)

Current Committee: Business and Labor (H)

Next Hearing: 3:00PM 02/09/2018

House Committee
Business and Labor
Public Hearing and Possible Work Session
HR E

[HB 4108 INTRO](#)

Relating to tax incentives for affordable housing; prescribing an effective date.

Allows credit against net income taxes for portion of eligible costs of newly constructed single-family

dwelling that sells for price affordable to household with annual income at or below 120 percent of area median income.

Bill Sponsor: Rep Esquivel; Rep Kennemer; Rep Noble; Rep Olson; Rep Power; Rep Smith DB; Rep Stark; Rep Vial; Rep Wilson; Rep Witt; Sen Beyer; Sen Hansell; Sen Johnson; Sen Knopp; Sen Kruse; Sen Olsen; Sen Roblan; Sen Thomsen (Presession filed)

Current Committee: Revenue (H)

Next Hearing: 1:00PM 02/08/2018

House Committee

Revenue

Public Hearing

HR A

[HB 4109 INTRO](#)

Relating to carbon sequestration.

Directs Department of Environmental Quality and State Forestry Department to study opportunities for state actions to promote carbon sequestration and to include in study consideration of regional approaches for reducing greenhouse gas emissions through carbon sequestration.

Bill Sponsor: Rep Barreto; Rep Lewis; Rep Noble; Rep Olson; Rep Smith DB; Rep Sprenger; Rep Stark; Rep Witt; Sen Roblan (Presession filed)

Current Committee: Agriculture and Natural Resources (H)

Next Hearing: 8:00AM 02/08/2018

House Committee

Agriculture and Natural Resources

Public Hearing

HR D

[HB 4121 INTRO](#)

Relating to Housing and Community Services Department programs; declaring an emergency.

Requires Housing and Community Services Department to establish and administer program that provides incentive payments to construction contractors undertaking energy improvement projects on residential structures and provides grants for energy improvement projects for manufactured dwellings.

Bill Sponsor: Rep Fahey; Rep Keny-Guyer; Rep Marsh; Rep Noble; Rep Olson; Rep Sanchez; Rep Smith DB; Sen Boquist (Presession filed)

Current Committee: Economic Development and Trade (H)

Next Hearing: 8:00AM 02/07/2018

House Committee

Economic Development and Trade

Public Hearing and Possible Work Session

HR E

[HB 4148 INTRO](#)

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

Bill Sponsor: Rep Greenlick; Rep Helm; Rep Holvey; Rep Keny-Guyer; Rep Lively; Rep Marsh; Rep Reardon; Sen Dembrow; Sen Prozanski (Presession filed)

Current Committee: Energy and Environment (H)

Next Hearing: 8:00AM 02/09/2018

House Committee

Energy and Environment

Public Hearing

HR D

[HJR 201 INTRO](#)

Proposing amendment to Oregon Constitution relating to affordable housing.

Proposes amendment to Oregon Constitution to allow municipal corporations to use certain bonded indebtedness to finance capital costs of affordable housing, with certain limitations.

Bill Sponsor: Presession filed (at the request of House Interim Committee on Human Services and Housing)

Current Committee: Human Services and Housing (H)

Next Hearing: 8:00AM 02/06/2018

House Committee

Human Services and Housing

Public Hearing and Possible Work Session

HR E

[HJR 202 INTRO](#)

Proposing amendment to Oregon Constitution relating to affordable housing.

Proposes amendment to Oregon Constitution to allow state to incur general obligation indebtedness to finance costs associated with acquiring, improving, constructing, developing, remodeling, repairing, equipping or furnishing real or personal property, or planning therefor, or issuing grants or loans, in order to maintain or increase availability of affordable housing in this state.

Bill Sponsor: Presession filed (at the request of House Interim Committee on Human Services and Housing)

Current Committee: Human Services and Housing (H)

Next Hearing:

[SB 1507 INTRO](#)

Relating to greenhouse gas emissions; declaring an emergency.

Requires Environmental Quality Commission to adopt by rule program that places cap on greenhouse gas emissions and that provides market-based mechanism for covered entities to demonstrate compliance.

Bill Sponsor: Presession filed (at the request of Senate Interim Committee on Environment and Natural Resources)

Current Committee: Environment and Natural Resources (S)

Next Hearing: 3:00PM 02/07/2018

Senate Committee
Environment and Natural Resources
Public Hearing
HR F

[SB 1508 INTRO](#)

Relating to fees on air contamination sources; declaring an emergency.

Requires Environmental Quality Commission to establish fee applicable to certain air contamination sources to cover direct and indirect costs of Department of Environmental Quality and commission in developing and implementing a program and rules to reduce public health risks of emissions of toxic air contaminants from industrial and commercial air contamination sources.

Bill Sponsor: Presession filed (at the request of Senate Interim Committee on Environment and Natural Resources)

Current Committee: Environment and Natural Resources (S)

Next Hearing:

[SB 1514 INTRO](#)

Relating to periodic sunset review of state government entities; prescribing an effective date.

Establishes periodic sunset review of state boards, commissions, committees, task forces and other executive department entities that meet certain criteria.

Bill Sponsor: Presession filed (at the request of Senate Interim Committee on General Government and Accountability)

Current Committee: General Government and Accountability (S)

Next Hearing: 3:00PM 02/06/2018

Senate Committee
General Government and Accountability
Public Hearing
HR C

[SB 1519 INTRO](#)

Relating to State Department of Energy; declaring an emergency.

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

Bill Sponsor: Sen Beyer; Sen Olsen (Presession filed)

Current Committee: Business and Transportation (S)

Next Hearing: 3:00PM 02/12/2018

Senate Committee
Business and Transportation
Public Hearing and Possible Work Session
HR B

[SB 1537 INTRO](#)

Relating to State Department of Energy; declaring an emergency.

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

Bill Sponsor: Presession filed (at the request of Senate Interim Committee on Business and Transportation)

Current Committee: Business and Transportation (S)

Next Hearing: 3:00PM 02/12/2018

Senate Committee

Business and Transportation

Public Hearing and Possible Work Session

HR B

[SB 1541 INTRO](#)

Relating to toxic air contaminants; declaring an emergency.

Authorizes Environmental Quality Commission to adopt program and rules to reduce public health risks of emissions of toxic air contaminants from industrial and commercial air contamination sources.

Bill Sponsor: Rep Witt; Sen Girod; Sen Roblan; Sen Winters (Presession filed)

Current Committee: Environment and Natural Resources (S)

Next Hearing:

[SB 1552 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 Baertschiger Jr; Sen Boquist; Sen Girod; Sen Kruse; Sen Linthicum; Sen Thomsen (Presession filed)

Current Committee: Business and Transportation (S)

Next Hearing: 3:00PM 02/14/2018

Senate Committee

Business and Transportation

Public Hearing and Possible Work Session

HR B

Tab 10

Energy Trust of Oregon Glossary of Key Terms and Program Descriptions

Updated April 2017

Key terms

Allied technical assistance contractors: Allied technical assistance contractors provide technical analysis and studies to help industrial customers identify energy-efficiency upgrades.

Avoided cost: The amount of money that an electric utility would spend for the next increment of electric generation it 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 gets paid for power sold to the utility.

Benefit/cost ratio: Energy Trust ensures investment in cost-effective energy efficiency based on the Total Resource Cost Test benefit/cost ratio and the Utility Cost Test benefit/cost ratio. Together, the tests assess the value of the energy-efficiency investment compared to a utility supplying the same amount of energy, and determine whether energy efficiency is the best energy buy for a utility and for all utility customers.

Total Resource Cost Test: This is the main test that determines whether Energy Trust can offer an incentive for a project. Benefits include the value of energy savings to the ratepayers of the utility system over the expected life of the energy-efficiency resource (otherwise known as the avoided cost of energy), and in some cases benefits also include quantifiable non-energy benefits, such as water savings and operations and maintenance benefits. Costs include the total cost of the energy-efficiency resource, including Energy Trust incentives and the project cost paid by the participating customer.

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. Benefits include the value of energy savings to the ratepayers of the utility system over the expected life of the energy-efficiency resource (otherwise known as the avoided cost of energy). Costs include the cost of the Energy Trust incentive.

Multnomah County Property Fit initiative (formerly Commercial Property Assessed Clean Energy): Started in Q3 2015, the pilot provides 100 percent of funding to commercial property owners that complete comprehensive energy-efficiency and renewable energy projects, with standard incentives from Energy Trust and long-term loans from the Portland Development Commission repaid through energy savings or electricity production.

Cost-effectiveness: The OPUC has a definition that refers to 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.

Demand response: A load management strategy, it is the reduction in electricity consumption by end-use customers from their normal pattern of consumption during times of peak energy use, when wholesale electricity prices are high and/or when system reliability is jeopardized. Customers are often compensated for participating in demand response programs.

Energy Saver Kit: Customers of Portland General Electric, Pacific Power, NW Natural and Cascade Natural Gas can order free Energy Saver Kits from Energy Trust's website, including energy-saving LEDs, showerheads and faucet aerators.

EPS™: Builders can receive cash incentives for new homes constructed to EPS energy performance requirements, indicating low energy consumption, utility costs and carbon footprint. The score helps homebuyers assess and compare the energy use and costs of similarly sized homes.

Irrigation modernization: A collaborative effort by Energy Trust and Farmers Conservation Alliance, irrigation modernization connects irrigation districts and farmers with tools to invest in modern irrigation infrastructure, saving water and energy, improving habitats for fish and generating clean energy through small-scale hydropower systems installed in pipes.

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 a measure.

LivingWise kits: LivingWise kits and curriculum are delivered to sixth-grade students in Oregon schools. Energy Trust provides free LivingWise science curriculum to teachers, and offers energy-saving LEDs and showerheads for students to install in homes.

Market solutions: Tailored market solutions incentive packages help businesses make quick decisions and achieve deeper energy savings when constructing small restaurant, grocery, multifamily, office, school or retail buildings less than 70,000 square feet.

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.

Megaproject: Large commercial or industrial projects receiving more than \$500,000 in Energy Trust incentives for energy-efficiency upgrades are considered megaprojects. These projects are reviewed and approved by Energy Trust's Board of Directors.

Midstream incentive: Midstream incentives are provided to distributors and to retailers, with savings passed onto customers. Downstream incentives are provided directly to customers.

Path to Net Zero: The Path to Net Zero offering provides increased design, technical assistance, construction, and measurement and reporting incentives to new commercial construction projects that aim to exceed energy code by 40 percent through a combination of energy-efficiency and renewable energy features.

Pay for Performance: The Pay for Performance offering for commercial customers offers incentives for capital and operations and maintenance improvements over a multiyear period to help achieve additional energy savings for more comprehensive projects.

Program Management Contractor (PMC): Company contracted 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. Contracts are rebid on a regular basis.

Program Delivery Contractor (PDC): Company contracted 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. Contracts are rebid on a regular basis.

Project development assistance: Incentives and support for early-stage development of Other Renewables projects helps build a pipeline of future renewable energy projects.

Retrocommissioning: A systematic process for identifying less-than-optimal performance in commercial equipment, lighting and control systems and improving the energy efficiency of these existing systems.

Savings Within Reach: Owners of single-family or manufactured homes who meet moderate-income qualifications can receive enhanced Savings Within Reach incentives for qualifying projects.

Strategic Energy Management: Energy Trust helps industrial and commercial customers reduce energy use and save money through behavioral and low-cost operations and maintenance improvements.

Verifier: Trade ally verifiers provide technical guidance and inspection to home builders, ensuring that homes rated with EPS save energy through energy-efficient windows, HVAC, appliances and weatherization.

Program descriptions

Existing Buildings. The Existing Buildings program offers energy-efficient improvements for existing commercial buildings of all sizes. Incentives are available for custom projects, including capital upgrades and operations and maintenance improvements; standard upgrades; lighting upgrades; and energy management offerings with tools, training, technical assistance and Strategic Energy Management offerings to help customers reduce energy use through behavioral and operations improvements.

Existing Multifamily. The Existing Multifamily program serves existing multifamily buildings with two or more units, including market-rate housing, affordable housing, homeowners associations, individual unit owners, and assisted living and campus living facilities. The program offers standard incentives for water heaters, HVAC equipment, weatherization, appliances and foodservice equipment; free in-unit installation of LEDs, showerheads

and faucet aerators and distribution of advanced power strips; custom incentives for capital improvements; incentives for lighting upgrades in common areas; and incentives paid to distributors to reduce costs of efficient lighting and equipment for customers.

New Buildings. The New Buildings program supports design and construction of high-performance commercial buildings and major renovations of all sizes and building types. Staff engage with building owners, developers, business owners and design professionals to provide standard prescriptive incentives, market solutions incentive packages and custom incentives. Tailored market solutions incentive packages help businesses make quick decisions and achieve deeper energy savings when constructing small restaurant, grocery, multifamily, office, school or retail buildings less than 70,000 square feet.

Production Efficiency. The Production Efficiency program offers technical assistance and incentives to industrial and agricultural businesses, including incentives for custom projects, standard lighting and equipment upgrades delivered by trade allies, and an industrial Strategic Energy Management offering to help customers achieve persistent energy savings through behavioral and operations and maintenance improvements.

Existing Homes. The Existing Homes program serves single-family homeowners, renters and owners of existing manufactured homes with energy-saving recommendations, referrals to qualified trade ally contractors, cash incentives for heating and water heating equipment, smart thermostats, insulation and windows, and LEDs, showerheads and faucet aerators delivered through kits. Enhanced Savings Within Reach incentives are available for moderate-income residents.

New Homes. The New Homes program works with trade ally builders, subcontractors and verifiers to construct energy-efficient homes that exceed code through construction of EPS-rated homes and prescriptive incentives for individual equipment.

Products. The Products program offers cash incentives for residential ENERGY STAR qualified products, including lighting, clothes washers and showerheads. The program also provides energy-saving kits to food pantries to deliver to their clients, and distributes showerheads through water bureaus and districts. In addition, the program encourages the sale of energy-efficient new manufactured homes.

Solar Electric. The Solar program aims to create a vigorous and sustainable market for solar energy by offering cash incentives that lower above-market costs for small solar projects, educating consumers, creating and enforcing quality standards and ensuring a robust network of qualified trade ally contractors. Staff review incentive levels regularly and gradually reduce them to manage budget and respond to decreases in solar costs. The Solar program supports installation of standard solar systems on residential and commercial properties, and also large custom projects if funding is available.

Other Renewables. The Other Renewables program provides project development assistance and incentives that lower above-market costs for projects that generate renewable energy from hydropower, biopower, wind and geothermal resources. Project development assistance supports early-stage development and helps build a pipeline of future renewable energy installation projects. In 2016, staff focused on projects that provide a wide range of benefits, including biogas projects generating energy from anaerobic digestion of organic waste and hydropower projects at irrigation districts.

Northwest Energy Efficiency Alliance. NEEA is a nonprofit organization working to maximize energy efficiency to meet our future energy needs. Michael Colgrove, Energy Trust executive director, serves as a board member. NEEA is supported by and works in partnership with Bonneville Power Administration, Energy Trust and more than 100 Northwest utilities for the benefit of more than 12 million energy consumers. NEEA uses the market power of the region to accelerate innovation and adoption of energy-efficient products, services and practices. NEEA has delivered market transformation savings under contract to Energy Trust since 2002.

