

# Energy Trust Board of Directors

February 20, 2019

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# 164th Board Meeting

Wednesday February 20, 2019

421 SW Oak Street, Suite 300, Portland, Oregon

Agenda		Tab	Purpose
9:30 a.m.	<b>Board Meeting—Call to Order</b> (Alan Meyer) Approve agenda		Action
	<b>General Public Comment</b> <i>The president may defer specific public comment to the appropriate agenda topic.</i>		
	<b>Consent Agenda</b> (Alan Meyer) <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 of any member of the board.</i>	1	Action
	<ul style="list-style-type: none"> <li>December 14, 2018 Meeting Minutes</li> <li>January 28.2019 Strategic Planning Workshop Minutes</li> <li>Approve Authority to Commit Incentive Funds Policy R#867</li> <li>Approve Waiving Program Incentive Caps R#868</li> <li>Approve Waste to Energy Policy R#869</li> </ul>		
9:45 a.m.	<b>President's Report</b> (Alan Meyer)		Info
9:55 a.m.	<b>Investment Earnings</b> (Susan Brodahl)		Info
10:00 a.m.	<b>Nominating Committee</b> (Debbie Kitchin) <ul style="list-style-type: none"> <li>Terms of Office R#871</li> <li>Election of Officers R#870</li> </ul>	2	Action
10:10 a.m.	<b>Staff Report</b> <ul style="list-style-type: none"> <li>Status of Board Review (Michael Colgrove)</li> <li>Diversity Advisory Council Update (Sue Fletcher)</li> <li>Legislative Update (Hannah Cruz)</li> </ul>	3	Info Info Info
10:30 a.m.	<b>Energy Programs</b> <ul style="list-style-type: none"> <li>Program Management Contractor Contract Extension Lockheed Martin (Kate Wellington)</li> <li>Program Management Contractor Contract Extension ICF (Jay Olson)</li> <li>Program Delivery Contractor Contract Extension Cascade (Jessica Kramer)</li> <li>Program Delivery Contractor Contract Extension Evergreen (Jessica Kramer)</li> </ul>	4	Info
11:30 p.m.	<b>Update on Organizational Development Implementation Plan</b> (Greg Stokes)		Info
12:00 p.m.	<b>Lunch Break</b>		

- 1:00 p.m. **Renewable Northwest** (Nicole Hughes) Info
- 1:30 p.m. **Committee Reports**
- Evaluation Committee (Alan Meyer) **5** Info
  - Finance Committee (Susan Brodahl) **6** Info
  - Strategic Planning Committee (Mark Kendall) **7** Info
  - Policy Committee (Alan Meyer) **8** Action
    - Approve Bylaws Change R#872 Distributed via email in advance of meeting
  - Conservation Advisory Council (Alan Meyer, Elee Jen) Distributed via email in advance of meeting
  - Renewable Energy Advisory Council (Ernesto Fonseca, Henry Lorenzen) Distributed via email in advance of meeting
- 2:30 p.m. **Adjourn**

**The next meeting of the Energy Trust Board of Directors will be  
Wednesday, April 3, 2019 at 10:30 a.m.  
at Energy Trust of Oregon, 421 SW Oak, Suite 300, Portland, OR 97204**

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Approve Waste to Energy Policy R#869

**Tab 2 Nomination Committee**

Election to New Terms of Office R#871  
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**Tab 3 Legislative Briefing paper****Tab 4 Energy Programs**

Program Management Contractor Contract Extension Lockheed Martin  
Program Management Contractor Contract Extension ICF  
Program Delivery Contractor Contract Extension Cascade Energy  
Program Delivery Contractor Contract Extension Evergreen Consulting

**Tab 5 Evaluation Committee**

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November 12, 2018 minutes

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January 31, 2019 Minutes A

# Tab 1

# Board Meeting Minutes—162<sup>nd</sup>

December 14, 2018

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**Board members present:** Melissa Cribbins, Roger Hamilton, Eric Hayes, Elee Jen, Mark Kendall, Debbie Kitchin, Henry Lorenzen, Alan Meyer, Anne Root, Roland Risser, Steve Bloom (OPUC ex officio), Janine Benner (Oregon Department of Energy special advisor, by phone), Ruchi Sadhir (Oregon Department of Energy special advisor, by phone)

**Board members absent:** Lindsey Hardy, Susan Brodahl, Ernesto Fonseca

**Staff attending:** Mike Bailey, Wendy Bredemeyer, Justin Buttles, Shelly Carlton, Scott Clark, Amber Cole, Michael Colgrove, Ryan Crews, Chris Crockett, Hannah Cruz, Cheryle Easton, Sue Fletcher, Fred Gordon, Brigid Gormley, Andy Griguhn, Kate Hanson, Steve Lacey, Jed Jorgensen, Betsy Kauffman, Oliver Kesting, Jessica Kramer, Dave McClelland, Debbie Menashe, Spencer Moersfelder, Dave Moldal, Alex Novie, Pati Presnail, Thad Roth, Dan Rubado, Lizzie Rubado, Kenji Spielman, Cameron Starr, Julianne Thacher, Katie Wallace, Jay Ward, Peter West, Whitney Winsor, Robert Wylie, Amanda Zuniga

**Others attending:** Eric Anderson (Pacific Power), Aaron Frenchette (Cascade Energy), Kari Greer (Pacific Power), Anna Kim (OPUC), Brendan McCarthy (Portland General Electric), Anusha Neelan (Cascade Policy Institute), Elaine Prause (OPUC)

## Business Meeting

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Roger Hamilton called the meeting to order at 10:34 a.m. Reminder that consent agenda items can be changed to regular agenda items at any time.

## General Public Comments

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Eric Anderson, strategic manager for renewable energy and emerging tech at Pacific Power and member of Energy Trust's Renewable Energy Advisory Council, provided comments on Energy Trust's proposed changes to its Renewable Energy Certificate (REC) policy on behalf of Pacific Power.

This policy change was discussed at the Renewable Energy Advisory Council, but there was not an opportunity to provide feedback on the current proposal. Pacific Power requested to be brought in for input earlier in the process.

Pacific Power also had concerns that the policy could establish a precedent of divesting ratepayers of value prior to knowing about any potential changes that could come about in the 2019 state legislative session. Pacific Power strongly suggests that this policy change not be deemed a precedent for all projects under 360 kW. Pacific Power also asked that this policy be re-evaluated outside of the three-year review cycle if context changes. In addition, Pacific Power recommends the board delay the decision until after the 2019 legislative session.

Steve Bloom noted that the community solar statute mandates that RECs only go to participants, not the utility.

Brendan McCarthy, government affairs analyst at PGE, expressed concern that community solar projects should not receive Energy Trust incentives. Community solar participants will already receive significant incentive to complete projects through the program.

The board asked if concerns were brought directly to the OPUC, and they were not because the utilities learned about the proposed policy changes very recently.

The board acknowledged written public comment provided through a letter from John Charles at Cascade Policy Institute, which urged the board to adopt option #4 outlined in the policy proposal to not take title to any RECs. The board expressed disagreement with the statement in the letter that “for industrial solar and wind, there is no ‘greening’; there is only a ‘browning’ associated with the required spinning reserves.”

## 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:

- November 14 board meeting minutes
- Board Committee Assignments (R860-(replaces R852) Updated)
- Consent Agenda Procedure 2.01.0001-A (R864)
- Diversity, Equity and Inclusion Policy 4.08.000-P (R862)

Moved by: Roland Risser

Seconded by: Melissa Cribbins

Vote:                      In favor: 10  
                                 Opposed: 0

Abstained: 0

**RESOLUTION 860  
BOARD COMMITTEE APPOINTMENTS  
(REPLACES RESOLUTION 852)**

**WHEREAS:**

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

**It is therefore RESOLVED:**

1. This resolution replaces Resolution 852, adopted by the board at its October 17, 2018, meeting.
2. That the Board of Directors hereby appoints the following directors to the following committees for terms that will continue until a subsequent resolution changing committee appointments is adopted:

<b>Audit Committee</b>
Anne Root, Chair
Melissa Cribbins
Mark Kendall
Karen Ward, outside expert
Roger Hamilton (ex officio)
Pati Presnail, staff liaison
<b>Board Nominating Committee</b>
Debbie Kitchin, Chair
Alan Meyer
Anne Root
Melissa Cribbins
Steve Bloom, OPUC (ex officio)
Roger Hamilton (ex officio)
Greg Stokes, staff liaison
<b>Compensation Committee (formerly 401(k) Committee)</b>
Melissa Cribbins, Chair
Mark Kendall
Roland Risser
Roger Hamilton (ex officio)
Debbie Goldberg Menashe, staff liaison
<b>Executive Director Review Committee</b>
Melissa Cribbins, Chair
Debbie Kitchin
Elee Jen
Roger Hamilton (ex officio)
Amanda Sales, staff liaison
<b>Finance Committee</b>
Susan Brodahl, Chair
Ernesto Fonseca
Debbie Kitchin



Anne Root
Roger Hamilton (ex officio)
Pati Presnail, staff liaison
<b>Policy Committee</b>
Alan Meyer, Chair
Eric Hayes
Ernesto Fonseca
Henry Lorenzen
Anne Root
Elaine Prause (ex officio)
Roger Hamilton (ex officio)
Debbie Goldberg Menashe, staff liaison
<b>Program Evaluation Committee</b>
Lindsey Hardy, Chair
Susan Brodahl
Eric Hayes
Alan Meyer
Jennifer Light, expert outside reviewer
Dulane Moran, expert outside reviewer
Jamie Woods, expert outside reviewer
Warren Cook, ODOE (ex officio)
Roger Hamilton (ex officio)
Sarah Castor, staff liaison
<b>Strategic Planning Committee</b>
Mark Kendall, Chair
Susan Brodahl
Lindsey Hardy
Roland Risser
Ruchi Sadhir, ODOE (ex officio)
Elaine Prause, OPUC (ex officio)
Roger Hamilton (ex officio)
Debbie Goldberg Menashe, staff liaison

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

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

- a. Conservation Advisory Council: Lindsey Hardy, Alan Meyer and Elee Jen**
- b. Renewable Energy Advisory Council: Ernesto Fonseca and Henry Lorenzen**

Moved by: Roland Risser

Seconded by: Melissa Cribbins

Vote:

In favor: 10

Abstained: 0

Opposed: 0

## Resolution 864

### Amend Consent Agenda Procedure

December 14, 2018

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#### Discussion and Recommendation

First approved and adopted by the Energy Trust board in 2003, the Consent Agenda Procedure was adopted to provide a streamline process for routine and non-controversial board resolutions. The process has worked well and is flexible. Staff presented some editorial clarifications to the Policy Committee on November 15, 2018, and the Policy Committee recommended approval by the full board.

#### RESOLUTION 864 AMEND CONSENT AGENDA PROCEDURE

##### WHEREAS:

1. In 2003, the board established a policy directing staff to identify non-controversial and routine items for inclusion in a consent agenda.
2. Staff was directed to err on the side of caution in that determination and has continued to recommend use of the consent agenda judiciously.
3. This policy, up for its regular three-year review, was reviewed by the Policy Committee and is recommended for approval by the full Energy Trust board through the consent agenda at its next full board meeting.

It is therefore **RESOLVED** that the Board of Directors hereby amends the Energy Trust Consent Agenda Procedure as shown below.

Moved by: Roland Risser

Vote: In favor: 10

Opposed: 0

Seconded by: Melissa Cribbins

Abstained: 0

## Marked Version

### 2.01.001-A Consent Agenda Procedure

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History			
Source	Date	Action/Notes	Next Review Date
Board Decision	November 5, 2003	Approved (R221)	11/2006
Policy Committee	October 19, 2006	Reviewed-no changes	11/2009
Policy Committee	October 23, 2012	Reviewed-no changes	10/2015
Board Decision	November 4, 2015	Approved (R756)	11/2018
Board Decision	December 14, 2018	Approved (R864)	12/2021

#### POLICY

~~That Energy Trust of Oregon, Inc., Board of Directors hereby approves the option of placing~~  
**Board action items may be placed on a consent agenda, according to the following guidelines:**

- Written decision documents on consent agenda items will follow the same format and contain the same information as provided for regular agenda items.
- Where appropriate, consent agenda items will meet the following criteria:
  - Involve routine and non-controversial matters

- Conform with a previously adopted board policy or implement a project previously approved by the board in a formal resolution
- If an energy efficiency matter, involve a cost-effective action as documented by pertinent financial information, energy savings/production, or other outcomes
- If a renewable energy matter, involve items that will follow the process approved by the board specifically for that program, if any
- Can be accomplished within the board-approved budget with clearly specified budget authority
- No board or public comment is anticipated regarding the proposed action.
- If the consent agenda item authorizes an increase in expenditures under a previously existing contract, the resolution must include but not be limited to:
  - The original amount of the contract
  - The number and amount of prior increases
  - The amount of the current proposed increase
  - The reason for the increase, and
  - The resulting total contract amount.
- The existing conflict of interest rules apply to votes of all items on the consent agenda.
- Any item on the consent agenda will be moved to the regular agenda upon request from any board member.

## Clean Version

### 2.01.001-A Consent Agenda Procedure

History			
Source	Date	Action/Notes	Next Review Date
Board Decision	November 5, 2003	Approved (R221)	11/2006
Policy Committee	October 19, 2006	Reviewed-no changes	11/2009
Policy Committee	October 23, 2012	Reviewed-no changes	10/2015
Board Decision	November 4, 2015	Approved (R756)	11/2018
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  - Conform with a previously adopted board policy or implement a project previously approved by the board in a formal resolution
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  - If a renewable energy matter, involve items that will follow the process approved by the board specifically for that program, if any
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- The number and amount of prior increases
- The amount of the current proposed increase
- The reason for the increase, and
- The resulting total contract amount.
- The existing conflict of interest rules apply to votes of all items on the consent agenda.
- Any item on the consent agenda will be moved to the regular agenda upon request from any board member.

## RESOLUTION 862 DIVERSITY, EQUITY AND INCLUSION POLICY

### WHEREAS:

1. Energy Trust's board of directors adopted its Diversity, Equity and Inclusion Policy in 2017 following an extensive revision of its existing Equity Policy.
2. Acknowledging the breadth of revisions to the board's Equity Policy that the Diversity, Equity and Inclusion Policy represents, the board directed the Policy Committee to review the policy on an annual cycle for the first three years of 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.
3. Energy Trust's board Policy Committee has reviewed the policy revision at its committee meeting on November 15, 2018, and recommends slight revisions to the policy language to clarify and reflect the current status of the diversity, equity and inclusion work underway.

It is therefore **RESOLVED** that the Energy Trust Diversity, Equity and Inclusion Policy is revised as shown below.

### Marked Version

#### 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
Board Decision	December 15, 2017	Revised (R828) Name updated from Equity Policy to Diversity, Equity and Inclusion Policy	October 2018
<u>Board Decision</u>	<u>December 14, 2018</u>	<u>Revised (862)</u>	<u>December 2021</u>

**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 including](#) 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-maintain](#) 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.

## Clean Version

### 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
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Board Decision	December 14, 2018	Revised (862)	December 2021

#### Introduction

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- 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, including 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:
  - h. strategize and plan for Energy Trust program delivery
  - i. deliver programs and services
  - j. partner and collaborate
  - k. allocate resources

- l. communicate and market
- m. build our workforce
- n. evaluate our work

- Energy Trust will maintain 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.
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Moved by: Roland Risser

Seconded by: Melissa Cribbins

Vote: In favor: 10

Abstained: 0

Opposed: 0

## President's Report

Roger Hamilton summarized the *National Assessment of the State of the Climate* report, which states that the impact of human carbon emissions will reach critical impact on global average temperature sooner than expected. One of the impacts will be increasing sea level, which could go up 2.4 meters by 2100, directly impacting the Oregon coast. This could cause a global recession or even depression.

The latest Intergovernmental Panel on Climate Change *Global Warming of 1.5 Degrees Celsius* report indicates that global carbon emissions must be reduced to zero by 2050 to avoid climate chaos with temperature increases above 2 degrees Celsius. Technology is available to do this with renewable energy and energy efficiency. The U.S. projects to increase carbon emissions by 2.7 percent in 2018. The U.S. is the biggest emissions producer per capita of all countries. Hundreds of companies and 90 cities have committed to 100 percent renewable consumption.

Janine Benner added that Governor Kate Brown has taken two notable recent actions. She released her Oregon climate agenda, which highlights eight strategies to achieve the state's climate and economic goals, including to strengthen investment in energy efficiency. She also released a state budget that creates a state Oregon Climate Authority agency.

Roger noted that impacts of climate change in Oregon include drought, forest fires, asthma and tropical diseases moving north.

## Final Proposed 2019 Budget and 2019-2020 Action Plan

Mike Colgrove presented Energy Trust's Final Proposed 2019 Budget and 2019-2020 Action Plan for the board's consideration and approval. He summarized the forecast for the remainder of 2018, where the organization expects to exceed gas efficiency goals, come close to electric efficiency goals and exceed its renewable energy generation goal. Lower electric savings are attributed to delay of a megaproject in PGE territory and delay of some large Existing Buildings custom projects.

In 2019, Energy Trust plans to invest \$201.7 million to save 53.2 average megawatts of electricity, save 6.4 million annual therms of natural gas and generate 2.25 aMW of renewable energy. The savings goal levels are a modest decline from 2018. The organization expects to deliver savings at levelized costs of 3.11 cents/kWh and 39.37 cents/therm. For renewables, generation is expected to increase compared to 2018. The organization will also expand outreach, create operational efficiencies and develop a 2020-2024 strategic plan.

Spending in 2019 will increase 1.4 percent largely due to more small projects, outreach and technical services. Administrative and program support costs will be up slightly at 7.4 percent and staffing costs will be 6.97 percent, both below the caps specified in the OPUC's annual performance metrics.

Key budget takeaways include a focus on underserved markets, increasing cost per unit of savings from smaller projects, completion of residential lighting transition in 2020 as LEDs become standard and no longer need Energy Trust support, declining savings per project, transition of solar market after expiration of Oregon's Residential Energy Tax Credit, challenging project economics for hydropower and biopower projects, increasing resource demands on the organization, and investing in key internal projects to enhance adaptability and operational efficiency.

The board discussed the typical percent of expenditures for incentives in annual budgets, which is generally in the range of 50 to 60 percent overall and roughly 80 percent for renewable energy. Incentives include funds provided to customers, and do not include other services such as technical assistance and inspections. The board discussed how activities are categorized as incentives.

Mike described public comments received about the draft budget, which were largely supportive but included concerns about cost and savings trends and progress on diversity, equity and inclusion efforts.

The board discussed why revenue went down and asked about adjustments to public purpose charge rates on utility bills. Mike clarified that funds are expected to carry over from 2018 to 2019, so less revenue is needed from utilities, and noted PGE rates are being adjusted downward. He referenced rate information for all utilities later in the presentation.

Mike reminded the board of Energy Trust's six annual goal areas, all of which include diversity, equity and inclusion considerations and actions.

Mike addressed OPUC staff feedback on managing costs, and summarized activities planned for 2019 that will help manage levelized costs in the long-term. Efforts include several pilots, existing multifamily program redesign, valuing peak savings, and system and process enhancements.

*Debbie Kitchin arrived at 11:49 a.m.*

Mike continued that levelized costs are increasing largely due to loss of lowest-cost savings sources, such as LEDs. Energy Trust will continue careful cost management strategies to deliver this least-cost energy resource for ratepayers.

The board discussed levelized costs for other utility programs. Energy Trust's levelized costs are in the middle of the pack compared to other programs. Energy Trust's levelized costs for Washington customers of NW Natural are higher due to greater economy of scale in Oregon, the Washington Utilities and Transportation Commission's approach to measuring cost-effectiveness, and challenges of serving single-fuel customers.

The board discussed a decline in savings from Northwest Energy Efficiency Alliance, which is due to no longer claiming savings from battery charger technology that is now baseline.



Mike shared administrative and program support cost trends, which are capped at 8 percent of revenue based on the OPUC performance measure. Increases in 2019 are due to organization and budget review implementation, and cost of living and healthcare increases for those staff who categorized as administrative. In 2020, Energy Trust projects administrative and program support drops back slightly to 7.2 percent of revenue.

The board cautioned that administrative expenses will likely continue to increase after 2019. Steve Bloom added that OPUC is responsible for overseeing expense of ratepayer dollars, and it appreciates the challenges acknowledged. Energy Trust is doing a great job. Mike added that the budget binder includes a memo describing factors impacting administrative and staffing costs.

The board discussed the 2020 budget, which includes a slight reduction in costs due to 2019 investments in organizational development that may not carry through to 2020.

Mike described staffing costs, which will be 7 percent of the 2019 budget and are expected to go up to 7.4 percent in 2020. This performance measure is a three-year rolling average with a cap of 7.25 percent. Staffing costs are driven by increases in healthcare costs, compensation adjustments and compliance with Oregon's pay equity law. Energy Trust did not request additional staff.

The board discussed consideration of vacancies as a percentage of staffing costs, which are not currently included in the calculation. However, Energy Trust expects final staffing expenditures to be lower than budgeted for this reason. Compliance with performance metrics is based both on budgeted and actual expenditures.

Mike clarified that Energy Trust is projecting not to be in compliance with the staffing costs performance metric in 2020. Energy Trust is talking regularly with the OPUC about this and will work with OPUC staff to explore staffing scenarios that would bring the organization into compliance with the performance metric in the next few months.

### **RESOLUTION 861 ADOPT 2019 BUDGET, 2020 PROJECTION AND 2019-2020 ACTION PLAN**

**BE IT RESOLVED** that Energy Trust of Oregon, Inc. Board of Directors approves the Energy Trust 2019 Budget, 2020 Projection and 2019-2020 Action Plan as presented to the board at its meeting on December 14, 2018.

Moved by: Melissa Cribbins

Seconded by: Debbie Kitchin

Vote: In favor: 10

Abstained: 0

Opposed: 0

*The board took a break for lunch at 12:18 p.m. and reconvened at 12:33 p.m.*

## **Communications and Customer Service**

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Shelly Carlton, senior marketing manager, and Denise Olsen, marketing services project manager, presented a resolution to approve a media buying contract with Coates Kokes.

The role of advertising is to raise awareness of Energy Trust offerings and motivate customers to act. Advertising is increasingly complex to manage, given the organization's need to reach deeper into communities. Energy Trust manages up to 75 media buying contracts.

This contract includes a new process where the agency would negotiate and manage contracts and invoices, reducing Energy Trust's staff resourcing for this work so the resources can be devoted to other priority work. Agencies have systems to more efficiently do this work, and expertise and relationships that Energy Trust can leverage get more out of its advertising investments. Shelly described how Energy Trust conducted an RFP for a media buying and received 12 responses.

The board discussed the proposed contract, asking questions regarding the expertise of Coates Kokes in media buying, metrics for success of advertising, cost and scope of the contract, and types of media consumption across the state. The board noted economies of scale for advertising firms with the ability to leverage media buying power across all clients.

**RESOLUTION 865  
AUTHORIZING A CONTRACT WITH COATES KOKES FOR ADVERTISING PURCHASES AND  
PURCHASING SERVICES**

**WHEREAS:**

- 1. Media buying at Energy Trust allows programs to advertise in print, radio, TV, outdoor and online, creating program awareness, and promoting services, programs, and products.**
- 2. Advertising is the most common answer to how participating customers first hear of us, and there is a clear connection between advertising and customer awareness and engagement, leading to savings and generation.**
- 3. Increased advertising reach, using a professional media buyer with constant media contact and significant media data, would allow Energy Trust to expand customer participation by increasing the number of times people see our message.**
- 4. Media planning and buying is currently done on an annual basis, requiring staff time in Communications & Customer Service and Finance over several months to plan and process invoices for roughly 75 contracts. Most of this time can now be reallocated to other priority activities in the 2019 business plan.**
- 5. Following a review of proposals received through a request for qualification competitive bidding process for advertising purchasing services, staff proposes to execute a contract with Coates Kokes to purchase up to \$1.2 million in advertising on behalf of Energy Trust through multiple media contracts, consistent with the 2019 board approved budget, for the purchase of broadcast radio, TV, print and non-programmatic online media in 2019.**
- 6. Based on scoring of proposals, staff believe Coates Kokes is uniquely suited to do this work and has demonstrated skill, expertise, and competitive pricing.**

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

- Sign a contract with Coates Kokes for advertising purchasing services with terms and conditions that include, but are not limited to, the following:**
  - Authorizing payments of up to a total of \$1.2 million for the purchase and reporting of broadcast radio, TV, print and non-programmatic online media on behalf of Energy Trust, with up to \$157,500 of the total authorized contract amount payable to Coates Kokes for advertising purchasing services and up to \$1,042,500 for advertising purchases made on behalf of Energy Trust and payable to Coates Kokes under contract terms and conditions;**
  - providing for a contract term to cover advertising and advertising purchasing services through 2019;**
  - providing for monthly reporting on purchased media reach and copy; and**

- **other terms and conditions to ensure Coates Kokes services and media purchases are designed and executed to further Energy Trust's advertising strategy.**

Moved by: Anne Root

Seconded by: Alan Meyer

Vote: In favor: 10

Abstained: 0

Opposed: 0

## **Diversity, Equity and Inclusion Annual Operations Plan Update**

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Debbie Menashe, director of legal and human resources, gave an update about Energy Trusts diversity, equity and inclusion work in 2018, and acknowledged staff and an organizational consultant, Dani Ledezma.

Today the board approved a diversity, equity and inclusion policy, which instructs Energy Trust to engage in diversity, equity and inclusion activities. In 2018, staff began planning for a Diversity Advisory Council to guide the board, including preparations for convening a foundational group of eight community advisors to help Energy Trust form the council. The foundational group, staff, Susan Brodahl and Ernesto Fonseca will meet for the first time in January. Staff also conducted an in-depth data, baseline and participation analysis, which the board learned about in November. Energy Trust also completed a diversity, equity and inclusion operations plan in early 2018, which includes 10 goals.

The board was pleased to see diversity, equity and inclusion data metrics show up in program and project presentations. It's helpful to see how DEI becomes part of the fabric of the organization's work.

Jessica Kramer, senior industrial and agricultural program manager, presented the two goals relating to programs. The first goal, energy efficiency programs, is broken up into sectors.

The residential sector plans to increase the residential participation rate by 20 percent in communities of color by the end of 2020, which would be an increase from 50,000 to 60,000 households. An example of this work is partnering with community-based organizations to deliver offerings.

The board recommended that the definition of residential include multifamily. Staff clarified that Energy Trust's residential diversity, equity and inclusion goal includes single-family and people who live in small multifamily buildings, with units of five or fewer. Residents of large multifamily buildings are served by the commercial program. Residential and commercial teams will coordinate to achieve goals.

The board clarified the goals are about participants in diverse census tracts, not participants who are diverse.

The commercial goal is for the Existing Buildings program and focuses on small and medium businesses and rural businesses. The goal is to increase participation from both groups by 20 percent by 2020. To serve these customers, the Existing Buildings program will collaborate with industrial sector. In 2019, staff will test methods for reaching these customers and make recommendations for 2020. Roughly 80 percent of customers are large or located in urban areas.

The industrial goal is to increase participation from small and medium businesses in rural territories by 20 percent by the end of 2020. Through the custom track, Energy Trust will work directly with customers through outreach. Through the standard track, Energy Trust will work with vendors and trade allies. The first step for standard track is to do research to identify specific target areas and strategies. One specific focus area will be Southern Oregon. The Industrial team will also be assessing marketing

methods used in 2018 to apply learnings in 2019. Cannabis grow operations are served by the industrial program, but they are not a specific target of the sector's diversity, equity and inclusion goal.

Goal two, the renewable energy goal, was established using a composite of all diversity, equity and inclusion focus areas—including low income, rural and racially diverse customers—with focus on areas of greatest need throughout the state. The goal is to increase the number of projects sited in these communities. Activities include providing solar innovation grants for communities and developing a Solar Within Reach incentive, similar to the residential Savings Within Reach incentive.

Sue Fletcher, communications and customer service senior manager, provided an update on two goals regarding the trade ally network. Goal three is to increase participation in the Trade Ally Network by minority-owned and women-owned businesses by 50 percent each by the end of 2020. There are currently 27 minority-owned and 15 women-owned businesses in the network, representing two percent and one percent of all trade allies, respectively. Businesses that are both minority-owned and women-owned are counted once.

An increase of 50 trade allies would mean 14 new minority-owned contractors and eight new women-owned contractors. This goal requires work to cultivate relationships with these underrepresented businesses. Energy Trust will work with trade and culturally specific organizations to build relationships with local businesses, such as Oregon Association of Minority Entrepreneurs.

Goal four is to increase the number of projects completed by minority-owned and women-owned business by 15 percent by the end of 2020. Projects are marked completed in Energy Trust's systems once an incentive is paid. To achieve this goal, Energy Trust will increase engagement with current minority-owned and women-owned business allies to support them and remove barriers. The organization will also seek to enroll diverse contractors in specific initiatives, such an offer targeted to a particular community.

Goal six is to increase market awareness by developing and deepening relationships with up to 50 organizations by the end of 2020. Energy Trust identified 80 existing relationships with organizations that could be considered as part of this goal. It plans to deepen 25 currently existing relationships and create new relationships with 25 organizations. It's key that the relationships benefit both organizations. Energy Trust aims to achieve savings and generation goals by collaborating with organizations to better reach and serve their communities. Organizations include community-based organizations, tribes, municipalities and others. Relationships could range from sponsorships to contracts to exchange of information.

The board asked about activities targeting low-income customers. Energy Trust has not been able to figure out how to identify commercial entities as low-income or racially diverse. For the residential goal, the goal is on racial diversity, and Energy Trust will try to reach low-income customers in those areas. Energy Trust has many existing offers for low-income customers, and the residential sector decided to focus on racial diversity because there are more opportunities for improvement. The board stated that Energy Trust should have goals for all three diversity focus areas: low-income, racial diversity and rural/urban location.

Mike added that other agencies serve low-income customers, and staff are doing work to understand that landscape of organizations and services. Serving these customers is a coordinated conversation with other agencies.

The board asked if Energy Trust will take a linear approach to achieving these goals. This work is a continuous effort over the two years. For the community-based organization goal, these will be long-term relationships that go beyond the two-year timeframe and will be acquired over the two year period.

Debbie Menashe described goal five, which is to increase the number of contracts with minority-owned and women-owned business by 15 percent by the end of 2020. Energy Trust currently has 48 contracts

with contractors identified as diverse compared to an annual total of roughly 500 contracts. Staff examined and coded current contracts, and developed a new tracking tool to monitor the number diversity, equity and inclusion of contracts and funds spent. Energy Trust will learn more from community-based organizations about service providers. Staff plan to focus first on catering and other professional services contracts.

The board suggested also tracking spending on diversity, equity and inclusion contracts. This is best practice in the construction industry. The board discussed challenges and opportunities for tracking contracting spending, including the challenge of several very large Program Management Contractor and Program Delivery Contractor contracts. Debbie Menashe expressed willingness to consider this option, and reiterated that the goal is to increase participation in programs.

Goal seven is to increase the diversity of Energy Trust's applicant pool and hires by 25 percent. This goal is critical to achieve all other diversity, equity and inclusion goals. Reflecting communities will help the organization better serve these customers, and the organization's credibility in this work depends on achieving this goal.

The board discussed annual staff turnover, which has been roughly 11 percent over the last two years, and noted that this goal is relatively small as it represents only three diverse hires.

Debbie Menashe continued that Energy Trust is partnering with staffing agencies that emphasize diversity, and the organization is tracking on diversity of applicants through a third party. It's just as important to retain diverse employees as it is to hire them, and Energy Trust needs to build leadership that reflects the community and indicates growth opportunities for all employees.

The board observed that employee turnover is very low, and it noted that management have been here for a long time and there's little opportunity for upward mobility. Debbie explained that Energy Trust is focusing on succession planning, which was encouraged in the Secretary of State's audit recommendation. Mike added that Energy Trust may not be able to fill all vacant positions in future years to manage staffing costs. The organization needs to revisit this goal through a different lens as it understands more about our staffing planning.

Goal nine is to increase organizational cultural responsiveness. Cultural responsiveness means increasing the ability of an organization to work with different kinds of people, including building awareness, empathy and sensitivity. In 2015, staff and board completed an Intercultural Effectiveness Scale survey, and Energy Trust plans to conduct this survey again to assess progress. The organization plans to offer cultural responsiveness training and to bring guest speakers representing communities. The board recommended providing information to staff about rural communities, and noted that Energy Trust will hold its July 2019 board meeting in Pendleton.

The final goal is to increase transparency about diversity, equity and inclusion. Energy Trust plans to publish its DEI operations plan and progress toward goals, provide updates in quarterly and annual reports to OPUC, and provide additional reporting for stakeholders and the public. This goal is important to hold ourselves accountable.

The board discussed how Energy Trust defines customer types according to its programs, which may not make sense for customers or communities. For example, the residential goal excludes a large number of multifamily customers. That's a barrier to communication with customers. Energy Trust needs to blend our data and program strategies better. Debbie Menashe acknowledged that this work has highlighted some of those inconsistencies and sparked discussion, and agreed on the need to be clearer in communications and think differently about collaborating across programs.

The board also advised that data based on census tracts is not accurate enough to guide Energy Trust's diversity, equity and inclusion efforts. Mike described a recent open house with community-

based organizations who recommended that Energy Trust collect demographic information on applications. A pilot to collect demographic data on applications is likely next year.

*The board took a break from 2:08 to 2:13 p.m.*

## **Energy Trust E3 Sustainability Report**

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Katie Wallace, marketing project manager, and Robert Wylie, renewable energy program coordinator, presented a 2016 and 2017 E3 Sustainability Report from Energy Trust's E3 team, a group of staff that volunteer their time to improve the organization's sustainability practices. E3 stands for energy, environment and engagement. E3 reviews and improves business practices and educates employees about sustainability practices.

The E3 Sustainability Report is created every two years and highlights activities and accomplishments, such as promoting sustainability commuting, promoting recycling, volunteering at the Oregon Food Bank, improving efficiency in office operations and hosting a sustainability goal. Goals for the future are to continue hosting a sustainability fair, provide opportunities to recycle non-curb-side items and household appliances, and enhance employee volunteer opportunities and increase employee engagement.

## **Strategic Planning Unique Role of Value**

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As chair of the Strategic Planning Committee, Mark described recent work to plan for Energy Trust's 2020-2024 Strategic Plan.

Debbie Menashe and Hannah Cruz, senior communications manager, presented strategic planning progress and acknowledged the board strategic planning committee, staff and consultant Holly Valkama.

Hannah provided an overview of strategic planning work to date. The committee is currently developing five strategic planning building blocks, including a strengths and capabilities map, unique role of value statement, key drivers, scenarios and opportunities. A draft plan will be available in Spring 2019 and a final proposed plan will be available October 2019 for board consideration.

In May 2018, the board worked on developing a strengths and capabilities map. Since then, staff engaged Conservation Advisory Council and Renewable Energy Advisory Council for input on what Energy Trust does in the market that nobody else does or nobody else does as well as Energy Trust. Energy Trust's current unique role of value is what differentiates it from other organizations. Value can be what it delivers, where it is delivered and to whom it is delivered.

The strategic planning committee and staff identified the policy environment and available energy resource as key drivers for scenario planning. Staff, Conservation Advisory Council and Renewable Energy Advisory Council members were asked if the policy environment and available resource will be better or worse in the next five years and what's the likelihood of that outcome. Based on that input, staff derived three scenarios: "incremental evolution," "resiliency now" and "hungry for action" for 2020-2024.

The committee selected a modified version of "incremental evolution," with more of an emphasis on resilience, as the most likely scenario. This scenario envisions that new clean energy policies will be passed, but implementation will take time. It anticipates declining cost-effective electric energy efficiency resource, with an uptick at the end of the five years. A single technology is not expected to bring large amounts of savings, like LEDs have in the past. Instead, the scenario expects technology to optimize energy use (such as through controls and "smart" devices) that will support grid management (such as peak management and demand response). Climate change is expected to impact rural and coastal communities more than other communities. Oregon will continue to face affordability

challenges, such as with housing, and an economic recession is likely. Yet innovative policies, such as Portland Clean Energy Fund, will continue to emerge in some areas.

With Conservation Advisory Council, Renewable Energy Advisory Council, some board members and staff, the team explored opportunities in clean energy this scenario would present. They identified opportunities included linking renewable energy and storage to address resilience, unlocking and deploying financing innovations to scale investments, and advancing partnerships with private and public entities to increase funding streams for energy efficiency.

Mike described an interactive activity to elicit input from board members on Energy Trust's unique role of value and potential opportunities for the organization during the five-year timeframe. Mike posed four questions to ask when considering each opportunity. Do you think this opportunity is of interest for Energy Trust? Are there other organizations that are better positioned to serve? Would serving the opportunity impact our ability to administer the public purpose charge? Do you believe that this opportunity could be served under our current role?

The board discussed the opportunities and voted to identify opportunities that could be a good fit for Energy Trust.

*Steve Bloom left at 3:28 pm. The board took a break from 3:30 - 3:36 p.m.*

Hannah described upcoming outreach for strategic plan development, including early engagement in February through April, a draft available in May, and external outreach, engagement and public comment from June to July. The plan will be revised in September and a final proposed plan will go to the board in October for consideration and approval. Additional engagement is planned with staff, Conservation Advisory Council, Renewable Energy Advisory Council and the Board Strategic Planning Committee.

The board asked about the timeframe for board feedback, and Mike said that staff will send specific feedback requests and deadlines to the board.

The board noted that the strategic planning documents provided are useful. The board also suggested that Energy Trust consider contracting its role as a contrast to thinking about expanding its role and as a way to identify the organization's greatest strengths.

## **Renewable Energy Certificate Policy**

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Betsy Kauffman and Jed Jorgensen presented changes to Energy Trust's Renewable Energy Certificate (REC) policy. All policies can be reviewed and changed if the market changes, and this policy can be reviewed at any time outside of the formal review cycle.

The current policy requires Energy Trust to take ownership of RECs from all projects that receive an installation incentive. The recommendation is for Energy Trust to stop taking title to RECs from all net-metered and onsite use projects under 360 kw. These project owners are prohibited from selling their RECs. Betsy noted a change to the recommendation, informed by public comment.

Betsy described the market conditions that led to the recommendation, including the impossibility of cost-effective delivery of RECs from small net-metered projects to the utilities and the state's upcoming community solar program. Energy Trust cannot provide an incentive for community solar projects if it claims the RECs. Community solar projects that could receive Energy Trust incentives are small community projects serving low-income and diverse communities, and Energy Trust's incentives could help make these projects viable.

The policy change is recommended because it will align with Energy Trust's actual REC practice, enable Energy Trust to provide incentives to small community solar projects and remove impediments to participation by entities wishing to achieve climate goals. This change is supported by the OPUC

staff, majority of Renewable Energy Advisory Council, the board Policy Committee and staff. Staff also propose to report to the board once a year on REC prices and whether it is cost-effective to register projects in Western Renewable Energy Generation Information System, and also following legislative sessions on any changes that could impact REC prices.

The board discussed the public comment received earlier from utilities and considered giving Renewable Energy Advisory Council an additional opportunity to review the policy. Betsy clarified that the Renewable Energy Advisory Council supported eliminating REC policy altogether, and she noted that taking the policy back to Renewable Energy Advisory Council would delay the board's policy decision to April 2019.

The board clarified that it is not requesting a procedural change for policy decisions. Mike asked the board if it would like for a procedural change going forward.

The board discussed the risks of waiting to approve the policy, and Alan moved to postpone a decision until at least the next board meeting. The board invited the utility representatives to provide additional input.

Brendan explained that PGE's concern is regarding Energy Trust's REC policy as it relates to community solar, and the board suggested that Brendan bring his concerns to the OPUC.

Eric noted that Renewable Energy Advisory Council decision was not unanimous, and he would not expect a unanimous decision if this issue went back to the Renewable Energy Advisory Council. Jed clarified that a memo describing the policy change was presented to Renewable Energy Advisory Council for review, and Eric noted that the memo did not include the 360-kw threshold.

Jed cautioned the board against waiting to vote on the policy until April. Energy Trust is a major market influencer, and not changing the policy would have a negative impact on the market. Dave McClelland, solar program manager, explained that Energy Trust's participation in the state's community solar program is a separate discussion from Energy Trust's REC policy. Dave added that with this policy change, Energy Trust wants to give the value of RECs to customers, and noted that community groups have stated that they don't understand the REC transaction.

The board continued to discuss the impacts of delaying a vote on the REC policy.

Elaine Prause, OPUC, stated that the OPUC wants Energy Trust to continue taking RECs from larger projects and applying them to the Renewable Portfolio Standard. However, it's not possible for Energy Trust to register RECS in Western Renewable Energy Generation Information System, and it's reasonable to allow customers to keep RECs since Energy Trust can't register them in WREGIS. This policy change is not impacted by community solar.

The board discussed the value RECs have for customers and asked, if we give RECs to a customer, what can they do with them? Staff said if Energy Trust owns the REC, the customer can't say they're using solar power in their house.

Alan motioned to modify the policy to require review annually instead of every three years, and board members noted that review can occur at any time outside of the annual review. Roland seconded the motion to modify the resolution to provide for the change to an annual review of the policy. Nine board members voted yes, with Melissa opposed. The board then proceeded to a vote on the policy as revised to include a required annual review in addition to the other proposed policy revisions.

Moved by: Mark Kendall

Seconded by: Eric Hayes



Vote: In favor: 10

Abstained: 0

Opposed: 0

The board requested an update following the 2019 legislative session.

## Marked Version

### 4.15.000-P Renewable Energy Certificate (REC) Policy

History			
Source	Date	Action/Notes	Next Review Date
Board Decision	March 3, 2004	Approved (R256)	February 2005
Board Decision	February 16, 2005 (residential tags)	Amended (R313)	
Board Decision	April 6, 2005	Rescind (R313)	February 2008
Board Decision	March 28, 2007	Amended (R433)	February 2010
Policy Committee	October 12, 2010	Reviewed, no changes	October 2013
Board Decision	May 4, 2011	Amended (R584)	May 2014
Board Decision	November 4, 2015	Amended (R759)	November 2018
Board Decision	December 14, 2018	<a href="#">Amended (R863)</a>	December <a href="#">2024-2019</a>

#### PRINCIPLES

The following principles should guide Energy Trust's ownership of renewable energy certificates (RECs) generated by renewable resources:

- RECs generated by renewable energy are one of the multiple values for Oregonians provided through investing in renewable resources.
- Energy Trust RECs should be used for the long-term benefit of customers of Pacific Power and Portland General Electric, as long as the effort and expense associated with registering them is not disproportionate to their value.
- The disposition (retention, transfer) of RECs will coordinate with and further the goals of Energy Trust, state policies and regulatory requirements.
- Where Energy Trust takes ownership of RECs, its ownership should reflect both the REC value and the support provided by Energy Trust.
- Energy Trust should coordinate its REC policy with utility green power programs and rate processes.
- Energy Trust ownership of RECs and the mode of delivery of RECs to Energy Trust should be flexible over time, while reinforcing incentives for long-term project performance.

#### POLICY

##### 1. Annual Board Review [and Two-Year REC Cost Review](#)

- [The Energy Trust Policy Committee will review this policy annually to take into account new market information.](#)
- Energy Trust will ascertain market values and forward price curves for relevant types of RECs and update them periodically.
- In order to ascertain market values and forward prices curves for relevant types of RECs, Energy Trust will consult with PGE, Pacific Power and the OPUC staff and will give consideration to federal and state policies that may affect such values and forward price curves.

- Energy Trust will track the cost and effort involved in registering RECs and report it to the RAC and the board at least every two years, and where the market value of any given REC category is less than the cost of registering them, recommend whether to continue to register them in WREGIS.
- Where the board determines, after RAC review, that the cost and effort entailed in registering RECs of a given type is disproportionate to the market and other values associated with RECs, the board may authorize staff to take title to the RECs without registering them in WREGIS and shall effectuate such authority by board resolution.

## 2. Ownership

- For all physically or virtually net-metered projects, or other projects that use energy on-site, that are less than 360kW in nameplate AC capacity REC ownership will remain with the project owner. Project owners must agree to maintain ownership of RECs over the operational life of the renewable energy system unless Energy Trust incentives are repaid.
- For all Qualifying Facility projects and all other projects greater than or equal to 360kW in nameplate AC capacity, where the board determines that Energy Trust should secure RECs for the benefit of ratepayers, the quantity of RECs for which Energy Trust will take ownership rights will be based on the ratio between Energy Trust's incentive and above-market cost, with an adjustment in cases where the REC market value exceeds the per-REC value of the incentive, determined as follows:
  - Step 1: Multiply the number of RECs that would be generated by a project over the term of the funding agreement with Energy Trust by the percentage of the above-market cost represented by Energy Trust's incentive.
  - Step 2: Divide the incentive amount by the quantity of RECs calculated in Step 1.
  - Step 3: Compare the per-REC value of Energy Trust's incentive to the REC market value ascertained in Section 1 of this policy.
  - Step 4: If the per-REC value of the incentive exceeds the per-REC market value, Energy Trust will take the full amount of RECs calculated in Step 1. If, however, the per-REC market value exceeds the per-REC incentive value, Energy Trust will reduce its REC ownership so that the per-REC incentive value is equivalent to the per-REC market value.
- Energy Trust will reduce its ownership of RECs to the extent that a utility retains RECs for the benefit of its ratepayers pursuant to the utility's green power program or power purchase agreements.

## 3. Delivery of RECs

- Unless the Energy Trust board determines under Section 1 that a type of REC need not be registered in WREGIS, RECs should be delivered to a utility WREGIS account specified by Energy Trust.
- Energy Trust may agree to up-front retention of RECs by a developer or project owner if there are contractual assurances that future RECs will revert to Energy Trust.

## Committee Reports

### *Policy Committee (Alan Meyer)*

The Policy Committee reviewed Energy Trust's diversity, equity and inclusion policy, REC policy and a potential executive committee. It also reviewed bylaws to remove a requirement that Energy Trust must have a chief operating officer. Concerns were raised about risk to Energy Trust by removing that role, and the decision was delayed to when Moss Adams can be present for guidance.

### *Audit Committee (Anne Root)*

Energy Trust's five-year management review is expected in 2020.

### *Evaluation Committee (Phil Degens for Lindsey Hardy)*

The Evaluation Committee reviewed research on solar trade allies, new building market research and ENERGY STAR® windows market research.

*Alan Meyer left at 4:23 p.m.*

***Strategic Planning Committee (Mark Kendall)***

Ruchi Sadhir, Oregon Department of Energy, will take Janine Benner's role on Strategic Planning Committee.

***Conservation Advisory Council (Hannah Cruz for Lindsey Hardy, Alan Meyer)***

Recent Conservation Advisory Council topics included Energy Trust's budget, a trade ally survey and a PGE guest speaker on the utility's smart grid test bed. Tim Hendricks joined the council and represents Building Owners and Managers Association.

***Renewable Energy Advisory Council (Jed Jorgensen for Alan Meyer, Ernesto Fonseca)***

November Renewable Energy Advisory Council topics included Energy Trust's budget, irrigation hydropower projects, a presentation from Oregon Department of Energy on its Biennial Energy Report, strategic planning and low- and moderate-income solar innovation grants.

## **Adjourn**

The meeting adjourned at 4:29 p.m.

**The next regular meeting of the Energy Trust Board of Directors** will be held Wednesday, February 20, at 9:30 a.m. at Energy Trust of Oregon, Inc., 421 SW Oak Street, Suite 300, Portland, Oregon.

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Signed: Mark Kendall, Secretary

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Date

PINK PAPER

# Board Meeting Minutes—163<sup>rd</sup> Meeting

## Strategic Planning Workshop

January 28, 2019

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**Board members present:** Susan Brodahl, Melissa Cribbins, Ernesto Fonseca, Roger Hamilton, Eric Hayes, Elee Jen, Mark Kendall, Debbie Kitchin, Roland Riser, Steve Bloom (OPUC ex officio)

**Board members attending by phone:** Anne Root, Janine Benner (Oregon Department of Energy special advisor)

**Board members absent:** Lindsey Hardey, Henry Lorenzen, Alan Meyer

**Staff attending:** Michael Colgrove, Wendy Bredemeyer, Amber Cole (phone), Chris Crocket, Hannah Cruz, Cheryle Easton, Sue Fletcher, Fred Gordon, Kate Hanson, Betsy Kaufman, Steve Lacey, Debbie Menashe, Spencer Moersfelder, Thad Roth, Lizzie Rubado, Zach Sippel, Julianne Thacher, John Volkman, Peter West, Mark Wyman

**Others attending:** Ruchi Sadhir (ODOE), Elaine Prause (OPUC), Brendan McCarthy (PGE), Holly Valkama (1961 Consulting)

## Business Meeting

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Roger Hamilton called the workshop to order at 10:00 a.m.

## Board Workshop

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***Welcome and Framing of What We've Done So Far*** (Mark Kendall, Mike Colgrove)

Mark described the objective of the meeting, which is to see if Energy Trust's role of value statement is broad enough for the work planned for the next five years.

At the December 2018 board meeting, board members reviewed a list of nine possible new opportunities for Energy Trust. The board found potential in seven of these opportunities, and staff consolidated the list down to six opportunities. Today the board will evaluate the organization's unique role of value statement to determine if it allows for exploration of these six opportunities.

Energy Trust's current unique role of value is: "As principal administrator of public-purpose funds for investor-owned utility ratepayers in Oregon, Energy Trust provides innovative, comprehensive clean energy solutions that provide proven value to ratepayers, utility systems, the economy and the environment. Energy Trust's expertise is in integrating private and public efforts to achieve clean energy goals."

Does this statement serve the organization when considering potential opportunities? What is Energy Trust's future unique role of value in the marketplace? What are the capabilities and competencies the board would like Energy Trust to have?

Mike Colgrove clarified that while the amount of cost-effective energy efficiency will decline, there is still a substantial amount of available resource. It is and will remain Energy Trust's primary role to pursue this least-cost resource for utility customers. The organization is facing unique challenges to fulfill its core role of acquiring cost-effective energy efficiency. One challenge is to get better at developing targeted offering for specific communities and populations. The second challenge is to get better at offering programs midstream and upstream without losing connection with customers. The third challenge is to get better at engineering and development of innovative measures. The fourth challenge is to develop strengths to work at the intersection of energy efficiency, renewable energy and demand response.

***While staying fully committed to our core mission, is an expansion in our unique role of value statement needed to pursue additional opportunities we may have interest in over the next five years? If so, how does our current role of value statement need to change?*** (Holly Valkama)

Holly Valkama, 1961 Consulting, introduced a discussion about Energy Trust's current unique role of value. The unique role of value statement is intended to guide what Energy Trust should and should not do. Where is the organization uniquely positioned to provide a service or serve a group of customers?

#### **Opportunities Discussion** (Lizzie Rubado)

Lizzie Rubado, renewables program strategies manager, facilitated a discussion about Energy Trust's current unique role of value. In December, the board was presented with a list of opportunities that emerged from conversations with Conservation Advisory Council, Renewable Energy Advisory Council and staff. The board provided initial feedback and requested additional information on seven of those opportunities to understand how Energy Trust might provide unique value. These opportunities stretch the margins of Energy Trust's role.

Two opportunities were identified as close to Energy Trust's current role: renewable natural gas and distributed energy resources. Renewable natural gas is an example of a role that Energy Trust is uniquely positioned to play and that has substantial overlap with current work. At the other end of the spectrum is the opportunity for advocacy. While Energy Trust is equipped to play this role, there are many others in the market. What could Energy Trust offer that others don't?

Are there opportunities that would require a change to our unique role of value, and if so, how would our unique role of value need to change?

The board discussed potential opportunities and their impact on Energy Trust's unique role of value statement, including Energy Trust's strengths and the pros and cons of several opportunities.

The board favored maintaining Energy Trust's unique strength as a trusted provider of objective information about energy, which is seen as more powerful than taking an advocacy position. The board discussed ways that Energy Trust could better promote this strength as a resource for the state.

The board discussed distributed energy resources as an opportunity, noting that Energy Trust is uniquely positioned to play this role because of its broad focus on energy solutions.

The board discussed renewable natural gas, suggesting exploration of this opportunity through a pilot and expressing skepticism that this work would have long-term financial benefit for the organization. The board noted that renewable natural gas is a priority for the state and that Energy Trust is uniquely positioned due to our existing relationships and expertise with biogas producers.

The board discussed the opportunity of financing and noted that Energy Trust's role in financing would be to catalyze market activity. The board sees financing as within Energy Trust's current scope and not a new opportunity that would require a change to the unique role of value statement.

The board discussed the need for scaling programs to support smaller local activities, such as community-led climate change efforts.

The board discussed the potential opportunity to adapt cost-effectiveness tests and consider valuing other non-energy benefits. Elaine Prause stated that Energy Trust has the ability to address cost-effectiveness tests within its current role through conversations with the OPUC. The OPUC does not support changing cost-effectiveness tests at this time.

Steve Bloom suggested that Energy Trust maintain focus on its current role and continue to demonstrate wise stewardship of ratepayer funds and benefits for Oregonians.

Elaine Prause noted that parts of Energy Trust's unique role of value statement are too vague, such as "comprehensive clean energy solutions." She also suggested incorporating Energy Trust's role as an unbiased information resource into the statement.

### **Possible Changes in Role of Value Statement—Initial Discussion** (Holly Valkama)

Holly asked the board to discuss changes to the unique role of value statement. This statement gives the organization boundary conditions and will guide decisions about opportunities to pursue in the next five years.

The board discussed potential changes to the unique role of value statement. One option is to broaden the statement to say that Energy Trust "administers energy-related programs benefiting the Pacific Northwest," given that all opportunities under consideration are energy related.

The board discussed the benefit of a fairly broad unique role of value statement, which would enable the organization to adapt in a rapidly changing environment.

The board discussed the word "innovative" in the current statement, which could imply that Energy Trust pursued new opportunities outside of its current scope.

The board discussed the need to decide whether or not the organization should pursue new activities outside of its current role.

The board discussed the first clause of the unique role of value statement, "as principal administrator of the public purpose charge," which could imply that Energy Trust cannot do work outside of its current role. The board agreed that administration of the public purpose charge clause should stay front and center in the unique role of value statement, because this is the core of Energy Trust's work.

The board discussed adding language to the unique role of value statement indicating Energy Trust's track record of consistent accountability and meeting its goals within budget.

The board considered a need to do a better job of informing stakeholders about the organization's current unique role of value.

## **General Public Comments**

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Brendan McCarthy, PGE, suggested that expanding Energy Trust's mission beyond administration of the public purpose charge and adding new funding sources could make it easier for legislators to argue that public purpose dollars should be used for another purpose.

## **Board Workshop**

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### **Possible Changes in Role of Value Statement—Final Thoughts for Drafting a Future Role of Value Statement** (Holly Valkama)

The board discussed potential for more public awareness of climate change and more interest in clean energy solutions in future years. The unique role of value statement should give Energy Trust the ability to act amid this change.

Elaine noted that Energy Trust's potential subcontract role in administering the state's community solar program will be an opportunity for the organization to figure out how to do an activity outside of its core mission. She also suggested that Energy Trust's role as an objective technical resource, such as providing information to evaluate new policies, could lead to new opportunities.

The board discussed additional strengths of Energy Trust that could be added to the unique role of value statement, including its role as a trusted information resource, independence from direct political pressure, and a process for engaging stakeholders and the public through the Conservation Advisory Council, Renewable Energy Advisory Council and trade allies.

The board discussed whether the “principal administrator of the public purpose charge” statement should be at the beginning or the end of the unique role of value statement.

Ruchi Sadhir suggested adding language indicating that Energy Trust has been a steward of public funds. Being a steward for another type of funding could be a new opportunity.

The board discussed that scalability is not addressed in the current unique role of value statement, noting that the organization needs to be more nimble and dynamic to scale its work to support smaller community efforts.

Other considerations were to add language about complementary energy-related programs and clarifying that Energy Trust’s unique role of value is to help customers use less energy.

Janine Benner suggested that Energy Trust remain flexible as the environment is changing. More may be known in May about the proposed Oregon Climate Authority, and that should influence Energy Trust’s strategic planning.

**Next Steps** (Debbie Menashe)

Debbie summarized next steps, which include seeking additional input from the Conservation Advisory Council and Renewable Energy Advisory Council, beginning a draft of the plan, updates at the February board meeting, two Strategic Planning Committee meetings and in-depth discussion at the Board Strategic Planning Workshop on May 16 and 17. If the board has additional questions or desires additional discussion, the full board can be convened prior to the May workshop.

Mike noted staff will send the board a summary of feedback from today’s meeting.

**The meeting adjourned at 12:12 p.m.**

**The next regular meeting of the Energy Trust Board of Directors** will be held Wednesday, February 20, 2019, at 9:30 a.m. at Energy Trust of Oregon, Inc., 421 SW Oak Street, Suite 300, Portland, Oregon.

\_\_\_\_\_  
Signed: Mark Kendall, Secretary

\_\_\_\_/\_\_\_\_/\_\_\_\_  
Date



PINK PAPER

## **Resolution 867**

### **4.21.000-P Authority to Commit Incentive Funds for Payment of Energy Efficiency Projects in Future Years**

February 20, 2019

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#### **Summary**

Authorize revision to the Policy 4.21.000-P on Authority to Commit Incentive Funds for Payment of Energy Efficiency Projects in Future Years.

#### **Background**

- In 2006, the Energy Trust board of directors originally adopted and approved the policy outlining authority to commit incentive funds in future years.
- The policy is up for its regular three-year review.
- The impetus for this policy comes from the Commercial and Industrial program designs, such as strategic energy management or long-term design and construction support, which can involve program engagement and incentive commitments of more than two years. This policy permits longer term commitments, provided such commitment are consistent with budget and action planning and contracting policies, including compliance with OPUC grant agreement guidelines.
- Staff does not recommend any substantive changes.

#### **Discussion**

- The Policy Committee reviewed the Authority to Commit Incentive Funds for Payment of Energy Efficiency Projects in Future Years at its meeting on January 31, 2019, and proposed only formatting revisions to the policy language.
- The Policy Committee recommended that the revised policy be placed on the consent agenda for the board's February 20, 2019, meeting.

#### **Recommendation**

Authorize the modest formatting revisions to the Authority to Commit Incentive Funds for Payment of Energy Efficiency Projects in Future Years as shown below.

#### **RESOLUTION 867 AUTHORITY TO COMMIT INCENTIVE FUNDS FOR PAYMENT OF ENERGY EFFICIENCY PROJECTS IN FUTURE YEARS**

#### **WHEREAS:**

1. Energy Trust's board Policy Committee has reviewed proposed revisions to the Authority to Commit Incentive Funds for Payment of Energy Efficiency Projects in Future Years at its meeting on January 31, 2019, and recommends slight formatting revisions.

**It is therefore RESOLVED** that the Energy Trust Authority to Commit Incentive Funds for Payment of Energy Efficiency Projects in Future Years is revised as shown below.

Moved by:  
Vote: In favor:  
Opposed:

Seconded by:  
Abstained:

## Marked Version

### 4.21.000-P Authority to Commit Incentive Funds for Payment of Energy Efficiency Projects in future Years

History			
Source	Date	Action/Notes	Next Review Date
Board Decision	May 25, 2006	Adopted (R391)	May 2009
Policy Committee	May 19, 2009	editorial revision, deleting building tune-up program	May 2012
Board Decision	Sept 19, 2012	Amended (R644)	Sept 2015
Board Decision	Sept 30, 2015	Amended (R752)	Sept 2018

#### Authorizing Commitment of Incentive Funds for Payment of Energy Efficiency Projects in Future Years

##### WHEREASBACKGROUND:

1. Energy Trust continues to identify improved ways of managing program budgets and maintain accountability.
2. Beginning in 2005, the board approved changes to the annual budget process, program monitoring and reporting of savings and budget expenditures and provided staff the flexibility to shift funds within programs.
3. The Board later modified the policy to (a) accommodate customers with complex multi-year projects and incentive payment requirements in future years: 1-
4. ~~The Board now wishes to modify the policy to~~ (ab) clarify that some of the policy's limitations apply to programs as a whole and others to individual incentive commitments, and (cb) allow individual commitments beyond two years, 1 if the overall limitation on programs budgets is respected and the commitment is consistent with Energy Trust contracting policies and the OPUC grant agreement.

##### It is therefore RESOLVEDPOLICY:

Staff may design energy efficiency programs to pay financial incentives over several years, provided that:

1. Staff reviews such programs annually and ensures that not more than 75% of the program's budgeted financial incentive funds are projected to be committed in the following year, and not more than 25% in the succeeding year.

2. In addition, any long-term financial incentive commitments made to individuals or individual entities shall be:
  - (a) consistent with milestones or conditions in any reservation, tracking or other systems or requirements applicable to these programs;
  - (b) subject to all Energy Trust contracting requirements and policies, and the Energy Trust-OPUC grant agreement;
  - (c) tracked and reflected appropriately in forecasting reports; and
  - (d) displayed by the program and incorporated into the annual budget process.

## Clean Version

### 4.21.000-P Authority to Commit Incentive Funds for Payment of Energy Efficiency Projects in future Years

History			
Source	Date	Action/Notes	Next Review Date
Board Decision	May 25, 2006	Adopted (R391)	May 2009
Policy Committee	May 19, 2009	editorial revision, deleting building tune-up program	May 2012
Board Decision	Sept 19, 2012	Amended (R644)	Sept 2015
Board Decision	Sept 30, 2015	Amended (R752)	Sept 2018

#### Authorizing Commitment of Incentive Funds for Payment of Energy Efficiency Projects in Future Years

##### BACKGROUND:

1. Energy Trust continues to identify improved ways of managing program budgets and maintain accountability.
2. Beginning in 2005, the board approved changes to the annual budget process, program monitoring and reporting of savings and budget expenditures and provided staff the flexibility to shift funds within programs.
3. The Board later modified the policy to (a) accommodate customers with complex multi-year projects and incentive payment requirements in future years; (b) clarify that some of the policy's limitations apply to programs as a whole and others to individual incentive commitments, and (c) allow individual commitments beyond two years if the overall limitation on programs budgets is respected and the commitment is consistent with Energy Trust contracting policies and the OPUC grant agreement.

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provided that:

1. Staff reviews such programs annually and ensures that not more than 75% of the program's budgeted financial incentive funds are projected to be committed in the following year, and not more than 25% in the succeeding year.
  2. In addition, any long-term financial incentive commitments made to individuals or individual entities shall be:
    - (a) consistent with milestones or conditions in any reservation, tracking or other systems or requirements applicable to these programs;
    - (b) subject to all Energy Trust contracting requirements and policies, and the Energy Trust-OPUC grant agreement;
    - (c) tracked and reflected appropriately in forecasting reports; and
    - (d) displayed by the program and incorporated into the annual budget process.
-

PINK PAPER

## **Resolution 868**

### **4.20.000-P Waiving Program Incentive Caps Policy**

February 20, 2019

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#### **Summary**

Authorize revision to the board's Policy on Waiving Program Incentive Caps.

#### **Background**

- The Energy Trust board of directors originally adopted and approved the Policy on Waiving Program Incentive Caps in 2003.
- The policy is up for its regular three-year review.
- The policy imposes specific criteria for projects receiving incentives that exceed program incentive limits, projects sometimes referred to as "megaprojects."
- Staff does not recommend any substantive changes.

#### **Discussion**

- The Policy Committee reviewed the Policy on Waiving Program Incentive Caps at its meeting on January 31, 2019, and proposed small, clarifying revisions to the policy language.
- The Policy Committee recommended that the revised policy be placed on the consent agenda for the board's February 20, 2019, meeting.

#### **Recommendation**

Authorize the modest revisions for clarity to the Policy on Waiving Program Incentive Caps as shown below.

### **RESOLUTION 868 POLICY ON WAIVING PROGRAM INCENTIVE CAPS**

#### **WHEREAS:**

1. **Energy Trust's board Policy Committee has reviewed proposed revisions to the Policy on Waiving Program Incentive Caps at its meeting on January 31, 2019, and recommends slight revisions to the policy language for clarity.**

**It is therefore RESOLVED that the Energy Trust Policy on Waiving Program Caps is revised as shown below.**

Moved by:  
Vote:      In favor:  
              Opposed:

Seconded by:  
Abstained:

## Marked Version

### 4.20.000P

## Policy on Waiving Program Incentive Caps

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History			
Source	Date	Action/Notes	Next Review Date
Board Decision	Oct 1, 2003	Approved (R 212)	Oct 2006
Board Decision	Nov 8, 2006	Approved (R412)	Nov 2009
Board Decision	Nov 4, 2009	Approved (R527)	Nov 2012
Policy Committee	Oct 23, 2012	Reviewed, no change	Oct 2015
Policy Committee	Nov 18, 2015	Reviewed, no change	Oct 2018

### POLICY

The board may approve exceptions to **efficiency** program incentive limits ~~(which may exceed \$500,000 per incentive only with board approval)~~ for projects that meet the following criteria:

1. Exemptions require suspension of self-direction for a minimum of 3 years.
2. Exemptions will be approved only if there is available incentive budget.
3. **Efficiency p**Projects are expected to save energy at a cost per annual unit of energy saved (\$ per annual kilowatt-hour/therm) to Energy Trust that is less than the current incentive levels for the applicable program.

## Clean Version

### 4.20.000P

## Policy on Waiving Program Incentive Caps

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History			
Source	Date	Action/Notes	Next Review Date
Board Decision	Oct 1, 2003	Approved (R 212)	Oct 2006
Board Decision	Nov 8, 2006	Approved (R412)	Nov 2009
Board Decision	Nov 4, 2009	Approved (R527)	Nov 2012
Policy Committee	Oct 23, 2012	Reviewed, no change	Oct 2015
Policy Committee	Nov 18, 2015	Reviewed, no change	Oct 2018

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1. Exemptions require suspension of self-direction for a minimum of 3 years.
  2. Exemptions will be approved only if there is available incentive budget.
  3. Efficiency projects are expected to save energy at a cost per annual unit of energy saved (\$ per annual kilowatt-hour/therm) to Energy Trust that is less than the current incentive levels for the applicable program.
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## **Resolution R869**

### **4.24.000-P Waste-to-Energy Policy**

February 20, 2019

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#### **Summary**

Authorize revision to 4.24.000-P Waste-to-Energy Policy.

#### **Background**

- The Energy Trust board of directors originally adopted and approved the policy establishing funding priorities for waste-to-energy generation projects based on waste source in 2006.
- The policy is up for its regular three-year review.
- Under this policy, biogas projects are prioritized, using waste from human, animal, or plant sources.
- Staff recommends only one change to the policy: the elimination of the policy language that requires waste-to-energy projects be reviewed by Renewables Advisory Council (RAC) before board action. This recommended change is made because, under another board policy, Policy on Other Renewables Approval Process, all Other Renewables projects with funding of \$200,000 or more are reviewed by the RAC.

#### **Discussion**

- The Policy Committee reviewed the Waste-to-Energy Policy at its meeting on January 31, 2019, and supports staff recommendation for deleting the specific requirement for RAC review in light of the Policy on Other Renewables Approval Process.
- The Policy Committee recommended that the revised policy be placed on the consent agenda for the board's February 20, 2019, meeting.

#### **Recommendation**

Authorize the revision to the Waste-to-Energy Policy as shown below.

### **RESOLUTION R869**

### **WASTE-TO-ENERGY POLICY**

#### **WHEREAS:**

1. **Energy Trust's board Policy Committee has reviewed proposed revision to the Waste-to-Energy Policy at its meeting on January 31, 2019, and recommends, that in light of other board policy requiring RAC review of Others Renewables projects, Waste-to-Energy Policy be revised to eliminate the specific reference to RAC review.**

**It is therefore RESOLVED that the Energy Trust Waste-to-Energy Policy is revised as shown below.**

Moved by:  
Vote:      In favor:  
              Opposed:

Seconded by:  
Abstained:

## Marked Version

### 4.24.000-P Waste-to-Energy Policy

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History			
Source	Date	Action/Notes	Next Review Date
Board Decision	November 8, 2006	Approved (R411)	November 2009
Policy Committee	November 17, 2009	No change	November 2012
Policy Committee	October 23, 2012	No change	October 2015
Board Decision	November 4, 2015	Amended (R757)	November 2018

#### POLICY

1. Among waste-to-energy projects, Energy Trust will give top funding priority to those projects using organic or biological wastes from human, animal or plant sources.
2. Among waste-to-energy projects, Energy Trust will give secondary funding priority to projects using wastes from manufacturing and industrial processes that are otherwise lost to commercial use, and that have no higher-value use than energy production. These projects will be considered as funds allow.
3. Eligible projects may use *de minimus* quantities (provisionally, less than 1% of energy content) of petroleum-based materials.
4. Energy Trust will prioritize waste-to-energy projects that meet the above criteria and: (a) do not use waste at the expense of a real, current alternative use with a higher social value, such as re-use or recycling; and (b) divert material from landfills, or otherwise avoid environmentally harmful waste disposal options.

~~5. Waste-to-energy projects will be reviewed~~

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## Clean Version

### 4.24.000-P Waste-to-Energy Policy

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History			
Source	Date	Action/Notes	Next Review Date
Board Decision	November 8, 2006	Approved (R411)	November 2009
Policy Committee	November 17, 2009	No change	November 2012
Policy Committee	October 23, 2012	No change	October 2015
Board Decision	November 4, 2015	Amended (R757)	November 2018

#### POLICY

1. Among waste-to-energy projects, Energy Trust will give top funding priority to those projects using organic or biological wastes from human, animal or plant sources.

2. Among waste-to-energy projects, Energy Trust will give secondary funding priority to projects using wastes from manufacturing and industrial processes that are otherwise lost to commercial use, and that have no higher-value use than energy production. These projects will be considered as funds allow.
  3. Eligible projects may use *de minimus* quantities (provisionally, less than 1% of energy content) of petroleum-based materials.
  4. Energy Trust will prioritize waste-to-energy projects that meet the above criteria and: (a) do not use waste at the expense of a real, current alternative use with a higher social value, such as re-use or recycling; and (b) divert material from landfills, or otherwise avoid environmentally harmful waste disposal options.
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# Tab 2

## **Resolution 871 Terms of Office**

February 20, 2019

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**RESOLUTION 871  
ELECTING ERIC HAYES, ERNESTO FONSECA, DEBBIE KITCHIN,  
HENRY LORENZEN, ALAN MEYER  
TO NEW TERMS ON THE ENERGY TRUST BOARD OF DIRECTORS**

**WHEREAS:**

- 1. The terms of incumbent board members Eric Hayes, Ernesto Fonseca, Debbie Kitchin, Henry Lorenzen, Alan Meyer 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 Eric Hayes, Ernesto Fonseca, Debbie Kitchin, Henry Lorenzen, and Alan Meyer, incumbent board members, to new terms of office that end in 2021.**

Moved by:

Seconded by:

Vote:

In favor:

Abstained:

Opposed:

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## **Resolution 870**

### **Election of Officers**

February 20, 2019

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#### **RESOLUTION 870 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 2019:**

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

Moved by:

Seconded by:

Vote:

In favor:

Abstained: 0

Opposed: 0

# Tab 3

# Briefing Paper

## 2019 State Legislation Update

February 20, 2019

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### Summary

This paper highlights bills in the 2019 state legislative session that are of special interest to Energy Trust. A fuller list is attached (clicking on a bill number in the fuller list will take you to the text of the bill).

### Background

- The legislative session began January 22 and is expected to adjourn June 30.
- Under the grant agreement with the OPUC, Energy Trust does not take positions on legislation. We routinely brief legislators on Energy Trust programs and accomplishments, monitor bills that could impact Energy Trust and respond to legislative requests for information in coordination with the OPUC.

### Highlights

- **Public purpose charge**
  - HB 2494 would extend the sunset date for the 3 percent public purpose charge that helps fund Energy Trust for 10 years, from 2026 (current law) to 2036.
  - SB 91 would require at least 50 percent of the public purpose charge revenues that the OPUC directs to a non-governmental entity (Energy Trust) to be used to provide incentives to retail electric customers to accelerate transportation electrification. In addition, transportation electrification would be defined as a new type of “market transformation,” and at least 80 percent of the funds allocated for it must come from within the service area where the funds are collected.
- **Renewable energy**
  - SB 98 and SB 636 would direct the OPUC to develop a renewable natural gas program to achieve the following targets: 5 percent up to 2024, 10 percent up to 2029, 15 percent up to 2034, 20 percent up to 2039, 25 percent up to 2044 and 30 percent up to 2050. Utilities choosing to participate in the program may recover prudent investments via an automatic adjustment clause in the year following the investment, including cost of capital (secs. 4(3) & (4)), but no more than 5 percent of a utility’s revenue requirement (sec. 4(5)).
  - HB 2611, SB 503 and SB 508 would allow all hydropower to count toward renewable portfolio standard requirements.
  - HB 2618 would create a Rooftop Solar Incentive Fund to provide rebates for residential and commercial solar and storage, to be administered by the Oregon Department of Energy. The rebate amounts would decrease over time from 2020 to 2023. The bill would appropriate \$30 million for the fund.

- HB 2857 would promote small-scale renewable energy resources by requiring larger utilities to get 8 percent of the electricity they sell from small-scale renewables (rather than 8 percent of aggregate capacity under current law); and adding requirements in setting avoided cost rates and other aspects of qualifying facilities.
- **Clean Technology Investment**
  - HB 2808 would require the Oregon Business Development Department to establish a competitive clean technology sector development program to make grants from a Clean Technology Sector Development Fund to lenders to develop and administer loan programs for projects including community-based renewable energy, energy storage, energy recovery, agricultural technology to produce renewable energy, alternative fuel vehicles and infrastructure, and other projects that “will improve operational performance, productivity or efficiency while reducing costs, inputs, energy consumption, waste or environmental pollution.”
- **Low-Income Energy**
  - HB 2242 would authorize the OPUC to consider energy burden in setting rates; authorize financial assistance for organizations representing low-income customers/environmental justice in proceedings; establish an Office of Low-Income and Environmental Justice Advocate; require a public report to investigate ways to address and mitigate energy burdens by September 2020.
- **Climate Policy**
  - HB 2020: Establishes a Carbon Policy Office to administer the Oregon Climate Action Program. Among other provisions, adjusts statewide greenhouse gas emissions reduction goals. Requires Director of the Carbon Policy Office to establish a program to achieve emissions reductions by auctioning a declining number of emission allowances (one allowance per ton of emissions) adding up to a total cap. Allowances must be purchased by sources emitting 25,000 tons of CO<sub>2</sub> per year, with some exceptions: electric and gas utilities, certain emissions-intensive, trade-exposed industries, and those emitting certain fluorocarbons. The Carbon Policy Office would oversee the investment of auction revenues to benefit consumers and impacted communities. (For a summary of issues the bill raises, see the following OPB article: [https://www.opb.org/news/article/oregon-cap-and-trade-bill/?utm\\_source=Sightline%20Institute&utm\\_medium=web-email&utm\\_campaign=Sightline%20News%20Selections](https://www.opb.org/news/article/oregon-cap-and-trade-bill/?utm_source=Sightline%20Institute&utm_medium=web-email&utm_campaign=Sightline%20News%20Selections)).
  - HB 5044 would appropriate funds for the Oregon Climate Authority for the purposes of “carbon markets and policy” and “climate and energy policy and programs.”
  - SB 598 would change the name of the Oregon Global Warming Commission to the Oregon Climate Change Commission.
- **Other:**
  - HB 2852 would authorize local governments to organize community choice aggregation authorities.

- HB 2855 would expand the purposes for which OPUC decisions are deemed in the public interest to include social equity, environmental justice, environment, greenhouse gas emissions reduction, customer choice and diverse ownership of electric generation.

### List of all bills that we are following (as of February 5, 2019)

Bill Number	Bill Title	Bill Summary	Bill Sponsor	Current Committee
<a href="#">HB 2020</a>	Relating to greenhouse gas emissions; declaring an emergency.	Establishes Carbon Policy Office within Oregon Department of Administrative Services and directs Director of Carbon Policy Office to adopt Oregon Climate Action Program by rule.	Carbon Reduction (J)	Carbon Reduction (J)
<a href="#">HB 2063</a>	Relating to environmental mitigation trust agreement moneys.	Extends authorized uses of moneys received by state pursuant to Volkswagen Environmental Mitigation Trust Agreement and deposited in Clean Diesel Engine Fund.	Presession filed (at the request of Governor Kate Brown for Department of Environmental Quality)	Energy and Environment (H)
<a href="#">HB 2093</a>	Relating to procurements for facilities that deliver electricity to the public for electric motor vehicles; prescribing an effective date.	Permits Oregon Department of Administrative Services to contract with other entity, and to participate in, sponsor, conduct or administer cooperative procurements, for purpose of acquiring, installing, maintaining or operating devices or facilities to deliver electricity to public for electric motor vehicles.	Presession filed (at the request of Governor Kate Brown for Oregon Department of Administrative Services)	Rules (H)
<a href="#">HB 2095</a>	Relating to maintenance of buildings owned by state agencies; declaring an emergency.	Establishes Building Maintenance Account in State Treasury, separate and distinct from General Fund.	Presession filed (at the request of Governor Kate Brown for Oregon Department of Administrative Services)	Ways and Means (J)
<a href="#">HB 2208</a>	Relating to seismic improvements to buildings; prescribing an effective date.	Establishes Oregon Business Development Department program to issue grants for improving seismic safety, stability and resiliency of qualifying unreinforced masonry and unreinforced concrete buildings.	Presession filed (at the request of House Interim Committee on Veterans and Emergency Preparedness)	Veterans and Emergency Preparedness (H)
<a href="#">HB 2242</a>	Relating to public utilities.	Authorizes Public Utility Commission to consider differential energy burden and other inequities of affordability in rates.	Rep Helm; Rep Holvey; Rep Keny-Guyer; Rep Power; Rep Salinas; Rep Wilde; Sen Dembrow; Sen Taylor (Presession filed)	Energy and Environment (H)

<a href="#"><u>HC 2250</u></a>	Relating to the environment.	Requires certain state agencies to regularly assess proposed and final changes to federal environment laws to determine whether changes are significantly less protective of public health, environment or natural resources than standards and requirements contained in those federal environmental laws, as in effect on January 19, 2017.	Presession filed (at the request of Governor Kate Brown for Office of the Governor)	Energy and Environment (H)
<a href="#"><u>HB 2256</u></a>	Relating to housing affordability; declaring an emergency.	Creates Oregon Housing Crisis Task Force.	Presession filed (at the request of Governor Kate Brown for Office of the Governor)	Human Services and Housing (H)
<a href="#"><u>HB 2039</u></a>	Relating to electric-powered school buses.	Directs Department of Transportation to develop and implement program to lend moneys to school districts for incremental costs of purchasing electric-powered school buses.	Rep Keny-Guyer; Rep Reardon (Presession filed)	Transportation (J)
<a href="#"><u>HB 2322</u></a>	Relating to the adoption of energy policies into statewide land use planning goals.	Requires Land Conservation and Development Commission to amend statewide land use planning goals related to energy to incorporate development of renewable energy facilities and reduction of greenhouse gas emissions and to match state energy policies.	Rep Helm; Rep Marsh (Presession filed)	Energy and Environment (H)
<a href="#"><u>HB 2329</u></a>	Relating to energy facilities.	Modifies definition of "energy facility" for purposes of regulation of energy facilities by Energy Facility Siting Council.	Rep Helm; Rep Power; Rep Smith DB; Sen Bentz (Presession filed)	Energy and Environment (H)
<a href="#"><u>HB 2423</u></a>	Relating to small homes; prescribing an effective date.	Adopts Small Home Specialty Code to regulate construction of homes not more than 400 square feet in size.	Presession filed (at the request of House Interim Committee on Business and Labor)	Business and Labor (H)
<a href="#"><u>HB 2494</u></a>	Relating to public purpose charge.	Extends operation of public purpose charges until January 1, 2036.	Rep Doherty; Rep Holvey; Rep Power; Rep Wilde (Presession filed)	Energy and Environment (H)
<a href="#"><u>HB 2496</u></a>	Relating to energy conservation in public buildings; prescribing an effective date.	Includes battery storage in definition of "green energy technology." Defines "total contract price." Permits contracting agency, as alternative to including green energy technology in construction, reconstruction or major renovation of public building, to make expenditure to improve energy use efficiency in public building.	Rep Holvey (Presession filed)	Energy and Environment (H)

<a href="#"><u>HB 2497</u></a>	Relating to green energy technology requirements for public buildings; prescribing an effective date.	Adds battery storage to definition of "green energy technology" for public buildings that are emergency shelters or facilities for public safety.	Rep Holvey (Presession filed) (at the request of Oregon Solar Energy Industries Association)	Energy and Environment (H)
<a href="#"><u>HB 2501</u></a>	Relating to a task force on green energy corridors; prescribing an effective date.	Establishes Task Force on Green Energy Corridors.	Rep Smith G (Presession filed)	Energy and Environment (H)
<a href="#"><u>HB 2581</u></a>	Relating to Columbia River Basin water; declaring an emergency.	Makes findings regarding Columbia River Basin.	Rep Wilde (Presession filed)	Agriculture and Land Use (H)
<a href="#"><u>HB 2602</u></a>	Relating to vehicle electrification.	Modifies definitions of light-duty zero-emission vehicle and plug-in hybrid electric vehicle to include vehicles with at least three wheels.	Rep Fahey; Rep Holvey; Rep Lively; Rep Nathanson; Rep Power; Rep Wilde; Sen Manning Jr; Sen Prozanski (Presession filed)	Transportation (J)
<a href="#"><u>HB 2611</u></a>	Relating to the use of hydroelectric energy to comply with a renewable portfolio standard.	Specifies that electricity generated by hydroelectric facility or other equipment that generates electricity through use of hydroelectric energy may be used to comply with renewable portfolio standard.	Rep Smith G (Presession filed)	Energy and Environment (H)
<a href="#"><u>HB 2618</u></a>	Relating to solar incentives; prescribing an effective date.	Requires State Department of Energy to adopt by rule program for providing rebates for purchase, construction or installation of residential and commercial solar electric systems and paired solar and storage systems.	Rep Helm; Rep Lively; Rep Marsh; Rep Nosse; Rep Power; Rep Reardon; Rep Salinas; Rep Schouten; Rep Smith DB; Rep Wilde; Sen Boquist; Sen Dembrow; Sen Frederick; Sen Golden; Sen Manning Jr; Sen Prozanski; Sen Roblan (Presession filed)	Energy and Environment (H)
<a href="#"><u>HB 2791</u></a>	Relating to energy facility siting; declaring an emergency.	Modifies cost recovery formula for site certificate holders.	Agriculture and Land Use (H)	Energy and Environment (H)
<a href="#"><u>HB 2792</u></a>	Relating to energy facility siting.	Requires applicant for energy facility site certificate to obtain land use approval from local government.	Agriculture and Land Use (H)	Energy and Environment (H)
<a href="#"><u>HB 2808</u></a>	Relating to clean technology sector development.	Requires Oregon Business Development Department to establish competitive clean technology sector development grant program.	Economic Development (H)	Economic Development (H)

<a href="#"><u>HB 2852</u></a>	Relating to community choice aggregation.	Authorizes local governments to form authorities for purpose of implementing community choice aggregation programs.	Energy and Environment (H)	Energy and Environment (H)
<a href="#"><u>HB 2855</u></a>	Relating to the Public Utility Commission.	Modifies general powers of Public Utility Commission.	Energy and Environment (H)	Energy and Environment (H)
<a href="#"><u>HB 2857</u></a>	Relating to sustainable energy.	Requires eight percent of electricity sold in this state by each electric company that makes sales to 25,000 or more retail electricity consumers to be generated by small-scale renewable energy facilities or certain biomass facilities.	Energy and Environment (H)	Energy and Environment (H)
<a href="#"><u>HB 5044</u></a>	Relating to the financial administration of the Oregon Climate Authority; declaring an emergency.	Appropriates moneys from General Fund to Oregon Climate Authority for biennial expenses.	Presession filed (at the request of Oregon Department of Administrative Services)	Ways and Means (J)
<a href="#"><u>HCR 9</u></a>	Supporting development of closed-loop pump storage projects.	Supports development of closed-loop pump storage projects.	Rep Helm; Rep Nearman; Rep Reschke; Rep Smith G; Sen Dembrow; Sen Frederick; Sen Roblan (Presession filed)	Energy and Environment (H)
<a href="#"><u>SB 38</u></a>	Relating to treatment of renewable energy certificates issued for the generation of thermal energy.	Modifies provisions for treatment of renewable energy certificates issued for generation of thermal energy.	Presession filed (at the request of Governor Kate Brown for State Department of Energy)	
<a href="#"><u>SB 89</u></a>	Relating to greenhouse gas emissions; declaring an emergency.	Requires Environmental Quality Commission to adopt by rule program for assessing net impacts of state policies and programs for reducing greenhouse gas emissions.	Presession filed (at the request of Senate Interim Committee on Environment and Natural Resources)	Environment and Natural Resources (S)
<a href="#"><u>SB 91</u></a>	Relating to public purpose expenditure standards.	Requires at least 50 percent of public purpose charge funds paid to nongovernmental entity to be invested in providing incentives to retail electricity customers for accelerating transportation electrification.	Presession filed (at the request of Senate Interim Committee on Environment and Natural Resources)	Environment and Natural Resources (S)
<a href="#"><u>SB 98</u></a>	Relating to renewable natural gas; prescribing an effective date.	Requires Public Utility Commission to adopt by rule renewable natural gas program for natural gas utilities to recover prudently incurred qualified investments in meeting certain targets for including renewable natural gas in gas purchases for distribution to retail natural gas customers.	Presession filed (at the request of Senate Interim Committee on Environment and Natural Resources)	Environment and Natural Resources (S)



<a href="#">SB 220</a>	Relating to greenhouse gas emissions.	Requires Department of Environmental Quality to conduct study related to greenhouse gas emissions.	Presession filed (at the request of Governor Kate Brown for Office of the Governor)	Environment and Natural Resources (S)
<a href="#">SB 267</a>	Relating to small scale local energy projects; declaring an emergency.	Transfers duties, functions and powers of State Department of Energy related to issuance of loans for small scale local energy projects to Oregon Business Development Department.	Sen Olsen (Presession filed)	Environment and Natural Resources (S)
<a href="#">SB 348</a>	Relating to conducting a cost-benefit analysis of low carbon fuel standards; prescribing an effective date.	Requires Division of Audits to hire or contract with independent, third-party entity to conduct cost-benefit analysis of low carbon fuel standards and associated rules.	Sen Olsen; Sen Thatcher (Presession filed)	Environment and Natural Resources (S)
<a href="#">SB 451</a>	Relating to eligibility for renewable energy certificates.	Establishes eligibility for renewable energy certificates for facilities that generate electricity from direct combustion of municipal solid waste and became operational before January 1, 1995, if such facilities register with Western Renewable Energy Generation Information System at any time.	Sen Beyer (Presession filed) (at the request of Covanta)	Environment and Natural Resources (S)
<a href="#">SB 503</a>	Relating to the use of hydroelectric energy to comply with a renewable portfolio standard.	Specifies that electricity generated by hydroelectric facility or other equipment that generates electricity through use of hydroelectric energy may be used to comply with renewable portfolio standard.	Sen Linthicum; Sen Olsen (Presession filed)	Environment and Natural Resources (S)
<a href="#">SB 504</a>	Relating to allowable green energy technology in public improvement contracts; prescribing an effective date.	Expands definition of "green energy technology" for purposes of public improvement contracts.	Sen Linthicum; Sen Olsen (Presession filed)	Environment and Natural Resources (S)
<a href="#">SB 508</a>	Relating to the use of hydroelectric energy to comply with a renewable portfolio standard.	Specifies that electricity generated by hydroelectric facility or other equipment that generates electricity through use of hydroelectric energy may be used to comply with renewable portfolio standard.	Sen Johnson (Presession filed)	Environment and Natural Resources (S)
<a href="#">SB 598</a>	Relating to the Oregon Global Warming Commission.	Changes name of Oregon Global Warming Commission to Oregon Climate Change Commission.	Rep Lively; Rep Marsh; Rep Nosse; Rep Power; Sen Taylor (Presession filed) (at the request of Tuck Wilson)	Environment and Natural Resources (S)

<a href="#">SB 636</a>	Relating to renewable natural gas; prescribing an effective date.	Requires Public Utility Commission to adopt by rule renewable natural gas program for natural gas utilities to recover prudently incurred qualified investments in meeting certain targets for including renewable natural gas in gas purchases for distribution to retail natural gas customers.	Sen Beyer	Environment and Natural Resources (S)
<a href="#">SB 712</a>	Relating to the energy supplier assessment.	Reduces, to 0.15 percent, percentage of energy resource supplier's gross operating revenue that annual energy resource supplier assessment may not exceed.	Sen Olsen	Environment and Natural Resources (S)
<a href="#">SB 713</a>	Relating to State Department of Energy.	Requires State Department of Energy to conduct study on department's contributions to leading State of Oregon to safe, clean and sustainable energy future.	Sen Olsen	Environment and Natural Resources (S)
<a href="#">SB 714</a>	Relating to the Energy Facility Siting Council.	Requires State Department of Energy to conduct study related to Energy Facility Siting Council and report findings to interim committees of Legislative Assembly by September 15, 2021.	Sen Olsen	Environment and Natural Resources (S)
<a href="#">SB 715</a>	Relating to the Energy Facility Siting Council.	Requires State Department of Energy to conduct study related to Energy Facility Siting Council and report findings to interim committees of Legislative Assembly by September 15, 2021.	Sen Olsen	Environment and Natural Resources (S)
<a href="#">SCR 1</a>	Declaring legislative support for pump storage energy projects.	Declares legislative support for pump storage energy projects.	Presession filed (at the request of Senate Interim Committee on Environment and Natural Resources)	Environment and Natural Resources (S)

# Tab 4

## Briefing Paper

# Lockheed Martin Contract Extension for Existing Multifamily

February 20, 2019

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### 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 second of two potential one-year extension periods, from January 1, 2020 to December 31, 2020. This would be the final extension of the current contract. 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. In February 2018, the board did not object to staff's proposal of a one-year extension of the contract term through December 31, 2019. Staff now proposes to extend the contract for a second, and final, one-year extension period from January 1, 2020 to December 31, 2020.

### 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 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, 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, and the board resolution also directed staff to report to the board on the PMC's progress toward meeting contract extension criteria, and recommend whether to extend the contract.
- At the February 22, 2018 board meeting, staff proposed a one-year extension to this contract, through December 31, 2019, and the board did not object.
- Staff have again reviewed the contract extension criteria and are now recommending to extend the contract for a second, and final, 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, 2020 consistent with the 2020 board approved budget and action plans.
- If extended, 2020 will be the fifth and final year of the PMC contract. In 2019, staff plans to explore opportunities for redesigning its multifamily program offerings, which would inform the 2020 competitive solicitation process.

## Performance Criteria

Staff has assessed the PMC performance against the five (5) performance criteria identified below and determined that the PMC has satisfactorily performed in these areas in this contract period:

**1. Satisfactory execution of Statement of Work deliverables.** Notwithstanding some savings shortfalls, as discussed in more detail below, the PMC has satisfied this extension criteria. The PMC consistently provides deliverables on time, achieves high customer satisfaction rates, and consistently achieves milestones for receiving 100% on quarterly compliance audits. Engagement rates with marketing email communications are consistently above industry averages. The PMC has remained within contracted delivery and total incentive budgets in the current contract term.

The chart below provides savings performance towards goal in the current contract term. Note that in 2018, the PMC worked with Energy Trust to identify opportunities for scaling back activity in Avista to address organizational funding constraints in that territory, and as a result achieved 89% of Avista goal as compared to 100% forecasted had activity not been scaled back. Similar action was also taken in 2016 with Pacific Power goals. In both cases, the revised goals were satisfied.

Utility	2016			2017			2018		
	Achieved	Goal	% to goal	Achieved	Goal	% to goal	Achieved	Goal	% to goal
PGE	14,339,131	15,309,364	94%	11,904,017	15,573,606	76%	11,829,506	11,793,197	100%
PAC	6,448,694	10,240,508	63%*	4,138,460	6,793,178	61%	3,941,339	3,921,496	101%
<b>Electric</b>	<b>20,787,825</b>	<b>25,549,872</b>	<b>81%</b>	<b>16,042,477</b>	<b>22,366,784</b>	<b>72%</b>	<b>15,770,845</b>	<b>15,714,693</b>	<b>100%</b>
NWN	238,917	301,496	79%	161,265	141,094	114%	96,592	142,323	68%
CNG	13,986	12,000	117%	7,515	11,336	66%	6,895	6,053	114%
AVI	-	-	n/a	12,862	8,000	161%	15,467	17,416	89%**
<b>Gas</b>	<b>252,903</b>	<b>313,496</b>	<b>81%</b>	<b>181,642</b>	<b>160,430</b>	<b>113%</b>	<b>118,954</b>	<b>165,792</b>	<b>72%</b>

\* PAC 2016 goals were amended mid-year - PMC achieved 99% of amended goal

\*\* AVI 2018 goals were amended in Q4 - PMC achieved 104% of amended goal

Savings shortfalls over the past three years have been primarily driven by challenges in the instant savings measure direct-install track. Savings have consistently declined from this track due to high market saturation in large properties, challenges in reaching smaller customers, and decreases in measure-level savings. In 2018, NW Natural savings were particularly challenging to acquire. While the number of NW Natural projects increased in 2018 as compared to 2017, the number of higher savings projects was significantly lower than in previous years; for reference, in 2017 the program had 25 projects with savings greater than 2,000 therms, as compared to six in 2018. Additionally, several larger projects were pushed from 2018 to 2019. To address these savings shortfalls, the PMC developed additional tactics in Q3 and Q4 to drive projects in this territory, which included direct-install communications, and utilizing billing data to identify high users to identify opportunities for boilers and steam traps projects. While this did not result in projects in 2018, it did surface a number of potential 2019 projects.

In 2019, the program will continue to evolve strategies to address the challenges currently being faced, including deeper analysis of remaining opportunities and ways to continue reaching new customers.

**2. Cross-program coordination.** The Existing Multifamily program involves a significant amount of coordination with other Energy Trust programs including Residential, New Buildings, Existing Buildings, and Solar programs on customer experience, measure development, marketing and messaging, stakeholder engagement and market strategies, and the PMC has consistently coordinated among these programs, satisfying this criteria. Examples of cross-program coordination activities include:

- In 2018, the PMC collaborated with the Residential program management contractor to expand select single-family on-bill repayment offerings to multifamily customers
- Plans are being developed to launch Savings Within Reach offerings to multifamily customers in 2019.
- Effective processes are in place for transferring customers to appropriate programs as needed, with the PMC processing over 450 applications transferred from other programs in 2018, a nearly 50% increase over 2017 transfers.
- Customer satisfaction with the program is very high. Fast Feedback surveys conducted in the current contract term found an average of 94% of customers are satisfied with their overall program experience, and an average of 98% are satisfied with their interaction with program representatives.
- PMC coordinates closely on measure development with other programs.

**3. Project pipeline.** Through an account management approach, the PMC energy advisors work closely with customers to identify, prioritize and implement efficiency projects. While the program does not maintain a formal “pipeline” through required pre-approval or signed commitments for most projects, the PMC has a process for tracking future projects, and have satisfied this extension criteria. Example of “pipeline” building activities include:

- In 2018, the PMC increased emphasis on the delivery of free Walkthrough Surveys, based on an analysis finding that over 70% of customers who had received a Walkthrough Survey in the past had gone on to participate in the program, primarily through direct-install and prescriptive offerings. These efforts have positioned the program well for anticipated 2019 projects, and the program expects to achieve 2019 goals.

**4. Innovation:** Within the current contract term, the PMC has implemented a range of innovations to improve the program and reach underserved customer groups and has satisfied this extension criteria. Some examples include:

- Expanding Program Offerings:
  - Over the past three years the PMC has broadened the range of HVAC, water heating, weatherization and instant savings measure offerings through adding roughly a dozen new measures to the program and expanding eligibility requirements for several more.

- PMC revised incentive structures for a range of measures to significantly simplify requirements and eligibility and align with other Energy Trust programs to reduce market confusion.
- Enhancing Marketing and Outreach Strategies:
  - As part of strategic data usage efforts, the PMC conducted in-depth analysis of the multifamily market and program participation rates to identify opportunities to increase participation in underserved customer groups.
  - Based on findings from this analysis the PMC launched a range of targeted marketing and outreach tactics in 2018 aiming to reach new participants in customer segments with historically low participation rates. Tactics targeted condo/townhome owners and small (2-4 units) market rate properties.
  - Over the course of the marketing campaigns, of the roughly 1,800 first-time participants in the program, over half were condo/townhome owners, and about 25% were market rate 2-4 plexes.
- Streamlining Program Participation:
  - PMC launched redesigned program forms in January, which improve clarity of program offerings and requirements and simplify information needed from customers to apply for incentives.
  - PMC worked closely with Energy Trust to develop and launch a DocuSign workflow enabling online customer program enrollment.
  - PMC developed a property manager portfolio-level application process for distributors which greatly simplifies the process, leading to immediate increase in project volume and faster turnaround time for payments.

**5. Teamwork.** The PMC has satisfied this extension criteria. PMC is 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.

## Next Steps

Absent board objection, staff is authorized to extend the Existing Multifamily program management contract with the PMC through December 31, 2020.

PINK PAPER



# Briefing Paper

## ICF Contract Extension for Existing Buildings

February 20, 2019

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### Summary

Absent board objection, Energy Trust staff proposes to extend the contract for the Existing Buildings (Oregon and Washington) program management contractor (PMC) with ICF Resources, LLC (ICF) for the first of two potential one-year extension periods, from January 1, 2020 to December 31, 2020. The initial term of this PMC contract with ICF was for three years from January 1, 2017 to December 31, 2019, with the option of two additional year extensions. Staff proposes to extend the contract for a one-year extension period from January 1, 2020 to December 31, 2020.

### Background

- The Existing Buildings program offers energy-efficient improvements for existing commercial buildings of all sizes and types. Incentives are available for custom projects, including capital upgrades and operations and maintenance improvements; standard upgrades; lighting upgrades; and energy performance management offerings, such as commercial strategic energy management (SEM). The program provides incentives, tools, training, and technical assistance to help customers reduce energy use, including through behavioral and operations improvements. The program is delivered in Oregon and to Northwest Natural Gas customers in Southwest Washington.
- In July 2016, the board authorized a contract with ICF for program management and delivery services with a first-year anticipated budget for 2017 of approximately \$41.97 million, which included approximately \$14.23 million in delivery, \$27.74 million in incentives, and actual and subsequent annual budgets consistent with board-approved annual budgets and action plans.
- The 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 have reviewed the contract extension criteria and are recommending extending 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, 2020 consistent with the 2020 board-approved budget and action plans.

### Performance Criteria

ICF's program management contract sets forth five (5) specific extension criteria to assess the PMC performance for contract extension reviews. Staff determined that the PMC has met these extension criteria as described below.

## 1. Annual Electric and Gas Savings Goals (kWh/Therms)

PMC has met the extension criteria for savings goals as described below. The chart below provides savings performance to goal for 2017 and 2018:

Utility	2017 Goals	2017 Achieved	2017 % to Goal	2018 Goals	2018 Achieved	2018 % to Goal
Portland General Electric	67,534,016	69,571,243	103%	79,103,180	78,004,707	99%
Pacific Power	38,838,649	43,453,828	112%	51,982,075	42,940,158	83%
Northwest Natural	1,483,682	1,223,758	82%	1,217,987	1,095,985	90%
Northwest Natural WA	156,525	154,866	99%	160,000	161,632	101%
Cascade Natural Gas	222,180	179,035	81%	211,339	232,447	110%
Avista	24,000	45,184	188%	52,367	96,540	184%

- **Portland General Electric:** achieved 101% savings average. PGE territory has been very active with an increase in small, medium, and large projects.
- **Pacific Power:** achieved 98% savings average. PAC territory has been challenged by limited contractor availability affecting the ability to achieve savings from larger custom projects. While the program increased enrollments by 150 projects (a 10% increase) over 2017, average project savings decreased by 15%. Overall savings in PAC increased in 2018 over 2017 by nearly 1 million kWh.
- **Northwest Natural:** achieved 87% savings average. Savings shortfalls occurred in the custom track as a result of limited contractor and equipment availability for large projects. The program experienced a large increase in custom studies in 2018 which will increase custom savings in 2019.
- **Northwest Natural Washington:** achieved 101% savings average.
- **Cascade Natural Gas:** achieved 96% savings. CNG savings fell short in custom savings but saw strong savings in other tracks.
- **Avista:** achieved 186% savings average. Energy Trust has been supporting Avista for two years and the program is calibrating the savings potential. Despite roughly doubling the 2018 goal, the Program exceeded goal primarily as a result of inexpensive SEM savings.

## 2. Savings pipeline for future gas and electric savings

PMC has satisfied its saving pipeline extension criteria as described below.

- PMC contacted 1,092 new participants in 2018. Approximately 65% of those were small businesses. This expanded reach helps to achieve DEI, small, and rural businesses. PMC's outreach team expanded efforts through the establishment of a small business team.
- By expanding outreach efforts, the PMC achieved a 32% increase in custom studies, many of which filled the pipeline for anticipated 2019 savings.
- In 2018, the PMC reached 137 school districts and have established recurring meetings with 26 districts. This represents state-wide support and pipeline development.

- PMC averages eight monthly purposeful market engagement activities with local, regional, and state associations, chambers, and organizations.

### **3. Achieving Deliverables**

PMC has satisfied this extension criteria by consistently providing deliverables on time, achieving high customer satisfaction rates, and achieving 100% on all quarterly compliance audits. PMC has remained within contracted delivery and incentive budgets. Examples of its performance in achieving deliverables include:

- PMC achieved 100% on an established performance metric of three or fewer revision reviews for marketing deliverables.
- PMC has supported the measure development process taking the lead on 21 measures during 2017 and 2018. The measure development process requires a substantial amount of engineering and energy analysis work, which is completed in-time for developing savings estimates and budgets.
- PMC works very closely with the Oregon Department of Energy and is actively exchanging information on a weekly basis, to the benefit of the school districts and all Energy Trust programs. Many school districts have indicated appreciation to this collaborative model and an increase in energy studies and potential projects is the result.

### **4. Cross-program Teamwork**

Cross-program referrals represent a key metric for cross-program collaboration that supports quality customer service. PMC has satisfied this extension criteria. Examples of such collaboration include:

- PMC referred 230 projects to other programs: 79 to New Buildings, 66 to Production Efficiency, 38 to Multifamily, 20 to Residential, and 29 to Solar.
- PMC has participated in regular coordination with New Buildings and the Oregon Department of Energy to ensure school districts are able to utilize available support and funding across organizations.
- PMC led the new measure development work across programs for six measures in 2016, 15 measures in 2018, and for 22 measures scheduled in 2019. Measure development efforts support savings, forecasting, and budgeting.

### **5. Innovation**

PMC has satisfied this extension criteria, demonstrating innovation in delivering the program. Examples of innovation are below:

- PMC implements an innovative direct-install offering through the program that continues to be highly successful and supports Energy Trust goals for serving a diverse customer mix of underserved, small, and rural commercial businesses.
- Current innovative initiative is to introduce a mid-stream offering that will support New Buildings, Multifamily, and Production Efficiency programs. This midstream offering will be used as a test case for a specific, standalone measure that could be duplicated for future midstream program delivery channels. This initiative is designed to increase savings while streamlining the incentive process for customers and lower implementation costs.

- To adapt to a changing energy-efficiency market and to expand the program's outreach to hard-to-reach customers, the PMC created a small business team in 2018 and ran initial campaigns in Cascade Natural Gas territory to directly contact restaurants and other small business. This small business team, a subset of the PMC's outreach team, is focused on developing offerings and running campaigns that allow and encourage our diverse customer base to participate in the program.

**Next Steps**

Absent board objection, staff is authorized to extend the Existing Buildings program management contract with the PMC through December 31, 2020.

PINK PAPER

# Briefing Paper

## Cascade Energy Contract Extension for Production Efficiency Standard Industrial and Agriculture Program Delivery Contract

February 20, 2019

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### Summary

Energy Trust staff proposes to extend the contract for the Production Efficiency – Standard Industrial and Agricultural program delivery contractor (PDC) with Cascade Energy, Inc. (Cascade Energy) for the first of two potential one-year extension periods, from January 1, 2020 to December 31, 2020. The initial term of this PDC contract with Cascade Energy was for three years from January 1, 2017 to December 31, 2019, with the option of two additional year extensions. Staff proposes to extend the contract for a one-year extension period from January 1, 2020 to December 31, 2020.

### Background

- Energy Trust manages and delivers the Production Efficiency program, an energy efficiency program designed to deliver and enhance energy efficiency and energy conservation in existing industrial facilities in Oregon which utilize Portland General Electric, Pacific Power, NW Natural, Cascade Natural Gas or Avista. Energy Trust staff manages the program and utilizes Program Delivery Contractors (PDCs) and a network of trade allies to deliver the program to participants.
- During 2016, program staff conducted a Request for Qualifications process to select the program's two Standard Track PDCs (formerly referred to as the Streamlined track). One Standard track PDC manages the program's Industrial Lighting track, and the other the Standard Industrial and Agriculture track. The two Standard Track PDCs differ from the Custom Industrial track by working directly with trade allies to deliver customers prescriptive and calculated energy efficiency solutions.
- In July 2016 (Resolution 779), the board authorized a contract with Cascade Energy for the Standard Industrial and Agricultural program delivery services subject to determination of a final contract amount based on the board-approved 2017 budget and subsequent annual budgets consistent with board-approved annual budgets and action plans.
- The authorizing resolution included an initial term of three years and a provision allowing staff to offer up to two additional year extensions if the PDC meets certain established performance criteria. The board resolution also directed staff to report to the board on the PDC'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 PDC contract term through December 31, 2020 consistent with the 2020 board approved budget and action plans.

## Performance Criteria

Staff have identified criteria to assess PDC performance. Staff determined that the PDC has satisfactorily performed in these areas in this contract period. This briefing paper describes PDC performance against these criteria.

**1. Annual savings goals:** The chart below provides savings goals, savings achievement and percent to goal for 2017 and 2018:

- 2017 electric savings were below goal mainly due to a very wet spring that impacted irrigation measure delivery, with 33 fewer irrigation projects compared to the previous year. Gas savings were below goal primarily due to a key vendor who retired without a program succession plan. In 2017, Cascade Energy developed a prescriptive measure for steam traps measure that delivered year-round savings and in 2018, they made a push to increase the volume of greenhouse gas projects.
- 2018 electric savings exceeded goal due to higher than expected irrigation savings and 2018 gas savings exceeded goal due to a small number of large projects.
- Avista was below goal in 2017 and 2018. The program over-estimated the potential savings available in this territory. Most of the potential opportunities are Commercial customers or customers who are not eligible because they are on a transport schedule. 2019 will be a strong year in Avista due to an expected large greenhouse project.

Utility	2017 savings goal (kWh)	2017 savings achieved (kWh)	2017 % to goal	2018 savings goal (kWh)	2018 savings achieved (kWh)	2018 % to goal
Electric: PGE	9,505,320	7,690,410	81%	11,200,000	12,176,031	109%
Electric: Pacific Power	5,118,249	4,453,308	87%	5,300,000	6,385,181	120%
Gas: NW Natural	192,827	73,672	38%	229,500	341,119	149%
Gas: NW Natural (Schedule 360/DSM)	149,977	84,252	56%	178,500	634,576	356%
Gas: Cascade Natural Gas	9,641	9,286	96%	11,475	20,936	182%
Gas: Avista	4,642	1,696	37%	5,525	1,814	33%

*\*Working Savings*

**2. Delivery budget management:** In 2017 and 2018, Cascade Energy managed the delivery of the program to not exceed their delivery budget.

**3. Project pipeline/trade ally network development:** Cascade Energy manages savings, incentive delivery and forecasting to develop a project pipeline through the trade ally network with the following activities:

- Communicates with the Energy Trust program manager bi-weekly to assess the strength of the savings pipeline. Cascade Energy is responsive to concerns about being either under or over delivery of savings and over incentive budget and manages accordingly.
- Supports a strong pipeline by working with 146 trade allies and vendors to continually deliver savings throughout the year.
- Builds their electric and gas pipelines through trade ally and vendor outreach, fuel specific outreach events, presenting at conferences and trade events and holding networking socials for trade allies and vendors.

**4. Data management/Project reporting:** To ensure Energy Trust incentive processing and compliance requirements are met, Cascade Energy consistently follows Energy Trust's data management procedures/project reporting with the following activities:

- Produces all required data and paperwork to support an incented project.
- Processes incentives into Energy Trust's system of record and incentive payment, Project Tracking (PT).
- Provides a monthly report that outlines program performance and forecasted performance and provides a detailed activity list that breaks out relationship/activities by outreach priority.

Notably, this contract period was first time Energy Trust moved project file management and data entry into this PDC's scope of work. This was a significant change and Cascade Energy handled the required training and transition well.

**5. Service to customers and trade allies:** In efforts to provide excellent customer and trade ally service, Cascade Energy:

- Meets with trade allies and vendors in person, on the phone and by email to introduce and help navigate the program.
- Assists vendors with trainings on specific measures (ex: Compressed Air Leak Reduction) and with processing incentive application submissions.
- Helps customers correct and re-submit incentive applications when they do not fill them out completely or accurately.
- Serves rural customers and vendors. In 2019, Cascade has committed to hiring a field representative who will focus on Southern, Central and Eastern Oregon. This new hire will result in a stronger Energy Trust Standard Industrial and Agriculture presence in these remote and rural areas, will assist with 2019 DEI efforts and will bring in more savings.

**6. Marketing coordination:** Cascade Energy has a high level of marketing coordination with Energy Trust, particularly for the agricultural program. Cascade Energy:

- Works collaboratively with Energy Trust's marketing team to inform the development of marketing materials, including web content, blog/newsletter stories, fact sheets and case studies.
- Provides ideas for marketing and valuable feedback on marketing materials created for their use by Energy Trust.
- Provides valuable insights into the needs of vendors and customers.
- Promotes Energy Trust by attending and speaking at trade shows, webinars and industry events as well as utility-hosted customer events.
- Works within prescribed Energy Trust marketing process requirements and tracking tools.



- 7. Quality Control:** For prescriptive measures, energy savings are carefully estimated before a measure is offered. PDC staff ensure that qualifying criteria for all prescriptive measures are met. For calculated measures, an Excel-based tool is used to estimate savings. Tools are reviewed for accuracy during development by multiple Cascade Energy engineers and by Energy Trust during the Measure Approval Process. The number of projects brought back to Cascade Energy for reassessment are relatively low. Internal audits have a high pass rates for supporting incentive paperwork.
- 8. Exhibiting Teamwork:** To leverage activities and customers that have cross over with other PDCs and PMCs, the program expects that they all work collaboratively. Cascade Energy:
- Is responsive and adaptive to Energy Trust needs and requests and provides regular cross-PDC referrals. Cascade often provides the program's Lighting PDC, Evergreen Consulting, LLC, with lighting referrals as well as promptly acting on referrals made to them for customer follow up.
  - Confirms there is no overlap in communication between the Standard Industrial programs when Cascade Energy and the Lighting PDC work with a customer together.
  - Works together with other PDCs to represent Energy Trust at customer and vendor facing events.

## Next Steps

Absent board objection, staff requests authorization to extend the Production Efficiency program delivery contract with Cascade Energy, the Standard Industrial and Agriculture PDC, through December 31, 2020.

# Briefing Paper

## Evergreen Consulting Contract Extension for Production Efficiency Industrial Lighting Program Delivery Contract

February 20, 2019

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### Summary

Energy Trust staff proposes to extend the contract for the Production Efficiency – Industrial Lighting program delivery contractor (PDC) with Evergreen Consulting, LLC (Evergreen) for the first of two potential one-year extension periods, from January 1, 2020 to December 31, 2020. The initial term of this PDC contract with Evergreen was for three years from January 1, 2017 to December 31, 2019, with the option of two additional year extensions. Staff proposes to extend the contract for a one-year extension period from January 1, 2020 to December 31, 2020.

### Background

- Energy Trust manages and delivers the Production Efficiency Program, an energy efficiency program designed to deliver and enhance energy efficiency and energy conservation in existing industrial facilities in Oregon which utilize Portland General Electric (PGE), Pacific Power, NW Natural, Cascade Natural Gas or Avista. Energy Trust staff manages the program and utilizes Program Delivery Contractors (PDCs) and a network of trade allies to deliver the program to participants.
- During 2016, program staff conducted a Request for Qualifications process to select the program's two Standard Track PDCs (formerly referred to as the Streamlined track). One Standard track PDC manages the program's Industrial Lighting track, and the other the Standard Industrial and Agriculture track. The two Standard Track PDCs differ from the Custom Industrial track by working directly with trade allies to deliver customers prescriptive and calculated energy efficiency solutions.
- In July 2016 (Resolution 778), the board authorized a contract with Evergreen for the Industrial Lighting program delivery services with a first-year program delivery budget for 2017, including first-year incentives, contracted delivery and possible performance compensation of approximately \$6.2 million dollars and subsequent annual budgets consistent with board-approved annual budgets and action plans.
- The authorizing resolution included an initial term of three years and a provision allowing staff to offer up to two additional year extensions if the PDC meets certain established performance criteria. The board resolution also directed staff to report to the board on the PDC'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 PDC contract term through December 31, 2020 consistent with the 2020 board approved budget and action plans.

## Performance Criteria

Staff have identified criteria to assess PDC performance. Staff determined that the PDC has satisfactorily performed in these areas in this contract period. This briefing paper describes PDC performance against these criteria

1. **Annual savings goals:** The chart below provides savings goals, achievement and percent to goals for 2017 and 2018:

- Evergreen exceeded savings goals to help overall organizational savings goals for PGE and Pacific Power. They were responsive and flexible in managing additional savings requests from the organization.

Utility	2017 savings goal (kWh)	2017 savings achieved (kWh)	2017 % to goal	2018 savings goal (kWh)	2018 savings achieved (kWh)	2018 % to goal
Electric: PGE	17,161,888	24,104,031	140%	29,250,000	39,456,418	135%
Electric: Pacific Power	9,241,016	13,011,147	141%	16,500,000	21,874,108	133%

*\*Working Savings*

2. **Delivery budget management:** In 2017 and 2018, Evergreen managed the delivery of the program to not exceed their delivery budget.

3. **Project pipeline development:** Evergreen managed savings, incentive delivery and forecasting to develop and demonstrate a project pipeline with the following activities. Evergreen:

- Communicates with the Energy Trust program manager weekly to assess the strength of the lighting savings pipeline. Evergreen is responsive to concerns about being either under or over delivery of savings and over incentive budget and manage accordingly.
- Met program requirements to immediately inform Energy Trust's Program Manager if they were within a certain % of incentive budgets.
- Is able to build a robust pipeline by working with trade allies to continually deliver savings throughout the year.

4. **Trade Ally network development:** To deliver on lighting savings, Evergreen must implement and maintain a strong trade ally network. Evergreen:

- Maintains, educates and continually grows a trade ally network of over 250 trade allies for the Production Efficiency, Existing Buildings and Multi-Family programs.
- Holds annual lighting outreach events, with attendance of 330 trade allies and vendors at the 2018 event.
- Holds mid-year trade ally update events as well as webinars to help train trade allies on the lighting tool.
- Supports the growth of Energy Trust's Diversity, Equity and Inclusion efforts by working to expand the trade ally network with women and minority trade allies.

- 5. Data management/Project Reporting:** To ensure Energy Trust incentive processing and compliance requirements are met, Evergreen consistently follows Energy Trust's data management/project reporting procedures, with the following activities. Evergreen:
- Produces all required data and paperwork to support an incented project.
  - Processes incentives into Energy Trust's system of record and incentive payment, Project Tracking (PT).

Notably, this contract period was the first time Energy Trust moved project file management and data entry into this PDC's scope of work. This was a significant change and Evergreen handled the required training and transition well.

- 6. Service to customers and trade allies:** Evergreen's primary tool to garnering saving is to support and serve the trade allies who work with Energy Trust's industrial lighting customers. Evergreen:
- Helps trade allies understand the program, how to use the tools and calculate potential incentives.
  - Creates efficiencies for quicker payment and processing time. In this contract period, Evergreen implemented DocuSign which decreased offer paperwork turnaround time by approximately 1.5 weeks and final paperwork by approximately 2 weeks.
  - Brings in newer technologies, such as networked lighting controls, and developing new savings channels such as cannabis lighting.

- 7. Marketing coordination:** Business lighting is often the first, and frequently the best option for customers to participate in Energy Trust programs. As a result, Evergreen has a high level of coordination with Energy Trust's marketing team. Evergreen:
- Provides referrals for customer stories for Energy Trust channels (website, blog/newsletters and collateral) and for utility marketing channels.
  - Contributes to the My Business campaign, which focuses on lighting.
  - Promotes energy-efficient lighting to customers by attending and speaking at trade shows, webinars and industry events, as well as presenting at utility-sponsored customer events for Pacific Power customers.
  - Works within prescribed Energy Trust marketing process requirements and tracking tools when they are creating communications.

- 8. Quality Control:** Evergreen complies with Energy Trust field verification requirements. When a project is completed, Evergreen checks that the project meets all program requirements. The number of projects brought back to Evergreen for reassessment are relatively low. 2018 internal audits have a 100% pass rate for Evergreen's supporting incentive paperwork.

- 9. Exhibiting Teamwork:** In order to leverage activities and customers across PDCs and PMCs, Energy Trust expects that PDCs work collaboratively. Evergreen:
- Provides regular cross-PDC referrals with 100 referrals made to Standard Industrial and Custom Production Efficiency PDCs in 2017 and 34 in 2018.
  - Works closely with other PDCs to confirm that there is no overlap in communication when they work with a customer together.
  - Works together with other PDCs to represent Energy Trust at customer and vendor facing events.

## **Next Steps**

Absent board objection, staff requests authorization to extend the Production Efficiency program delivery contract with Evergreen, the Industrial Lighting PDC, through December 31, 2020.

# Tab 5

# Evaluation Committee Meeting

December 6, 2018, 12:00 pm

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## Attending at Energy Trust offices

Mike Bailey, Adam Bartini, Eric Braddock, Shelly Carlton, Sarah Castor, Phil Degens, Andy Griguhn, Kati Harper, Andy Hudson, Oliver Kesting, Anna Kim, Erika Kociolek, Steve Lacey, Jennifer Light, Debbie Goldberg Menashe, Alan Meyer, Dulane Moran, Alex Novie, Amanda Potter, Thad Roth, Dan Rubado, Kenji Spielman, Peter West

## Attending by phone

Warren Cook

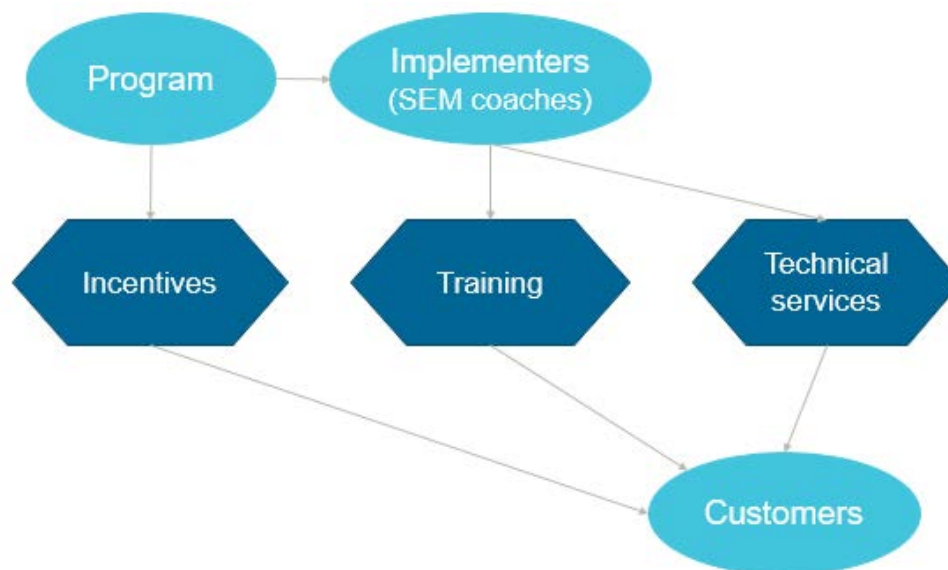
## Industrial Strategic Energy Management (SEM) Evaluation

Presented by Erika Kociolek

Much of the work for this evaluation was done in 2015, and there were some delays in finalizing the report due to staff focus on other projects, and due to discussions about how to move forward given some issues related to data availability, which we will discuss.

Background: The goal of SEM is to empower customers to identify and undertake energy-saving projects in their facilities. In this presentation, we are talking about how SEM worked at the time of the evaluation, which is a little different than how it works today. Both then and now, SEM coaches work with customers in groups or one-on-one to conduct trainings and provide technical services. Behavioral and operations and maintenance (O&M) opportunities are identified, as well as capital projects. The program provides incentives for energy savings, and savings from capital projects are backed out of total savings to identify just the SEM savings. This is shown in the figure below.

Industrial SEM Overview:



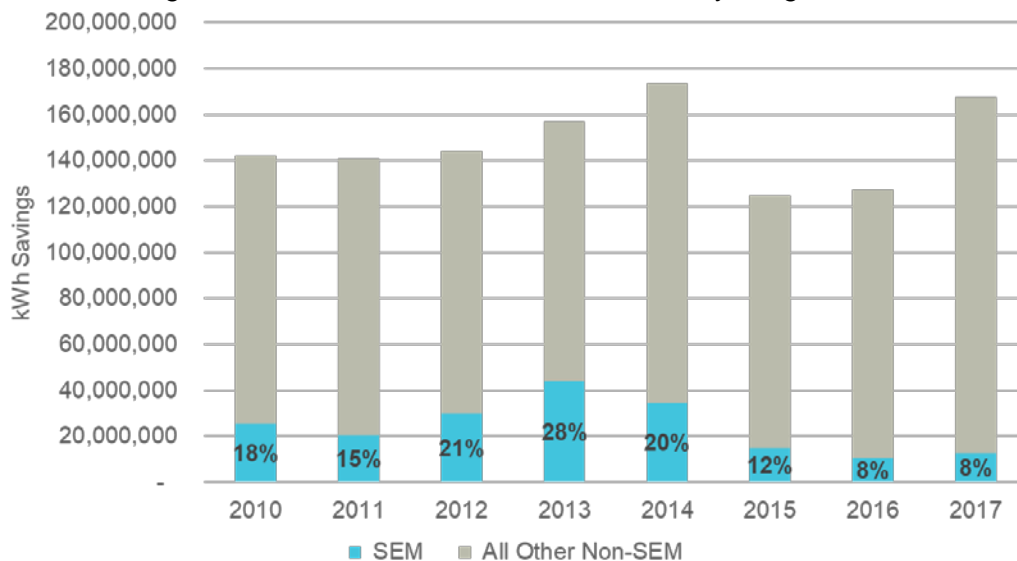
Participation in SEM requires commitment from the executive level of each company. In the years evaluated for this study, participants were primarily large industrial customers in the Willamette Valley.

At the time of the evaluation, SEM had a one-year engagement period, during which the participant is active in developing the energy model(s), which compares the reporting and engagement periods to a baseline period. The reporting period is the last few months of the engagement period and is used to estimate energy savings. There is an opportunity register, which is used to track activities identified and implemented. Everything is detailed in a final report for the participant. One year after the engagement period is when we would hope to do an impact evaluation; in this study we came in a bit later. For the years and participants covered by the evaluation, customers weren't usually engaging with the program after the SEM engagement period.

Alan Meyer asked if the customers were aware that we would be coming back to them for evaluation. Erika Kociolek said that participation in evaluation is a typical expectation communicated to customers. We had not formalized how we would evaluate during these program years, so participants were not aware of exactly what the evaluation would entail.

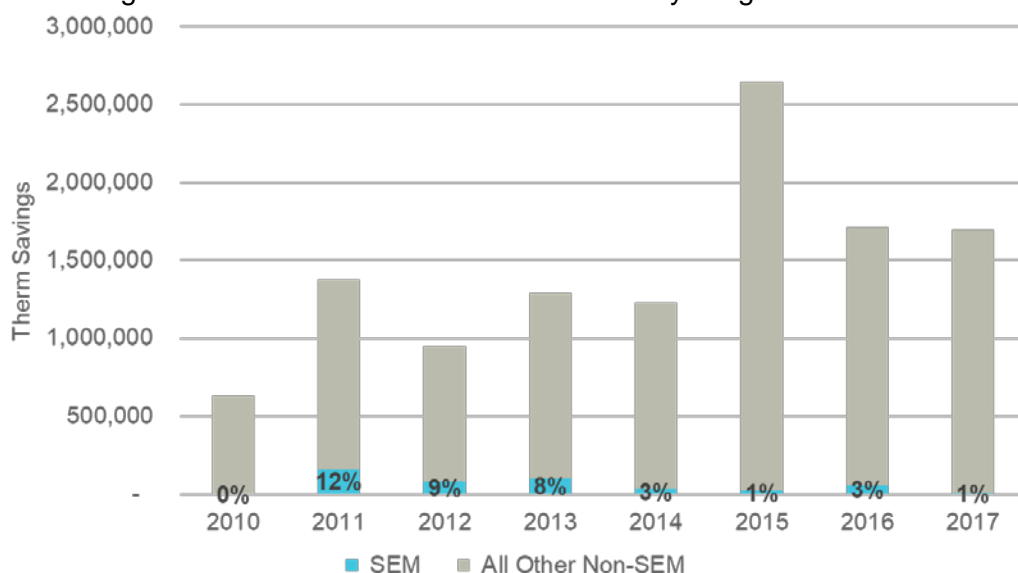
SEM has been an important source of savings for the industrial program – as much as 28% of the annual electric savings, and as much as 12% for gas (as shown in the graphs below), though the proportions have declined in recent years. The impetus for evaluation was the growth in the number of participants in SEM.

Electric Savings of SEM Relative to Production Efficiency Program Overall:





## Gas Savings of SEM Relative to Production Efficiency Program Overall:



Anna Kim asked about the changes in SEM gas savings as a percent of percent total gas savings over time. Erika noted that the proportion of SEM gas savings depends on the mix of customers participating in SEM at any given time (and their gas loads) as well as activity from other program tracks – for example, custom, streamlined, etc. Amanda Potter and Kati Harper also noted that Energy Trust does not serve gas transport customers.

In 2014, SEM was a relatively new offering, and we undertook two workshops with evaluation contractors and Energy Trust staff to discuss how best to evaluate SEM. The outcome of the workshops were evaluation guidelines, with a preferred approach involving gathering updated production and energy data and using it to update the regression models to estimate savings, reviewing the opportunity registers, conducting customer interviews and site visits, and accounting for capital project savings. We recognized that it might not be possible to utilize the preferred approach in all cases, so we also had an alternative approach for instances when we did not have enough data to update models. The alternative is a more qualitative assessment of savings with a review of the models and in some cases a bottom-up engineering analysis to estimate savings. In this SEM evaluation, we learned a lot about how these two evaluation approaches work in practice.

The research objectives of this evaluation included looking at SEM activities and the energy models. Research questions asked what activities participants were continuing to implement, and whether those activities differed between single- and multi-engagement participants. There were several questions about the models, including what model specifications implementers were using, what type of adjustments evaluators made to the models, and whether there were opportunities for implementers to adjust models to improve savings and aid evaluation. Additionally, there were questions about data availability and quality, such as how savings estimates differed between participants who had daily data and those who had only monthly data in their models, and what is the minimum level of data required for evaluation.

Finally, we wanted to explore how SEM savings changed since the initial engagement. To do this, we would need to get updated production and energy data from customers after the engagement and reporting periods.

The evaluation tasks were to review documents, interview participants, perform site visits, replicate regression models, collect updated data to re-run models, analyze data to estimate actual savings, and report results and recommendations.

There were 73 SEM participants between 2010 and 2013, and we sampled 46 of these for the evaluation (representing 126 models). Some participated in SEM in multiple years. There are multiple models per participant because of multiple facilities, multiple engagements, and/or multiple fuels (i.e., electric and gas) at a site. The evaluation contractor interviewed 36 of the participants and looked at all the models for all 46 participants.

Findings: The evaluation contractor first considered the evaluability of the participants. Evaluability in this context refers to the ability to utilize the preferred evaluation approach, which requires the right data for the engagement and post-engagement periods. The evaluator came up with criteria, including participant engagement level, availability of data and models, baseline and post-periods that do not overlap, and ability to re-estimate the reported savings. There weren't very many models for which the evaluator could utilize the preferred evaluation approach. We were only able to get updated data from 20% of participants; overall, there were not enough data available to utilize the preferred evaluation approach for this evaluation.

Alan asked whether the models were user-friendly, as he remembers hearing that maybe they were not easy to use. Erika said some people said they were still using the models, and some people had challenges using them; we didn't hear anything specific about it being difficult to work with the models during this evaluation. Erika said she took heart in seeing that the evaluability improved over time, from only one of the 16 participants (6%) in 2010 to 10 of the 15 participants (67%) in 2013. In the rest of this presentation, we will focus on findings from interviews since we can't look at changes in savings over time. We got a lot of useful information from participant interviews.

Anna asked if SEM year refers to the year of the reporting period. Kati said it is the year the savings were claimed, when SEM engagement closed out. Anna asked why we were looking at 2010-2013. Erika said the evaluation workshops were in 2014 and scoping for this evaluation project happened in 2015 and that is when interviews were done. Getting the report to a state that could be reviewed by the Evaluation Committee took some time. Phil Degens also noted that you need several years after engagement to be able to look at savings trajectories.

To characterize SEM activity levels for participants, we used the Consortium for Energy Efficiency (CEE) minimum elements for SEM. Participants were scored as full, some or no adoption in three categories: customer commitment, planning and implementation, and monitoring and reporting. We talked to 36 participants, who may be the more engaged ones, but the fact that we achieved a 78% response rate means that the results are representative of most participants in the sample.

For customer commitment and monitoring and reporting, about 60% of participants scored as "full adoption." In planning and implementation, it is very hard to get a score of no adoption or full adoption; everyone was scored as "some adoption" in this category, which led to all overall scores also being "some adoption."

In the category of customer commitment, participants were asked about their policies and goals, and resources allocated to energy management. Almost all (89%) respondents said their company has a policy or plan that incorporates energy efficiency, while 69% said they have

goals related to energy or efficiency. Of those, the vast majority said the goals are communicated to staff and about a third say they have met or are on track to meet goals. Just over two-thirds (69%) of participants said they have a staff member in charge of coordinating energy management, and of those, 60% had the same staff member as during the SEM engagement, and 88% have a back-up manager. Anna asked if these numbers were from 2015, and Erika confirmed they were from 2015, and noted that the interviews were conducted between 2 and 5 years after participants' initial SEM engagement. Overall, 60% of participants have an energy team, of which three quarters are comprised of multiple staff (rather than one person); almost all teams (88%) continue to meet regularly.

There were a lot of elements in the planning and implementation category: the energy management assessment, energy map, employee engagement, metrics and goals (which were covered above), project registers, implementation of projects in the register, and periodic reassessments of goals, opportunities and models. A fifth of respondents (20%) had not revisited or updated the energy management assessment since engagement. Nearly two thirds (61%) had used their energy map, and 81% conducted employee engagement activity, with 70% planning to continue these activities. Activities included trainings, meetings, events, rewards for achieving goals, signage and others. Two-thirds found the opportunity register useful, and 86% said they were tracking savings opportunities in some way; two-thirds of those respondents had added new opportunities since the engagement.

Because some opportunity registers were very long and it would have taken a long time to ask about everything on the register, the evaluator chose the most important activities for each interviewee in terms of highest energy impact and asked whether those activities were still in place. Of the 78 activities participants were asked about, 91% of remained in place at the time of the interview. This finding supports the persistence of savings after engagement.

In the category of measurement and reporting, participants were asked about how they track energy use, what data they collect and have available, and whether and how they share results. Two-thirds of participants are maintaining energy models or tracking energy use in some way. Half of these are using the models from their SEM engagement. One-third of participants said they don't track energy use at all for various reasons, including: time constraints, the facility has changed, or they are not sure why energy use is no longer being tracked. Respondent suggestions for improvement regarding the models included providing more training and information and automation of data updates, including weather data. About two-thirds (69%) said that their management requires regular updates from the energy team, most often quarterly, and about the same number said energy use data are shared with others in the organization.

We asked respondents about challenges with SEM. The most commonly cited were time and resource constraints (22%), commitment from management and staff or budget (14%). Respondents suggested continued communication from Energy Trust (27%) when asked about potential improvements; 24% had no suggestions for improvement. Anna asked if these two questions were open-ended and Erika confirmed they were. Anna wondered if we asked specifically about management whether more people would cite that as a challenge.

Respondents were asked for their perspectives on the impact of SEM. Overall, 88% felt they were more likely to do energy efficiency projects, and the same number said it made identifying future projects easier. Half said that SEM made implementing projects easier. The opportunity register and the energy team were the aspects of SEM that most contributed to doing additional energy efficiency projects. Finally, 80% reported that there was at least one change to their

facility since the SEM engagement, mostly to the facility itself or production levels versus hours of operation, schedules or product lines.

Conclusions and Recommendations: The energy savings evaluation was inconclusive. The evaluator recommended that Energy Trust should require that final versions of models and data are available to re-estimate the savings documented in final reports. This is a program requirement as of 2016. Another conclusion was that many SEM activities are still in place. The evaluator recommended that Energy Trust proactively follow-up with participants after SEM and consider requiring updated energy usage and production data after the engagement; the program is currently considering these recommendations.

Institutional knowledge about SEM activities remained in place after the engagement; the recommendation is that Energy Trust should support knowledge transfer when there is staff turnover at facilities. Many respondents noted there were changes to their facilities, which made maintaining or using models difficult over time. Energy Trust should check in with participants after engagement and work with participants to document changes over time.

In the end, we were not able to do analysis we envisioned and assess the persistence of savings using the energy models. Even if we have been able to get updated data, changes to facilities might have challenged the analysis. From participant interviews, it appears SEM is continuing at facilities after engagement and supporting the completion of more projects.

Next Steps: There is a persistence study of O&M measures underway. The study is using interviews and site visits to assess savings persistence, rather than energy models, based on our experience in this evaluation. The process evaluation of the Production Efficiency program is also underway, and in that evaluation, we are looking at the impact of SEM on implementation of capital projects, which will give quantitative information to complement the qualitative information gained from the interviews conducted as part of this evaluation. Lastly, given that the preferred evaluation approach was not workable, we are using the alternative approach in the 2013-2014 impact evaluation that is wrapping up and in the 2016-2017 impact evaluation that is underway.

The program has made several changes since the evaluation period. SEM has expanded beyond the Willamette Valley and to small and medium customers. The program has also standardized the offering and curriculum; there is now a first-year, intro-level offering and a continuous SEM offering. Modeling guidelines, SEM coach guides, the opportunity register, and other tools have been updated. The delivery model has also changed: there used to be one provider and there is now a pool of coaches. Delivery is currently being transitioned to custom program delivery contractors (PDCs). The program is exploring ways to deepen SEM practices and expand SEM participation.

Alan asked about the additional opportunity of customers that haven't yet participated - does this evaluation help show the value of SEM to customers? Kati said recruiting for SEM is part of a larger conversation about energy management between the customer and the PDC. Amanda noted that we are also involved in those conversations. Alan said knowing that competitors do SEM may encourage companies to participate. Kati noted that there are different motivations for participation among the executive team versus the energy team, and regionally. In Klamath Falls, for example, motivation is more about joining with the community, while in the Willamette Valley, it is more about competitive advantage.

Anna said the results make her wonder if the measure life (three years) is right. What would we need to do to get to a longer measure life? Erika said the persistence study of O&M measures is designed to get a read on measure life; at the end, we should be able to say the life should be three years or something else. Dulane Moran asked what we would tell other people about evaluating SEM – would we say don't use the models to estimate savings? Erika said that while we weren't able to use the models the way we had originally planned, it is still important for evaluators to review the models to make sure the model specification makes sense, and determine whether the model baseline was right, and how the model accounted for capital projects. In addition, the reporting period (typically three to six months) is used to estimate savings, which is then extrapolated to a full year; if the site has seasonal changes in usage, that needs to be taken into account. While we couldn't use the models in the way we originally expected, they were still useful. Phil said looking at the models is a crucial part of evaluation; just because we couldn't re-estimate them doesn't mean the savings estimates weren't right. The recommendations to streamline models and make sure the program has the final versions are good.

## **Pay for Performance 2018 Evaluation**

Presented by Phil Degens

Background: Pay for Performance (PFP) programs differ across the country. At Energy Trust, the customer implements energy savings actions with the help of a contractor and then gets incentive payments each year for three years; energy savings are verified by regression analysis. This differs from Energy Trust's custom program, where the payments are made once based on forecasted savings, rather than verified savings. It is also different from commercial SEM where customers are more involved in their building's energy management.

The PFP pilot was initiated in February 2014 and recruited 1 participant; the pilot concluded in 2017. A revised, limited PFP offering is rolled out in 2018. MetaResource Group was hired to do a follow-up look at the pilot, a process evaluation of the current offering, and compare Energy Trust's PFP offering with five others around the country.

The PFP offering targets buildings with more than 50,000 square feet of space. There was a goal of six participants in 2018. There are two major pathways: O&M and capital. Capital measures needed to pass measure-level cost-effectiveness tests, while O&M measures were deemed cost-effective. There was a target of at least 5% savings for each site, with an incentive cap of 150% of capital savings and 200% of O&M savings. The cap was designed to drive additional activity during the year, beyond the initial savings goal. Oliver Kesting said we had a lower incentive cap for capital measures because we didn't want to overspend on the program budget.

To roll out the offering there was an overview session in August 2017 that was attended by 18 of 27 invited contractors. Two firms enrolled as PFP allies and attended training in September 2017. As of mid-2018, there are no enrolled customers.

The evaluation methodology included a document review and interviews with PFP trade allies and contractors (seven in total), the pilot building engineer, and three program implementation staff. There were also interviews with five other utility managers who also offer a PFP program.

In the interview of the pilot participant, the participant noted that their experience was positive and their PFP ally made it easy. The key to them was the lack of up-front capital. They felt the

multi-year contract was fine and could be longer. There are lots of different opinions on contract length across the market. The participant felt the payment-over-time approach was unique, but worked well. They would be interested in new PFP offerings. They felt that energy savings may have decreased somewhat since the end of the contract period.

Interviewed contractors saw that existing relationships with customers were a key factor in participation and success of the offering. They were satisfied with pilot results. On the 2018 offering, contractors thought it allowed for measure consolidation, bundling, O&M, and deep retrofits. They felt the offering was a good business fit for them, and that it offered rigorous measurement and savings persistence. They said the incentives were better than those available for the pilot, and clearer for participants.

There was some target market misalignment and confusion. Oliver said the contractors didn't think they could enroll government buildings, but in fact they can enroll government office buildings. A commercial real estate company had difficulty with the multi-year offering. Contractors said it was difficult to make a compelling pitch for PFP to the customer, compared to the custom track offering. They also are concerned that PFP will add significant time and complexity to projects. While there were some concerns about measurement and verification requirements, they were not about the regression analysis. Contractors noted that they are already very busy, which reduced their interest in PFP. They also noted the lack of payment for up-front studies makes it hard to pursue PFP projects, but Phil noted other PFP programs don't offer that either. Phil said that several contractors had difficulty with lead generation, saying "all the good ones were taken" and were already participating in SEM or the custom track. A number of potential participants ended up going through other program tracks.

Four of the five other utilities we spoke with are just rolling out their PFP program and only one has been doing it for a while. The longer-standing program does not look like our PFP offering, it looks more like our custom track; they pay for a study up-front, and pay incentives based on first-year savings with a one-year engagement. Many of the new programs are having trouble finding leads, and it is taking longer than expected to roll out. All said they find measuring savings difficult, but methods are all similar to ours. Our cost-effectiveness requirements are more stringent; others test for cost-effectiveness at the building level. Other programs have higher savings targets, 15% or more, with similar incentive levels. They also involved trade allies in designing the program and screen them in order to participate. Contracts vary in length from two to 10 years. Phil thinks 10 years is long enough that people may forget why they are participating. Three years is a nice length because it keeps people engaged.

Recommendations: Recommendations from the evaluator were to manage expectations for recruiting and timelines. We should also clarify and communicate target markets and provide examples of financials for different options like PFP and the custom track to help people choose the right path. The evaluator also recommended considering a study funding mechanism, such as having Energy Trust pay for the study up front and then taking the cost out of incentives later, or if the customer decides not to participate then they must pay the cost of the study. Energy Trust should re-engage with contractors that showed interest in the offering. It was also recommended that we offer higher incentives and use less stringent cost-effectiveness criteria to make PFP more enticing.

Peter West asked how many people are participating in the other programs we spoke with. Phil said it varied. Oliver said that there were only a handful outside of the longer-standing program. Anna asked how many times we evaluate a pilot project. Phil said that it is important to evaluate a pilot to learn something. Cost-effectiveness doesn't always apply to a pilot; sometimes that's

what we want to learn from the pilot. Oliver said we wanted to learn from the pilot before we expand to the next phase. Lots of people are interested and talking about PFP, and we want to make sure we do it in a way that we can be successful.

Alan wondered if the solution will only benefit a small subset of customers. Oliver said we've had a lot of input from the service provider community. They want a vendor-driven offering, multi-year payments, regression models to verify savings, and incentives that are performance-based. Our offering was designed with this in mind, and customers are not clamoring for it. Oliver said PFP is similar to SEM, over a longer period of time, and driven by the service provider community rather than the customer and our coaches. Some customers want to outsource the work, but PFP is not compelling enough right now. We may be able to tweak it for success. Peter said stakeholders went to the legislature and asked for the pilot. He asked if anyone looked at the overhead for PFP. SEM isn't cheap to implement, but savings are big. Will it be possible to get enough savings from a PFP offering? Phil said the service providers sometimes want a big margin or to get paid for a long time. Oliver said that we have leveled cost targets which limit the incentives. The cost of offering PFP goes up for every year you add to the contracts.

The updated PFP offering has not had uptake for many possible reasons. This could be a niche market, and occasionally, this fits for a participant. Peter asked, how big does a niche need to be to justify the offering? Alan said rather than designing something and trying to find a customer, why don't we design something people need. Dulane noted the disconnect with institutional or government customers. Oliver said that most of those customers are already participating in SEM. Phil said we are starting a PFP offering in residential with a very different design. Anna said the OPUC is aware of the status of PFP and is drafting a report to the legislature; they will continue to monitor PFP and see how it goes. Warren Cook said that maybe there will be a way to combine PFP with mandatory energy disclosures, and it makes sense to keep it available for buildings who want to reduce their energy use index.

## **Diversity, Equity & Inclusion (DEI) Data, Baseline and Participation Analysis**

Presented by Dan Rubado

Andy Griguin, Alex Novie and Dan Rubado worked on this analysis over the summer. The goal was to look at the equity of Energy Trust programs, in a nutshell. This same presentation was given at the November 2018 board meeting.

Background: The DEI Operations Plan was adopted at the beginning of 2018. There are 10 goals to support expanding participation in our programs. This project is related to one of those goals and seeks to determine the extent to which we have served diverse communities, and identify areas where opportunities remain.

Energy Trust does not collect participant demographic data. This limits our ability to do individual-level data analysis. We selected a geographic approach using Census Bureau data; it is the gold standard for data, consistent in methodology over time, and receives lots of vetting so it is reliable. We did not use third-party household-level data because of its limitations – it is a snapshot in time, often unverified, and may miss low-income households because it relies on credit data.

The analysis created diversity indicators for three areas of priority. A 1-to-5 score was assigned to areas based on concentration of low-income, people of color, and rural residents (a 1 indicates low concentration, while 5 indicates high concentration). We then analyzed the extent to which we have served each community. The team got feedback from community-based organizations (CBOs) early on and adjusted the analysis methods based on that feedback.

A census tract is a proxy for a community and contains 1,000 to 2,500 households per tract. There are about 800 tracts in our service territory. Demographic data were from the American Community Survey (ACS), for years 2012-2016. We calculated program participation for eligible sites using 2013-2017 program data to align with demographic data.

For the income index, “1” indicates the most affluent areas and “5” is least affluent. The indicator was based on adjusted median income and average housing cost burden. On the racial index, “1” indicates the least racially diverse and “5” indicates the most racially diverse, based on the percent of residents identifying as people of color. On the urban/rural index, “1” tracts are urban and “5” are rural, based on the urban rural commuting area from the US Department of Agriculture and ACS population data. The commuting areas indicate how urbanized the land is, housing density, and where people commute to and from. It represents access to urban amenities, like contractors and energy services that we are interested in. Alan asked about the racial diversity slide and wondered whether some tracts are populated by one racial or ethnic group. Dan said the “5” tracts are between 25% and 95% people of color. Alan said those are not necessarily diverse. Dan said most “5” tracts are at most 50% people of color, so the tracts are not comprised of all one race or ethnicity, with some exceptions for tracts near Native American reservations. Debbie Goldberg Menashe said this is a good point to raise with communities of color to see how they feel about it. The index measures percent of the population that is not white, but there has been feedback from communities of color that “non-white” is not the preferred term either. Andy Hudson asked what the white blocks on the maps are. Dan said they are tracts not in our service territory or that do not have any residences.

For the participation analysis, we classified all sites in our territory as residential (including multifamily), commercial/industrial, and solar. We then compared participation between tracts with different index scores. Note that demographic data are not at the site level, so we don’t know if the low-income people in the tract participated, for example. We can say there is an association between the tract score and participation and it is an indicator. Participation rates exclude retail buy-down products like lighting and showerheads, which are about 50% of our savings; we can’t tie these products to individual sites. We may be able to look at them in the future at a regional level. Jennifer Light said that if we go down that path, other programs are trying to figure out how to do that, too, and we could get a group together to discuss it. There is interest in using the Retail Sales Allocation Tool (RSAT) data (which are used to allocate midstream sales to regions), for example. Dan said that the limitations of the geographic analysis are magnified by the RSAT. Shelly Carlton asked if the external data overlay we did in 2016 would resolve limitations. Dan said that that analysis used the third-party demographic data that we don’t really trust.

Anna asked why this came to Evaluation Committee last, after the board and the Conservation Advisory Council. Dan said it was driven by meeting timing. Anna said she is open to discussing things like this at Evaluation Committee more often and earlier. Dulane asked how bad third-party demographic data are; Dan said there are some validation studies, and the results are not great. Less than half the time they get the gender correct, which is some of the most basic data. Race is often imputed from Census tract data. They may have data on income for credit-



reporting purposes, but we don't know how good it is. They are secretive about how the data are created.

Alan said the pure analytical approach would be to find low participation areas and find out why they aren't participating. Dan said we did that and it wasn't very illuminating because it ended up being gas-only territory; after that income is a primary driver. Anna said if that is the case, this reporting is just confirming what we already knew. Dan said that in the full report, there is more detail on the different fuel territories and interaction with the indicators. Alan suggests getting out and talking to people or calling them to ask why they haven't participated. Dan said that the report looks at the 20 lowest participation tracts and they are Avista, or gas-only, where we have had less opportunity to serve them in the past. Debbie said that it was important to look at these specific communities, not just low participation areas. The Customer Insights Study provides another look into why people do or don't participate. Shelly said that Customer Insights also has some of the same problems as this analysis. Anna said there are a lot of possible reasons why people aren't participating beside these three factors. Shelly suggested we could connect with CBOs to tap their community knowledge. Debbie said we use a lot of methods to connect and determine why participation is low. Sarah Castor said that people aren't always able to tell you why they don't participate if you ask, and Dulane said they don't always know what participation means. Anna said it is good to be having these conversations. Alex said we wanted to do this analysis as a common framework, to find a consistent way to look at the market. Dulane asked if this was residential only; Dan said there is analysis of commercial and industrial participation, but the analysis was a little different. That was harder because of using household-level data to reflect businesses. For Customer Insights, we are oversampling areas in the number "5" tracts. Jennifer said this work is good and when talking about participation, there are a lot of different metrics – "touches" versus the extent of savings and incentives, for example. What does it mean to be inclusive; does a lightbulb really equal a more significant measure? We don't want to lose sight of the complexity and this work captures more of that complexity than other studies.

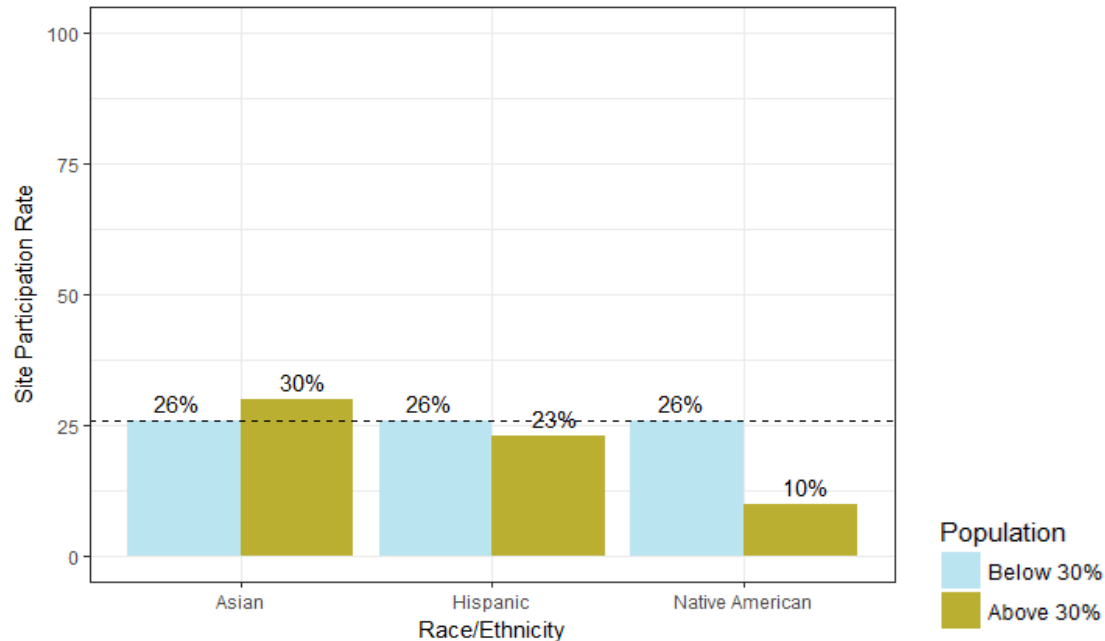
Findings: Residential participation varies with income from 30% participation in the most affluent areas to 24% in the least affluent areas. It is important to note that multifamily housing is included because they are hard to separate from single-family in our data. It looks like we have been more successful in serving low-income households through the multifamily program. Shelly asked if participation includes instant savings measures (like lightbulbs). Dan said it does as long as the measures are linked to a residential site. Thad Roth asked if common area multifamily projects are included. Dan said that building-level projects were counted toward all units in the building. If it was a direct-install measure, it was not assigned to all units, only to the unit in which it was installed.

Looking at savings by income indicates a slightly stronger trend – participants in less affluent areas have saved less energy than those in more affluent areas. Jennifer asked if the analysis considered where there was the most potential to save energy. Andy Griguhn said we couldn't figure out how to do that level of analysis in the timeframe for this project. Dan said we looked at savings as a proportion of energy use, but it isn't at the site level, it is at the tract level.

The demographic data for Oregon show that the population is about 75% white, non-Hispanic. Less diverse communities have a participation rate of 22% and the most diverse areas have 27% participation. The same trend is apparent in savings per participant: more diverse communities tend to save more energy. Jennifer asked if we segmented the analysis by measure type. Dan said we looked at free measures versus measures where customers had to pay something out of pocket. Alex said the next steps are to go further with that analysis.

There are several limitations of this analysis. Communities of color are not monolithic. Race is correlated with income and urban/rural indices. There may be countervailing trends with difference racial groups. We looked at tracts with large groups of a single race category. We were able to look at Asian, Hispanic, and Native American categories, but not African American or Pacific Islander tracts because there we no tracts with a relatively large concentration of these groups. Tracts with a high percentage of Native Americans had notably lower participation. We want to find out more about why we are serving Native American areas less than others; Shelly said that regional outreach staff can help with this.

#### Residential Participation in Tracts with Less or More than 30% of Population in a Specific Race Category



Alan said that there is also correlation between income and opportunity for savings because of house size. Dan said the opportunity with Native Americans is probably real. Anna asked if those areas are Bonneville Power Administration areas. Dan said they are Pacific Power, electric-only territory – areas with Warm Spring, Siletz, and Coquille tribes. It is a rural and income issue as well as race, and the dominant factor is unknown. Dan said we can't say how well we are serving Native Americans in urban areas.

There is a strong relationship between whether an area is urban and the level of residential participation: in urban tracts, participation averages 28% versus 14% in the most rural communities. Shelly asked if this is related to urban areas being more likely to be dual-fuel territory. Dan said yes, that is definitely a reason.

Residential conclusions are that there is opportunity to engage Native American, Hispanic, low-income and rural communities. We can reach out to representatives for these communities, seek input, and explore alternative data and analysis methods. Warren wanted to confirm that we don't know if the participants fall into the demographic categories we are interested in. Dan confirmed that. Warren Cook said that gentrification may lead to participation that doesn't benefit the groups we are interested in. Dan said this is a broad indicator, and picks up large differences in participation, but maybe not small ones.

We skipped the detailed business and solar results to ensure time for the last meeting agenda item. The conclusions are that small and medium and rural business are areas of opportunity, especially the overlap of those categories. The solar program should target low-income areas.

Dulane asked if we will collect more demographic data from participants going forward. There are conversations happening within Energy Trust, but no decisions yet. Dan said we collect demographic data in our Fast Feedback survey, but that has its own difficulties. Sarah noted we do not store Fast Feedback respondent demographic information in our Customer Relationship Management system, so we can't use it outside Fast Feedback.

## Fast Feedback Modes Experiment

Presented by Dan Rubado

Background: Dan presented early results from a test of survey modes for Fast Feedback. We worked with Research Into Action to test out a web-based survey versus our typical phone survey. Within the mode test, we did a test of recruiting methods and incentives. We looked at response rates, costs per complete, mode impacts on survey question answers. We also added demographic and spillover questions. We will present the results of demographics when the full year of Fast Feedback data is available.

Findings: For residential customers, the response rate to the phone survey was 24%, at a cost of \$15.16 per complete. For the web survey, the response rate was 25% at a cost per complete of \$7.60.

For web, the response rate for the email-only recruitment was same as for an email plus a mailer. The mailer-only recruitment was virtually useless, and we have already abandoned that method. Dulane asked if it was a postcard and Dan confirmed it was. Dulane said a mailer with stamp and envelop can get a much higher response rate.

In a test of different survey incentives, a fixed incentive of \$10 yielded a response rate of 34% at a cost of \$14.75 per complete; the lottery (for \$100) was cheaper but had a lower response rate that was about the same as no incentive and was more expensive per complete. Alan asked how these interacted, and Dan replied that the email-only recruitment with a fixed incentive performs best.

Residential Survey Response Rates and Costs:

Web Condition	Response Rate	Cost
Email only	28%	\$5.81
Email + mailer	29%	\$11.26
Mailer only	3%	\$45.01
Survey Incentive	Response Rate	Cost
Fixed incentive	34%	\$14.75
Lottery incentive	22%	\$9.09
No incentive	24%	\$6.12

For nonresidential customers, phone surveys had a 36% response rate at \$10.73 per complete, while web surveys had a 15% response rate at \$8.00. As with residential, we saw that the mailer was useless, possibly because it is hard to get it to the correct person within a company. A survey incentive didn't have a big impact relative to no incentive. Phone surveys are the clear winner for nonresidential due to the better response rate for a modest additional cost over web.

We wanted to see if the survey mode affected who responded to a survey or how they responded to the survey questions. The mode did not appear to affect satisfaction rates. Web survey respondents were more likely to say the program was influential in their decision to do the project and report lower free-ridership (35% vs 42%). Web respondents were also more likely to obtain info from Energy Trust, use our trade ally list, and learn about contractors from online source. They appear to be more web-savvy and more influenced by Energy Trust. Dulane said that she has seen this type of effect on free-ridership before, and there is potentially a social desirability bias in phone surveys that makes web responses more honest, but she doesn't have any studies to prove it.

For commercial and industrial respondents, there was no difference in overall satisfaction by mode. Web respondents were more likely to be very satisfied and give very high or very low ratings of the influence of Energy Trust on their project decision. There was a slight effect on free-ridership: it was higher for web than phone (28% vs 22%).

For participant spillover estimation, we gave respondents a list of potential measures (that weren't retail or buy-down measures) and asked them if they had done any of them without an incentive based on the influence of the program. About 5% of residential participants and 0.5% of nonresidential customers said they had done something on the list. The savings impact is unknown for these actions because we did not ask about specific details of the actions. Sarah noted that the survey timing – within a couple of months of doing a measure – doesn't allow a lot of time for spillover actions to occur. Dan said the question asked about influence in a general way and not about actions only since the participation for which they were being surveyed. The spillover questions are very cumbersome in the survey and Dan is not sure we should continue to use them.

Recommendations: Research Into Action recommends that we move to a web survey for residential participants with phone survey follow-ups to non-respondents or those without an email address. They also recommended the use of the fixed incentive for web surveys. We should continue to randomly sample participants, rather than invite everyone, to keep the cost of Fast Feedback manageable. This method should achieve a 42% response rate for both sectors at lower cost than in the past. The combination of phone and web survey should reduce bias in survey responses. Dulane asked if there were demographic biases. Dan said we are still in the process of analyzing that, this recommendation is about biases in answers due to mode.

Dan said that we haven't made any decisions for next year yet, but these seem like reasonable recommendations. Steve Lacey asked about how this interacts with the proposal to move to gross savings for goals and reporting, and how we determine how to exit markets. Phil said we haven't come to a final decision about moving to gross savings yet. Satisfaction is a metric we present to the OPUC. If we are changing the population we sample from, we may need to change the way we calculate satisfaction. If we change to gross savings, we may not need program or measure-specific free ridership rates for reporting, but we still want to know our influence on the market.

Phil said we still need to think through the sampling and how it affects other things. The free-ridership question battery is difficult for some respondents to answer and we may want to change those if we no longer need to do them the same way for adjusting gross to net savings. Anna suggested we could ask the free ridership questions of fewer people. Phil agreed that we may need fewer completes in the future. The survey doesn't have to change for 2019, but now is a good time to consider whether changes are appropriate. We will still be using net savings for goals and reporting in 2019, but it is better to reassess now rather than asking in December of next year and making changes with very little notice.

Dulane noted Fred's paper on gross versus net savings and said there may be different questions about influence that would be more useful. Sarah said that free-ridership figures haven't been that critical in making decisions to exit a market or measure in practice. Dulane said it is hard to let go of collecting information that we have focused on for so long.

**Meeting adjourned at 3:02 PM.**

**Sarah will send out a poll to schedule the next meeting for late January or early February 2019.**

PINK PAPER

# Trade Ally Survey

Final Report

October 17, 2018



Prepared by

research > into > action<sup>inc</sup>

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Final Report

# Trade Ally Survey

October 17, 2018

Funded By:  
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# Acknowledgment

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We would like to thank Energy Trust of Oregon for giving us the support needed to conduct this project. We also wish to acknowledge the many trade ally companies that agreed to participate in the survey and provided their responses to our questions; we appreciate their willingness to participate.

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## Executive Summary

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This report provides the results of the 2018 Energy Trust of Oregon (Energy Trust) Trade Ally Survey conducted for the first time since 2013. The main goal of this study is to gather feedback from trade allies to improve communication and to enhance offerings to both trade allies and customers.

The research team collected 180 survey responses online from a sample of participating trade allies that represent the various geographic areas in Energy Trust's service territory and varying levels of project activity with Energy Trust in 2017 and 2018.

The following are the highlighted findings:

### Firmographics

- › Almost 80% of respondents are small companies with fewer than 20 employees, half of which (39%) are very small companies with fewer than five employees.
- › One in 10 respondents (11%) are new trade allies with two years or less since becoming an Energy Trust's ally.
- › For about a third of respondents (30%), a large portion (50% or more) of 2017 revenues came from projects receiving Energy Trust incentives.
- › 12% of responding companies are women-owned, 9% are veteran-owned, and 6% are minority-owned.

### Program Paperwork and Participation

- › Three-quarters of the respondents across the market sectors complete program paperwork for their customers at least most of the time.
- › Two-thirds of respondents (68%) think the amount of time it takes to complete an application is within a "reasonable" range. Somewhat more than half of solar sector respondents (59%), however, think the amount of time it takes is "unreasonable." Relatedly, while 8% of all respondents reported that it takes more than two hours to complete an application, 28% of solar sector respondents did so.
- › 30% of respondents anticipate an increase in Energy Trust projects next year compared to 2017-2018, 18% anticipate a decrease, and 39% anticipate no change.

### Solar Market Participation

- › A high proportion of solar respondents (41%) anticipate a decrease in Energy Trust projects next year compared to 2017-2018.

- › Two-thirds of the solar respondents (68%) reported that the sunset of the Residential Energy Tax Credit (RETC) in 2017 has caused their solar-related business approach to change in 2018.
- › Just over one-half of solar respondents (54%) reported that three-quarters or more of their 2017 revenues were from solar projects, while about one third reported that non-solar work made up more than three-quarters of their revenues.
- › More than a third of the solar respondents (35% in residential and 38% in the commercial market) reported having no projects currently planned.

## Relationship with Energy Trust

- › Three-quarters of respondents (76%) reported overall satisfaction with Energy Trust. They reported highest satisfaction in areas such as interactions with, or response time from, program staff; however, half of respondents (50%) were dissatisfied with the incentive payment processing time.
- › Most respondents across the market sectors (89%) reported their relationship with Energy Trust has stayed the same or improved since last year. Eight percent said it had declined.

## Trade Ally Forum and Training

- › Despite being familiar with various types of support that Energy Trust provides trade allies (program and technical training, cooperative marketing, training reimbursement, etc.), fewer respondents reported using those opportunities. Most respondents were unfamiliar with travel reimbursement for energy conferences and training, but a large portion of respondents reported being interested in using it.
- › Top training topics of choice among respondents across market sectors are savings calculation tools, code changes, selling the value of energy efficiency to customers, and program requirements and paperwork.
- › A third of respondents (34%) reported attending trade forums or training in the last year, but almost half (47%) reported they have never attended or have not attended in more than two years.

## Communications, *Insider* Newsletter, and Website

- › The most-commonly reported preferred communications channels were email (84%), the *Insider* newsletter (65%), and the Energy Trust website (59%). Only a few respondents mentioned social media as a preferred communication channel.
- › Across the market sectors, 83% of respondents reported reading the *Insider* email newsletter at least “sometimes.” Ten percent reported being unfamiliar with the newsletter.
- › Two-thirds of respondents (67%) check the Energy Trust website a few times a month, and some (11%) check more frequently. Twenty percent of respondents said they never do.

## Star Rating System

- › Three-quarters of the single-family and solar respondents (76%) reported they are familiar with Energy Trust’s star system that is used to rate them. (Only single-family and solar trade allies were asked about familiarity with the star rating system.)
- › A majority of those respondents reported the current star rating system is clear (93%). But when asked how fair the system is to them, more than a quarter said (28%) it is at least a “slightly” unfair system. While most respondents (60%) remained neutral about the system’s usefulness to their customers, more thought the rating system is useful (30%) than not useful (11%).

## Conclusions

Findings from the survey in general suggest that Energy Trust’s trade ally network serves the trade ally community effectively, and has opportunities for improvement.

The respondents represent a large core of long-term members with a mixture of more recent entrants. They generally enjoy stable relationships with Energy Trust, with which satisfaction is high. Attitudes are generally positive about the star rating system, including a proposed change in the system, among single-family homes and solar respondents (the only ones surveyed on this topic).

Energy Trust programs significantly contribute to the trade allies’ aggregate revenues, but most revenues still come from non-program projects, suggesting continuing room for program expansion. Some trade allies, however, expect an increase in Energy Trust projects next year. While this likely stemmed from their positive experience working with the Trust, this may also suggest the need of encouraging diversification of the allies’ businesses and continuing monitoring their revenue sources to avert over-reliance on leveraging the incentive.

Trade allies prefer email, the *Insider* newsletter, and the Energy Trust website as sources of information about programs. They prefer the website, for information on incentives, general program information, and forms; and the *Insider*, for articles about common problems and their solutions, emerging technologies, tax credits, and technical assistance or resources. The *Insider* could be improved with more focus on program updates, how to work with Energy Trust, and more technical articles and industry news.

Among the various forms of Energy Trust support, trade allies are most familiar with, and interested in, trainings, cooperative marketing support, and reimbursements for conference, workshop, and training attendance. However, half of respondents have not attended any recent Energy Trust-sponsored trade ally forum or training. Energy Trust may achieve greater attendance by making trade allies more aware of the travel reimbursement for trade ally forums and making training and forums more informative and more relevant to continuing education credits.

Trade allies are interested in the idea of internships and apprenticeships offered through SummerWorks, a Worksystems program, which is a publicly funded paid summer internship program for diverse young adults ages 16-24 in the Portland Metro area.

About one-quarter of responding trade allies are minority-, women-, or veteran-owned businesses, and such businesses serve as subcontractors for about 11% of the subcontracted projects done by other trade allies.

Evidence is slightly mixed on how well trade allies serve non-English-speaking communities. More than one-quarter of responding trade allies have staff who speak at least one other language, which far exceeds the percentage of the Oregon population who cannot speak English very well (about 6%). On the other hand, on average, about 10% of sales are with customers for whom English is not the first language, which is less than the 15% of Oregonians who speak a non-English language at home. It may be worth attempting to investigate what additional barriers exist to reaching and serving non-English-speaking households.

Responses indicate that the incentive paperwork is not in general an excessive burden for trade allies, except in the case of solar incentives.

Solar trade allies generally depend on work in that segment, as it tends to make up a large percentage of their work and most such trade allies reported having no more than about a one-month pipeline of work. Solar sector trade allies experienced decreases in activity from 2017 in both the residential and commercial sectors, likely due to the sunset of the Residential Energy Tax Credit (RETC).

# MEMO

**Date:** January 2, 2018  
**To:** Board of Directors  
**From:** Ashley Prentice, Trade Ally Project Manager  
Cameron Starr, Sr. Customer Service Strategy Manager  
**Subject:** Staff Response to the 2018 Trade Ally Survey

Energy Trust's 2018 trade ally survey was developed from previous surveys of the trade ally network that were last conducted in 2013. The previous surveys were heavily focused on questions related to equipment installation. This survey was shortened and the focus shifted to the collection of firmographic information, examination of benefits trade allies receive from being part of the network and feedback on communications and satisfaction with Energy Trust. Insights from the survey will help identify areas for improvement in 2019.

The web-based survey resulted in 180 responses from a sample of participating trade allies from all geographic areas in Energy Trust's service territory, and who completed at least one project with Energy Trust in 2017 and 2018. The survey asked about the services trade allies perform, instead of programs enrolled in, which returned interesting results. For example, 50 percent of respondents reported serving multifamily properties, while our enrollment data shows that only 27 percent of those respondents are enrolled as Multifamily trade allies. This indicates an opportunity to increase enrollment in programs in which contractors already participate.

This year's survey was designed to capture firmographic information from survey respondents. We captured number of employees, trade allies who are minority, veteran or women-owned, trade allies who employ staff who speak a language other than English, serve non-English speaking customers and collected information on revenue coming from Energy Trust projects. Almost 80 percent of respondents are small companies with fewer than 20 employees. Forty percent of respondents reported that they have fewer than five employees. 12 percent of responding companies self-report being women-owned, 9 percent report veteran-owned and 6 percent report minority-owned. Results show that more than one-quarter of responding trade allies have staff who speak at least one language other than English, and support non-English-speaking customers – most commonly Spanish. We are reviewing the data to understand where we can provide better support regionally, based on the feedback received. Lastly, for about a third of respondents, fifty percent of 2017 revenues came from projects receiving Energy Trust incentives.

The survey also asked about satisfaction with benefits trade allies receive from being in the network. We asked trade allies about a possible new benefit, travel reimbursement. Results showed that 60 percent of trade allies are interested in travel reimbursement for conferences and trainings. We recently launched a travel reimbursement for those who attended the Pendleton Trade Ally Forum in October 2018, and we are planning to expand this offering to other rural locations throughout the state for the fall 2019 forum.

The survey results provided good feedback to staff on trade allies' preferred methods of communication, trainings and workshop topics of interest, along with support needs through business development funds and Energy Trust's website. Trade allies prefer email, the Insider



newsletter, and the Energy Trust website as main sources of information about programs. Along with communications, we also asked about satisfaction with Energy Trust. Three-quarters of respondents reported overall satisfaction with Energy Trust. The area with highest satisfaction were interactions with, or response time from, program staff. Trade allies expressed the lowest satisfaction with incentive payment processing time. Energy Trust's Solar program received the lowest rating for incentive payment processing time. We believe that this is because the survey was fielded during the sunset of the Residential Energy Tax Credit and a decrease in the number of post installation quality assurance verifiers. The program has since redesigned the verification process to allow them to be conducted remotely. This effort, in addition to launching a new processing system, have helped reduce processing time.

Other Energy Trust programs are also working to reduce payment processing timelines. The Home Retrofit program has implemented standards to ensure 90 percent of completed applications are processed within 30 days of receipt – a significant reduction from the previous processing time of six to eight weeks. Other programs, such as Existing Multifamily and Production Efficiency, are redesigning high volume incentive application forms to help reduce customer and contractor confusion. In open-ended comments, trade allies reported an interest in electronic payments and DocuSign software. Energy Trust is exploring an electronic payment option to potentially decrease the payment timeline.

With about 1,400 trade allies throughout Oregon and southwest Washington, we recognize their important role in supporting and increasing awareness of energy efficiency. Trade allies are often the customer's primary, or only, connecting point with Energy Trust. We ask for trade ally input on relevant training topics at every forum and trade ally event, and highly value their input. This survey provides good insights to refine and adjust our approach to communications, training and the benefits we offer and we look forward to exploring next steps summarized above.

PINK PAPER



# Energy Trust of Oregon 2018 Windows Market Research Report

Submitted by Apex Analytics, LLC  
September 28, 2018

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# 1. Executive Summary

Energy Trust of Oregon (Energy Trust) has offered incentives to residential homeowners to install higher efficiency windows since 2003. Energy Trust contracted with Apex Analytics (Apex) to conduct market research on the residential windows to obtain more information on the availability and cost/pricing of efficient windows that are currently on the market. This information will help Energy Trust consider changes to program incentive levels, efficiency levels, and program delivery. The overall goals of the research were to:

- △ Determine the key manufacturers serving the Oregon market.
- △ Estimate the current and mid-term projections (five-year forecast) for the size and efficiency shares of the windows market in Oregon.
- △ Assess the incremental cost of energy efficient windows, including the incremental cost at different efficiency levels and what drives these costs.
- △ Determine how a midstream or upstream program could most effectively increase the adoption of energy efficient windows.

To accomplish the goals for this market research report, Apex conducted three primary tasks:

- △ Collected secondary research on the windows market and windows energy efficiency programs.
- △ Designed and ran a hedonic price model, based on almost 2,000 window products harvested from online windows retailers, to determine incremental costs by increased efficiency (U-value) for residential windows.
- △ Administered a total of eight in-depth interviews with windows manufacturers, glass manufacturers, retailers, and market experts.

Apex grouped key findings and conclusions from the market research into one of six categories: Market Landscape, Supply Chain, Market Share, Incremental Cost, Technology, and Program Design. Apex's conclusions are summarized below.

## Market Landscape

*Market share by manufacturer is not readily available.* None of the window and glass manufacturer interviewees were able to provide estimates for manufacturer

market share and believed the subscription or pay-for reports make speculative approximations of manufacturer shares. In addition, program tracking only included manufacturer for approximately one-third of the rebates. The interviewees, however, were in agreement that the major window manufacturers for Oregon were Anderson, Marvin, Milgard, and Jeld-Wen, followed by secondary manufacturers including Pella, Ply-Gem, and Sierra Pacific.

*Approximately 650,000 residential windows are sold in Oregon each year, split approximately evenly between the new construction and replacement/retrofit market.* The estimated range of sales was fairly wide (500,000 to 800,000 windows per year) and was reported to vary based on the economy and new housing starts.

### Supply Chain

*The residential windows supply chain is undergoing minor changes, but significant transformation is unlikely in the near term.* Residential window supply has transitioned to primarily a two-step process (from manufacturer to dealer, from dealer to buyer), though some window suppliers still provide a significant share to production builders and directly to homeowners through single-step channels. Market consolidation has increased through mergers and acquisitions, which some manufacturers believe will help lower pricing due to increased production volumes and economies of scale. Supply disruption via online retailers (e.g., Amazon) was considered unlikely because of the customization and measurement required for residential windows.

### Market Share

*Efficient windows (below 0.30 U-value) had approximately 66% market share in 2017, forecasted to go up to 72% market share in 2022.* Higher-tiered (i.e. more) efficient windows (0.27 U-value and below) had 15% market share in 2017, forecasted to go up to 32% in 2022 (Table 1). The key factors that drive shares of efficient windows are: incentives, local building codes, the ENERGY STAR specification, and new technology.

Table 1. Windows Market Share by U-Value Bins.

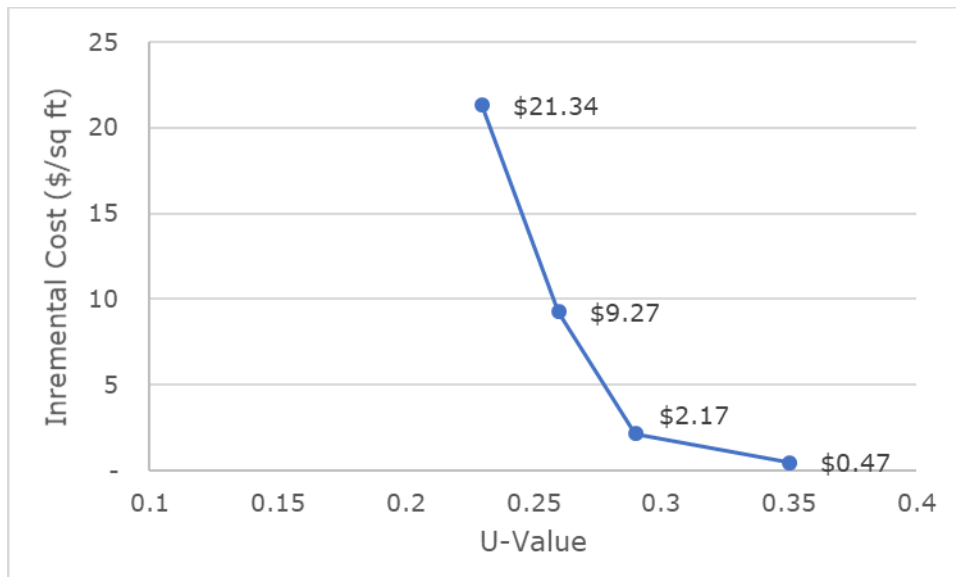
U-Value Tier	2017 Market Share	Estimated 2022 Market Share
> 0.35	4%	4%
0.31 to 0.35	30%	24%
0.28 to 0.30	51%	40%
0.25 to 0.27	11%	24%
0.20 to 0.24	3%	6%
< 0.20	1%	2%
<b>Total</b>	<b>100%</b>	<b>100%</b>

Source: 2014 Delphi Study and current study interviews

## Incremental Cost

*The incremental cost of moving from an average inefficient window (0.33 U-value) to a higher-efficiency window (0.28 U-value), purchased from large home improvement retailers, is approximately \$1.45 per square foot and increases sharply for windows below 0.27 U-value.* The model results showed the non-linear nature of windows pricing, with the price of 0.25 to 0.27 U-value windows approximately four times the price of 0.28 to 0.30 U-value windows, and tri-pane windows below 0.25 U-value costing approximately ten times more (Figure 1).

Figure 1. Increasing Incremental Cost by U-Value Bins.





*The nature of the window production process is the primary driver for increased incremental costs.* Window production is very labor intensive, and production of higher-efficiency windows increases the degree of manual input to the process. The fabrication process requires increasing demands from manufacturer staff, coupled with the additional expense of another pane of glass (for tri-pane windows), additional (and more expensive) gas fill, spacers, and materials in general.

## Technology

There are several promising on-the-market window technologies and one theoretical product that could offer significant transformation of the windows market. Existing technologies includes dynamic glass (whose savings come primarily from summer cooling) and window automation (automated opening/closing and advanced shading/blinds, again savings primarily from summer cooling). One of the most promising new technologies is called “thin-triple” windows, and involves an ultra-thin glass insert coupled with krypton gas fill that could be integrated within existing windows fabrication processes (obviating the need for frame and sash redesign). Identifying upstream manufacturing partners and downstream utility and government support to develop this technology will be crucial for its success. Other technologies reviewed in our research offer increased efficiency, but they suffer drawbacks or limitations that have prevented significant market penetration and are unlikely to gain traction in the near term.

## Program Design

*The Energy Trust windows program aligns well with most other Northern ENERGY STAR tier programs.* Apex identified 22 other windows programs offering incentives across 32 states—all downstream programs—and Energy Trust incentives were in the mid-range of incentives offered by other program administrators for the 0.28 to 0.30 U-value windows. Energy Trust was one of only several programs that offered tiered incentives, with considerably higher incentive levels for the higher-efficiency windows products.

*Downstream incentives were the most preferred program design approach.* Every market actor believed that direct-to-consumer rebates are the most effective means of providing support for increasing consumer demand for high-efficiency windows. There was one interviewee who believed that an upstream approach could drive the market for super high-efficiency “thin-triple” glass, particularly since the incremental cost analysis found considerably higher per-square-foot cost of a conventional tri-pane window relative to the assumed cost of providing ultra-thin tri-pane insulated glass units.

Recommendations from the research include:

- △ *Collect manufacturer name as part of the rebate application.* This would help characterize the market shares—at least through the program—by manufacturer, allowing for more strategic targeting of manufacturers that aren't selling as many rebated products.
- △ *Adopt the incremental cost findings for planning and other program design assumptions.* Consider the incremental cost if coordinating with window manufacturers to provide upstream incentives.
- △ *Consider pursuing tri-pane ultra-thin inserts as an upstream program offering with LBNL, willing windows manufacturers, and other partners.* The manufacturers most receptive to this technology included Alpen and Anderson windows. Other interested parties in this effort include the state of California, Canada, and NEEA. Energy Trust should be sure to investigate the concerns related to krypton (losses and pricing) and window frame and sash upgrades, as these were valid concerns.

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# MEMO

**Date:** December 31, 2018  
**To:** Board of Directors  
**From:** Mark Wyman, Senior Program Manager  
Phil Degens, Evaluation Project Manager  
**Subject:** Staff Response to the 2018 Residential Windows Market Research Report

Energy Trust conducted market research on the availability and cost/pricing of residential efficient windows to help Energy Trust consider changes to program incentive levels, efficiency levels, and program delivery. The research confirmed that few technological advances in residential windows have been made in the last few years or are anticipated in the near future. The research did confirm that Energy Trust's tiered window incentive was appropriate. The research did report higher estimated incremental costs for the more efficient tier of windows. This will lead Energy Trust to do a comprehensive review of incremental costs when the current window measure is renewed.

The discussion of the thin triple pane window technology in the report has already led to a few actions. The Northwest Energy Efficiency Alliance (NEEA) has contracted with Steven Selkowitz to consult on a potential market transformation project involving the thin triple pane window. Energy Trust has also met with Dr. Selkowitz and NEEA to discuss how we might accelerate this technology in the region. There are a few pilots currently underway in California that NEEA and Energy Trust might be able to leverage to start introducing this technology to Oregon in 2019.

# Tab 6

# Finance Committee Meeting

January 30, 2019, 2:00 pm

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## Attending at Energy Trust offices

Pati Presnail, Mike Colgrove, Steve Lacey, Greg Stokes, Alison Ebbott, Lizzie Rubado, Cheryle Easton from Energy Trust

## Attending by teleconference

Susan Brodahl – *Finance Committee Chair*, Anne Root, Debbie Kitchin, Roger Hamilton

The meeting began at 2:01 pm.

## Budget Tools Project

Greg Stokes presented an update on the budget tools implementation plan.

The plan began with findings of budget review team, presented to the board June 2018. The new process would shift planning to a three-year cycle, with annual budgets. This would be supported by new tools and informed by stakeholder workgroups. Objectives of the budget tools are to improve our forecasting ability and to engage more deeply with stakeholders. Next, we worked with Dan Kent from Solomon Consulting to define the implementation plan. There are three teams, with the heavy focus on the tools this year. This was a strategic choice to achieve benefits more quickly. The budget tools will replace the current collection of spreadsheets to support better, more frequent, and more robust forecasts, among other benefits. Steve adds OPUC commented they encourage we pursue tools this year. Greg went on to describe change management and the steering committee.

Anne commented that this is an enormous project, and applauds the team for taking this on. She also said her experience with new software is that you learn a lot 'on the road' toward finding a solution.

Pati asked the committee what cadence would be helpful to receive status updates. The committee is interested in a quarterly update, something that is not too labor intensive to prepare but is sure to give early and clear notice of any major obstacles encountered.

## Community Solar

Lizzie Rubado, Renewables Strategy Manager, presented the status of our role in the Community Solar program. She described the purpose of the program and the funding source, and provided examples of how it might work for a participant.

Pati presented the budget for the program and the impact this program will have on the organization as a whole, including the reallocation of costs. Pati explained that the Commission is concerned we don't cross subsidize between PPC and these funds, which a full allocation is meant to demonstrate. She explained that the allocation model may need to be revised, and we may ask for further insight during the Management Review. Michael Colgrove agreed we need to look at the allocations to make sure they are equitable for this program and all other programs. The committee asked a few clarifying questions about staff costs, allocations, and revenue.

Next, Mike explained the staging of the decision process, for both the contract and the revised budget. While the prime contractor is negotiating with the State none of this can be done in a public setting, and so we are not able to bring this budget to the February board meeting. The next board meeting is in April. Mike explained that ordinarily we would prefer the board review and approve the budget for new funding sources before we execute a contract, but given the timing challenges on this one, we would like the board to consider two options. The first would be to hold a special board meeting after

the prime contractor executes their contract with the state to approve the amended budget. The second is to bring this topic to the board training for informational purposes only and execute our subcontract with the prime contractor whenever it's ready. We would then post the amended budget for public comment and present it to the board for approval at the April board meeting. Mike asked the committee if they would recommend a special board meeting or approving the budget after we execute the contract. Committee members Susan, Anne and Roger said they did not see a need for a special meeting. Debbie Kitchin had by this time dropped off the call.

## **2018 Investment Results**

Alison Ebbott presented investment results from 2018 and our performance against the investment policy. Energy Trust's investment policy is very conservative, placing an emphasis on safety, liquidity, and lastly returns. The funds earned 1.27% for the year, totaling over \$1 million. This year Alison renegotiated the rate paid on the sweep account. Her initiative increased the returns significantly.

Mike asked if this interest has been reallocated to the utilities, and Pati explained this will take place after year-end. Pati mentioned we will look at charging expenses such as Alison's time as well as the safe keeper fee prior to that redistribution.

We would like the committee to review the investment policy. Steve noted that the current policy mentions the Chief Financial Officer, and this needs editing. Pati asked if the committee would be interested in hearing from an investment advisor about our investment objectives. Susan asked if Cable Hill could provide feedback to us. Pati will follow up on this suggestion.

## **Committee Charter**

We will review the committee charter at the next meeting.

**Next meeting date is March 13, 2019 at 2pm.**

## Notes on November 2018 Financial Statements

December 18, 2018

### Revenue

Revenue continues to track above budget by 4%.

	<u>YTD Actual</u>	<u>YTD Budget</u>	<u>YTD Var</u>	<u>YTD %</u>	<u>PY</u>
PGE Efficiency	88,271,665	85,263,897	3,007,768	4%	86,348,741
PGE Renewables	7,937,704	7,667,645	270,059	4%	7,935,998
PAC Efficiency	50,439,871	49,127,623	1,312,248	3%	52,984,108
PAC Renewables	5,808,539	5,805,182	3,357	0%	5,904,249
NWN	19,975,948	19,573,490	402,457	2%	24,916,657
CNG	2,059,059	1,807,379	251,681	14%	2,356,954
Avista	1,210,763	1,060,464	150,299	14%	864,439
Grant Revenue	84,238		84,238	0%	43,233
Investment Income	944,418	210,000	734,418	350%	385,908
<b>Total</b>	<b>176,732,205</b>	<b>170,515,680</b>	<b>6,216,526</b>	<b>4%</b>	<b>181,740,287</b>

### Reserves

Reserves declined more than \$5 million dollars in November, and we expect to see much larger decreases by the end of the year. All utilities should end with positive balances.

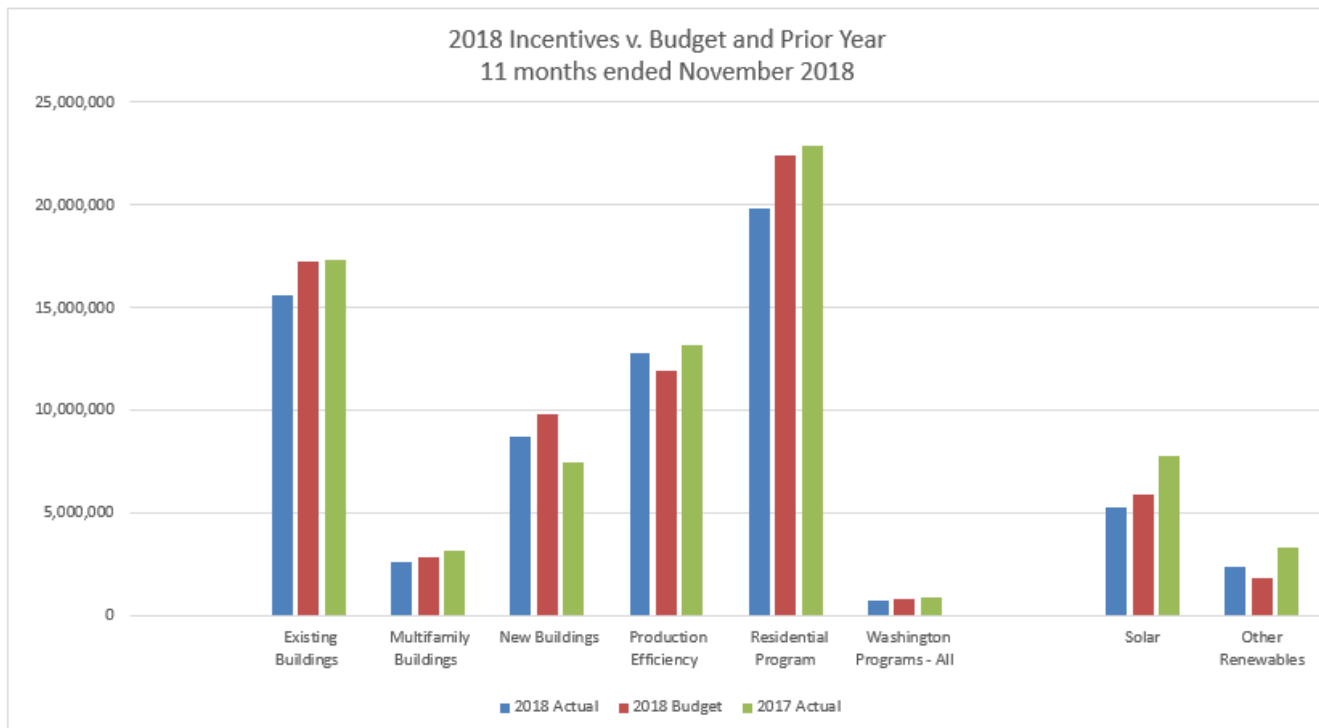
<u>Reserves</u>	<u>12/31/18</u> <u>forecast</u>	<u>11/30/18</u> <u>current</u>	<u>1/1/18</u> <u>beg of year</u>	<u>11/30/17</u> <u>one year ago</u>
PGE	17,352,727	30,740,060	12,210,374	20,518,476
PacifiCorp	4,537,102	15,809,108	6,211,995	12,607,760
NW Natural	3,189,165	5,167,175	3,527,721	4,952,526
Cascade	153,044	886,712	262,065	397,057
Avista	16,017	79,021	75,716	41,916
NWN Industrial	199,190	1,300,200	2,647,086	4,152,134
NWN Washington	436,902	910,683	176,503	476,785
PGE Renewables	8,606,385	9,364,241	7,073,074	7,324,783
PAC Renewables	5,811,252	6,579,841	6,268,078	6,674,219
<b>Program Reserves</b>	<b>40,301,784</b>	<b>70,837,030</b>	<b>38,452,612</b>	<b>57,145,656</b>
<b>Other Reserves</b>	<b>0</b>	<b>24,805</b>	<b>38,710</b>	<b>39,407</b>
Contingency Reserve	5,000,000	5,000,000	5,000,000	5,000,000
Board approved for program loans	1,800,000	1,800,000	800,000	
Contingency Available	3,441,309	3,785,727	4,641,309	4,601,517
<b>Total</b>	<b>50,543,091</b>	<b>81,447,565</b>	<b>48,132,611</b>	<b>66,786,574</b>



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## Expenses

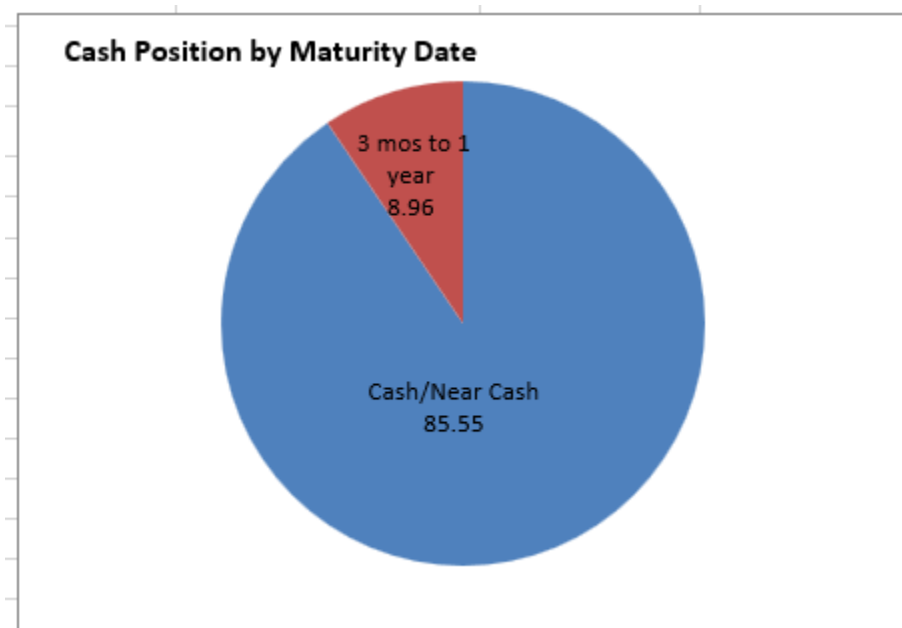
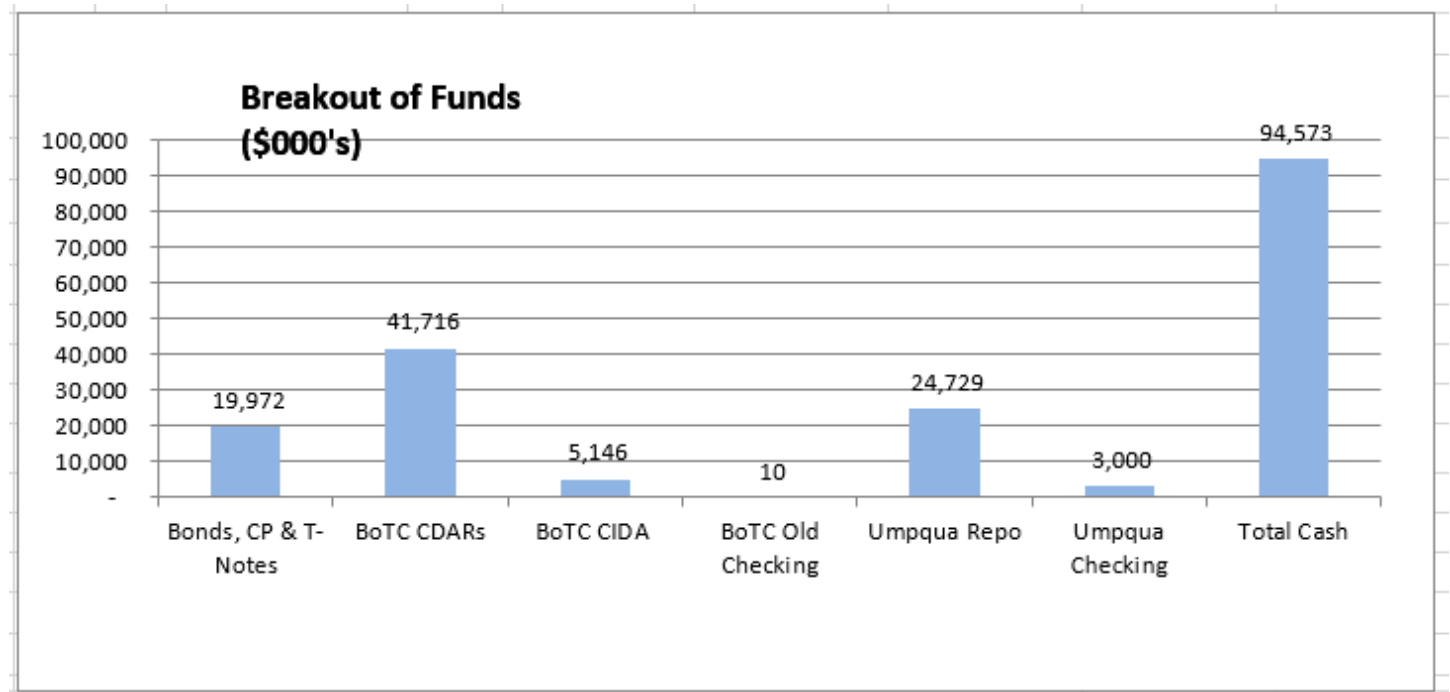
Total expenses for the month of November were 3% (\$0.5 million) more than budgeted. November incentives were more than budget by \$890K. This brings our incentive shortfall for the 10 months of the year to just under \$5 million. Total expenses year-to-date are \$9.8 million less than budget. In addition to incentives, professional services are below budget by \$2.3 million for the year due to certain projects not beginning as quickly as planned.



<b>Total Incentives</b>			
<b>Year-to-Date 2018</b>			
	<u>2018 Actual</u>	<u>2018 Budget</u>	<u>2017 Actual</u>
Existing Buildings	15,624,558	17,237,476	17,288,833
Multifamily Buildings	2,635,148	2,878,765	3,150,398
New Buildings	8,688,540	9,846,449	7,498,867
Production Efficiency	12,793,812	11,938,485	13,213,790
Residential Program	19,817,634	22,411,929	22,901,576
Washington Programs - All	765,173	812,311	866,055
Solar	5,270,650	5,925,650	7,823,026
Other Renewables	2,390,119	1,833,834	3,345,720
<b>Total Incentives</b>	<b>67,985,635</b>	<b>72,884,901</b>	<b>76,088,265</b>
<b>Energy Efficiency Only</b>	<b>60,324,865</b>	<b>65,125,416</b>	<b>64,919,519</b>

**Investment Status**

The graphs below show the type of investments we hold and the locations where our funds are held. We are investing in short term areas (mainly 13 week CDARs). Our available cash balance in the checking account decreased more than \$3 million from October to November. In December we will begin to bring back some of the maturing CDAR's in order to cover our expected January incentive payouts.



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**Energy Trust of Oregon**  
**BALANCE SHEET**  
**November 30, 2018**  
**(Unaudited)**

	November 2018	October 2018	December 2017	November 2017	Change from one month ago	Change from Beg. of Year	Change from one year ago
<b>Current Assets</b>							
Cash & Cash Equivalents	32,904,756	35,958,523	52,223,904	50,948,695	(3,053,767)	(19,319,147)	(18,043,938)
Investments	61,568,780	58,536,874	22,721,392	26,717,313	3,031,907	38,847,388	34,851,467
Receivables	87,683	88,275	119,077	98,665	(592)	(31,394)	(10,982)
Prepaid Expenses	301,495	366,876	244,442	339,455	(65,381)	57,053	(37,960)
Advances to Vendors	734,276	1,468,528	2,489,421	744,663	(734,253)	(1,755,145)	(10,387)
<b>Total Current Assets</b>	<b>95,596,991</b>	<b>96,419,077</b>	<b>77,798,237</b>	<b>78,848,791</b>	<b>(822,086)</b>	<b>17,798,754</b>	<b>16,748,200</b>
<b>Fixed Assets</b>							
Computer Hardware and Software	3,934,165	3,934,165	3,733,082	3,733,082	-	201,083	201,083
Software Development in Progress	-	-	183,687	181,238.30	-	(183,687)	(181,238.30)
Leasehold Improvements	605,621	605,621	595,027	595,027	-	10,594.50	10,594.50
Office Equipment and Furniture	819,795	819,795	815,056	815,056	-	4,739	4,739
<b>Total Fixed Assets</b>	<b>5,359,581</b>	<b>5,359,581</b>	<b>5,326,852</b>	<b>5,324,403</b>	<b>-</b>	<b>32,729</b>	<b>35,178</b>
Less Depreciation	(4,815,806)	(4,796,909)	(4,442,925)	(4,374,848)	(18,898)	(372,881)	(440,958)
<b>Net Fixed Assets</b>	<b>543,774</b>	<b>562,672</b>	<b>883,926</b>	<b>949,555</b>	<b>(18,898)</b>	<b>(340,152)</b>	<b>(405,780)</b>
<b>Other Assets</b>							
Deposits	258,653	258,653	237,314	237,314	-	21,339.00	21,339.00
Deferred Compensation Asset	988,462	987,596	972,828	866,528	866	15,634	121,934
Note Receivable, net of allowance	430,669	430,669	263,669	263,669	-	167,000	167,000
<b>Total Other Assets</b>	<b>1,677,785</b>	<b>1,676,919</b>	<b>1,473,812</b>	<b>1,367,512</b>	<b>866</b>	<b>203,973</b>	<b>310,273</b>
<b>Total Assets</b>	<b>97,818,550</b>	<b>98,658,668</b>	<b>80,155,975</b>	<b>81,165,857</b>	<b>(840,117)</b>	<b>17,662,576</b>	<b>16,652,693</b>
<b>Current Liabilities</b>							
Accounts Payable and Accruals	13,194,444	9,387,062	29,180,745	11,637,746	3,807,382	(15,986,301)	1,556,698
Salaries, Taxes, & Benefits Payable	1,058,761	964,479	874,594	891,920	94,282	184,167	166,841
<b>Total Current Liabilities</b>	<b>14,253,205</b>	<b>10,351,541</b>	<b>30,055,339</b>	<b>12,529,666</b>	<b>3,901,664</b>	<b>(15,802,134)</b>	<b>1,723,539</b>
<b>Long Term Liabilities</b>							
Deferred Rent	1,133,461	1,111,269	990,344	978,251	22,192	143,117	155,210
Deferred Compensation Payable	982,081	981,215	976,378	870,078	866	5,703	112,003
Other Long-Term Liabilities	2,235	2,235	1,290	1,290	-	945	945
<b>Total Long-Term Liabilities</b>	<b>2,117,777</b>	<b>2,094,719</b>	<b>1,968,012</b>	<b>1,849,619</b>	<b>23,059</b>	<b>149,766</b>	<b>268,158</b>
<b>Total Liabilities</b>	<b>16,370,982</b>	<b>12,446,260</b>	<b>32,023,351</b>	<b>14,379,285</b>	<b>3,924,722</b>	<b>(15,652,369)</b>	<b>1,991,697</b>
<b>Net Assets</b>							
Unrestricted Net Assets	81,447,568	86,212,408	48,132,624	66,786,572	(4,764,840)	33,314,944	14,660,996
<b>Total Net Assets</b>	<b>81,447,568</b>	<b>86,212,408</b>	<b>48,132,624</b>	<b>66,786,572</b>	<b>(4,764,840)</b>	<b>33,314,944</b>	<b>14,660,996</b>
<b>Total Liabilities and Net Assets</b>	<b>97,818,550</b>	<b>98,658,668</b>	<b>80,155,975</b>	<b>81,165,857</b>	<b>(840,117)</b>	<b>17,662,576</b>	<b>16,652,693</b>

**Energy Trust of Oregon**  
**Cash Flow Statement-Indirect Method**  
**Monthly 2018**

	<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>
<b>Operating Activities:</b>												
<i>Revenue less Expenses</i>	\$ 11,111,618	\$ 11,785,867	\$ 5,880,943	\$ 6,097,341	\$ 1,847,257	\$ (3,889,820)	\$ 2,539,130	\$ 578,392	\$ 1,070,747	\$ 1,058,313	\$ (4,764,839)	\$ 33,314,942
<i>Non-cash items:</i>												
Depreciation	60,349	60,436	37,154	35,624	33,910	31,464	26,631	22,992	22,992	22,937	18,898	373,387
Change in Reserve on Long Term Note												-
Loss on disposal of assets												-
Receivables	25,330	13,597	(10,052)	(101,297)	89,402	(6,066)	(5,248)	34,210	(15,585)	(7,930)	(7,602)	8,760
Interest Receivable	11,816	701	586	(36,521)	59,170	(27,651)	55,102	(8,083)	(42,041)	1,362	8,194	22,634
Advances to Vendors	1,053,629	717,885	(1,549,230)	755,704	755,705	(1,563,795)	773,167	773,166	(1,429,591)	734,253	734,252	1,755,145
Prepaid expenses and other costs	(423,367)	(160,906)	52,859	53,228	(29,400)	67,421	(36,386)	74,911	(16,865)	92,964	64,515	(261,026)
Accounts payable	(18,224,160)	(151,198)	(3,016,589)	1,026,311	(486,892)	43,241	1,788,509	(2,652,679)	2,450,039	(570,275)	3,807,381	(15,986,312)
Payroll and related accruals	94,882	102,231	(227,298)	(11,396)	148,977	58,746	(44,306)	(132,682)	(85,099)	190,667	95,148	189,870
Deferred rent and other	12,093	12,092	12,092	12,093	14,051	12,093	12,092	12,093	12,092	11,079	22,192	144,062
<b>Cash rec'd from / (used in) Operating Activities</b>	<b>(6,277,810)</b>	<b>12,380,706</b>	<b>1,180,465</b>	<b>7,831,087</b>	<b>2,432,180</b>	<b>(5,274,367)</b>	<b>5,108,691</b>	<b>(1,297,680)</b>	<b>1,966,689</b>	<b>1,533,370</b>	<b>(21,861)</b>	<b>19,561,470</b>
<b>Investing Activities:</b>												
Investment Activity (1)	3,011,583	(2,002,711)	(8,416,303)	(3,992,551)	5,387,728	(16,077,806)	(8,988,537)	(591,615)	(4,064,963)	(80,307)	(3,031,906)	(38,847,388)
(Acquisition)/Disposal of Capital Assets	(2,843)	(8,444)	(3,397)		(7,955)					(10,595)		(33,233)
<b>Cash rec'd from / (used in) Investing Activities</b>	<b>3,008,740</b>	<b>(2,011,155)</b>	<b>(8,419,700)</b>	<b>(3,992,551)</b>	<b>5,379,773</b>	<b>(16,077,806)</b>	<b>(8,988,537)</b>	<b>(591,615)</b>	<b>(4,064,963)</b>	<b>(90,902)</b>	<b>(3,031,906)</b>	<b>(38,880,621)</b>
<b>Cash at beginning of Period</b>	<b>52,223,904</b>	<b>48,954,835</b>	<b>59,324,388</b>	<b>52,085,153</b>	<b>55,923,690</b>	<b>63,735,643</b>	<b>42,383,470</b>	<b>38,503,624</b>	<b>36,614,329</b>	<b>34,516,054</b>	<b>35,958,523</b>	<b>52,223,904</b>
<b>Increase/(Decrease) in Cash</b>	<b>(3,269,070)</b>	<b>10,369,552</b>	<b>(7,239,235)</b>	<b>3,838,536</b>	<b>7,811,953</b>	<b>(21,352,173)</b>	<b>(3,879,846)</b>	<b>(1,889,295)</b>	<b>(2,098,274)</b>	<b>1,442,469</b>	<b>(3,053,767)</b>	<b>(19,319,151)</b>
<b>Cash at end of period</b>	<b>\$ 48,954,835</b>	<b>\$ 59,324,388</b>	<b>\$ 52,085,153</b>	<b>\$ 55,923,690</b>	<b>\$ 63,735,643</b>	<b>\$ 42,383,470</b>	<b>\$ 38,503,624</b>	<b>\$ 36,614,329</b>	<b>\$ 34,516,054</b>	<b>\$ 35,958,523</b>	<b>\$ 32,904,756</b>	<b>\$ 32,904,756</b>

(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	18,964,634	21,537,912	17,624,324	17,785,777	15,360,373	12,544,226	13,567,185	13,864,679	15,994,676	15,519,129	12,940,634	13,109,094
Investment Income	48,230	35,414	48,768	21,666	136,385	71,477	171,619	115,601	70,862	119,747	127,284	-
From Other Sources	31,744	20,495	383	(96,406)	95,652	0	(55)	41,257	(8)	(65)	(0)	
Total cash in	19,044,608	21,593,822	17,673,475	17,711,037	15,592,410	12,615,703	13,738,749	14,021,537	16,065,530	15,638,811	13,067,918	13,109,094
Cash Out:												
Net cash flow for the month	(25,325,256)	(9,221,560)	(16,496,406)	(9,879,952)	(13,168,186)	(17,890,069)	(8,630,058)	(15,319,218)	(14,098,846)	(14,116,032)	(13,089,780)	(30,870,280)
	(6,280,648)	12,372,261	1,177,069	7,831,085	2,424,224	(5,274,366)	5,108,691	(1,297,681)	1,966,684	1,522,779	(21,862)	(17,761,186)
Cash Flow from/to Investments	3,011,583	(2,002,711)	(8,416,303)	(3,992,551)	5,387,728	(16,077,806)	(8,988,537)	(591,615)	(4,064,963)	(80,307)	(3,031,906)	18,213,130
Beginning Balance: Cash & MM	52,223,904	48,954,835	59,324,381	52,085,150	55,923,690	63,735,643	42,383,469	38,503,623	36,614,326	34,516,047	35,958,523	32,904,756
Ending cash & MM	48,954,835	59,324,381	52,085,153	55,923,690	63,735,643	42,383,470	38,503,624	36,614,329	34,516,047	35,958,523	32,904,756	33,356,700
Future Commitments												
Renewable Incentives	8,300,000	8,500,000	6,400,000	4,900,000	5,200,000	7,000,000	7,200,000	7,600,000	10,700,000	10,200,000	10,100,000	9,400,000
Efficiency Incentives	84,300,000	85,700,000	88,200,000	90,600,000	89,500,000	98,400,000	100,700,000	113,600,000	89,400,000	90,100,000	84,900,000	84,200,000
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	99,600,000	100,500,000	99,700,000	110,400,000	112,900,000	126,200,000	105,100,000	105,300,000	100,000,000	98,600,000

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

2019 Final R2 Projection												
	January	February	March	April	May	June	August	October	October	October	November	December
Cash In:												
Public purpose and Incr funding	17,731,369	21,863,246	17,167,251	16,757,648	14,799,345	12,139,449	14,164,964	12,866,575	13,440,712	14,961,390	12,705,326	15,245,215
Investment Income	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
From Other Sources												
Total cash in	17,781,369	21,913,246	17,217,251	16,807,648	14,849,345	12,189,449	14,214,964	12,916,575	13,490,712	15,011,390	12,755,326	15,295,215
Cash Out:	(34,333,809)	(10,156,816)	(12,851,975)	(13,440,371)	(13,951,600)	(15,033,565)	(15,854,199)	(14,054,336)	(14,690,875)	(15,891,839)	(16,736,445)	(20,673,505)
Net cash flow for the month	(16,552,439)	11,756,429	4,365,276	3,367,277	897,745	(2,844,116)	(1,639,235)	(1,137,760)	(1,200,163)	(880,449)	(3,981,118)	(5,378,290)
Cash Flow from/to Investments	-	-	-	-	-	-	-	-	-	-	-	-
Beginning Balance: Cash & MM	33,356,700	16,804,261	28,560,690	32,925,966	36,293,243	37,190,988	34,346,872	32,707,637	31,569,877	30,369,714	29,489,265	25,508,146
Ending cash & MM	16,804,261	28,560,690	32,925,966	36,293,243	37,190,988	34,346,872	32,707,637	31,569,877	30,369,714	29,489,265	25,508,146	20,129,856
Future Commitments												
Renewable Incentives	9,700,000	10,700,000	10,900,000	10,800,000	11,000,000	11,300,000	11,600,000	12,000,000	12,500,000	13,100,000	13,100,000	13,100,000
Efficiency Incentives	85,400,000	86,500,000	87,400,000	88,300,000	90,500,000	99,500,000	99,500,000	99,600,000	99,700,000	99,900,000	100,100,000	100,400,000
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	100,100,000	102,200,000	103,300,000	104,100,000	106,500,000	115,800,000	116,100,000	116,600,000	117,200,000	118,000,000	118,200,000	118,500,000

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 11 Months Ending November 30, 2018**  
**(Unaudited)**

	November				YTD			
	Actual	Budget	Budget Variance	Variance %	Actual	Budget	Budget Variance	Variance %
<b><u>OREGON PPC REVENUE</u></b>								
Public Purpose Funds-PGE	2,900,467	2,506,140	394,326	16%	35,478,376	34,562,825	915,551	3%
Incremental Funds - PGE	4,636,638	5,356,367	(719,729)	-13%	60,730,993	58,368,717	2,362,276	4%
Public Purpose Funds-PacifiCorp	2,020,742	2,199,075	(178,333)	-8%	26,104,043	26,075,999	28,044	0%
Incremental Funds - PacifiCorp	2,232,233	2,370,672	(138,439)	-6%	30,144,367	28,856,806	1,287,561	4%
Public Purpose Funds-NW Natural	862,605	835,760	26,846	3%	17,027,112	16,587,319	439,793	3%
NW Natural - DSM	-	-	-		520,024	520,024	0	0%
Public Purpose Funds-Cascade	173,579	308,291	(134,712)	-44%	2,059,059	1,807,379	251,681	14%
Public Purpose Funds-Avista	114,370	96,406	17,964	19%	1,210,763	1,060,464	150,299	14%
<b>Total Oregon PPC Revenue</b>	<b>12,940,634</b>	<b>13,672,712</b>	<b>(732,078)</b>	<b>-5%</b>	<b>173,274,738</b>	<b>167,839,532</b>	<b>5,435,206</b>	<b>3%</b>
NW Natural - Washington	-	-	-		2,428,812	2,466,148	(37,336)	-2%
Grant Revenue	7,602	-	7,602		84,238	-	84,238	
Revenue from Investments	119,090	20,000	99,090	495%	944,418	210,000	734,418	350%
<b>Total Other Sources of Revenue</b>	<b>126,693</b>	<b>20,000</b>	<b>(106,693)</b>	<b>-533%</b>	<b>3,457,468</b>	<b>2,676,148</b>	<b>781,320</b>	<b>29%</b>
<b>TOTAL REVENUE</b>	<b>13,067,327</b>	<b>13,692,712</b>	<b>(625,385)</b>	<b>-5%</b>	<b>176,732,206</b>	<b>170,515,680</b>	<b>6,216,526</b>	<b>4%</b>
<b><u>EXPENSES</u></b>								
Incentives	10,724,467	9,834,103	(890,364)	-9%	67,985,635	72,884,901	4,899,266	9%
Program Delivery Subcontracts	5,029,237	4,987,530	(41,707)	-1%	53,081,353	53,359,826	278,474	1%
Employee Salaries & Fringe Benefits	1,116,188	1,143,315	27,127	2%	12,313,818	12,465,115	151,296	1%
Agency Contractor Services	105,723	133,972	28,249	21%	1,182,362	1,402,026	219,664	15%
Planning and Evaluation Services	240,030	335,673	95,643	28%	2,364,514	3,692,401	1,327,887	37%
Advertising and Marketing Services	201,395	222,014	20,619	9%	2,285,166	2,610,961	325,795	13%
Other Professional Services	136,739	447,249	310,510	69%	1,855,350	4,142,794	2,287,444	53%
Travel, Meetings, Trainings & Conferences	36,888	38,712	1,825	5%	351,918	437,837	85,919	21%
Dues, Licenses and Fees	20,067	23,709	3,642	15%	137,145	208,830	71,684	37%
Software and Hardware	37,305	45,512	8,207	18%	360,829	469,867	109,038	24%
Depreciation & Amortization	18,898	33,184	14,286	43%	373,386	489,281	115,895	22%
Office Rent and Equipment	154,751	87,869	(66,881)	-76%	1,016,849	966,564	(50,286)	2%
Materials Postage and Telephone	10,429	11,346	917	8%	103,744	127,304	23,560	20%
Miscellaneous Expenses	50	250	200	80%	5,192	4,250	(942)	-29%
<b>TOTAL EXPENSES</b>	<b>17,832,166</b>	<b>17,344,439</b>	<b>(487,727)</b>	<b>-3% #</b>	<b>143,417,261</b>	<b>153,261,956</b>	<b>9,844,695</b>	<b>6%</b>
<b>TOTAL REVENUE LESS EXPENSES</b>	<b>(4,764,840)</b>	<b>(3,651,727)</b>	<b>(1,113,113)</b>	<b>-30%</b>	<b>33,314,944</b>	<b>17,253,724</b>	<b>16,061,220</b>	<b>93%</b>

**Energy Trust of Oregon**  
**Income Statement - Actual and Prior Yr Comparison**  
**For the 11 Months Ending November 30, 2018**  
**(Unaudited)**

	November				YTD			
	Actual	Actual Prior Year	Prior Year Variance	Variance %	Actual	Actual Prior Year	Prior Year Variance	Variance %
<b><u>OREGON PPC REVENUE</u></b>								
Public Purpose Funds-PGE	2,900,467	2,824,635	75,832	3%	35,478,376	35,508,982	(30,606)	0%
Incremental Funds - PGE	4,636,638	4,821,946	(185,308)	-4%	60,730,993	58,775,758	1,955,236	3%
Public Purpose Funds-PacifiCorp	2,020,742	2,062,972	(42,230)	-2%	26,104,043	26,783,699	(679,656)	-3%
Incremental Funds - PacifiCorp	2,232,233	2,393,421	(161,187)	-7%	30,144,367	32,104,657	(1,960,290)	-6%
Public Purpose Funds-NW Natural	862,605	887,210	(24,604)	-3%	17,027,112	16,975,227	51,885	0%
NW Natural - DSM	-	-	-		520,024	5,920,596	(5,400,572)	-91%
Public Purpose Funds-Cascade	173,579	214,415	(40,836)	-19%	2,059,059	2,356,954	(297,895)	-13%
Public Purpose Funds-Avista	114,370	123,916	(9,546)	-8%	1,210,763	864,439	346,324	40%
<b>Total Oregon PPC Revenue</b>	<b>12,940,634</b>	<b>13,328,514</b>	<b>(387,879)</b>	<b>-3%</b>	<b>173,274,738</b>	<b>179,290,312</b>	<b>(6,015,574)</b>	<b>-3%</b>
NW Natural - Washington	-	-	-		2,428,812	2,020,834	407,978	20%
Grant Revenue	7,602	12,368	(4,766)	-39%	84,238	43,233	41,005	95%
Revenue from Investments	119,090	42,466	76,624	180%	944,418	385,908	558,510	145%
<b>Total Other Sources of Revenue</b>	<b>126,693</b>	<b>54,834</b>	<b>(71,858)</b>	<b>-131%</b>	<b>3,457,468</b>	<b>2,449,976</b>	<b>(1,007,492)</b>	<b>-41%</b>
<b>TOTAL REVENUE</b>	<b>13,067,327</b>	<b>13,383,348</b>	<b>(316,021)</b>	<b>-2%</b>	<b>176,732,206</b>	<b>181,740,287</b>	<b>(5,008,082)</b>	<b>-3%</b>
<b><u>EXPENSES</u></b>								
Incentives	10,724,467	10,152,993	(571,473)	-6%	67,985,635	76,088,265	8,102,630	11%
Program Delivery Subcontracts	5,029,237	5,280,865	251,628	5%	53,081,353	52,273,076	(808,277)	-2%
Employee Salaries & Fringe Benefits	1,116,188	1,045,144	(71,044)	-7%	12,313,818	11,513,090	(800,728)	-7%
Agency Contractor Services	105,723	91,139	(14,585)	-16%	1,182,362	740,429	(441,933)	-60%
Planning and Evaluation Services	240,030	233,039	(6,991)	-3%	2,364,514	1,691,089	(673,425)	-40%
Advertising and Marketing Services	201,395	238,968	37,573	16%	2,285,166	2,110,965	(174,200)	-8%
Other Professional Services	136,739	158,180	21,441	14%	1,855,350	1,685,773	(169,577)	-10%
Travel, Meetings, Trainings & Conferences	36,888	34,238	(2,650)	-8%	351,918	371,499	19,581	5%
Dues, Licenses and Fees	20,067	9,158	(10,909)	-119%	137,145	189,597	52,451	28%
Software and Hardware	37,305	16,530	(20,776)	-126%	360,829	283,550	(77,279)	-27%
Depreciation & Amortization	18,898	68,620	49,722	72%	373,386	776,593	403,207	52%
Office Rent and Equipment	154,751	82,343	(72,408)	-88%	1,016,849	942,571	(74,279)	-8%
Materials Postage and Telephone	10,429	10,362	(67)	-1%	103,744	101,045	(2,699)	-3%
Miscellaneous Expenses	50	21,048	20,998	100%	5,192	60,095	54,903	91%
<b>TOTAL EXPENSES</b>	<b>17,832,166</b>	<b>17,442,626</b>	<b>(389,541)</b>	<b>-2%</b>	<b>143,417,261</b>	<b>148,827,637</b>	<b>5,410,376</b>	<b>4%</b>
<b>TOTAL REVENUE LESS EXPENSES</b>	<b>(4,764,840)</b>	<b>(4,059,278)</b>	<b>(705,562)</b>	<b>-17%</b>	<b>33,314,944</b>	<b>32,912,650</b>	<b>402,294</b>	<b>1%</b>

**Energy Trust of Oregon**  
**Statement of Functional Expenses**  
**For the 11 Months Ending November 30, 2018**  
**(Unaudited)**

	Energy Efficiency Total	Renewable Energy	Low and Moderate Income Solar	Total Programs	Office Space	IT	Management and General	Communications and Customer Service	Development	Supporting Centers	TOTAL
Incentives	\$60,324,865	\$7,660,770		\$67,985,635							\$67,985,635
Program Delivery Subcontracts	52,735,627	345,726		53,081,353							53,081,353
Employee Salaries & Fringe Benefits	5,102,018	1,219,292	8,923	6,330,233		1,935,985	2,164,152	1,869,975	13,474	5,983,586	12,313,819
Agency Contractor Services	456,445	126,642	46,287	629,374	4,685	315,959	166,093	66,251		552,988	1,182,362
Planning and Evaluation Services	2,312,081	22,538		2,334,619			1,575	28,321		29,896	2,364,515
Advertising and Marketing Services	1,192,413	164,957		1,357,370				927,365	431	927,796	2,285,166
Other Professional Services	813,160	424,734	18,400	1,256,294		42,630	448,770	107,656		599,056	1,855,350
Travel, Meetings, Trainings & Conferences	136,430	42,196	2,971	181,597	378	32,275	85,899	51,769		170,321	351,918
Dues, Licenses and Fees	89,322	13,726		103,048		250	15,262	18,585		34,097	137,145
Software and Hardware		177,399		177,399	9,790	173,640				183,430	360,829
Depreciation & Amortization					111,208	262,178				373,386	373,386
Office Rent and Equipment					1,016,849					1,016,849	1,016,849
Materials Postage and Telephone	2,878	421		3,299	49,867	34,714	15,699	164		100,444	103,743
Miscellaneous Expenses	1,510			1,510	1,867		1,815			3,682	5,192
Shared Office Space	510,539	132,186	1,066	643,791	(1,194,643)	180,273	194,405	176,173		(643,792)	-
Shared Information Technology	1,966,939	262,546	1,952	2,231,437		(2,977,905)	399,941	346,527		(2,231,437)	-
<b>TOTAL FUNCTIONAL EXPENSE</b>	<b>125,644,228</b>	<b>10,593,131</b>	<b>79,599</b>	<b>136,316,959</b>			<b>3,493,612</b>	<b>3,592,786</b>	<b>13,905</b>	<b>7,100,302</b>	<b>143,417,261</b>

**Energy Trust of Oregon**  
**Administrative Expenses Classified by OPUC Performance Measure**  
**For the 11 Months Ending November 30, 2018**  
**(Unaudited)**

	Total	Program	Administrative and Program Support
Incentives	\$67,985,635	\$67,985,635	
Program Delivery Subcontracts	\$53,081,353	53,081,353	
Employee Salaries & Fringe Benefits	\$12,313,819	6,330,233	5,983,586
Agency Contractor Services	\$1,182,362	629,374	552,988
Planning and Evaluation Services	\$2,364,514	2,334,619	29,896
Advertising and Marketing Services	\$2,285,166	1,357,370	927,796
Other Professional Services	\$1,855,350	1,256,294	599,056
Travel, Meetings, Trainings & Conferences	\$351,918		351,918
Dues, Licenses and Fees	\$137,145		137,145
Software and Hardware	\$360,829		360,829
Depreciation & Amortization	\$373,386		373,386
Office Rent and Equipment	\$1,016,849		1,016,849
Materials Postage and Telephone	\$103,744		103,744
Miscellaneous Expenses	\$5,192		5,192
<b>TOTAL Expenses</b>	<b>143,417,262</b>	<b>132,974,878</b>	<b>10,442,385</b>
Program Support			3,342,082
Management & General & Development			3,507,517
Communications and Outreach			3,592,787
<b>TOTAL Expenses</b>			<b>10,442,385</b>
divided by			
Total Revenue without Interest			175,703,550
<b>OPUC Measure vs. 8%</b>			<b>5.94%</b>

**ENERGY TRUST OF OREGON**  
**Summary of All Units**  
**For the 11 Months Ending November 30, 2018**

	<b>ENERGY EFFICIENCY</b>									
	PGE	PacifiCorp	Total	NWN Industrial	NW Natural	Cascade	Avista	Oregon Total	NWN WA	ETO Total
<b>REVENUES</b>										
Public Purpose Funding	27,540,672	20,295,504	47,836,176		17,027,112	2,059,059	1,210,763	68,133,110		68,133,110
Incremental Funding	60,730,993	30,144,367	90,875,360	520,024				91,395,384	2,428,812	93,824,196
Grant Revenue										
Contributions										
Revenue from Investments										
<b>TOTAL PROGRAM REVENUE</b>	<b>88,271,665</b>	<b>50,439,871</b>	<b>138,711,536</b>	<b>520,024</b>	<b>17,027,112</b>	<b>2,059,059</b>	<b>1,210,763</b>	<b>159,528,494</b>	<b>2,428,812</b>	<b>161,957,306</b>
<b>EXPENSES</b>										
Incentives	32,236,480	18,036,189	50,272,671	783,562	7,213,497	720,490	569,472	59,559,692	765,173	60,324,865
Program Delivery Subcontracts	27,590,276	16,975,673	44,565,949	826,921	5,861,897	505,564	454,977	52,215,307	520,321	52,735,628
Employee Salaries and Fringe Benefits	1,698,036	1,025,832	2,723,866	57,223	379,135	35,332	30,502	3,226,059	86,108	3,312,167
Agency Contractor Services	232,728	129,889	362,617	9,203	30,642	3,787	2,566	408,816	-	408,816
Planning and Evaluation Services	1,146,559	590,432	1,736,991	25,504	114,540	13,803	10,631	1,901,468	-	1,901,468
Advertising and Marketing Services	591,820	377,300	969,121	15,693	179,067	14,940	13,592	1,192,414	-	1,192,414
Other Professional Services	308,029	204,784	512,816	7,937	101,041	8,374	7,562	637,729	12,083	649,812
Travel, Meetings, Trainings and Conferences	37,010	22,191	59,201	917	10,623	903	819	72,463	754	73,217
Dues, Licenses and fees	11,584	6,436	18,019	374	1,611	184	166	20,353	38,557	58,910
Software and Hardware	-	-	-	-	-	-	-	-	-	-
Depreciation and Amortization	-	-	-	-	-	-	-	-	-	-
Materials Postage and Telephone	904	595	1,499	65	28	11	2	1,605	-	1,605
Miscellaneous Expenses	795	403	1,198	3	270	17	21	1,510	-	1,510
Shared Office Space	171,694	104,382	276,077	6,000	37,637	3,548	3,026	326,287	8,889	335,176
Shared Information Technology	823,932	476,119	1,300,051	16,973	236,968	19,642	18,629	1,592,263	34,232	1,626,495
Customer Service Management	129,756	91,244	221,000	497	73,296	5,296	5,325	305,413	-	305,413
Trade Ally Management	95,514	68,728	164,242	565	53,266	3,917	3,916	225,906	-	225,906
Planning & Evaluation Management	1,220,685	714,098	1,934,782	23,220	333,740	27,722	26,586	2,346,049	144,777	2,490,826
<b>TOTAL PROGRAM EXPENSES</b>	<b>66,295,802</b>	<b>38,824,295</b>	<b>105,120,100</b>	<b>1,774,657</b>	<b>14,627,258</b>	<b>1,363,530</b>	<b>1,147,792</b>	<b>124,033,334</b>	<b>1,610,894</b>	<b>125,644,228</b>
<b>ADMINISTRATIVE COSTS</b>										
Management & General (Notes 1 & 2)	1,699,068	995,011	2,694,080	45,483	374,876	34,945	29,416	3,178,800	41,285	3,220,085
Communications & Customer Svc (Notes 1 & 2)	1,747,301	1,023,258	2,770,558	46,773	385,519	35,939	30,251	3,269,038	42,456	3,311,494
<b>Total Administrative Costs</b>	<b>3,446,369</b>	<b>2,018,269</b>	<b>5,464,638</b>	<b>92,256</b>	<b>760,395</b>	<b>70,884</b>	<b>59,667</b>	<b>6,447,838</b>	<b>83,741</b>	<b>6,531,579</b>
<b>TOTAL PROG &amp; ADMIN EXPENSES</b>	<b>69,742,171</b>	<b>40,842,564</b>	<b>110,584,738</b>	<b>1,866,913</b>	<b>15,387,653</b>	<b>1,434,414</b>	<b>1,207,459</b>	<b>130,481,172</b>	<b>1,694,635</b>	<b>132,175,807</b>
<b>TOTAL REVENUE LESS EXPENSES</b>	<b>18,529,494</b>	<b>9,597,307</b>	<b>28,126,798</b>	<b>(1,346,889)</b>	<b>1,639,459</b>	<b>624,645</b>	<b>3,304</b>	<b>29,047,322</b>	<b>734,177</b>	<b>29,781,499</b>
<b>NET ASSETS - RESERVES</b>										
Cumulative Carryover at 12/31/17	12,210,566	6,211,801	18,422,366	2,647,089	3,527,716	262,067	75,717	24,934,948	176,506	25,111,445
Net Assets Reattributed from prior year										
Change in net assets this year	18,529,494	9,597,307	28,126,798	(1,346,889)	1,639,459	624,645	3,304	29,047,322	734,177	29,781,499
<b>Ending Net Assets - Reserves</b>	<b>30,740,060</b>	<b>15,809,108</b>	<b>46,549,164</b>	<b>1,300,200</b>	<b>5,167,175</b>	<b>886,712</b>	<b>79,021</b>	<b>53,982,270</b>	<b>910,683</b>	<b>54,892,944</b>
<b>Ending Reserve by Category</b>										
Program Reserves (Efficiency and Renewables)	30,740,060	15,809,108	46,549,164	1,300,200	5,167,175	886,712	79,021	53,982,270	910,683	54,892,944
Loan Reserve										
Operational Contingency Pool										
Emergency Contingency Pool										
<b>TOTAL NET ASSETS CUMULATIVE</b>	<b>30,740,060</b>	<b>15,809,108</b>	<b>46,549,164</b>	<b>1,300,200</b>	<b>5,167,175</b>	<b>886,712</b>	<b>79,021</b>	<b>53,982,270</b>	<b>910,683</b>	<b>54,892,944</b>

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 11 Months Ending November 30, 2018**

	<b>RENEWABLE ENERGY</b>			Solar LMI	Community Solar	Other	TOTAL	Approved budget	Change	% Change
	PGE	PacifiCorp	Total				All Programs			
<b>REVENUES</b>										
Public Purpose Funding	7,937,704	5,808,539	13,746,243				81,879,353	80,093,985	1,785,368	2%
Incremental Funding							93,824,196	90,211,695	3,612,501	4%
Grant Revenue				76,636			76,636		76,636	
Contributions									-	
Revenue from Investments						944,418	944,418	210,000	734,418	350%
<b>TOTAL PROGRAM REVENUE</b>	<b>7,937,704</b>	<b>5,808,539</b>	<b>13,746,243</b>	<b>76,636</b>	<b>-</b>	<b>944,418</b>	<b>176,724,603</b>	<b>170,515,680</b>	<b>6,208,923</b>	<b>4%</b>
<b>EXPENSES</b>										
Incentives	3,811,834	3,848,936	7,660,769	-			67,985,634	72,884,901	4,899,267	7%
Program Delivery Subcontracts	208,464	137,261	345,726	-			53,081,354	53,359,826	278,472	1%
Employee Salaries and Fringe Benefits	528,349	540,113	1,068,463	8,923	13,474		4,403,027	4,439,249	36,222	1%
Agency Contractor Services	66,290	57,835	124,125	46,287			579,228	736,526	157,298	21%
Planning and Evaluation Services	-	-	-	-			1,901,468	3,055,317	1,153,849	38%
Advertising and Marketing Services	89,167	75,790	164,957	-	431		1,357,802	1,627,378	269,576	17%
Other Professional Services	221,981	147,165	369,146	18,400			1,037,358	2,400,149	1,362,791	57%
Travel, Meetings, Trainings and Conferences	17,707	19,282	36,989	2,971			113,177	151,012	37,835	25%
Dues, Licenses and fees	6,639	5,455	12,095	-			71,005	84,402	13,397	16%
Software and Hardware	95,109	82,290	177,399	-			177,399	152,508	(24,891)	-16%
Depreciation and Amortization	-	-	-	-			-	77,778	77,778	100%
Materials Postage and Telephone	39	36	75	-			1,680	7,058	5,378	76%
Miscellaneous Expenses	-	-	-	-			1,510	-	(1,510)	-
Shared Office Space	58,526	59,033	117,558	1066			453,800	455,808	2,008	0%
Shared Information Technology	115,601	117,797	233,397	1,952			1,861,844	2,146,865	285,021	13%
Customer Service Management	19,062	16,508	35,569	-			340,982	354,569	13,587	4%
Trade Ally Management	61,788	53,460	115,248	-			341,154	366,900	25,746	7%
Planning & Evaluation Management	67,207	64,409	131,615	-		-	2,622,441	2,748,878	126,437	5%
<b>TOTAL PROGRAM EXPENSES</b>	<b>5,367,763</b>	<b>5,225,370</b>	<b>10,593,131</b>	<b>79,599</b>	<b>13,905</b>	<b>-</b>	<b>136,330,863</b>	<b>145,049,124</b>	<b>8,718,261</b>	<b>6%</b>
<b>ADMINISTRATIVE COSTS</b>										
Management & General (Notes 1 & 2)	137,295	133,682	270,976	2,551	-	-	3,493,612	4,398,570	904,957	21%
Communications & Customer Svc (Notes 1 & 2)	141,478	137,725	279,204	2,088	-	-	3,592,786	3,814,261	221,475	6%
<b>Total Administrative Costs</b>	<b>278,773</b>	<b>271,407</b>	<b>550,180</b>	<b>4,639</b>	<b>-</b>	<b>-</b>	<b>7,086,398</b>	<b>8,212,831</b>	<b>1,126,433</b>	<b>14%</b>
<b>TOTAL PROG &amp; ADMIN EXPENSES</b>	<b>5,646,536</b>	<b>5,496,777</b>	<b>11,143,311</b>	<b>84,238</b>	<b>13,905</b>	<b>-</b>	<b>143,417,261</b>	<b>153,261,955</b>	<b>9,844,695</b>	<b>6%</b>
<b>TOTAL REVENUE LESS EXPENSES</b>	<b>2,291,168</b>	<b>311,762</b>	<b>2,602,932</b>	<b>-</b>	<b>(13,905)</b>	<b>944,418</b>	<b>33,314,944</b>	<b>17,253,724</b>	<b>16,061,219</b>	<b>93%</b>
<b>NET ASSETS - RESERVES</b>										
Cumulative Carryover at 12/31/17	7,073,073	6,268,079	13,341,154	-	38,710	9,641,309	48,132,624	43,871,177	4,261,447	10%
Net Assets Reattributed from prior year							-			
Change in net assets this year	2,291,168	311,762	2,602,932	-	(13,905)	944,418	33,314,944	17,253,724	16,061,220	93%
<b>Ending Net Assets - Reserves</b>	<b>9,364,241</b>	<b>6,579,841</b>	<b>15,944,086</b>	<b>-</b>	<b>24,805</b>	<b>10,585,727</b>	<b>81,447,568</b>	<b>61,124,901</b>	<b>20,322,667</b>	<b>33%</b>
<b>Ending Reserve by Category</b>										
Program Reserves (Efficiency and Renewables)	9,364,241	6,579,841	15,944,086	-	24,805		70,861,835			
Loan Reserve						1,800,000	1,800,000			
Operational Contingency Pool						3,785,727	3,785,727			
Emergency Contingency Pool						5,000,000	5,000,000			
<b>TOTAL NET ASSETS CUMULATIVE</b>	<b>9,364,241</b>	<b>6,579,841</b>	<b>15,944,086</b>	<b>-</b>	<b>24,805</b>	<b>10,585,727</b>	<b>81,447,566</b>	<b>61,124,901</b>	<b>20,322,667</b>	<b>33%</b>

Energy Trust of Oregon  
Program Expense by Service Territory  
For the 11 Months Ending November 30, 2018  
(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
<b>Energy Efficiency</b>																
<b>Commercial</b>																
Existing Buildings	\$19,324,703	\$11,562,172	\$30,886,875	\$685,228	\$2,242,340	\$267,693	\$307,133	\$3,502,394	\$34,389,269	\$633,735			\$35,023,004	\$37,944,367	\$2,921,363	8%
Multifamily Buildings	5,365,971	1,779,043	7,145,014	30,576	633,227	22,499	72,560	758,863	7,903,877				7,903,877	8,523,838	619,961	7%
New Buildings	11,640,155	3,586,800	15,226,955	57,789	1,451,157	171,855	98,864	1,779,665	17,006,620				17,006,620	18,504,727	1,498,107	8%
NEEA	1,494,143	1,127,164	2,621,307		98,352	10,565		108,917	2,730,224				2,730,224	2,452,034	(278,190)	-11%
<b>Total Commercial</b>	<b>37,824,972</b>	<b>18,055,179</b>	<b>55,880,151</b>	<b>773,592</b>	<b>4,425,077</b>	<b>472,613</b>	<b>478,557</b>	<b>6,149,839</b>	<b>62,029,990</b>	<b>633,735</b>			<b>62,663,725</b>	<b>67,424,966</b>	<b>4,761,241</b>	<b>7%</b>
<b>Industrial</b>																
Production Efficiency	15,121,025	9,962,442	25,083,467	1,093,318	459,642	176,394	39,249	1,768,604	26,852,071				26,852,071	26,795,348	(56,723)	0%
NEEA	46,518	35,093	81,611						81,611				81,611	369,951	288,340	78%
<b>Total Industrial</b>	<b>15,167,542</b>	<b>9,997,536</b>	<b>25,165,078</b>	<b>1,093,318</b>	<b>459,642</b>	<b>176,394</b>	<b>39,249</b>	<b>1,768,604</b>	<b>26,933,682</b>				<b>26,933,682</b>	<b>27,165,299</b>	<b>231,617</b>	<b>1%</b>
<b>Residential</b>																
Residential Combined	14,630,359	11,191,084	25,821,443		9,714,629	700,728	689,653	11,105,010	36,926,453	1,060,900			37,987,353	42,069,276	4,081,923	10%
NEEA	2,119,299	1,598,769	3,718,068		788,302	84,680		872,981	4,591,049				4,591,049	5,018,784	427,735	9%
<b>Total Residential</b>	<b>16,749,657</b>	<b>12,789,853</b>	<b>29,539,511</b>		<b>10,502,931</b>	<b>785,407</b>	<b>689,653</b>	<b>11,977,991</b>	<b>41,517,502</b>	<b>1,060,900</b>			<b>42,578,402</b>	<b>47,088,060</b>	<b>4,509,658</b>	<b>10%</b>
<b>Energy Efficiency Program Costs</b>	<b>69,742,172</b>	<b>40,842,568</b>	<b>110,584,740</b>	<b>1,866,911</b>	<b>15,387,650</b>	<b>1,434,414</b>	<b>1,207,460</b>	<b>19,896,434</b>	<b>130,481,174</b>	<b>1,694,635</b>			<b>132,175,809</b>	<b>141,678,325</b>	<b>9,502,516</b>	<b>7%</b>
<b>Renewables</b>																
Solar Electric (Photovoltaic)	4,079,328	3,529,500	7,608,828						7,608,828		84,238		7,693,066	8,491,964	798,898	9%
Other Renewable	1,567,208	1,967,276	3,534,484						3,534,484				3,534,484	3,091,667	(442,817)	-14%
<b>Renewables Program Costs</b>	<b>5,646,537</b>	<b>5,496,775</b>	<b>11,143,312</b>						<b>11,143,312</b>		<b>84,238</b>		<b>11,227,550</b>	<b>11,583,631</b>	<b>356,081</b>	<b>3%</b>
Community Solar Development												13,905	13,905		(13,905)	
<b>Cost Grand Total</b>	<b>75,388,708</b>	<b>46,339,343</b>	<b>121,728,052</b>	<b>1,866,911</b>	<b>15,387,650</b>	<b>1,434,414</b>	<b>1,207,460</b>	<b>19,896,434</b>	<b>141,624,486</b>	<b>1,694,635</b>	<b>84,238</b>	<b>13,905</b>	<b>143,417,261</b>	<b>153,261,956</b>	<b>9,844,695</b>	<b>6%</b>

**Energy Trust of Oregon**  
**Administrative Expenses**  
**For the 11 Months Ending November 30, 2018**  
**(Unaudited)**

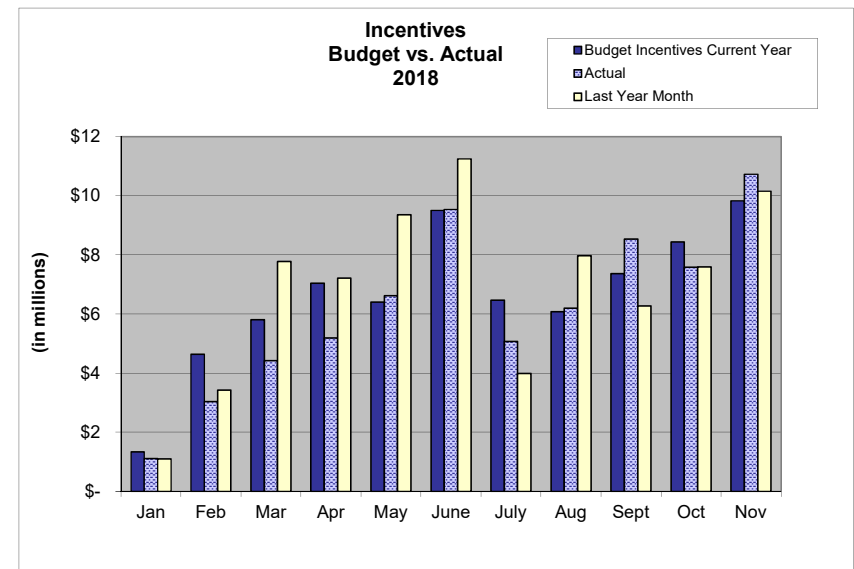
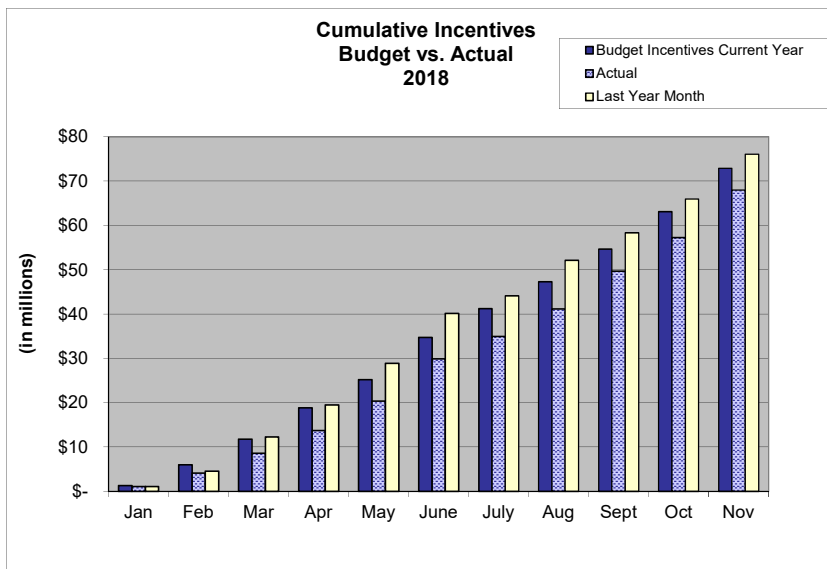
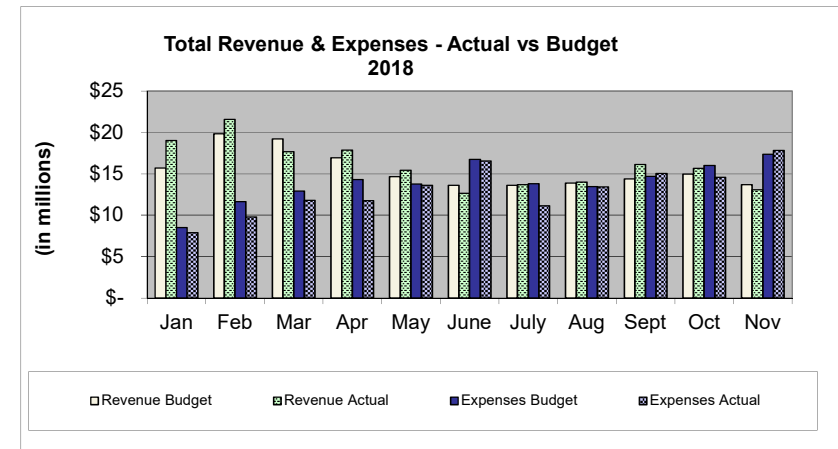
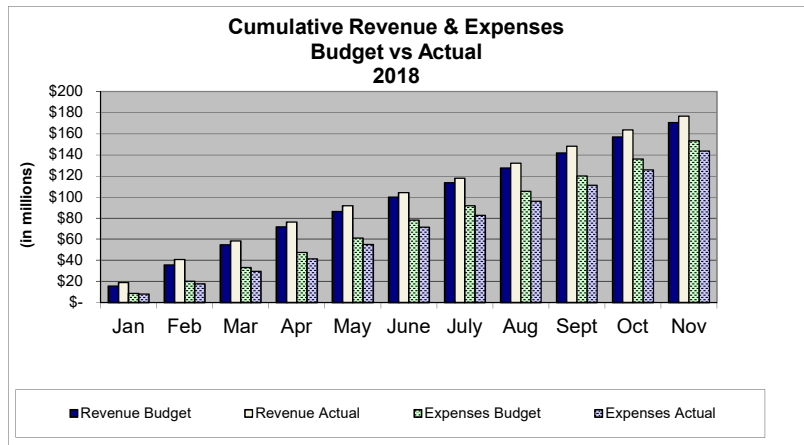
<b>EXPENSES</b>	<b>MANAGEMENT &amp; GENERAL</b>						<b>COMMUNICATIONS &amp; CUSTOMER SERVICE</b>					
	<b>ACTUAL</b>	<b>QUARTERLY</b>		<b>ACTUAL</b>	<b>YTD</b>		<b>ACTUAL</b>	<b>QUARTERLY</b>		<b>ACTUAL</b>	<b>YTD</b>	
		<b>BUDGET</b>	<b>REMAINING</b>		<b>BUDGET</b>	<b>VARIANCE</b>		<b>BUDGET</b>	<b>REMAINING</b>		<b>BUDGET</b>	<b>VARIANCE</b>
Outsourced Services	\$100,006	\$254,329	\$154,323	\$428,829	\$1,038,874	\$610,045	\$109,854	\$341,500	\$231,646	\$1,034,422	\$1,252,167	\$217,745
Legal Services	2,552	6,250	3,698	15,232	22,917	7,685						
Salaries and Related Expenses	456,934	717,753	260,819	2,328,627	2,520,412	191,785	339,944	480,828	140,884	1,833,439	1,763,035	(70,404)
Supplies	1,694	725	(969)	4,572	2,658	(1,914)	39	250	211	119	917	798
Postage and Shipping Expenses		750	750	497	2,750	2,253	31		(31)	38		(38)
Printing and Publications	1,660	1,125	(535)	10,630	4,125	(6,505)		0	0	4	2,500	2,496
Travel	4,483	13,850	9,367	34,633	50,783	16,150	11,007	12,500	1,493	40,966	45,833	4,868
Conference, Training & Mtngs	12,939	13,250	312	51,127	48,583	(2,544)	1,435	5,500	4,065	8,492	20,167	11,675
Interest Expense and Bank Fees	103		(103)	1,815	1,500	(315)						
Dues, Licenses and Fees	3,919	2,663	(1,256)	15,142	37,722	22,580	895	4,500	3,605	16,580	16,500	(80)
Shared Allocation (Note 1)	46,583	53,310	6,727	193,821	198,030	4,209	37,648	43,813	6,165	166,443	162,751	(3,693)
IT Service Allocation (Note 2)	76,999	115,163	38,164	398,815	459,868	61,053	63,281	94,646	31,365	327,765	377,941	50,176
Planning & Eval	1,825	2,817	992	9,871	10,347	476	30,414	46,943	16,530	164,520	172,452	7,932
<b>TOTAL EXPENSES</b>	<b>709,696</b>	<b>1,181,984</b>	<b>472,288</b>	<b>3,493,612</b>	<b>4,398,569</b>	<b>904,958</b>	<b>594,546</b>	<b>1,030,480</b>	<b>435,933</b>	<b>3,592,786</b>	<b>3,814,263</b>	<b>221,475</b>

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: 12/1/2018

CONTRACTOR	Description	City	EST COST	Actual TTD	Remaining	Start	End
<b>Administration</b>							
<b>Administration Total:</b>			<b>13,659,309</b>	<b>5,577,756</b>	<b>8,081,553</b>		
<b>Communications</b>							
<b>Communications Total:</b>			<b>6,311,608</b>	<b>4,488,810</b>	<b>1,822,797</b>		
<b>Energy Efficiency</b>							
Northwest Energy Efficiency Alliance	Regional EE Initiative Agmt	Portland	36,142,871	26,313,750	9,829,121	1/1/2015	7/1/2020
ICF Resources, LLC	2019 BE PMC	Fairfax	17,010,123	0	17,010,123	1/1/2019	12/31/2019
ICF Resources, LLC	2018 BE PMC	Fairfax	15,616,683	13,788,623	1,828,060	1/1/2018	12/31/2018
CLEAResult Consulting Inc	2018 Residential PMC	Austin	8,483,204	7,026,432	1,456,772	1/1/2018	12/31/2018
CLEAResult Consulting Inc	2019 NBE PMC	Austin	6,477,804	0	6,477,804	1/1/2019	12/31/2019
CLEAResult Consulting Inc	2018 NBE PMC	Austin	6,256,575	5,630,928	625,647	1/1/2018	12/31/2018
Northwest Energy Efficiency Alliance	Regional Gas EE Initiative	Portland	5,864,530	3,025,265	2,839,265	1/1/2015	7/1/2020
Lockheed Martin Corporation	2019 MF PMC	Grand Prairie	4,728,273	0	4,728,273	1/1/2019	12/31/2019
Lockheed Martin Corporation	2018 MF PMC	Grand Prairie	4,655,000	3,881,129	773,871	1/1/2018	12/31/2018
Energy 350 Inc	PE PDC 2019	Portland	3,523,160	0	3,523,160	1/1/2019	12/31/2019
Energy 350 Inc	PDC - PE 2018	Portland	3,373,954	2,930,554	443,400	1/1/2018	12/31/2018
Intel Corporation	EE Project Incentive Agmt	Hillsboro	2,400,000	0	2,400,000	11/13/2015	12/31/2019
Cascade Energy, Inc.	PE PDC 2019	Walla Walla	2,324,400	0	2,324,400	1/1/2019	12/31/2019
Evergreen Consulting Group, LLC	PE Lighting PDC2019	Tigard	2,232,000	0	2,232,000	1/1/2019	12/31/2019
RHT Energy Inc.	PE PDC 2019	Medford	2,199,922	0	2,199,922	1/1/2019	12/31/2019
TRC Engineers Inc.	2019 EPS New Const PDC	Irvine	2,135,341	0	2,135,341	1/1/2019	12/31/2019
Evergreen Consulting Group, LLC	PE Lighting PDC 2018	Tigard	1,968,000	1,730,108	237,892	1/1/2018	12/31/2018
TRC Engineers Inc.	2018 EPS New Const PDC	Irvine	1,946,406	1,606,623	339,783	1/1/2018	12/31/2018
Cascade Energy, Inc.	PE PDC 2019	Walla Walla	1,921,485	0	1,921,485	1/1/2019	12/31/2019
RHT Energy Inc.	PDC - PE 2018	Medford	1,836,230	1,569,139	267,091	1/1/2018	12/31/2018
Northwest Power & Conservation Council	RTF Funding Agreement		1,825,000	1,349,096	475,904	2/25/2015	12/31/2019
Cascade Energy, Inc.	PE PDC 2018	Walla Walla	1,823,250	1,632,632	190,618	1/1/2018	12/31/2018
CLEAResult Consulting Inc	2018 Retail PDC	Austin	1,645,112	1,364,681	280,431	1/1/2018	12/31/2018
CLEAResult Consulting Inc	2019 Retail PDC	Austin	1,403,837	0	1,403,837	1/1/2019	12/31/2019
Craft3	Manufactured Home Pilot	Portland	1,000,000	0	1,000,000	9/20/2018	9/20/2033
SBW Consulting, Inc.	PE Program Impact	Bellevue	573,000	567,070	5,930	5/1/2016	12/31/2018
Michaels Energy, Inc.	PE 16 & 17 Impact Eval	La Crosse	539,000	98,249	440,751	7/1/2018	11/14/2018
Craft3	Loan Agreement	Portland	500,000	167,000	333,000	1/1/2018	12/31/2019
Pivotal Energy Solutions LLC	License Agreement	Gilbert	490,500	262,487	228,013	3/1/2014	12/31/2019
EnergySavvy Inc.	Optix Engage Online Audit Tool	Seattle	467,000	282,250	184,750	6/1/2016	5/31/2020
Michaels Energy, Inc.	NBE '15 & '16 Impact Eval	La Crosse	425,000	383,294	41,706	3/5/2018	3/1/2019
Open Energy Efficiency, Inc.	Automated Meter Data Analysis	Mill Valley	400,000	133,130	266,870	1/1/2018	12/31/2019
Balanced Energy Solutions LLC	New Homes QA Inspections	Portland	381,575	184,312	197,263	4/27/2015	12/31/2019
KEMA Incorporated	EB & SEM 2017 Evaluation	Oakland	350,000	293,602	56,398	4/10/2018	5/30/2019

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Cascade Energy, Inc.	PDC Transition Agreement	Walla Walla	311,107	190,457	120,650	9/1/2018	12/31/2018
Craft3	Loan Agreement	Portland	300,000	300,000	0	6/1/2014	6/20/2025
ICF Resources, LLC	2019 BE NWN WA PMC	Fairfax	270,876	0	270,876	1/1/2019	12/31/2019
ICF Resources, LLC	2018 BE PMC - WA	Fairfax	258,286	223,457	34,829	1/1/2018	12/31/2018
CLEAResult Consulting Inc	2018 Residential PMC - WA	Austin	238,129	201,292	36,837	1/1/2018	12/31/2018
ICF Resources, LLC	2019 BE DSM PMC	Fairfax	215,972	0	215,972	1/1/2019	12/31/2019
CLEAResult Consulting Inc	2018 Residential PMC - CustSvc	Austin	174,000	150,123	23,877	1/1/2018	12/31/2018
ICF Resources, LLC	2018 BE PMC - DSM	Fairfax	161,119	136,200	24,919	1/1/2018	12/31/2018
The Cadmus Group LLC	Residential DHP Study	Portland	155,000	113,178	41,822	4/18/2018	6/30/2019
Evergreen Economics	2018 EB Process Evaluation	Portland	150,000	133,808	16,193	5/14/2018	3/31/2019
Research Into Action, Inc.	PE Process Evaluation	Portland	138,000	76,288	61,712	4/2/2018	6/14/2019
DNV GL Energy Services USA	Ind O&M Persistence Study	Oakland	130,000	25,448	104,553	9/4/2018	6/30/2019
TRC Engineers Inc.	2019 EPS New Const PDC - WA	Irvine	124,474	0	124,474	1/1/2019	12/31/2019
Research Into Action, Inc.	Fast Feedback 2018	Portland	115,500	101,048	14,452	2/15/2018	5/31/2019
Portland General Electric	Intel Mega project transition	Portland	110,000	0	110,000	1/1/2019	12/31/2019
Alternative Energy Systems Consulting, Inc.	PE Review of Technical Studies	Carlsbad	100,000	80,190	19,810	5/22/2017	3/31/2019
WegoWise Inc	benchmarking license	Boston	90,000	42,572	47,428	6/15/2014	12/31/2019
EES Consulting, Inc	Professional Services Agmt	Kirkland	80,430	33,300	47,130	10/1/2016	9/30/2020
SBW Consulting, Inc.	BPA Air Source HP Study	Bellevue	73,200	0	73,200	11/26/2018	11/30/2019
Research Into Action, Inc.	Evaluation MHR Pilot	Portland	66,000	28,865	37,135	5/1/2017	3/31/2020
TRC Engineers Inc.	2018 EPS New Const PDC - WA	Irvine	63,456	59,733	3,724	1/1/2018	12/31/2018
BASE zero LLC	Quality Assurance Services	Bend	58,825	41,990	16,835	3/1/2016	12/31/2019
Craft3	SWR Loan Origination/Loss Fund	Portland	55,000	0	55,000	1/1/2018	12/31/2019
Research Into Action, Inc.	Marketing Customer Insights	Portland	53,418	16,264	37,154	6/14/2018	3/31/2019
Navigant Consulting Inc	Evaluation Consultant-DSM Proj.	Boulder	50,500	40,731	9,770	6/15/2017	6/1/2019
Alternative Energy Systems Consulting, Inc.	CSEM - PTT	Carlsbad	50,000	31,915	18,085	6/30/2018	9/30/2019
TRC Engineers Inc.	2019 EPS New Const-Grid Harmon	Irvine	50,000	0	50,000	1/1/2019	12/31/2019
Apex Analytics	Residential Windows Research	Boulder	45,000	16,006	28,994	5/15/2018	12/31/2018
Evergreen Economics	New Home Pilot- DHP	Portland	44,000	22,689	21,311	11/1/2017	3/31/2019
Brightworks Sustainability LLC	Net Zero Fellowship Grant Agmt	Portland	43,500	43,500	0	4/5/2017	8/31/2018
The Cadmus Group Inc.	Existing Homes DHP Study	Watertown	40,000	40,000	0	9/25/2017	3/31/2019
The Cadmus Group Inc.	Impact Evaluation NB projects	Watertown	39,000	29,157	9,843	6/18/2018	2/28/2019
KEMA Incorporated	Billing Analysis Review	Oakland	35,000	5,501	29,499	3/15/2015	12/31/2019
MetaResource Group	Intel Mod 1&2 Megaproject	Portland	35,000	4,497	30,503	3/1/2018	12/31/2019
Research Into Action, Inc.	Evaluation - APS Pilot	Portland	34,645	24,883	9,762	7/1/2017	3/1/2019
Northwest Energy Efficiency Council	Tool Lending Lbry Sponsorship	Seattle	30,500	30,500	0	1/1/2018	12/31/2018
INCA Energy Efficiency, LLC	Red Rock Evaluation	Grinnell	30,000	0	30,000	6/10/2018	6/9/2020
Pod4print	PGE 2019 Bill Inserts	Beaverton	30,000	0	30,000	1/1/2019	12/31/2019
RWDI USA LLC	Net Zero Fellowship Grant		26,000	0	26,000	9/1/2018	9/1/2019

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University of Oregon	NB 2018 Net Zero Fellows Grant	Eugene	26,000	0	26,000	10/1/2018	3/30/2020
Ecotope, Inc.	LR MultiFamily Field Studies	Seattle	25,000	25,000	0	11/13/2018	11/11/2019
MetaResource Group	Pay-for-Performance Evaluation	Portland	25,000	24,694	307	2/1/2018	12/31/2018
FMYI, INC	Subscription Agreement	Portland	24,650	24,650	0	4/25/2016	1/15/2019
Cadeo Group LLC	Evaluation Consulting Services	Washington	24,620	14,586	10,034	5/1/2018	12/31/2018
Consortium for Energy Efficiency Membership Dues - 2018			23,074	23,074	0	1/1/2018	12/31/2018
Bridgetown Printing Company	Pacific Power 2019 Bill Insert	Portland	22,000	0	22,000	1/1/2019	12/31/2019
Michaels Energy, Inc.	Large NB Impact Evaluation	La Crosse	18,000	4,653	13,348	8/1/2018	3/31/2020
Earth Advantage, Inc.	Sponsorship	Portland	17,750	10,250	7,500	3/1/2017	2/28/2019
Efficiency for Everyone, LLC	Benefit Outreach- Appliances	Portland	15,000	0	15,000	1/1/2019	12/31/2019
KEMA Incorporated	New Bldg Evaluation	Oakland	13,000	4,942	8,058	10/1/2017	4/30/2019
Alliance For Sustainable Energy, LLC	Technical Services Agreement	Lakewood	9,609	9,609	0	3/19/2018	3/31/2019
LightTracker, Inc.	Lighting Market Analysis	Boulder	9,000	9,000	0	4/1/2018	12/31/2018
City of Portland Bureau of Planning & Sustainability	2019 Fix it Fair Sponsorship	Portland	8,000	0	8,000	1/1/2019	12/31/2019
Earth Advantage, Inc.	2018 - Sponsorship	Portland	7,750	5,000	2,750	6/1/2018	12/31/2018
Sheraton Portland Airport Hotel	Trade Ally Forum		6,782	0	6,782	1/23/2018	12/31/2018
Northwest Energy Efficiency Council	2019 BOC Technical Webinar	Seattle	6,780	0	6,780	1/1/2019	12/31/2019
The Cadmus Group Inc.	NB Evaluation Plan	Watertown	6,500	0	6,500	10/1/2017	3/31/2019
Richard K. Howel	Coaching & Leadership training		6,199	0	6,199	8/1/2018	2/28/2019
Carleton Hart Architecture PC	Net Zero Leaders Grant	Portland	6,000	0	6,000	11/13/2018	6/15/2019
Otak Incorporated	Net Zero Leaders Grant	Portland	6,000	0	6,000	11/12/2018	6/15/2019
Speranza Architecture	Net Zero Leaders Grant	Eugene	3,840	0	3,840	11/14/2018	6/15/2019
Hennebery Eddy Architects Inc	Net Zero Emerging Leader Grant	Portland	3,333	0	3,333	11/19/2018	6/15/2019
Holst Architecture Inc	Net Zero Leaders Grant	Portland	3,000	2,432	568	11/13/2018	6/15/2019
<b>Energy Efficiency Total:</b>			<b>147,312,060</b>	<b>76,621,833</b>	<b>70,690,227</b>		

**Joint Programs**

Structured Communications Systems, Inc.	ShoreTel Phone System Install		72,845	65,287	7,559	1/1/2017	12/31/2019
Infogroup Inc	Data License & Service Agmt	Papillion	26,114	13,057	13,057	2/12/2018	2/12/2020
<b>Joint Programs Total:</b>			<b>98,959</b>	<b>78,344</b>	<b>20,616</b>		

**Renewable Energy**

Sunway 3, LLC	Prologis PV installation		3,405,000	3,261,044	143,956	9/30/2008	9/30/2028
City of Salem	Biogas Project - Willow Lake	Salem	3,000,000	0	3,000,000	9/4/2018	9/4/2038
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

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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
Three Sisters Irrigation District	TSID Funding Agreement	Sisters	400,000	0	400,000	1/1/2018	12/31/2038
Farmers Conservation Alliance	Program Support	Hood River	367,000	199,926	167,074	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
Clean Power Research, LLC	PowerClerk License	Napa	215,478	215,478	0	7/1/2017	6/30/2019
City of Astoria	Bear Creek Funding Agreement	Astoria	143,000	143,000	0	3/24/2014	3/24/2034
Energy Assurance Company	Solar Verifier	Milwaukie	100,000	4,480	95,520	11/15/2018	10/14/2020
Gary Higbee DBA WindStream Solar	Solar Verifier	Eugene	100,000	350	99,650	10/15/2018	10/14/2020
Wallowa County	Project Funding Agreement	Enterprise	80,000	0	80,000	4/1/2018	3/31/2038
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 Financial Dev	Albany	60,000	4,650	55,350	8/1/2018	6/30/2020
Oregon Solar Energy Industries Association	Solar soft costs install price	Portland	54,200	0	54,200	12/21/2018	6/30/2020
TRC Engineers Inc.	2019 EPS New Const PDC-Solar	Irvine	53,016	0	53,016	1/1/2019	12/31/2019
TRC Engineers Inc.	2018 EPS New Const PDC - Solar	Irvine	41,500	36,579	4,921	1/1/2018	12/31/2018
Clean Energy States Alliance	2018 CESA Sponsorship		39,500	39,500	0	6/1/2018	6/30/2019
Clean Power Research, LLC	WattPlan Software	Napa	38,000	38,000	0	11/17/2017	6/30/2019
Faraday Inc	Software Services Subscription		36,000	0	36,000	1/15/2019	12/14/2019
Craft3	NON-EEAST OBR Svc Agrmt	Portland	30,000	10,250	19,750	1/1/2018	12/31/2018
The Solar Foundation	Workforce Diversity Survey	Washington	27,500	13,750	13,750	7/17/2018	12/31/2018
University of Oregon	UO SRML Contribution - 2018	Eugene	24,999	24,999	0	3/9/2018	3/8/2019
Wallowa Resources Community Solutions, Inc.	Renewables Field Outreach		24,999	14,941	10,058	2/1/2018	1/30/2020
Robert Migliori	42kW wind energy system	Newberg	24,125	24,125	0	4/11/2007	1/31/2024
Site Capture LLC	SiteCapture Subscription	Austin	24,000	19,500	4,500	2/1/2018	1/31/2019
Oregon Solar Energy Industries Association	2019 Sponsorship	Portland	20,000	0	20,000	1/1/2019	12/31/2019
Warren Griffin	Griffin Wind Project	Salem	13,150	9,255	3,895	10/1/2005	10/1/2020

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Flink Energy Consulting	Barriers Solutions Small RE PD	Portland	13,145	0	13,145	11/1/2018	3/31/2019
Lewis & Clark	Small Scale 20MW RE Projects	Portland	13,145	0	13,145	11/1/2018	3/31/2019
Bonneville Environmental Foundation	REC/WRC Purchase 2016	Portland	7,290	4,860	2,430	1/1/2016	12/31/2018
Seattle University	2018 Mid-Career Inst. Environm	Seattle	5,000	0	5,000	6/22/2018	12/31/2018
National Association for the Advancement of Colored People	LMI Solar Energy Development	Eugene	3,920	1,136	2,783	9/1/2018	6/30/2019
Lower Columbia Hispanic Council	LMI Solar Energy Development	Astoria	3,736	1,133	2,604	9/1/2018	6/30/2019
Mid-Columbia Housing Authority	LMI Solar Energy Development	The Dalles	3,691	1,073	2,618	9/5/2018	6/30/2019
NeighborImpact	LMI Solar Energy Development	Redmond	3,627	1,174	2,452	9/4/2018	6/30/2019
African American Alliance for Homeownership	LMI Solar Energy Development	Portland	3,102	1,024	2,078	9/1/2018	6/30/2019
Habitat for Humanity of Oregon Inc	LMI Solar Energy Development	Portland	3,102	1,000	2,102	9/1/2018	6/30/2019
Housing Development Center Inc	LMI Solar Energy Development	Portland	3,102	0	3,102	9/1/2018	6/30/2019
Native American Youth & Family Center	LMI Solar	Portland	3,102	0	3,102	9/1/2018	6/30/2019
Portland Community Reinvestment Initiatives Inc	LMI Solar Energy Development	Portland	3,102	1,000	2,102	9/1/2018	6/30/2019
<b>Renewable Energy Total:</b>			<b>20,194,262</b>	<b>13,652,600</b>	<b>6,541,662</b>		
<b>Grand Total:</b>			<b>187,576,198</b>	<b>100,419,343</b>	<b>87,156,855</b>		

# Tab 7



## **Strategic Planning Committee Meeting**

December 11, 2018

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### **Attending at Energy Trust offices**

Michael Colgrove, Hannah Cruz, Cheryle Easton, Fred Gordon, Debbie Menashe, Spencer Moersfelder, Lizzie Rubado, John Volkman

### **Attending by Teleconference**

Mark Kendall (Committee Chair), Susan Brodahl, Elaine Prause, Roland Risser, Roger Hamilton

**Meeting began at 11:00 a.m.**

### **Report on CAC/RAC Engagement on November 30, 2018**

Lizzie Rubado and Hannah Cruz described the interactive engagement at the joint meeting of the Conservation and Renewable Advisory Councils (CAC and RAC) on November 30, 2018. At the joint meeting, Energy Trust staff presented the future five-year scenario developed for the strategic plan development. CAC and RAC members then participated in an interactive discussion, facilitated by Lizzie, to identify and discuss opportunities for Energy Trust that could be imagined in the five-year future scenario presented. Roland Risser, who attended the CAC/RAC joint meeting, reported that there was a lot of engagement.

### **Discussion of Energy Trust's Unique Role of Value**

Debbie Menashe updated the Committee on the progress of the strategic plan development process. At this point, the Committee and staff, with input from CAC and RAC, have identified Energy Trust's current strengths and capabilities, current unique role of value, and a five year future scenario. As the organization and its stakeholders begin to identify possible future opportunities for Energy Trust, the Committee and staff will return to the current unique role of value statement to consider whether it should change for the future. Michael Colgrove discussed the current unique role of value draft and launched the discussion.

Committee members discussed the unique role of value statement in light of the future opportunities identified by the CAC and RAC discussion, but requested more detail and information about the opportunities to inform their consideration of this matter. Committee members also asked that staff consider other players in these opportunities areas and consider how their roles might affect any future role for Energy Trust.

Energy Trust staff will provide more detail on the opportunity areas for the full board discussion planned for the next board meeting, December 14<sup>th</sup>.

**Strategic Plan Outreach Planning**

Hannah Cruz presented a high level outline of Energy Trust's plans for public outreach on the strategic plan. The outreach plan is divided into two phases: (i) early engagement and (ii) public engagement for comments on the draft plan. In the early engagement phase, staff will continue to meet regularly with OPUC staff, set up meetings with key funding utility leadership, and identify additional stakeholders who may have interest and expertise in the opportunity areas identified in the process. During the second phase, over the course of the summer, Energy Trust staff will undertake a more extensive public engagement and comment process to elicit comments on the draft strategic plan. Comments will be compiled and provided to the board in advance of their discussion on adopting the next strategic plan, a discussion expected at the October 2019 board meeting. Committee members asked questions about the outreach and engagement processes, requesting that staff develop an engagement strategy for trade allies and contractors.

**Meeting adjourned at approximately 12:30 p.m.**

**Next Strategic Planning Committee Meeting will be January 28, 2019.**

# Tab 8

# Policy Committee Meeting

January 31, 2019

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## Attending at Energy Trust offices

Alan Meyer (Committee Chair), Henry Lorenzen

Amber Cole, Michael Colgrove, Fred Gordon, Steve Lacey, Debbie Menashe, Pati Presnail, Peter West, Jessica Kramer, Jay Olson, Zabyn Towner, Kate Wellington, Wendy Campos (Moss Adams), Jennifer Price (Moss Adams)

## Attending by Teleconference

Roger Hamilton, Elaine Prause, Anne Root

Meeting began at 1:00 p.m.

## Policies Reviewed

### a. Waiving Program Incentive Caps 4.20.000-P

This policy was up for its regular three-year review. Staff reviewed the policy to consider any needed changes. No substantive changes were suggested, but a simple revision to reference “efficiency projects” and not simply “projects” was recommended. The committee discussed the policy and suggested further changes for clarity: removing the parenthetical language in the first sentence of the policy and adding the word “efficiency” before the phrase “program incentive limits,” also in the first sentence of the policy. Committee members recommend that the revised policy, reflecting changes discussed in the committee meeting, be forwarded to the full board for approval and included in the board’s consent agenda for its February 20, 2019 meeting.

### b. Authority to Commit Incentive Funds for Payment in Future Years 4.21.000-P

This policy was first adopted in 2006 and authorizes programs to commit funds from a current year’s budget to projects in future years. The impetus for this policy came from Commercial and Industrial program designs, such as strategic energy management, which contemplate program engagement and incentive commitments of more than two years. The policy, up for its regular review, permits longer term commitments provided the commitment is consistent with overall programs budgeting and actions plans, and the commitment is consistent with our contracting policies. In addition, such commitments must comply with OPUC grant agreement guidelines, which require staff to provide notice to the OPUC of financial commitments of more than two years. Staff believes the policy is working appropriately and recommended only minor, editorial changes. Committee members asked questions of staff regarding the way in which the policy operates. Following a discussion, the committee recommended that the policy be forwarded to the full board for approval and recommended that the policy should be included on the February 20<sup>th</sup> consent agenda, with the changes as proposed.

### c. Waste-to-Energy Policy 4.24.000-P

This policy was first developed in 2006 to establish funding priorities for waste-to-energy generation projects based on waste source. The policy was up for its regular review and provides guidance to Energy Trust renewables sector staff in funding priorities. Under this policy, biogas projects are prioritized, for example, as are municipal water resource recovery facilities that redirect human and food waste, fats, oils or greases from landfills to anaerobic digesters to create methane.

The only change proposed by staff in this review was to eliminate the requirement that waste-to-energy projects be reviewed by the RAC before being proposed to the board. Projects with an incentive over \$200,000 are already reviewed by the RAC under another board policy (**Policy on**

**Other Renewables Approval Process 4.13.0001).** Staff advised the committee that it is not aware of any biogas project that has not gone to the RAC under this approval process policy. Removing the reference to RAC approval in this policy would have the practical effect of eliminating the requirement to bring a project with proposed funding of less than \$200,000 to the RAC. This is consistent with the process for all other Other Renewables projects. Committee members discussed the implications of this policy, understanding that the “loading order” it identifies is with respect to waste-to-energy projects only, and not all Other Renewables projects. With that understanding, the committee recommended the revised policy be forwarded to the full board for approval and recommended that it be included in the February 20<sup>th</sup> consent agenda consistent with the other two policies reviewed at the meeting.

### **Review of Proposal to Amend the Bylaws**

In 2018, the position of “Chief Financial Officer” was reconfigured as Pati Presnail was appointed to the position of Director of Finance as a member of the Management Team. As a result of this change, staff is recommending changes to the bylaws to eliminate references to a “Chief Financial Officer” and to otherwise revise the bylaws to ensure that they are consistent with current operations of the organization’s finance group.

Staff presented suggested revisions to the Energy Trust bylaws at the committee’s meeting in November 2018, and committee members requested that staff review the proposed bylaw revisions with Energy Trust’s Moss Adams auditors and report back to the committee. Debbie Menashe and Pati Presnail met with Wendy Campos, Jennifer Price and Ashley Osten, of Moss Adams, to review and discuss the proposed bylaw changes. Wendy, Jennifer, and Ashley provided helpful guidance on the bylaws, supporting staff’s recommended changes regarding the Chief Financial Officer and financial activities sections, and advising that the detailed provisions in the current bylaws are not typical of nonprofit corporations, in their experience. In addition, Wendy, Jennifer and Ashley also suggested that the board consider revising language in the bylaws to maximize flexibility for future changes. On January 25, 2019, Debbie and Pati discussed the proposed bylaw changes with members of the Oregon Public Utility Commission staff at a regular monthly coordination meeting and received additional feedback.

Wendy Campos and Jennifer Price of Moss Adams were present at the committee meeting to describe their review of the proposed bylaw changes. Wendy and Jennifer responded to committee member questions regarding whether a financial statement certification requirement, as outlined in the current bylaw language, should continue to be included in the bylaws. Wendy and Jennifer reported that certification language is not typical in nonprofit corporation bylaws, and that it is the type of language one would expect in a publicly traded corporation. Wendy and Jennifer described their audit process, including their reliance on a Management Representation letter. Though not certified, the Management Representation letter is an important part of the audit process, and should auditors have concerns or questions, they would raise them with the Audit Committee. The revised bylaws mandate the establishment of an Audit Committee. Discussion ensued, and the committee suggested that instead of a certification requirement, the mandate of an Audit Committee is appropriate and further language be added to the role of the treasurer. Elaine Prause reported that the OPUC staff supports the proposed bylaw revisions.

In addition, committee members agreed that the bylaws would be reviewed as part of the overall board structure and process review, which is set to begin shortly. Should that review identify possible bylaw revisions, the Policy Committee will come back to the bylaws for a further review then. Debbie will revise the bylaws to reflect committee discussion, circulate those revisions to committee members for review, and then put the revised bylaws forward to the full board for review at the February board meeting.

**Board Meeting Presentation Previews****Preview of Presentations regarding Industrial and Agriculture Program Delivery Contract and Existing Buildings and Multifamily Program Management Contract Extensions**

Staff supports one-year extensions for two Industrial and Agriculture Program Delivery Contractor (PDC) agreements (with Cascade Energy and Evergreen Consulting, respectively), the Existing Buildings Program Management Contractor (PMC) agreement (with ICF Resources), and the Multifamily PMC agreement with (Lockheed Martin), each currently set to expire on December 31, 2019. In accordance the terms of each of these agreements, the agreements may be extended for one-year extensions if Energy Trust staff determines that the firm has met the contract's extension criteria and the board of directors does not object to the extension. Jessica Kramer, Jay Olson, and Kate Wellington previewed their presentations on contract extensions for the committee. Committee members provided feedback on the presentations and briefing materials, and staff members will revise their presentations to provide more direct information on how the extension criteria have been satisfied in response to the committee's suggestions.

**Consent and Appointment to the Renewables Advisory Council (RAC) and Conservation Advisory Council (CAC) Affiliation Update**

Pursuant to board policy, Energy Trust staff requested Policy Committee approval for the appointment of a new member to the RAC: Rebecca Smith, Senior Energy Policy Analyst at the Oregon Department of Energy. The committee approved the appointment of Rebecca Smith.

Staff also reported that Tyler Pepple, a current CAC member formerly of Industrial Customers of Northwest Utilities (ICNU), is now affiliated with Alliance of Western Energy Consumers (AWEC).

**Update on Community Solar Program Process (Michael Colgrove and Lizzie Rubado)**

Elaine Prause, of the OPUC staff, departed the meeting for this discussion, and Mike and Lizzie Rubado updated the committee on the current process and discussions among Energy Solutions, prospective Community Solar Program Administrator, Oregon Public Utility Commission, and Energy Trust.

**Meeting adjourned at 3:10 p.m.**

**Next meeting date: March 7, 2019, 1:00 pm**