

Energy Trust Board of Directors

October 13, 2021

Energy Trust of Oregon Board of Directors' Meeting and Budget Workshop

The Energy Trust Board of Directors will meet virtually from 9:00 a.m. to 3:00 p.m. The meeting will start with a 3-hour 2022 Budget Workshop from 9:00 a.m. to 12:00 p.m. for the board, Conservation Advisory Council, Diversity Advisory Council, Renewable Energy Advisory Council, interested stakeholders and the public. Then the board will meet from 12:35 p.m. to 3:00 p.m. for its regular board meeting, also open to the public. Your registration link will be the same link for both the workshop and the board meeting.

Register in advance for this meeting and workshop: https://us06web.zoom.us/meeting/register/tJctdO-spzgqGtNSzvyB4qflLVWi7U-P8vl5

After registering, you will receive a confirmation email containing information about joining the Zoom.

PUBLIC COMMENT:

There will be one PUBLIC COMMENT opportunity during the meeting at 12:40 p.m. To request to speak email meeting host cheryle.easton@energytrust.org with contact information and interested agenda topic.

192nd Board Meeting October 13, 2021

Register in advance for this meeting: https://us06web.zoom.us/meeting/register/tJctdO-spzgqGtNSzvyB4qflLVWi7U-P8vl5



	Agenda	Tab	Purpose
9:00 a.m.	Board Meeting Call to Order (Melissa Cribbins) 5 minutes • Welcome to the workshop		Info
9:05 a.m.	Budget Workshop (Budget team) 180 minutes2022 Draft Budget and 2022-2023 Action Plan	Budget Binder	Info
12:05 p.m.	Lunch 30 minutes		
12:35 p.m.	Call Meeting to Order (Melissa Cribbins) 5 minutes		
12:40 p.m.	General Public Comment 5 minutes The president may defer specific public comment to the appropriate agenda topic.		Info
12:45 p.m.	Budget Workshop Debrief (Michael Colgrove) 30 minutes		Info
1:15 p.m.	President's Report (Melissa Cribbins) 5 minutes		
	 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 of any member of the board. July 20, 2021 Board Learning Session Minutes July 21, 2021 Board Meeting Minutes Approve 4.15.000-P Renewable Energy Certificate (REC) Policy R948 	Tab 1	Action
1:20 p.m.	 Executive Director Report (Michael Colgrove) 10 minutes Supplier Diversity Program Upcoming retirements and recruitment plans 	Tab 2	Info Info

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	Agenda	Tab	Purpose
1:30 p.m.	Committee Reports 45 minutes		
•	Joint Audit & Compensation Committee (Anne Root)	Tab 3	Info
	Compensation Committee (Roland Risser)	Tab 4	Info
	Evaluation Committee (Lindsey Hardy)	Tab 5	Info
	Finance Committee (Susan Brodahl)	Tab 6	Info
	 Resolution Approve reallocation of \$2 million Emergency Contingency funds R949 		Action
	Policy Committee (Henry Lorenzen)	Tab 7	Info
	 Acknowledge resigning RAC member Andria Jacob 		Info
	Strategic Planning Committee	Tab 8	
	 Conservation Advisory Council (Lindsey Hardy) 	Tab 9	Info
	 Diversity Advisory Council (Mark Kendall) 		Info
	 Renewable Advisory Council (Alexia Kelly) 	Tab 10	
	 Ad hoc Board DEI Committee (Mark Kendall) 		Info
	 Ad hoc Board Roles & Responsibilities Committee (Roland Risser) 		Info
	Ad hoc Board Structure Committee (Henry Lorenzen)		Info
2:15 p.m.	Program Staff Reports 45 minutes		
	 Industrial & Agriculture program present progress update for 2022 Request for Proposal process (Amanda Potter) 25 minutes 		Info
	 Residential program present progress update for 2022 Request for Proposal process (Marshal Johnson) 20 minutes 		Info
3:00 p.m.	Adjourn Meeting (Melissa Cribbins)		

The next meeting of the Energy Trust Board of Directors will be held virtually Tuesday December 17, 2021 at 10:00 a.m.

Agenda October 13, 2021

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

Tab 2 Executive Report

• Supplier Diversity Program

Tab 3 Audit Committee

July 8, 2021 Joint Audit & Compensation Committee Meeting Notes

Tab 4 Compensation Committee

• August 19, 2021 Compensation Committee Meeting Notes

Tab 5 Evaluation Committee

- July16, 2021 Evaluation Committee Meeting Notes
- Executive Summary Recurve Ducted Heat Pump Upgrades Impacts Final
- Impact Evaluation on 2019 Existing Building program

Tab 6 Finance Committee

- Resolution Approve Reallocation of \$2 million Emergency Contingency funds R#
- August Finance Committee Financial Packet
- July 27, 2021 Finance Committee Meeting Notes
- August 31, 2021 Finance Committee Meeting Notes
- September 27, 2021 Finance Committee Meeting Notes

Tab 7 Policy Committee

• September 9, 2021 Policy Committee Notes

Tab 8 Strategic Planning Committee

• August 17, 2021 Strategic Planning Committee Notes

Tab9 Conservation Advisory Council

August 4, 2021 Conservation Advisory Council Notes

Tab 10 Renewable Advisory Council

• July 28, Renewable Advisory Council Notes

Tab 1



Board Learning Session Minutes—190th Meeting

July 20, 2021

Board members present: Alan Meyer, Elee Jen, Eric Hayes, Ernesto Fonseca, Henry Lorenzen, Lindsey Hardy, Mark Kendall, Melissa Cribbins, Roland Risser, Susan Brodahl, Janine Benner (Oregon Department of Energy special advisor), Letha Tawney (Oregon Public Utility Commission ex officio)

Board members absent: Alexia Kelly, Anne Root, Erik Andersson

Staff attending: Amber Cole, Amanda Thompson, Betsy Kauffman, Cheryle Easton, Dan Rubado, David Moldal, Debbie Menashe, Elaine Dado, Elizabeth Fox, Emma Clark, Fred Gordon, Greg Stokes, Hannah Cruz, Justin Buttles, Karl Whinnery, Marshall Johnson, Melanie Bissonnette, Michael Colgrove, Pati Presnail, Quinn Cherf, Shelly Carlton, Steve Lacey, Thad Roth, Tracy Scott

Others attending: Anna Kim (Oregon Public Utility Commission), Brooke Landon (CLEAResult), Jenny Sorich (CLEAResult), Misti Nelmes (CLEAResult), Susan Badger Jones (Diversity Advisory Council)

Melissa Cribbins called the meeting to order at 1:00 p.m.

2022 Organizational Goals Discussion

Continuing the discussion that was not fully completed at the last board meeting, Executive Director Michael Colgrove provided information on the development of the four annual organization goals for 2022. Annual organizational goals are derived from the focus areas of the Strategic Plan and serve as the foundations for business planning for the coming year. Mike explained that the goals are higher level and directional. They are intended to help shape the organization's work and do not delineate every planned activity.

Mike described the process for developing the goals, noting that this is only the third year of developing organizational goals through this process and that this was the first year in which we were able to hold a board workshop. Board members expressed some concern about the sufficiency of board involvement, and staff will work closely with the board to continue to improve the process.

Mike then described the substance of four annual organizational goals for 2022. Board members asked clarifying questions about the language and content of the goals. Goals two and three, which focus on more intentional and focused community collaboration and on advancing an organization development function are significant goals. Areas discussed during the session were the focus on energy burden, community based organizations and community collaboration, and how new matters can be covered by the goals if they come up after the goals are adopted. Board members discussed how the goals do reflect many of the key messages around energy burden and community-led initiatives that have emerged out of all of the energy legislation in 2021. Board members also offered suggestions on language related to the goal around development and the fourth goal on operations and operational efficiency.

Budgeting to a Plan: The process and levers Energy Trust uses to develop the budget

Mike and the budget team presented information on the tools Energy Trust uses in any given year for budget development. Debbie Menashe described the policy underpinnings of the budget development. Pati Presnail explained the typical schedule and timeline of the budget development process. Fred Gordon, Tracy Scott and Steve Lacey described the tools used by our programs to build our budget: forecasting the resource, measure incentive levels and program design tools, and utility funding negotiations. Mike used a bridge analogy to illustrate this topic and also described how Energy Trust builds its annual budget to support what is possible and achievable in cost-effective efficiency and renewable energy. That is different than budgeting to a fixed budget. Board members asked clarifying questions, including regarding the board's role on allocating the budget among sectors and understanding what is possible and achievable. Board members also requested that staff provide the board with the specific policy questions as well as alternatives and analyses. With this type of information, board members can assist staff in policy questions and make informed decisions on the annual budget.

The Board expressed appreciation for the explanation of the budgeting process and the presentation by staff.

President Melissa Cribbins suspended the meeting at 3:50 p.m. for a brief break, and the board reconvened at approximately 4:00 p.m.

Customer Insight Study

Dan Rubado, Senior Project Manager, Planning and Evaluation, presented information on the 2020 Customer Insights Study. The survey had a large sample size to give us a better understanding of how we serve customers, customer awareness of Energy Trust, and what barriers exist to participation in Energy Trust programs. Additionally, the survey was used to validate the census-tract based approach we have been using to evaluate the equity of our program reach, the approach we have used since 2018.

Overall, the study found that approximately 37% of eligible households had been served in Energy Trust territory from 2013-2019. The study went deeper to uncover differences in participation rates among households by different dimensions: race, income, type of housing (rental or owner-occupied), fuel, geography. Asian Americans had the highest participation rates and Black and Latinx households had the lowest. Higher income households reflected higher participation rates than lower income households, and the patterns on income persists among racial groups examined. Renters in small multifamily buildings have the lowest participation rates.

Forty percent surveyed had some knowledge of Energy Trust. This rate is consistent with prior surveys. Staff will use information about how different customer types become of aware of Energy Trust to improve and tailor information dissemination. For instance, utility bill inserts and direct mail appear to be the most effective ways to build awareness in lower income households.

Energy Trust received useful information from the survey on how to address barriers to participation to program offerings and the interests of customers in energy issues and energy use.

Board members asked clarifying questions, particularly about the disaggregated information on customer groups in the survey results. This information provides guidance for more specific and intentional program design for different customer groups. Board members acknowledged how the Customer Insight Study provides more granular and helpful information than the previous Census tract-based study conducted on program equity. Board members expressed appreciation for the Evaluation group's follow up in reviewing the Census tract-based analysis methods and investigating the limitations of that study.

Adjourn	
President Melissa Cribbins adjourned the m	neeting at 4:30 p.m.
The next regular meeting of the Energy 1 13, 2021 at 9:00 a.m. held virtually on Zoon	Frust Board of Directors will be held Wednesday October n.
Signed: Mark Kendall, Secretary	// Date

PINK PAPER



Board Meeting Minutes—191st Meeting

July 21, 2021

Board members present: Alan Meyer, Alexia Kelly, Elee Jen, Erik Andersson, Ernesto Fonseca, Henry Lorenzen, Lindsey Hardy, Mark Kendall, Susan Brodahl, Roland Risser, Janine Benner (Oregon Department of Energy special advisor), Letha Tawney (Oregon Public Utility Commission ex officio)

Board members absent: Anne Root, Eric Hayes, Melissa Cribbins

Staff attending: Adam Bartini, Amanda Potter, Amanda Thompson, Andy Cameron, Betsy Kauffman, Cheryle Easton, Debbie Menashe, Elaine Dado, Elizabeth Fox, Emily Estrada, Emma Clark, Eric Braddock, Fred Gordon, Hannah Cruz, Jay Ward, Karl Whinnery, Melanie Bissonnette, Michael Colgrove, Quinn Cherf, Sarah Castor, Scott Clark, Steve Lacey, Sue Fletcher, Tara Crookshank, Thad Roth, Tracy Scott

Others attending: Anna Kim (Oregon Public Utility Commission), Beth Glynn (Cascade Energy), Brooke Landon (CLEAResult), Chris Smit (Energy 350), Daniel Meek, Jeff Bernacki (Cascade Energy), Jeff Manternach (Red Rock Biofuels, LLC), Kari Greer (Pacific Corp.), Matthew Tidwell (PGN), Rachel Dawson (Cascade Policy Institute), Rick Hodges (NW Natural Gas), Ross Finney (RHT Energy), Susan Badger-Jones (Diversity Advisory Council)

Business Meeting

Vice President Henry Lorenzen called the meeting to order at 10 a.m. Henry reminded board members of their ability to request that consent agenda items be removed to the regular agenda items at any time. He also described the public meeting process and outlined the Zoom process for public comments and presentations for meeting participants and members of the public in attendance.

General Public Comments

Henry asked for public comments, and there were none at the meeting. However, Henry stated that a written public comment submitted to the board earlier in the day by Tom Cusack with concerns expressed about Red Rock Biofuels, LLC. Those comments are attached at the end of the minutes and were delivered to board later in the meeting.

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.

Secretary Mark Kendall notified the board that he had reviewed the minutes in the board packet and found them accurate. The board approved the minutes as part of the consent agenda.

MOTION: Approve consent agenda

Consent agenda includes:

1. May 18, 2021 Board Learning Session Minutes

2. May 19, 2021 Board Meeting Minutes
Request approval of Andy Cameron as Oregon Department of Energy member to the
Evaluation Committee R#944

Moved by: Roland Risser Seconded by: Mark Kendall

Vote: In favor: 10 Abstained:

Opposed: O

RESOLUTION 944 BOARD COMMITTEE APPOINTMENTS

(REPLACES RESOLUTION 932)

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. Oregon Department of Energy (ODOE) director and special advisor and ex-officio member to the board, Janine Benner, has requested that Andy Cameron, ODOE Energy Efficiency and Conservation Manager, replace Warren Cook as the ODOE representative on the Energy Trust Program Evaluation Committee.
- 3. The Board President recommends the appointment of Andy Cameron to the Program Evaluation Committee in place of Warren Cook.

It is therefore RESOLVED:

- 1. This resolution replaces Resolution 932 adopted by the board at its February 24, 2021 meeting to reflect the addition of Andy Cameron on the Evaluation Committee; and
- 2. That the Board of Directors hereby appoints the following directors to the following committees for terms that will continue until a subsequent resolution changing committee appointments is adopted:

Audit Committee
Anne Root, Chair
Henry Lorenzen
Mark Kendall
Karen Ward, outside expert
Melissa Cribbins (ex officio)
Pati Presnail, staff liaison
Board Nominating Committee
Anne Root, Chair
Alan Meyer
Alexia Kelly
Ernesto Fonseca
Lindsey Hardy
Letha Tawney OPUC (ex officio)
Melissa Cribbins (ex officio)
Greg Stokes, staff liaison

Compensation Committee
Roland Risser, Chair
Mark Kendall
Susan Brodahl
Eric Hayes
Melissa Cribbins (ex officio)
Amanda Sales, staff liaison
Executive Director Review Committee
Elee Jen, Chair
Erik Andersson
Roland Risser
Eric Hayes
Melissa Cribbins (ex officio)
Amanda Sales, staff liaison
Finance Committee
Susan Brodahl, Chair
Anne Root
Henry Lorenzen
Roland Risser
Melissa Cribbins (ex officio)
Pati Presnail, staff liaison
Policy Committee
Henry Lorenzen, Chair
Alan Meyer
Anne Root
Eric Hayes
Erik Andersson
Susan Brodahl
Letha Tawney OPUC (ex officio)
Melissa Cribbins (ex officio)
Debbie Goldberg Menashe, staff liaison
Program Evaluation Committee
Lindsey Hardy, Chair
Alan Meyer
Eric Hayes
Erik Andersson
Jennifer Light, expert outside reviewer
Andy Cameron, ODOE (ex officio)
Melissa Cribbins (ex officio)
Sarah Castor, staff liaison
L :

Strategic Planning Committee
Mark Kendall, Chair
Lindsey Hardy
Roland Risser
Ruchi Sadhir, ODOE (ex officio)
Letha Tawney OPUC (ex officio)
Melissa Cribbins (ex officio)
Debbie Goldberg Menashe, staff liaison
Ad hoc Committee on Board Roles and Responsibilities
Roland Risser, Chair
Alan Meyer
Elee Jen
Eric Hayes
Mark Kendall
Melissa Cribbins (ex officio)
Letha Tawney OPUC (ex officio)
Cheryle Easton, staff liaison
Ad hoc Committee on Board Governance and Structure
Henry Lorenzen, Chair
Alan Meyer
Anne Root
Eric Hayes
Ernesto Fonseca
Susan Brodahl
Letha Tawney OPUC (ex officio)
Melissa Cribbins (ex officio)
Cheryle Easton, staff liaison
Ad hoc Committee on Board Diversity
Mark Kendall, Chair
Elee Jen
Eric Hayes
Ernesto Fonseca
Lindsey Hardy
Letha Tawney OPUC (ex officio)
Ruchi Sadhir, ODOE (ex officio)
Melissa Cribbins (ex officio)
Cheryle Easton, 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, Elee Jen and Alan Meyer

b. Renewable Energy Advisory Council: Susan Brodahl and Alexia Kelly

c. Diversity Advisory Council: Mark Kendall, Ruchi Sadhir

Moved by: Roland Risser Seconded by: Mark Kendall

Vote: In favor: 10 Abstained:

Opposed:

Executive Director Report

Executive Director Michael Colgrove included several items in his report.

Michael first described organizational plans for a hybrid workplace, both in ongoing COVID-19 circumstances and beyond. The workplace model envisioned would permit flexibility for staff to work in or away from the Energy Trust office space. Executive Team is working to identify protocols and procedures for a hybrid workplace and expects to institute a pilot over the next 6-12 months

Board members discussed considerations for their own meetings and whether and how to continue with hybrid, in-person and virtual attendance. Board members will consider and discuss their meeting protocols over the next months.

Henry presented to the board comments received in written form by Tom Cusack regarding his concerns about the Red Rock project. The written comments are attached to the minutes.

Michael then introduced Industry & Agriculture Sector Lead Amanda Potter who presented information on the Red Rock Biofuels project and recommended an extension to the current project funding agreement Board members acknowledged the concerns raised in the written comments and asked questions about the project risk and the funding agreement risk. Jeff Manternach, co-founder and CFO of Red Rock Biofuels, LLC, responded to board member questions about project funding and construction timing.

Board members expressed appreciation for the project, including its economic development benefits for Lake County.

Board members then moved to approve Resolution 945 below as follows:

RESOLUTION 945 WAIVING PROGRAM INCENTIVE CAP AND APPROVING INCENTIVES FOR THE RED ROCK EFFICIENCY PROJECT

WHEREAS:

- 1. The Energy Trust Production Efficiency program has worked with Red Rock Biofuels, LLC (Red Rock) to identify a custom waste heat to energy system project (the Project) in connection with the gasification process at Red Rock's new biofuel production facility, to be constructed and located in Lakeview, Oregon.
- 2. In June 2018, the Energy Trust board of directors authorized the executive director to enter into an incentive funding agreement with Red Rock for up to \$2 million, subject to certain conditions including:
 - Energy Trust funding would be contingent on Red Rock's agreement to suspend self-direction at the facility site where the Project is located for at least three years.
 - Electric energy generated by the Project will be used by Red Rock on-site to reduce the amount of electricity purchased for the facility.
 - Energy Trust funding would be conditioned on Red Rock's construction completion by September 2021 and would be payable annually based on savings performance.
- 3. Energy Trust and Red Rock entered into an incentive funding agreement consistent with the Energy Trust board of directors' approval effective June 19, 2020 (the Red Rock Incentive Agreement).
- 4. Red Rock has commenced construction and completed approximately 60% of the project, but Red Rock will not complete construction by September 2021 and has, therefore, requested an extension of the original construction completion deadline condition in order to secure adequate funding for completion.
- 5. Energy Trust remains supportive of the Red Rock project as it provides very cost effective energy efficiency savings for the benefit of ratepayers.
- 6. Energy Trust staff proposes amending the Red Rock Incentive Agreement to (i) extend the construction completion deadline from September 30, 2021 to December 31, 2023 and (ii) add an additional milestone condition for securing adequate funding not later than March 30, 2022, such funding must be adequate for construction completion by the December 2023 deadline.

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

- Authorizes the executive director to negotiate and sign an amendment to the Red Rock Incentive Agreement that contains the following terms:
 - Revises the condition for incentive payment for construction completion by extending the current construction completion deadline in the Red Rock Incentive Agreement from September 30, 2021 to December 31, 2023; and
 - Adding an additional condition for incentive payment to secure adequate funding to complete construction not later than March 30, 2022.

Seconded by: Erik Andersson

Moved by: Mark Kendal

Vote:

In favor: 10 Abstained: 0

Opposed: 0

Michael then updated the board on Energy Trust's ongoing efforts to support wildfire relief efforts, describing plans to create specific wildfire rebuilding measures and the development of a tool to track active fires. This tracking tool enables Energy Trust to focus outreach efforts as and where needed. Board members expressed their support for these efforts.

Janine Benner, Director of Oregon Department of Energy (ODOE) and special advisor to the board, reported that she and Michael are in discussions on how ODOE and Energy Trust can coordinate to advance Energy Trust efforts and funding allocated to ODOE for wildfire rebuilding in the 2021 legislative session.

Michael completed his report by introducing two new employees, Elaine Dado, executive assistant, and Emma Clark, senior outreach manager-communities of color.

Committee Reports

Audit Committee

In committee chair Anne Root's absence, Michael Colgrove referred board members to the committee notes in the board packet.

Evaluation Committee

Lindsey Hardy reported on the Evaluation Committee, highlighting evaluations on Fast Feedback and a large, complex industrial project.

Finance Committee

Susan Brodahl asked Michael Colgrove and Steve Lacey, Energy Trust Director of Operations, to describe information presented to the Finance Committee regarding the request to use contingency funds to provide additional funding for Energy Trust's gas efficiency programs until such time as additional revenues can be collected from the gas utilities. Michael and Steve presented information on the program needs, and board members asked questions regarding gas utility and OPUC discussions and involvement. Board members sought to confirm that the utilities were committed to providing future revenue. OPUC Commissioner Letha Tawney, ex officio member of the board, confirmed that Energy Trust and the gas utilities are expected before the OPUC for a tariff adjustment in November to ensure additional funding for Energy Trust in January to replenish the contingency reserves.

Board members then moved to approve Resolution 946 as follows:

RESOLUTION R946 AUTHORIZING USE OF PROGRAM AND CONTINGENCY RESERVES TO SUPPORT GAS EFFICIENCY PROGRAMS

WHEREAS:

- Energy Trust's board policy on Maintaining, Establishing, and Using Net Assets requires that Energy Trust's board of directors approve expenditures that exceed 50% of Energy Trust's program reserves and in any amounts from Energy Trust's Operational Contingency Reserves.
- 2. Market conditions and program design have resulted in a higher uptake of incentives in gas efficiency programs, and to support the continuation of these programs, Energy Trust staff is implementing incentive changes and proposes accessing program and operational contingency reserves.

3. Energy Trust staff has taken steps to manage gas program incentive demand, including changing incentives and implementing incentive and program caps. To sustain the gas programs, Energy Trust staff also proposes accessing program reserves for NW Natural and Avista and accessing operational contingency funds temporarily in an amount up to \$500,000 for support of Avista gas incentive offerings.

It is therefore RESOLVED that in order to sustain and support the continuation of the gas efficiency programs in 2021:

- 1. Energy Trust staff is authorized to access and use the NW Natural and Avista program reserves in amounts that will exceed 50% of those program reserves; and
- 2. Energy Trust staff is authorized to access and use temporarily an amount not to exceed \$500,000 from the operational contingency reserves.

Moved by Susan Brodahl Seconded by: Roland Risser

Vote: In favor:10 Abstained: 0

Opposed: 0

Policy Committee

Henry Lorenzen reported on the Policy Committee actions and discussions which included the appointment of Terrance Harris to the Diversity Advisory Council and the review of several policies, including the Combined Heat and Power (CHP) Policy, a review of large contracts, and an update on the legislative session. Committee members asked staff to provide more explanation and options for their review of the policies. Henry noted that a review of many policies will be undertaken in light of legislative changes and the effects on many of Energy Trust's policy statements.

Conservation Advisory Council (CAC)

Lindsey Hardy reported on the June CAC meeting. At that meeting, staff reported on the business sector incentive pipeline and project management for 2021, which revealed that the year continues to be dynamic. The meeting also included updates on the uptake of gas incentives in the Residential sector, wildfire recovery, the development of the new tracking tool for the Strategic Energy Management program, and on Power and Conservation Council's upcoming power plan draft.

Diversity Advisory Council (DAC)

Mark Kendall reported on the last DAC meeting. DAC members will be meeting with the board's ad hoc DEI Committee in October to discuss trainings and discussions with the board focused on inclusivity and anti-racism. Board members asked questions regarding the DAC's focus on communities of color, rural communities, and customers with low-income and how board trainings will be connected to all of those communities. Board members discussed the importance of efforts and focus on inclusivity among all communities and the way in which DAC's efforts to raise Energy Trust's awareness of possible preconceptions and assumptions can make our programs more inclusive and accessible to all potential customers.

Ad hoc Board Governance Roles & Responsibilities and Structure Committees

Roland Risser reported on the board's ad hoc Board Governance and Structure committees. The committees planned the board's June 8th workshop. At that workshop, the board discussed legal and fiduciary board responsibilities, best practices, a list of board responsibilities, and committee structures. Another workshop is scheduled for August 25th to make decisions on next steps. Workshop 2 will work on these and come to some conclusions.

The Board adjourned for Lunch at 11:58 a.m.

Henry Lorenzen called meeting to order at 12:48

General Public Comments

There were no public comments.

Legislative Report

Hannah Cruz, Senior Communications Manager, and Jay Ward, Community Outreach Manager, presented an update on the outcomes of the 2021 legislative session. It was a significant session, with focus on rebuilding for wildfire and COVID-19 and racial justice. In addition, the session resulted in significant developments in clean energy policy and legislation.

For Energy Trust, the most direct and substantial impact comes out of HB 3141. HB 3141 extended the sunset for the public purpose charge through 2036 and expands the statutory purposes for renewable energy public purpose funding to include support for distribution system connected technologies that support reliability, resilience and integration of renewable resources into the distribution system and also to require at least 25% of that funding to be focused on low income customers.

The bill reduced the 3 percent public purpose charge on electric utility customer bills and moves all energy efficiency funding from the public purpose charge structure and into regular utility ratemaking, in the same way Energy Trust's current "supplemental funding" through SB 838 has been handled since 2008. By moving cost-effective energy efficiency funding from the public purpose charge and into OPUC ratemaking processes, the sunset on energy efficiency funding is effectively removed. The bill also phases out over time funding caps on large electric customers.

In addition, the bill requires the OPUC to set equity metrics for all utility customer funds managed by Energy Trust. The equity metrics must be set by the end of 2022.

Hannah provided slides depicting the changes to the Energy Trust's funding sources, and the board expressed appreciation for the information.

Steve Lacey reported that the OPUC staff and Energy Trust staff have been in conversations to discuss how to implement the legislative changes. An internal Energy Trust team has convened. The board will be updated regularly.

Board members asked a number of questions and asked to be thoroughly engaged as Energy Trust and the OPUC work through the changes.

Staff provided a brief summary on other relevant and significant bills, including HB 2021 (Clean Electricity) and HB 2475 (authorizing differentiated ratemaking for low income customers and providing intervenor funding). A full report on all bills tracked by Energy Trust and summaries of other significant bills was included in the board packet for the meeting.

Board members asked questions for clarity and expressed interest in the opportunities presented for Energy Trust by the legislation.

2022 Business Plan in Support of Organizational Goals

Michael Colgrove presented an informational overview of Energy Trust's 2022 business plan and the connection between the activities identified in the plan and the organization's annual goals.

Michael noted that the business plan assigns 82% of available work hours to "running the business" to achieve Energy Trust's core mission. Other hours planned for innovation projects or initiatives are categorized as core, adjacent, transformational. To be more innovative as an organization, the business plan contemplates continued support of an innovation team.

The business plan identifies activities that support the four draft 2022 annual organizational goals: achieving savings and generation goals, expanding support for community-led initiatives, advancing development as a core function, and implementing new operational strategies to support staff and thrive cost-effectively in a changing workplace environment. Michael highlighted examples of activities that are planned to support these goals.

Board members discussed the information presented, urging Michael and staff to ensure that activities, both running the business and innovation, support Energy Trust's core mission of supporting energy efficiency and renewable energy. Michael explained that Energy Trust's core mission is the focus and connects to all of the organization's work and budget, including in setting staffing levels.

2020 Annual Results

Michael Colgrove presented highlights from the Energy Trust 2020 Annual Report.

Board members discussed the highlights, specifically asking questions about partnerships with communities, community-based organizations and utilities. Board members expressed their interest and support for this work and the way it leverages resources to get efficiency and renewable energy resources for the benefit of ratepayers. Board members discussed how to sequence and begin moving on the timeline for responding to opportunities emerging out of HB 3141.

Henry Lorenzen suspended the meeting for a short break at 2:20 p.m. and called the meeting back into session at 2:32 p.m. When the meeting resumed, Michael reported on the annual savings and generation results and number of sites served. He also reported on expenditures for 2020, noting that approximately \$180 million was spent, with 55% of that amount spent in customer incentives.

- Total electric savings were 43.2 aMW saved, achieving 95% of goal
- Total gas savings were 7.2 MMTh saved, achieving 110% of goal
- Total renewable generation was 4.2 aMW generated, achieving 127% of goal
- Total sites served 64,022 across the service territories.

Michael explained the results by utility, noting that while gas savings goals were exceeded, Energy Trust did not meet its goals for Cascade Natural Gas because of a delayed project. Michael also reviewed results by sector.

Board members discussed the results, noting the accomplishments through an unprecedented year. Board members discussed how over-achieving goals is important to watch. In addition, board members urged staff to continue to monitor savings and spending by sector, especially any underachievement in the Industry & Agriculture sector which can provide the most cost-effective savings.

Board members recognized staff for the excellent results for 2020, noting that it takes a truly hardworking organization to pull together to fulfill its duties to ratepayers.

Michael then reported on Energy Trust's performance against the OPUC Performance Measures. The organization met all savings measures except for savings in Cascade Natural Gas and Project Development assistance dollars. In addition, the organization did not meet the measure in staffing costs, caused primarily by excess vacation liability. Michael described steps taken to reduce vacation liability. All of the Diversity, Equity, and Inclusion measures were achieved, except on the number of minority and women-owned business in Energy Trust's trade ally network. The organization continues to work on recruitment of diverse contractors into the network.

Staff Report: Annual Update Northwest Energy Efficiency Alliance End Use Load Research Project

Sarah Castor, Program Manager-Evaluation and Engineering, and Erika Kociolek, Senior Data and Business Intelligence Analyst, presented the annual update on the NEEA End Use Load Research (EULR) Project.

The EULR project is aimed to developing use and load profiles for residential and commercial end users by installing meters. The granular data that will be derived from these meters will be very helpful in tracking levels and timing of energy usage. The project is long term, lasting until 2025. Today, there are 11 commercial buildings that are metered and more than 200 homes throughout the NEEA region. Recruitment for metering was slower than anticipated in 2020 because of COVID-19 restrictions, but recruitment is underway again. Recruitment for commercial buildings has been slower than expected, and the project's steering team is working on strategies to improve uptake.

Board members asked a number of questions about use of the EULR information.

Adjourn

The meeting adjourned at approximately 3:45 p.m.

U U	Board of Directors will be held Wednesday October y Trust of Oregon, Inc., 421 SW Oak Street, Suite 300
Signed: Mark Kendall, Secretary	/ Date

Public Comment

To: Oregon Energy Trust Board

FM: Tom Cusack

Subject: July 21,2021 Board Meeting, Red Rocks Biofuels Extension Issues and Questions

Good morning this is Tom Cusack. I live in Lake Oswego; am a retired HUD Oregon Feld Office Director, and I write the *Oregon Housing Blog*. Unfortunately, I am in travel status today and likely will not be able to listen to your meeting and ask these questions directly

My comments and questions relate to Resolution 945 in Tab 2. This extends further the construction contract completion date and adds a secure financing milestone to continue the current \$2 million Energy Trust incentive payment to Red Rocks Biofuels. I ask that my comments and questions be made part of the public record for this meeting.

I have previously posted articles about the history of Red Rock Biofuels and just completed a new post Monday after reviewing the board package: https://tinyurl.com/7c6vfjrj

I believe the board briefing materials are significantly incomplete. For example, the materials omit:

- The briefing materials from the two relevant prior board meetings in 2016 and 2018. (I am attaching those as pages 2-12 of this document).
- That this was the second extension that would be granted to the project.
- This new "secure project financing" milestone is **five years and three months** from the secure project financing milestone the Board originally approved in April 6, 2016.
- The estimated construction completion amount must be at least \$402 million versus \$337 million in the June 6, 2018 board meeting package. **Total public subsidy to date is at least \$356 million.**
- There is no estimate for additional costs or dates to make the project operational once the construction is complete.
- The Port of Morrow recently turned down a \$65 million bond request.
- The prices of bonds traded for this project indicate investor concern about its financial feasibility.

These are the questions I believe the Board should have answered before approving this extension request:

- 1. What is the projected project cost currently and how does that compare to the \$337 million cost found in the June 6, 2018 meeting materials? Is that cost to just complete construction or to get to operating status after completing performance testing? What happens if Red Rocks Biofuels misses its March 2022 secure financing milestone?
- 2. How much public funding has been provided to date to Red Rocks Biofuels? What are the amounts of PPP loans to Red Rocks Biofuels and its contractors?
- 3. What is the status of a lawsuit to recapture funds paid to a Texas contractor that went into bankruptcy and how much to date did Red Rocks Biofuels pay to this contractor?
- 4. Did the Port of Morrow recently decline to provide \$65 million in requested public financing for this project and if so, why?
- 5. How does the bond market view the prospects for the project? What is the pricing history of bonds for this project? Compared to the bond coupon rate what is the yield to maturity in the most recent bond trades?



Board Decision

Waive Program Incentive Cap and Authorize Incentives for Red Rock Biofuels LLC Efficiency Project

June 6, 2018

Summary

Waive the Production Efficiency program incentive cap and authorize incentives of up to \$2 million for an energy efficiency project associated with a biofuels production facility in Lakeview, Oregon, estimated to save at least 48,000,000 kilowatt hours (5.5 average megawatts) per year.

Background

Energy Trust staff previously submitted a proposed Red Rock Biofuels LLC (Red Rock) energy efficiency project to Energy Trust's board of directors at its April 6, 2016 meeting. At that time, the board waived the Production Efficiency program incentive cap and authorized Energy Trust's executive director to sign an incentive agreement for Red Rock's proposed energy efficiency project for up to \$2 million, subject to certain conditions. One of those conditions was that Red Rock was required to secure sufficient debt and equity investment for the proposed project, as a part of its proposed biofuel production facility construction project by November 30, 2016. Red Rock was not able to meet that deadline and contracting negotiations were never finalized. Red Rock has now secured funding for its new biofuels production facility and has reached out again to request Energy Trust incentives for a proposed energy efficiency project at the site.

Project Description

- Red Rock proposes to design, install and operate an energy-efficiency project as a component of Red Rock's new biofuels production facility, to be constructed and operated in Lakeview, Oregon.
 - The new facility will convert 400 bone dry tons (BDT) of waste woody biomass per day into approximately 1,069 barrels per day of liquid products consisting of jet, diesel and gasoline blendstock (naphtha) fuels. The (cellulosic) jet fuel produced from this biofuel production process is expected to appeal to airlines seeking to meet sustainability and clean energy goals.
 - The biofuel production facility will be fueled (for process heat) by natural gas and biomass (for feedstock).
 - The most recent project schedule anticipates that Red Rock will complete the facility and begin operations in March 2020.
- Red Rock's proposed energy-efficiency project, as presented to Energy Trust's
 Production Efficiency program for review and analysis, would use waste heat from the
 biofuel production facility's gasification process to generate electricity via a steam
 generator and condensing turbine, offsetting the facility's need to otherwise purchase
 power.
 - The steam generator would recover most of the waste heat in the form of useful steam and send it to a condensing turbine to produce power.

- The steam generator, condensing turbine and parasitic loads would be expected to operate whenever the plant is in operation (8,160 hours/year), which translates to 93 percent availability. The condensing turbine is rated at 8.5 MW, but normal power production is estimated at 6.4 MW based on design parameters.
- Red Rock would use the generated power from the project onsite to offset a portion of the facility's electrical usage.
- Attachment 1 features a simplified one-line diagram of the proposed energyefficiency project and how it fits into the facility's overall biofuel production process.

Project Participants

- Red Rock Biofuels LLC (Red Rock), a single purpose entity, was established in 2011 to develop, construct, install, equip, commission, own and operate an advanced biofuels production facility in Lake County, Oregon. Red Rock would contract with Energy Trust for incentive funding for the proposed energy efficiency project.
- Red Rock is a Colorado limited liability company. As of the date of Energy Trust's
 review, 100 percent of the units representing the membership interest in Red Rock are
 wholly owned by Red Rock Biofuels Lakeview, LLC, which is wholly owned by Red Rock
 Biofuels Holdings, Inc (RRBH). RRBH is majority owned by IR1 Group LLC (IR1),
 headquartered in Fort Collins, Colorado.
- Red Rock has entered into an engineering, procurement and construction (EPC)
 agreement with IR1 to engineer and construct the project, and an operation and
 management (O&M) agreement with RRBH to operate and manage the project.

Financing Status

- The project has a total budget of \$337 million, which includes construction costs (\$208 million), development costs (\$16.5 million), other project costs (\$29.3 million), construction contingency (\$10.9 million), debt service and working capital reserves (\$59.5 million), and cost of bond issuance (\$12.8 million).
- Red Rock has secured funding from multiple sources: State of Oregon sponsored economic development bonds (\$245.5 million), equity contributions (\$9.9 million), contributions from Red Rock affiliates (\$7.5 million) and Department of Defense awards (\$74.1 million).

Key Activities Completed

Red Rock has completed the following key pre-construction milestones and activities for its new biofuels production facility:

- Project site has been purchased:
- All major pre-construction permitting has been completed;
- Major construction and technology contracts have been executed;
- Red Rock has entered into offtake agreements with FedEx and Southwest Airlines for the purchase of a minimum of six (6) MGPY of unblended biofuel that qualifies under the EPA Renewable Fuel Standard Program guidelines. These agreements represent 100% of the project's planned jet fuel production, which is 40% of the project's total annual production of 15 MGPY.
- Red Rock has entered into long-term feedstock agreements for 95,300 BDT per year of woody biomass for eight years from the commencement of operations and has plans to purchase approximately 30% of its required feedstock on the spot market. This is consistent with Red Rock's feedstock assessment consultant's recommendation that no

- more than 70% of annual feedstock consumption be procured through long-term agreements.
- An independent engineer's report was completed for Red Rock on February 24, 2018. The report reviews the organization, management, financial and environmental aspects of Red Rock's planned facility. It provides observations and conclusions that support the current design, project plan, projected costs, operations and maintenance (O&M), contracts, third party agreements, environmental requirements, site conditions and the overall financial model of the proposed biofuels production facility as realistic and achievable.

Project Review

- Energy Trust's Production Efficiency program followed a rigorous technical review process, as is standard for custom projects of this size and complexity.
 - Energy 350, Inc. is a Production Efficiency program allied technical assistance contractor with expertise in waste heat recovery, industrial process efficiency and power generation. Energy 350 worked with Red Rock to define the proposed energy efficiency project, develop the baseline and quantify savings potential and preliminary cost estimates in a technical analysis study.
 - The technical analysis study includes a preliminary monitoring and verification plan that will inform the final monitoring and verification requirements used to determine the energy savings.
 - Energy Trust's senior technical manager and energy engineering personnel from RHT Energy, Inc., the Production Efficiency PDC, reviewed the technical analysis study for the proposed energy efficiency project and found it reasonable.
- Energy Trust has reviewed the project against its combined heat and power criteria and determined it is an efficiency project, not a combined heat and power project. The project, without any increased consumption of natural gas, will generate electricity from waste heat and will use the generated electricity on-site, thereby reducing the facility's consumption of grid electrical energy.
- By capturing otherwise wasted heat to generate power, the technical analysis study
 estimates that Red Rock's proposed energy-efficiency project would save about
 48,000,000 kWh per year compared to the standard design and construction that Red
 Rock would utilize at the facility absent Energy Trust's incentives, significantly increasing
 the efficiency of the overall system. Generation from the project would be used on-site.
- Waste heat recovery is not always done on large projects with this technology. The
 process of converting biomass to biofuel will work just the same with or without waste
 heat recovery. In addition, the pre-incentive payback is four to five years, a range where
 industrial projects often do not move forward without incentives. Given these facts and
 the lack of similar plants of this scale in production in the U.S., Energy Trust is proposing
 to make incentives available to make certain that the energy-efficient heat recovery
 portion of the Red Rock project will move forward as proposed.
- In addition to its technical review, Energy Trust engaged an independent third-party consultant, Wynde Consulting, to assist with a financial analysis review of the proposed Red Rock biofuel production facility and associated energy efficiency project. Red Rock was very responsive to requests for information, and provided Energy Trust with additional documentation to inform this review, including financial statements, the bond offering memorandum and other confidential, sensitive and proprietary information of Red Rock.
- Wynde Consulting's review indicated that there is nothing in the financial support and structure of the Red Rock project to prevent Energy Trust from providing the incentives under consideration given the timing and structure proposed.

- Red Rock's energy- efficiency project would be impacted if the biofuels production facility is not constructed as planned, does not reach operation at the anticipated levels of production or otherwise operate as planned, or the facility does not survive long enough for Energy Trust to realize the projected energy savings.
- Energy Trust's proposed incentive payment structure, including annual caps and the timing for payment(s), is designed to mitigate potential risks associated with the facility construction and production levels/operation.
- According to our analysis, the Red Rock energy efficiency project meets both the societal and utility benefit cost ratios with the proposed incentive payments. The utility benefit cost ratio is above one, even down to 12,000,000 kWh and one year measure life.

Proposed Incentive Payment

- At over 48,000,000 kWh in savings, staff propose Energy Trust incentives of \$0.0417/first-year kWh, capped at 25 percent of eligible project costs, with a maximum incentive of \$2 million.
- The proposed incentive would exceed the program incentive cap of \$500,000 per project. The board's policy on waiving program incentive caps allows such incentives if: (1) self-direction is suspended for at least three years; (2) there is available incentive budget; and (3) the project is expected to save energy at a cost per energy unit saved that is less than the current incentive levels for the program.
 - The proposed incentive funding would be contingent on Red Rock's agreement to suspend self-direction at the site for at least three years;
 - o Incentives would be paid in annual payments not to exceed \$1 million in any year, tied to energy savings performance, with the first energy savings verification and payment following completion of the first year of operation. If the full \$2 million is not paid at the end of the second year, additional incentive payment could be made for additional energy savings achieved in years three and four up to \$2 million total payments.
 - The project will be much more cost-effective than other sources of savings. Currently, custom capital projects average \$0.13/first-year kWh, or about 2-3 cents levelized cost. The levelized cost for savings from the Red Rock project would be less than ½ cent.
- As proposed by staff, actual incentive payments would be determined based upon verification of commercial operation and costs, and annual energy savings verifications conducted by Energy Trust consistent with post-installation measurement, verification and evaluation plans. Changes in the as-built state or in operating performance that reduces savings or costs would reduce the incentive in accordance with established custom track procedures.
- Energy Trust would require that certain minimum energy savings thresholds be met each year before calculating an incentive payment (for example, Red Rock would need to reach a minimum of 24,000,000 kWh in the first year of operation to be eligible to receive any incentive payment).
- Red Rock would need to meet certain key construction milestones and a construction completion date in order for Energy Trust to continue to hold the incentives dollars.

Recommendation

Waive the Production Efficiency Program incentive cap and authorize the executive director or his designee to sign a contract committing up to \$2 million in incentives to the Red Rock energy-efficiency project on terms and conditions consistent with the resolution below. A copy of the proposed board resolution is attached.

RESOLUTION 839 WAIVING PROGRAM INCENTIVE CAP AND APPROVING INCENTIVES FOR THE RED ROCK EFFICIENCY PROJECT

WHEREAS:

- 1. The Energy Trust Production Efficiency program has worked with Red Rock Biofuels, LLC (Red Rock) to identify a custom waste heat to energy system project (the Project) in connection with the gasification process at Red Rock's new biofuel production facility, to be constructed and located in Lakeview, Oregon.
- 2. Energy efficiency aspects of the Project were reviewed through standard Energy Trust processes for complex custom-track industrial projects, including a technical energy analysis study commissioned by Energy Trust and carried out by a waste heat to power expert.
- 3. The Project's energy savings will be very cost-effective compared to the cost of savings from the average Production Efficiency program custom project. The incentive for the Project is projected and would be budgeted at \$.0417/first-year kWh, a levelized cost of <0.5 cent/kWh; while Production Efficiency program custom capital projects average \$.13/first-year kWh, or about 2-3 cents levelized.
- 4. Energy Trust funding would be contingent on Red Rock's agreement to suspend selfdirection at the facility site where the Project is located for at least three years.
- 5. Electric energy generated by the Project will be used by Red Rock on-site to reduce the amount of electricity purchased for the facility.
- 6. Energy Trust funding would be conditioned on Red Rock's construction completion by September 2021 and would be payable annually based on savings performance.

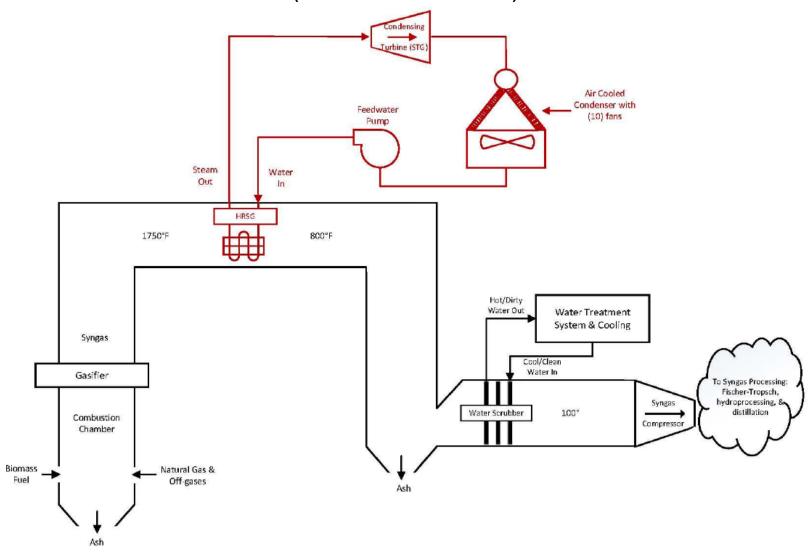
It is therefore RESOLVED that the board of directors of Energy Trust of Oregon:

- 1. Waives the Production Efficiency Program's incentive cap for this project; and
- 2. Authorizes the executive director to negotiate and sign an incentive agreement with Red Rock Biofuels LLC for up to \$2 million in total incentives payable on the following terms and conditions:
 - Agreement to suspend self-direction at the site for at least three years;
 - Incentives to be paid in annual payments tied to savings performance;
 - Post-installation measurement, verification and evaluation plans for the Project will be required;
 - Red Rock to complete construction by September 2021

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

ATTACHMENT 1

(EFFICIENCY PROJECT IN RED)





Waive Program Incentive Cap and Authorize Incentives for Red Rock Biofuels LLC Efficiency Project

April 6, 2016

Summary

Waive the Production Efficiency Program incentive cap and authorize incentives of up to \$2 million for an energy efficiency project associated with a biomass gasification plant in Lakeview, Oregon, estimated to save at least 48,000,000 kWh (5.5 average MW) per year.

Background

- Red Rock Biofuels LLC (Red Rock) proposes to generate electricity from waste process heat produced by a planned biomass gasification plant in Lakeview, Oregon.
 - The generating project will be a component of the Red Rock Biofuels refinery. The refinery is expected to begin final design and construction in late second quarter of 2016 and complete performance testing in 18-22 months. The refinery will be fueled mostly by gas and in small part by biomass.
 - The refinery is expected to convert 400 tons of biomass to approximately 1,069 barrels
 of liquid jet fuel per day. The jet fuel is to be low-carbon and is expected to appeal to
 airlines seeking to meet sustainability and clean energy goals.
- The proposed energy efficiency project would use waste heat from the gasification process
 to generate electricity via a steam generator and condensing turbine, offsetting otherwise
 purchased power at the refinery site.
 - The steam generator would recover most of the waste heat in the form of useful steam and send it to a condensing turbine to produce power. The condensing turbine requires parasitic loads for air-cooled condensers, a water pump and smaller motors.
 - The steam generator, condensing turbine and parasitic loads are expected to operate whenever the plant is in operation, 8,160 hours/year which translates to 93% availability. The condensing turbine is rated at 8.5 MW but normal power production is estimated at 6.4 MW based on design parameters.
 - o Generated power will be used onsite to offset a portion of the facility's electrical usage. The waste heat recovery will also provide 100% of the ancillary heat needs of the plant.
 - A graphic of the proposed waste heat to power project and how it fits into the overall fuel production process is in Attachment 1.

Discussion

- The project followed the rigorous technical process used by the Production Efficiency program for custom projects of this size and complexity:
 - Energy350, an Allied Technical Assistance Contractor (ATAC) with expertise in waste heat recovery, industrial process efficiency and power generation, worked with Red Rock to define the project, develop the baseline and quantify savings potential and preliminary cost estimates in a Technical Analysis Study.
 - The technical analysis lays out a draft scope for the detailed custom monitoring and verification plan that will be used to determine actual savings.
 - Energy Trust Technical Managers and Program Delivery Contractor (PDC) engineers from RHT Energy reviewed the Energy350 study and found it reasonable.
- We consider the project to be an efficiency project based on established policy for combined heat and power projects. This project, without any increased consumption of natural gas, will generate electricity from waste heat and will use the generated electricity on-site, thereby

- reducing a facility's consumption of grid energy. Similarly, solar hot-water projects are considered efficiency projects because they reduce energy consumption at a site.
- By capturing otherwise wasted heat to generate power, our study estimates that the Red Rock Project would save upwards of 48,000,000 kWh per year compared to the standard design and construction, significantly increasing the efficiency of the overall system.
 - o Generation from the project would be used on-site.
- At over 48,000,000 kWh in savings, staff proposes Energy Trust incentives of \$.04/first-year kWh, capped at 25% of eligible project costs, with a maximum incentive of \$2 million.
- The proposed incentive would exceed the program incentive cap of \$500,000 per project. The board's policy on waiving program incentive caps allows such incentives if: (1) self-direction is suspended for at least three years; (2) there is available incentive budget; and (3) the project is expected to save energy at a cost per energy unit saved that is less than the current incentive levels for the program.
 - The proposed incentive funding would be contingent on agreement to suspend selfdirection at the site for at least three years;
 - Incentives would be paid in three annual payments tied to system commercial operation and savings performance. The incentives will be budgeted for in the year they are expected to be paid, 2018-2021.
 - o The project will be much more cost-effective than other sources of savings. Currently, custom capital projects average \$.13/first-year kWh, or about 1 cent levelized cost. The levelized cost for savings from the Red Rock project would be less than ½ cent.
- As proposed by staff, actual incentive payments would be based upon verification of commercial operation and costs, consistent with post-installation measurement, verification and evaluation plans. Changes in the as-built state or in operating performance that reduces savings or costs would reduce the incentive in accordance with established Custom Track procedures.
- Incentives would be conditioned on Red Rock securing sufficient debt and equity investment by November 30, 2016 to mitigate risk associated with the start-up phase of Red Rock's continued investment solicitations.
- Staff discussed this project with the Policy Committee in November 2015. The Committee asked for additional information about Red Rock:
 - Red Rock was established in 2011 to develop refineries to convert waste woody biomass to renewable drop-in jet, diesel and naptha fuels.
 - Red Rock's single member/owner is Joule Unlimited Technologies, Inc. (Joule), a Delaware corporation.
 - o Flagship Ventures, Inc. (Flagship), a venture capital firm, is Joule's major investor, and several Flagship principals sit on Joule's board of directors. Flagship manages more than \$1.4 billion in investments, focusing on therapeutics, health technologies and sustainability. Joule and Red Rock are part of Flagship's sustainability portfolio. Even before Joule's acquisition of Red Rock, Flagship provided significant investment and help to Red Rock in developing Red Rock's renewable, low-carbon fuel processing expertise.
 - Based on information provided to staff, here is the status of key milestones and activities:
 - Project siting has been secured through a purchase option agreement;
 - All major pre-construction permitting is either in final phase or completed;
 - Major construction and technology contracts have been executed

- Offtake contracts have been executed with two major delivery companies
- Forest Feedstock Availability Assessment is completed, finding feasibility of forward contracting for 75% of feedstock, 25% for purchase on the open market;
- A draft agreement for 35,500 bone dry tons of woody biomass per year is being negotiated, meeting about 25% of the refinery's need; negotiations are underway with other forest residual feedstock suppliers for the other 50% to be forward contracted;
- An Independent Engineer's Report was completed on February 25, 2016. The report reviews the organization, management, financial and environmental aspects of Red Rock's planned refinery. It provides observations and conclusions that support the current design, project plan, projected costs, operations and maintenance (O&M), contracts, third party agreements, environmental requirements, site conditions and the overall financial model of the proposed biorefinery as realistic and achievable.
- Business Oregon completed an economic and employment impact report in 2015 and is in the process of updating it; and,
- Red Rock, Joule and Flagship are securing additional funding for the project, including working with Business Oregon on industrial development bonds. Red Rock's CFO anticipates full funding and "financial close" for construction in the next couple of months.
- Staff has worked with these parties over the last several months and they have been responsive to all questions and requests for information.

Recommendation

Waive the Production Efficiency Program incentive cap and authorize the executive director or her designee to sign a contract committing up to \$2 million in incentives to the Red Rock efficiency project on terms and conditions consistent with the resolution below.

RESOLUTION 772 WAIVING PROGRAM INCENTIVE CAP AND APPROVING INCENTIVES FOR THE RED ROCK BIOMASS GASIFICATION EFFICIENCY PROJECT

WHEREAS:

- 1. The Energy Trust Production Efficiency program has worked with Red Rock Biofuels, LLC (Red Rock) to identify a waste heat to energy system for a new biomass gasification facility located in Lakeview, Oregon (the Project).
- 2. Energy efficiency aspects of the Project were reviewed through standard Energy Trust processes for complex custom-track industrial projects, including a technical energy analysis study commissioned by Energy Trust and carried out by a nationally-recognized expert.
- 3. The project's energy savings will cost less than half the cost of savings from the average custom project. The incentive for the Project is projected and would be budgeted at \$.04/first-year kWh, a levelized cost of < ½ cent / kWh; while Production Efficiency program custom capital projects average \$.13/first-year kWh, or about 1 cent levelized.
- 4. Energy Trust funding would be contingent on Red Rock's agreement to suspend selfdirection at this site for at least three years.
- 5. Energy from the Project will be used on-site.
- 6. Energy Trust funding would be conditioned on committed full debt and equity investment for the project in place not later than November 30, 2016 and would be payable in increments based on performance.

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

- 1. Waives the Production Efficiency Program's incentive cap for this project; and
- 2. Authorizes the executive director to negotiate and sign an incentive agreement with Red Rock Biofuels LLC for up to \$2 million in total incentives payable on the following terms and conditions:
 - Agreement to suspend self-direction at the site for at least three years;
 - Incentives to be paid in three annual payments tied to commercial operation and savings performance;
 - Post-installation measurement, verification and evaluation plans will be required;
 - Red Rock to secure sufficient debt and equity investment by November 30, 2016 to mitigate risk associated with the start-up phase of continued investment solicitations.

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

Ash

ATTACHMENT 1 (EFFICIENCY PROJECT IN RED) Condensing Turbine (STG) Air Cooled Condenser with Feedwater (10) fans Pump Steam Water Out In HRSG 1750°F 800°F Hot/Dirty Water Out Water Treatment System & Cooling Syngas Cool/Clean Water In Gasifier To Syngas Processing: Fischer-Tropsch, hydroprocessing, & Syngas Water Scrubber distillation 100° Combustion Compressor Chamber **Biomass** Natural Gas & Fuel Off-gases Ash

PINK PAPER

Resolution 948

AMENDING THE RENEWABLE ENERGY CERTIFICATE POLICY 4.15.000-P

October 13, 2021

Summary and Background

At its meeting on September 9, 2021, the Board of Directors' Policy Committee reviewed Energy Trust's staff recommendation for modest corrections to the Renewable Energy Certificate (REC) Policy. As currently written, the policy excludes projects of sizes *less than 360kw in size*. This exclusion was added to the policy in 2018 with intent to align the policy with the Western Renewable Energy Generation Information System (WREGIS) REC registration requirements and requirements of the emerging Oregon Community Solar Program (Oregon CSP).

WREGIS requirements exclude projects of *360kw or less in size*. The policy's current exclusion is not aligned precisely with WREGIS or the Oregon CSP, which can cause confusion and project sizing complication This misalignment was in error, and Energy Trust staff now propose slight modifications to the REC Policy for alignment.

The Policy Committee reviewed staff's recommendation and recommends amending the board policy to correct the erroneous misalignment.

Recommendation

Amend the Board REC Policy as indicated in the tracked changes below in **Attachment** 1.

RESOLUTION 948

AMENDING THE RENEWABLE ENERGY CERTIFICATE POLICY 4.15.000-P

WHEREAS:

- 1. The REC policy currently excludes requirement to take RECs from projects less than 360kw in size.
- 2. This size limitation is inconsistent with WREGIS and Community Solar Program requirements and was an error in the policy drafting when amending the policy in 2018.
- 3. Energy Trust staff recommend correcting the error and including projects of 360kw in size in the policy's exclusion.
- 4. During its review of the REC Policy in September 2021, the committee recommended that the policy be revised to correct the error and that the revised policy be forwarded to the full board for approval on the consent agenda.

It is therefore RESOLVED that the Board of Directors of Energy Trust of Oregon, Inc. amends the Renewable Energy Certificate Policy as shown in *Attachment 1* to reflect the changes described above.

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

Attachment 1

Marked-4.15.000-P Renewable Energy Certificate Policy

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	Amended (R863)	December 2021

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 or equal to 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.

Tab 2

Doing Business with Minority, Women, Emerging Small Businesses, and Service-Disabled Veteran Business Enterprises in Oregon: Energy Trust of Oregon Supplier Diversity Program

"MWESBs and SDVs are at the cornerstone of Energy Trust of Oregon's mission to sustain local businesses. Through a headstrong reverence to diversity and those who embody it, we are helping to cultivate a statewide flourish of multicultural prosperity." – Tyrone Henry, Diversity, Equity and Inclusion Lead

August 16, 2021



Why We Do This Work

Since its inception, Energy Trust of Oregon has developed and supported a network of suppliers, industry experts, and service providers through its efforts to advance energy efficiency and small renewable energy systems throughout its service territories. Having developed this network of businesses, Energy Trust has a responsibility in ensuring its work with minority, women, emerging small businesses and service-disabled veteran business enterprises (MWESB/SDVBE) is equitable and supports their growth in Oregon's economy. Energy Trust is committed to this work by building an effective and robust supplier diversity program. In building such a program there are inherited challenges and solutions that should be considered and addressed:

- Historically, there has been no formal supplier diversity program or tracking system to support and monitor MWESB/SDVBE businesses.
- Participation by MWESB/SDVBE businesses should be more clearly defined as goals for Energy Trust's programs.
- The application of a supplier diversity initiative for all contract types and contract amounts should be clarified.
- An effective MWESB/SDVBE supplier diversity program should:
 - Establish eligible suppliers based on the definitions created by Oregon's Certification Office for Business Inclusion and Diversity.
 - Align solicitations with Energy Trust's supplier diversity goals.
 - Strengthen performance measures that assess contracting data by creating a supplier diversity tracking system.
 - Track and report on performance measures in Energy Trust's public reports.
 - Include an inter-organizational agreement with utility funders and the OPUC to promote solicitation opportunities to MWESB/SDVBE certified firms.
 - Track contracts at the direct and indirect level to encourage subcontracting with MWESB/SDVBE suppliers and hold direct contractors accountable.

Defining What an MWESB/SDVBE Supplier Diversity Program Means to Energy Trust

As we begin to build our MWESB/SDVBE Supplier Diversity Program (SDP), it is paramount that we help cultivate a wide array of MWESB/SDVBE suppliers and contractors from around the state. Not only does working with these firms improve our ability to better serve our historically underserved customers, but they also contribute to our funding through their energy consumption and should have meaningful opportunities to contract with us. This may include helping to develop Trade Ally Workshops, encouraging joint venture partnering opportunities and collaborating with our utility partners and community-based organizations (CBOs) to engage in MWESB/SDVBE outreach events. With our ever-growing projects reaching deeper into rural parts of the state and tribal communities, the ability to widen our potential supplier pool is a given. This, in turn, will promote competition in the supply base chain of MWESB/SDVBE contractors, improve product quality and reduce costs. Adding diversity to our supplier base helps businesses weather unanticipated events like COVID-19 and other economic

downturns. Providing contracting opportunities for MWESB/SDVBE suppliers and contractors is not only crucial to Oregon's economy, but it also supports our ratepayers' quality of life.

Sometimes finding qualified MWESB/SDVBE suppliers to take part in a supplier diversity program is simply not enough. A sustainable, successful supplier diversity program requires commitment and buy-in from across the organization. To help ensure our SDP remains equitable and inclusive, here are six crucial elements our supplier diversity program must embrace to be successful.

1. Program Purpose and Policy:

Energy Trust has established the SDP to advance non-discriminatory practices and a more inclusive use of Minority Business Enterprise, Women Business Enterprise, Emerging Small Business Enterprise and Service-Disabled Veteran Business Enterprise (MWESB/SDVBE) and to increase accessibility of contracting opportunities. Energy Trust is committed to ensuring that qualified MWESB/SDVBE firms can receive and participate in Energy Trust contracting opportunities, including bidding at prime levels. Energy Trust looks to its staff and its contracted entities, including its Program Management Contractors (PMCs) and Program Delivery Contractors (PDCs), to identify and attract capable MWESB/SDVBE firms that can effectively provide quality services and facilitate the development of Oregon-based MWESB/SDVBE firms in Energy Trust's work.

It is the goal of Energy Trust to award contracts to Oregon-based MWESB/SDVBE businesses and provide guidance on how to conduct business with Energy Trust. Services may include professional services, purchased supplies and materials, hired labor and/or general management services. Through our Diversity, Equity and Inclusion (DEI) Operations Plan, Energy Trust will establish contracting goals with MWESB/SDVBE businesses. The goals may be adjusted from year to year and shall be communicated to all contractors through bid documents and pre-solicitation meetings. The MWESB/SDVBE business participation levels are goals, not quotas. The SDP is consistent with federal and state statutory and regulatory provisions and other contractual requirements relating to equal opportunity with supplier diversity. Energy Trust complies with all applicable federal, state, and local laws regarding non-discrimination and will not discriminate in any case against a business based on the owner's race, color, religion, creed, national origin, sex, age familial status, sexual orientation, gender identify, disability, or status as a veteran.

2. Supplier Diversity Program Qualifications:

MWESB/SDVBE businesses are defined according to the Certification Office for Business Inclusion and Diversity (COBID) of Oregon, the Oregon agency responsible for the appropriate certification of small business firms. Energy Trust is not a certification agency, nor will Energy Trust participate in self-certification of any kind.

Energy Trust's preference is for certification by Oregon's COBID office. Diverse firms located outside Oregon may contribute to Energy Trust's supplier diversity goals if they are currently certified by their own state's official certification process that is not based on self-attested certification. We encourage all firms to get certified in Oregon if they are doing business in Oregon.

The specific definitions from COBID for Minority Business Enterprise, Women Business Enterprise, Emerging Small Business Enterprise and Service-Disabled Veteran Business Enterprise are provided in Appendix A.

MWESB/SDVBE Contracting:

SDP and Energy Trust Contracts Authorizing Expenditure greater than \$100,000 utilizing a Competitive Solicitation Process

All bids and proposals submitted to Energy Trust for initial opportunities greater than \$100,000 utilizing a competitive solicitation process¹ must include a subcontracting plan to meet or exceed subcontracting goals with COBID certified firms of at least twenty percent (20%) of the value of the contract (not including incentive budgets, if applicable), unless the primary respondent is a COBID certified firm². Proposals must include the *DEI Subcontracting Plan* (see Appendix B) that shall be attached to the proposal demonstrating commitment to hire MWESB/SDVBE businesses as direct subcontractors³ consistent with Energy Trust's expectations. Bids may be disqualified at the discretion of Energy Trust for failure to submit the appropriate form, failure to express a commitment to subcontract with MWESB/SDVBE businesses or past failures to satisfy its expressed contractual commitment to meet or exceed Energy Trust's MWESB/SDVBE contractual subcontracting requirements.

All submitting firms must submit their bid with appropriate subcontractor certification(s) on the *DEI Subcontracting Plan* provided by Energy Trust. Companies that submit bids without the appropriate certification(s) shall be notified of the deficiency and given a reasonable opportunity to provide evidence of their certification. Third-party technical assistance resources and certification counseling services shall be provided to subcontractors that are unable to meet COBID certification requirements.

Any respondent that submits a bid with an MWESB/SDVBE subcontractor whose COBID certification has lapsed or is not certified but has begun the COBID certification process will be given a grace period that will expire at the conclusion of the competitive solicitation process defined by notification to the selected firm. Should the subcontractor not be certified as an MWESB/SDVBE by COBID by the conclusion of the solicitation process, their contributions toward the SDP subcontracting goals shall not be counted and the proposal's score shall be adjusted accordingly.

¹ This subcontracting requirement does not apply to contracts with COBID certified firms, contracts with a sole source justification, contracts for equipment or supply purchases or contracts related to employment or hiring.

² Energy Trust's preference is for certification by Oregon's COBID office. Diverse firms located outside Oregon may contribute to Energy Trust's supplier diversity goals if they are currently certified by their own state's official certification process that is not based on self-attested certification. We encourage all firms to get certified in Oregon if they are doing business in Oregon.

³ While firms are encouraged to subcontract with COBID firms at all levels, only directly subcontracted COBID firms will contribute towards attainment of the subcontracting goals.

All MWESB/SDVBE certified firms are expected to remain in good standing with COBID throughout the course of the contract regardless of whether they are a prime contractor or a direct subcontractor.

Every competitive solicitation will include a review committee to, among other things, review the SDP Commitment form for validity and make recommendations to the Executive Director and/or the Energy Trust Board (for contracts over \$500,000) as required for awards. Such review committees shall include a "diversity champion" who might be recruited from the internal DEI Committee, the Diversity Advisory Council or other external sources of DEI expertise.

Contracts less than or equal to \$100,000

All contracts for opportunities of \$100,000 or less (Small Contracts) are not required to include a subcontracting plan. All procurement processes must include a request for COBID certification information for the proposer and give selection preference⁴ for COBID certified firms (see also item 4 below for guidance on promoting the solicitation). Contract terms will include termination provisions for changes in ownership during the term of the contract.

The contract cover sheet shall indicate COBID certification and, in the absence of COBID certification, an explanation of what effort was taken to promote the solicitation to, identify and select a COBID certified firm. In the absence of qualified proposals from COBID certified firms, contract managers should seek to select firms that, through personal knowledge, are known to be minority- or woman-owned firms. Only contracts with COBID certified firms will count toward and be reported against our supplier diversity goals, but non-COBID certified minority- and women-owned firms will be tracked in the supplier diversity tracking system.

4. Agency-Wide Supplier Diversity Commitment:

Like any business strategy, supplier diversity only becomes a reality when it is ingrained in the organization's day-to-day systems and the minds of staff. Making sure staff are fully trained in supplier diversity and the supplier diversity tracking system is an absolute must. Digitization and being able to manipulate and extract data from the new tracking system not only improves the overall procurement function, it also makes supplier diversity more manageable by helping track and analyze data for reporting.

A significant factor for a supplier diversity program's success is <u>removing</u> <u>obstacles</u>⁵ standing in the way of our diversity goals. By sharing the details of what products, services, and changes our organization needs, we can help MWESB/SDVBE businesses and in turn they can help us engage more effectively with them and our customers. For example, most companies or

⁴ In this circumstance, "preference" will be interpreted as selection of a COBID-certified firm among a set of proposals that are the same or reasonably close in quality and price where there is more than one proposer who could reasonably perform the work.

⁵ Craig-Hart, S. (2017, January 18) *How to Achieve Supplier Diversity*. Dun & Bradstreet. https://www.dnb.com/perspectives/small-business/supplier-diversity-definition-how-to-increase-supply-chain-diversity.html

agencies with SDPs have an extensive website with comprehensive SDP information on how to do business with them. Above all, we must continually stay informed about supplier diversity trends and requirements, including those trends and requirements as reflected in federal and state contracting programs.

Procurement activities of any size or type of service should be considered with respect to the SDP. It is incumbent upon all staff to ensure that all contract opportunities are promoted to MWESB/SDVBE businesses and that they are encouraged to respond to competitive solicitations. The COBID database; membership organizations such as the National Association of Minority Contractors of Oregon (NAMC-Oregon), the Professional Business Development Group (PBDG) and LatinoBuilt (also known as the BIG-3); and our DEI Lead are excellent resources for certified and diverse firms. Additionally, selection of a respondent in a competitive solicitation process should provide additional weight to diverse firms. Energy Trust's SDP goals will be based on total annual contracting and, therefore, all procurement should strive to support diverse firms.

5. Intersections with other Diversity, Equity and Inclusion Efforts:

Energy Trust's diversity, equity and inclusion efforts extend well beyond the supplier diversity initiative into all aspects of the organization. The SDP needs to recognize the intersections among these various efforts and work to maximize the impacts of all of them. Some related efforts include our work with community-based organizations (CBOs) and trade allies.

Community-Based Organizations

While the SDP deals explicitly with companies that provide direct contracted or subcontracted services to Energy Trust, we also work and contract with CBOs that provide specific types of services to Energy Trust. They have assisted us in engaging with many communities throughout Oregon, they play a pivotal role and are typically well-integrated and trusted by the communities Energy Trust attempts to reach. CBOs, however, are not recognized through COBID certification so we have established separate goals outside of the SDP to increase our support of and partnership with these types of organizations.

These organizations, however, do intersect in important ways with the objectives of the SDP, and we want to ensure continued focus on CBOs. Effective CBOs reflect the communities they serve in their leadership. They can help Energy Trust relate with and connect to the MWESB/SDV firms in the communities they support. Being able to speak the language of diverse constituents, provide technical assistance and even, in some circumstances, help potential MWESB/SDV contractors navigate the COBID certification process provides valuable support for Energy Trust. Our relationships with CBOs help stimulate job creation, boost economic development among MWESB/SDVBE contractors and build capacity among COBID certified firms, all objectives of the SDP.

Trade Allies

Energy Trust has developed an extensive network of trade allies among the construction trades who support customers as they adopt clean energy solutions. These trade allies work with us to become familiar with our incentives, program processes and measure requirements to support their customers. Because trade allies are not directly contracted with Energy Trust to provide specific services, these types of entities are not covered by the SDP and we have established

separate goals for increasing the diversity of the Trade Ally Network. Like CBOs, trade allies have an important intersection with the objectives of the SDP.

Because of their knowledge and relationships with their MWESB/SDVBE client base, membership organizations such as the National Association of Minority Contractors of Oregon (NAMC-Oregon), the Professional Business Development Group (PBDG) and LatinoBuilt are important partners in increasing the diversity of the Trade Ally Network by connecting us with various COBID certified firms.

Ongoing Commitment to Support MWESB/SDVBE Firms:

As part of an established SDP, we must continually monitor and improve it each year. Annual audits will help us verify that activities and results align with our policies and annual DEI goals. Feedback from internal stakeholders, the MWESB/SDVBE business community, the OPUC and our utility partners is vital to ensure that our SDP exceeds everyone's expectations. Highlighting program success stories is a way to maintain momentum and pride in what we do. A dedicated space on our website is a great way to draw attention to diverse firms and pay honor to all who will have dedicated themselves to the success of our program.

Our ongoing commitment should include a willingness to engage respectfully and productively with the MWESB/SDVBE firms, CBOs or trade allies in order to deepen our mutual understanding and to develop larger, more diverse pools of potential resources. The following guidance should be considered whenever building these relationships⁶:

Seek inclusive relationships based on diversity. Make a list of potential firms and organizations you think would benefit from what you are trying to accomplish and keep these firms in mind as you proceed. Seek and establish relationships and contracts with a cross-section of the community and ensure that the firms engaged have prior experience in working with the community you are working to serve.

Don't wait for all relationships to get on board prior to moving your plans forward. Most relationships expand over time; don't lose momentum waiting on others.

Secure commitments to collaborate – don't leave it to chance. Ask those firms and organizations you engage with to designate specific individuals with a well-known reputation in the community and assign responsibilities in writing. Take an assessment of what each organization brings to the table. When everyone better understands their role, they are more likely to develop effective and inclusive plans that support your goals.

Seek input by collaborating to create a shared vision and/or goals. Give firms and organizations an opportunity to help develop and shape your vision and goals, rather than rubber-stamping them. If DEI training is needed to fully understand how to best engage organizations, then seek out a DEI consultant of color who can provide this type of expertise.

Engage in collaborative decision-making, if appropriate. If there are other entities who have already blazed the trail you are about to embark on, then consider working

⁶ Coe, A. *Ten Tips for Effective Community Partnerships*. Convergent Nonprofit Solutions. https://www.convergentnonprofit.com/blog/10-tips-for-effective-community-partnerships/

with and learning from them. If there are others at the same stage as you, then consider an opportunity to collaborate and blaze the trail together. Come to agreement on your respective roles to help minimize disagreements later. This builds a feeling of ownership and empowerment among all parties involved.

Use members of our advisory councils and DEI Committee to focus on areas of specialty. Conduct cross-learning exercises through workshops or meetings to enhance your efforts or consider recruiting these members to work directly with you.

Develop shared measurable goals and communicate your progress regularly. Make sure information about your effort's successes and failures are readily available to all parties involved. Transparency is paramount, which is why Energy Trust will continue publishing and reporting progress on our supplier diversity goals and efforts.

Listen and be responsive to key stakeholders in your community. It's important to understand the issues and concerns of those you are working with or trying to serve. Don't, however, try to be all things to all people. It's ok to find those intersections where Energy Trust's purpose supports specific issues.

Don't hesitate to think BIG and make bold decisions in order to move the ball forward. Positive momentum is always a good predictor of success. As Newton's First Law of Motion (the law of inertia) states, an object at rest tends to stay at rest, while an object in motion tends to stay in motion.

Finally, attend BIG-3 meetings either virtually or in person when it is safe to do so. These meetings occur once per month and will help you gain a deeper perspective on how to engage with the MWESB/SDVBE business community.

APPENDIX A: Definitions of Minority, Women, Emerging Small Businesses/Service-Disabled Veteran Business Enterprise by the Certification Office for Business Inclusion and Diversity (COBID) of Oregon⁷

Minority and Women Business Enterprise Certification (M/WBE)

Minority Business Enterprise (MBE) and Women Business Enterprise (WBE) certifications are for minority-owned and women-owned businesses seeking opportunities for state, county and city government and special jurisdiction (e.g., hospitals and universities) contracts.

To qualify

The business must:

be for profit [OAR 123-200-1600(3)(a)] be registered with the Oregon Secretary of State [OAR 123-200-1600(3)(c)] have gross annual receipts (3-year average) not exceeding \$26.29 million [OAR 123-200-1100(16)]

and the business owner must:

be a U.S. citizen or lawfully admitted, permanent resident [49 CFR 26.67(a)] own and control 51% or more [OAR 123-200-1220] control and manage day-to-day operations [OAR 123-200-1240] have proper licensing (e.g., engineer, plumber, etc.) [OAR 123-200-1240(8)(a)] have made a contribution of capital [OAR 123-200-1220(6)]

The business owner should also expect a phone interview as well as a possible site visit, which includes office, shop, and job site when applicable [OAR 123-200-1300(6)]

Emerging Small Business (ESB) Certification

The Emerging Small Business (ESB) certification is for Oregon small businesses seeking opportunities for state, county and city government and special jurisdiction (e.g., hospitals and universities) contracts. The certification is:

A race and gender-neutral program based on the size of the business rather than the individual [OAR 123-200-1600(1)]

A two-tier system with total participation not to exceed 12 years

To qualify

The business must:

be for profit [OAR 123-200-1600(3)(a)]

⁷ Energy Trust's preference is for certification by Oregon's COBID office. Diverse firms located outside Oregon may contribute to Energy Trust's supplier diversity goals if they are currently certified by their own state's official certification process that is not based on self-attested certification. We encourage all firms to get certified in Oregon if they are doing business in Oregon.

be an Oregon business (according to federal tax filing) [OAR 123-200-1600(3)(b)] be registered with the Oregon Secretary of State [OAR 123-200-1600(3)(c)] not be a joint venture [OAR 123-200-1600(3)(d)]

and the business owner must:

be properly licensed (e.g., engineer, plumber, etc.) [OAR 123-200-1600(3)(c)]

Tier	1	2
Number of employees [OAR 123-200-1600(3)(e) and (h)]	less than 19	less than 29
3-year average annual gross receipts - construction firms - non-construction firms	<\$1,972,996.84 <\$789,198.873	< \$3,945,993.70 < \$1,315,331.23

The business owner should also expect a phone interview as well as a possible site visit, which includes office, shop, and job site when applicable [OAR 123-200-1300(6)].

Service-Disabled Veteran (SDV) Certification

Service-Disabled Veteran (SDV) certification is for service-disabled veteran-owned businesses seeking opportunities for state, county and city government and special jurisdiction (e.g., hospitals and universities) contracts.

Certification is based on the individual rather than the size of the business

To qualify

The business must:

be for profit [OAR 123-200-1600(3)(a)] be registered with the Oregon Secretary of State [OAR 123-200-1600(3)(c)] have gross annual receipts (3-year average) not exceeding \$26.29 million [OAR 123-200-1100(16)]

and the business owner must:

be a U.S. citizen or lawfully admitted, permanent resident [49 CFR 26.67(a)] own and control 51% or more [OAR 123-200-1220] control and manage day-to-day operations [OAR 123-200-1240] have proper licensing (e.g., engineer, plumber, etc.) [OAR 123-200-1240(8)(a)] have made a contribution of capital [OAR 123-200-1220(6)]

The business owner should also expect a phone interview as well as a possible site visit, which includes office, shop, and job site when applicable [OAR 123-200-1300(6)].

APPENDIX B: Diversity, Equity and Inclusion Subcontracting Plan

Respondent to submit plan on its company letterhead

[RESPONDENT NAME] DEI SUBCONTRACTING PLAN

1.0 Subcontracting Plan

The following Diversity, Equity & Inclusion (DEI) Subcontracting Plan is in support of Energy Trust's [enter name and date of RFP here] (RFP). This plan incorporates a proposed approach for integrating and incorporating subcontractor and other supplier activities with MWESB, other COBID-eligible contractors, and non-profit, community-based organizations (DEI subcontractors) in meaningful and strategic services.

1.1 Types of Services to be contracted and program strategy

[Respondent Name] has identified potential opportunities for DEI subcontractors to team with respondent for the following scope of work categories:

- 1. Category 1 (ex. Energy engineering review)
- 2. Category 2 (ex. Marketing/outreach services)
- 3. Category 3 (ex. Administration/operations support services)

[Respondent Name] has identified qualified DEI subcontractors within these categories and will continue to expand the list of qualified DEI subcontractors as appropriate.

Respondent intends to team with the following DEI contractor firms associated with each of the categories identified in 1.1 above:

[insert]

1.2 Strategic subcontracting approach to deliver proposal goals

[Use this section to describe identified scopes of works for the subcontracted services to specific and meaningful strategies and approaches outlined in respondent's proposal – reference Proposal location where additional detail is provided]

1.3 Subcontracting Spend Goals

A. DEI Contracting Goal: For the purpose of **Table 1**, respondent should reference the totals included in respondent's proposal for contract amounts associated delivery of the service requested. Do <u>NOT</u> include incentive funds (including any anticipated service incentive funds) in the Projected Total Contract Spend amount listed below.

Table 1	Year 1 (20xx)	[if needed] Year 2 (20yy)	[if needed] Year 3 (20zz)
Projected Total Contract Spend (\$)			
Projected Total DEI Contractor Spend (\$)			

Projected Total DEI Contractor Spend (%)		

 Listed below are [Respondent's] DEI subcontractors team members and the dollar value by DEI subcontractor for the first year of the contract:

Year 1	ontractor for the first year o	Projected Year 1 Total DEI Subcontractor Spend from Table 1:		
Subcontractor name	COBID Certification Number ⁸	MBE, WBE, or ESB (list all that apply)	Oregon resident subcontractor (yes or no)	Dollar value
subcontractor 1				
subcontractor 2				

1.3 Method and Activities Used to Identify Prospective DEI Subcontractors

If DEI subcontractors have not been identified as part of your proposal, please explain in detail the approach your company took to identify and recruit potential DEI subcontractors. Discuss the strategies and efforts your firm will utilize to identify and qualify potential DEI subcontractors in the future. Identify support that Energy Trust may be able to provide to assist with the approach.

1.4 Responsibilities

The following individual will be responsible for administering the DEI Subcontracting Plan:

Name:	
Title:	
Address/Location:	
Phone (direct):	
Email:	

The DEI Subcontracting Plan's administrator's duties for plan implementation are as follows:

- 1. Duty 1
- 2. Dutv 2
- 3. Duty 3

1.5 Reporting & Record Keeping

[Respondent] agrees to provide monthly reporting of DEI subcontracting spend against the goals. Please provide details explaining your company's reporting process and established controls to ensure reporting accuracy. Detail your payment processes for ensuring prompt payment to DEI subcontractor firms.

The following individual will be responsible for all reporting required by Energy Trust:

⁸ If proposed subcontractor is not yet COBID certified, attach a copy of the entity's application for COBID certification.

Name:	
Title:	
Address/Location:	
Phone (direct):	
Email:	

[Respondent Name]

[Signature]

Tab 3



Joint Audit-Compensation Committee Meeting Notes July 8, 2021 1:00 p.m.

Board members present: Anne Root (Audit Committee Chair), Mark Kendall, Henry Lorenzen, Roland Risser (Compensation Committee Chair), Eric Hayes, and Susan Brodahl

Presenters: Danielle Hyman; Karen Allen, Moss Adams

Staff attending: Pati Presnail (Audit Committee Staff Liaison), Steve Lacey, Michelle Spampinato, Michael Colgrove, Debbie Menashe, and Amanda Sales (Compensation Committee Staff Liaison)

Also present: Ryan Christensen, Kendra Gulley, Cable Hill Partners

Presentation of 2020 of Energy Trust's 401k Audit

This meeting is a joint committee meeting between the Compensation Committee and the Audit Committee to hear the Moss Adams report on the results of the 2020 401k audit.

Danielle Hyman and Karen Allen of Moss Adams presented the results of the audit. Danielle advised the joint committee that Jaime Parker, Energy Trust's regular account manager, is unavailable due to parental leave, but is expected to return as Energy Trust's account manager.

Danielle and Karen presented a high-level overview of the audit, reporting that they completed their audit of the Energy Trust of Oregon 401k plan for the year ended December 31, 2020. They described their scope of services, which includes review of processes and financial statements, including the plan's Form 5500 return. Committee members and the Moss Adams team discussed information received from The Principal, the plan's recordkeeper, and how to monitor The Principal. The Principal must file SOC 1 reports on their controls, and exceptions or concerns are disclosed there. Ryan Christensen, of Cable Hill Partners, who are advisors to the 401K plan, advised that they monitor the recordkeeper for these purposes as part of their advisory services to the Committee.

The Moss Adams team reported that the team encountered no problems or obstacles during the course of the audit. Moss Adams reviewed the internal controls over HR, payroll and plan contributions, and they did not find any material gaps in the internal controls. Moss Adams expressed appreciation for the Energy Trust's financial team. Board members asked Karen and Danielle if there were any areas of concern, and the answer was no.

Committee members asked that notes be delivered to Compensation Committee Chair Roland Risser to report out on the audit results to the full board at their next meeting.

Tab 4

Compensation Committee Meeting Notes



August 19, 2021

Committee Members Attending by teleconference: Roland Risser (Chair) and Mark Kendall

Committee Members Absent: Susan Brodahl, Eric Hayes, Melissa Cribbins ex-officio

Staff attending: Amanda Sales (Staff Liaison), Cheryle Easton, Debbie Menashe, Mayra Aparicio, Michael Colgrove

Others in attendance: Ryan Christiansen (Cable Hill Partners) and Tonya Hirte (Principal Financial)

Chair Roland Risser called the meeting to order.

Retirement Plan Update

Tonya Hirte from Principal then gave an update on the plan health and participation as of 6/30/21: Energy Trust retirement plan health is very good. Plan assets exceed \$22 million, with year over year grow. All plan health metrics are good: Participation rate, average deferral rate, retirement wellness of 70% or above, diversification rate, and contribution-index. On all dimensions, Energy Trust's plan is very healthy, with an overall health score of over 44%. The more typical plan health score is 20%.

Committee members asked questions about the results in all dimensions. Committee members expressed their appreciation in seeing a participation rate of over 93%, and Tonya added that Energy Trust's participation rate is 20% above the benchmark of Principal plans. This high participation rate reflects the organization's continuing commitment to match employee contributions.

Ryan Christiansen of Cable Hill Partners then presented the fiduciary quarterly market report. On the macro level, Ryan reported that the equity markets were up over the quarter, reflecting optimism for the economy as it recovers from COVID-19. Growth investments are outpacing value. Fixed income returns were relatively flat for the quarter.

Ryan turned committee members' attention to the investment "periodic table," noting that the Balanced Index class of investments is stable throughout. Ryan noted that the Principal platform continues provide a wide range of investment choices which are represented on the periodic table, and the RetireView option, which is the default for Energy Trust participants, is a Balanced class investment option.

Ryan then reported on the plan's portfolio watchlist. The DFA US Core Equity 2 I has exceeded three quarters on the watch list, and Ryan recommended replacing it with the Schwab S&P 500 Index. Committee members approved the action to remove the DFA US Core Equity 2 I fund and replace it with the Schwab S&P 500 Index.

Committee members then reviewed the plan allocation by investment type. Committee members and Ryan discussed the relatively large percentage in cash investments, expressing some concern for the limited growth potential for these investments. Ryan, Tonya and Amanda Sales, Energy Trust's Director of Human Resources, described continuing education efforts for staff to help in their investment choices.

Cable Hill and Principal representatives exited the meeting.

Update on Status of Market Compensation Study

Amanda Sales provided an update of the Market Compensation now underway. Amanda reported that Energy Trust undertakes such studies every 2-3 years. Alliance Consulting has been engaged to conduct the study. Alliance reviews numerous market surveys, including the Milliman-Portland Area Compensation Study, the Northwest Management and Professional Survey, and the Executive Compensation and Professionals Survey.

Debbie Menashe, Director of Legal Services, responded to questions about whether this market survey would cover executive director compensation. Executive director compensation is reviewed by the Executive Director Review Committee. As requested in May by that committee, Energy Trust is examining comparator organizations to provide more information to the Executive Director Review Committee.

Adjourn meeting

Chair Roland Risser adjourned the meeting at approximately 3:00 p.m.

The next meeting of the Compensation Committee is scheduled for October 21, 2021 at 2:00 p.m.

Tab 5

Evaluation Committee Meeting Notes



July 16, 2021, 2:00pm

Committee attending by Zoom: Alan Meyer, Erik Andersson, Jennifer Light (outside expert)

Board members absent: Eric Hayes, Lindsey Hardy (chair), Janine Benner (Oregon Department of Energy)

Staff attending by Zoom or phone: Alex Novie, Andrew Shepard, Andy Griguhn, Betsy Kaufman, Dan Rubado, Eric Braddock, Fred Gordon, Gina Saraswati, Jeni Hall, Kenji Spielman, Michael Colgrove, Phil Degens, Sarah Castor (staff liaison), Spencer Moersfelder, Thad Roth, Tracy Scott

Others attending by Zoom or phone: Adam Shick (CLEAResult), Andy Cameron (Oregon Department of Energy – for Janine Benner) Anna Kim (Oregon Public Utility Commission), Kyle Kent (CLEAResult), Roger Kainu (Oregon Department of Energy – for Janine Benner)

Announcements

Andy Cameron has been nominated as the Oregon Department of Energy representative on the Committee, to replace Janine Benner; his nomination will be voted on at the July 21, 2021 meeting of the Board of Directors.

Review of Solar Program Installation Requirements

Sarah Castor presented the results of a review of the Solar program's installation requirements, which are used to qualify solar systems for program incentives. A consultant reviewed the current requirements document and conducted interviews with industry experts and a survey of program trade allies to solicit input on updates to the requirements and a process for making further updates on an ongoing basis. The review resulted in proposed additions, revisions and clarifications to the requirements; the consultant also recommends conducting a web-based survey of trade allies annually and interviews of industry experts every one-to-two years to inform future updates to requirements. Solar program staff are reviewing the recommendations and will decide how to update the installation requirements; they are also planning to update the solar trade ally rating system.

Alan Meyer asked if we plan to allow the customer manual to be provided in either print or digital format as recommended. Jeni Hall said that the program is still weighing all the recommendations from the project and wants to consider what works best for customers as well as trade allies.

Manufactured Home Replacement Inspection and Billing Analysis Memo

Phil Degens presented results from a review of home inspection data and a billing analysis for the Manufactured Home Replacement pilot. The inspection data showed that the replaced homes were mostly small, older single-wide homes with older electric heating systems and poor insulation and windows. More than two thirds of all homes inspected had mold issues and more than half had indoor air quality issues or roof leaks; about a third lacked a smoke detector and about 70% lacked a carbon monoxide detector. The billing analysis was challenging primarily because it was difficult to match replaced homes with their replacements, and some homes did not have consistent electricity usage data. The billing analysis showed higher average annual consumption than assumed for both the baseline homes and the replacement homes, but the evaluated annual savings of 5,872 kWh falls within the range of assumed savings. The measure approval document for Manufacture Home Replacement has already been updated to reflect the results of the billing analysis. We should continue to track the baseline and replacement energy use of manufactured homes, especially in other size categories and weather zones.

Anna Kim asked why electrically heated homes would need carbon monoxide detectors, as noted in the inspections. Kyle Kent noted that many manufactured homes have supplemental heat from wood

stoves or propane heaters. Alan Meyer asked if the results change the cost-effectiveness of the offering. Phil Degens said the offering is already under cost-effectiveness exception from the Oregon Public Utility Commission; these results do not have a big effect on cost-effectiveness, but we should continue to monitor the offering as more homes are replaced.

Review of Evaluation & Research Project List

Phil Degens reviewed a list of ongoing and upcoming evaluation and research projects at Energy Trust, with the goal of getting feedback on where the Evaluation team should increase or reduce its focus to be most effective with its limited resources. The projects include program impact evaluations, process evaluations, evaluations of pilots, market research projects and surveys. The Evaluation team also maintains, improves and analyzes data and supports the measure development process, as well as supporting research projects managed by NEEA and our funding utilities.

Anna Kim said that the list of projects seems too long. She recommends thinking about where COVID makes things too hard to evaluate and skipping or delaying that work, as well as thinking about where the pandemic has created unique opportunities to learn about things and focusing there. Alan Meyer noted that the Evaluation Committee does not have a charter but needs one to define how they provide input on choices around evaluations and research. He would like to see a process where there are guidelines for decisions on projects and an annual evaluation plan and the Evaluation Committee agrees to that plan. The board is currently working to better define the roles of the committees which would enable that type of process, but that work will probably not be completed before the end of 2021. Jennifer Light said that it would be helpful to have guidelines for how much of our portfolio is evaluated and how frequently, and the reliability of the savings that we are looking for. That might help focus the evaluations on things with more uncertainty and not as much or as often at things where we already have a lot of consistent information. Fred Gordon said that we should look at where we can be strategic not just about the impact evaluation work, but also the process evaluation, market research and data work. Erik Andersson agreed with Alan Meyer's suggested process for future years and asked how the Evaluation team is planning to make choices in the absence of that process. Sarah Castor said the Evaluation team would be meeting the following week to talk about setting priorities in advance of budgeting for 2022. Phil Degens added that in the past we have skipped a year of program impact evaluation or consolidated years into one project, which saves some work and cost. He sees some projects that could be delayed because of COVID and noted that we have already cut some projects that were previously planned. Fred Gordon noted that we try to take timing into account and sometimes have to be flexible with delays. He said that we consider skipping impact evaluation for a year when program design and evaluation results have been fairly stable. Jennifer Light suggested that we try to coordinate with others such as NEEA and RTF on projects to leverage funding and reduce effort and agrees that we could skip impact evaluation for some years where program realization rates are stable. Anna Kim said we should avoid delaying impact evaluations for a given year for too long after that year because of the challenges that creates in collecting the needed data. Phil Degens welcomed additional feedback and suggested that we revisit the topic at the next Evaluation Committee meeting.

Existing Buildings Large/Complex Project Impact Evaluation

Sarah Castor presented findings from an impact evaluation of a large, complex project completed through the Custom track of the Existing Buildings program. The project did not save as much gas as anticipated; it also increased the use of electricity at the site, which was not claimed by Energy Trust in its reported program savings. Alan Meyer asked why we did not claim the increase in electric use. Fred Gordon said that the internal policy of not claiming negative interactive savings was developed around lighting measures. One of the reasons was that there were compensating benefits; lighting efficiency increases heating loads and decreases cooling loads. There was also some hesitance to penalize our progress toward gas savings goals due to electric only measures that were not funded as part of the gas program. He noted that this case doesn't seem to fit that logic. Kenji Spielman clarified

that while the negative electric savings are not included in our savings reporting, they are factored into the cost-effectiveness assessment. Fred Gordon said we need to take another look at how we handle projects like this with negative interactive savings.

Industrial Megaproject Update

Phil Degens presented an update on estimated savings from a megaproject completed through the Production Efficiency program. The project has been monitored for several years and has saved the expected amount of energy. Alan Meyer asked if Energy Trust paid incentives based on projected savings or actual savings. Phil Degens said that the incentive payments were made annually based on the project meeting savings expectations.

The meeting adjourned at 3:48 pm. Sarah Castor will send out a poll for availability for the next meeting, to take place in September.

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MEMO

Date: August 18, 2021 **To:** Board of Directors

From: Dan Rubado, Sr. Project Manager, Planning & Evaluation

Jackie Goss, Sr. Engineer, Planning & Evaluation

Subject: Summary of Recurve Analysis of Ducted Heat Pump Upgrade Impacts

EXECUTIVE SUMMARY

Energy Trust used an impact analysis tool built by Recurve Analytics to evaluate energy savings from high efficiency ducted heat pumps installed in single-family and manufactured homes by trade ally contractors from 2013 to 2018. Energy savings for two primary installation scenarios were analyzed for each home type—homes replacing an existing heat pump (referred to as "upgrades") and conversions from an electric forced air furnace (referred to as "conversions"). This report focuses on the impact of heat pump upgrade projects. Energy Trust discontinued its heat pump upgrade measures in 2018 due to increasing cost-effectiveness challenges. Weather-normalized annual energy usage prior to installation was compared with the year immediately following installation. The change in annual energy usage was evaluated against changes in energy usage during the same time period in a comparison group of future participants.

The implicit baseline for this analysis (that is, the system that the efficient case was compared against to compute savings) is the existing condition system (what was in place prior to the upgrade). This contrasts with the assumption of the deemed savings analysis for these measures, where a market average efficiency (market baseline) heat pump was used as the point of comparison to compute savings. Using a market baseline assumes customers are already going to replace their existing heat pump system (possibly due to failure) and the incentive is intended to encourage customers to upgrade from a market baseline model to a high efficiency model. Deemed savings were therefore computed as the difference in energy consumption of a high efficiency heat pump compared to the energy consumption of a market baseline heat pump.

Since a market baseline system is likely more efficient than the existing systems that were replaced, the observed savings in this analysis would be higher than expected when compared to the deemed savings. Further complicating matters, the existing conditions encompassed in this analysis are not known and may have included nonfunctional heat pump systems and non-electric heating systems, such as oil furnaces. In addition, three-quarters of heat pump upgrades included commissioning and controls measures on top of the heat pump installation. This suggests a direct comparison between the analysis findings and deemed savings would be misleading. To address this, we estimated a range of possible savings for the efficient case compared to a market baseline system, using two extreme existing condition scenarios to create adjustment factors. In addition, we simply reported the observed energy savings of heat pump upgrades as compared to the existing conditions.

Projects in site-built homes saved 1,520 kWh per year (8 percent) and those in manufactured homes saved 2,150 kWh per year (14 percent) compared with the existing conditions. We estimate that site-built homes saved between 100 and 760 kWh per year compared to a market baseline system, while manufactured homes saved between 140 and 1,080 kWh per year. This results in a realization rate between 7 and 55 percent for site-built homes and 10 and 78 percent for manufactured homes. Projects completed in heating zone 2 appeared to have higher savings than those in heating zone 1, which aligns with our expectations based on the colder climate of heating zone 2.

Commissioning and advanced control incentives were associated with a small increase in electricity savings of about 200 kWh, resulting in a roughly 40 percent realization rate. Pre-installation heating loads in the analysis sample were closer to what we might expect to see in homes with electric forced air furnaces, rather than heat pumps. This could be explained if the existing heat pumps that were replaced were very inefficient, undersized, or had inoperable compressors. A properly sized, efficient, new heat pump would have a large opportunity for energy savings in these scenarios compared to the existing condition. However, that opportunity is substantially reduced once a market baseline is assumed as the point of comparison.

If Energy Trust wishes to develop new heat pump upgrade measures and rescreen them for costeffectiveness, savings estimates adjusted for a market baseline would need to be used to match the assumptions of prior heat pump upgrade measures. We recommend conducting a thorough review of heat pump commissioning activities and advanced controls installations to determine what the most effective practices are and how much energy they save. There may be certain services that are more effective or that can be improved.

¹ Residential ducted heat pumps are also known as air source heat pumps and central heat pump systems.

² Market baseline refers to the average efficiency level of equipment sold in the market.

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DNV

Impact Evaluation of the 2019 Existing Buildings Program

Energy Trust of Oregon

June 1, 2021

SAFER, SMARTER, GREENER



Table 0-2: Evaluated energy savings by fuel and track

Program Track	Evaluated Electricity Savings (kWh) 2019	Evaluated Gas Savings (therms) 2019
Lighting	94,077,036	
Standard	7,053,360	457,991
Custom	24,352,887	755,154
Capital Measures Only	125,483,283	1,213,145
Strategic Energy Management	11,613,056	563,892
Grand Total	137,096,339	1,777,037

Table 0-3: Program realization rates by fuel and track

Program Track	Electricity Realization Rates 2019	Gas Realization Rates 2019	
Lighting	108%		
Standard	98%	79%	
Custom	90%	86%	
Capital Measures Only	104%	83%	
Strategic Energy Management	90%	94%	
Existing Buildings Program	102%	86%	

Table 0-4: Track and domain realization rate summaries, unweighted

Track / Primary		Electric	Results			Gas R	esults	
sampling domain	# Results	Min RR	Mean RR	Max RR	# Results	Min RR	Mean RR	Max RR
Lighting	31	26%	98%	193%				
Direct Install	12	26%	81%	141%				
Standard Lighting	16	90%	110%	193%				
Street Lighting	3	100%	102%	105%				
Standard	32	56%	97%	101%	43	15%	82%	136%
Refrigeration	13	84%	99%	100%	5	100%	100%	100%
Others	12	56%	95%	101%	12	77%	99%	112%
Boiler					13	15%	41%	115%
Food Equipment	7	85%	98%	100%	13	49%	99%	136%
Custom	23	14%	98%	218%	18	0%	86%	145%
Custom	23	14%	98%	218%	18	0%	86%	145%
SEM	34	0%	133%	1,536%	26	44%	122%	311%
Year-1	6	0%	304%	1,536%	4	100%	106%	117%
Continuation	28	0%	96%	292%	22	44%	125%	311%

0.4 Demand savings estimates

Energy Trust has developed summer and winter load factors, as a function of kWh savings, to estimate the demand savings achieved by each capital measure. Demand savings are not estimated for SEM measures. Energy Trust used this evaluation as an opportunity to see how the evaluation's adjustments to electric energy savings would impact Energy Trust's estimate of demand savings. Energy Trust provided DNV with the load factors to estimate the demand savings of any project based on the measure composition. Independent review of Energy Trust's load factors or site-specific adjustments to the factors themselves based on the data collected through this evaluation was out of the scope of this evaluation. DNV estimated the demand savings for each project in the sample frame based on the claimed energy savings and for every project evaluated using the evaluated savings. DNV then completed an expansion of demand savings from the sample to the program population. Table 0-5 compares the electric realization rates for the capital measures to the demand realization rates for the same measures by program track. The analysis shows that the demand realization rates are similar, but the application of the load factors does result in slightly different realization rates.

Table 0-5: Comparison of electric energy and demand savings realization rates

Program	Electric Energy –	Summer kW -	Winter kW -
Track	RR	RR	RR
Lighting	108.3%	109.6%	110.1%
Standard	98.1%	97.7%	98.7%
Custom	89.9%	89.1%	89.9%
Capital Measures Only	103.6%	100.7%	106.0%

0.5 Historic capital measure performance

Table 0-6, Figure 1 and Figure 2 show historic program performance for capital measure tracks: lighting, standard, and custom. The table and charts do not include the SEM track, which was added to the Existing Buildings program impact evaluations in 2015.

Table 0-6: Historic program performance, excluding SEM

Program Year	Verified Electric Savings (MWh)	Electric Realization Rate	Verified Gas Savings (therms)	Gas Realization Rate
2008	41,887	99%	746,564	87%
2009	63,537	85%	705,644	75%
2010	91,884	107%	1,486,729	86%
2011	98,776	91%	2,148,020	101%
2012	86,911	95%	1,174,676	79%
2013	79,612	88%	911,922	67%
2014	82,699	81%	973,143	72%
2015	94,992	96%	1,061,316	79%
2016	104,962	92%	1,228,416	87%
2017	119,002	95%	1,515,434	90%
2018	134,660	104%	915,956	73%
2019	125,483	104%	1,213,145	83%

Figure 1: Historic Non-SEM program electric savings and realization rates

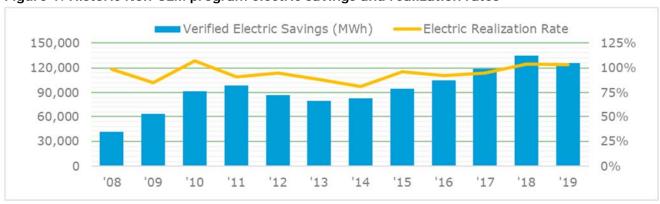
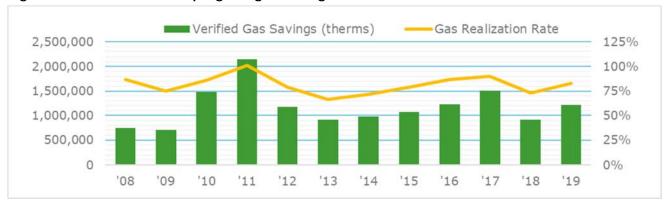


Figure 2: Historic Non-SEM program gas savings and realization rates



0.6 Historic SEM performance

Table 0-7, Figure 3 and Figure 4 show historic SEM performance over time.

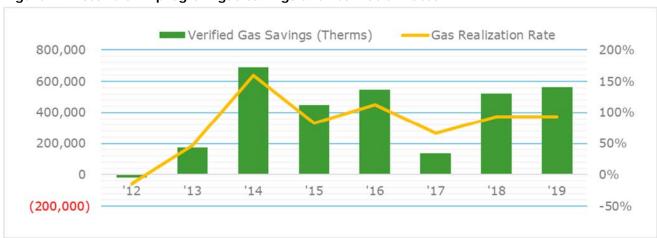
Table 0-7: Historic SEM program performance

Program Year	Verified Electric Savings (MWh)	Electric Realization Rate	Verified Gas Savings (Therms)	Gas Realization Rate
2012	7,351	139%	-18,452	-15%
2013	8,988	103%	174,390	47%
2014	11,514	89%	690,639	160%
2015	9,217	89%	446,946	83%
2016	9,039	92%	546,458	113%
2017	5,540	92%	137,968	66%
2018	13,326	91%	524,496	93%
2019	11,613	90%	563,892	94%

Figure 3: Historic SEM program electric savings and realization rates



Figure 4: Historic SEM program gas savings and realization rates



0.7 Key evaluation findings and recommendations

This section provides key findings and recommendations resulting from this study. Additional findings are presented within each track-specific section.

0.7.1 Lighting track

Finding – We found that project documentation and program savings calculators were properly filled out and were sufficient for our evaluation needs. The program has done a good job of emphasizing the need for quality project documentation to trade allies and should continue to do so. We found no obvious errors in any of the assumptions used in the savings analysis.

For Standard Lighting measures we found good agreement between the reported operating parameters (lighting hours, quantities, and wattages) and the responses we received from site contacts.

Deemed savings values for Direct Install lighting projects tend to over-estimate the actual hours of operation, which results in a lower Direct Install evaluation realization rate. All DI measures assume 3,600 hours/year of operation per the regional mix from 2014 CBSA¹ data, regardless of business type or market.

Recommendation – Based on results from PY2018 and PY2019 evaluation cycles, we suggest
adopting an hours-of-use value more in line with actual consumption. 3,000 hours per year for
lighting projects excluding controls would provide better alignment (large controls-only lighting
projects have not typically over-estimated savings and need not be adjusted).

0.7.2 Standard track

Finding – For many projects completed under a corporate account (for example, this year's RTU Economizer / Demand Control Ventilation measures), it is often very difficult to track down a site contact specific to that location who is knowlegable enough to answer survey questions. The evaluation team was only able to speak with the Engineering Rebate Manager for the corresponding project, not the actual local site contact. This makes verification of site specific details, usage habits and other factors very uncertain, as Engineering Rebate Managers were only able to verify scope of installation at the time of install or before install. This echos a similar issue with a previous finding in the PY2018 impact evaluation.

• Recommendation – Limit the amount of projects applied through Engineering Rebate Managers, and/or consider revising the program application to have participants also provide a technically knowledgeable contact who is familiar with the installed measure (not just an administrative manager who applied for the measure incentive).

Finding – The evaluated savings for 12 of 13 sampled boiler projects are lower than reported savings. Seven of the sampled boiler projects were installed at schools, either at the primary, middle, or high school level. Boiler projects received considerable reduction in evaluated savings because of an error in assumptions used in the energy analysis that was uncovered as a result of the whole building gas consumption regression analysis.

Recommendation – Projects utilizing the new boiler MAD UES values to estimate savings for high
efficiency boiler installations should reduce this variance. If possible, review the total annual gas
consumption of a school prior to finalizing savings in order to flag any sites for which savings is more

¹ Commercial Building Stock Assessment

than 20% of consumption. When flagged, adjust the savings claimed based on the consumption profile for the facility.

0.7.3 Custom track

Finding - Program models continue to estimate savings that suggest a significant reduction in annual consumption. DNV analyzed the actual change in facility consumption using the same regression methodology used for the Strategic Energy Management (SEM) evaluation. The COVID-19 impacts prevented this analysis from being used directly or as significantly as it has been used in past evaluations. However, the analysis did support the conclusion that two projects were not achieving any gas savings due to the measures installed.

 Recommendation – DNV continues to suggest that Energy Trust complete additional review of simulation inputs for sites expecting savings greater than 20% of consumption. Energy Trust should consider requiring ATACs to document in the technical analysis study (TAS) what simulation inputs are the largest drivers of savings for the project.

0.7.4 Strategic Energy Management

Finding – The Strategic Energy Management program has become a more complicated program over time, which has increased the cost to evaluate the program. The increase in complication is primarily driven by the increase in performance tracking tools (PTTs) used to estimate program savings. While it appears that improvement and consolidation of PTTs is occurring, there are still incidents where model inputs and information are located in inconsistent areas or are not appropriately accounted for in the model.

Recommendation – DNV recommends that Energy Trust continue its efforts to create simplified and consistent PTT tools for program participants to use. DNV recommends the creation of a "Non-Routine Events" (NRE) log within the PTT that documents all capital projects (both those in the baseline and those during program years), any weather adjustments made, and any other NREs that are accounted for in the model (including baseline adjustments and gas curtailments). The log should state how the NRE is accounted for in the savings calculation.

Memo



To: Board of Directors

From: Wendy Gibson, Sr. Program Manager – Existing Buildings

Kathleen Belkhayat, Program Manager – Commercial Energy Performance

Management

Sarah Castor, Program Manager – Evaluation & Engineering

CC:

Date: August 13, 2021

Re: Staff Response to the Existing Buildings Program 2019 Impact Evaluation

The 2019 Existing Buildings program impact evaluation covered the program's four tracks: Custom, Lighting, Standard and Strategic Energy Management (SEM). As in past years, the evaluation found that the program is doing a good job of estimating savings for electric measures in all tracks, with an overall electric realization rate of 102%. Estimating gas savings proved more challenging, especially for Standard and Custom gas projects, and the overall realization rate was 86% for gas savings.

Energy Trust is committed to regularly updating the savings estimates and documentation for its standard measures, as recommended by the evaluator. The boiler measure was updated in late 2019 as recommended by the evaluator and an improvement in the realized savings for boilers should be seen in the impact of the 2020 program year. Energy Trust updated the measure analysis for direct install lighting in early 2021, before the recommendation to reduce assumed hours of use was received; this update included breaking out hours of use for different technologies rather than a single assumption for hours of use. When the measure is up for review again in early 2022, we will assess whether further changes are needed to improve savings accuracy.

In 2022, the program will begin developing a new performance tracking tool platform for SEM, which will make it easier for the program to assess engagement and consistently aggregate and analyze models to understand the correlation between actions and energy savings. Energy Trust will continue to track on evaluation results for K-12 public schools to identity ways to improve project performance for those buildings. We will also explore the possibility of collecting more relevant site contact information to facilitate evaluation.

As a health and safety precaution during the coronavirus pandemic, all data collection for this evaluation took place via telephone interviews or virtual site visits. These methods yielded the required data while also reducing travel costs associated with in-person site visits, and Energy Trust plans to continue using remote data collection methods in future evaluations to the greatest extent possible.

Tab 6

Resolution 949

AUTHORIZING REALLOCATION OF FUNDS FROM THE EMERGENCY CONTINGENCY RESERVE TO THE OPERATIONAL CONTINGENCY RESERVE October 13, 2021

Discussion

Pursuant to the board's Maintaining, Establishing, and Using Net Assets Policy (the "Net Assets Policy"), Energy Trust maintains two organizational reserves, the Emergency Contingency Reserve and the Operational Contingency Reserve. The Net Assets Policy contemplates that the amount of each of these organizational reserves be assessed by the Finance Committee of the board of directors and then set and adjusted by a decision of the board of directors.

At the request of the Finance Committee, Energy Trust engaged consultant services to conduct a business analysis of the amount appropriate for the Emergency Contingency Reserves. The current Emergency Contingency Reserve was established by the board in the amount of \$5 million in 2013.

Energy Trust engaged Procor Solutions and Consulting, a leading risk management, disaster management and insurance consulting firm ("Procor"), to conduct an analysis of Energy Trust's Emergency Contingency Reserve. Based on the analysis conducted, Procor advised that \$3 million is a reasonable Emergency Contingency Reserve amount.

Procor's recommended Emergency Contingency Reserve amount was based on an analysis of potential widespread disruptions to the operations of Energy Trust such as large earthquakes or wildfires. Procor then examined Energy Trust's financial statements, equipment replacement analyses, and property insurance coverage, among other things.

Procor presented the findings to the Energy Trust Finance Committee on August 30, 2021, and asked staff to consider and recommend reallocation of the amount of the Emergency Contingency Reserve.

At the Finance Committee's meeting on September 27, 2021, Energy Trust staff recommended reallocating \$2 million from the Emergency Contingency Reserve to the Operational Contingency Reserve.

Recommendation

1. Authorize staff to reallocate \$2 million from the Energy Trust Emergency Contingency Reserve to the Energy Trust Operational Contingency Reserves as soon as practicable.

RESOLUTION R949
AUTHORIZING MOVEMENT OF \$2 MILLION IN EMERGENCY CONTINGENCY
RESERVE TO OPERATIONAL CONTINGENCY RESERVE

WHEREAS:

- 1. Energy Trust's board policy on Maintaining, Establishing, and Using Net Assets sets forth procedures and guidelines for maintaining, establishing and using organizational net assets.
- 2. The Net Assets Procedures document provides that the amount established for the Emergency Contingency Reserve be assessed periodically set by the Finance Committee of the board of directors and the set by a decision of the board of directors.
- 3. In 2021, at the request of the Finance Committee, Energy Trust engaged Procor Solutions and Consulting, a leading risk management, disaster management and insurance consulting firm (Procor), to assess Energy Trust's Emergency Contingency Reserve.
- 4. Procor made assumptions about potential emergencies and widespread operational disruptions. Procor also reviewed Energy Trust financial statements and insurance coverages to analyze Energy Trust's potential exposures and needs for emergency event cash reserves.
- 5. Procor presented its findings to Energy Trust staff and the Finance Committee in August 2021. Based on its analysis, Procor advised that a sufficient cash reserve for emergency scenarios contemplated would be \$3 million.
- 6. Energy Trust currently maintains an Emergency Contingency Reserve in the amount of \$5 million.
- 7. Energy Trust staff met with the board's Finance Committee on September 27, 2021 and recommended reducing the Emergency Contingency Reserve amount from \$5 million to \$3 million and allocating the \$2 million to the Energy Trust Operational Contingency Reserve.
- 8. The Finance Committee reviewed the proposal and supports the recommendation from staff, recommending that the matter be presented to the full board for approval.

It is therefore RESOLVED that the Emergency Contingency Reserve amount be reduced and reallocated to the Operational Contingency Reserve consistent with the assessment undertaken by Procor Solutions and Consulting, presented to the Finance Committee, and as follows:

- 1. Energy Trust staff is authorized to reduce the amount of the Emergency Contingency Reserve to \$3 million; and
- 2. Energy Trust staff is authorized to reallocate the difference between the current amount of the Emergency Contingency Reserve to the Operational Contingency Reserve for maintenance and use consistent with the Establishment, Use and Maintenance of Net Assets Policy.

Moved by:		Seconded by:	
Vote:	In favor:	Abstained:	0
	Opposed: 0		

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August 2021 Financial Statements

Revenue

We continue to monitor utility revenue. August utility revenue is 11.6% above budget, led by PGE. Year to date through August is 2.2% above budget. Year to date through September is 3.7% above budget. The revenue from the electrics, especially PGE is stronger than budgeted. It is too early to attribute this to the high temperatures, as there is a lag between energy used and receipt of revenue. Gas revenue variance is wavering around 1%-2% +/-.

August 2021:

	August Last Year	actual v LY	Actual - Month of August	actual v bud	August Budget	August YTD - Actual	August YTD - Budget	actual v bud
PPC 1149	2,400,692	24%	2,982,192	29%	2,312,713	23,612,356	22,032,518	7%
Rev 838	3,661,208	27%	4,643,503	14%	4,088,652	34,223,924	33,510,162	2%
PPC Renewables	693,613	14%	792,285	20%	662,905	6,337,445	6,013,395	5%
PGE Total	6,755,514	25%	8,417,980	19%	7,064,270	64,173,725	61,556,075	4.3%
PPC 1149	1,682,507	13%	1,897,801	10%	1,726,736	14,675,244	14,282,326	3%
Rev 838	2,559,993	22%	3,121,839	6%	2,938,075	23,385,154	23,165,717	1%
PPC Renewables	483,177	13%	545,660	3%	528,158	4,221,889	4,219,611	0%
PAC Total	4,725,676	18%	5,565,300	7%	5,192,969	42,282,287	41,667,655	1%
NWN	665,859	2%	677,884	-22%	870,419	19,574,229	19,949,049	-2%
CNG	100,445	35%	135,484	27%	106,541	2,422,630	2,421,295	0%
Avista	172,774	18%	203,608	0%	203,608	1,628,862	1,628,862	0%
NWN Washington	-		-		-	2,000,582	2,000,582	0%
Total Utility Revenue	12,420,268	20.8%	15,000,256	11.6%	13,437,807	132,082,314	129,223,518	2.2%

September 2021:

	September Last Year	actual v LY	Actual - Month of September	actual v bud	September Budget	September YTD - Actual	September YTD - Budget	actual v bud
PPC 1149	2,610,913	24%	3,227,069	35%	2,391,631	26,839,425	24,424,148	10%
Rev 838	4,060,119	20%	4,872,834	15%	4,229,934	39,096,758	37,740,096	4%
PPC Renewables	756,501	17%	885,989	29%	689,267	7,223,433	6,702,662	8%
PGE Total	7,427,534	21%	8,985,892	23%	7,310,832	73,159,616	68,866,907	6.2%
PPC 1149	1,885,338	0%	1,885,752	12%	1,689,570	16,560,997	15,971,896	4%
Rev 838	2,896,077	14%	3,314,232	15%	2,870,663	26,699,387	26,036,380	3%
PPC Renewables	545,167	-1%	540,519	5%	516,845	4,762,407	4,736,456	1%
PAC Total	5,326,583	8%	5,740,503	13%	5,077,078	48,022,790	46,744,732	3%
NWN	628,589	35%	846,905	8%	783,943	20,421,133	20,732,992	-2%
CNG	104,857	0%	104,857	-2%	106,547	2,527,487	2,527,842	0%
Avista	172,774	18%	203,608	0%	203,608	1,832,470	1,832,469	0%
NWN Washington	-		-		-	2,000,582	2,000,582	0%
Total Utility Revenue	13,660,337	16.3%	15,881,764	17.8%	13,482,007	147,964,078	142,705,525	3.7%

Energy Trust Of Oregon Statement of Net Assets Actual As of Period Ending August 2021

	Actual					Budget	
Funding Source	Beginning of Year Net Assets	Current Year Net Income	Transfer of Net Assets	Distributed Investment Income	Ending Net Assets at end of this period	Budgeted Net Assets at end of this period	Difference from Budget
PGE	9,030,935	11,626,654		35,830	20,693,419	12,305,455	8,387,964
PacificPower	4,194,123	3,527,122		14,380	7,735,625	6,224,978	1,510,647
NWN - Industrial	1,123,295	(202,303)		2,467	923,459	1,285,469	(362,010)
NWN	3,688,393	952,793		10,053	4,651,239	6,469,285	(1,818,046)
Cascade Natural Gas	2,206,949	522,797		5,958	2,735,704	2,418,258	317,446
Avista Gas	335,576	(65,372)		731	270,934	340,227	(69,292)
OPUC Efficiency	20,579,271	16,361,690		69,419	37,010,380	29,043,671	7,966,709
PGE	15,767,413	(1,067,232)		36,770	14,736,951	12,965,931	1,771,020
PacificPower	6,213,075	(9,005)		14,986	6,219,055	5,808,469	410,586
OPUC Renewables	21,980,488	(1,076,238)		51,756	20,956,006	18,774,400	2,181,605
Washington	610,702	38,198		1,520	650,420	581,866	68,553
LMI	(48)	50		(0)	2	0	2
Community Solar	322,444	137,746	(379,635)	486	81,042	477,609	(396,567)
PGE Storage	8,021	(3,231)		15	4,805	28,405	(23,600)
NWN Geo TLM Phase 3	-	172,143		208	172,351	(943)	173,294
Development	11,640	(9,787)	379,635	474	381,963	6,513	375,450
Total Other Net Assets	952,759	335,120		2,704	1,290,583	1,093,451	197,132
Craft3 Loans	2,300,000				2,300,000	2,300,000	_
Operational Contingency	2,946,818		2,000,000	24,733	4,971,551	2,964,056	2,007,495
Emergency Contingency	5,000,000		(2,000,000)		3,000,000	5,000,000	(2,000,000)
Total Contingency	10,246,818	-		24,733	10,271,551	10,264,056	7,495
Investment Income		148,611		(148,611)			-
Total Net Assets	53,759,335	15,769,184		-	69,528,519	59,175,578	10,352,942

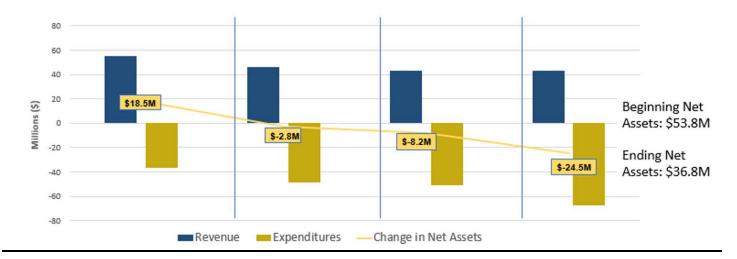
Transfer #1: Community Solar to Development - Finance committee recommended transfer net income after invoice payment is received

Transfer #2: Reduce emergency reserve - finance committee recommended reduction based on PROCOR analysis

Operational Contingency: budget proposals indicate need to temporarily supplement program reserves with contingency to smooth impact on ratepayers 2022-2024

Net Assets

Seasonality in Net Assets – 2021 Q2



	Q1 actual	Q2 actual	Q3 Fcst	Q4 Fcst
Revenue	\$56M	\$46M	\$43M	\$43M
Expenditures	\$-37M	-49M	-51M	\$-67.5M
Change	\$18.5M	\$-2.8M	\$-8.2M	\$-24.5M
Ending Net Assets	\$72.3M	\$69.4M	\$61.3M	\$36.8M

Contingent Liabilities

Energy Trust commits program reserves and expected revenue to fund future efficiency and renewable projects and other agreements. Each of these commitments is contingent on the project being completed according to the milestones established in the agreement. Once a project is complete, the commitment becomes a liability and is paid as quickly as possible from the then-available program reserves.

Current reserves plus future revenue ensure funds are available when commitments come due.

Contingent liabilities as of September 1, 2021 are as follows:

Total contingent liabilities for future commitments	112,171,000
Estimated In-force contracts for delivery and operations, to be paid in the future	60,971,000
Renewables Incentive commitments to be paid in the future	9,200,000
Efficiency Incentive commitments to be paid in the future	42,000,000

OPUC Financial Performance Measures

The two OPUC financial performance measures deal with administrative and program support (as defined by OPUC) and staffing cost (Employee Salaries and Fringe Benefits). We are operating well within the administrative and program support measure, at 5.8% of revenue and a 5.7% decrease year over year. Most of the decrease is due to reductions in organization-wide media unused this year.

Staffing costs under OPUC oversight are 0.6% higher than 2020.

Administrative and Program Support	less than 8% of revenue	5.8% ok
	less than 10% increase over prior year	-5.7% ok
Employee Salaries and Fringe	less than 9% increase over prior year	0.6% ok

Details	YTD 2021	YTD 2020	Y/Y Change
Revenue	130,081,732	121,209,775	
Administrative and Program Support	7,593,648	8,052,868	-5.7%
Percent of Revenue	5.8%	6.6%	
Employee Salaries and Fringe Benefits	9,977,813	9,917,707	0.6%

Expenses

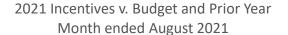
Through August, spending is 6.0% below the budget. For the first eight months, incentives are 3.7% below budget or \$2.47M. Marketing and professional services expenditures were reduced in the amended budget and in actuals because the project pipeline is strong and does not need marketing effort.

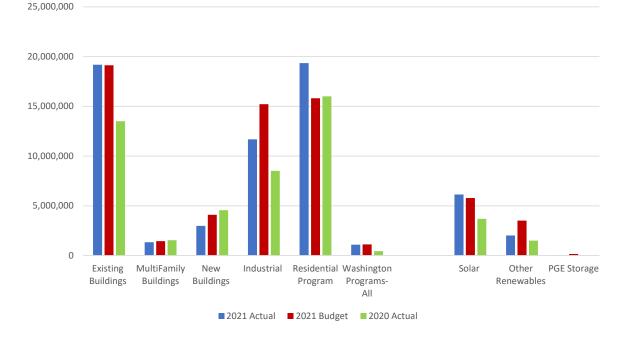
		Year to Date		Total Year
		Amended	Budget	
Total Expenditure	Actual	Budget	Variance	Amended Budget
Incentives	63,794,325	66,262,225	(2,467,900)	120,805,454
Program Delivery Contractors	35,338,487	36,701,581	(1,363,094)	56,097,373
Employee Salaries & Fringe Benefits	10,435,141	11,018,246	(583,106)	16,808,212
Agency Contractor Services	955,001	1,346,546	(391,545)	2,169,863
Planning and Evaluation Services	1,625,212	2,095,624	(470,412)	3,482,785
Advertising and Marketing Services	1,177,336	1,626,581	(449,244)	3,253,100
Other Professional Services	2,131,404	3,519,351	(1,387,947)	5,891,758
Travel, Meetings, Trainings & Conferences	36,038	140,208	(104,170)	260,630
Dues, Licenses and Fees	187,209	202,859	(15,650)	334,420
Software and Hardware	399,547	512,923	(113,376)	817,203
Depreciation & Amortization	213,837	201,004	12,834	275,295
Office Rent and Equipment	689,088	795,684	(106,596)	1,247,500
Materials Postage and Telephone	39,993	83,990	(43,997)	148,750
Miscellaneous Expenses	13,052	4,476	8,576	5,500
Expenditures	117,035,669	124,511,298	(7,475,628)	211,597,841

Incentives Detail

Incentives year to date are 3.7% below the budget. Efficiency programs for the first eight months are up 25% or \$11.1 million compared to last year, due to strong response to the bonuses last year, and a high number of projects. This was accommodated in the amended budget for electric funded projects, and subsequently identified for gas funded projects. The variances from budget by sector do not imply a shift in funding between sectors so much as both timing variation and the effect of combining electric and gas in this table. Further explanations will be provided as the forecast is completed.

Incentives to Date	2021 Actual	2021 Budget	Variance from Budget	Percent Variance	2020 Actual
Existing Buildings	19,181,923	19,125,453	56,470	0%	13,504,965
MultiFamily Buildings	1,341,316	1,446,436	(105,119)	-7%	1,544,728
New Buildings	2,985,173	4,099,023	(1,113,851)	-27%	4,561,274
Industry and Agriculture	11,677,471	15,211,427	(3,533,956)	-23%	8,513,205
Residential Program	19,345,804	15,806,150	3,539,654	22%	15,996,485
Washington Programs- All	1,099,062	1,124,966	(25,904)	-2%	434,534
Efficiency Incentives	55,630,748	56,813,456	(1,182,707)	-2%	44,555,191
Solar	6,139,523	5,782,024	357,498	6%	3,694,026
Other Renewables	2,016,053	3,516,744	(1,500,691)	-43%	1,495,973
PGE Storage	8,000	150,000	(142,000)	-95%	
Total Incentives	63,794,325	66,262,225	(2,467,900)	-3.7%	49,745,190

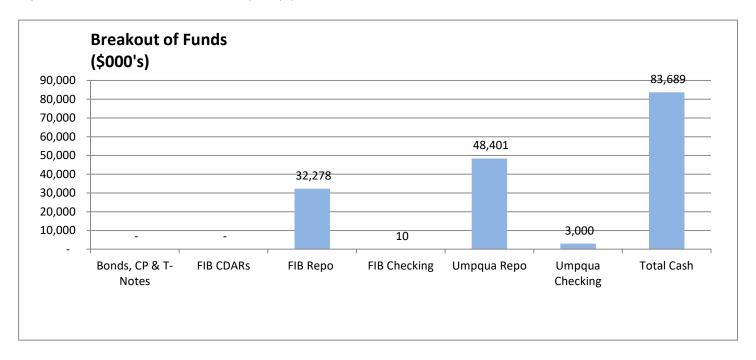




Cash and Investment Status

The graphs below show the type of investments we hold and the institutions where our funds are held. As expected for this time of year, cash levels continue to increase. There were no new reinvested funds in CDAR investments this month.

The column "Umpqua Repo" represents the operating cash balances at Umpqua Bank that are parked in an overnight repurchase account, which is backed by Umpqua Bank.



The average maturity in 2021 through August is 1 day, and the average return is 0.18%.

Energy Trust of Oregon Balance Sheet For the Period Ending August 2021

	August	July	December 2020	One Year Ago August	One month change	Year to date change
Cash	76,943,889	72,638,880	70,585,985	44,357,493	4,305,009	6,357,904
Investments			5,168,914	41,959,350	-	(5,168,914)
Accounts Receivable	189,983	170,971	434,579	134,725	19,013	(244,595)
Prepaid	823,247	757,751	376,223	790,970	65,496	447,024
Advances to Vendors	817,344	1,634,688	1,924,827	2,942,553	(817,344)	(1,107,483)
Current Assets	78,774,463	75,202,290	78,490,527	90,185,090	3,572,173	283,936
Fixed Assets	5,946,660	5,946,660	5,861,911	5,785,644	-	84,749
Depreciation	(5,298,211)	(5,272,306)	(5,084,373)	(4,974,725)	(25,905)	(213,837)
Net Fixed Assets	648,450	674,355	777,538	810,919	(25,905)	(129,088)
Other Assets	2,849,293	2,848,465	2,342,127	2,197,794	828	507,166
Assets	82,272,206	78,725,110	81,610,192	93,193,803	3,547,096	662,014
Accounts Payable and Accruals	9,060,554	4,871,572	24,327,087	7,422,680	4,188,983	(15,266,533)
Salaries, Taxes, & Benefits Payable	1,224,557	1,152,553	957,359	1,024,192	72,004	267,198
Current Liabilities	10,285,111	6,024,125	25,284,446	8,446,872	4,260,987	(14,999,335)
Long Term Liabilities	2,458,576	2,474,152	2,566,412	2,443,413	(15,576)	(107,835)
Liabilities	12,743,687	8,498,276	27,850,858	10,890,285	(15,576)	(15,107,170)
Net Assets	69,528,518	70,226,833	53,759,335	82,303,517	(698,315)	15,769,183
	00.070.000	70 705 440	04 040 400	00 400 000	0.547.000	200.012
Liabilities and Net Assets	82,272,206	78,725,110	81,610,193	93,193,803	3,547,096	662,013

Energy Trust of Oregon Income Statement - Actual and YTD Budget Comparison

For the Period Ending August 2021

Total Company, All Departments (departments) and All Funding Sources

		Period to Date			Year to Date		Full Year
	Actual	Budget	Budget Variance	Actual	Budget	Budget Variance	Budget
Revenue from Utilities	15,000,256	13,437,807	1,562,449	132,082,314	129,223,517	2,858,797	187,344,583
Contract Revenue	47,359	109,091	(61,732)	565,617	609,120	(43,503)	1,045,484
Grant Revenue			-	8,311		8,311	
Investment Income	18,512	275	18,237	148,611	94,901	53,711	96,000
Revenue	15,066,126	13,547,173	1,518,954	132,804,853	129,927,538	2,877,316	188,486,067
			(2.1.2.1.2.2)			(0.40=000)	
Incentives	8,859,024	9,475,424	(616,400)		66,262,225	(2,467,900)	120,805,454
Program Delivery Contractors	4,283,886	4,683,105	(399,220)		36,701,581	(1,363,094)	56,097,373
Employee Salaries & Fringe Benefits	1,297,289	1,447,492	(150,203)		11,018,246	(583,106)	16,808,212
Agency Contractor Services	121,162	205,829	(84,668)	955,001	1,346,546	(391,545)	2,169,863
Planning and Evaluation Services	251,853	347,572	(95,719)	1,625,212	2,095,624	(470,412)	3,482,785
Advertising and Marketing Services	468,619	326,754	141,865	1,177,336	1,626,581	(449,244)	3,253,100
Other Professional Services	283,657	591,634	(307,976)	2,131,404	3,519,351	(1,387,947)	5,891,758
Travel, Meetings, Trainings & Conferences	4,195	30,707	(26,512)	36,038	140,208	(104,170)	260,630
Dues, Licenses and Fees	27,670	32,890	(5,221)	187,209	202,859	(15,650)	334,420
Software and Hardware	47,077	76,070	(28,993)	399,547	512,923	(113,376)	817,203
Depreciation & Amortization	25,905	22,654	3,251	213,837	201,004	12,834	275,295
Office Rent and Equipment	89,941	112,954	(23,013)	689,088	795,684	(106,596)	1,247,500
Materials Postage and Telephone	3,814	15,815	(12,001)	39,993	83,990	(43,997)	148,750
Miscellaneous Expenses	350	256	94	13,052	4,476	8,576	5,500
Expenditures	15,764,441	17,369,157	(1,604,716)	117,035,669	124,511,298	(7,475,628)	211,597,841
Operating Net Income	(698,315)	(3,821,985)		15,769,184	5,416,240		(23,111,774)

Energy Trust Of Oregon Statement of Net Assets Actual As of Period Ending August 2021

		Actual			Budget	Comparisons		
Funding Source	Beginning of Year Net Assets	Current Year Net Income	Distributed Investment Income	Ending Net Assets at end of this period	Budgeted Net Assets at end of this period	Difference from Budget	Difference due to Beginning Net Assets	
PGE	9,030,935	11,626,654	35,830	20,693,419	12,305,455	8,387,964	0	
PacificPower	4,194,123	3,527,122	14,380	7,735,625	6,224,978	1,510,647	1	
NWN - Industrial	1,123,295	(202,303)	2,467	923,459	1,285,469	(362,010)	(0)	
NWN	3,688,393	952,793	10,053	4,651,239	6,469,285	(1,818,046)	0	
Cascade Natural Gas	2,206,949	522,797	5,958	2,735,704	2,418,258	317,446	0	
Avista Gas	335,576	(65,372)	731	270,934	340,227	(69,292)	(0)	
OPUC Efficiency	20,579,271	16,361,690	69,419	37,010,380	29,043,671	7,966,709	1	
PGE	15,767,413	(1,067,232)	36,770	14,736,951	12,965,931	1,771,020	24	
PacificPower	6,213,075	(9,005)	14,986	6,219,055	5,808,469	410,586	24	
OPUC Renewables	21,980,488	(1,076,238)	51,756	20,956,006	18,774,400	2,181,605	48	
Washington LMI Community Solar PGE Storage NWN Geo TLM Phase 3	610,702 (48) 322,444 8,021 - 11,640	38,198 50 137,746 (3,231) 172,143 (9,787)	1,520 (0) 945 15 208 16	650,420 2 461,135 4,805 172,351 1,870	581,866 0 477,609 28,405 -942.7572115 6,513	68,553 2 (16,474) (23,600) 173,294	1 (48) (0) 1 -	
Development Total Other Not Assets	· · · · · · · · · · · · · · · · · · ·				· · · · · · · · · · · · · · · · · · ·	(4,643)	(1)	
Total Other Net Assets	952,759	335,120	2,704	1,290,583	1,093,451	197,132	(47)	
Craft3 Loans	2,300,000			2,300,000	2,300,000	-	-	
Operational Contingency	2,946,818		24,733	2,971,551	2,964,056	7,495	(2)	
Emergency Contingency	5,000,000			5,000,000	5,000,000	-	-	
Total Contingency	10,246,818	-	24,733	10,271,551	10,264,056	7,495	(2)	
Investment Income		148,611	(148,611)			-		
Total Net Assets	53,759,335	15,769,184	-	69,528,519	59,175,578	10,352,942	(1)	

Total Expenditures Programs By Funding Source Actual For the Year to Date Period Ending August 2021

	All Funding				Cascade Natural				
	Sources	PGE	PacificPower	NWN - Industrial	NWN	Gas	Avista Gas		
Existing Buildings	33,981,037	16,689,960	10,388,735	1,659,786	3,924,652	876,584	441,321		
Multi-Family	1,862,287	915,536	531,345	25,467	327,220	26,164	36,555		
New Buildings	8,845,404	5,091,553	2,732,847	26,170	819,973	93,281	81,580		
NEEA Commercial	1,996,131	1,015,650	766,192		156,045	39,750	18,493		
Commercial Sector	46,684,858	23,712,699	14,419,119	1,711,423	5,227,889	1,035,779	577,949		
Industry and Agriculture	20,506,654	8,680,406	10,171,550	1,182,178	326,982	125,586	19,952		
NEEA - Industrial	18,934	10,793	8,142	1,102,170	320,902	125,560	19,932		
Industry and Agriculture Sector	20,525,588	8,691,199	10,179,692	1,182,178	326,982	125,586	19,952		
madelly and righteditare decici	20,020,000	3,001,100	10,170,002	1,102,110	020,002	120,000	10,002		
Residential	32,647,083	12,249,569	8,760,521		9,957,954	632,163	1,046,877		
NEEA Residential	3,303,179	1,556,159	1,173,945		417,313	106,305	49,456		
Residential Sector	35,950,263	13,805,728	9,934,466		10,375,267	738,468	1,096,334		
OPUC Efficiency	103,160,709	46,209,626	34,533,276	2,893,600	15,930,139	1,899,833	1,694,234		
Solar	8,419,607	4,907,868	3,511,738						
Other Renewables	3,215,964	2,496,808	719,156						
OPUC Renewables	11,635,571	7,404,677	4,230,894						
Ci Co nonomusico	11,000,011	1,101,011	1,200,001						
OPUC Programs	114,796,280	53,614,303	38,764,170	2,893,600	15,930,139	1,899,833	1,694,234		
Washington	1,962,384								
Community Solar	175,333								
PGE Storage	40,537								
LMI	8,260								
NWN Geo TLM Phase 3	42,589								
Development	10,287	50.011.0 55			45 000 455	4 000 000	4 00 4 55 1		
Total Company	117,035,669	53,614,303	38,764,170	2,893,600	15,930,139	1,899,833	1,694,234		

Energy Trust of Oregon Contract Status Summary Report

Report Date: 9/16/2021

For contracts with costs through: 9/1/2021

CONTRACTOR	Description	City	EST COST	Actual TTD	Remaining	Start	End
Administration							
	Admi	nistration Total:	14,708,391	8,963,005	5,745,387		
Communications							
	Commu	nications Total:	3,309,255	1,777,576	1,531,680	•	
	Commu	illications rotal.	0,000,200	1,777,070	1,001,000		
Energy Efficiency							
Northwest Energy Efficiency Alliance	NEEA Funding Agreement	Portland	42,866,366	13,815,406	29,050,960	1/1/2020	8/1/2025
Northwest Energy Efficiency Alliance	Regional EE Initiative Agmt	Portland	33,662,505	33,569,081	93,424	1/1/2015	9/15/2022
TRC Environmental Corporation	2021 BE PMC	Windsor	14,911,514	8,730,350	6,181,164	1/1/2021	12/31/2021
CLEAResult Consulting Inc	2021 Residential PMC	Austin	9,358,533	5,370,562	3,987,971	1/1/2021	12/31/2021
CLEAResult Consulting Inc	2021 NBE PMC	Austin	5,916,534	3,971,671	1,944,863	1/1/2021	12/31/2021
CLEAResult Consulting Inc	2021 Lighting PDC	Austin	3,525,189	2,028,195	1,496,994	1/1/2021	12/31/2021
Energy 350 Inc	PE PDC 2021	Portland	2,815,324	1,729,628	1,085,696	1/1/2021	12/31/2021
TRC Engineers Inc.	2021 EPS New Const PDC	Irvine	2,559,773	1,622,048	937,725	1/1/2021	12/31/2021
Northwest Power & Conservation Council	Regional Technical Forum Agrmt	Portland	2,081,000	742,629	1,338,371	1/1/2020	12/31/2024
Cascade Energy, Inc.	PE PDC 2021	Walla Walla	1,773,600	1,061,293	712,307	1/1/2021	12/31/2021
Cascade Energy, Inc.	PE PDC 2021	Walla Walla	1,740,738	1,075,227	665,511	1/1/2021	12/31/2021
RHT Energy Inc.	PE PDC 2021	Medford	1,553,763	962,856	590,907	1/1/2021	12/31/2021
CLEAResult Consulting Inc	2021 Retail PDC	Austin	1,456,941	852,073	604,868	1/1/2021	12/31/2021
Craft3	Manufactured Home Pilot Loan	Portland	1,000,000	0	1,000,000	9/20/2018	9/20/2033
NW Natural	OR GeoTEE2021Funding Agreement	Portland	644,196	0	644,196	3/1/2021	12/31/2023
Craft3	Loan Agreement	Portland	500,000	500,000	0	1/1/2018	12/31/2027
Craft3	Loan Funding for EE Projects	Portland	500,000	500,000	0	1/1/2021	9/30/2025
Balanced Energy Solutions LLC	New Homes QA Inspections	Portland	482,275	293,897	188,378	4/27/2015	12/31/2021
Evergreen Economics	2022 RES Oregon Oversample	Portland	479,685	0	479,685	3/24/2021	12/31/2022
CLEAResult Consulting Inc	2021 Residential PMC-PILOTS	Austin	449,968	0	449,968	1/1/2021	12/31/2021
Alternative Energy Systems Consulting, Inc.	TechnicalEnergy Studies& Audit	Carlsbad	420,000	34,977	385,023	7/1/2021	6/30/2024
The Cadmus Group LLC	NB 2018_19 Impact Evaluation	Portland	405,235	405,226	9	9/14/2020	12/31/2021
SBW Consulting, Inc.	2020 EB Impact Evaluation	Bellevue	375,000	0	375,000	8/12/2021	6/30/2022
CLEAResult Consulting Inc	2021 Residential PMC-CustSvc	Austin	352,403	168,510	183,893	1/1/2021	12/31/2021
The Cadmus Group LLC	2020 PE Impact Evaluation	Portland	350,000	145,362	204,638	3/30/2021	3/30/2022
TRC Environmental Corporation	2021 BE DSM PMC	Windsor	309,405	0	309,405	1/1/2021	12/31/2021
TRC Environmental Corporation	2021 BE NWN WA PMC	Windsor	305,751	200,367	105,384	1/1/2021	12/31/2021
Craft3	Loan Agreement	Portland	300,000	300,000	0	6/1/2014	6/20/2025
CLEAResult Consulting Inc	2021 Residential PMC-WA	Austin	283,263	161,191	122,072	1/1/2021	12/31/2021
Verde	DHP Installation Program	Portland	221,800	177,193	44,607	1/31/2020	12/31/2021
Ekotrop, Inc.	ModelingSoftware for NC	Boston	200,000	156,248	43,753	1/21/2020	12/31/2021
Pivotal Energy Solutions LLC	Software Product Support	Gilbert	200,000	175,974	24,027	1/1/2020	12/31/2021
The Cadmus Group LLC	Site Speciific Impact Evals	Portland	170,000	55,118	114,882	2/8/2019	12/31/2021
TRC Engineers Inc.	2021 EPS New Const PDC- WA	Irvine	142,048	101,777	40,270	1/1/2021	12/31/2021
Battele Memorial Institute	PNNIL Services Agreement		140,142	140,142	0	5/9/2019	9/30/2022

CONTRACTOR	Description	City	EST COST	Actual TTD	Remaining	Start	End
Evergreen Consulting Group, LLC	Consulting for Lighting Tool	Tigard	120,600	24,641	95,960	2/16/2021	1/31/2022
SBW Consulting, Inc.	Measure Development Support	Bellevue	100,000	57,054	42,946	5/1/2021	12/31/2021
Anchor Blue LLC	Technical Support for Planning	Vancouver	100,000	49,210	50,790	10/26/2020	12/31/2021
Evergreen Economics	DHP Controls Research Project	Portland	99,000	52,768	46,233	12/22/2020	7/31/2022
Johnson Consulting Group LLC	Res Process Evaluation	Frederick	85,000	0	85,000	8/27/2021	5/31/2022
FMYI, INC	Subscription Agreement	Portland	69,650	69,650	0	4/25/2016	2/1/2022
Opinion Dynamics Corporation	Evaluation MHR Pilot	Waltham	66,000	65,404	596	5/1/2017	12/31/2021
E Source Companies LLC	2021 Membership Agreement	Boulder	63,237	63,237	0	1/1/2021	12/31/2021
INCA Energy Efficiency, LLC	Intel Mega Projects Eval	Grinnell	55,000	42,858	12,143	8/1/2019	7/1/2022
Craft3	SWR Loan Origination/Loss Fund	Portland	55,000	18,661	36,339	1/1/2018	12/31/2021
Oregon Architecture, INC	NZEL Grants 2020-21		51,000	40,000	11,000	11/2/2020	12/31/2021
Northwest Energy Efficiency Alliance	SmartThermostatPerformance	Portland	50,000	50,000	0	9/15/2019	12/31/2021
Portland General Electric	Verfi Assistance D1X Mega Proj	Portland	45,500	27,625	17,875	1/1/2020	12/31/2021
The Cadmus Group LLC	Solar Install Requirements	Portland	44,015	42,619	1,396	12/1/2020	11/30/2021
Earth Advantage, Inc.	RealEstate Engagement	Portland	38,650	0	38,650	1/1/2021	12/31/2022
Northwest Energy Efficiency	Tool Lending Library	Seattle	37,250	36,650	600	1/1/2021	12/31/2021
Council Pivot Advising	TLM Evaluation	Portland	36,000	25,188	10,813	2/5/2021	11/30/2021
EVALUCREE	Outreach Training LATINX/HIS	rottand	35,000	5,000	30,000	1/1/2021	12/31/2021
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INCA Energy Efficiency, LLC	Red Rock Evaluation	Grinnell	30,000	5,808	24,193	6/10/2018	7/10/2021
American Council for and Energy Efficient Economy	Research Sponsorship Agreement	Washington	30,000	30,000	0	1/12/2021	12/31/2021
Home Builders Association	2021 CoSponsorship for HBA		25,000	0	25,000	8/1/2021	12/31/2021
Housing Authority of Jackson County	Manufactured Home Funding		25,000	0	25,000	11/1/2020	11/1/2021
Community Energy Project, Inc.	MF Grant Agreement	Portland	20,600	0	20,600	6/15/2021	12/31/2021
African American Alliance for Homeownership	CommunityProgramImplement ation	Portland	20,000	20,000	0	1/1/2021	12/31/2021
Northwest Earth Institute	2021 Eco Challenge Sponsorship	Portland	5,000	5,000	0	7/1/2021	12/31/2021
	Energy	Efficiency Total:	133,759,452	79,778,371	53,981,081		
Joint Programs							
ADM Associates, Inc.	Fast Feedback	Seattle	182,000	126,830	55,170	4/16/2020	6/30/2022
Apex Analytics LLC	ResidentialPayPerformance P4P	Boulder	83,000	45,454	37,546	8/1/2019	4/30/2022
Lake County Resources Initiative	EE/RE Outreach & Support		74,800	25,335	49,465	1/1/2021	12/31/2021
Structured Communications Systems, Inc.	ShoreTel Phone System Install	Clackamas	72,845	69,466	3,379	1/1/2017	12/31/2021
The Cadmus Group LLC	Solar Program Improvements	Portland	52,460	8,801	43,660	7/19/2021	6/30/2022
Consortium for Energy Efficiency	CEE 2021 Dues	Boston	36,527	36,527	0	1/1/2021	12/31/2021
Empress Rules LLC	DEI Training & Consulting		32,075	31,688	388	9/1/2019	12/31/2021
Lake County Resources Initiative	OIT EA REDA Grant Agreement		17,730	0	17,730	4/26/2021	4/15/2023
Infogroup Inc	Data License & Service Agmt	Papillion	17,000	16,404	596	2/4/2020	3/1/2022
Cheryl Roberts	DAC Consulting Services		10,000	500	9,500	4/15/2021	12/31/2021
Susan Badger-Jones	DEI Consultant Services	Joseph	7,000	1,625	5,375	2/1/2021	12/31/2021
Environmental Leadership Foundation	RAY Fellowship Agreement	•	5,500	0	5,500	7/16/2021	7/15/2023
Sherry Tran	DAC Consultant Services		4,400	2,656	1,744	1/1/2021	12/31/2021
Dolores Martinez	DAC PA Agreement		2,000	0	2,000	9/1/2021	12/31/2021
Indika Sugathadasa	DAC Consultant Services		500	500	0	3/1/2021	12/31/2021
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CONTRACTOR	Description	City	EST COST	Actual TTD	Remaining	Start	End
	Joint	Programs Total:	597,837	365,785	232,052	İ	
Renewable Energy		J		l		I	
Sunway 3, LLC	Prologis PV installation	Portland	3,405,000	2,964,146	440,854	9/30/2008	9/30/2028
Clean Water Services	Project Funding Agreement	Hillsboro	3,000,000	2,013,106	986,894	11/25/2014	11/25/2039
City of Salem	Biogas Project - Willow Lake	Salem	3,000,000	1,725,000	1,275,000	9/4/2018	11/30/2023
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Water Environment Services, A Dept. of Clackamas County	Bio Water Cogeneration System	Clackamas	1,800,000	1,000,000	800,000	11/15/2019	9/30/2041
Oregon Institute of Technology	Geothermal Resource Funding	Klamath Falls	1,550,000	1,550,000	0	9/11/2012	9/11/2032
Farmers Conservation Alliance	Irrigation Modernization	Hood River	1,500,000	1,220,068	279,932	4/1/2019	3/31/2022
Farm Power Misty Meadows LLC	Misty Meadows Biogas Facility	Mount Vernon	1,000,000	1,000,000	0	10/25/2012	10/25/2027
Three Sisters Irrigation District	TSID Hydro	Sisters	1,000,000	1,000,000	0	4/25/2012	9/30/2032
Farmers Irrigation District	FID - Plant 2 Hydro	Hood River	900,000	900,000	0	4/1/2014	4/1/2034
Three Sisters Irrigation District	Mckenize Reservoir Irrigation	Sisters	865,000	0	865,000	3/18/2019	3/17/2039
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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
Energy Assurance Company	Solar Verifier Services	Milwaukie	450,000	404,975	45,025	10/15/2020	10/14/2022
Deschutes Valley Water District	Opal Springs Hydro Project	Madras	450,000	450,000	0	1/1/2018	4/1/2040
City of Medford	750kW Combined Heat &	Medford	450,000	450,000	0	10/20/2011	10/20/2031
City of Pendleton	Power Pendleton Microturbines	Pendleton	450,000	150,000	300,000	4/20/2012	4/20/2032
RES - Ag FGO LLC	Biogas Manure Digester	Washington	441,660	441,660	0	10/27/2010	10/27/2025
NEO-Ag I GO LLC	Project	wasnington	441,000	441,000	U	10/2//2010	10/21/2023
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	400,000	0	1/1/2018	12/31/2038
SunE Solar XVI Lessor, LLC	BVT Sexton Mtn PV	Bethesda	355,412	355,412	0	5/15/2014	12/31/2034
Clty of Gresham	City of Gresham Cogen 2	Gresham	350,000	334,523	15,477	4/9/2014	7/9/2034
American Microgrid Solutions LLC	RE Feasability Analysis	Easton	207,500	197,800	9,700	11/18/2019	12/31/2021
City of Princyillo	DDA Eunding Agreement		150 000	0	150,000	4/29/2021	12/31/2021
City of Prineville City of Astoria	PDA Funding Agreement Bear Creek Funding	Astoria	150,000 143,000	143,000	0	3/24/2014	3/24/2034
City of Astoria	Agreement	Astona	143,000	143,000	Ü	3/24/2014	3/24/2004
Craft3	NON-EEAST OBR Svc Agrmt	Portland	135,000	112,500	22,500	1/1/2018	12/31/2021
Clean Power Research, LLC	License & Services Agreement	Napa	121,648	121,648	0	7/1/2021	6/30/2022
Oregon Solar Energy Industries Association	Solar soft costs install price	Portland	110,640	75,303	35,338	12/21/2018	11/30/2021
Faraday Inc	Software Services Subscription	Burlington	108,000	90,000	18,000	1/15/2019	12/14/2021
Wallowa Resources Community Solutions Inc	Rural Outreach Energy Planning	Enterprise	106,392	0	106,392	8/1/2021	8/1/2023
New Buildings Institute	GridOptimalBuildings Intiative	White Salmon	100,000	100,000	0	12/1/2019	11/30/2021
Wallowa Resources Community Solutions Inc	Renewables Field Outreach	Enterprise	95,920	94,320	1,600	3/1/2020	2/28/2022
Clean Power Research, LLC	WattPlan Software	Napa	93,800	74,000	19,800	11/17/2017	6/30/2022
Solar Oregon	Solar Education & Outreach	Portland	91,375	66,515	24,860	12/15/2019	10/31/2021
City of Hillsboro	Project Funding Agreement	Hillsboro	85,000	85,000	0	6/8/2020	12/31/2040
University of Oregon	Solar + Storage Microgrids	Eugene	85,000	51,000	34,000	12/1/2020	12/31/2021
Kendrick Business Services LLC	Small Business Financial Dev	Albany	84,750	72,854	11,896	8/1/2018	9/30/2021
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Wallowa County	Project Funding Agreement	Enterprise	80,000	80,000	0	4/1/2018	3/31/2038
Kleinschmidt Associates	Other Renewable Consulting	Pittsfield	79,400	44,369	35,031	2/1/2020	10/30/2021
Site Capture LLC	SiteCapture Subscription	Austin	78,000	69,000	9,000	2/1/2018	1/31/2022
SPS of Oregon Inc	Project Funding Agreement	Wallowa	75,000	74,513	488	10/15/2015	10/31/2036
TRC Engineers Inc.	2021 EPS New Const-Solar	Irvine	55,695	33,521	22,175	1/1/2021	12/31/2021
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CONTRACTOR	Description	City	EST COST	Actual TTD	Remaining	Start	End
Oregon Solar Energy Fund	Solar Education Training	Portland	46,626	7,914	38,712	3/10/2020	12/31/2021
Clean Energy States Alliance	Memorandum of Understanding	Montpelier	39,500	39,500	0	7/1/2021	6/30/2022
Oregon Solar Energy Fund	Workforce Trainings	Portland	33,000	2,978	30,022	4/16/2021	4/30/2022
Oregon Solar Energy Industries Association	2021 Sponsorship for OSEC	Portland	24,500	24,500	0	12/15/2020	12/31/2021
Robert Migliori	42kW wind energy system	Newberg	24,125	24,125	0	4/11/2007	1/31/2024
Rogue Climate	Solarize Campaign		22,840	7,000	15,840	1/1/2020	8/31/2021
Solar Oregon	Go Zero Tour Sponsorship	Portland	22,000	22,000	0	4/1/2021	12/31/2021
ICF Resources, LLC	Spark Lab Remote Workshops	Fairfax	17,500	0	17,500	8/1/2021	12/31/2021
OS Engineering	City of Medford Technical Memo		15,818	10,665	5,153	5/17/2021	8/31/2021
Farmers Conservation Alliance	East MiddleFork Ribbon Cutting	Hood River	10,975	10,975	0	5/1/2021	7/31/2021
Oregon Solar Energy Fund	2021 SponsorSolar CareerExpo	Portland	10,000	0	10,000	8/1/2021	12/31/2021
	Renewa	ble Energy Total:	25,501,736	19,405,047	6,096,689		
		Grand Total:	177,876,672	110,289,784	67,586,888	j	
	Contracts without	154,278,315	92,307,772	61,970,543			
	Renewable Energy	23,598,357	17,982,012	5,616,345			
Energy Efficiency Incentives Total:			0	0	0	1	

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Finance Committee Meeting Notes

July 27, 2021 2:00 pm

Board attending: Susan Brodahl (Chair), Henry Lorenzen, Roland Risser

Board absent: Anne Root, Melissa Cribbins (ex officio)

Staff attending: Pati Presnail (staff liaison), Amber Cole, Cheryle Easton, Debbie Menashe, Michael Colgrove, Michael Spampinato, Steve Lacey, Tracy Scott

Pati Presnail called the meeting to order at 2:00 p.m.

2022/23 Budget and Action Plan check in

Following the Board Learning Session about the budget process, staff asked committee members for questions or recommendations.

Henry asked about the Utility and OPUC influences on the budget and gaining visibility into that process. Michael responded that staff intend to share these insights throughout the process which is beginning in July. Staff will work on a format that brings insights back to the finance committee at each of its upcoming meetings.

Another suggestion was to share the 'known unknowns' document that staff send to OPUC. This information will help in framing the budget workshop by calling attention to external risks and opportunities that may influence the budget. The committee agreed this would be insightful. Amber confirmed that the draft could be ready for the August Finance Committee meeting.

The committee asked for more visibility into the budget buildup and trade off decisions. Michael said the next budget engagement with the board is October 13, 2021 with Board, RAC, CAC, DAC in a three-hour budget workshop, leveraging the information about the tools and process shared at the board learning session.

Impact of the HB 3141

Steve Lacey informed the committee of the internal staff tiger team that has been assembled to translate HB3141 as it relates to Energy Trust policies and procedures. The OPUC is interested in Energy Trust's viewpoint, but ultimately will be responsible for the implementation. We do not expect any changes in our budget or budget process this year, for 2022. Staff will keep the committee and the board informed as work continues.

June 2021 Financials Review

Pati reviewed the June 2021 financial reports.

During the net asset review, Susan asked about the other funding sources, rationale for interest distribution and transfer of funds to development. She requested more detailed financials for the other funding sources, and a label change to better explain Washington. Michael and Pati both referenced the Net Asset policy which gives the finance committee authority to set program reserves and to instruct staff to sweep excess funds to development during the budget process.

Energy Trust is in compliance with the OPUC performance measures for administrative and program support costs and for staffing costs. Staffing costs are well below the plan due to unfilled staff positions that will be filled in the next few months.

Incentives to date by program were discussed. The overall variance is near \$1 million, which as a percent of budget is very low. We had just amended the budget in the spring, so this lower variance is to be expected. Residential is above budget, Industry and Agriculture below budget. Pati acknowledged this is an area of interest for the committee and referred again to board policies that put constraints in place.

Henry and Roland inquired about industry statistics that measure incentives as a percent of total budget, and how Energy Trust measures up. Pati, Steve, and Michael described the CEE study, and mentioned the possibility of asking E-Source for a survey. Michael explained this statistic might be interesting, but not necessarily a good measure of success because it doesn't track expenses to support customer adoption of measures beyond the first-cost barrier. Many programs provide technical assistance, education and awareness that can also drive adoption of measures but are not counted in the incentive metric. Steve described the reaction to Washington costs – that initially there was concern that non-incentives were on the high side, but our results of acquiring savings was very strong, and supports a cost structure that gets results.

2021 Q2 forecast for energy savings and generation, versus budget.

Tracy Scott reviewed the Q2 forecasts, providing the committee with some early insights on Incentive spending expected for the year. These are early forecast and may change.

Adjourned

The meeting was adjourned at 3:16 p.m.

Next meeting: August 31, 2021 2:00-3:30 p.m.

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Finance Committee Meeting Notes

August 31, 2021 2:00 p.m.

Board Attending by teleconference: Susan Brodahl (Chair), Anne Root, Henry Lorenzen, Roland Risser, Melissa Cribbins (ex officio)

Staff attending: Pati Presnail (staff liaison), Amber Cole, Debbie Menashe, Elaine Dado, Karin Murray, Michael Colgrove, Steve Lacey,

Others in attendance: Joe Critelli, PROCOR

Chair Susan Brodahl opened the meeting at 2:00 p.m.

PROCOR Presentation – analysis and recommendations for the emergency reserves

Joe Critelli with PROCOR presented an analysis of the emergency cash reserves. His analysis indicates that \$3 million would be adequate, given the revenue flow and insurance coverages. Staff and committee members thanked Joe for his time and expertise.

The committee asked staff to propose how to handle the reduction of the emergency reserve by \$2 million. A proposal will be brought back to the September finance committee meeting, and if acceptable, to the full board at its next meeting.

July 2021 Financial Statements

Pati presented the July financials. Revenue is slightly above budget. Expenditures are on track against budget. Staffing costs are below budget due to vacant positions. The lower costs in 2021 may create an optics issue in 2022 when comparing year over year changes. Staff are keeping the Oregon Public Utility Commission and the finance committee appraised as time progresses.

Budget Developments update

Staff provided an overview of Utility Engagements to date.

- Pati provided a summary of some best practices they will exercise as they move through this process.
- Tracy shared feedback that due to COVID there has been some market shifting.
 - Residential customers that were able to work from home and had money to make improvements
 - o Commercial customers that were also able to continue doing work.
 - Utilities were extremely interested in these new opportunities resulting from COVID.
- Steve Lacey added that the Utilities are tariff adjustment averse and want to hold the plan levels while looking at new opportunities.

Overview of communications of risk factors "unknowns."

- New Inputs & Emerging Information August 2021 (PPP)
- The unknown memo will be included in presentation at October board meeting.
- Staff requested if the committee felt the document was clearly stated the risks. Roland felt it was clear.

Michael shared with the committee that these risks and the intel we collect through the
meetings with utilities and stakeholders through the next months will be the basis of the
budget workshop. We will not present detailed draft budget; spend more time speaking
around the uncertainties and how we derive those numbers.

Susan would like to include market trends in our risks.

- Steve informed the committee that the planning group pays particular attention to market trends and where the market is going to provide indicators as market intelligence.
- Tracy informed the committee the planning assumptions memo document that the programs are using for shaping their action plans and narratives for the 2022 budget.
- Susan asked if the planning assumptions could be a memo bullet point memo that is summarized it for the board's budget materials.
- Michael informed that they are trying to include the highest level of market intelligence risk into the budget workshop.

Pati addressed the benefits renewal at 20% last year has been able to be reduced to 8%.

 Amanda Sales continues to work with Susan's consultation to see if that can be improved further.

House Bill 3141 internal group working with Oregon Public Utility Commission on reworking the grant agreement.

• Oregon Public Utility Commission staff will be defining the language around reaching 25% of low and moderate income customers and this will shape the renewables budget.

R.1 2022 Board Services Budget

Elaine Dado presented R1 Board Governance budget briefing paper and asked if there were any questions of the support budget that Cheryle Easton prepared. This was information for the board to see how the support budget was built.

Debbie Menashe and Michael provided background information Cheryle used to develop the proposed budget. Michael shared that the full board services budget falls in the administrative cost portion of the budget. We may need to make cuts to the Board Services Budget numbers presented to the committee to meet the Oregon Public Utility Commission administrative performance measures.

Committee will have a follow up conversation in September when the level of cuts needed are known to meet the performance measures.

Adjourned

The meeting was adjourned 3:24 p.m.

Next meeting: September 27, 2021 2:00-3:30 p.m.

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Finance Committee Meeting Notes

September 27, 2021 2:00 p.m.

Board members in attendance:

Susan Brodahl (chair), Henry Lorenzen, Roland Risser

Board members absent: Anne Root, Melissa Cribbins (ex officio)

Staff in attendance:

Pati Presnail (staff liaison), Amber Cole, Cheryle Easton, Karin Murray, Michael Colgrove, Michelle Spampinato, Steve Lacey, Tracy Scott

Chair Susan Brodahl opened the meeting at 2:01 p.m.

August 2021 Financial Statements

Pati presented the August Financial statements, highlighting a few areas. Revenue from utilities is higher than budget by 5%, spending is lower than budget to date. Susan inquired about underspending in professional services.

Pati presented an ad hoc analysis of sector-level variances, to demonstrate the board policy on obtaining board approval to transfer budget between sectors. From this came a good conversation about trends in the Industry and Ag program and impact of large project delays.

Update Board Services Budget

Cheryle Easton provided an update on the adjusted Board Governance 2022-2023 Budget. The changes were needed across the organization to keep administrative costs under the Performance measure.

Budget Development updates

Pati gave an update on meetings with OPUC and the utilities, with insights learned in those sessions.

Recommended allocation of excess Emergency Contingency Funds to Operational Contingency

Last month, a risk management analyst reported his findings on the sufficiency of Energy Trust's emergency reserve. He recommended an emergency reserve of \$3 million. This creates an opportunity to transfer \$2 million for other purposes. Steve presented a recommendation that we transfer \$2 million to the operational contingency reserve. The committee agreed, and will support a resolution to the board to the effect.

Adjourned meeting

The meeting was adjourned at 3:40 p.m.

The next meeting for the Finance Committee will be October 25, 2021 3:00 p.m., via **Zoom.** (this is a change from the original October 6th date)

Tab 7

Policy Committee Meeting Notes



September 9, 2021 Conducted via Zoom Teleconference

Board Members Attending: Henry Lorenzen (Chair), Alan Meyer, Eric Hayes, Letha Tawney (Oregon Public Utility Commission ex-officio), Melissa Cribbins(ex-officio), Susan Brodahl,

Staff Attending: Debbie Menashe (Staff Liaison), Adam Bartini, Amanda Potter, Amber Cole, Betsy Kauffman, Cheryle Easton, Fred Gordon, Kirstin Pinit, Michael Colgrove, Steve Lacey, Tracy Scott

Chair Henry Lorenzen called the meeting to order.

Staff Presentation of Industrial & Agriculture Program Structure and Planned Request for Proposal Process and Scope

Pursuant to the board's Contract Execution and Oversight Policy, staff reviews the basic terms of planned competitive bid processes for large contracts with the board. Industrial & Agriculture Sector Lead, Amanda Potter, previewed an informational full board presentation on the upcoming competitive request for proposals for program management and delivery services for the Industrial & Agriculture program. Amanda explained the team's review of various options for the design of the proposed request for proposal (RFP) document. Staff expects to issue an RFP that seeks a single program management contractor for the program across the Energy Trust service territory.

Committee members asked questions about the proposed structure for the RFP, noting that the proposed PMC structure was used in the program in prior year. Amanda explained that the program has grown and become more complex. The PMC model frees time for Energy Trust staff to focus on program design and advancement. Committee members also asked question about contract performance requirements envisioned, and staff responded.

Consent and Appointment of Member to Renewable Advisory Council (RAC)

Pursuant to board policy, Energy Trust staff requested Policy Committee approval for an appointment to the RAC. Renewables Sector Lead Betsy Kauffman submitted one name for approval and notified the committee of two departures from the RAC. Chair Henry Lorenzen asked committee members to submit any suggestions for future RAC members to Betsy.

Betsy then recommended Angela Crowley-Koch for RAC membership. Angela is the executive director of the Oregon Solar and Storage Industry Association, the trade association for solar contractors and storage contractors. Angela brings a wealth of expertise on the solar industry as well as understanding of the broader sustainability and policy landscape. She has served as the Legislative Director at Oregon Environmental Council, an assistant to Senator Jeff Merkley, and executive director of Oregon Physicians for Social Responsibility. OSSIA is a key constituent of Energy Trust's solar program. Angela would replace Kendra Hubbard, a former OSSIA board member who is stepping away from RAC service.

Betsy also advised the committee that Andria Jacob, Climate Policy and Program Manager for the city of Portland, is stepping down from the RAC. Andria has been a long-time RAC member who has provided municipal perspective. Committee members recommended that Andria's service be acknowledged by the full board.

Policies to review

4.15.000-P Renewable Energy Certificate Policy- Betsy Kauffman recommend a minor but important revision to the Renewable Energy Certificate (REC) Policy.

In Section 2 of the policy, projects of "less than 360kW in nameplate AC capacity are excluded; Energy Trust does not take ownership of RECs in projects of this size. This threshold capacity size exclusion was added to the policy in 2018 (i) to align with the Western Renewable Energy Generation Information System (WREGIS) requirements and (ii) to permit projects of this size to participate in the Oregon Public Utility Commission's Community Solar Program (the Community Solar Program) and be eligible for Energy Trust Solar Program Incentives. The WREGIS threshold and the eligibility for Community Solar Program participation requires projects to be "less than *or equal to* 360kW" (emphasis added) in nameplate AC capacity. Energy Trust staff recommended adding "or equal to" to the REC policy language in order to align.

Committee members supported the recommendation and asked staff to review the policy to make sure all necessary changes were added to affect the correction. The Policy Committee approved the revisions to the policy and recommended that the revised REC Policy be forwarded to the full board for approval on its consent agenda.

4.18.000-P Economic Development Policy

Staff recommended revisions to the Economic Development Policy. These revisions resulted from staff conversations with board member Erik Andersson for direction and thoughts on the policy. Staff reported that Erik has indicated his support for the draft because it is more specific in describing how Energy Trust can support economic development activities at the state, local and business level.

Committee members asked a number of questions and suggested language changes to make the policy clearer and to ensure that it is read to cover working with jurisdictional agencies as well as economic development entities. Committee members also requested that staff share the draft policy with Energy Trust's utility liaisons for their input.

Staff will revise the policy draft in accordance with the Committee's suggestions and then engage utility liaisons. Staff will then return to the Committee at a future meeting with the results of these changes and engagements.

Debbie Menashe then briefed the Committee on upcoming policy work. The board's ongoing Board Roles and Responsibilities and Structure work and the passage of HB 3141 earlier in the year will require a review of many, possibly even a majority of, board policies. Debbie also advised that there may be new policy development in response to HB 3141 so there is a busy year ahead. Board members discussed the potential for new policy development and review and the need to connect with the OPUC and Energy Trust's utility funders through this work.

Staff and Committee Member Updates

Executive Director Michael Colgrove updated the committee members on two matters. Michael first discussed a recent communication from several stakeholders regarding Energy Trust's Fuel Switching Policy regarding the role of natural gas incentive programs in carbon mitigation. Committee members discussed the complexity of this issue. Michael advised that a draft response letter will be circulated to the entire board for review, and then President Melissa Cribbins will respond. Committee members recognized that this issue will be part of a continuing public conversation involving the gas utilities and many other stakeholders.

Michael also updated the committee on the proposal to reallocate a portion of the current Emergency Contingency Reserve. The proposal will be presented to the full board at the October board meeting. The adjustment proposed is based on a study to review needed amounts of Emergency Contingency Reserve and conducted by Procor, Inc. Michael reported that the results of the study were previously presented to the Finance Committee. The study concluded that an appropriate level of \$3 million was an appropriate amount for the reserve, which is \$2 million more than the current emergency reserve level. Michael and Steve Lacey, Director of Operations, expressed appreciation to Susan Brodahl for her assistance in engaging Procor, Inc. for the study.

Committee members then discussed a number of current topics, including advisory council engagement, as well as equity measures, Energy Trust roles, and Grant Agreement implications emerging from HB 3141. Discussion continued regarding the various assistance and support programs for low income utility customers. Michael responded that in 2022, staff intends to explore Energy Trust's role in low-income programming relative to other entities like OHCS, CAPO, and the utilities. Staff will provide an update to the board on this work next year.

Committee members expressed appreciation for the discussion.

Adjourned meeting

The meeting was adjourned at 3:00 pm

The next meeting of the Policy Committee is scheduled for November 3, 2021, 1:00-3:00 pm

Tab 8

Strategic Planning Committee Meeting Notes

August 17, 2021, 1 p.m.

Board members in attendance

Mark Kendall (committee chair), Alexia Kelly (committee member), Lindsey Hardy (committee member), Roland Risser (committee member), Ruchi Sadhir (committee ex officio), Anna Kim (for Commissioner Tawney, committee ex officio), Alan Meyer, Eric Hayes, Henry Lorenzen, Ernesto Fonseca

Board members absent

Melissa Cribbins (committee ex officio)

Staff in attendance

Amber Cole, Michael Colgrove, Hannah Cruz, Cheryle Easton, Fred Gordon, Debbie Menashe, Spencer Moersfelder, Greg Stokes, Lizzie Rubado, Tracy Scott, Pati Presnail, Steve Lacey

Public in attendance

Lisa McGarity, Sherry Tran, Susan Stratton

Introductions

Mark welcomed any members of the public and clarified that this meeting is a regular meeting of the Energy Trust Strategic Planning Committee. Other directors who are not regular members of the committee wanted to attend this meeting, so it was publicized as a public meeting in case this resulted in a quorum of the board. He clarified that the committee would not be making any board decisions.

May Board Meeting Annual Strategic Planning Presentation Debrief

The committee and attending directors discussed feedback on the annual strategic planning presentation at the May 2021 board meeting and provided guidance to staff for the 2022 presentation.

Feedback was varied. Some directors supported a higher-level presentation, like the one staff gave, which centered on highlights and storytelling to illustrate progress to the strategic plan's focus areas and achievement to metrics and progress indicators. Other directors supported a more detailed presentation, citing the full board does not see the detailed quarterly dashboard updates that the committee receives and the board's responsibility to ensure achievement to the reporting targets set for each progress indicator.

Directors agreed that stories are useful to illustrate activities. Several board members noted the value of stories that help explain Energy Trust's work, and that these stories are important for board members to be able to communicate about Energy Trust in their communities.

Directors suggested the next presentation continue to use some stories and provide more information on each focus area's individual metrics and targets. The presentation should highlight the metrics and where the organization is off or on track, and the board should be provided with the reporting dashboard as a reference document to access more details behind the status of each metric. The committee chair should also raise key questions or concerns and the full board allowed to discuss them. The directors noted there is benefit in focusing the presentation on both positive and negative outliers.

Staff thanked the committee and board for their openness to trying a different style of progress reporting this past year.

SB 1149 Signpost and Passage of HB 3141

Hannah Cruz presented on the potential strategic plan implications from HB 3141, a law passed in the 2021 state legislative session that modernizes the public purpose charge.

When approved by the board in 2019, the 2020-2024 Strategic Plan contained an assumption that the public purpose charge sunset of January 1, 2026, would be removed or extended during the plan timeframe. This was designated as a signpost for the strategic planning committee to monitor. The passage of HB 3141 verified this assumption by extending the public purpose charge sunset for renewables funding to 2036 and removing the sunset for energy efficiency funding.

HB 3141 includes several provisions in addition to the extended sunset. Among other changes, they include new uses for renewables funding, including funding distribution system connected technologies and dedicating 25 percent of funds to benefit low- and moderate-income customers. Social equity and environmental justice directions were also added, with a requirement for the OPUC to set equity metrics on the expenditures of funds by Energy Trust. For energy efficiency, the law streamlined authorization for electric efficiency funding and made adjustments to large customer funding levels over the next 14 years. The law also directs Energy Trust and each utility to jointly develop budgets annually through a public process.

After comparing the legislation to the strategic plan's focus areas, strategies and stated organizational role, staff recommended making no material changes to the plan. This is because the legislation does not change Energy Trust's role, and the focus areas are flexible enough to allow staff and the organization to adjust and respond to the new directions in the law. Staff recommends a minor update to the Plan Management section of the plan to reflect the passage of the signpost.

The committee noted the plan anticipated many of these shifts and asked if there are new areas that need to be added or emphasized. Staff noted that the plan incorporates flexibility for staff to respond to changing policy and market context, and pursue new opportunities that align with serving all utility customers with cost-effective energy efficiency and renewable power. The plan already provides for changes in policy.

The committee chair noted the legislation provides for a number of substantive changes, but not at a level that changes the focus areas in the strategic plan. The strategies in the plan account for the purposes and priorities of the new legislation and do not need to change. New or modified metrics might be called for to help measure progress at these levels. Staff will assess the reporting dashboard and its metrics and targets to ensure appropriate reporting in 2022 and beyond.

The committee asked when the Oregon Public Utility Commission will conclude the rulemaking process on the majority of the items raised by the new legislation. Anna Kim responded that the priority for this year would be focused on ensuring the correct rates are collected from customers. Other activities could be deferred until next year and would not be concluded until the end of 2022. OPUC is still assessing what needs to be done inside and outside of rulemaking. Energy Trust's budget process will proceed this year per normal. If changes are warranted, those will occur no earlier than next year.

The committee concurred that no changes to the plan are indicated, and asked staff to provide an update in mid-2022 when more is known through the OPUC rulemaking processes.

Q1-2 2021 Dashboard Update and Review

The strategic plan dashboard was updated with information available as of Q2 2021, and Greg Stokes provided background on the targets and metrics for each focus area while reviewing progress made to those targets through Q2 2021.

After walking through how metrics and targets flowed from each progress indicator in the plan, Greg reviewed updates for Focus Area 1. The business plan forecasts that the organization is on track to achieve the target ratio for core, adjacent and transformational innovation in 2022, after being off track in two of those categories for 2021. There have not been updates to the other metrics in this area since the last update.

In Focus Area 2, Greg noted that the second Targeted Load Management (TLM) milestone has been reached. This milestone ensures semi-automated procedures are in place for extracting and summarizing data by location for TLM projects. The two Pacific Power TLM projects progressed, and a new TLM project with NW Natural is pending.

In Focus Area 3, the dashboard was updated to reflect the 11 major policy initiatives to which Energy Trust is, or has, contributed data or expertise. Anna Kim noted that Energy Trust's support was a positive contribution to an OPUC workshop on how to serve more low-income customers with energy efficiency.

For Focus Area 4, there are no updates to the numeric metrics. Greg noted that conversations are underway with gas utilities on carbon reduction opportunities.

For Focus Area 5, Greg noted that the 2020 DEI Operations Plan goals were revised and extended through 2021, and that revised Energy Trusts metrics related to recruitment, which are in progress.

Committee members shared that the metrics are clear and understandable. They suggested staff might want the dashboard to indicate which areas are new to Energy Trust, and to be clear in where we are in the process of learning, piloting and scaling our work in an area.

Members emphasized the importance of Energy Trust's work and expert contributions in Focus Area 3 (Policy engagement) for public benefit and ratepayer impact, particularly on behalf of underrepresented customers and communities. And underlined that Focus Area 4 work (leveraging funding) is critical, particularly in light of the increase in federal funding for clean energy and resilience.

A board member asked what the role of the board is with regards to approving the metrics. Mike explained that the draft metrics were presented to the board for review, input and approval in May 2020. At that time, all but 3 metrics were ready for board review and approval. For the remaining 3 metrics, two are in development with staff and will be reviewed by the committee in November. In the case of the third metric, the Board DEI metric, a placeholder was included in May 2020, pending formation of the board ad hoc DEI committee, which would develop a metric for Board diversity.

Staff will review the proposed methodologies for tracking community partnerships and tracking savings and generation resulting from leveraging other funding at the November committee meeting.

Meeting adjourned at approximately 2:30 p.m. The next meeting for the committee will be November 30, 2021.	

Tab 9



Conservation Advisory Council Meeting Notes

August 4, 2021

Attending from the council:

Jeff Bissonnette, NW Energy Coalition

Andy Cameron (for Roger Kainu), Oregon Department of Energy

Jess Kincaid, Bonneville Power Administration

Matthew Tidwell (for Jason Klotz), Portland General Electric

Kari Greer, Pacific Power Rick Hodges, NW Natural

Tina Jayaweera, NW Power and Conservation Council Kerry Meade, Northwest Energy Efficiency Council

Lisa McGarity, Avista

Becky Walker, Northwest Energy Efficiency Alliance

Tim Hendricks, Building Owners and Managers Association

Attending from Energy Trust:

Hannah Cruz Kate Wellington Mike Colarove Amanda Potter Elizabeth Fox Adam Bartini **Emily Findley** Jessica Kramer **Emily Estrada** Amanda Thompson Emma Clark Amanda Zuniga Alex Novie Dan Rubado Thad Roth Jay Ward Quinn Cherf Amber Cole Caryn Appler Kirstin Pinit Fred Gordon Mark Wyman Marshall Johnson Sue Fletcher Jay Olson Sletsy Dlamini Jackie Goss Scott Leonard

Bayo Ware Spencer Moersfelder

Kyle Morrill Steve Lacey Ian Pagatpatan Tracy Scott

Others attending:

Alan Meyer, Energy Trust board Elias Pite, Henkels Law Joe Marcotte, TRC Adam Shick, CLEAResult Jenny Sorich, CLEAResult

Chad Balthazor, Cascade Energy
Brien Sipe, CLEAResult
Brooke Landon, CLEAResult
Chris Smith, Energy 350

Misti Nelmes, CLEAResult
Patrick Murphy, CLEAResult
Randall Olsen, Community Action
Organization of Washington County

Cindy Strecker, CLEAResult Tom Elliott, Oregon Department of Energy

1. Welcome

Hannah Cruz, senior communications manager, convened the meeting at 1:32 p.m. via Zoom. The agenda, notes and presentation materials are available at www.energytrust.org/about/public-meetings/conservation-advisory-council-meetings.

Hannah Cruz opened with a summary of the agenda and led a round of introductions among the Conservation Advisory Council and board members. Hannah Cruz stated that representatives from low-income customer organizations had been invited to attend the meeting.

Hannah Cruz invited feedback on notes from the June meeting, and they were approved with no changes.

2. Exploration of ways to provide cost-effective energy efficiency measures to DEI communities

Topic summary

Oregon Public Utility Commission (OPUC) has been having broader conversations about costeffectiveness and exploring ways Energy Trust can better address energy burden within the existing framework. These two topics emerged at a public OPUC workshop in April as possible ways to expand measure availability for customers with limited incomes.

Estimation of non-energy benefit impacts of reduced utility customer arrearages from energy-saving measures

Energy Trust presented an analysis to estimate the impact that energy savings can have on reducing arrearages, or debt from past-due customer utility bills, for utilities as a non-energy benefit. Since the beginning of the COVID-19 pandemic, the total amount of arrearages has grown and become more widespread in Energy Trust service territory. Stakeholders have asked whether there is value in reducing these arrearages in order to make energy-efficiency measures more available to impacted customers.

Energy Trust staff used a proxy calculation framework and some borrowed assumptions to calculate the value of reducing utility expenses associated with arrearages and then applied these values as non-energy benefits to the Utility Cost Test and Total Resource Cost test to understand the impact that these values have on the overall cost-effectiveness of measures. Typically, non-energy benefits are only applied to the numerator of the Total Resource Cost test. However, because these non-energy benefits directly impact utilities, these benefits were also applied in the numerator of the Utility Cost Test.

Outcomes of this analysis demonstrated that this set of non-energy benefits can increase the incentive cap on the tested measures, though not by a significant amount. Current incentive levels for these measures are already well below the current maximum incentive that could be offered due to budgeting and program delivery decisions. In addition, results indicate that these non-energy benefits would not significantly increase the benefit-cost ratio for the Total Resource Cost test.

This particular analysis required a significant investment of resources and the results did not significantly change the outcomes of the cost-effectiveness of the tested measures based on the results of the Utility Cost Test or Total Resource Cost test. Energy Trust can still pursue cost-effectiveness exceptions with the OPUC for measures targeted at limited-income customers. Furthermore, emerging policies which arise from recent Oregon state legislation could reshape the framework that establishes how Energy Trust serves these customers.

Discussion

Council members asked clarifying questions about the methodology throughout the presentation including: whether the test defines measure life as the life of the measure or the duration of the non-energy benefit being investigated (Lisa McGarity); how durable is the arrearage data given

that it is based on a limited timeframe and may change if COVID-19 ceases to have an impact in the future (Kari Greer); if the study considered electric and gas arrearages separately or as an average (Lisa McGarity) and if the study quantified the theoretical value of reducing arrearages that could reoccur throughout a measure life (Lisa McGarity). An attendee asked whether the study could account for low-income customers who pay for utility bills using a credit card and accrue interest (Brien Sipe).

Next steps

Energy Trust will continue to strategically identify and analyze non-energy benefits that have the potential to significantly contribute to the overall cost-effectiveness of measures intended to help limited-income customers.

Energy Trust co-funding results with Community Action Organization of Washington County

Topic summary

Marshall Johnson, senior program manager, presented a summary of results from a collaboration to fund energy-saving improvements in low-income customer homes served by Community Action Organization of Washington County (CAO).

Starting in 2019, OPUC expanded the public purpose charge framework to allow Energy Trust and Oregon Housing and Community Services (OHCS) to co-fund measures benefitting low-income customers with energy efficiency and weatherization measures. The framework allows Energy Trust to claim savings for the co-funded measures. Energy Trust worked with Portland General Electric to identify CAO as a candidate to begin applying this framework with weatherization and HVAC measures.

After a pilot year, the effort was renewed for additional program years. The pandemic created challenges for CAO with reaching customers and spending program funds due to labor and material shortages, resulting in a remaining pipeline of projects to complete when resources are available.

Randall Olsen from CAO provided insights from the collaboration, and shared that the overall experience has been positive, and allowed them to weatherize more homes and install more measures in those homes. One lesson learned was a need to for the two organizations to align terminology.

Discussion

Council members expressed support for the co-funding framework and offered suggestions including: Department of Environmental Quality's Climate Protection Program could be a source of funding in 2022 to work with nonprofits to deliver measures that reduce greenhouse gas emissions (Lisa McGarity); Bonneville Power Administration is working on a marketing plan for underserved communities through the Comfort Ready Home program, which includes increasing outreach to tribes and a team dedicated to tribal relations that could be a resource (Jess Kincaid); and a suggestion that Energy Trust should continue presenting on its growing focus on outreach and partnerships with community-based organizations (Lisa McGarity).

Next steps

Energy Trust will continue this co-funding effort and develop a proposal with key metrics to share with the OPUC. There are also plans to apply this framework to manufactured home replacement opportunities with additional agencies.

3. HB 3141 passage and implementation

Topic summary

Hannah Cruz reviewed the passage and impacts of HB 3141, the public purpose charge modernization law that affirms and advances the work of Energy Trust as a nongovernmental entity investing utility customer funds in energy efficiency and small-scale renewable energy. The bill's passage took place late in the session and is the result of a two-year long effort with public purpose charge supporters led by Governor Brown's office. Energy Trust participated in stakeholder meetings and provided testimony and information upon request.

Hannah Cruz clarified that the law will take effect January 1, 2022 and resulting changes in funding allocations will not impact Energy Trust's 2021 budget. The law removes the sunset for energy-efficiency funding and extends the 2025 sunset by 10 years for renewable energy, low-income efficiency, affordable housing and school building conservation. HB 3141 expands how funding for renewable energy can be used, including for distribution-system connected technology and low-income benefits. The OPUC is expected to define the implementation timeline this summer for the energy efficiency and renewable energy provisions. Energy Trust has formed an internal team to ensure it can respond to requests related to implementing HB 3141.

Discussion

No council discussion. An attendee asked if the bill introduced any additional definition or insight on the requirement to pursue all cost-effective energy efficiency, and if that could lead to additional funding given the high level of recent program activity (Chris Smith). Hannah Cruz shared there is no change to the ability to plan for and pursue all cost-effective energy efficiency.

Next steps

The internal team will continue to support the OPUC with information requests as they begin implementing the law.

4. Member share-out

Topic summary

Council members were invited to share what their organizations are focused on at this time; particularly, planning efforts and actions to support customers with their energy efficiency goals and needs.

Discussion

Council members stressed that the coming year is likely to bring the need for even more stakeholder engagement, particularly small nonprofits and community-based organizations. Members advised Energy Trust to be proactive about coordinating engagements with utilities and other entities when possible in order to avoid exhausting mutual stakeholders by overengaging them (Kari Greer, Matthew Tidwell).

Next steps

None.

5. Public comment

There was no public comment.

6. Adjournment

The meeting adjourned at 3:27 p.m. The next meeting will be held on September 15, 2021.

Tab 10



Renewable Energy Advisory Council Meeting Notes

July 28, 2021

Attending from the council:

Anna Kim, Oregon Public Utility
Commission
Erik Anderson, Pacific Power
Jaimes Valdez, Portland Clean Energy
Community Benefits Fund
John Cornwell, Oregon Department of
Energy

Josh Peterson, University of Oregon Solar Radiation Monitoring Lab Les Perkins, Farmers Irrigation District Max Greene, Renewable NW Raphaela Hsu-Flanders, Bonneville Environmental Foundation Suzanne Leta. SunPower

Attending from Energy Trust:

Adewale Adesanya Albert Stanfield Alina Lambert Amber Cole **Bayo Ware** Betsy Kauffman Chervle Easton Dave McClelland Dave Moldal Elaine Dado Emily Estrada Emma Clark Frederick Gordon Hannah Cruz Ian Brysen Pagatpatan Jay Ward

Jeni Hall
Kyle Petrocine
Lizzie Rubado
MacKenzie Kurtzner
Matt Getchell
Michael Colgrove
Peter West
Robert Wyllie
Shelly Carlton
Sue Fletcher
Susan Jowaiszas
Taylor Navesken
Tracy Scott

Others attending:

Alexia Kelly, Energy Trust Board Angela Crowley-Koch, Oregon Solar + Storage Industries Association David Beaulieu, TRC Elee Jen, Energy Trust Board Jed Jorgensen, Farmers Conservation Alliance Kacia Brockman, Oregon Public Utility Commission Rachel Shimshak Ryan Harvey, Pacific Corp. Tess Jordan, Portland General Electric Timothy Tutt Warren Leon, Clean Energy States Alliance

1. Welcome, Introductions and Announcements

Betsy Kauffman, sector lead for renewables, convened the meeting at 9:02 a.m. on Zoom. The agenda, notes and presentation materials are available on Energy Trust's website at https://www.energytrust.org/about/public-meetings/renewable-energy-advisory-council-meetings/.

Betsy Kauffman announced the passing of House Bill 3141 that extends Energy Trust renewable energy funding through 2035. Tracy Scott, director of energy programs, Ian Brysen Pagatpatan, renewables intern, Taylor Navesken, renewables intern and Bayo Ware, solar project manager introduced themselves as new Energy Trust staff.

2. RAC input into 2022-23 Budget and Action Plan

Topic summary

Betsy Kauffman led a discussion on budget management for the renewables team. Staff is seeking information on Renewable Energy Advisory Council priorities regarding work generally, equity work, community partnerships, workforce development and resilience. There are competing demands for funding, particularly in Pacific Power territory. Council members were divided into breakout rooms to dive more deeply into their priorities for Energy Trust activities.

Discussion

Members asked for clarification on the organization's draft 2022 goal to: "Advance development as a core function that enhances the value energy efficiency and renewable energy provide our customers and communities" (Tess Jordan). Staff clarified that this means that the organization wants to improve its ability to obtain outside funding to stretch current dollars further and broaden Energy Trust's reach (Betsy Kauffman, Tracy Scott).

Members discussed that Energy Trust should focus on Community Solar Program, Equitable Solar Initiative, and Solar Within Reach projects (Raphaela Hsu-Flanders). Attendees commented that solar without storage doesn't help meet climate goals (Alexia Kelly) and that Energy Trust should continue to provide a broad perspective on the solar industry and focus on assisting customers in shaping load and using grid interactive technology (Kacia Brockman). Members supported focusing on making critical facilities resilient and supporting community hubs that will provide safety during extreme weather events (Jaimes Valdez).

Unsticking parts of the market that are currently stuck should be prioritized, such as the Community Solar Program (Jed Jorgensen, Jaimes Valdez) and irrigation modernization projects should continue to be funded (Jed Jorgensen). Attendees commented that small Community Solar Program projects that have multiple community benefits and have the opportunity to focus on low-income participation should be prioritized (Jaimes Valdez, Tess Jordan). Members stated that more dollars should be focused on resilience projects with solar and reduced incentives for single-family solar systems that aren't providing multiple benefits to the community (Max Greene).

Attendees expressed that Energy Trust should continue to support early-stage feasibility and community support with a focus on resilience, obtaining grants and financial assistance to local communities, such as matching FEMA funding (Alexia Kelly). Assisting in obtaining grant funding to support resiliency in the community (Tess Jordan) is a priority and Energy Trust should ensure that its always leading with energy efficiency, packaging renewables and efficiency together in resilience programs (Alexia Kelly).

Members discussed pointed out that workforce development is extremely important to help with the development of job skills (Raphaela Hsu-Flanders) and supporting trade allies in increasing BIPOC ownership of businesses and participation in the workforce can provide different wealth development opportunities (Jaimes Valdez).

Next steps

Energy Trust staff will examine how the Renewable Energy Advisory Council feedback and priorities can be incorporated into the 2022-23 budgets.

3. Priorities for Solar Program

Topic summary

Staff requested feedback on whether Energy Trust should have a continued, smaller role in funding residential solar projects that serve market-rate customers and are not capable of providing resilience or grid services or, if Energy Trust should only provide financial incentives for solar systems that provide additional values such as improved equity, resilience and/or grid services.

Discussion

Members asked about quality standards outside of projects that are reviewed by Energy Trust (Jamies Valdez) and how integral providing customer leads to trade allies is in the market (Kacia Brockman). Staff mentioned that there is a surprisingly high volume of solar projects that don't receive Energy Trust incentives and the team has received feedback that the same standards are not implemented outside of the program. Staff also noted that contractors have mentioned that leads are more valuable than incentives (Dave McClelland). An attendee stated that direct incentives to projects that provide greater benefits to underserved communities should be prioritized over standard residential incentives (Alexia Kelly). Members mentioned that power incentives reach a point where there are diminishing returns for developers; identifying this threshold is critical before adjusting incentive offerings that may be based on assumptions (Suzanne Leta, Raphaela Hsu-Flanders).

Members strongly recommended doing a survey of stakeholders before staff makes a decision (Suzanne Leta, Angela Crowley-Koch, Jaimes Valdez). The Diversity Advisory Council (DAC) and individuals involved in HB 3141 should be involved in the survey, as well as community-based organizations and community leaders (Angela Crowley-Koch, Max Greene, Alexia Kelly). Utilities should also be involved in the conversation due to their sector expertise (Bayo Ware, Angela Crowley-Koch). One attendee noted there should be some quality control to ensure project standards do not diminish if Energy Trust incentives go away (Angela Crowley-Koch). Staff cited that Energy Trust still fills a gap in the market performing design review and verification that focuses on system performance and longevity as opposed the municipal life safety inspection (Jeni Hall).

Members discussed how keeping incentives the same for both utilities may not be needed, but if they are different, it would be difficult for installers who serve multiple territories (Angela Crowley-Koch, Suzanne Leta). A member stated that commercial is a separate market from residential due to the economics being different (Suzanne Leta).

Next steps

Staff is collecting feedback and will consult with solar trade allies before major changes in the program are made.

4. Renewable Energy Advisory Council thank you to now-retired Peter West *Topic summary*

Members thanked Peter West, Energy Trust's former director of energy programs and former manager of the renewable energy sector, for his contributions to Energy Trust and to renewable energy development in Oregon.

Discussion

Attendees noted Peter West's previous work at Renewable Northwest as the Policy Director prior to Energy Trust, where he helped establish net metering and the first carbon standard in Oregon (Rachel Shimsak). Peter was at the founding meeting for the Clean Energy States alliance, served on its board for seven years and received its Clean Energy Champion Award (Warren Leon). Council members noted that Peter has left an indelible mark on how energy is produced and used in Oregon and across the Pacific Northwest by expanding energy efficient appliances in the state and supported irrigation modernization, biopower and municipal wastewater treatment plant projects (Jed Jorgensen).

5. Public Comment

None.

6. Adjourn

The meeting adjourned at 11:25 a.m. The next meeting will be Wednesday, September 15th.