Energy Trust Board of Directors

July 24, 2019

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167th Board Meeting
July 24, 2019
Tamástslikt Cultural Institute
47106 Wildhorse Boulevard Pendleton, Oregon 97801

	Agenda Topic	Tab	Purpose
9:30 a.m.	**Board Meeting Call to Order** (Roger Hamilton) **Welcome to Tamástslikt Cultural Institute** (Roberta "Bobbie" Connor, Executive Director, Tamástslikt Cultural Institute) **General Public Comment**		
	Consent Agenda (Roger Hamilton) • April 3, 2019 Board Meeting Minutes • May 16-17, 2019 Board Meeting and Strategic Planning Workshop Minutes	**1**	Action
9:45 a.m.	**President's Report** (Roger Hamilton and Henry Lorenzen) • Welcome to Pendleton (Henry Lorenzen) • Introduction of Board Review Consultants, Synergy Consulting, Inc. (Henry Lorenzen)		Info
10:15 a.m.	**Approve Revised Authorization Northwest Energy Efficiency Alliance 2020-2024 Funding Commitment R879 replaces R877a** (Mike Colgrove)	**2**	Action
10:25 a.m.	**Approve Diversity Advisory Council Charter R880** (Debbie Menashe)	**2**	Action
10:55 a.m.	**2019 Legislative Session Update** (Jay Ward)	**2**	Info
11:05 a.m.	**Strategic Planning Discussion** Purpose and Vision (Mark Kendall/Mike Colgrove/Debbie Menashe)	**Distributed at Meeting**	Info
12:05 p.m.	**Lunch** (Tamástslikt Kinship Café)		

	Agenda Topic	Tab	Purpose
1:00 p.m.	**Management Review** (Pati Presnail & Holly Valkama)		Info
1:15 p.m.	**Energy Programs**		
	• Multifamily Program Assessment (Kate Wellington)		Info
2:00 p.m.	**Committee Reports** (30 minutes)		
	• Audit Committee (Anne Root)	**3**	Info
	• Compensation Committee (Melissa Cribbins)	**4**	Info
	• Evaluation Committee (Lindsey Hardy)	**5**	Info
	• Finance Committee (Susan Brodahl)	**6**	Info
	• Policy Committee (Alan Meyer)	**7**	Info
	• Strategic Planning Committee (Mark Kendall)	**8**	Info
	• Conservation Advisory Council (Lindsey Hardy)	**Distributed at Meeting (May notes included in Tab 9)**	Info
	• Renewable Advisory Council (Henry Lorenzen)	**Distributed at Meeting (May notes included in Tab 9)**	Info
3:00 p.m.	**Adjourn meeting**		

The next Energy Trust Board of Directors meeting will be held on
Wednesday October 16, 2019
at Energy Trust of Oregon, 421 SW Oak St, Suite 300, Portland, OR 97204

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Tab 1

Board Meeting Minutes—165th Meeting

April 3, 2019

Board members present: Susan Brodahl, Roger Hamilton, Eric Hayes, Elee Jen, Debbie Kitchin, Alan Meyer, Anne Root, Roland Risser, Steve Bloom (Oregon Public Utility Commission ex officio), Ruchi Sadhir for Janine Benner (Oregon Department of Energy special advisor)

Board members attending remotely: Mark Kendall

Board members absent: Melissa Cribbins, Ernesto Fonseca, Lindsey Hardy, Henry Lorenzen

Staff attending: Wendy Bredemeyer, Sarah Castor, Amber Cole, Chris Crocket, Hannah Cruz, Phil Degens, Alison Ebbott, Cheryle Easton, Fred Gordon, Betsy Kauffman, Steve Lacey, Marshall Johnson, Jed Jorgensen, Debbie Menashe, Spencer Moersfelder, Alex Polley, Pati Presnail, Thad Roth, Dan Rubado, Lizzie Rubado, Katie Sager, Michelle Spampinato, Julianne Thacher, Rachel Torres, John Volkman, Jay Ward, Peter West, Whitney Windsor, Lily Xu

Others attending: John Charles (Cascade Policy Institute), Sara Fredrickson (CLEAResult), Kari Greer (Pacific Power), Anna Kim (OPUC), Jeremy Litow (Northwest Energy Efficiency Alliance), Joe Marcotte (Lockheed Martin), Brendan McCarthy (Portland General Electric), Julie O'Shea (Farmers Conservation Alliance), Dan Reese (CLEAResult)

Business Meeting

Roger Hamilton called the meeting back to order at 10:29 a.m. and noted that consent agenda items can be changed to regular agenda items at any time.

General Public Comments

There were no public comments.

Consent Agenda

RESOLUTION 873
CONSENT AGENDA

MOTION: Approve 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 at the request of any board member.

- February 19, 2019 Board Orientation/Training Minutes
- February 20, 2019 Annual Board Meeting Minutes

Moved by: Roland Risser		Seconded by: Anne Root
Vote:	In Favor: 8	Abstained: 0
	Opposed: 0	

President's Report

Roger Hamilton presented a brief overview of community solar programs in the United States. States use a number of different program models, including some driven by utilities and some driven by nonprofits. Massachusetts, New York, Minnesota and Colorado have the most community solar activity. Oregon, Illinois and New Jersey are developing community solar policies.

Debbie Kitchin joined the meeting at 10:33 a.m.

The board discussed the status of Oregon's Community Solar Program.

Staff Report

Board Review

Mike Colgrove provided an update on the consultant that will conduct a review of board processes. Mike Colgrove, Debbie Menashe, Cheryle Easton and Henry Lorenzen reviewed three proposals and interviewed two consultants. A consultant is expected to be selected prior to the May board strategic planning retreat.

Mike noted a handout summarizing Oregon legislation under consideration. The board discussed several bills that could potentially impact Energy Trust.

Mike shared a news story about Energy Trust's irrigation modernization work in Central Oregon.

Committee Reports

Compensation Committee (Roland Risser for Melissa Cribbins)

In 2018, Energy Trust conducted a competitive solicitation for an administrator of its tax deferred 401k plan. The organization selected Principal Financial as the plan administrator and Cable Hill Partners to provide advisory services to staff. Cable Hill recommended that Energy Trust adopt an investment policy statement to guide investment decisions. The compensation committee reviewed the proposed policy statement and recommended two changes, including removing references to company stock and changing the description of how to review plan investments. The statement will be reviewed by the compensation committee on an annual basis and is consistent with Energy Trust's standard practices.

The board clarified that the plan is a defined contribution 401k plan. Principal Financial sets up fund options and employees select contribution amounts and investments. The board oversees the overall administration of the plan and how the investment options are performing against the criteria set in the organization's investment policy.

Board Decision
ADOPT AN INVESTMENT POLICY STATEMENT

Adopted: April 3, 2019

RESOLUTION #876
ADPOT INVESTMENT POLICY STATEMENT

WHEREAS:

1. **Energy Trust sponsors a defined contribution plan 401(k) Retirement Plan (the Plan) for the benefit of its employees and their designated beneficiaries.**
2. **Energy Trust, acting through its board of directors and the board's Compensation Committee, has fiduciary oversight responsibility of the Plan.**
3. **At its February 14, 2019 Compensation Committee meeting, the committee reviewed and discussed an Investment Policy Statement presented by Cable Hill Partners, a certified financial advising firm engaged by Energy Trust to provide retirement plan investment and oversight support.**
4. **The Investment Policy Statement presented is intended to assist the Energy Trust board as fiduciary, acting through its Compensation Committee, by establishing nonbinding guidelines for making investment-related decisions with respect to the Plan.**

5. **The Compensation Committee reviewed and discussed the proposed Investment Policy Statement and proposed some modest revisions to align the Investment Policy Statement with Energy Trust's not-for-profit structure.**
6. **With the revisions proposed, Energy Trust's Compensation Committee recommends that the board adopt an Investment Policy Statement in the form attached to this resolution document.**

IT IS THEREFORE RESOLVED: That Energy Trust of Oregon, Inc., Board of Directors adopts the Investment Policy Statement attached hereto as Exhibit A.

Moved by:		Debbie Kitchin	Seconded by:	Mark Kendell
Vote:	In Favor:	8	Abstained:	0
	Opposed:	0		

Financial Audit Results

Presentation of Audit Results (Jenn Price, Ashley Osten, and Wendy Campos of Moss Adams)

Energy Trust received an unmodified financial audit for 2018, which means financial statements are presented in accordance with Generally Accepted Accounting Principles. Energy Trust had no deficiencies in internal controls.

Susan Brodahl joined the meeting at 11:06 a.m.

Wendy Campos presented tax changes that are relevant to nonprofits. A change that could potentially impact Energy Trust is a requirement that costs to provide transportation benefits, such as bus passes, are taxed at a 21 percent rate as unrelated business income. This applies to 2018 forward. The board asked clarifying questions about the tax and how it could affect Energy Trust.

The board asked about potential tax implications of Energy Trust receiving alternative sources of revenue, such as a foundation grant. Commissioner Bloom asked about potential tax implications of Energy Trust's subcontract to help administer part of the Oregon Community Solar Program. Wendy recommended that Energy Trust discuss this further with auditors.

The board asked if Energy Trust completes 1099 forms for contractors and people who receive rebates. Pati Presnail, director of finance, replied that Energy Trust provides 1099 forms to contractors and commercial and industrial customers.

The board thanked Moss Adams and the Energy Trust Finance Team for excellent work.

The board took a break for lunch at 11:32 a.m.

Strategic Planning Discussion

Review Draft 2020-2024 Plan (Mark Kendall, Debbie Menashe, Mike Colgrove)

The board reconvened at 11:46 a.m., except for Mark and Susan.

Roland Risser introduced a strategic planning discussion and invited comments, concerns and questions. There will be more opportunities for discussion at the board strategic planning retreat in May.

Debbie Menashe, director of legal and HR, described the draft 2020-2024 strategic plan and a cover memo sent to the board.

Mark rejoined on the phone at 11:50 a.m.

The board discussed potential changes to the draft plan, including adding language explaining that energy efficiency is the least-cost resource and acquiring all cost-effective energy efficiency benefits the utility system and all ratepayers.

The board discussed if and how to include distributed energy resources in the draft strategic plan. Ruchi Sadhir provided the Oregon Department of Energy's broad definition of distributed energy resources used in its biennial energy report.

The board suggested using less technical language and a more positive tone in the draft plan.

The board requested that measures for success be added to the draft plan.

The board discussed how to describe underserved customers in the draft plan and suggested adding data to show which customers are underserved and why. The board also discussed the term "underserved," noting that the ratepayers' perspective should be considered in selecting the appropriate term. If a ratepayer identifies as underserved, Energy Trust should use that language in the draft plan. The board noted that alternative language could be "not yet served."

Janine joined on the phone at 12:17 p.m.

The board continued to discuss if and how distributed energy resources should be addressed in the plan and considered the addition of smart meters.

The board discussed changing the order of the focus areas in the plan.

Susan rejoined the meeting at 12:28 p.m.

The board suggested that the plan should acknowledge the possibility that technology and markets could change in ways that make savings cheaper instead of more expensive.

The board suggested adding that Energy Trust has adapted to the market when developing programs and will continue to do so.

Mark invited board members to submit any further feedback to himself or Debbie Menashe by April 15. The board will receive an updated draft prior to the May board strategic planning workshop.

Debbie Menashe added that Energy Trust staff recently met with OPUC staff and Commissioner Bloom to receive guidance and input on the draft strategic plan.

Energy Programs

Farmers Conservation Alliance—Irrigation Modernization Program Services Contract (R874) (Jed Jorgensen and Julie O'Shea, Farmers Conservation Alliance)

Jed Jorgensen, senior renewables program manager, presented a recommendation to sign a contract with the Farmers Conservation Alliance. Jed explained Oregon's irrigation system, which moves 480 billion gallons of water per year through open canal systems to 6,500 farms and ranches. Canals can block fish from moving upstream and lose water to evaporation. Modernized irrigation systems move water through pipes instead of canals, which saves water, facilitates fish passage, saves energy, reduces costs and creates opportunities to generate energy through in-pipe hydropower systems.

The irrigation modernization program launched in 2015. Energy Trust has two contracts with Farmers Conservation Alliance, including the program management contract discussed today. The irrigation modernization program is currently working with 25 percent of Oregon's irrigation infrastructure, including nine districts with 38 megawatts of hydropower generation potential and 60,000 megawatt hours of energy savings potential. In addition, Energy Trust and Farmers Conservation Alliance have helped irrigation districts receive $2.8 million from the United States Department of Agriculture Natural Resources Conservation Service (NRCS) to assist with permitting and $75 million from NRCS to support piping.

Jed described a recent successful event at Three Sisters Irrigation District earlier this month, which resulted in positive attention from stakeholders and the media.

Jed explained the purpose of the proposed contract, which is to maintain existing services; integrate on-farm energy efficiency opportunities with Energy Trust programs; and allow Farmers Conservation Alliance to expand participation, communication and funding for irrigation modernization projects. The contract is for up to $500,000 annually, not to exceed $2.5 million over five years.

Julie O'Shea, executive director of Farmers Conservation Alliance, described the broader benefits of irrigation modernization for Oregon and the nation, including investments in local economies and improvements to critical infrastructure. She explained the challenges and opportunities ahead as the initiative scales up.

The board asked about sources of funding for irrigation projects. Julie explained that Farmers Conservation Alliance receives Energy Trust funding, then leveraged Energy Trust funds to receive NRCS dollars. Irrigation districts are seeing as much as 75 percent of their funding from NRCS. Farmers Conservation Alliance helps districts apply for loans and state funding. Revenue from hydropower generation is a key tool for helping districts afford the resulting loan payments.

The board asked about the cost to modernize all irrigation in the state of Oregon. Julie estimated it would cost roughly between $30 billion and $50 billion to modernize infrastructure in the state.

The board asked about contract performance metrics. Performance metrics would be determined during contract negotiations.

The board asked why all the irrigation districts engaged are east of Interstate 5. Those districts work very differently from districts further west, and they face different challenges. Farmers Conservation Alliance is working with three districts on the Interstate 5 corridor in Southern Oregon.

Recommendation

Authorize the executive director to negotiate and sign a contract with Farmers Conservation Alliance for up to $500,000 in Energy Trust funds per year, for up to five years, for management of the Irrigation Modernization Program.

RESOLUTION 874
AUTHORIZING A CONTRACT WITH FARMERS CONSERVATION ALLIANCE FOR MANAGEMENT OF THE IRRIGATION MODERNIZATION PROGRAM

WHEREAS:

1. **Modernizing agricultural water delivery infrastructure creates significant opportunities for new, in-conduit hydroelectric projects and substantial electricity savings by eliminating irrigation pumping loads;**
2. **Farmers Conservation Alliance (FCA), as Energy Trust's contractor since 2015, has built a highly successful program supporting irrigation modernization;**
3. **FCA has attracted $75 million in federal funding for modernization projects in central Oregon, requiring a 25 percent non-federal match;**
4. **Energy Trust wishes to continue growing the Irrigation Modernization Program to accelerate energy efficiency and renewable energy projects, penetrate more deeply into on-farm opportunities, and attract non-federal and federal funding to achieve these and other, non-energy benefits.**

It is therefore RESOLVED, that the board of directors of Energy Trust of Oregon, Inc. authorizes the executive director to negotiate and sign a contract with Farmers Conservation Alliance for Irrigation Modernization program management services consistent with, but not limited to, the following terms:

1. **An initial term of two years, with three potential one-year extensions.**
2. **A budget of up to $500,000 per year, not to exceed a total of $2.5 million over five years.**
3. **To achieve the following purposes (among others):**
    - **Maintain existing program services with the goal of accelerating energy efficiency and renewable energy project implementation;**
    - **Extend participation to new irrigation districts or similar agricultural water providers;**
    - **Expand communications to improve stakeholders' understanding of irrigation modernization benefits and cultivate opportunities for development and implementation funding and partnerships;**
    - **Expand non-federal development and implementation funding and partnerships;**
    - **Grow external funding for program management and project planning;**
    - **Integrate on-farm energy efficiency and renewable energy opportunities in coordination with Energy Trust programs;**
    - **Seek federal funding for modernization activities, which is expected to be available under the P.L. 83-566 program over the next five years**.

Moved by:	Debbie Kitchin	Seconded by: Roland Risser
Vote:	In Favor: 8	Abstained: 0
	Opposed: 0	

Contract Extension offer for Residential Program Management Contractor Services with CLEAResult Consulting (Thad Roth and Marshall Johnson)

Thad Roth, residential sector lead, proposed extending three contracts, a Program Management Contractor (PMC) contract with CLEAResult, a Program Delivery Contractor (PDC) contract for new home construction services with TRC and a PDC contract for retail services with CLEAResult. All contracts would extend through the end of 2020. This contract structure represents a consolidated and

streamlined approach to management and delivery of Energy Trust's residential programs, which reduced duplicative services and costs.

In 2018, the Residential program exceeded savings goals and acquired savings at a lower cost than budgeted.

For the PMC contract, CLEAResult performed well against five criteria, including collaboration, project pipeline, innovation, teamwork and satisfactory execution of services. CLEAResult demonstrated particular strength in coordinating with the two Residential PDCs and the Existing Multifamily program.

The board asked for examples of new measures in development. Marshall Johnson, senior residential program manager, provided examples, including extended capacity heat pumps, air conditioning and heat pumps for manufactured homes.

Commissioner Bloom left the meeting at 1:35 p.m.

The board had no objections to extend the PMC contract with CLEAResult.

Contract Extension offer for EPS New Construction Program Delivery Contractor, TRC Consulting (Thad Roth and Marshall Johnson)
For the PDC contract with TRC, TRC performed well against the same five criteria as for the PMC contract.

The board had no objections to extending the PDC contract with TRC.

Contract Extension offer for Residential Retail Program Delivery Contractor with CLEAResult Consulting (Thad Roth and Marshall Johnson)
Thad noted that Energy Trust will evaluate the scope of a PDC contract for retail program delivery given expected changes in the residential lighting market.

For the PDC contract with CLEAResult, CLEAResult performed well against the same five criteria as for the PMC contract.

The board asked how Energy Trust will transition out of residential retail lighting. The program will reduce incentives for LEDs or exit the retail LED market in a way that continues to support some markets, such as for small stores in rural areas. Energy Trust will continue to participate in the retail market for other products, such as smart thermostats and efficient tank water heaters.

The board asked what could happen to the PDC contract in 2021. Energy Trust will figure out the best approach in 2020. Possible solutions could include selecting a PDC that specializes in delivering midstream offerings or folding the PDC contract into a PMC contract.

The board asked about emerging technologies that could provide savings in absence of LEDs. There are emerging technologies and significant opportunities (such as retrofitting 180,000 inefficient manufactured homes that could be upgraded with heat pumps), yet these opportunities are more expensive compared to LEDs. Water heaters are another opportunity.

The board asked if ductless heat pumps have a market in Oregon. There is a market for ductless heat pumps; however, Energy Trust can only claim energy savings in homes that upgrade from electric resistance heating.

Thad added that the Residential program is focusing on savings opportunities with customers who have not yet participated, saving energy in constrained geographic areas through Energy Trust's targeted load management pilots with Pacific Power and NW Natural, and coordinating with PGE's demand response programs where qualifying efficient equipment can also be used for demand response.

The board had no objections to extending the PDC contract with CLEAResult.

2019 Budget Amendment (R875)

Amend 2019 Budget, 2020 Projection and 2019-2020 Action Plan (R875) (Lizzie Rubado and Pati Presnail)

Pati presented a resolution recommending the board adopt Energy Trust's amended budget, which was modified to reflect revenues and expenditures for supporting the Oregon Community Solar Program in 2019 and 2020 through a subcontract with the primary program administrator, Energy Solutions.

The board asked about the process for collecting revenue. As a subcontractor, Energy Trust will receive revenue on a time and materials basis not to exceed the amount listed in the contract. Energy Solutions and Energy Trust will be paid from funds collected from all ratepayers during the startup period, as authorized by the OPUC.

The board asked what Energy Trust will do with the net assets. Net assets will serve as a reserve for delivering the Oregon Community Solar Program, and will be available for any other mission-specific purposes because they are not derived in any way from public purpose funds. Pati described Energy Trust's mechanism for ensuring separation of funds from the Oregon Community Solar Program and public purpose charge dollars. The Community Solar net assets will show up separately from other net assets in financial reports and the budget.

The board asked if Energy Trust has a process for deciding how to spend net assets. Mike Colgrove is working on a process to approve use of these unrestricted net assets, and this process was tested when Energy Trust made the decision to consider applying as a subcontractor to Oregon Community Solar Program last year. Mike suggested that the board policy committee make sure that policies describe Energy Trust's current and intended practices for deciding how to spend net dollars.

RESOLUTION 875
AMEND 2019 BUDGET, 2019-2020 ACTION PLAN AND 2020 PROJECTION

BE IT RESOLVED that Energy Trust of Oregon, Inc. Board of Directors amends the Energy Trust 2019 Budget, 2020 Projection and 2019-2020 Action Plan as presented to the board at its meeting on December 14, 2018 to adjust for additional revenue and expenses arising out of Energy Trust's contract with Energy Solutions to provide program delivery services as a subcontractor to Energy Solutions in its role as Oregon Community Solar Program Administrator and as shown in the Energy Trust Income Statement 2018 to 2020 below.

Energy Trust of Oregon
Income Statement
2018 to 2020, Amended Budget

	Budget 2018	Forecast 2018	Budget 2019	Projection 2020
OREGON PPC REVENUE				
Public Purpose Funds-PGE	37,484,629	37,416,478	38,961,842	38,961,842
Incremental Funds - PGE	64,656,625	67,030,916	51,874,804	51,874,804
Public Purpose Funds-PacifiCorp	28,525,981	28,537,673	28,848,138	28,848,138
Incremental Funds - PacifiCorp	31,515,755	32,419,066	32,112,130	32,112,130
Public Purpose Funds-NW Natural	18,279,834	18,558,144	20,558,144	23,558,144
NW Natural - Industrial DSM	520,024	848,774	3,769,769	3,968,028
Public Purpose Funds-Cascade	2,167,052	2,167,052	2,915,331	2,915,331
Public Purpose Funds-Avista	1,156,870	1,325,134	2,091,870	2,091,870
Total Oregon PPC Revenue	**184,306,770**	**188,303,236**	**181,132,028**	**184,330,287**
NW Natural - Washington	2,466,148	2,428,171	2,194,160	2,542,487
Community Solar Revenue			355,063	546,896
Revenue from Investments	230,000	600,000	600,000	600,000
Total Other Sources of Revenue	**2,696,148**	**3,028,171**	**3,149,223**	**3,689,383**
TOTAL REVENUE	**187,002,918**	**191,331,407**	**184,281,250**	**188,019,670**
EXPENSES				
Incentives	111,030,753	103,770,760	109,121,220	96,793,877
Program Delivery Subcontracts	58,297,400	58,552,327	61,771,050	59,553,160
Employee Salaries & Fringe Benefits	13,608,430	13,375,998	14,546,606	15,742,300
Agency Contractor Services	1,536,000	1,417,420	1,927,964	1,315,248
Planning and Evaluation Services	4,028,074	3,147,643	3,702,872	3,193,872
Advertising and Marketing Services	2,832,975	2,746,975	3,195,450	2,946,500
Other Professional Services	4,596,049	3,142,084	4,771,018	5,066,672
Travel, Meetings, Trainings & Conference	476,550	451,994	470,440	478,066
Dues, Licenses and Fees	220,091	230,632	253,683	238,183
Software and Hardware	515,379	455,280	526,989	581,291
Depreciation & Amortization	522,465	396,000	264,647	294,978
Office Rent and Equipment	1,054,433	1,054,433	1,059,933	1,060,570
Materials Postage and Telephone	138,650	135,976	137,450	138,355
Miscellaneous Expenses	4,500	4,712	4,500	4,500
TOTAL EXPENSES	**198,861,753**	**188,882,235**	**201,753,820**	**187,407,566**
TOTAL REVENUE LESS EXPENSES	**(11,858,836)**	**2,449,172**	**(17,472,570)**	**612,104**

Moved by: Anne Root Seconded by: Alan Meyer

Vote: In favor: 9 Abstained: 0

Opposed: 0

Northwest Energy Efficiency Alliance Cycle 6 Strategic and Business Plan

Present NEEA Cycle 7 Strategic and Business Plan (Jeremy Litow)

Mike Colgrove introduced a presentation on Northwest Energy Efficiency Alliance's 2020-2024 business plan. NEEA is on the same business planning cycle as Energy Trust and recently approved its 2020-2024 business plan. Energy Trust's board will vote on a resolution about funding Energy Trust's portion of the NEEA business plan at the May board retreat.

Jeremy Litow, chief operating office for NEEA, introduced NEEA and described its 2020-2024 business plan. NEEA is a nonprofit funded by regional utilities, Bonneville Power Administration and Energy Trust. It works with market partners, including manufacturers, retailers and government agencies. By pooling resources across a four-state region, NEEA has a larger market influence, pools risk and reduces costs through economies of scale. Jeremy explained the market transformation process. Jeremy noted that Mike Colgrove is the secretary of NEEA's board of directors, on NEEA's board executive committee and leads the board strategic planning committee.

Jeremy described NEEA's 2020-2024 business plan, which is the organization's first dual-fuel plan that includes both electric and gas market transformation. Many investments from this period will be realized after 2024.

The board discussed Energy Trust's funding support for NEEA, including paying a slightly larger portion of funding for gas customers than for electric customers because Energy Trust represents a larger percentage of gas customers.

The board discussed the timeframe for return on investment and carbon reduction impacts.

NEEA's primary strategies for achieving market transformation are emerging technology, effective portfolio execution, influencing development of codes and standards, helping convene stakeholders for collaboration, and conducting research analysis to achieve market intelligence and report results. NEEA also does regional studies, such as residential and commercial building stock assessments.

Jeremy provided a snapshot of historical and projected savings from 2010 through 2034 and described NEEA's current electric portfolio and stages of development. He explained NEEA's natural gas portfolio, with all initiatives in concept development or program development stages. Emerging technologies include even more efficient LEDs with built-in controls, much faster and more efficient electric vehicle chargers, a combined gas air and water heater and thinner triple-pane windows.

The board discussed technologies in various stages of development and asked if battery storage is within NEEA's scope. Battery storage is currently outside of NEEA's scope.

Committee Reports Continued

Evaluation Committee (Eric Hayes)

Evaluation committee reviewed an evaluation of advanced power strips, a process evaluation of Existing Buildings and an evaluation of ductless heat pumps.

Finance Committee (Susan Brodahl)

Susan introduced a vote to approve a new finance committee charter that reflects that Energy Trust has a director of finance instead of a chief financial officer. Susan described December 2018 financial statements. The board observed that Energy Trust is achieving highly cost-effective savings and building up reserves. Steve Lacey added that Energy Trust takes reserves into consideration during annual budgeting and adjust them in consultation with the utilities.

Board Decision
FINANCE COMMITTEE CHARTER

Adopted: April 3, 2019

RESOLUTION 877 REPLACES R293
RESOLUTION APPROVING FINANCE COMMITTEE CHARTER

WHEREAS:

1. **At its February 2019 meeting, the board adopted amendments to the Energy Trust bylaws recognizing that the position formerly called Chief Financial Officer has been restructured in a new position called Director of Finance. A conforming amendment to the Finance Committee charter is therefore needed.**
2. **In addition, the current charter authorizes the Finance Committee to "advise the Board regarding all matters affecting the establishment of accounts with banks or brokers." The board wishes to make clear that the Committee is also authorized to advise the board regarding the closure of such accounts.**

IT IS THEREFORE RESOLVED: That Energy Trust of Oregon, Inc., Board of Directors approves revisions to the Finance Committee Charter as indicated in Exhibit A attached hereto.

Moved by:	Roland Risser		Seconded by:	Debbie Kitchin
Vote:	In favor:	9	Abstained:	0
	Opposed:	0		

Adopted on April 3, 2019, by Energy Trust of Oregon, Inc., Board of Directors.

Exhibit A

Energy Trust of Oregon, Inc.
Finance Committee Charter

Purpose and Scope

The primary function of the Finance Committee (the "Committee") is to assist the Board of Directors (the "Board") in fulfilling its responsibilities by advising the Board, and in certain instances by acting on behalf of the Board, on matters relating to the organization's investment policies and financial activities.

Composition

The Committee shall be comprised of a minimum of three members of the Board as appointed by the Board, each of whom shall be free from any relationship that, in the opinion of the Board, would interfere with the exercise of his or her independent judgment as a member of the Committee. Basic understanding of financial statements, general accounting policies and practices, investment, cashflow, and operations is encouraged. In addition, the executive director and ~~Chief Financial Officer~~Director of Finance will serve as staff representatives on the committee.

The members of the Committee shall serve until their successors are duly elected or until their resignation or removal. Unless the Board appoints a Committee Chair, the members of the Committee may designate a Chair by majority vote of the full Committee membership.

One member of the Committee shall serve in a liaison role with the Audit Committee.

Meetings

The Committee shall meet as necessary to enable it to fulfill its responsibilities and duties as set forth herein. The Committee shall report its actions to the full Board and keep written minutes of its meetings, which in turn shall be recorded and maintained with the books and records of the organization.

Responsibilities

The Committee shall:

1. Advise the Board regarding any proposed debt, equity or hybrid financing transaction of the organization and review any such proposed transaction for compliance with any applicable rules and regulations promulgated by any governmental or regulatory body exercising authority over the organization (”Regulatory Body”).

2. Be responsible for recommending changes to the board-approved accounting policies.

3. Advise the Board regarding all matters affecting the establishment or closure of accounts with banks or brokers.

4. Review and assess the adequacy of the organization’s investment guidelines as necessary, assess whether these guidelines are appropriate for the organization, review such guidelines for compliance with any applicable rules and regulations promulgated by any Regulatory Body and review and recommend to the Board any amendments or revisions to the guidelines.

5. Periodically meet with management to review matters within the Committee’s authority.

6. Be available to consult with members of the organization’s senior management on matters relating to any proposed financing transaction, investment or other finance-related strategy to be pursued by the organization.

7. Regularly meet with staff to review the financial results of the organization’s operations, and other financial or management reports which are provided to the Board and provide staff guidance as necessary.

8. Review with staff the annual budget draft and make recommendations to the full Board. Review and recommend any necessary budget changes during the year.

9. Review and assess the adequacy of this Charter periodically as needed and recommend to the Board any modifications to this Charter.

Authority

1. To the extent it deems necessary, the Committee may engage outside counsel, investment bankers, accountants and/or independent consultants to review any matter under its responsibility.

2. The Committee may take such other actions in matters under its authority as the Committee deems to be in the best interests of the organization or as required by any Regulatory Body.

Policy Committee (Alan Meyer)
The committee reviewed two policies and did not recommend changes to either policy, including the cost-effectiveness policy and a policy about eligibility of self-direct businesses for Energy Trust incentives. The committee requested more data regarding the second policy, which will be discussed at the next policy committee meeting.

Renewable Energy Advisory Council (Hannah Cruz)
At the February 27 Renewable Energy Advisory Council meeting, staff previewed Energy Trust's preliminary 2018 annual results and explained how the Solar program is shifting to support higher-value solar. The Renewable Energy Advisory Council was generally supportive of this program shift, and this topic may be brought to the board at a future meeting. There was a presentation about how Energy Trust could define net-zero homes for a potential streamlined energy efficiency and solar incentive.

Conservation Advisory Council (Hannah Cruz)
At the February 27 Conservation Advisory Council meeting, members received presentations on preliminary 2018 annual results and a potential program offering for net-zero homes. There were also presentations on results from recent studies and a list of measures that staff will review and potentially change or discontinue in 2020. The Conservation Advisory Council approved its operating principals and continued to ask questions about how their feedback is presented to the board.

Hannah asked for feedback on the February Conservation Advisory Council notes, which are slightly more condensed than prior meeting notes. The board preferred the more detailed version of the notes because it helps to see the perspectives from each individual member and shows transparency. The board discussed the timing of receiving committee meeting notes, and requested to receive them earlier if possible – in a separate email from the board packet. Hannah explained that it takes staff time to clean up the notes and carefully review them. Staff strive to get notes to board members as early as possible, which is currently at the same time as the board packet.

Ruchi Sadhir, Oregon Department of Energy, mentioned that the Built Environment Efficiency Working Group has a public meeting on April 16, and thanked Energy Trust staff in advance for attending and providing information at that meeting.

Adjourn

The meeting adjourned at 3:30 p.m.

The next meeting of the Energy Trust Board of Directors will be the Annual Strategic Workshop at 8:00 a.m. on Thursday, May 16, 2019 and Friday May 17, 2019 at Energy Trust of Oregon, Inc., 421 SW Oak Street, Suite 300, Portland, OR 97204.

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Signed: Mark Kendall, Secretary Date

PINK PAPER

Board Meeting Minutes—166th Board Meeting

May 16, 2019

Board members present: Susan Brodahl, Melissa Cribbins, Ernesto Fonseca, Roger Hamilton, Lindsey Hardey, Eric Hayes, Elee Jen, Mark Kendall, Debbie Kitchin, Alan Meyer, Roland Riser, Anne Root, Letha Tawney (Oregon Public Utility Commission ex officio), Janine Benner (Oregon Department of Energy special advisor)

Board members absent: Henry Lorenzen

Staff attending: Adam Bartini, Scott Clark, Amber Cole, Mike Colgrove, Hannah Cruz, Sue Fletcher, Cheryle Gibson, Fred Gordon, Jeni Hall, Marshall Johnson, Jessica Kramer, Steve Lacey, Debbie Menashe, Spencer Moersfelder, Dave Moldal, Amanda Potter, Thad Roth, Lizzie Rubado, Greg Stokes, Rob Strange, Julianne Thacher, John Volkman, Jay Ward, Peter West

Others attending: Holly Braun (NW Natural), John Charles (Cascade Policy Institute), Jason Eisdorfer (OPUC), Kari Greer (Pacific Power), Rick Hodges (NW Natural), Anna Kim (OPUC), Jeremy Litow (Northwest Energy Efficiency Alliance), Brendan McCarthy (Portland General Electric), Lisa McGarity (Avista), Patty Sackewitz (Pacific Power), Susan Stratton (NEEA), Holly Valkama (1969 Consulting), Becca Yates (NEEA)

Business Meeting

Roger Hamilton called the meeting to order at 8:02 a.m.

General Public Comments

John Charles, executive director of Cascade Policy Institute, made a comment about Energy Trust's proposed funding agreement with NEEA. Energy Trust proposes to invest $40 million in NEEA over five years to fund research, advocacy and education activities. Investing in NEEA is not the same as purchasing energy. Market transformation is difficult to determine, measure and benchmark. Energy savings from market transformation are ambiguous and uncertain. A two-year funding agreement would be more appropriate.

The board noted that Oregon, Washington, Idaho and Montana public utility commissions weigh in on NEEA's measurement and evaluation procedures.

Authorize Northwest Energy Efficiency Alliance Funding Commitment (R877)

(Susan Stratton and Jeremy Litow, Northwest Energy Efficiency Alliance)

NEEA is a four-state alliance between Oregon, Washington, Idaho and Montana and has a unique partnership with 140 utilities. Mike is a member of NEEA's board and participated in discussion and oversight of NEEA's strategic plan.

Susan Stratton presented Energy Trust's share of the Oregon work proposed in NEEA's five-year business plan and budget. All funders commit to five-year funding agreements because NEEA initiatives are long-term efforts.

Susan Stratton explained that Pacific Power, PGE, NW Natural and Cascade Natural Gas fund NEEA through Energy Trust. In the next five years, Energy Trust will also fund NEEA on behalf of Avista.

Janine Benner arrived at 8:21 a.m.

The board noted that gas goals in NEEA's five-year business plan have a wide range. Susan Stratton explained that gas market transformation efforts are very new, so there is more uncertainty in this small portfolio. NEEA expects to achieve savings in the middle of the goal range.

The board asked about NEEA's expected savings returns. Susan Stratton described expected savings from code transformation, new LEDs, heat pumps and a retail product portfolio initiative.

The board noted that investing in NEEA enables Energy Trust to save energy cost-effectively by leveraging a regional collaboration.

Mike explained that the resolution approves signing a five-year funding contract with NEEA. Funding will be approved on an annual basis through Energy Trust's annual budgeting process.

Melissa Cribbins arrived at 8:32 a.m.

Recommendation

Authorize the executive director or his designee to sign a contract authorizing expenditures of up to $40,100,000 expected to acquire up to 102.8 aMW of electric savings and 6.1 million therms of natural gas savings during the 2020-2024 period, contingent upon successful contract negotiation consistent with the resolution, below.

RESOLUTION 877
AUTHORIZING A 2020-2024 FUNDING COMMITMENT
TO THE NORTHWEST ENERGY EFFICIENCY ALLIANCE

WHEREAS:

1. **The Northwest Energy Efficiency Alliance (NEEA) remains the premier regional market transformation organization and Energy Trust contractor since our inception.**
2. **In July 2014, Energy Trust committed to funding NEEA through its current funding cycle, NEEA "Cycle 5" and for the NEEA 2015-2019 Strategic Plan and Business Plan.**
3. **Pursuant to Energy Trust's Cycle 5 contribution, through the first quarter of 2019, Energy Trust has acquired approximately 30 aMW of savings attributable to NEEA.**
4. **The NEEA board has adopted a new 2020-2024 Strategic Plan and Business Plan and is seeking corresponding commitments for the period 2020-2024 funding cycle.**
5. **The NEEA 2020-2024 Business Plan proposes to acquire between 360 and 500 aMW in regional electric savings and between 11 and 18 million therms in natural gas savings from market transformation investments over five years. Of this amount, approximately 20 percent of the electric savings and 26 percent of the natural gas savings are anticipated as Energy Trust savings**.
6. **Planned NEEA savings acquisition levelized costs compare favorably to levelized costs projected from other Energy Trust programs, and also comply with minimum OPUC performance measures established for Energy Trust.**
7. **The 2020-2024 NEEA Strategic Plan and Business Plan prioritize regional coordination and collaboration to accelerate development of emerging energy efficiency technologies, a critical strategy for Energy Trust's savings acquisition goals.**
8. **Staff regards NEEA's work as essential to achieving Energy Trust savings goals over the next few years, helping ensure a full pipeline of efficiency projects to deliver long-term benefits to Oregon and the region.**

It is therefore RESOLVED:

1. **The executive director or his designee is authorized to negotiate and sign a five-year contract with NEEA authorizing funding of up to $40,100,000 to acquire an estimate of up to 102.8 aMW of electric energy savings and up to 6.1 million therms of natural gas savings.**
2. **Funding shall be consistent with Energy Trust's board-approved annual budgets and two-year action plans.**

Moved by: Roland Risser Seconded by: Mark Kendall

Vote: In favor: 11 Abstained: 0

Opposed: 0

Strategic Plan Progress Update Year 4 – 2015-2019 Strategic Plan Implementation Dashboard

(Hannah Cruz)

Hannah Cruz, senior communications manager, presented on progress toward goals and objectives in the current 2015-2019 Strategic Plan. Energy Trust's 2015-2019 goals are to save 240 average megawatts, save 24 million annual therms and generate 10 aMW of renewable energy.

The 2015-2019 Strategic Plan includes six strategy areas: energy goals, emerging efficiency resources, expanding customer participation, key processes, new opportunities and staff engagement. Energy Trust is tracking well in all areas.

In the first four years of the five-year period, Energy Trust has exceeded two of the energy goals and achieved 98 percent of the third goal.

Energy Trust has saved more than 236 aMW through 2019, which is ahead of expected achievements. This is driven by LEDs, new construction, a large megaproject and strong NEEA performance. Energy Trust expects to exceed this goal by about 20 percent.

Energy Trust has already saved 27.3 million annual therms, which exceeds the strategic plan goal for natural gas savings.

Energy Trust has already generated 13.8 aMW of renewable energy, exceeding the strategic plan goal for renewable energy generation. Energy Trust expects to exceed the goal in the five-year period due to extension of the Solar Investment Tax Credit, falling solar costs and work with small hydropower through the irrigation modernization initiative.

Energy Trust is on track with the emerging efficiency resources strategy. This includes achievements through NEEA and Energy Trust's additional work testing and implementing technologies ready for deployment. NEEA is focused further upstream from Energy Trust to stimulate production and development of new energy efficiency technologies. Energy Trust has achieved 30 aMW of electric market transformation savings through NEEA and anticipates exceeding the five-year goal. Progress to the gas market transformation metric has been delayed because market development of a combined gas space and water heating technology has been delayed.

Lindsey Hardy arrived at 8:48 a.m.

Energy Trust is on track toward the goal of expanding participation, including identifying gaps and opportunities, addressing and advancing engagement, and reporting on actions and results. Accomplishments include:

- Completing a customer insights survey
- Completing a diversity, equity and inclusion baseline report
- Setting 10 diversity, equity and inclusion program and operations goals to be accomplished by the end of 2020

The board noted that the diversity, equity and inclusion baseline report based on analysis of census tracts doesn't track the actual participation in Energy Trust programs and asked to improve Energy Trust's tracking of diverse participants. Mike explained that staff are exploring additional tracking, however it will not be possible to collect demographic information on all program participants. Staff are looking into doing a more detailed demographic survey of customers within the most diverse census tracts. Energy Trust also conducts customer insights surveys of both participants and non-participants to understand why customers don't participate.

Energy Trust is on track to improve operational efficiency. Activities have included an organizational review, budget process review, incentive processing, streamlining customer services and information, energy project tracking and lean startup customer development. One key process, internal procurement and payment, was put on hold in favor of other higher priority projects.

Debbie Kitchin left the meeting at 9:06 a.m.

Mike shared that as an outcome of the organizational review, Energy Trust formed a formal Senior Management Team. This enables Energy Trust to bring senior managers into decision making processes. Energy Trust renamed its Management Team to Executive Team.

Energy Trust is tracking well in the area of new opportunities to propel the organization. An example is a manufactured home replacement pilot, which creates a model for replacing inefficient older manufactured homes while creating additional benefits for residents. For this pilot program, Energy Trust selected three manufactured home parks owned by nonprofits, including St. Vincent de Paul, NeighborWorks Umpqua and CASA. Energy Trust's incentives for energy efficiency helped these parks and residents achieve affordable housing goals. In addition, Energy Trust authorized a loan fund that's matched by Craft 3 and Meyer Memorial Trust. This makes affordable, low-interest lending available to these customers.

The board supported Energy Trust's work to preserve affordable housing and affordable manufactured homes.

The board asked about efforts to coordinate with cities and counties. Hannah clarified that this refers to supporting efforts in communities within Energy Trust's service territory, such as supporting local sustainability goals or other community led efforts.

The board discussed community and business interests in improving indoor air quality.

Hannah continued with other examples of new opportunities, such as responding to policy initiatives and supporting load and demand management efforts with utilities.

The board discussed the use of smart thermostats in utility load and demand management efforts.

Energy Trust is tracking well in the area of staff engagement. Drivers of staff engagement include opportunities for future growth, leadership and accountability; rewards and recognition; work alignment and work-life balance. Overall, employees are engaged, but Energy Trust is observing a downward trend in employee engagement over the past two years. Staff engagement may be declining due to the

more dynamic nature of Energy Trust's work and increases in staff workload. Improvements to address staff engagement include listening sessions with staff, additional internal communications such as an internal weekly newsletter, and additional all staff meetings. Energy Trust is conducting more intentional business planning to ensure all staff are aligned with organizational priorities. Mike added that the strategic planning process has created a level of uncertainty, as has the status of SB 1149.

The board asked about employee turnover and which staff engagement categories declined. The survey responses with the lowest engagement are related to areas of future growth and opportunity for the organization, work-life balance and career growth. The human resources team is working to better define pathways to career development within the organization.

The board acknowledged that Energy Trust anticipates significantly exceeding its five-year goals. Hannah explained that market and technology changes have occurred that could not have been anticipated.

Hannah asked the board to consider what level and types of information it will need to asses Energy Trust's progress toward the 2020-2024 Strategic Plan's objectives.

The board took a break from 9:44 to 9:56.

Board Meeting Minutes—Annual Board Strategic Planning Workshop

May 16-17, 2019

Opening Remarks: Workshop Agenda Recap and Strategic Planning Overview (Michael Colgrove and Holly Valkama)

Mark Kendall acknowledged the work of the board strategic planning committee, including Elaine Prause from the OPUC, and staff. The purpose of this workshop is to develop a draft of the 2020-2024 Strategic Plan to publish to the public and stakeholders for feedback.

Mike reviewed the strategic planning process to date. One year ago, Holly conducted a training and presented a framework for strategic planning. The committee started the process by thinking about Energy Trust's unique current role of value. The committee then determined the most likely scenario over the next five years and what opportunities may exist within that likely scenario. The board systematically rejected many of those opportunities and focused on the remaining opportunities that are the best fit for Energy Trust and hold the greatest promise.

Mike thanked the board for participating in additional strategic planning workshops and discussions in the past year. Mike also thanked staff, OPUC, utilities, members of Conservation Advisory Council and Renewable Energy Advisory Council, and other stakeholders for input and guidance.

Utility Future Perspectives (NW Natural, Pacific Power and PGE)

Bill Edmonds and Ryan Bracken, NW Natural

NW Natural's "Pacific Northwest Pathways to Decarbonization" study is a vision for 2050. The cheapest and largest part of NW Natural's carbon reduction strategy is reducing and offsetting consumption through energy efficiency. NW Natural makes progress in energy efficiency through Energy Trust.

NW Natural's "Pacific Northwest Pathways to Decarbonization" study is about achieving economy-wide carbon reduction to achieve an 80 percent reduction in greenhouse gases by 2050. According to the study, about 12 percent of greenhouse gas emissions are from direct-use natural gas. Space heating represents about one-half of that usage.

The study looked at four different emissions reduction scenarios. All scenarios rely on energy efficiency to enable decarbonization through building shell improvements, lighting, efficient equipment and reducing plug loads. Energy efficiency consists of reductions in energy demands as well as device efficiency.

Across all scenarios, energy generation in 2050 will be from less coal and more wind and solar resources. New loads from electrification of space heating will, net of displaced resistance load, be incremental to existing peak demands. By 2050, incremental gas capacity will be 5-10 times higher in electric heat pump scenarios than compared to gas scenarios. This would require building of additional gas plants or significant additional battery storage. Natural gas is the largest source of 2050 energy sector emissions in all scenarios.

According to the study, the Pacific Northwest will continue to have winter peak needs. These peaks will continue to be met mostly with gas in all of the decarbonization scenarios through 2050, with gas-fired electric generation or direct use of gas. Widespread deployment of electric heat pumps leads to an increase in winter peak electricity demands relative to gas scenarios.

The board asked questions about NW Natural's assumptions in the study, which include that no more coal will be used in generation in 2050 and that there will not be large unanticipated breakthroughs in technology.

Bill described two sets of decarbonization opportunities. The first is replacing older pipes, which NW Natural has already completed. The second is to purchase gas from areas with more stringent regulation of methane emissions from gas production.

The board asked if increases in heat pumps are expected from new construction or fuel switching, and Bill responded that both sources were considered. Mike clarified that Energy Trust does not encourage customers to switch fuels.

The board discussed the impacts of California's low carbon fuel standard and Oregon's clean fuel standard on renewable natural gas.

Scott Bolton, Pacific Power

Pacific Power is committed to decarbonization of electricity sources as quickly as possible through public policy, increasing wind generation, participating in the energy imbalance market and diversifying the grid. Pacific Power's 2019 Integrated Resource Plan includes early coal retirements in 2022.

Pacific Power is working to power transportation electrification, such as providing grant funding for communities in Coos Bay, Bend, Medford and Roseburg to install electric vehicle charging stations. It is also focusing on investing in system reliability, grid resiliency through smart meters, system improvements and battery storage projects, and competitive rates.

Debbie Kitchin returned to the meeting at 11:33 a.m.

The board discussed implications of more distributed renewables on Pacific Power. Mike noted that grid resiliency has been a topic in strategic plan discussions, and Scott agreed that customers want to improve resiliency and recover from potential crisis events. Board members discussed resiliency needs in their communities.

The board discussed transitioning away from coal and increasing the portion of the region's energy from renewable sources.

The board took a break from 11:47 to 11:52 a.m.

Dave Robertson and Larry Bekkedahl, PGE

PGE's goal for decarbonization is 80 percent by 2050 while keeping the system reliable, resilient and affordable. PGE's strategic plan consists of decarbonation, an integrated grid and improving customer experience.

About 25 percent of the overall economy right now is met with electricity, and that is expected to grow to 50 percent in the future. Oregonians will be using overall less energy, but a greater portion of that energy will be from electricity.

PGE conducted a deep decarbonization study and identified three pathways: high electrification, low electrification and high distributed energy resources. In every scenario, more energy efficiency is required. A future grid must still be reliable and affordable, and it must also be clean, flexible and innovative. The grid is increasingly complex. Technology changes and the evolution of customer applications are changing grid operations, planning and investments. This includes communication infrastructure.

PGE is launching a smart grid test bed. This includes a distributed energy pilot in three cities, including residential battery storage and electric vehicle charging stations. There will be battery storage at 500 homes, plus some batteries at substations. PGE is also looking for opportunities for pump storage.

The board noted that demand response is not Energy Trust's core mandate, and Larry suggested that PGE could still contract with Energy Trust to perform demand reduction work. PGE is looking for complementary roles for PGE and Energy Trust.

The board discussed policies under consideration with the state legislature and battery storage technology.

The board took a break for lunch at 12:35 p.m.

OPUC Staff Discussion on Strategic Plan Focus Areas (Jason Eisdorfer)

The board reconvened at 1:10 p.m.

Jason Eisdorfer, utility program director at the OPUC, reflected on the presentations from the utilities, and expressed excitement that utilities and the industry are evolving quickly.

Energy efficiency is Energy Trust's core purpose, and it remains critically important for the state's carbonization and climate goals. The energy efficiency industry is facing significant changes, from the challenges of market adoption of LEDs to potential public policy changes that would redirect the utilities to think about utility system efficiencies or require additional revenue for energy efficiency investments.

When Energy Trust began 20 years ago, it was visionary. Oregon is still ahead of most states, and Energy Trust is leading that charge.

The board is about to discuss five focus areas. Focus area one is to continue current work but be more innovative, focus on the pipeline, and help utilities and customers meet their carbon reduction objectives. Focus area two is better integrating utility systems with customer wants and needs. PGE just stated they are seeking additional opportunities to collaborate with Energy Trust, and that collaboration is appropriate for Energy Trust. Focus area three is to be an expert at implementation. Energy Trust plays a critical role in providing expert information and helping the OPUC answer policy questions. Focus area four is to leverage other funding. Energy Trust should consider competitive funding opportunities carefully and participate only in opportunities where there is a clear public purpose and a market obstacle that Energy Trust can address. Focus area five is internally focused. The OPUC supports Energy Trust's in being more efficient, innovative, diverse and valuable, and to foster a great working environment for staff. These five focus areas are appropriate and allow Energy Trust to be aware of additional changes and opportunities.

The board asked Jason if the five focus areas should be weighted in terms of relative importance and resources allocated. The OPUC believes that weighting the focus areas could be too restrictive. It should be clear that the first focus area is foundational and key to achieving utility carbon reduction goals, and it should take precedent over other focus areas. The board suggested that the foundational nature of the first focus area could be described more clearly in the draft strategic plan.

The board asked about the OPUC's comfort level with excluding five-year savings goals from the strategic plan. Jason agreed it's too difficult to set specific five-year goals given policy and market uncertainty. However, Energy Trust needs some way to determine long-term savings goals, and the OPUC is open to new ways of doing that.

The board noted that if a cap and trade bill passes the legislature, manufacturers may have additional additional incentives to do energy efficiency and this could result increase savings potential.

Jason added that in a changing market, Energy Trust needs to have a creative and collaborative relationship with utilities.

Strategic Plan Draft Document: Continued Board Discussions on Focus Areas and Strategies (Holly Valkama)

The board discussed the five focus areas in the draft strategic plan.

For focus area one (energy efficiency and renewable energy for all customers), the board recommended using simpler and clearer language and using a more active voice.

For focus area two (focus on solutions that benefit the grid), the board suggested emphasizing the benefit to customers.

For focus area three (support energy policy), the board supported Energy Trust's role providing information or data to help policy-making bodies set goals. Energy Trust is valuable as an impartial, trusted data source. The board also recommended that Energy Trust explain how this work helps achieve additional energy savings for customers.

For focus area four (leverage other funding), the board recommended clearly articulating the benefits of drawing other funding into the marketplace to maximize energy efficiency and provide other public benefits. Commissioner Letha Tawney noted that focus area four is an extension of Energy Trust's core work to use incentive funds to increase investments in energy efficiency.

For focus area five (organizational adaptability and diversity), the board discussed whether operational efficiency is appropriate for a strategic plan or a basic requirement for an organization. The board considered specific aims for this focus area, such as flexibility, adaptability, diversity, innovation and staff expertise.

Commissioner Tawny stated that an internally focused goal is appropriate and necessary because Energy Trust must increase its operational efficiency and effectiveness to succeed in a rapidly and significantly changing future.

The board suggested adding language to the context section of the strategic plan to help readers understand how the focus areas are interrelated. The context section should also articulate the tension between decarbonization goals and maintaining resource adequacy.

The board took a break from 2:36 to 2:46 p.m.

Background Information on Progress Indicators (Spencer Moersfelder, Lizzie Rubado)

Progress indicators are designed to measure progress in each focus area. They don't necessarily reflect strategies one for one, but they provide directional perspective. They hold Energy Trust accountable for what the organization says it will need in the strategic plan, and they signal a need for course corrections.

The 18 proposed progress indicators were developed with input from staff and OPUC, and they are subject to refinement based on board input. Energy Trust is seeking input on what indicators are most important and most useful to monitor progress. Progress indicators will be reported annually throughout the strategic plan period and should be relatively easily tracked.

Strategic Plan Draft Document: Board Discussions on Progress Indicators (Holly Valkama)

Holly asked the board to narrow the list of 18 possible progress indicators.

For progress indicator one under focus area one (savings and generation targets that identify a range of opportunities are established by 2020), the board asked about Energy Trust's forthcoming three-year budget process and noted that it is not clear from the progress indicators when this new budget period begins. The board discussed the benefits and risks of selecting numerical savings indicators. Indicators should be specific enough to be meaningful but broad enough to not be limiting. The board suggested making the indicator about pushing the market beyond status quo. Commissioner Tawny suggested that Energy Trust could set a specific numerical savings indicator about serving or moving specific markets, such as previously underserved areas.

The board suggested that progress indicators under focus area one, two and three could be combined into a single indicator.

The board asked about the fourth progress indicator under focus area one (annual renewable energy activity goals are set and achieved). This indicator is intended to show the pipeline of potential future renewable energy projects that may move forward and receive installation incentives in the future. Given the limited funding Energy Trust can provide to these large and costly projects, Energy Trust's funds may be most effective at helping projects materialize through support for early stage development instead of installations.

The board noted that these progress indicators are not easily tracked or reported in a dashboard. Mike suggested that the dashboard could tell us whether or not the organization is on track to achieve these goals and include an explanation if not.

The board discussed how Energy Trust's three-year budget goals will relate to the five-year strategic plan goals. The board suggested adding an explanation of the three-year budgeting process to the context section of the plan.

Spencer explained that focus areas two, three and four are new focus areas for Energy Trust, and progress indicators could be dynamic over time. As markets evolve, staff can change progress indicators based on conversations with the board.

The board discussed progress indicators under focus area two, including the challenges of setting indicators when the market and specific activities are unknown. One project could be to develop a plan or roadmap to establish progress indicators.

The board discussed progress indicators under focus area three, including possibly tracking stakeholder engagement, awareness, influence or impact.

The board discussed progress indicators under focus area four, which could include dollars leveraged from other investors.

The board discussed progress indicators under focus area five, which could be the time it takes from identification to activation of a new opportunity. The board also suggested Energy Trust track redeployment of resources and reduction or elimination of some work to free up resources for new opportunities. Another consideration is a metric about fostering and attracting talented staff.

Debbie Menashe will work with staff and the board strategic planning committee in June to refine the plan and bring revisions to board in July. The board will vote on the final plan in October.

Discuss Signposts (Holly Valkama, Michael Colgrove)

The last piece of the strategic planning process in October will be to identify signposts. Signposts are changes to watch for in the market to measure assumptions and make sure they continue to hold. Staff will track signposts annually and reopen the plan if course correction is needed.

Public Comment

There was no public comment.

Closing Conversation (Holly Valkama)

Board members each shared a one-word reflection on the conversation: informative, creative, progress, good place, comprehensive, reflective, better, healthy evolution, optimistic, flexible, adaptable and improving.

Mike thanked the board for a productive conversation and asked board members to consider a few questions for the discussion tomorrow. Why are you on the board of this organization? What does Energy Trust mean to you personally? Why do you do what you do as a member of this board?

Adjourn Day 1

The meeting adjourned at 4:47 p.m.

Board Meeting Minutes—Annual Board Strategic Planning Workshop

May 17, 2019

Board members present: Susan Brodahl, Melissa Cribbins, Ernesto Fonseca, Roger Hamilton, Lindsey Hardy (on phone), Eric Hayes, Elee Jen, Mark Kendall, Debbie Kitchin, Alan Meyer, Anne Root, Roland Riser, Letha Tawney (OPUC ex officio), Janine Benner (Oregon Department of Energy special advisor)

Board members absent: Henry Lorenzen

Staff attending: Scott Clark, Amber Cole, Mike Colgrove, Hannah Cruz, Cheryle Gibson, Fred Gordon, Debbie Menashe, Spencer Moersfelder, Lizzie Rubado, Julianne Thacher, John Volkman, Peter West

Others attending: Rick Hodges (NW Natural), Anna Kim (OPUC), Becca Yates (NEEA)

Board meeting Call to Order (Roger Hamilton)

Roger called the meeting to order at 8:05 a.m.

Overnight Reflections (Board members)

The board shared reflections on yesterday's meeting, including feeling excited and engaged that the strategic plan is coalescing.

Board members discussed their motivations for being on Energy Trust's board, which included ensuring coordination between Energy Trust and Oregon Department of Energy, mitigating climate change, ensuring ratepayer value and benefits, having a positive impact on the community, making sure communities are represented, contributing industry experience and expertise, and representing the business and labor communities.

Strategic Plan Draft Document: Discussion on Vision and Purpose (Michael Colgrove, Kevin Hiebert)

Ernesto arrived at 8:50 a.m.

Kevin led a series of small group brainstorms about Energy Trust's vision and purpose statements.

Purpose statement ideas included:

- Together we create a cleaner and more prosperous world
- Taking care of you through clean energy
- To save money and energy for a better life
- We support good energy. Innovative energy solutions; real energy solutions for real people
- To empower people to live better lives
- Enable customers to be in charge of their energy use through clean, affordable energy solutions
- To make lives better with bluer skies, comfort, convenience and choice

The board discussed these ideas. Top choices were:

- Together we create a cleaner more prosperous world
- To save money and energy for a better life
- To empower people to live better lives

The board took a break from 9:55 to 10:05 a.m.

Vision statement ideas included:

- Clean affordable energy for all
- Every Oregonian directly benefits from healthy, affordable energy choices
- Prosperous communities powered by clean energy
- Resilient, low-carbon energy system underpins thriving, verdant Northwest
- Lead the people of the Northwest to create a future that is resilient against natural and economic energy risks and that is environmentally clean and innovating, leading the country
- Energy efficiency and renewables deliver a resilient, clean and affordable place for everyone

Melissa Cribbins left meeting at 10:50 a.m.

The board discussed these ideas. Top choices were:

- Prosperous communities powered by clean energy
- Clean, affordable energy for all
- Resilient, low carbon energy system underpins thriving, verdant Northwest

Strategic Plan Public Outreach Plan (Hannah Cruz)

Hannah Cruz presented an outreach plan to give stakeholders and the public an opportunity to provide input on the draft strategic plan. The draft plan will be available on the website on June 21. There will be a six-week comment period from June 24 through August 2. After August 2, staff will compile a summary of comments and include verbatim comments received. The board will then vote on the final proposed plan on October 16. The final phase will be to revise Energy Trust's existing materials based on the plan, promote the new plan, evaluate if the plan should impact Energy Trust's brand or messaging, and infuse the plan into 2020 budget and action plans. There will be time at the July board meeting for discussion.

Public promotion will include communication through a variety of approaches to stakeholders, customers, trade allies, ratepayer advocates, energy efficiency and renewable industry organizations, the business community, community-based organizations, partner utilities, advisory councils and the media.

Another component of communications is outreach. Energy Trust plans to leverage existing forums such as Conservation Advisory Council and Renewable Advisory Council meetings, customer meetings, business associations, Pacific Power community events, and the July Pendleton board meeting and reception. Mike, staff and local outreach managers will give presentations about the plan. Energy Trust's senior outreach manager will notify legislators. Hannah requested that board members notify staff of possible engagement opportunities in their communities.

The board noted that the public comment period may coincide with summer vacations.

Public Comments (Roger Hamilton)

There were no public comments.

Summary of Key Takeaways and Next Steps (Debbie Menashe and John Volkman)

Debbie Menashe reiterated for next steps for plan development. Staff and Mark Kendall are available to receive additional board feedback throughout the summer.

John Volkman summarized key takeaways from the workshop. The board would like a shorter, simpler and more direct strategic plan with key messages up front. It should be in a more active voice. There's tension between the need for decarbonization and resource adequacy, and the plan should explain this tension and how fundamental energy efficiency is to decarbonization. On focus areas two through four, the board provided a variety of input that staff will incorporate. On focus area five, the board suggested that staff revisit that section and describe the kind of organization Energy Trust needs to become to accomplish focus areas one through four. For performance indicators, staff will work with the OPUC and utilities to determine metrics that are trackable and reportable. Staff will report back on those conversations at the July meeting and will provide a revised set of indicators in October.

The board recommended that staff evaluate Energy Trust's existing vision and purpose statements.

The board discussed the best language to describe energy efficiency and renewable energy. "Clean energy" is simpler and more accessible for the public, however some board members expressed concern that it is imprecise and ambiguous. The language should be customized to the audience. Staff will provide customer research on effective language at a future board meeting.

Closing Comments (Roger Hamilton, Mark Kendall, Michael Colgrove)

Mark thanked staff, the board strategic planning committee and the board for their hard work and acknowledged significant progress toward developing a strong strategic plan.

Adjourn Day 2

The meeting adjourned at 12:15 p.m.

The next Energy Trust Board of Directors meeting will be held on Wednesday, July 24, 2019 at Tamástslikt Cultural Institute, 47106 Wildhorse Boulevard, Pendleton, OR 97801

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Signed: Mark Kendall, Secretary Date

Tab 2

Resolution 879
Authorizing a 2020-2024 Funding Commitment to the Northwest Energy Efficiency Alliance (Replacing Resolution 877a)

May 16, 2019

Summary

The board of directors of Northwest Energy Efficiency Alliance (NEEA) unanimously approved its 2020-20204 (Cycle 6) Strategic and Business Plans in December 2018, and requested NEEA funders to approve NEEA Cycle 6 funding. In May 2019, the board of directors of Energy Trust unanimously approved a resolution authorizing the executive director to negotiate and execute a five-year contractual commitment to fund the NEEA 2020-2024 Strategic and Business plan in an amount up to $40,100,000. In preparing to negotiate and finalize the resulting funding agreement with NEEA, NEEA staff advised Energy Trust staff of some corrections to the funder percentages previously provided, resulting in an increase of nearly $300,000 in the Energy Trust funding commitment sought. In light of the increase in funding, Energy Trust returns to the board of directors for authority to execute a funding agreement with NEEA in an increased amount of $40,386,000. This funding amount will support an estimated range of 72.6 to 100.9 aMW of electricity savings and 3.7 to 6.1 million therms of gas savings through regional market transformation activities for Energy Trust and secure related benefits for Oregon utility customers.

Background

- Since its inception, Energy Trust has supported and relied upon NEEA as the premier source of market transformation activities and electric energy savings benefitting Pacific Northwest utilities and their respective customers.
- In 2014, NEEA expanded its portfolio of programs to focus on and provide market transformation activities related to natural gas, also benefitting Pacific Northwest utilities and their respective customers. Since that time, Energy Trust has also supported NEEA's natural gas market transformation efforts.
- As the second largest funder, Energy Trust represents approximately 20.1 percent of NEEA's total electric budget and approximately 34 percent of its total natural gas budget.
- Energy Trust previously identified its natural gas funding percentage as 26 percent.
- Since 2015, and through the first quarter of 2019, as part of its most recent funding cycle, NEEA's "Cycle 5", NEEA has delivered approximately 30 aMW in electric savings for Energy Trust and has established a pipeline for natural gas savings.
- During the last two years, NEEA developed new 2020-2024 Strategic and Business Plans to guide the next five-year period of investment – the first of its duel-fuel integrated strategic and business plans. As a NEEA board member representing Energy Trust and our utility partners, Executive Director Michael Colgrove has been actively involved in the development of both the strategic and business plans.
- As articulated in its 2020-2024 Strategic and Business Plans, NEEA will continue to provide energy savings, emerging technology and initiative investment to ensure a continuing supply of emerging technology, access to region-wide market research such as regional business stock assessments and end use load research, energy efficiency training, tools and resources, and networking and collaboration opportunities.

- Energy Trust staff support the execution of this contract to fund its portion of NEEA's "Cycle 6" funding period for electric and natural gas market transformation savings and other related benefits for its customers.
- In May 2019, the board of directors of Energy Trust unanimously approved funding of up to $40,100,000 to fund Energy Trust's portion of NEEA's Cycle 6 funding period. Since that time, NEEA provided revised funder percentages for gas market transformation activities, resulting in the need for an additional funding commitment.
- Energy Trust presented the revised funding request to Energy Trust's board Policy Committee on June 20, 2019. The Policy Committee reviewed the proposed revised commitment and asked Energy Trust staff to confirm calculations with NEEA staff.
- Energy Trust staff have confirmed the funder percentage, funding commitment and market transformation savings numbers included in this resolution and recommend board approval.

Discussion

- Energy Trust supports and seeks to continue its membership and engagement with NEEA as the regional Alliance of more than 140 Northwest utilities and the Bonneville Power Administration, pursuing market transformation benefits for electric and natural gas energy efficiency on behalf of the region.
- Continued collaborative investment in NEEA enables resources to be pooled and leveraged across the region, maximizing opportunities and benefits of market changes while minimizing risks.
- Energy Trust works closely with NEEA to identify emerging technologies, an area of NEEA expertise and a significant strategy to meet and ensure our future savings acquisition goals through new products, services and opportunities.
- NEEA's planned investments also support ongoing development of highly energy efficient codes and standards, and the delivery of education, training, marketing, collaboration, and other services best conducted at a regional level.
- To pursue activities and achieve results identified in its Strategic and Business Plans for the 2020-2024 funding cycle – Cycle 6, NEEA is seeking five-year contractual commitments from its funders by July 30, 2019.
- In Cycle 5, Energy Trust funded NEEA under two separate agreements, but in this Cycle 6 funding cycle, electric and natural gas market transformation work are integrated into a single agreement.
- NEEA's 2020-2024 Business Plan proposes to support between 360 and 500 aMW in regional electric savings and between 11 and 18 million therms in natural gas savings from market transformation investments over five years. Of this amount, approximately 20.1 percent of the electric savings and 34 percent of the natural gas savings are anticipated as Energy Trust savings.
- For the Cycle 5 investment portfolio, the 20-year cost effectiveness of NEEA savings have a levelized cost of 2.9 cents per kWh, below the Cycle 5 Business Plan target of 3.5 cents per kWh. The cost effectiveness benefit cost ratio is 1.4. NEEA expects the Cycle 6 investment portfolio cost effectiveness ratio to be similar, and at a levelized cost in the range of 3.0 – 3.5 cents per kWh. Although still cost effective, NEEA does forecast an increase in the levelized cost for the portfolio as compared to Cycle 5 estimates due to the market rollout of three program initiatives: Luminaire Level Lighting Controls, Super-Efficient Dryers, and Retail Product Program.
- NEEA requests a five-year funding commitment of up to $ 40,386,000, comprised of up to $34,020,000 for electric savings and anticipated and proposed special project services, which include resources and support for regional commercial and industrial strategic energy management programs and a multifamily building stock assessment. It also includes natural gas savings at a cost of up to $6,366,000. For comparison, Energy Trust committed up to $34 million for electric savings from NEEA and $5.865 million in natural gas savings and pipeline development, in the prior funding cycle.

- The proposed funding agreement is subject to Energy Trust's continued funding and is terminable should Energy Trust's public purpose charge funding be reduced. Given the long term and large commitment represented by the proposed agreement with NEEA, Energy Trust will provide informational notice of the agreement and its significant terms to the Oregon Public Utility Commission.
- Energy Trust staff support the NEEA 2020-2024 Strategic and Business Plans and the corresponding funding request. Staff regard NEEA investments as critical to the achievement of Energy Trust savings goals over the next five years, knowing such savings will continue to deliver benefits to utilities and customers we represent well beyond this time period.

Recommendation

Authorize the executive director or his designee to sign a contract authorizing expenditures of up to $40,386,000 expected to support up to 100.9 aMW of electric savings and 6.1 million therms of natural gas savings during the 2020-2024 period, contingent upon successful contract negotiation consistent with the resolution, below.

RESOLUTION 879
REPLACES 877A
AUTHORIZING A 2020-2024 FUNDING COMMITMENT
TO THE NORTHWEST ENERGY EFFICIENCY ALLIANCE

WHEREAS:

1. **The Northwest Energy Efficiency Alliance (NEEA) remains the premier regional market transformation organization and Energy Trust contractor since our inception.**
2. **In July 2014, Energy Trust committed to funding NEEA through its current funding cycle, NEEA "Cycle 5" and for the NEEA 2015-2019 Strategic Plan and Business Plan.**
3. **Pursuant to Energy Trust's Cycle 5 contribution, through the first quarter of 2019, Energy Trust has acquired approximately 30 aMW of savings attributable to NEEA.**
4. **The NEEA board has adopted a new 2020-2024 Strategic Plan and Business Plan and is seeking corresponding commitments for the period 2020-2024 funding cycle.**
5. **The NEEA 2020-2024 Business Plan proposes to support between 360 and 500 aMW in regional electric savings and between 11 and 18 million therms in natural gas savings from market transformation investments over five years. Of this amount, approximately 20.1 percent of the electric savings and 34 percent of the natural gas savings are anticipated as Energy Trust savings.**
6. **Planned NEEA savings acquisition levelized costs compare favorably to levelized costs projected from other Energy Trust programs, and also comply with minimum OPUC performance measures established for Energy Trust.**
7. **The 2020-2024 NEEA Strategic Plan and Business Plan prioritize regional coordination and collaboration to accelerate development of emerging energy efficiency technologies, a critical strategy for Energy Trust's savings acquisition goals.**
8. **Staff regards NEEA's work as essential to achieving Energy Trust savings goals over the next few years, helping ensure a full pipeline of efficiency projects to deliver long-term benefits to Oregon and the region.**

It is therefore RESOLVED:

1. **The executive director or his designee is authorized to negotiate and sign a five-year contract with NEEA authorizing funding of up to $40,386,000 to support an estimate of up to 100.9 aMW of electric energy savings and up to 6.1 million therms of natural gas savings.**
2. **Funding shall be consistent with Energy Trust's board-approved annual budgets and two-year action plans.**

Moved by: Seconded by:

Vote: In favor: Abstained:

Opposed:

PINK PAPER

Board Decision R880
Approving the Charter of the Energy Trust Diversity Advisory Council
July 24, 2019

Summary
Approve the initial charter of Energy Trust's Diversity Advisory Council (DAC).

Background
In December 2017, the Energy Trust board of directors amended and restated its board policy number 4.08.000-P Equity Policy, revising it to Energy Trust's board Diversity, Equity and Inclusion Policy. The revised Diversity, Equity and Inclusion Policy, as approved in December 2017 and reviewed and reaffirmed in December 2018, provides, among other things, for the following:

> Energy Trust will establish a Diversity Advisory Council to provide advice and resources to the board of directors to support Energy Trust's diversity, equity and inclusion operations plan and to advise the board of directors on assessing and measuring progress toward goals of such plan.

Beginning in January 2019, Energy Trust staff convened a group of community members interested in working with Energy Trust to establish a charter for a DAC consistent with board policy and to support Energy Trust. The following community members comprised what staff have described as a "Foundational DAC":

Oswaldo Bernal, OBL Media
Charity Fain, Community Energy Project
Carolina Iraheta Gonzalez, Verde
Kaeti Namba, Native American Youth and Family Center
Kheoshi Owens, Empress Rules Equity Consulting
Cheryl Roberts, African American Association for Homeownership

In addition, the following members of the Energy Trust board and staff worked closely with the Foundational DAC to support and advise efforts to propose a DAC charter:

Susan Brodahl, Board Member
Ernesto Fonseca, Board Member

Michael Colgrove, Executive Director
Margie Harris, Former Executive Director

Karen Chase, Staff Member
Ryan Crews, Staff Member
Sue Fletcher, Staff Member
Betsy Kauffman, Staff Member
Debbie Menashe, Staff Member
Art Sousa, Staff Member

After a series of five meetings and additional conversations, the Foundational DAC and involved board and staff members presented a proposed DAC charter to the Energy Trust Policy Committee for an initial review and a second review. The proposed draft charter is presented to the full board for approval, with support of the Policy Committee to bring it forward.

Discussion
The Foundational DAC worked closely with board members Susan Brodahl and Ernesto Fonseca, as well as supporting Energy Trust staff, to learn about Energy Trust's DEI efforts and DEI Operations Plan, as well as the roles and functions of Energy Trust in order to inform the drafting of a proposed DAC charter.

The Foundational DAC worked over a series of five meetings to draft a charter that outlines and describes the purpose of the DAC, DAC functions, DAC membership, DAC meeting and procedures, DAC relationship with the Energy Trust board of directors, DAC relationship with Energy Trust staff and DAC relationship with Energy Trust's other advisory councils, the Conservation Advisory Council (CAC) and the Renewable Advisory Council (RAC).

The proposed charter was presented to the Policy Committee at its May and June meetings. Policy Committee members discussed provisions regarding the proposed geographic distribution of DAC members, the process for approval of DAC members, and the procedure for payment of stipends, among other things. Energy Trust staff facilitated discussions with Foundational DAC members to consider approaches to revise language in the proposed DAC charter to address Policy Committee questions. The resulting proposed DAC charter reflects these conversations and adjustments.

Foundational DAC members expressed gratitude to Energy Trust board members and staff for the process of drafting the proposed DAC charter. Foundational DAC members specifically appreciated the interaction and active listening among all involved.

Recommendation
Approve the DAC charter in the form attached.

Board Decision
DIVERSITY ADVISORY COUNCIL CHARTER

Adopted: April 3, 2019

RESOLUTION R880
RESOLUTION DIVERSITY ADVISORY COUNCIL CHARTER

WHEREAS:

1. **In December 2017, the Energy Trust Board of Directors revised the board Equity Policy into a Diversity, Equity and Inclusion Policy 4.08.000-P. The Diversity, Equity and Inclusion Policy (the DEI Policy) was reaffirmed by the board in December 2018.**
2. **The DEI Policy calls for Energy Trust to establish a diversity advisory council to "provide advice and resources to the board of directors to support Energy Trust's diversity, equity and inclusion operations plan and to advise the board of directors on assessing and measuring progress toward goals of such plan."**
3. **Beginning in January 2019, Energy Trust convened and supported a group of community members interested in supporting Energy Trust's efforts to establish a diversity advisory council (DAC) and experienced in DEI and similar advisory councils (the Foundational DAC).**
4. **Through a series of meetings, the Foundational DAC, working with Energy Trust board members Susan Brodahl and Ernesto Fonseca and a group of Energy Trust staff, drafted a proposed DAC charter which was presented for consideration to the Energy Trust Policy Committee in May and June 2019.**
5. **Responding to comments of the Policy Committee, the Foundational DAC and involved board and staff members revised the proposed DAC charter and present it to the full board for review.**
6. **Members of the Policy Committee supported bringing the proposed DAC charter to the full board for review and approval in the form attached to this resolution as Exhibit A.**

IT IS THEREFORE RESOLVED: That Energy Trust of Oregon, Inc., Board of Directors approves the Diversity Advisory Council Charter in the form attached as Exhibit A.

Moved by: Seconded by:

Vote: In favor: Abstained:

Opposed:

Adopted on April 3, 2019, by Energy Trust of Oregon, Inc., Board of Directors.

Exhibit A

CHARTER
Energy Trust of Oregon, Inc.
Diversity Advisory Council
July 24, 2019

***Purpose**:*

The purpose of the Diversity Advisory Council (DAC) is to support Energy Trust's diversity, equity and inclusion goals and to make recommendations to the Energy Trust board of directors and staff on assessing and measuring progress in this work. The Council will operate in accordance with this charter. Final resolution of issues and all decision authority remains with the board of directors.

Council functions:

1. Provide input and feedback into the development of Energy Trust's strategic plan, budgets and action plans, and annual business plans.

2. Review and provide input on data analyses and data used to inform Energy Trust's diversity, equity and inclusion work to ensure transparency.

3. Review and assess Energy Trust's progress toward its diversity, equity and inclusion operations plan goals.

4. Identify opportunities and successes for Energy Trust's diversity, equity and inclusion work to be advanced.

5. Identify topics, issues and connections for Energy Trust board and leadership consideration to inform their decision-making and work.

6. Support the board and staff in their efforts to achieve and maintain diversity by advising the board on board member selection processes, and recommending and nominating prospective board members and candidates for staff leadership positions.

Council membership:

1. The Council will aim for a membership of 11 people who reside in Energy Trust's service territories. At least four members will reside outside of the Portland Metro area, to include at least one in Southern Oregon, one in Eastern Oregon and one in Central Oregon.

2. The Council will maintain a matrix showing characteristics and qualities sought in council members to ensure diverse representation and members who will be able to lend leadership to DAC topics. DAC members will have experience and interest in diversity, equity and inclusion.

3. The DAC will contribute to an established list of organizations and individuals who will be contacted as part of the recruitment process. The recruitment process will be open to any who apply and will be promoted on Energy Trust's website.

4. Prospective DAC members will be required to submit an application to the DAC for membership consideration. The DAC, with assistance of Energy Trust staff, will review submitted membership applications and vote on prospective members to recommend for appointment to the DAC. Those prospective members who are recommended for appointment to the DAC will be presented to the Energy Trust Policy Committee for approval. At least one member of the DAC, along with an Energy Trust staff member who participated in reviewing the prospective member's application, will attend any Policy Committee meeting at which DAC members are recommended for approval to present information on the recommendation and answer questions.

5. Stipends will be available for DAC members in accordance with procedures that are established by the DAC and Energy Trust staff and approved by the Energy Trust board of directors.

6. Expenses will be reimbursed for all members including parking, childcare, mileage, and accommodations, if an overnight stay is required. Meals will be provided for meetings spanning meal hours. Car-pooling and other efforts to reduce costs will be encouraged.

7. Members will serve a three-year term with the option to apply for a second three-year term. Five of the initial members will serve for two-years with the option of a second three-year term to allow for staggering terms.

8. Members are expected to attend all meetings of the DAC. Those who are unable to attend at least five meetings in a calendar year are expected to communicate with Energy Trust staff about whether they wish to continue membership on the DAC. Energy Trust will reach out to members who have missed at least three meetings in a calendar year to discuss whether continued membership on the DAC is appropriate.

Diversity Advisory Council meetings and procedures:

1. The DAC will meet at least eight times a year on a set schedule.

2. Meetings will be open to the public.

3. Meetings will primarily be held in Portland, with at least one meeting per calendar year held outside the Portland Metro area, but within Energy Trust service territory. Additional meetings held outside the Portland Metro area must be approved in advance by Energy Trust's Executive Team.

4. Member preferences regarding meeting times, duration and locations will be considered to ensure the greatest level of member and public participation.

5. The DAC will adopt and annually review meeting ground rules and operating principles.

6. DAC members and assigned Energy Trust staff will co-create meeting agendas based on the functional areas identified in this charter. Agendas and background materials shall be made available to DAC members and the public a week in advance of meetings, if possible.

7. All DAC members shall have an opportunity for comment. Audience comments will also be solicited.

8. Staff will prepare meeting notes and provide them to DAC members and the board.

Relationship between the Diversity Advisory Council and Energy Trust board:

1. The Energy Trust Board of Directors will designate at least one of its members to regularly attend and participate in DAC meetings and serve as a liaison between the board and the DAC.

2. The DAC may suggest topics for consideration by the board and Energy Trust staff will communicate those suggestions to the board.

3. Energy Trust board and staff will establish a feedback loop to ensure that DAC members receive information on how DAC feedback was considered by the board and staff and any resulting decisions.

Relationship between the Diversity Advisory Council and Energy Trust staff:

1. At DAC meetings, the DAC will advise and make recommendations to staff on topics for presentations, including but not limited to presentations regarding program design and delivery, significant public outreach and communications efforts.

2. Energy Trust staff will be a general resource to DAC members, providing information, answers, and other resources as possible.

3. DAC members will be a general resource to Energy Trust staff, providing information, answers, and other resources as possible.

4. Energy Trust staff will provide logistical support for DAC meetings such as scheduling, note-taking and follow up.

Relationship between the Diversity Advisory Council, Conservation Advisory Council and Renewable Advisory Council:

1. Periodically, but at least once annually, joint meetings of DAC, RAC, and CAC will be held regarding subjects of mutual interest, such as diversity, equity, and inclusion as it intersects with Energy Trust's conservation and renewable programs.

2. Members of specific Energy Trust advisory councils will be encouraged to attend alternate advisory councils, with DAC members occasionally attending RAC and CAC meetings, and vice versa.

3. Strategic plans (created every five years), annual budgets, and annual action plans will be presented to all three advisory councils through individual or combined meetings.

4. Summary information from CAC and RAC meetings will be shared with DAC members, and vice-versa.

5. Advisory councils are responsible for identifying topics that should be discussed with one or more of the other councils.

PINK PAPER

Briefing Paper
2019 State Legislation Update

July 8, 2019

Summary

This briefing paper summarizes bills considered in the 2019 Oregon legislative session that are of special interest to Energy Trust. The table at the end of the paper lists all the bills staff monitored throughout the session, with URL links in the bill number.

Background

- The session began on January 22, 2019 and ended on June 30, 2019.
- As usual, staff monitored bills that could impact our programs, and responded to requests for information from legislators, interested parties and the Oregon Public Utility Commission (OPUC). We took no positions on any bill.

Discussion

Among the bills that passed:

- Renewable natural gas: Senate Bill 98 (SB 98) requires the OPUC to develop large (200,000 or more customer accounts) and small-scale renewable natural gas programs for biogas, hydrogen from renewable resources, methane from biogas, renewable hydrogen or waste CO_2. The programs will allow participating utilities to recover prudent costs of investments in these resources. In the large utility program, investments are subject to certain limits, increasing from 5 percent of the utility's portfolio in 2020 to 30 percent in 2050. Small utilities will be subject to an OPUC-determined rate cap.
- Solar: House Bill 2618 (HB 2618) requires the Oregon Department of Energy to develop a rebate program for residential and certain nonresidential solar electric systems and paired solar and storage systems. HB 5050 appropriates $2 million for the program for the biennium ($1.5 million for incentives and $0.5 million for administration), which will support about 150-200 residential projects per year at the recommended incentive caps.
- Irrigation modernization: HB 5050 appropriated substantial funds for irrigation district canal piping in the Deschutes Basin and dam rehabilitation at Wallowa Lake.
- Electric vehicles:
    - SB 1044 aims to accelerate Oregonians' purchase and use of zero-emission vehicles to meet the state's greenhouse gas emissions goals, and to establish a "robust and well-operating market for zero-emission vehicles," such that, by 2035, 90 percent of new vehicles sold are zero-emission vehicles. The bill requires state agencies to use zero-emission vehicles if feasible, adopt policies and rules to achieve these goals, regularly evaluate the adoption of such vehicles in the state and recommend legislation to achieve these goals. SB 1044 also amends the SB 1149 public purpose charge provisions to allow school districts

receiving such funds to conduct fleet audits and use public purpose charge funds for zero-emission vehicles or charging stations.

    - HB 2093 allows the Oregon Department of Administrative Services to contract with an entity to cooperatively acquire, install, maintain or operate devices or facilities to deliver electricity for electric vehicles.

- Green energy in public buildings: Oregon law requires public construction, reconstruction or major renovation contracts to include “green energy technology,” i.e., solar or geothermal (ORS 279C.527). HB 2496 adds battery storage to the definition of "green energy technology" and, where solar potential is limited, allows contracting agencies to improve building energy efficiency and/or install biomass instead.

- Housing:

    - HB 2896 requires the Oregon Housing and Community Services Department to establish a program to: (1) provide one or more loans to nonprofit “community development financial institutions” to invest in the “preservation and affordability of manufactured dwelling parks”; (2) provide loans to individuals to buy manufactured dwellings to replace older and less energy-efficient manufactured dwellings; and (3) make grants for decommissioning and disposal of manufactured homes and develop or improve “infrastructure for a manufactured dwelling park.” The bill authorizes funds for these purposes.

    - Under a 2016 law, the Land Conservation and Development Commission was required to establish a site-selection process for two affordable housing pilots, one from a city with a population of less than 25,000 and one with a larger population. HB 2336 removes the population requirement if no city with less than 25,000 is nominated.

Among the bills that failed:

- SB 1149 public purpose charge:

    - HB 2494 would have extended the 3 percent public purpose charge to 2036.

    - SB 91 would have required at least 50 percent of public purpose charge funds paid to the nongovernmental entity (Energy Trust) to be invested in providing incentives to retail electricity customers to accelerate transportation electrification.

- Low income and equity: HB 2242 would have allowed the OPUC to consider differential energy burden and other rate inequities, and established an Office of the Low-Income and Environmental Justice Advocate to represent low-income and environmental justice communities in commission proceedings.

- Small-scale renewables: HB 2857 would have required 8 percent of electricity sold in the state by electric utilities with sales to 25,000 or more retail consumers to be generated by small-scale renewable energy facilities or certain biomass facilities.

- Climate: HB 2020 would have: (1) required businesses that emit greenhouse gases to buy “allowances” – one allowance per ton of emissions, (2) limited the total number of allowances to achieve certain emissions limits, which decline over time, and (3) directed

investments in clean energy and infrastructure, job creation, environmental remediation and community resilience funded by revenues from allowance purchases.

List of all bills monitored by staff (as of July 5, 2019)

Bills that passed or are pending Governor Brown's signature are in bold.

Bill Number	Bill Summary	Bill Sponsor	Status
HB 2020 B	Establishes Climate Policy Office within Oregon Department of Administrative Services and directs office to adopt Oregon Climate Action Program by rule.	Carbon Reduction (J)	Failed
HB 2063 INTRO	Extends authorized uses of moneys received by state pursuant to Volkswagen Environmental Mitigation Trust Agreement and deposited in Clean Diesel Engine Fund.	Pre-session filed (at the request of Governor Kate Brown for Department of Environmental Quality)	Failed
HB 2093 EN	**Permits Oregon Department of Administrative Services to contract with other entity, and to participate in, sponsor, conduct or administer cooperative procurements, for purpose of acquiring, installing, maintaining or operating devices or facilities to deliver electricity to public for electric motor vehicles.**	**Pre-session filed (at the request of Governor Kate Brown for Oregon Department of Administrative Services)**	**Passed**
HB 2095 INTRO	Establishes Building Maintenance Account in State Treasury, separate and distinct from General Fund.	Pre-session filed (at the request of Governor Kate Brown for Oregon Department of Administrative Services)	Failed
HB 2208 A	Establishes Oregon Business Development Department Unreinforced Masonry Seismic Safety Program to issue grants for improving seismic safety, stability and resiliency of qualifying unreinforced masonry and unreinforced concrete buildings.	Pr-esession filed (at the request of House Interim Committee on Veterans and Emergency Preparedness)	Failed
HB 2242 A	Authorizes Public Utility Commission to consider differential energy burden and other inequities of affordability in rates.	Rep Helm; Rep Holvey; Rep Keny-Guyer; Rep Marsh; Rep Power; Rep Salinas; Rep Schouten; Rep Wilde; Sen Dembrow; Sen Taylor (Pre-session filed)	Failed
HB 2250 EN	**Requires Department of Environmental Quality and Oregon Health Authority to regularly assess final changes to federal environment laws to determine whether changes are significantly less protective of public health, environment or natural resources than standards and requirements contained in those federal environmental laws, as in effect on January 19, 2017.**	**Pre-session filed (at the request of Governor Kate Brown for Office of the Governor)**	**Passed**
HB 2256 INTRO	Creates Oregon Housing Crisis Task Force.	Pre-session filed (at the request of Governor Kate Brown for Office of the Governor)	Failed

HB 2309 INTRO	Directs Department of Transportation to develop and implement program to lend moneys to school districts for incremental costs of purchasing electric-powered school buses.	Rep Keny-Guyer; Rep Reardon (Pre-session filed)	Failed
HB 2322 A	Requires Land Conservation and Development Commission to amend statewide land use planning goals related to energy conservation to incorporate development of renewable energy facilities and reduction of greenhouse gas emissions and to match state energy policies.	Rep Helm; Rep Marsh (Pre-session filed)	Failed
HB 2329 EN	**Modifies definition of "energy facility" for purposes of regulation of energy facilities by Energy Facility Siting Council.**	**Rep Helm; Rep Helt; Rep Power; Rep Smith DB; Rep Wilde; Sen Bentz (Pre-session filed)**	**Pending**
HB 2336 EN	**Removing population requirement for affordable housing pilot program if no qualifying nomination is received for city with population under 25,000.**	**Rep Boles; Rep Bonham; Rep Boshart Davis; Rep Findley; Rep Helm; Rep Helt; Rep Keny-Guyer; Rep Lewis; Rep McLane; Rep Nearman; Rep Noble; Rep Post; Rep Reschke; Rep Stark; Rep Zika; Sen Dembrow; Sen Gelser; Sen Knopp (Pre-session filed)**	**Passed**
HB 2423 EN	**Adopts Small Home Specialty Code to regulate construction of homes not more than 400 square feet in size.**	**Pre-session filed (at the request of House Interim Committee on Business and Labor)**	**Passed**
HB 2494 INTRO	Extends operation of public purpose charges until January 1, 2036.	Rep Doherty; Rep Holvey; Rep Power; Rep Wilde (Pre-session filed)	Failed
HB 2496 EN	**Includes battery storage in definition of "green energy technology." Defines "total contract price." Permits contracting agency, as alternative to including green energy technology in construction, reconstruction or major renovation of public building, to make expenditure to improve energy use efficiency in public building.**	**Rep Holvey; Rep Power; Rep Sollman; Rep Williams (Pre-session filed)**	**Passed**
HB 2497 INTRO	Adds battery storage to definition of "green energy technology" for public buildings that are emergency shelters or facilities for public safety.	Rep Holvey (Pre-session filed) (at the request of Oregon Solar Energy Industries Association)	Failed
HB 2501 INTRO	Establishes Task Force on Green Energy Corridors.	Rep Smith G (Pre-session filed)	Failed
HB 2535 INTRO	Creates Task Force on Disaster Response and Recovery.	Rep Evans (Pre-session filed)	Failed
HB 2536 INTRO	Establishes Oregon Public Places Are Safe Places Investment Fund.	Rep Evans (Pre-session filed)	Failed
HB 2581 INTRO	Makes findings regarding Columbia River Basin.	Rep Wilde (Pre-session filed)	Failed

HB 2602 INTRO	Modifies definitions of light-duty zero-emission vehicle and plug-in hybrid electric vehicle to include vehicles with at least three wheels.	Rep Fahey; Rep Holvey; Rep Lively; Rep Nathanson; Rep Power; Rep Wilde; Sen Manning Jr; Sen Prozanski (Pre-session filed)	Failed
HB 2611 INTRO	Specifies that electricity generated by hydroelectric facility or other equipment that generates electricity through use of hydroelectric energy may be used to comply with renewable portfolio standard.	Rep Nearman; Rep Smith G (Pre-session filed)	Failed
HB 2618 EN	**Requires State Department of Energy to adopt by rule program for providing rebates for purchase, construction or installation of residential and certain nonresidential solar electric systems and paired solar and storage systems.**	**Rep Fahey; Rep Helm; Rep Keny-Guyer; Rep Leif; Rep Lively; Rep Marsh; Rep McKeown; Rep Nosse; Rep Power; Rep Reardon; Rep Salinas; Rep Schouten; Rep Smith DB; Rep Sollman; Rep Wilde; Sen Boquist; Sen Dembrow; Sen Frederick; Sen Golden; Sen Manning Jr; Sen Prozanski; Sen Roblan (Pre-session filed)**	**Pending**
HB 2735 A	Establishes Task Force on Disaster Response and Recovery.	Rep Evans	Failed
HB 2791 INTRO	Modifies cost recovery formula for site certificate holders.	Agriculture and Land Use (H)	Failed
HB 2792 INTRO	Requires applicant for energy facility site certificate to obtain land use approval from local government.	Agriculture and Land Use (H)	Failed
HB 2802 A	Establishes Homeownership Repair and Rehabilitation Program within Housing and Community Services Department to provide grants to entities providing financial assistance to persons in low income households for repair and rehabilitation of residences.	Rep Fahey; Rep Gomberg; Rep Keny-Guyer; Rep Leif; Rep Marsh; Rep Noble; Rep Sollman; Sen Hansell	Failed
HB 2808 INTRO	Requires Oregon Business Development Department to establish competitive clean technology sector development grant program.	Economic Development (H)	Failed
HB 2852 INTRO	Authorizes local governments to form authorities for purpose of implementing community choice aggregation programs.	Energy and Environment (H)	Failed
HB 2855 INTRO	Modifies general powers of Public Utility Commission.	Energy and Environment (H)	Failed
HB 2857 INTRO	Requires eight percent of electricity sold in this state by each electric company that makes sales to 25,000 or more retail electricity consumers to be generated by small-scale renewable energy facilities or certain biomass facilities.	Energy and Environment (H)	Failed
HB 2893 INTRO	Establishes advisory committee on manufactured housing within Housing and Community Development Department.	Rep Fahey; Rep Helt; Rep Marsh	Failed

HB 2894 A	Establishes program within Housing and Community Services Department to provide supplementary loans to individuals for new energy efficient manufactured dwellings.	Rep Fahey; Rep Gomberg; Rep Helt; Rep Keny-Guyer; Rep Leif; Rep Marsh; Rep McKeown; Rep Meek; Rep Smith G; Rep Wilde; Rep Williams; Sen Hansell	Failed
HB 2895 A	Establishes program within Housing and Community Services Department to provide grants for decommissioning and disposing of manufactured dwellings.	Rep Fahey; Rep Gomberg; Rep Helt; Rep Keny-Guyer; Rep Leif; Rep Marsh; Rep Meek; Rep Smith G; Rep Wilde; Rep Williams; Sen Hansell	Failed
HB 2896 EN	**Establishes programs within Housing and Community Services Department to provide loans to one or more nonprofit corporations to develop programs that support manufactured dwelling park preservation and affordability for tenants.**	**Rep Fahey; Rep Gomberg; Rep Helt; Rep Keny-Guyer; Rep Leif; Rep Lively; Rep Marsh; Rep McKeown; Rep Meek; Rep Prusak; Rep Smith G; Rep Wilde; Sen Hansell**	**Pending**
HB 3025 INTRO	Requires State Forestry Department to establish Western Oregon Regional Carbon Sink as geographical area and take certain actions regarding area on or before January 1, 2031.	Rep Evans	Failed
HB 3027 INTRO	Authorizes State Treasurer to issue general obligation bonds under Article XI-E of Oregon Constitution in amount that produces $500 million in net proceeds for Strategic Carbon Sequestration and Forestry Sustainability Program.	Rep Evans	Failed
HB 3045 INTRO	Requires local governments to allow residential or commercial development applications to provide one parking space with electric vehicle charging as substitute for two required nonelectrified spaces.	Rep Wilde	Failed
HB 3094 A	Establishes Home Weatherization, Retrofit and Affordability Program for Housing and Community Services Department to provide incentive payments to construction contractors undertaking energy improvement projects on residential structures.	Rep Fahey; Rep Helm; Rep Keny-Guyer; Rep Marsh; Rep Meek; Rep Salinas; Rep Schouten; Rep Sollman; Rep Wilde; Rep Zika; Sen Dembrow; Sen Fagan	Failed
HB 3111 INTRO	Modifies provisions for reimbursement to administrator of electric vehicle rebates issued to recipients that sell vehicle or terminate lease before 24 months after purchase or beginning of lease.	Rep Gomberg	Failed
HB 3141 A	Modifies and adds laws related to electric vehicle charging stations.	Rep Helm; Rep Holvey; Rep Power; Rep Wilde	Failed
HB 3157 INTRO	Requires Director of Department of Consumer and Business Services to amend Low-Rise Residential Dwelling Code to require alternative energy collection or generation by December 15, 2020.	Rep Evans	Failed
HB 3211 A	Directs State Department of Agriculture to advance design of cannabis business certification program.	Rep Fahey; Rep Helm; Rep Smith DB; Rep Wilson; Sen Prozanski	Failed

HB 3264 INTRO	Requires additional disclosures from manufactured dwelling park landlords to Housing and Community Services Department.	Rep Fahey; Rep Marsh	Failed
HB 3274 A	Requires eight percent of electricity sold in this state by each electric company that makes sales to 25,000 or more retail electricity consumers to be generated by small-scale renewable energy facilities or certain biomass facilities.	Rep Bonham; Rep Helm; Rep Helt; Sen Bentz; Sen Roblan	Failed
HB 3313 INTRO	Authorizes Housing and Community Services Department to provide grants to nonprofit to develop infrastructure for new manufactured dwelling park in Springfield, Oregon.	Rep Lively; Rep Marsh; Sen Beyer	Failed
HB 3322 INTRO	Creates income tax credit for taxpayers that provide apprenticeship opportunities.	Rep Sprenger	Failed
HB 3324 EN	**Exempts funds collected through third party vendors for payment for electric vehicle charging services from certain laws relating to deposit of public funds.**	**Energy and Environment (H)**	**Passed**
HB 3325 INTRO	Requires public utility to meet certain requirements for processing applications from nonresidential customer-generators to interconnect to electric distribution system net metering facility that has generating capacity of more than 25 kilowatts but less than two megawatts.	Energy and Environment (H)	Failed
HB 3407 INTRO	Authorizes electric companies that are subject to renewable portfolio standards to offer to purchase qualifying electricity generated by certain hydroelectric facilities.	Rep Bonham; Rep Nearman	Failed
HB 3408 INTRO	Appropriates moneys from General Fund to Department of Environmental Quality for deposit in Residential Solid Fuel Heating Air Quality Improvement Fund to fund community efforts to promote economic development and improve public health by reducing emissions from solid fuel burning devices that burn wood.	Rep Findley; Rep Hayden; Rep Helm; Rep Keny-Guyer; Rep Sollman; Rep Wilde; Rep Zika; Sen Prozanski	Failed
HB 3425 A	Establishes, if State of Oregon adopts cap and trade program, credit available to eligible persons for purpose of mitigating carbon price indirectly paid through purchase of motor vehicle fuel to propel eligible motor vehicles on public highways.	Carbon Reduction (J)	Failed

HB 3433 INTRO	Requires certain state agencies and colleges at Oregon State University to conduct certain studies on opportunities for greenhouse gas sequestration by and emissions reductions from activities related to Oregon's natural and working lands and in Oregon's forest products, agricultural and building materials industries, transportation sector and electricity sector.	Rep Barreto; Rep Boles; Rep Bonham; Rep Boshart Davis; Rep Drazan; Rep Findley; Rep Hayden; Rep Helt; Rep Leif; Rep Lewis; Rep McKeown; Rep Nearman; Rep Noble; Rep Post; Rep Reschke; Rep Smith DB; Rep Smith G; Rep Sprenger; Rep Stark; Rep Wallan; Rep Wilson; Rep Witt; Rep Zika; Sen Girod; Sen Hansell; Sen Heard; Sen Knopp; Sen Linthicum; Sen Roblan; Sen Thomsen	Failed
HB 5044 INTRO	Appropriates moneys from General Fund to Oregon Climate Authority for biennial expenses.	Pre-session filed (at the request of Oregon Department of Administrative Services)	Failed
HB 5050	**Relating to state financial administration; declaring an emergency.**	**Appropriates monies from General Fund to Emergency Board for allocations during biennium.**	**Passed**
HCR 9 INTRO	Supports development of closed-loop pump storage projects.	Rep Helm; Rep Nearman; Rep Reschke; Rep Smith G; Sen Dembrow; Sen Frederick; Sen Roblan (Pre-session filed)	Failed
SB 1024 INTRO	Authorizes Housing and Community Services Department to provide grants to nonprofit to develop infrastructure for new manufactured dwelling park in Springfield, Oregon.	Sen Beyer	Failed
SB 1044 EN	**Establishes goals that promote zero-emission vehicle use and requires entities of executive department to promote zero-emission vehicle use.**	**Rep Evans; Rep Helm; Rep Keny-Guyer; Rep Marsh; Rep Neron; Rep Reardon; Rep Salinas; Rep Schouten; Rep Sollman; Rep Wilde; Sen Beyer; Sen Dembrow; Sen Monnes Anderson; Sen Wagner**	**Pending**
SB 1051 EN	**Establishes, if House Bill 2020 becomes law, credit available to eligible persons for purpose of mitigating carbon price indirectly paid through purchase of fuel to propel eligible motor vehicles on public highways.**	**Rep Power; Sen Beyer; Sen Dembrow**	**Pending**
SB 220 INTRO	Requires Department of Environmental Quality to conduct study related to greenhouse gas emissions.	Pre-session filed (at the request of Governor Kate Brown for Office of the Governor)	Failed
SB 267 INTRO	Transfers duties, functions and powers of State Department of Energy related to issuance of loans for small scale local energy projects to Oregon Business Development Department.	Sen Olsen (Pre-session filed)	Failed
SB 348 INTRO	Requires Division of Audits to hire or contract with independent, third-party entity to conduct cost-benefit analysis of low carbon fuel standards and associated rules.	Sen Olsen; Sen Thatcher (Pre-session filed)	Failed

SB 38 EN	**Modifies provisions for treatment of renewable energy certificates issued for generation of thermal energy.**	**Pre-session filed (at the request of Governor Kate Brown for State Department of Energy)**	**Passed**
SB 451 A	Establishes eligibility for renewable energy certificates for facilities that generate electricity from direct combustion of municipal solid waste and became operational before January 1, 1995, if such facilities register with Western Renewable Energy Generation Information System at any time, and for up to 11 average megawatts of electricity generated, per calendar year, from the combustion of biogenic material.	Sen Beyer (Pre-session filed) (at the request of Covanta)	Failed
SB 503 INTRO	Specifies that electricity generated by hydroelectric facility or other equipment that generates electricity through use of hydroelectric energy may be used to comply with renewable portfolio standard.	Sen Linthicum; Sen Olsen (Pre-session filed)	Failed
SB 504 INTRO	Expands definition of "green energy technology" for purposes of public improvement contracts.	Sen Linthicum; Sen Olsen (Pre-session filed)	Failed
SB 508 INTRO	Specifies that electricity generated by hydroelectric facility or other equipment that generates electricity through use of hydroelectric energy may be used to comply with renewable portfolio standard.	Sen Johnson (Pre-session filed)	Failed
SB 598 INTRO	Changes name of Oregon Global Warming Commission to Oregon Climate Change Commission.	Rep Lively; Rep Marsh; Rep Nosse; Rep Power; Sen Taylor (Pre-session filed) (at the request of Tuck Wilson)	Failed
SB 636 INTRO	Requires Public Utility Commission to adopt by rule renewable natural gas program for natural gas utilities to recover prudently incurred qualified investments in meeting certain targets for including renewable natural gas in gas purchases for distribution to retail natural gas customers.	Sen Beyer	Failed
SB 712 INTRO	Reduces, to 0.15 percent, percentage of energy resource supplier's gross operating revenue that annual energy resource supplier assessment may not exceed.	Sen Olsen	Failed
SB 713 INTRO	Requires State Department of Energy to conduct study on department's contributions to leading State of Oregon to safe, clean and sustainable energy future.	Sen Olsen	Failed
SB 714 INTRO	Requires State Department of Energy to conduct study related to Energy Facility Siting Council and report findings to interim committees of Legislative Assembly by September 15, 2021.	Sen Olsen	Failed
SB 715 INTRO	Requires State Department of Energy to conduct study related to Energy Facility Siting Council and report findings to interim committees of Legislative Assembly by September 15, 2021.	Sen Olsen	Failed

SB 82 INTRO	Directs Bureau of Labor and Industries to establish program to provide supportive services for preapprenticeship and apprenticeship programs in this state.	Pre-session filed (at the request of Commissioner of the Bureau of Labor and Industries Brad Avakian)	Failed
SB 89 INTRO	Requires Environmental Quality Commission to adopt by rule program for assessing net impacts of state policies and programs for reducing greenhouse gas emissions.	Pre-session filed (at the request of Senate Interim Committee on Environment and Natural Resources)	Failed
SB 902 INTRO	Declares policy of state to encourage sustainable growth by funding reduction of certain taxes with imposition of tax on amount of carbon dioxide equivalent emissions from combustion of certain carbon-based fuels.	Sen Bentz	Failed
SB 91 INTRO	Requires at least 50 percent of public purpose charge funds paid to nongovernmental entity to be invested in providing incentives to retail electricity customers for accelerating transportation electrification.	Pre-session filed (at the request of Senate Interim Committee on Environment and Natural Resources)	Failed
SB 928 A	Establishes Oregon Climate Authority and creates Oregon Climate Board, effective on passage.	Environment and Natural Resources (S)	Failed
SB 929 INTRO	Creates tax credit for certified historic property project contributions.	Environment and Natural Resources (S)	Failed
SB 98 EN	**Requires Public Utility Commission to adopt by rule large renewable natural gas program and small renewable natural gas program.**	**Pre-session filed (at the request of Senate Interim Committee on Environment and Natural Resources)**	**Pending**
SCR 1 EN	**Declares legislative support for closed-loop pump storage energy projects.**	**Pre-session filed (at the request of Senate Interim Committee on Environment and Natural Resources)**	**Passed**
SJR 27 INTRO	Proposes amendment to Oregon Constitution authorizing certain proceeds received by state from sale of allowances as part of market-based program for regulation of greenhouse gas emissions to be used to encourage use of low- or zero-emission motor vehicles and authorizing exception for payment of refunds and credits and costs of administration and collection.	Sen Beyer	Failed

Tab 3

Audit Committee Meeting

February 11, 2019

Attending by Teleconference
Anne Root, Roger Hamilton, Mark Kendall

Attending at Energy Trust offices
Karen Ward, and staff, Cheryl Gibson, Pati Presnail, Steve Lacey, Michael Colgrove

Meeting convened at 1:00 pm

Management Review

Pati Presnail introduced the management review project. The draft proposal includes three subject areas:

1. *Review systems and procedures in place to ensure shared costs are fairly allocated between program funds administered by the OPUC and others such as Washington NWN, to avoid any real or perceived cross-subsidization.*

2. *Review current practices for tracking time against projects and recommend best practices and tools that would help Energy Trust understand and explain how staff time is utilized, not only for cost accounting purposes, but to better understand and point to specific areas that consume staff time across the organization. One example would be tracking time spent on Targeted Load Management (TLM).*

3. *Provide insight into the percentage of total effort programs similar to Energy Trust spend on innovation and program design versus execution. Ascertain if there are best practices or benchmark ratios that might relate to this balance.*

The preliminary timeline calls for a mid-point report-out at the July board meeting, and a final report at the October board meeting.

Next steps:

These topic areas are being reviewed by Oregon Public Utility Commission staff and may be modified by them. A request for proposals will be issued, and top responders interviewed in April 2019.

Audit Committee Added to the Bylaws

The bylaws are undergoing a review to bring them up to date. The policy committee has advised that the bylaws should require the existence of an audit committee. The new addition to the bylaws will be presented to full board on February 20, 2019.

1.1 *Audit Committee. Each calendar year, annual financial statements shall be prepared in accordance with generally accepted accounting principles, uniformly applied, audited by an outside independent certified public accountant, and presented to the Audit Committee for review. The Audit Committee may also exercise such other powers and authority as may be conferred by the board of directors consistent with these bylaws.*

Audit Committee Charter

The committee will continue to work on the charter, referring to examples from Moss Adams. This may wait for board review which is expected to conclude in October.

Meeting adjourned at 2:00 pm

The next meeting of the Audit Committee will be held on April 15, 2019.

PINK PAPER

Audit Committee Special Meeting

April 15, 2019

Attending by Teleconference
Anne Root, Melissa Cribbins

Attending at Energy Trust Offices
Mark Kendall

Energy Trust Staff
Cheryl Gibson, Pati Presnail, Alison Ebbott, Steve Lacey, Michael Colgrove

Meeting convened at 9:00 a.m.

Management Review

In this special meeting of the audit committee, the Management Review RFP responders presented their proposal.

The Management Review is focused on aspects of administrative and operational costs and program operations that might improve the organization's efficiency and effectiveness. The review has three focus areas:

A. Review systems and procedures in place to ensure shared costs, such as facilities, information technology and administration, are appropriately and fairly allocated between Energy Trust's primary programs administered with public purpose charge funds provided to Energy Trust under its grant agreement with the Oregon Public Utility Commission (OPUC), and a small number of other programs funded by other sources, such as Oregon Community Solar and NW Natural in Southwest Washington. In addition, review policies and procedures for billing for services.

B. Review current practices for tracking time against various programs and projects and recommend best practices and tools. Consider tracking time by program, project, and task. Consider implications for cost accounting, resourcing decisions, billing for services, and communicating with stakeholders regarding the cost of special projects and analyses. Provide some guidance on considerations for implementing such a system.

C. Review current practice and provide best practices in our industry regarding the proportion of effort staff should spend on program innovation and design versus day-to-day program delivery and operations activities. Help draw relationships between current savings acquisition and design for future savings innovation. Provide best practices or benchmarks of ratios that might relate to this balance between developing for the near future versus process for the current state. Consider the near- and long-term impact of activities related to programs funded with sources other than public purpose charge funds on the efficiency and effectiveness of Energy Trust primary program operations.

The interview process went very well, with respondents providing background and walking through their proposed methodology and timeline. After the interview process, the committee discussed submitting their selection ratings based on the criteria set prior to this meeting. The next step will be Energy Trust staff entering into a contract, developing the statement of work, developing a schedule, and other project management tasks.

A mid-point update will be provided at the July board meeting.

Meeting adjourned at approximately 11:00 a.m.

The next meeting of the audit committee is to be determined.

Tab 4

Compensation Committee Meeting Minutes

April 24, 2019

Attending by Teleconference:
Roland Risser and Roger Hamilton

Attending at Energy Trust office:
Cheryle Easton, Debbie Menashe, Pati Presnail, Amanda Sales

Others attending:
Jeff Gates, Cable Hill Partners
Ann Konrad, Principal Financial
Shelby DeSiervo, Cable Hill Partners

Meeting started at 2:00 pm

Retirement Plan Quarterly Fiduciary Investment Review

Jeff Gates and Shelby DeSiervo of Cable Hill Partners, and Ann Konrad of Principal Financial, were present at the meeting to provide a quarterly fiduciary investment review to the committee. The presentation covered the first quarter of 2019, comparing it to the final quarter of 2018.

Shelby described how Energy Trust's plan participation rate continues to be good, up slightly from last quarter. This is especially impressive because Energy Trust's participation rate far exceeds the average rate among all plans on the Principal platform. In addition, the deferral percentage rate selected by employees is steady and in the ranges Cable Hill views as healthy. Shelby noted that the spread between younger and older participants in the Energy Trust plan is not as wide as in some of their other clients. This indicates that younger employees understand the benefits of a deferral option and are taking advantage of it. Debbie advised the committee that Energy Trust suggested employees consider increasing their contribution following the performance review merit increases. Staff will monitor whether this suggestion results in any greater deferral rates.

Jeff made reference to the growth in the fund balance, comparing 2018 Q4 to 2019 Q1. The market has rebounded, and this is reflected in an increase of nearly $500,000 in the fund balance.

Jeff then turned to a review of the plans fund menu, using the Cable Hill Partners scorecard methodology. The TIAA-CREF Social Choice Eq Instl fund, which had scored 6 for the past three quarters, has improved its score to 7. This is a promising direction. Under the scorecard methodology, if a fund stays at 7 or above for four consecutive quarters, it will be removed from the watchlist. The committee was pleased to see the fund performance improvement and agrees to continue to monitor it. Applying the scorecard methodology to the non-qualified "SERP" plan platform of funds identified an underperforming fund, the

Invesco Equity and Income R6 Fund. That fund is scoring in the 3-4 range, and Jeff recommended to the committee that the fund be removed and replaced from the SERP options with Vanguard Balanced Index Adm fund. The suggested replacement fund is in the same asset class as the Invesco Equity Fund. Committee members approved the replacement and asked staff and our plan advisors to provide notice to affected non-qualified plan participants.

Jeff then did a review of the overall financial markets for 2019 Q1. He directed committee members' attention to Cable Hill Partners' Q1 2019 Market Kaleidoscope to illustrate how the most recent quarter shows better performance in every asset class other than cash. Reasons for the improved performance of investments include: less concern about a trade war with China and indications from the Federal Reserve that rates will stay steady and not rise. The economy still has indicators of strength, and even though this growth cycle has continued for some time, all indicators show it will continue.

Jeff and Shelby asked committee members what other kinds of information they would like at the committee's quarterly meetings. Committee members suggested that Cable Hill Partners provide a list of suggested topics, and the committee will review the list and discuss what is of interest at the next committee meeting.

Ann then gave the committee a high-level summary of the distribution of plan investments and a snapshot of "retirement wellness," a measure of participation level, disaggregated by age of participation. Generally, Energy Trust's participant "retirement wellness" is good as compared to the comparison benchmark used by Principal Financial. The plan is the source of a relatively small number of employee loans. Ann also described that a new Principal phone app is out. More information will come, and Energy Trust will work with Principal to provide information about the app to employees.

Ann then provided information about the recent announcement that Principal will be acquiring Wells Fargo Retirement and Trust services. This acquisition, if approved through the regulatory process, is expected to close early in the third quarter of 2019. Ann will provide Principal's Q&A information to Energy Trust to help respond to any employee questions. Principal is committed to ensuring that the acquisition does not result in disruption to Principal participants. If completed, the acquisition would make Principal the third largest retirement plan platform in the country, making it less likely to be an acquisition target.

Staff Updates

Amanda updated the committee on Energy Trust's performance review process. Debbie updated the committee on preparations for the upcoming 401k plan audit.

Meeting adjourned at 3:30 p.m.

The next Compensation Committee meeting will be held on August 22, 2019 at 2:00 p.m.

Tab 5

Evaluation Committee Meeting

May 29, 2019, 12:00 pm

Attending at Energy Trust offices

Susan Brodahl, Shelly Carlton, Sarah Castor, Warren Cook, Phil Degens, Jackie Goss, Mana Haeri, Eric Hayes, Nicole Hillis-Lynch, Andrew Hudson, Erika Kociolek, Jennifer Light, Alan Meyer, Dulane Moran, Dan Rubado, Regina Saraswati, Peter Schaffer, Andrew Shepard, Kenji Spielman, Cindy Strecker, Jamie Woods

Attending by phone

Lindsay Hardy – *Committee Chair*, Anna Kim – Oregon Public Utility Commission (OPUC)

Customer Insights Study 2018 Highlights

Presented by Shelly Carlton

Background: This was the third year of this annual study; the survey was fielded from November 2018 through early January 2019. The study objectives were to describe the demographic makeup of participants and nonparticipants, assess awareness of and familiarity with Energy Trust, explore the customer journey of making home improvements, assess values related to energy use and environmental behavior, and to assess energy conservation behaviors.

Findings: Compared to the general Oregon population, participants were more likely to be homeowners, live in multi-person households, be highly educated and live in moderate- to high-income households. Nonparticipants tended to be a bit younger and less likely to own a home or live in the Portland Metro area, compared to the general population. These results were about what we expected based on past years of the survey.

The study used both aided and unaided awareness questions. The first question was open-ended and asked respondents if they knew of specific organizations that offer information and incentives for energy efficiency or renewable energy; 55 percent of participants and 12 percent of nonparticipants named Energy Trust in their answer. For the aided awareness question, the survey asked how much the respondent knew about Energy Trust's services and incentives; 79 percent of participants and 24 percent of nonparticipants said they knew a little, some or a lot about what Energy Trust does. Of those who had heard about Energy Trust in the last year, participants most often heard about Energy Trust through their utility (44 percent), while nonparticipants most commonly cited an advertisement (33 percent) as the source.

Respondents were asked about the motivation for completing their most recent home improvements. We have always found that saving energy and money are important to customers, and the same was true in this survey. Participants were less likely than nonparticipants to say improving the value of the home was a motivation. We are exploring new options for this survey question in the future.

When asked how they completed improvements, respondents said they most often hired contractors to do non-appliance projects; participants were more likely to do so than nonparticipants. Nonparticipants were more likely to undertake do-it-yourself projects.

The survey asked if respondents felt their energy use has an impact on the environment. Regardless of participation status, respondents strongly agreed that their energy use impacts

the environment (about 90 percent agreed). Respondents also agreed it was their responsibility to conserve energy and that their energy use has an impact on the grid. These questions were part of a new battery of questions developed with Research Into Action (now Opinion Dynamics Corporation) that we plan to continue in the future.

The survey asked a battery of questions about energy-saving household behaviors. The most commonly reported behaviors were turning off lights when not needed and cleaning or replacing HVAC filters. Shortening showers (to cut hot water use) was the least cited conservation behavior.

When asked about whether they have conversations about energy use, nearly half of participants reported talking about energy use with people outside of their household. Respondents with a high school diploma or less education reported significantly fewer conversations about home energy use. Those with annual household incomes of $100,000 or more reported having more conservations about home energy use.

The survey asked several questions to assess participant and nonparticipant demographics. Among participants, minority households are more likely than non-minority households to reside in the Portland Metro area and less likely to live in the Willamette Valley and North Coast regions, be middle aged, have children living at home, and have a college degree. Among non-participants, minority households are more likely than non-minority households to live in the Portland Metro, be younger, have a lower income, be living in a four-person household, and have less educational attainment.

Future work: For the 2019 study, we expect to field the survey in either September 2019 or February 2020. We are seeking a deeper understanding of how we are serving communities of color, as well as any difference in motivations, media consumption and participation barriers for moderate-income or rural customers. To obtain these, we may expand the sample size. We may also need to engage community-based organizations and the Diversity, Equity and Inclusion (DEI) committee.

Jamie Woods noted that the survey response rates were low, but normal for a phone survey. He asked if we have looked at whether response rates differ by area. He is more worried about selection bias and asked if Energy Trust has done any supplemental analysis of response rates. Shelly Carlton said that we have not dug into response rates. Jamie Woods asked how frequently the survey contacted a potential respondent before giving up. Sarah Castor said that five attempts was the maximum for any given customer.

Alan Meyer asked what action Energy Trust will take based on study results. Shelly Carlton said the study informs the way Energy Trust talks to people, as well as the channels we choose for marketing. We may dig deeper on a few questions in the 2019 study or do focus groups on those questions.

Susan Brodahl asked if the survey asked nonparticipants about what types of utility bills they get. Shelly Carlton said that we did not ask about that, but it might be interesting to explore in the 2019 study.

Short Take: Targeted Load Management Efforts

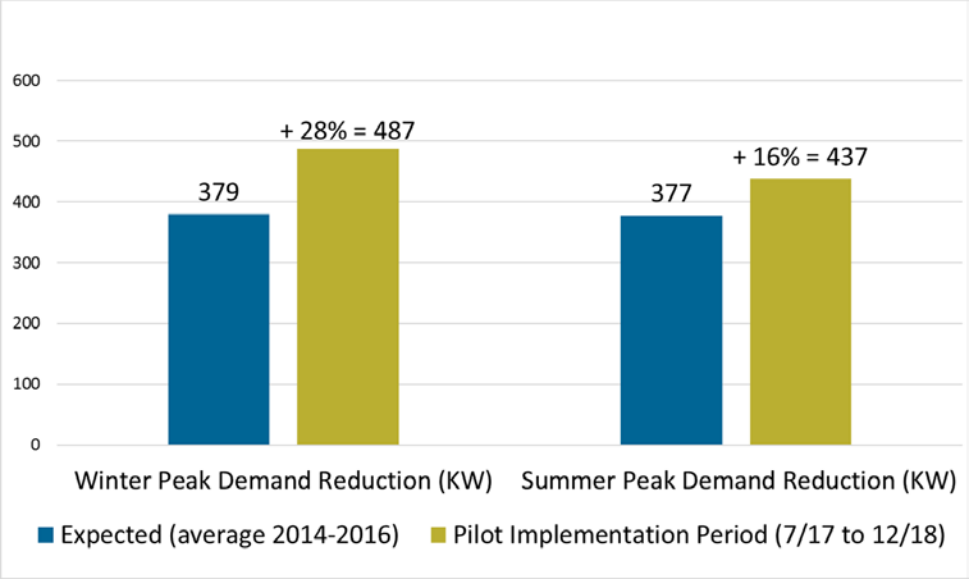
Presented by Phil Degens

Background: Targeted Load Management (TLM) is an effort to work with partner utilities to bring additional resources to areas with constraints during peak demand hours. Partner utilities may be offering demand response (DR), distributed energy resources (DER), or other transmission and distribution (T&D) improvements to the targeted areas. Utilities identify future bottlenecks in their systems and the goal is to defer capital investments, which can be very expensive.

Currently, Energy Trust and Pacific Power are finishing the North Santiam pilot, which began in 2016, as well as planning the Silverton project with NW Natural and a Medford area project with Pacific Power. In the future, Energy Trust anticipates working with Portland General Electric on some projects as part of their Smart Grid Test Bed.

North Santiam pilot: Pacific Power approached Energy Trust about the North Santiam pilot as a learning experience to assess demand side strategies for specific system constraints. Pacific Power uses a tool for screening distributed resources that focuses on demand management and DER alternatives to traditional T&D upgrades. The pilot fits into Energy Trust's mandate to achieve all cost-effective energy efficiency. Load management using energy efficiency is beneficial to ratepayers as a less expensive alternative to T&D upgrades. Some efficiency measures also make homes DR-ready.

The North Santiam pilot began informal planning in 2016, launched in July 2017, extended into 2018 and wrapped up in Q2 2019. The objective was to reduce demand between 6:00 and 10:00 a.m. in the winter, and 12:00 and 8:00 p.m. in the summer; there were no specific goals for kW savings. The main goal was to learn how to coordinate with the utility on this type of effort, document a replicable program design and test off-the-shelf offerings for rapid deployment. Demand reductions achieved were estimated to be 28 percent of winter peak demand and 16 percent of summer peak demand, as shown below.



The TLM team learned a lot from the pilot, for which they won the 2017 NEEA Leadership Award for Collaboration. The focus on rapid deployment of offerings did produce an impact on

demand. Looking forward, there is a need to shift from rapid deployment to planning for maximum impact. For example, if we anticipate a T&D constraint related to new housing development, we can work directly with builders. Joint promotional efforts between Energy Trust and Pacific Power were well received in the pilot. The team also learned that it is important to focus on large customers early in the effort, because their projects may take longer to complete. Lighting outreach strategies were the quickest to deploy and also the quickest to impact load.

The team will apply the learnings to the next pilot in the South Medford-Talent-Phoenix area. Energy Trust is collaborating with Pacific Power to refine the kW estimation methodology. The team will also share learnings with NW Natural and PGE for their targeted efforts. It will be important to develop a deeper understanding of the role of specific technologies at various sites, what is driving T&D constraints, increase knowledge of how savings shapes differ across measures, and continue to develop streamlined systems for the analysis of impacts.

Jackie Goss asked if there is an evaluator working on this pilot, and Phil Degens confirmed that there is an evaluator and evaluation work is underway. Jamie Woods asked what the resource planning tool is. Phil Degens said it was developed by AEG and is an Excel-based tool.

Medford pilot: The Medford area pilot will focus on summer peak demand, from 1:00 p.m. – 9:00 p.m. Phase 1, taking place in 2019, focuses on enhanced marketing of existing measures, while Phase 2, in 2020, will include increased incentives using existing avoided cost estimates.

Evaluation plans for 2019-2021 include a process evaluation: stakeholder interviews begin next month, then implementors, key pilot contractors, trade allies or key customers will be interviewed as needed. There will also be an impact evaluation, which will review savings methodology and savings estimates. Deliverables include an interim report in September 2019 and two additional reports in September 2020 and 2021.

Silverton pilot: NW Natural proposed a pilot with Energy Trust for TLM in Silverton. This pilot will also be a phased approach, allowing the project team to investigate cost, timing and savings attributable to different combinations of incentives, marketing and outreach. Energy Trust and NW Natural started talking about a TLM pilot in 2017, discussed the evaluation framework in 2018, and kicked off the first phase of the pilot in 2019. Silverton was picked out of seven possible cities. For NW Natural, the pluses of Silverton were that there is a single feeder that is easily metered, results would be generalizable to other area, and there are a fair number of modern (daily) meters. Energy Trust selected Silverton because of the customer mix, average consumption per site, remaining savings opportunity and current projects in the Energy Trust pipeline. Interruptible and transport customers are not included in the pilot since Energy Trust cannot serve them. The peak demand occurs in the winter and is driven by residential heating. The pilot will start with targeted marketing and delivery, then move to increased incentives. After that, the pilot may explore using localized avoided costs. Final reporting will take place in 2022.

The objectives of the pilot are to determine the cost per peak therm and evaluate that cost against other options for reducing peak demand. The pilot will also estimate customer adoption rates and assess how customers respond to the implementation of targeted solutions. The evaluation will look at pilot documents and conduct a pre/post billing analysis to assess savings on an annual basis. Energy Trust will integrate our work with NW Natural's work to see what is being saved at the pipeline.

TLM objectives: Energy Trust is hoping to build a strategy that can be deployed quickly and cost-effectively in constrained areas. We want to understand how to minimize cost by learning

more about local resource characteristics so we can target areas with the best strategies by sector and program.

Alan Meyer asked if the utility is adding any money to ours. Shelly Carlton said they are offering access to additional communication channels they use, but there is no additional incentive money provided on the utility side. Phil Degens said NW Natural may add incentives similar to what they already offer to residential customers installing new gas equipment.

Energy Trust would like to understand more about how much we are influencing demand reduction, and we want to use the same tools as T&D departments at the utility to assess the impact and value of our work.

Anna Kim said she appreciates Energy Trust staff working with utilities on these projects. The pilots combine the needs of utilities with opportunities for Energy Trust to learn new strategies that can help with future challenges. She thanked Phil for his work in evaluating the pilots. Phil Degens said it has been nice working with the utilities, and we are learning and growing from it.

Kenji Spielman asked if NW Natural is targeting a peak hour and Phil confirmed they are. Kenji Spielman asked if there will be challenges in estimating the demand reduction if the available metering is only at the daily level. Phil Degens said submetering at more frequent intervals would be very expensive and there isn't the need for it. We will look at daily usage, the feeder-level usage data (which is at a five-minute interval), and load shapes; then see if we need more information.

Fast Feedback Survey 2018 Results

Presented by Dan Rubado

Findings of mode experiment: A few months ago, Dan Rubado presented early results from an experiment of different survey modes for Fast Feedback. Energy Trust tested the traditional Fast Feedback phone survey and a web version of the survey with invitations via email, mailer and a combination of email and mailer. We also tested different survey incentives – a small fixed incentive to each respondent, an entry into a lottery for a larger incentive, and no incentive. We tracked response rates, cost per completed survey response and the impact of the survey mode on responses.

For residential participants, the phone and web surveys had similar response rates (23-24 percent), but the web survey had a lower cost. The mailer was much higher cost than emailed invitations. The fixed incentive of $10 had the best response rate. The lowest cost-per-complete of the various incentive conditions was the no incentive condition, but the response rate was substantially lower. Email invitations plus a fixed incentive had a 35 percent response rate at $11.50 per complete, including the incentive.

For nonresidential participants, the phone survey was much more effective and lower cost than a web survey. As with residential participants, the email invitation outperformed the mailer for the web survey. Survey incentives didn't have much of an effect on response rates. The conclusion was that the phone survey is still the best method for nonresidential participants.

For residential participants, there are some difference is answers by survey mode. Web respondents were:

- Slightly less satisfied overall and on specific items

- More likely to pay with credit card or financing
- More influenced by incentives, information and contractors
- Less likely to have done exactly the same thing
- Less likely to be free riders (37 percent vs. 45 percent)
- More likely to report spillover measures
- More inclined to use online resources in general
- More likely to be people of color
- Slightly older

Web and phone respondents were similar with respect to household income and number of people in the household.

Eric Hayes asked for the definition of a free rider. Dan Rubado said it is someone who would have done the project without the program's influence. Dulane Moran asked if some of the difference in the results by survey mode is related to social desirability bias with the phone survey, and if the evaluator commented on that. Dan Rubado said some of the difference is clearly related to mode, but the evaluator didn't specifically comment on social desirability bias, although that could be a factor.

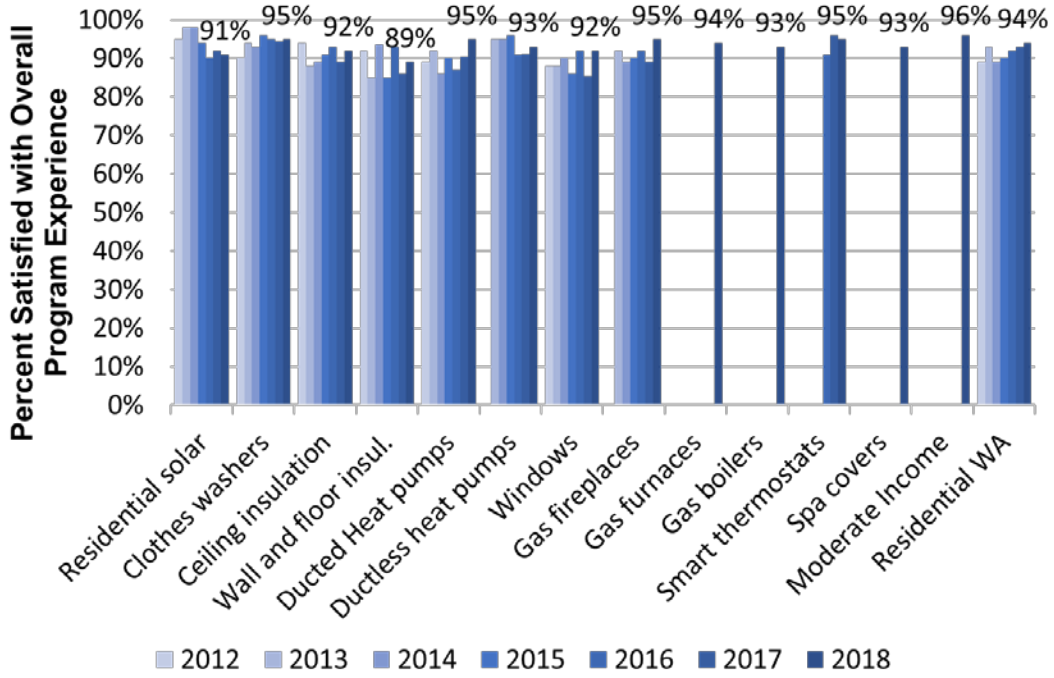
For nonresidential respondents, there were fewer difference in answers between survey modes. Web respondents were less satisfied with the project incentive amount, more influenced by their contractor, less influenced by Energy Trust information, less likely to have postponed the project or done a less efficient project, and more likely to report spillover measures. Free ridership was nearly identical between survey modes. Alan Meyer asked if these differences were statistically significant. Dan Rubado said they were, but the effects were smaller than on the residential side.

2018 Survey Results: Results were weighted by survey mode to try to control for differences related to mode. Overall satisfaction was 95 percent across all programs, and satisfaction with program representative was 97 percent (asked of nonresidential participants only). By program, satisfaction varied from 91 percent for Residential Solar to 100 percent for Existing Buildings - Washington.

Program	% Satisfied
Existing Buildings - Oregon	94%
Existing Buildings - Washington	100%
Production Efficiency	97%
Multifamily	96%
Commercial Solar PV	94%
Residential Solar PV	91%
Residential - Oregon	94%
Residential - Washington	94%

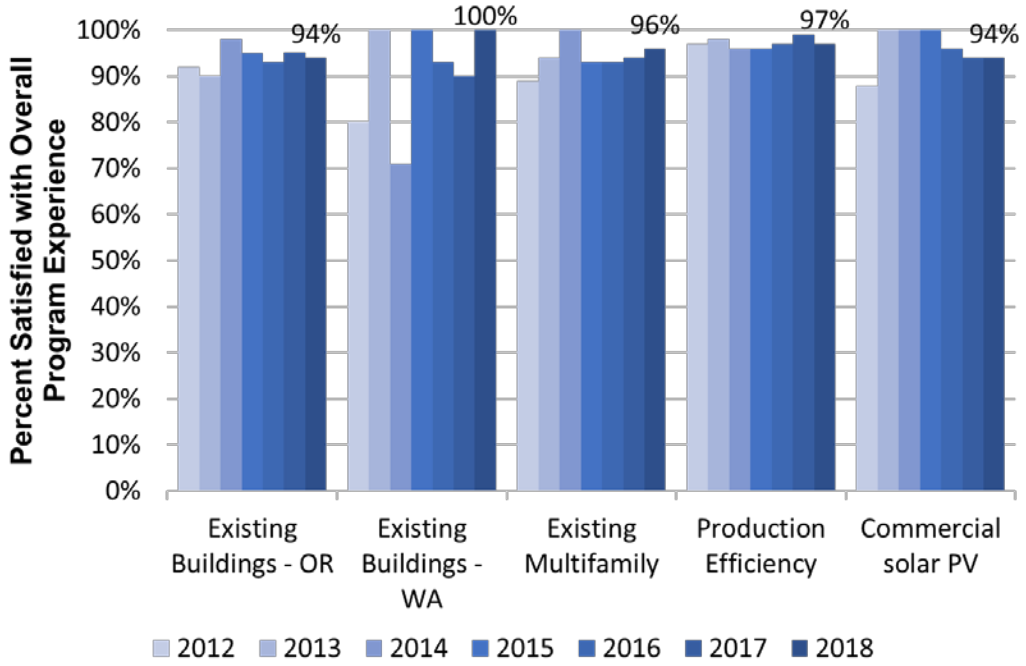
Over time, residential satisfaction has been relatively high, with no clear trends up or down, as shown in the figure below. Water heaters were removed from eligibility for Fast Feedback surveys in 2018 and gas furnaces, gas boilers, spa covers and moderate-income participants were added in 2018.

Residential Participant Satisfaction by Measure Type



Nonresidential satisfaction has also been fairly stable over time, as shown in the figure below. Existing Buildings – Washington has been the most volatile program because of the small number of respondents each year.

Nonresidential Participant Satisfaction by Program



Nonresidential satisfaction with technical services like studies is fairly high, though it was a bit lower for Existing Buildings (88 percent) and Commercial Solar (50 percent) than for other

programs – the latter due to a small number of respondents in that program. Satisfaction with contractors among residential participants varied by measure from 86 percent for gas boilers to 94 percent for ductless heat pumps.

Free ridership rates for residential participants varied by measure from a low of 29 percent for ductless heat pumps to 66 percent for gas boilers. There may be a downward trend in free ridership for ductless heat pumps, ducted heat pumps and gas fireplaces over the last four or five years. Andrew Shepard asked how closely answer options for the free ridership questions align with the type of measure. Dan said that the questions and answer options are tailored to the type of measure.

Free ridership rates for nonresidential programs were calculated separately for electric and gas projects and are savings-weighted – large projects can have a large influence on the free ridership rate for a program. Most programs and fuels saw free ridership increase slightly from 2017 to 2018, except for Existing Buildings - Gas. In general, nonresidential free ridership rates were in line with historic levels.

For residential participants, we ask how they paid for their project. Most respondents said they paid with cash or credit. For solar and moderate-income participants, the portion using financing exceeds 20 percent. We also asked about whether heating equipment replaced a functioning system; 69 percent of heat pump, 59 percent of gas furnace and 50 percent of gas boiler participants said that those measures replaced working units. Gas fireplaces most frequently replaced a wood fireplace or woodstove (65 percent), while 24 percent replaced an older gas fireplace. Smart thermostat installation rates at the time of the survey were 100 percent. For residential thermostat participants, we asked about the influence of an instant coupon provided by Energy Trust, if they received one; free ridership was relatively similar between those who received an instant coupon and those who did not, despite an initial assumption that the coupon would result in lower free ridership. Mana Haeri asked why the instant coupon was supposed to lower free ridership. Peter Schaffer said there was some evidence from similar programs at other utilities that supported that assumption. Results of the demographic questions for residential participants are forthcoming.

For both residential and nonresidential respondents, the survey asked if they had installed any unincentivized measures as a result of the influence of the program, known as spillover, and gave a list of possible measure types. Installation and efficiency of spillover measures were not verified. Eight percent of residential participants and 3 percent of nonresidential participants reported spillover measures – “not nothing”, but also not a very large impact – and we don’t know anything about the size of the potential savings. Results of the spillover question ultimately weren’t that useful or reliable, and the question was cumbersome to ask.

Conclusions: Overall participant satisfaction is high. The web survey had better response rates with lower cost than a phone survey for residential participants, while the phone survey was more effective for nonresidential participants. A web survey does introduce some bias compared to the phone survey. Combining the phone and web modes can reduce cost and bias over just a phone survey.

Fast Feedback surveys of 2019 participants are underway. The residential version is a web survey with phone follow-up to non-respondents and those without an email address. There is still a $10 incentive for completing the survey by web. So far, the response rate has been low because Gmail has introduced new spam filtering and survey invitation emails are having trouble getting through. Qualtrics and Opinion Dynamics Corporation – the survey vendor and

contractor managing Fast Feedback surveys, respectively, are working to find a solution to this problem. The nonresidential survey is a phone survey only and is unaffected by email spam filtering. We have dropped the spillover question from the 2019 surveys.

In 2020, Energy Trust is moving to reporting gross savings, and we won't need to estimate free ridership for reporting savings. Alan Meyer said there might still be value in the answers to the free ridership questions and asked if we will still get the information we need to make decisions. Dan Rubado said we will continue to track Energy Trust influence on projects, but not ask what participants would have done otherwise – a hard question for respondents to answer – or calculate the free ridership rate. We have until about September 2019 to redesign the survey for 2020.

Susan Brodahl asked if there is overlap between this survey and the Customer Insights Survey. Dan Rubado said that Customer Insights doesn't ask about specific projects. Shelly Carlton said Customer Insights focuses on customer awareness and behaviors, while Fast Feedback focuses on projects and experience with Energy Trust.

Fast Feedback has a large number of respondents because we are going for a certain level of precision of results on a quarterly basis. We could relax the precision and quotas, do fewer surveys and lower the cost of Fast Feedback. Shelly Carlton asked about the risk associated with reducing the number of completed surveys. Dan Rubado said that we report satisfaction to the OPUC quarterly, so the results may bounce around more with less precision. If satisfaction goes below the 85 percent threshold, that could have repercussions for Energy Trust. Anna Kim asked if we need to decide the number of survey completes this year. The OPUC is working on performance measures this year, potentially altering the staffing metrics and DEI metrics, which is taking time; Energy Trust and the OPUC would need to think about whether to prioritize discussion of the satisfaction metric. She said it might be good to hold off until next year, but she can talk more about it after the Evaluation Committee meeting.

Dulane Moran asked if the satisfaction requirements are at the measure level or the program level. Dan Rubado said the metrics are at the program level, so there may be some flexibility. He would be happy to hear thoughts on what additional changes they would like to see for Fast Feedback.

Anna Kim asked how well the demographic questions were received by respondents. Dan Rubado said he looked through the data and most of the respondents answered the questions. Questions about income and race received some push-back from a very small minority of respondents.

New Buildings 2015-2016 Impact Evaluation

Presented by Dan Rubado

Background: Alan Meyer asked why we are evaluating the 2015 and 2016 program years in 2019. Dan Rubado responded that most new buildings are not immediately occupied; to evaluate long term savings, we need to evaluate buildings when they are fully occupied and operations are stable. We have already started the 2017 program year evaluation. The 2015-2016 evaluation was complete at the beginning of 2019, and this is the first opportunity to present it to the Evaluation Committee. The evaluation timeline is different for Existing Buildings

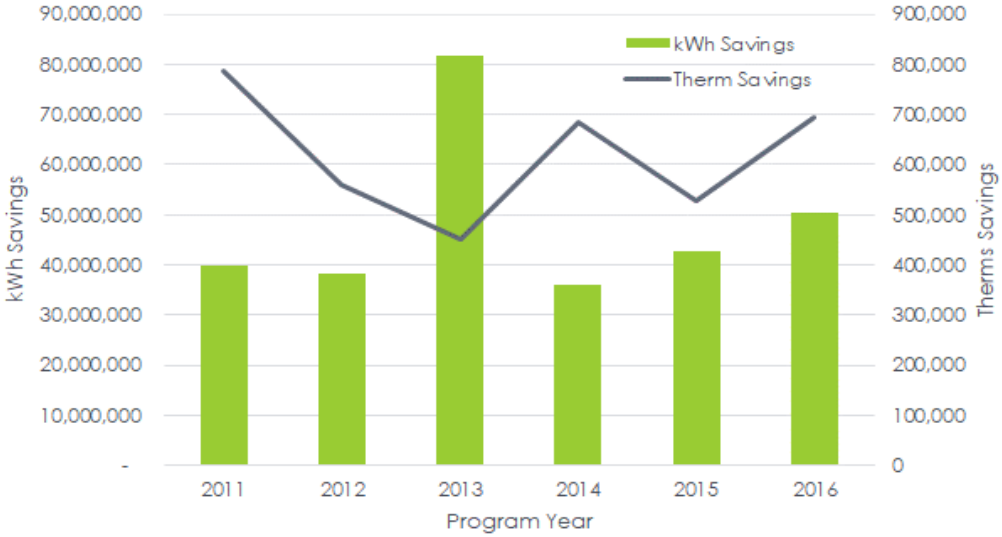
and Production Efficiency. Sometimes for large New Buildings projects we defer evaluation even longer.

The New Buildings program supports efficient design, construction, and major renovation of commercial buildings. There are four tracks:

- Data Centers
- Market Solutions: streamlined, bundled packages of measures for individual building types based on prototypical building models, which makes participation easier for small buildings
- System-Based: individually selected prescriptive and custom calculated measures, often single measures rather than bundles
- Whole Building: custom building simulation modeling to quantify whole building savings for large and complex projects; this track includes Path to Net Zero.

The graph below shows claimed electric and gas savings over time – the 2015 and 2016 years were fairly typical of past program years. The 2013 year was an outlier due to a large data center and a few other large projects.

New Buildings Program Savings over Time



For 2015 and 2016, the system-based track comprised over half of electric and gas savings, as shown below.

New Buildings Savings by Program Track

Program Track	Electric Savings (kWh)	% of Program	Gas Savings (therms)	% of Program
Data Center	21,774,374	25%	0	0%
Market Solutions	12,875,391	15%	323,546	26%
System-Based	45,286,046	52%	749,235	61%
Whole Building	6,819,900	8%	148,207	12%

Evaluation methods: The evaluation used stratified random sampling by building type. Savings were concentrated in certain building types, particularly multifamily, data centers, and warehouses for electric savings and multifamily, hospitality (hotels and restaurants), and schools for gas savings.

The goal of the evaluation was to estimate 2015 and 2016 program gas and electric savings and realization rates (RRs) at 90 percent confidence and 10 percent precision for each program year and fuel. There was also a desire to estimate savings and realization rates by building type at 90 percent confidence and 15 percent precision. A further goal was to report observations from projects, identify the causes of deviations from expected savings and recommend changes to improve the accuracy of estimated savings.

Susan Brodahl noted that we are evaluating 2015 and 2016 savings estimates and asked how, with changes to measures since that time, we will apply the results to 2020 savings estimates. Dan Rubado said that the findings are not used to change the working savings being used now, which are based on engineering calculations, but rather trying to assess how accurately the program estimated savings in 2015 and 2016. Susan Brodahl asked if savings estimates for measures from 2015 and 2016 translate to 2020 or if the savings have changed. Dan Rubado said that while the savings values of some measures have probably changed since 2015 and 2016, the methods used to develop the savings estimates are about the same.

The evaluation was conducted by Michaels Energy, with help from Evergreen Economics and PWP, Inc. for sampling and statistical analysis. The evaluation started with 166 sampled projects (22 percent of total projects), including 729 measures (34 percent of total measures). The sample was stratified by year, fuel, building type, and size of the savings claimed, and included a certainty stratum for the largest projects. Additionally, all Path to Net Zero projects were selected for evaluation as they were of particular interest. Sampled projects represented about 70 percent of claimed kWh savings and 64 percent of therm savings for 2015 and 2016. In most building types, the evaluation sampled the majority of claimed savings, while in a few building types, all the claimed savings were in the sample.

At the same time as this evaluation, NEEA was doing a code compliance study of the new commercial market in Oregon, which complicated matters a bit. We had eight sites that overlapped between studies, and Ecotope, NEEA's contractor, did field work and analysis for these sites. Also, the results for one large data center project, evaluated separately, were included in the sample because the project took place in the same program years. Another large data center project that occurred during 2015-2016 is being evaluated separately.

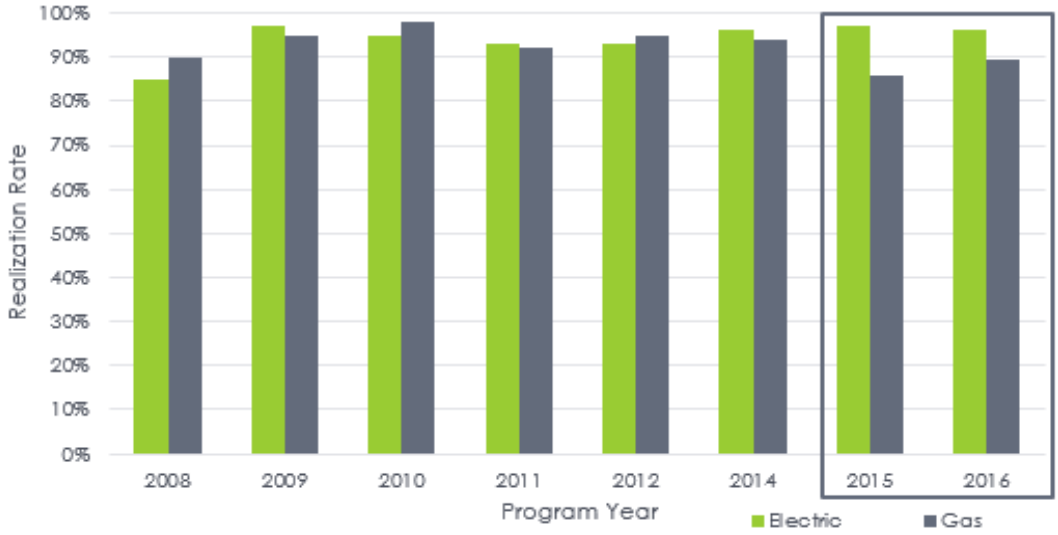
The evaluation ended up with 161 projects. Of those, 42 involved documentation review only, because they were simple projects, or the customer refused evaluation. The other 119 received site inspection and data collection involving facility operator interviews; onsite verification of equipment installation, counts, specs, fuel, and operation; and collection of operating hours and characteristics, control sequences and set points. In a subset of projects, data logging and metering were used to update operating schedules and usage profiles. Whenever possible, building automation or energy management system trend data and utility usage data were used to confirm equipment operation schedules and energy usage.

For prescriptive measures, the evaluator did more of a verification than an in-depth evaluation. For calculated measures, the evaluation verified engineering inputs and reviewed engineering algorithms. Market Solutions was treated more like prescriptive measures. Custom engineering calculations and building simulation models for the Whole Building track required the most scrutiny and rigor. The evaluation made adjustments to ex ante savings and developed measure- and project-level realization rates. From there, the evaluator aggregated results up to the building type and then to program level.

Results: As shown below, for 2015, the realization rates were 97 percent for electric savings and 86 percent for gas; and for 2016, 96 percent for electric and 90 percent for gas. The 2015 gas realization rate, highlighted in orange is a bit lower than we saw historically. Otherwise, the results look consistent and good.

Realization Rates by Program Year and Fuel

Year	Fuel	Realization Rate	Relative Precision
2015	Electricity	97%	1%
	Natural Gas	86%	2%
2016	Electricity	96%	1%
	Natural Gas	90%	2%



Looking at results by program track, the system-based and whole building track gas realization rates are on the lower side – 89 percent and 72 percent, respectively. Of five data centers in the

sample, one project had a 90 percent realization rate, and due to its large savings claim, had an outsized impact on the overall electric realization rate. In Market Solutions, the evaluation made only small adjustments to both gas and electric savings, with no common factors in savings adjustments. The system-based track was the largest track in savings and had a diverse set of measures. There were no systematic or common factors in savings adjustments, but small adjustments were common. The most frequent adjustment was to hours of use for lighting.

The Whole Building track included specialized offerings for Path to Net Zero and LEED in addition to standard simulation modeling projects. Path to Net Zero had good realization rates of 97 percent for electric and 94 percent for gas. For the entire Whole Building track, there were small electric savings adjustments, but larger adjustments on the gas side. One issue was hybrid heating and cooling system baselines. A lot of advanced HVAC system have two or more fuel sources; sometimes the highest efficiency options shift between fuels. Fuel-switching is prohibited by Energy Trust policy, but this is a nuanced issue in new construction because the baseline is hypothetical; we don't know what fuel would have been used instead, so it is not switching fuel. There were two projects where the assumed baseline fuel mix was different than the as-built fuel mix. One project had a variable refrigerant flow (VRF) system with gas-fired zone heating and the baseline model relied more on the electric heat. When the evaluator shifted the baseline fuel mix to reflect actual operation, it caused gas savings to go down. The second project used hot water coils in air handling units and reheat boxes provided by a gas boiler system and heat recovery chiller. It was a complex project with the baseline reheat modeled as electric resistance, rather than gas. As with the other project, when the evaluator adjusted the baseline for the actual fuel mix, the gas savings went down. The evaluator's take-away was that either the modeled baseline fuel mix or technology should more closely reflect the as-built case, or cross-fuel shifts in consumption, especially increases in consumption, need to be captured in savings claims, as negative savings if needed. Eric Hayes asked if the issue was caused by basing savings on the building plan prior to its being built. Dan Rubado said that with these projects, the issue was mainly that there is no code minimum equivalent to use for the baseline, it is subjective.

Most of the standard measure-type realization rates were close to 100 percent, especially on the gas side (as noted in the table below, with lower values highlighted in orange). Standard foodservice gas measures received an 86 percent realization rate because some units were not used or had been replaced. Standard HVAC measures had a 79 percent gas realization rates, due to actual operation of equipment; there were several instances were gas boilers were found to be backup or rarely used. For standard lighting, hours-of-use adjustments were made, both up and down, which resulted in a slight decrease in electric savings overall; the gas interactive effects for one project resulted in a -229 percent realization rate on the gas side. Custom gas measures received large downward adjustments due to differences with assumed equipment operation. There was one simulation model project that had energy recovery with bypass dampers that were found to be required by code; they were more efficient than the code minimum, but the savings decreased. One project included a boiler measure claimed as prescriptive outside the simulation model and when it was put into the model, the savings decreased. Another custom boiler measure occurred at a site where the actual facility gas usage was lower than assumed, and as a result savings had to be adjusted down proportionally. For custom lighting, there were two projects where daylighting controls were found to be required by code which reduced the realization rate for the measure category to 90 percent.

Measure Realization Rates

Measure Type	Electric Realization Rate	Gas Realization Rate
Standard Clothes Washer	100%	101%
Standard Controls	100%	N/A
Standard Food Service	100%	86%
Standard HVAC	101%	79%
Standard Lighting	94%	-229%
Standard Motors	100%	N/A
Standard Refrigeration	100%	100%
Standard Water Heating	95%	91%
Market Solutions Packages	101%	95%
Custom Gas	N/A	86%
Custom HVAC	99%	10%
Custom Lighting	90%	N/A
Custom Other	99%	99%
Custom Refrigeration	100%	N/A
Data Center	92%	N/A
LEED	97%	71%

Dulane Moran asked if this includes measures installed in multifamily units. Dan Rubado said it does; the results are the mix of all building types in the evaluation.

For the most part, the building type realization rates, which are in the table below, have good precision (at 90 percent confidence). The realization rates are fairly high on the electric side, with a few exceptions. On the gas side, the realization rates are lower than what we've seen in the past; lower values are noted in orange.

Building Type Realization Rate

Building Use Type	Sampled Projects	Electric Realization Rate	Electric Precision	Gas Realization Rate	Gas Precision
Multifamily	29	106%	4%	84%	2%
Affordable MF	8	91%	5%	93%	6%
Assisted Living	9	77%	5%	92%	4%
Data Center	5	93%	1%	N/A	N/A
Warehousing	19	96%	2%	89%	3%
Hospitality	13	98%	3%	102%	5%
Elementary School	16	97%	3%	85%	8%
Middle-High School	9	91%	6%	80%	5%
College/University	8	84%	8%	91%	4%
Grocery	13	100%	0%	100%	0%
Retail	15	92%	10%	92%	5%
Office	8	96%	4%	83%	3%
Health	3	97%	1%	69%	5%
Other	11	103%	6%	84%	3%
Total	**166**	**97%**	**1%**	**88%**	**1%**

Jamie Woods asked how the precision values in this table were calculated. Dan Rubado responded that he isn't sure how the precision values in the table were calculated.

Reasons for adjustments included: measures/buildings operated/installed differently (for both electric and gas), baseline change (gas), and documentation errors (gas). There were a few instances of calculation errors and tracking errors; these had small impacts. There were larger impacts due to baseline changes (i.e., where the assumed baseline was found to be incorrect and was adjusted) and documentation errors.

Energy Use Intensity (EUI) Analysis: Only 48 percent of projects had enough data to compute accurate EUIs. EUIs were calculated by taking total annual energy consumption and dividing by square feet. Verified energy savings were 28 percent of base case energy use, on average. Savings were deepest for the system-based track – 30 percent of base case energy use. Savings were deeper for gas-heated buildings (30 percent of base case energy use) than electric-heated buildings (24 percent).

The evaluator asked participants a battery of questions about building energy management practices. The evaluator found that these practices are not standard and found that those who had such practices in place tended to have somewhat lower EUIs.

The table below shows EUIs (in kBtu/sf) by building type. Results from the 2014 program evaluation, the 2014 Commercial Building Stock Assessment (which is a mix of new and existing buildings), and the Portland Commercial Building Energy Performance inventory (also a mix of new and existing buildings) are provided as a point of comparison. The EUIs from this evaluation should be lower compared to the EUIs from the studies provided as a point of comparison, and in many cases that does seem to be the case. It is worth noting that some of the EUIs are calculated using only a handful of sites, and that there are differences in how buildings are categorized by each of these studies. The green highlighting in the table below indicates reductions relative to the studies provided as a point of comparison, and the red highlighting in the table below indicates an increase relative to the studies provided as a point of comparison.

EUIs by Building Type

	2015-16 NB Participants		2014 NB Participants		2014 CBSA	Portland CBEP	CBECS categories
Building Type	n	kBtu/sf	n	kBtu/sf	kBtu/sf	kBtu/sf	Bldg Type
Assisted Living	8	57	7	54			Lodging
Affordable MF	4	24					Lodging
Multifamily	12	26	15	31			Lodging
Lodging/Hotel	5	71	6	74	91	97	Lodging
Retail	9	70	5	76	65	57	Retail
Office	9	52	8	69	76	67	Office
Warehouse	7	31	10	58	30	100	Warehouse
Schools K-12	6	42	8	41	64	66	Education
College/University	2	38	5	62	64	66	Education
Grocery	4	79	1	127	240	170	Food Sales
Restaurant	3	407	4	781	351	36	Food Service
Gym/athletic	3	88	1	41	91	79	Assembly
Other	5	102	6	43	85	159	Other

The restaurant category only has three buildings but has a very high EUI (407) relative to the studies provided as a point of comparison. The multifamily, office, schools K-12, and grocery categories have lower EUIs relative to the studies provided as a point of comparison. This provides good evidence that the program is driving down EUIs. Mana Haeri asked how many Path to Net Zero buildings are included in the EUI analysis. Dan Rubado responded that he isn't sure how many are included in the EUI analysis.

Recommendations: The evaluator had the following recommendations to improve the program. Engage customers during the final stages of projects to ensure equipment specifications and quantities are consistent. Consider expanding verification for multifamily buildings. Engage with customers regarding low flow devices, given that the evaluator observed that some of these devices had been removed. Consider claiming Market Solutions packages measure-by-measure to track individual measure performance – Dan Rubado commented that in Energy Trust's project tracking system, Market Solutions savings and incentives are represented as aggregations, rather than individual measures. Finally, investigate boiler savings methodology and inputs and screen for backup and oversized boilers.

Recommendations for Simulation Projects: Expand technical guidance on selecting the baseline for hybrid HVAC systems for certain scenarios, such as heat recovery chillers. Hybrid systems could benefit from a baseline-specific review and modelers could use guidance on hybrid baselines. Account for increases in energy usage due to fuel shifting or interactions. Update baseline models to be consistent with code, rather than applying adjustment factors – Dan Rubado commented that LEED uses ASHRAE as a baseline, instead of Oregon's code, and the program uses adjustment factors. When a building model is used, it should be used to calculate savings for all significant measures and parametric runs should be used to quantify savings for individual measures. Simulation models should be run with TMY3 weather data for the nearest weather station – there were some instances where modelers used TMY2.

Energy Trust Take: Energy Trust's New Buildings program is performing well, aside from a few specific issues with gas measures and building simulation projects. Electric realization rates were high across the board, and gas realization rates were down slightly. The New Buildings program does appear to be bringing down EUIs in new construction. Most issues with savings estimates were outside of the program's control – for example, buildings were operating differently than originally assumed. The program does verification site visits already; there is not much opportunity for further engagement to capture operating conditions. Boilers were discontinued as standard measure due to chronic implementation difficulties; the measure will be redesigned if it is reintroduced. Hybrid HVAC systems pose modeling challenges (in particular, identifying an appropriate baseline). Moving forward, the program will capture all quantified increases in energy use due to differences in fuel mix or interactive effects.

Jennifer Light asked if Energy Trust could leverage NEEA's recent code compliance study to understand the prevalence of common HVAC systems. Dan Rubado responded that two-thirds of the sample for NEEA's code compliance study had participated in Energy Trust's New Buildings program, and that some HVAC system types are poorly represented in the study. Jennifer Light commented that when choosing a weather station, both elevation and proximity are important.

New Buildings Large Project Impact Evaluations

Presented by Dan Rubado

There was not enough time to present the full results for this topic, which was the results from evaluations of two large projects in the New Buildings program, but there was time for the committee to ask specific questions about the reports.

Alan Meyer asked about the bypass efficiency of newer uninterruptible power supply (UPS) units used in data centers. Dan said that the baseline for UPS may need to be changed. A recommendation from the evaluation was to re-assess the UPS baseline for data centers, as the market has evolved significantly. It is not clear if bypass mode is a standard feature on baseline equipment at this point; at the time of the project, it wasn't standard. Cindy Strecker said that the baseline used by the program has been updated since this project, as it is more efficient. The issue of bypass mode is a tricky one. A data center operator wants to make sure their equipment doesn't go down, and there can be issues with how fast the UPS can switch out of bypass when there is a power event. Some data center operators will not use the feature because it doesn't meet their standard. The program has seen issues with data centers looking to have very high uptime and using bypass mode. She said a lot of it comes down to the operations of the specific data center and what it is promising customers. Dan Rubado added that even if baseline equipment has bypass, the savings depend on whether it gets used or not. Cindy Strecker said that the Energy Star UPS specification made an assumption of 75/25 for whether or not the bypass is enabled. Dan Rubado said that the presence and use of bypass mode can affect savings a lot. In this case, the project was using bypass mode, baseline equipment didn't have that capability, and there were really big energy savings as a result.

Dan Rubado commented that savings looked good for the large warehouse facility project. The savings were mostly from lighting, with a portion from controls that Energy Trust did not provide incentives for. The customer indicated that they might have done all of the efficiency regardless of the program; but we don't really know what would have happened. The program has seen nationally-operating companies change their practices in different parts of the country, in part due to what incentives and rebates were available. It sounds like this company builds to their specs regardless of what programs are available, but we can't be sure.

Meeting adjourned at 3:00 p.m.

Sarah Castor will send out a poll to schedule the next meeting.

PINK PAPER

EVERGREEN ECONOMICS

PWP Inc.

2018 Existing Buildings Process Evaluation

FINAL REPORT

February 7, 2019

Executive Summary

Energy Trust of Oregon's Existing Buildings program began in 2003 and serves Portland General Electric (PGE), Pacific Power, NW Natural, Cascade Natural Gas, and Avista commercial customers on eligible rate schedules. The program serves customers of these utilities in Oregon and NW Natural customers in Southwest Washington. ICF has served as the program management contractor (PMC) since 2013. Recent changes to the program include the Strategic Energy Management (SEM) track now being implemented by ICF instead of internally by Energy Trust staff and a more rigorous measure development and approval process.

There are five main program tracks, each described briefly below:

- **Lighting.** The Lighting track provides rebates to commercial customers for prescriptive lighting retrofits.
- **Standard.** The Standard track offers incentives to customers for a variety of end use measures including HVAC, water heating, insulation, compressed air, grocery equipment, data center upgrades, and lodging and food service equipment.
- **Custom.** Participants in the Custom track receive a site evaluation or technical analysis study conducted by an Allied Technical Assistance Contractor (ATAC) that identifies cost effective opportunities for improvements at the customer's site; customers may elect to install these improvements and receive a rebate.
- **Direct Install.** For the Direct Install track, the PMC has sub-contracted with SmartWatt Energy to provide walkthrough audits to identify lighting upgrade opportunities along with installations of a limited number of no-cost measures, including occupancy-sensing power strips.
- **Strategic Energy Management (SEM).** The SEM track is implemented with the assistance of SEM coaches, which help identify energy savings opportunities at the customer site, lead workshops for SEM cohorts, and help participants review and refine their SEM plan over time.

This evaluation was designed to address the following primary research objectives for the Existing Buildings program:

1. Obtain a complete view of the program and commercial market;
2. Determine how best to align the program to the commercial market;
3. Identify how the program can adapt to changing market conditions;
4. Document recent and planned program changes;
5. Document program delivery successes and challenges;

6. Assess the effectiveness of current program operations;
7. Determine how well the program is serving customers;
8. Identify opportunities for new measures, services, or target markets; and
9. Develop recommendations for program delivery improvements and program partner relationships.

This evaluation focused specifically on the five main program tracks (Standard, Custom, Lighting, Direct Install, and SEM) in Oregon and Southwest Washington for the 2017 and 2018 program years. Specific emphasis was placed on the Custom and SEM tracks of the program. Other elements of the Existing Buildings program, such as pilot studies and the Pay for Performance offering, were outside the scope of this evaluation.

To achieve the evaluation objectives described above, the Evergreen team conducted the following seven tasks:

1. Market Characterization and Program Penetration Analysis
2. SEM Participation Follow-Through Analysis
3. Program Staff Interviews
4. ATAC Interviews
5. Contractor Interviews
6. Participant Interviews
7. Non-Participant Interviews

Analysis of Energy Trust of Oregon program tracking data by the evaluation team, consisting of Evergreen Economics and PWP Inc., provided an overview of the types of projects and participants in the Existing Buildings program in the last two years.[1] In 2017 and 2018 (January to August), the largest number of projects were completed in the Lighting and Standard tracks. In terms of the types of measures installed, it follows that lighting makes up the majority of measures installed in 2017-2018, followed by "Other" measures (which includes custom project studies), food service equipment, and appliances. Participants are well distributed across the various commercial sectors, with the most participants in the restaurant, retail, warehouse, and office sectors. As would be expected, the vast majority of participants are located in the Portland Metro and Northwest Oregon regions, with the fewest number of participants in Eastern Oregon and Southwest Washington.

Our approach to each evaluation task is summarized below.

[1] The date range covered in the program data provided by Energy Trust is January 2003 through August 2018.

Market Characterization and Program Penetration Analysis

The objectives of the market characterization and program penetration analysis were to gain insights about the commercial market in Energy Trust of Oregon's service territory and determine what proportion of customers has been served by the programs. This was achieved through an analysis of participant and population data. The analysis included a characterization of the commercial market in terms of number of sites, electric load, and gas load by market sector and by customer size and participation status. We also examined the proportion of customers served in terms of number of sites, electric load, and gas load by market sector and customer size, as well as program penetration by program track for each sector and geographic region.

SEM Participation Follow-Through Analysis

There were two objectives of the SEM follow-through analysis. The first objective was to determine if and to what extent participating in the SEM track of the Existing Buildings program affects a commercial customer's likelihood of completing a capital project to install energy efficiency equipment through an Energy Trust program. The second objective, which was contingent on finding that SEM does positively affect the likelihood of completing an energy efficiency capital project through the Existing Buildings program, was to estimate the impact that SEM participation has on the size of the capital project as measured by energy saved through the project (electricity and/or gas) and the size of the incentive (measured in dollars) paid to the participant.

We utilized data provided by Energy Trust on capital projects completed by participants of the Existing Buildings program from 2012 through the first half of 2018, including those in the SEM track. To achieve the first objective of the SEM follow-through analysis—determining the impact that SEM has on the likelihood that a commercial customer will complete an energy efficiency capital project through the Existing Buildings program—we utilized logistic regression. We also used the Tobit regression model to achieve the second objective of this analysis, which was to estimate the impact of SEM on energy savings from energy efficiency capital projects and the financial incentives paid to customers for completing the projects.

Program Staff Interviews

One of the early tasks of the evaluation was to conduct interviews with program staff. This included staff at Energy Trust, ICF, Evergreen Consulting Group (no affiliation with Evergreen Economics), SmartWatt, and the SEM coaches. In total, we conducted 14 interviews with staff in various roles relating to the Existing Buildings program. A few of these interviews were conducted in-person in coordination with the project kick-off meeting, and the rest were conducted by phone. All interviews lasted approximately one hour. These interviews were used to review program direction, strategies, anticipated changes, and plans for the future. We also inquired about staff perspectives on what is

going well, what is challenging, where they see opportunities for the program, and how the evaluation research could best benefit them.

ATAC Interviews

We conducted interviews with Allied Technical Assistance Contractors (ATACs) to obtain market stakeholder insights and perspectives about the Custom program track and the markets with which they interact. Specific topics covered in the interviews included how studies are typically initiated, the study assignment process used by the PMC, trends in energy studies and the broader market, sectors with significant participation potential, perceptions of the customer experience, ATAC experience and satisfaction with the program, and suggestions for improvements to the program.

In total, we completed interviews with 13 ATACs that conducted Custom project studies in the past two years (2017 or 2018) and excluded ATACs who are trade allies that Energy Trust identified for invitation to a separate survey.

Contractor Interviews

We conducted interviews of trade ally and non-trade ally contractors to obtain market stakeholder insights and perspectives about the program and the markets with which they interact. Specific topics covered in the interviews included:

- Description of their business, including the type of work conducted and sectors served;
- Length and depth of involvement in the Existing Buildings program;
- Perceived benefits and drawbacks of being a trade ally (or *not* being a trade ally in the case of non-enrolled contractors);
- Satisfaction with program processes;
- Perceptions of the commercial market;
- Customer experience with the program;
- Feedback on program training and communications; and
- Any suggestions for improvements to the program.

We ultimately completed interviews with 31 trade allies and 9 non-trade allies. These included contractors that have completed projects in the Existing Buildings program in either 2017 or 2018, excluding trade allies identified by Energy Trust for a separate survey. The sample was designed to collect insights from a mix of trade allies and non-trade allies at various activity levels (in terms of number of projects completed), but we also attempted to reach contractors from various program tracks, with a focus on non-lighting or Custom track contractors whenever possible.

Participant Interviews and Surveys

Our approach to data collection with participants varied by the program track in which they participated. For the SEM track, we completed phone interviews with 17 participants, and offered them a $10 incentive as a thank you for their time. For the Custom track, we fielded an online survey and offered a varying level of incentives depending on their response effort: $5 for completing just the multiple choice questions online, $10 for completing the multiple choice questions and the follow-up open-ended questions online, or $15 for completing the multiple choice questions online and the follow-up open-ended questions via a short follow-up phone call. Ultimately, 60 Custom track participants completed the online survey. For the Lighting, Standard, and Direct Install program tracks, we fielded an online survey and had a total of 98 participants complete the survey across these three tracks (43 Lighting, 33 Standard, and 22 Direct Install).

Across all program tracks, the general topics covered in the phone interviews or online surveys included:

- Background information on the completed project (non-SEM only);
- Sources of awareness;
- Participant awareness of the program and available information material;
- Participation benefits and program value;
- Program processes;
- Energy management practices (SEM only);
- Impacts of participation;
- Additional efficiency improvements since participation; and
- Future opportunities.

Non-Participant Interviews

The Evergreen team conducted 28 telephone interviews with a stratified sample of non-participating customers. The sample frame was based on a dataset of program-eligible commercial sites provided by Energy Trust of Oregon and screened to eliminate past program participants and further narrowed to those sites for which InfoUSA data were available; the InfoUSA data provided a contact telephone number and a contact name. Targets by sector were based on the distribution of commercial businesses in the full population of organizations eligible for Existing Buildings program services.

Interview questions were divided into a short version for respondents who were willing to provide a few minutes of their time and an extended version for interviewees willing to allocate more time and provide more in-depth responses. The short interview gauged each interviewee's familiarity with Energy Trust of Oregon, their organization's size and function, and the interviewee's likelihood of pursuing energy savings opportunities for

their organization. In addition to covering the topics in the short interview, the extended interview gauged how interviewees identified energy programs available to them and their past experiences with energy efficiency programs, and asked interviewees if they had any suggestions for Energy Trust of Oregon to better serve and reach organizations like theirs. Interviewees who completed the short interview and qualified were offered a $15 incentive to continue with the extended version of the interview.

Evaluation Recommendations

Based on the findings of the evaluation tasks described above, we have made the following recommendations for the Existing Buildings program:

- Program Operations:
  - Provide faster turnaround on incentive check processing.
  - Collect and maintain better information on non-trade allies.
- Contractor Experience:
  - Provide a single point of contact for contractors with multi-measure projects.
  - Expand training for trade allies on Docusign.
  - Provide more training resources for new or occasional users of the Lighting Tool.
  - Increase contractor awareness of marketing resources and materials.
  - Use the *Insider Newsletter* to increase awareness of available program resources.
  - Identify a program "champion" at non-trade ally firms.
  - Promote alternative trade ally status to distributors, manufacturers, and retailers that do not provide installation services.
- SEM Track:
  - Promote capital upgrades to SEM program track participants beyond the first two years of involvement.
  - Continue utilizing participant success stories for SEM marketing.
  - Consider reducing the number of SEM coaches.
  - Set expectations with SEM participants about savings they expect to achieve.
  - Expand SEM program track participants' exposure to similar participants, even across cohorts.
- Custom Track:
  - Promote awareness and use of short Technical Analysis Studies (TASs).
  - Expand outreach to smaller customers in the Custom track.
  - Be transparent about the Custom project study assignment process.

- Make sure approved or assigned Custom project studies can be completed and evaluated in a timeframe consistent with the customer's project timeline.
- Better explain the project review and approval process to ATACs.
- Provide more feedback to ATACs on how they are performing.
- Improve turnaround on payment for studies.
- Focus marketing for the Custom track on building long-term relationships with customers.
- Maintain relationships with past Custom track participants and suggest emerging opportunities as they become available.

- Non-Participating Customer Outreach and Marketing:
  - Key sectors to focus on for future opportunities include Healthcare, Office, and Retail.
  - Increase outreach to businesses outside of the Portland Metro region if greater geographic equity is desired.
  - As savings opportunities dwindle among large businesses, look for opportunities to serve medium and small businesses.
  - Incorporating the customer's utility name into marketing materials to non-participants may be more effective than using the Energy Trust name alone.
  - Focus non-participant marketing and research at the organizational level rather than at the site level.

MEMO

Date: March 21, 2019
To: Board of Directors
From: Jay Olson, Sr. Program Manager, Commercial Sector
Kathleen Belkhayat, Program Manager, Commercial Sector
Dan Rubado, Evaluation Project Manager
Subject: Staff Response to 2018 Existing Buildings Process Evaluation

The 2018 process evaluation of the Existing Buildings program conducted by Evergreen Economics showed that the program is mature, well established in the market, and generally operating well. Customers and contractors reported that their experiences working with the program were positive overall, although they identified a variety of small improvements that could be made to program operations. The market characterization included in this report provides a lot of detailed information that is difficult to boil down, but it will be useful in identifying opportunities remaining in the market and guiding program targeting efforts. While there are no obvious program blind spots in terms of markets served and program services, the evaluation identified several underserved markets that the program will pursue in the coming years, using all available efficiency measures. These include smaller businesses throughout the state, buildings outside the Portland Metro area, and facilities in the healthcare, office, retail, and restaurant sectors. In addition, the program is continuing its diversity, equity, and inclusion efforts to reach small, rural, and diverse commercial customers, in part by enrolling more diverse trade allies.

Although the evaluation doesn't highlight it, the program is facing increasing challenges with cost-effectiveness and identifying new efficiency measures. In particular, the lighting and direct install tracks are facing worsening cost-effectiveness problems that will necessitate major overhauls in program design, or reductions in the variety of measures available and their savings, in the relatively near future. Compounding these issues, the evaluation was unable to identify any big new technologies that could fill the savings gap from the approaching reduction in lighting savings. To meet these challenges, the program must rapidly innovate and develop a variety of new measures and program strategies to continue to cost-effectively serve customers and reduce energy consumption in the commercial sector.

In an attempt to increase participation in the custom track, the program has experimented with shorter, more targeted, less expensive technical studies to identify custom energy saving opportunities. The hope is that these condensed technical studies will increase project volumes in the custom track by making it more feasible for smaller businesses to participate and increasing project completion rates for larger businesses with a shorter process. Additional effort will be required to achieve these results, and the evaluation indicated that many Allied Technical Assistance Contractors were unaware that the shorter study format was an option, and some didn't think that pursuing smaller customers would be productive. This may be in part because the shorter study format was first launched in 2018 and initially tested with only a small group of ATACs. In addition, ATACs tended to see opportunities in market sectors where they had spent the most time. These factors indicate that some ATACs may need more training and direction from the program to effectively reach more customers and identify new market opportunities. Further, the program needs to assess whether the ATAC model is the best way to expand custom track participation or if they should take a more active role in recruiting customers and identifying custom projects.

The Existing Buildings PMC assumed management of the commercial SEM track in 2017. There was an initial adjustment period as the PMC figured out how best to administer SEM, coordinate all of the participants and delivery contractors, and track and claim the energy savings. Many of the commercial SEM processes have evolved since the PMC took over, but SEM operations have continued to be smooth and customers are highly satisfied. SEM continues to be a highlight for the program and the number of participants and energy savings have continued to expand. In addition, the evaluation demonstrated that SEM provides benefits in addition to the operations and maintenance and behavioral savings identified through SEM. There is also a significant educational impact that has a positive impact on the program as a whole—SEM participant sites were 26 percent more likely to complete a capital efficiency project after more than one year of SEM, compared with non-participant sites. In addition, the projects they completed were significantly larger, in terms of energy savings, than projects completed by non-participants. This cross-pollinating effect should be considered when assessing SEM delivery costs.

Tab 6

Finance Committee Meeting

January 30, 2019, 2:00 pm

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

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

The meeting began at 2:01 p.m.

Budget Tools Project

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

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

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

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

Community Solar

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

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

Next, Mike explained the staging of the decision process, for both the contract and the revised budget. While the prime contractor is negotiating with the State none of this can be done in a public setting, and so we are not able to bring this budget to the February board meeting. The next board meeting is in April. Mike explained that ordinarily we would prefer the board review and approve the budget for

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

2018 Investment Results

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

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

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

Committee Charter

We will review the committee charter at the next meeting.

The next Finance Committee meeting will be held on March 13, 2019 at 2:00 p.m.

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Finance Committee Meeting

March 13, 2019, 2:00 p.m.

Attending at Energy Trust offices
Pati Presnail, Mike Colgrove, Steve Lacey, Peter West, Cheryle Easton (Energy Trust)

Attending by teleconference
Susan Brodahl (finance committee chair), Debbie Kitchin, Roger Hamilton

The meeting began at 2:01 p.m.

Committee Charter

The committee discussed the finance committee charter. Debbie noted that she refers to this for other nonprofits, and Roger noted that it looks okay.

2018 year-end results

Peter West reviewed year end results, in particular that we nearly met all goals, yet underspent incentives significantly. A theme across programs was the strong economy. Contractors are having trouble with equipment and labor shortages.

The New Buildings program identified three projects that appeared to be independent, but are actually related through a complex legal structure and subject to project caps on the incentives. The result was achieving predicted savings levels for a significantly lower incentive cost. The Production Efficiency program is over budget, but not as much as had been predicted in the forecast. We pulled some levers on lighting when we saw custom projects falling behind. We did the same in residential, other retail, and distributor equipment, and drove additional savings through Savings Within Reach. We used the early forecast to identify and respond to early signals and make up for parts of the portfolio that are falling behind. Mike noted that these levers for additional savings tend to be cheaper sources of savings as well, which resulted in meeting goals at a lower cost. Susan noted this was a very successful year.

Susan asked if the project delays that caused underspending in 2018 will result in budget overages in 2019. Peter answered that this may happen. The committee discussed the risks of utilities and stakeholders expressing concern about our ability to forecast.

Debbie asked how concerned the utilities are about Energy Trust meeting goals. Steve answered that we overachieved in a number of years and we came in this year at 98 percent of Pacific Power goals, and 96 percent of PGE goals, plus we met IRP goals – which is what they really care about. Peter responded that PGE was aware of the large customer custom project status.

Steve Lacey discussed reserves. He explained that large variances in reserves can lead to criticism, but we always roll it into the next year's revenue ask. Susan expressed concern about the reserves – our intentions versus actual results; she observed that we consistently end with higher reserves than intended and asked if there is an easy way to associate the reserves with projects in the pipeline. Pati explained where to find outstanding project commitments, which appear as a footnote in the cash flow forecast and in the contingent liability footnote of the public financial statement. Most projects are due in the next year, others are longer-lived projects which are several years away from payments being due.

Undesignated interest income attributed to program reserves

Pati presented the interest attribution analysis. For background, staff proposed, and the board agreed, that interest earned on program reserves should be credited to the program reserves. Pati explained how this would be accounted for in the beginning 2019 program reserves, and shared a worksheet showing how the interest is calculated. At the end of 2018 there was $914,592 to redistribute to utilities.

Update on Community Solar

Mike announced that the contract for Community Solar is nearly complete. The plan is to send the amended budget out for a two-week public comment period. Because the budget had previously been presented to the board, staff will present a shortened version with just three slides showing the amended budget and addressing questions about the controls in place to segregate costs between Community Solar and Public Purpose Charge funds.

Budget Tool Project Update

Pati updated the committee on the progress of the budget tools project. We have a strong project manager and we're moving quickly toward releasing a request for information to learn what is available in the marketplace.

Walk-on Topics

Susan asked if five members is sufficient for the finance committee. Debbie recalled a time in the past when a member needed to recuse themselves from a discussion and the small committee size would have been a detriment. Roger asked if Susan would want to recruit more members.

The next Finance Committee meeting will be held on June 21, 2019 at 1:00 p.m.

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Finance Committee Meeting

June 21, 2019, 1:00 pm

Attending at Energy Trust offices
Ernesto Fonseca (committee member), Pati Presnail, Mike Colgrove, Steve Lacey, Alison Ebbott (Energy Trust)

Attending by teleconference
Susan Brodahl (finance committee chair), Debbie Kitchin, Roger Hamilton (committee members)

The meeting began at 1:05 p.m.

Budget Tools Project Update

Pati presented an update on the status of the budget tools project.

- We've made a lot of progress on the project so far:
    - Hired a project manager, chartered the team, established goals, further built-out the high-level project plan
    - Completed high level requirements
    - Completed the RFI and saw five strong vendors
    - Selected two vendors to continue a competitive deeper dive
    - Moved contracting further out to allow time for a proof of concept prior to contracting
    - Asked the two vendors to provide budget and timelines for implementation, both due to us on July 6

- Staff are working on the proof of concept detailed requirements now. That is taking longer than we hoped, but is a good investment of time. It's work that needs to be done for implementation, anyway.
- We continue to work toward a completed, tested product no later than May 1, 2020 – which will be in use by July 1, 2020.
- A risk to completing the project on time is the availability of staff and how long it takes to write requirements. We are currently flagging that as yellow/red because it will remain a threat until requirements are completed.

Procedure for using excess net assets derived from Community Solar or similar non-Public Purpose Charge funding sources

Pati and Mike asked the committee for guidance on establishing a reserve for Community Solar, to cover contingencies from that program, and whether this would be best handled as an operational practice rather than a board policy. This was a subject for the policy committee, who advised that it should be decided by the finance committee. The finance committee members agreed that a practice of establishing the appropriate reserve level should be an operational process and could be discussed with the committee during the budget development cycle. A board policy is not necessary. Funds beyond the required reserve could be available for use. Mike pointed out that the reserve amount would always be visible in the financial statements. There was a question whether this had ever been an issue before, and Pati and Mike described the donated funds that were originally embedded in the contingency reserve, but now stand on their own, and are available for use.

Susan will bring this forward to the board in her committee report at the July meeting.

May financial statements

Revenues are 3 percent greater than budgeted and expenditures are 5 percent less than budgeted. Ernesto noted the financial conditions seem stable.

May is still early in the year to signal whether or not we are on track to reach goals, but at least we have not been alerted to any issues. After next month, the year will be re-forecasted, and we will have better information to share at the August finance committee meeting. There was discussion about meeting IRP goals last year, Susan recalled we missed one of the IRP goals and expressed concern that we not miss two years in a row. Her concern was shared and noted.

Susan posed additional questions by email earlier and asked that this exchange be shared with the committee. Pati will circulate.

Budget schedule key dates

Steve walked the committee through the budget calendar. A copy is attached to these notes. Key dates the committee should be aware of for their planning purposes are:

Date	Event or Activity
8/14	Finance committee meeting – review re-forecast
9/20	Preview copy for OPUC staff analysis
10/4	Informal workshop with OPUC staff
10/9	Finance committee meeting - review budget details
10/10-10/30	Public comment period
10/16	Board and advisory committee workshop on budget and business plan
11/7	OPUC public presentation of draft budget
12/13	Board meeting
--	Utility engagement occurs from August through October

Ernesto asked about the public engagement, and remarked that it seemed to involve mostly stakeholders – organizations involved in the process, not the general public. Mike explained that the budget is available to the general public, but acknowledged that engagement primarily occurs with stakeholders. The webinar is another way to make the budget accessible to the general public. The public comment period creates a forum for objections or support to be made in writing and these comments are made public.

Walk-on topic – board assessment, financial discussions

Mike shared a conversation he had with Henry Lorenzen who is leading the board assessment. Henry remarked that the board doesn't seem to spend much time going over financial reports and wondered if that was something to be concerned about. Mike pointed out that it may just be because of time of year – and Henry hasn't observed an entire year's cycle yet. Mike also recalled slides Susan sometimes prepares and wondered if they would be useful to the board. Ernesto again pointed out that the finances seem stable. The committee agreed that reports in the board packets should be read in advance, and questions could be surfaced during the committee report, but reading through the details isn't the best use of board meeting time, unless there are issues to act upon.

The meeting concluded at 2:00 p.m.

The next Finance Committee meeting will be held on August 14, 2019 at 2:00 p.m.

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Notes on May 2019 Financial Statements

June 20, 2019

Revenue

Revenue is within 3 percent of budgeted amounts. PGE 838 funding continues to exceed expectations.

	YTD Actual	YTD Budget	YTD Var	YTD %	PY
PGE Efficiency	39,569,893	37,297,304	2,272,589	6%	43,654,630
PGE Renewables	3,969,493	4,027,147	(57,653)	-1%	3,880,616
PAC Efficiency	25,200,798	25,267,455	(66,657)	0%	25,251,495
PAC Renewables	2,863,243	2,897,251	(34,008)	-1%	2,878,168
NWN	16,228,020	16,233,224	(5,205)	0%	13,523,855
CNG	2,046,194	1,727,023	319,172	18%	1,505,821
Avista	871,613	871,613	-	0%	578,435
Community Solar Revenue	64,524	100,206	(35,683)	-36%	
Grant Revenue	24,002		24,002	0%	34,888
Investment Income	629,976	250,000	379,976	152%	254,711
Total	91,467,756	88,671,222	2,796,533	3%	91,562,619

Reserves

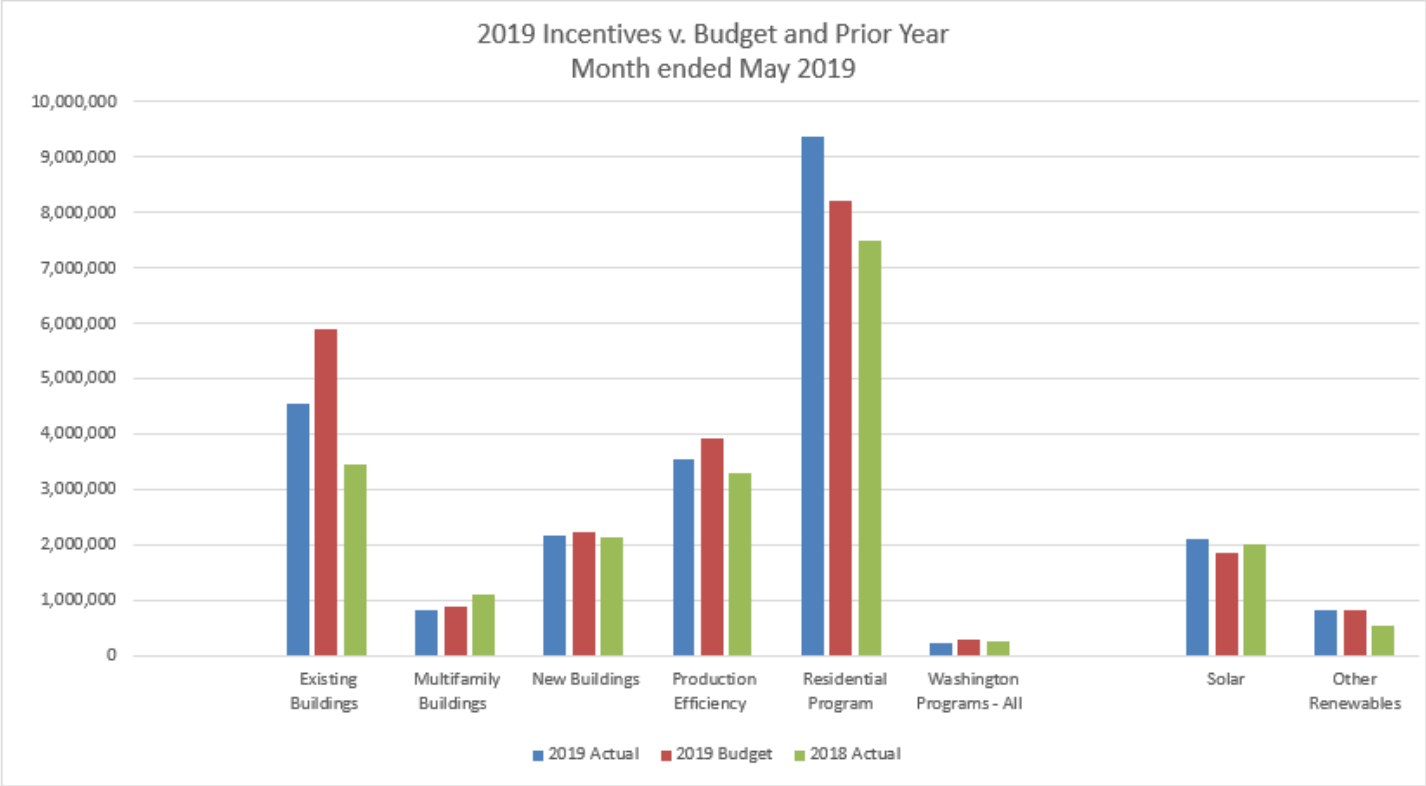
Reserve levels remained flat compared to the prior month. We have about $10 million more than we did last year at this time. We expect balances to drop in June when mid-year goals drive higher volumes. Community Solar is modestly accumulating net assets, which may be utilized by the program for unforeseen costs or released for other purposes.

Reserves

	5/31/19 current	12/31/18 Year End	5/31/18 one year ago
PGE	35,465,032	22,328,018	30,138,355
PacifiCorp	16,752,102	9,319,633	16,198,397
NW Natural	10,316,192	3,591,597	9,204,867
Cascade	1,592,587	373,597	1,231,686
Avista	151,233	0	(73,791)
NWN Industrial	1,484,827	772,993	1,933,276
NWN Washington	630,294	501,071	423,298
PGE Renewables	11,212,700	9,510,800	8,857,523
PAC Renewables	6,830,005	6,490,682	7,018,070
Program Reserves	84,434,972	52,888,391	74,931,681
Other Reserves	18,645	24,897	27,953
Community Solar Reserves	25,168	-	-
Contingency Reserve	5,000,000	5,000,000	5,000,000
Board approved for program loans	1,800,000	1,800,000	
Contingency Available	3,767,277	3,091,484	4,896,020
Total	95,046,029	62,804,754	84,855,649

Expenses

Year-to-date spending through May is 5 percent below budget ($3.4 million). May spending exceeded budget by $600,000. Incentives through May are within 2 percent of budgeted amounts and are 16 percent above incentive levels last year at this time. We expect a slight bump in June, as programs strive to reach their mid-year goals.

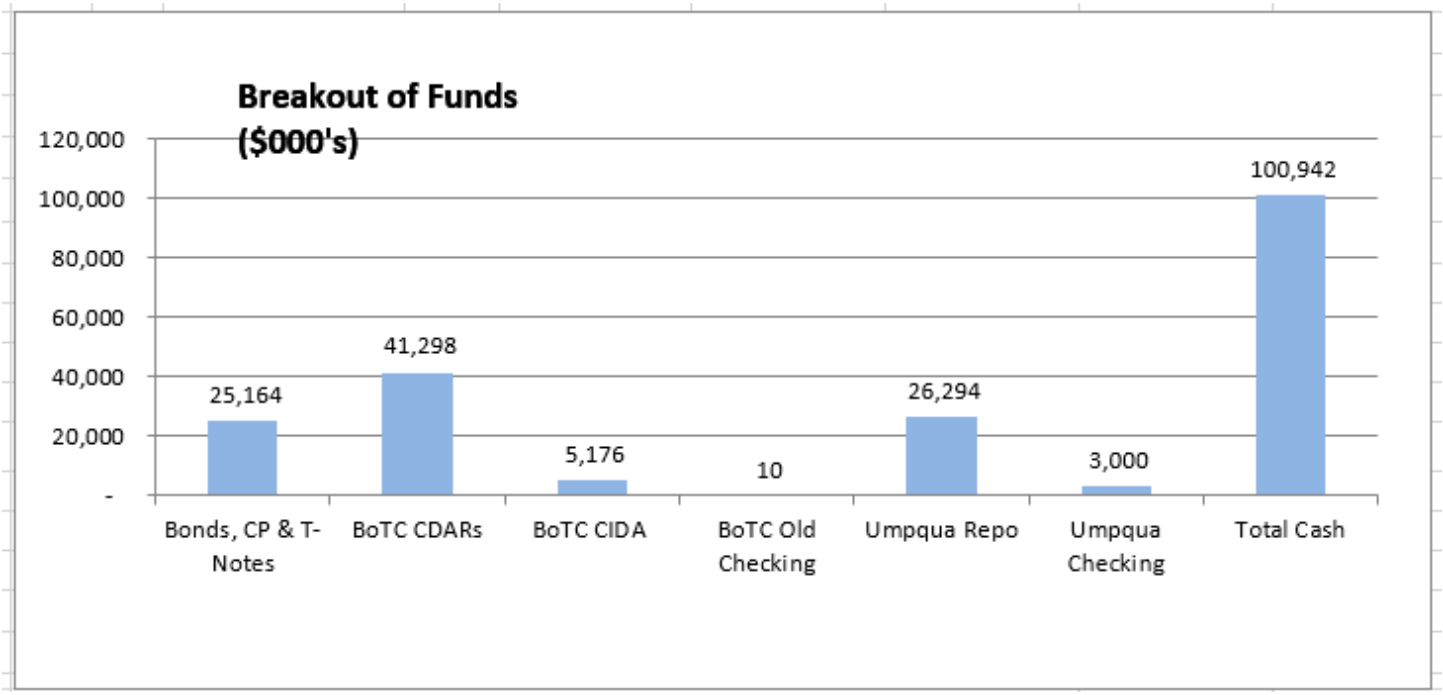


Total Incentives
Year-to-Date 2019

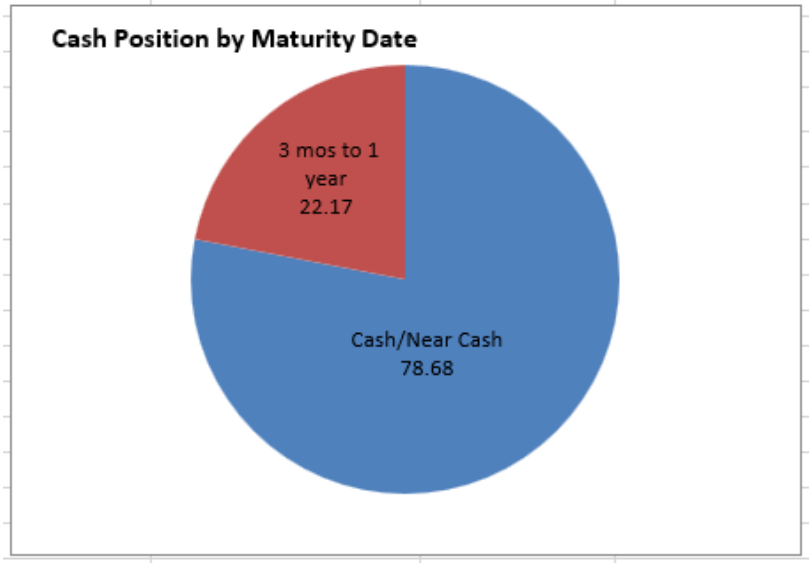
	2019 Actual	2019 Budget	2018 Actual
Existing Buildings	4,544,909	5,894,561	3,454,936
Multifamily Buildings	839,325	908,335	1,110,160
New Buildings	2,170,341	2,235,565	2,137,359
Production Efficiency	3,544,531	3,933,523	3,310,969
Residential Program	9,356,614	8,218,674	7,483,601
Washington Programs - All	250,472	290,600	281,954
Solar	2,114,185	1,860,617	2,013,287
Other Renewables	837,240	839,675	560,360
Total Incentives	23,657,617	24,181,550	20,352,626
Energy Efficiency Only	**20,706,192**	**21,481,258**	**17,778,978**

Investment Status

The graphs below show the type of investments we hold and the locations where our funds are held. As expected for this time of year, cash levels remain high. We invested $7 million more in short term, higher-yield investments this month. Our investments are primarily in CDARs (a bundle of FDIC insured CDs) with maturities of 13 weeks. We expect to continue rolling them over until year-end. Our overall yield is now at 1.72 percent, up from 1.64 percent last month.



Average Days to Maturity:	**66**
Average Portfolio Yield:	**1.72%**



PINK PAPER

Energy Trust of Oregon
BALANCE SHEET
May 31, 2019
(Unaudited)

	May 2019	April 2019	DEC 2018	May 2018	Change from one month ago	Change from Beg. of Year	Change from one year ago
Current Assets							
Cash & Cash Equivalents	34,491,263	43,722,137	53,104,536	63,735,643	(9,230,874)	(18,613,273)	(29,244,380)
Investments	66,371,127	59,283,695	38,440,394	28,733,646	7,087,432	27,930,733	37,637,481
Receivables	187,360	237,313	78,531	66,345	(49,953)	108,829	121,015
Prepaid Expenses	496,045	586,868	222,217	574,739	(90,823)	273,827	(78,694)
Advances to Vendors	767,604	1,535,208	2,238,777	755,728	(767,604)	(1,471,172)	11,876
Total Current Assets	**102,313,399**	**105,365,221**	**94,084,454**	**93,866,100**	**(3,051,822)**	**8,228,944**	**8,447,298**
Fixed Assets							
Computer Hardware and Software	3,869,226	3,869,226	3,869,226	3,934,165	-	-	(64,939)
Leasehold Improvements	617,915	617,915	615,557	595,027	-	2,358	22,888
Office Equipment and Furniture	816,373	816,373	831,612	819,795	-	(15,239)	(3,422)
Total Fixed Assets	**5,303,514**	**5,303,514**	**5,316,395**	**5,348,986**	**-**	**(12,881)**	**(45,472)**
Less Depreciation	(4,712,014)	(4,695,551)	(4,658,292)	(4,669,894)	(16,463)	(53,722)	(42,120)
Net Fixed Assets	**591,500**	**607,963**	**658,103**	**679,093**	**(16,463)**	**(66,603)**	**(87,593)**
Other Assets							
Deposits	258,653	258,653	258,653	237,314	-	-	21,339
Deferred Compensation Asset	985,575	980,133	967,280	983,117	5,442	18,295	2,458
Note Receivable, net of allowance	763,669	763,669	430,669	430,669	-	333,000	333,000
Total Other Assets	**2,007,898**	**2,002,455**	**1,656,602**	**1,651,101**	**5,442**	**351,295**	**356,797**
Total Assets	**104,912,796**	**107,975,639**	**96,399,160**	**96,196,293**	**(3,062,843)**	**8,513,636**	**8,716,503**
Current Liabilities							
Accounts Payable and Accruals	6,647,005	8,923,495	30,565,097	8,328,222	(2,276,490)	(23,918,092)	(1,681,217)
Salaries, Taxes, & Benefits Payable	1,051,868	898,704	931,049	975,251	153,164	120,819	76,617
Total Current Liabilities	**7,698,872**	**9,822,198**	**31,496,146**	**9,303,473**	**(2,123,326)**	**(23,797,274)**	**(1,604,600)**
Long Term Liabilities							
Deferred Rent	1,183,960	1,173,860	1,133,461	1,050,806	10,100	50,499	133,154
Deferred Compensation Payable	980,859	975,417	962,564	983,117	5,442	18,295	(2,258)
Other Long-Term Liabilities	3,075	2,235	2,235	3,249	840.00	840.00	(174)
Total Long-Term Liabilities	**2,167,895**	**2,151,513**	**2,098,260**	**2,037,172**	**16,382**	**69,634**	**130,722**
Total Liabilities	**9,866,767**	**11,973,711**	**33,594,406**	**11,340,645**	**(2,106,944)**	**(23,727,640)**	**(1,473,878)**
Net Assets							
Unrestricted Net Assets	95,046,029	96,001,928	62,804,754	84,855,649	(955,899)	32,241,276	10,190,381
Total Net Assets	**95,046,029**	**96,001,928**	**62,804,754**	**84,855,649**	**(955,899)**	**32,241,276**	**10,190,381**
Total Liabilities and Net Assets	**104,912,796**	**107,975,639**	**96,399,160**	**96,196,293**	**(3,062,843)**	**8,513,636**	**8,716,503**

Energy Trust of Oregon
Cash Flow Statement-Indirect Method
Monthly 2019

	January	February	March	April	May	Year to Date
Operating Activities:						
Revenue less Expenses	$ 12,037,369	$ 8,616,210	$ 6,368,168	$ 6,175,429	$ (955,899)	$ 32,241,277
Non-cash items:						
Depreciation	21,164	20,911	16,739	16,463	16,463	91,740
Change in Reserve on Long Term Note						-
Gain on disposal of assets		(17,265)				(17,265)
Receivables	(690)	4,224	(46,689)	(30,886)	9,957	(64,083)
Interest Receivable	6,540	(27,555)	(74,445)	10,719	39,996	(44,746)
Advances to Vendors	746,259	746,259	(1,556,553)	767,604	767,604	1,471,173
Prepaid expenses and other costs	(707,517)	60,974	(345,625)	281,664	85,380	(625,124)
Accounts payable	(18,806,695)	(713,165)	(705,741)	(1,416,005)	(2,276,491)	(23,918,097)
Payroll and related accruals	(212,773)	57,285	118,962	17,034	158,606	139,114
Deferred rent and other	10,100	10,100	10,099	10,100	10,940	51,339
Cash rec'd from / (used in) Operating Activities	(6,906,243)	8,757,978	3,784,915	5,832,122	(2,143,442)	9,325,330
Investing Activities:						
Investment Activity (1)	(2,035,756)	(4,000,472)	(9,238,890)	(5,568,183)	(7,087,432)	(27,930,733)
(Acquisition)/Disposal of Capital Assets	20	(5,929)	(1,963)			(7,872)
Cash rec'd from / (used in) Investing Activities	(2,035,736)	(4,006,401)	(9,240,853)	(5,568,183)	(7,087,432)	(27,938,605)
Cash at beginning of Period	53,104,536	44,162,558	48,914,136	43,458,198	43,722,137	53,104,536
Increase/(Decrease) in Cash	(8,941,979)	4,751,577	(5,455,938)	263,939	(9,230,874)	(18,613,273)
Cash at end of period	$ 44,162,558	$ 48,914,136	$ 43,458,198	$ 43,722,137	$ 34,491,263	$ 34,491,263

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

Energy Trust of Oregon
Cash Flow Projection
January 2018 - December 2019

	Actual					Budget						
	January	**February**	**March**	**April**	**May**	**June**	**July**	**August**	**September**	**October**	**November**	**December**
Cash In:												
Public purpose and Incr funding	19,862,886	20,022,600	18,823,067	17,904,001	14,136,700	11,846,094	13,289,165	12,533,545	13,097,427	14,797,251	12,281,956	14,731,497
Investment Income	116,780	75,970	54,380	141,560	196,541	27,332	27,332	27,332	27,332	27,332	35,941	35,941
From Other Sources	(690)	14,377	(24,879)	699	34,935	-	-	-	-	-	-	-
Total cash in	19,978,976	20,112,947	18,852,568	18,046,260	14,368,176	11,873,426	13,316,497	12,560,877	13,124,759	14,824,583	12,317,897	14,767,438
Cash Out:	(26,885,198)	(11,360,899)	(15,069,615)	(12,214,140)	(16,511,621)	(18,242,584)	(15,793,327)	(14,527,793)	(17,211,568)	(16,383,634)	(17,237,345)	(23,278,636)
Net cash flow for the Five Months	(6,906,222)	8,752,048	3,782,953	5,832,120	(2,143,445)	(6,369,158)	(2,476,830)	(1,966,916)	(4,086,808)	(1,559,051)	(4,919,448)	(8,511,198)
Cash Flow from/to Investments	(2,035,756)	(4,000,472)	(9,238,890)	(5,568,183)	(7,087,432)							5,000,000
Beginning Balance: Cash & MM	53,104,536	44,162,559	48,914,137	43,458,200	43,722,137	34,491,263	28,122,106	25,645,277	23,678,362	19,591,555	18,032,505	13,113,058
Ending cash & MM	**44,162,559**	**48,914,136**	**43,458,198**	**43,722,137**	**34,491,263**	**28,122,106**	**25,645,277**	**23,678,362**	**19,591,555**	**18,032,505**	**13,113,058**	**9,601,861**
Future Commitments												
Renewable Incentives	10,100,000	10,400,000	10,300,000	10,500,000	11,000,000	10,000,000	10,000,000	10,400,000	10,900,000	10,900,000	10,900,000	10,900,000
Efficiency Incentives	77,500,000	79,500,000	79,800,000	80,000,000	85,600,000	86,300,000	86,300,000	86,300,000	86,200,000	86,400,000	86,600,000	86,800,000
Emergency Contingency Pool	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000
Total Commitments	92,600,000	94,900,000	95,100,000	95,500,000	101,600,000	101,300,000	101,300,000	101,700,000	102,100,000	102,300,000	102,500,000	102,700,000

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

Energy Trust of Oregon
Cash Flow Projection
January 2018 - December 2019

	2020 R2 Projection											
	January	**February**	**March**	**April**	**May**	**June**	**August**	**October**	**October**	**October**	**November**	**December**
Cash In:												
Public purpose and Incr funding	18,064,283	22,460,282	17,528,184	17,103,269	15,068,412	14,477,318	12,206,703	12,954,548	13,515,339	15,190,343	12,822,199	15,481,895
Investment Income	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
From Other Sources	43,923	43,923	45,905	45,905	45,905	45,905	45,905	45,905	45,905	45,905	45,905	45,905
Total cash in	18,114,283	22,510,282	17,578,184	17,153,269	15,118,412	14,527,318	12,256,703	13,004,548	13,565,339	15,240,343	12,872,199	15,531,895
Cash Out:	(29,283,901)	(9,939,194)	(12,023,319)	(12,490,189)	(13,084,084)	(14,187,697)	(14,848,233)	(13,251,158)	(13,890,535)	(14,869,489)	(15,544,853)	(18,680,168)
Net cash flow for the Five Months	(11,169,618)	12,571,088	5,554,865	4,663,080	2,034,328	339,622	(2,591,530)	(246,610)	(325,196)	370,854	(2,672,654)	(3,148,273)
Cash Flow from/to Investments	12,500,000		-	-	-	-	-	-	-	-	-	-
Beginning Balance: Cash & MM	9,601,861	10,932,243	23,503,331	29,058,196	33,721,276	35,755,604	36,095,225	33,503,695	33,257,085	32,931,889	33,302,743	30,630,089
Ending cash & MM	**10,932,243**	**23,503,331**	**29,058,196**	**33,721,276**	**35,755,604**	**36,095,225**	**33,503,695**	**33,257,085**	**32,931,889**	**33,302,743**	**30,630,089**	**27,481,816**
Future Commitments												
Renewable Incentives	10,900,000	10,900,000	10,900,000	10,900,000	10,900,000	10,900,000	10,900,000	10,900,000	10,900,000	10,900,000	10,900,000	10,900,000
Efficiency Incentives	87,000,000	87,200,000	87,400,000	87,600,000	87,800,000	88,400,000	88,400,000	88,400,000	88,400,000	88,400,000	88,400,000	88,400,000
Emergency Contingency Pool	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000
Total Commitments	102,900,000	103,100,000	103,300,000	103,500,000	103,700,000	104,300,000	104,300,000	104,300,000	104,300,000	104,300,000	104,300,000	104,300,000

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

Energy Trust of Oregon
Income Statement - Actual and YTD Budget Comparison
For the Five Months Ending May 31, 2019
(Unaudited)

	May				YTD			
	Actual	**Budget**	**Budget Variance**	**Variance %**	**Actual**	**Budget**	**Budget Variance**	**Variance %**
OREGON PPC REVENUE								
Public Purpose Funds-PGE	3,179,811	3,167,245	12,566	0%	17,818,823	17,927,332	(108,509)	-1%
Incremental Funds - PGE	3,879,317	4,017,952	(138,635)	-3%	25,720,563	23,397,118	2,323,444	10%
Public Purpose Funds-PacifiCorp	2,150,341	2,492,896	(342,554)	-14%	12,837,043	13,002,892	(165,849)	-1%
Incremental Funds - PacifiCorp	2,521,830	2,579,855	(58,025)	-2%	15,226,998	15,161,814	65,184	0%
Public Purpose Funds-NW Natural	1,950,022	2,127,507	(177,485)	-8%	13,928,020	13,933,224	(5,205)	0%
NW Natural - DSM			-	-	1,500,000	1,500,000	-	0%
Public Purpose Funds-Cascade	281,056	198,171	82,884	42%	2,046,194	1,727,023	319,172	18%
Public Purpose Funds-Avista	174,323	174,323	-	0%	871,613	871,613	-	0%
Total Oregon PPC Revenue	**14,136,700**	**14,757,950**	**(621,250)**	**-4%**	**89,949,254**	**87,521,016**	**2,428,238**	**3%**
NW Natural - Washington			-	-	800,000	800,000	-	0%
Grant Revenue			0	-	24,002		24,002	
Community Solar Revenue	24,978	33,402	(8,424)	-25%	64,524	100,206	(35,683)	-36%
Revenue from Investments	156,546	50,000	106,546	213%	629,976	250,000	379,976	152%
Total Other Sources of Revenue	**181,524**	**83,402**	**98,122**	**118%**	**1,518,502**	**1,150,206**	**368,295**	**32%**
TOTAL REVENUE	**14,318,224**	**14,841,352**	**(523,128)**	**-4%**	**91,467,756**	**88,671,221**	**2,796,533**	**3%**
EXPENSES								
Incentives	7,793,837	6,909,341	(884,497)	-13%	23,657,617	24,181,550	523,933	2%
Program Delivery Subcontracts	5,231,732	5,216,489	(15,243)	0%	24,983,232	25,737,753	754,521	3%
Employee Salaries & Fringe Benefits	1,228,397	1,207,121	(21,276)	-2%	5,995,212	6,033,528	38,315	1%
Agency Contractor Services	90,175	168,422	78,247	46%	563,315	829,010	265,695	32%
Planning and Evaluation Services	222,104	308,573	86,469	28%	984,921	1,542,863	557,943	36%
Advertising and Marketing Services	278,946	266,486	(12,460)	-5%	1,142,614	1,337,881	195,267	15%
Other Professional Services	249,123	409,864	160,741	39%	984,372	1,880,291	895,919	48%
Travel, Meetings, Trainings & Conferences	26,280	38,381	12,101	32%	146,484	191,944	45,460	24%
Dues, Licenses and Fees	32,865	18,142	(14,723)	-81%	83,467	103,160	19,694	19%
Software and Hardware	15,225	44,921	29,696	66%	130,243	216,640	86,397	40%
Depreciation & Amortization	16,463	17,269	806	5%	91,740	96,641	4,901	5%
Office Rent and Equipment	81,309	88,328	7,019	8%	416,072	441,639	25,566	6%
Materials Postage and Telephone	7,594	11,246	3,652	32%	41,293	56,229	14,936	27%
Miscellaneous Expenses	74	750	676	90%	5,897	2,250	(3,647)	-162%
TOTAL EXPENSES	**15,274,123**	**14,705,332**	**(568,791)**	**-4%**	**59,226,480**	**62,651,379**	**3,424,899**	**5%**
TOTAL REVENUE LESS EXPENSES	**(955,899)**	**136,020**	**(1,091,919)**	**-803%**	**32,241,275**	**26,019,842**	**6,221,433**	**24%**

Energy Trust of Oregon
Income Statement - Actual and Prior Yr Comparison
For the Five Months Ending May 31, 2019
(Unaudited)

	May				YTD			
	Actual	Actual Prior Year	Prior Year Variance	Variance %	Actual	Actual Prior Year	Prior Year Variance	Variance %
OREGON PPC REVENUE								
Public Purpose Funds-PGE	3,179,811	3,052,011	127,800	4%	17,818,823	17,275,034	543,789	3%
Incremental Funds - PGE	3,879,317	5,196,541	(1,317,224)	-25%	25,720,563	30,260,212	(4,539,649)	-15%
Public Purpose Funds-PacifiCorp	2,150,341	2,320,363	(170,021)	-7%	12,837,043	12,860,310	(23,266)	0%
Incremental Funds - PacifiCorp	2,521,830	2,598,153	(76,323)	-3%	15,226,998	15,269,353	(42,355)	0%
Public Purpose Funds-NW Natural	1,950,022	1,924,111	25,911	1%	13,928,020	12,601,166	1,326,854	11%
NW Natural - DSM			-		1,500,000		1,500,000	
Public Purpose Funds-Cascade	281,056	172,789	108,267	63%	2,046,194	1,505,821	540,373	36%
Public Purpose Funds-Avista	174,323	96,406	77,917	81%	871,613	578,435	293,177	51%
Total Oregon PPC Revenue	**14,136,700**	**15,360,374**	**(1,223,674)**	**-8%**	**89,949,254**	**90,350,331**	**(401,078)**	**0%**
NW Natural - Washington			-		800,000	922,689	(122,689)	-13%
Grant Revenue		6,249	(6,249)	-100%	24,002	34,888	(10,886)	-31%
Community Solar Revenue	24,978		24,978		64,524		64,524	
Revenue from Investments	156,546	77,214	79,331	103%	629,976	254,711	375,266	147%
Total Other Sources of Revenue	**181,524**	**83,464**	**98,060**	**117%**	**1,518,502**	**1,212,287**	**306,215**	**25%**
TOTAL REVENUE	**14,318,224**	**15,443,838**	**(1,125,614)**	**-7%**	**91,467,756**	**91,562,619**	**(94,863)**	**0%**
EXPENSES								
Incentives	7,793,837	6,613,862	(1,179,976)	-18%	23,657,617	20,352,626	(3,304,991)	-16%
Program Delivery Subcontracts	5,231,732	4,707,122	(524,610)	-11%	24,983,232	24,274,654	(708,579)	-3%
Employee Salaries & Fringe Benefits	1,228,397	1,255,778	27,381	2%	5,995,212	5,705,390	(289,823)	-5%
Agency Contractor Services	90,175	137,720	47,546	35%	563,315	590,810	27,495	5%
Planning and Evaluation Services	222,104	235,049	12,946	6%	984,921	766,441	(218,479)	-29%
Advertising and Marketing Services	278,946	312,396	33,450	11%	1,142,614	1,251,010	108,396	9%
Other Professional Services	249,123	142,167	(106,956)	-75%	984,372	833,007	(151,365)	-18%
Travel, Meetings, Trainings & Conferences	26,280	35,526	9,246	26%	146,484	146,002	(482)	0%
Dues, Licenses and Fees	32,865	5,835	(27,029)	-463%	83,467	63,088	(20,379)	-32%
Software and Hardware	15,225	24,363	9,138	38%	130,243	138,321	8,078	6%
Depreciation & Amortization	16,463	33,910	17,447	51%	91,740	227,473	135,733	60%
Office Rent and Equipment	81,309	83,717	2,408	3%	416,072	438,198	22,126	5%
Materials Postage and Telephone	7,594	9,062	1,469	16%	41,293	48,366	7,073	15%
Miscellaneous Expenses	74	74	0	1%	5,897	4,209	(1,688)	-40%
TOTAL EXPENSES	**15,274,123**	**13,596,581**	**(1,677,542)**	**-12%**	**59,226,480**	**54,839,594**	**(4,386,886)**	**-8%**
TOTAL REVENUE LESS EXPENSES	**(955,899)**	**1,847,257**	**(2,803,156)**	**-152%**	**32,241,276**	**36,723,025**	**(4,481,749)**	**-12%**

Energy Trust of Oregon
Statement of Functional Expenses
For the Five Months Ending May 31, 2019
(Unaudited)

	Energy Efficiency Total	Renewable Energy	Low and Moderate Income Solar	Community Solar Operations	**Total Programs**	Office Space	IT	Management and General	Communications and Customer Service	Fund Development	**Supporting Centers**	TOTAL
Incentives	$20,706,192	$2,951,425			$23,657,617							$23,657,617
Program Delivery Subcontracts	24,843,053	140,179			$24,983,232							24,983,232
Employee Salaries & Fringe Benefits	2,449,820	563,598		27,060	3,040,478		897,047	1,140,277	911,159	6,252	2,954,735	5,995,213
Agency Contractor Services	128,212	71,306	21,820		221,338	2,966	146,816	167,956	24,239		341,977	563,315
Planning and Evaluation Services	942,291	40,682			982,973			156	1,792		1,948	984,921
Advertising and Marketing Services	582,625	133,249			715,874				426,740		426,740	1,142,614
Other Professional Services	423,584	317,887			741,471		1,238	217,677	23,986		242,901	984,372
Travel, Meetings, Trainings & Conference:	40,213	15,989			56,202	1,634	2,974	44,354	41,319		90,281	146,483
Dues, Licenses and Fees	20,820	14,254			35,074	119	593	33,838	13,842		48,392	83,466
Software and Hardware		69,585			69,585	(9,574)	70,232				60,658	130,243
Depreciation & Amortization						40,839	50,901				91,740	91,740
Office Rent and Equipment						416,072					416,072	416,072
Materials Postage and Telephone	1,031	243			1,274	23,978	14,250	1,178	612		40,018	41,292
Miscellaneous Expenses	799	1,962			2,761	1,204		1,933			3,137	5,898
Shared Office Space	195,952	66,009	273	3,668	265,902	(477,238)		110,220	101,116		(265,902)	-
Shared Information Technology	808,462	120,638	498	6,790	936,388		(1,184,051)	124,380	123,284		(936,387)	-
TOTAL FUNCTIONAL EXPENSE	**51,143,051**	**4,507,005**	**22,591**	**37,518**	**55,710,165**			**1,841,970**	**1,668,091**	**6,252**	**3,516,313**	**59,226,480**

Energy Trust of Oregon
Administrative Expenses Classified by OPUC Performance Measure
For the Five Months Ending May 31, 2019
(Unaudited)

	Total	Program	Administrative and Program Support
Incentives	$23,657,617	$23,657,617	
Program Delivery Subcontracts	24,983,232	24,983,232	
Employee Salaries & Fringe Benefits	5,995,213	3,040,478	2,954,735
Agency Contractor Services	563,315	221,338	341,977
Planning and Evaluation Services	984,921	982,973	1,948
Advertising and Marketing Services	1,142,614	715,874	426,740
Other Professional Services	984,372	741,471	242,901
Travel, Meetings, Trainings & Conferences	146,483		146,483
Dues, Licenses and Fees	83,466		83,466
Software and Hardware	130,243		130,243
Depreciation & Amortization	91,740		91,740
Office Rent and Equipment	416,072		416,072
Materials Postage and Telephone	41,292		41,292
Miscellaneous Expenses	5,898		5,898
TOTAL Expenses	**59,226,480**	**54,342,985**	**4,883,495**
Program Support			1,367,186
Management & General & Development			1,848,220
Communications and Outreach			1,668,091
TOTAL Expenses			**4,883,495**
divided by			
Total Revenue without Interest			90,837,779
OPUC Measure vs. 8%			**5.38%**

ENERGY TRUST OF OREGON
Summary of All Units
For the Five Months Ending May 31, 2019

	ENERGY EFFICIENCY									
	PGE	PacifiCorp	Total	NWN Industrial	NW Natural	Cascade	Avista	Oregon Total	NWN WA	ETO Total
REVENUES										
Public Purpose Funding	13,849,330	9,973,800	23,823,130		13,928,020	2,046,194	871,613	40,668,957		40,668,957
Incremental Funding	25,720,563	15,226,998	40,947,561	1,500,000				42,447,561	800,000	43,247,561
Grant Revenue										
Community Solar Revenue										
Revenue from Investments										
Gain or Loss on Investments										
TOTAL PROGRAM REVENUE	**39,569,893**	**25,200,798**	**64,770,691**	**1,500,000**	**13,928,020**	**2,046,194**	**871,613**	**83,116,518**	**800,000**	**83,916,518**
EXPENSES										
Incentives	9,494,462	6,877,997	16,372,460	280,911	3,202,123	345,008	255,219	20,455,720	250,472	20,706,192
Program Delivery Subcontracts	12,766,430	7,964,988	20,731,419	371,162	2,825,315	356,023	314,877	24,598,799	244,254	24,843,053
Employee Salaries and Fringe Benefits	765,249	543,455	1,308,703	30,030	196,090	21,424	17,884	1,574,131	44,863	1,618,994
Agency Contractor Services	60,360	46,344	106,706	3,315	10,952	1,541	1,181	123,697	-	123,697
Planning and Evaluation Services	429,397	333,022	762,419	22,900	55,202	8,497	6,596	855,611	-	855,611
Advertising and Marketing Services	277,527	194,407	471,935	8,400	81,105	8,814	7,600	577,854	-	577,854
Other Professional Services	145,133	116,875	262,009	1,426	89,454	7,240	5,092	365,224	1,988	367,212
Travel, Meetings, Trainings and Conferences	10,519	8,095	18,613	273	4,535	426	321	24,167	302	24,469
Dues, Licenses and fees	2,321	1,215	3,537	80	276	70	71	4,035	12,575	16,610
Software and Hardware	-	-	-	-	-	-	-	-	-	-
Materials Postage and Telephone	385	375	759	36	11	4	1	812	-	812
Miscellaneous Expenses	295	249	544	0	227	17	11	799	-	799
Shared Office Space	92,503	66,181	158,685	3,722	23,485	2,540	2,105	190,538	5,413	195,951
Shared Information Technology	381,507	247,141	628,650	8,902	125,584	12,665	11,167	786,966	21,496	808,462
Customer Service Management	44,762	28,593	73,355	1,031	14,807	1,563	1,358	92,114	13,964.00	106,078
Trade Ally Management	33,160	25,789	58,951	93	22,400	1,737	1,214	84,394	-	84,394
Planning & Evaluation Management	362,158	260,452	622,611	9,169	124,903	10,607	9,883	777,171	35,692	812,863
TOTAL PROGRAM EXPENSES	**24,866,168**	**16,715,178**	**41,581,356**	**741,450**	**6,776,469**	**778,176**	**634,580**	**50,512,032**	**631,019**	**51,143,051**
ADMINISTRATIVE COSTS										
Management & General (Notes 1 & 2)	822,161	552,661	1,374,823	24,515	224,053	25,728	20,982	1,670,102	20,864	1,690,966
Communications & Customer Svc (Notes 1 & 2)	744,550	500,490	1,245,040	22,201	202,903	23,300	19,001	1,512,446	18,894	1,531,340
Total Administrative Costs	**1,566,711**	**1,053,151**	**2,619,863**	**46,716**	**426,956**	**49,028**	**39,983**	**3,182,548**	**39,758**	**3,222,306**
TOTAL PROG & ADMIN EXPENSES	**26,432,879**	**17,768,329**	**44,201,219**	**788,166**	**7,203,425**	**827,204**	**674,563**	**53,694,580**	**670,777**	**54,365,357**
TOTAL REVENUE LESS EXPENSES	**13,137,014**	**7,432,469**	**20,569,472**	**711,834**	**6,724,595**	**1,218,990**	**197,050**	**29,421,938**	**129,223**	**29,551,161**
NET ASSETS - RESERVES										
Cumulative Carryover 12/31/18 (Audited results)	22,034,160	9,187,488	31,221,646	743,894	3,531,025	368,189	-	35,864,754	495,306	36,360,060
Investment Income Attributed to Reserves (Note 4)	293,858	132,145	426,003	29,099	60,572	5,408	254	521,336	5,765	527,101
Contingency Funds Temporarily Used / (repaid)							(46,071)	(46,071)		(46,071)
Change in net assets this year	13,137,014	7,432,469	20,569,472	711,834	6,724,595	1,218,990	197,050	29,421,938	129,223	29,551,161
Ending Net Assets - Reserves	**35,465,032**	**16,752,102**	**52,217,121**	**1,484,827**	**10,316,192**	**1,592,587**	**151,233**	**65,761,957**	**630,294**	**66,392,251**
Ending Reserve by Category										
Program Reserves (Efficiency and Renewables)	35,465,032	16,752,102	52,217,121	1,484,827	10,316,192	1,592,587	151,233	65,761,957	630,294	66,392,251
Reserves (Community Solar)										
Net Assets Loaned through Craft3 Program										
Operational Contingency Pool										
Emergency Contingency Pool										
TOTAL NET ASSETS CUMULATIVE	**35,465,032**	**16,752,102**	**52,217,121**	**1,484,827**	**10,316,192**	**1,592,587**	**151,233**	**65,761,957**	**630,294**	**66,392,251**

Note 1) Management & General and Communications & Customer Service Expenses (Admin) have been allocated based on total expenses.
Note 2) Admin costs are allocated for mgmt reporting only. GAAP for Not for Profits does not allow allocation of admin costs to program expenses.
Note 3) Program Management costs include both outsourced and internal staff.
Note 4) In December 2018, Investment income was re-attributed to program reserves in proportion to average balances

ENERGY TRUST OF OREGON
Summary of All Units
For the Five Months Ending May 31, 2019

	RENEWABLE ENERGY				Fund	Community Solar		TOTAL			
	PGE	PacifiCorp	Total	Solar LMI	Development	Operations	Other	All Programs	Approved budget	Change	% Change
REVENUES											
Public Purpose Funding	3,969,493	2,863,243	6,832,736					47,501,693	47,462,083	39,610	0%
Incremental Funding								43,247,561	40,858,932	2,388,629	6%
Grant Revenue				24,002				24,002		24,002	
Community Solar Revenue						64,524		64,524	100,206	(35,682)	
Revenue from Investments							629,976	629,976	250,000	379,976	152%
Gain or Loss on Investments										0	
TOTAL PROGRAM REVENUE	**3,969,493**	**2,863,243**	**6,832,736**	**24,002**	**-**	**64,524**	**629,976**	**91,467,756**	**88,671,221**	**2,796,533**	**3%**
EXPENSES											
Incentives	1,378,833	1,572,593	2,951,425					23,657,617	24,181,550	523,933	2%
Program Delivery Subcontracts	84,302	55,877	140,179					24,983,232	25,737,754	754,522	3%
Employee Salaries and Fringe Benefits	207,608	285,462	493,071		6,252	27,060		2,145,377	2,153,316	7,939	0%
Agency Contractor Services	42,022	29,080	71,102	21,820				216,619	371,173	154,554	42%
Planning and Evaluation Services	21,733	15,040	36,773					892,384	1,365,781	473,397	35%
Advertising and Marketing Services	70,829	62,192	133,021					710,875	872,255	161,380	19%
Other Professional Services	126,738	152,567	279,305	-				646,517	1,234,535	588,018	48%
Travel, Meetings, Trainings and Conferences	7,417	7,595	15,011					39,480	68,938	29,458	43%
Dues, Licenses and fees	8,652	5,413	14,065					30,675	48,482	17,807	37%
Software and Hardware	41,125	28,460	69,585					69,585	71,417	1,832	3%
Materials Postage and Telephone	47	14	60					872	3,209	2,337	73%
Miscellaneous Expenses	1,160	802	1,962					2,761	-	(2,761)	-
Shared Office Space	27,794	38,215	66,008	273		3,668		265,900	290,036	24,136	8%
Shared Information Technology	50,475	70,162	120,637	498		6,790		936,387	1,101,618	165,231	15%
Customer Service Management	2,996	2,073	5,070					111,148	144,451	33,303	23%
Trade Ally Management	43,183	29,884	73,067					157,461	122,510	(34,951)	-29%
Planning & Evaluation Management	17,977	18,688	36,664					849,527	926,928	77,401	8%
TOTAL PROGRAM EXPENSES	**2,132,891**	**2,374,117**	**4,507,005**	**22,591**	**6,252**	**37,518**		**55,716,417**	**58,693,953**	**2,977,536**	**5%**
ADMINISTRATIVE COSTS											
Management & General (Notes 1 & 2)	70,688	78,612	149,300	751		953		1,841,970	2,203,347	361,376	16%
Communications & Customer Svc (Notes 1 & 2)	64,014	71,191	135,205	660		885		1,668,091	1,754,085	85,994	5%
Total Administrative Costs	**134,702**	**149,803**	**284,505**	**1,411**		**1,838**		**3,510,060**	**3,957,432**	**447,372**	**11%**
TOTAL PROG & ADMIN EXPENSES	**2,267,593**	**2,523,920**	**4,791,510**	**24,002**	**6,252**	**39,356**		**59,226,480**	**62,651,379**	**3,424,899**	**5%**
TOTAL REVENUE LESS EXPENSES	**1,701,900**	**339,323**	**2,041,226**	**-**	**(6,252)**	**25,168**	**629,976**	**32,241,276**	**26,019,842**	**6,221,434**	**24%**
NET ASSETS - RESERVES											
Cumulative Carryover 12/31/18 (Audited results)	9,369,702	6,382,129	15,751,831	-	24,356		10,668,524	62,804,753	43,871,177	18,933,576	43%
Investment Income Attributed to Reserves (Note 4)	141,098	108,553	249,651		541		(777,294)	-			
Contingency Funds Temporarily Used							46,071	-			
Change in net assets this year	1,701,900	339,323	2,041,226	-	(6,252)	25,168	629,976	32,241,276	26,019,842	6,221,434	24%
Ending Net Assets - Reserves	**11,212,700**	**6,830,005**	**18,042,708**	**-**	**18,645**	**25,168**	**10,567,277**	**95,046,029**	**69,891,019**	**25,155,010**	**36%**
Ending Reserve by Category											
Program Reserves (Efficiency and Renewables)	11,212,700	6,830,005	18,042,708	-	18,645			84,453,604			
Reserves (Community Solar)						25,168		25,168			
Net Assets Loaned through Craft3 Program							1,800,000	1,800,000			
Operational Contingency Pool							3,767,277	3,767,277			
Emergency Contingency Pool							5,000,000	5,000,000			
TOTAL NET ASSETS CUMULATIVE	**11,212,700**	**6,830,005**	**18,042,708**	**-**	**18,645**	**25,168**	**10,567,277**	**95,046,029**	**69,891,019**	**25,155,010**	**36%**

Energy Trust of Oregon
Program Expense by Service Territory
For the Five Months Ending May 31, 2019
(Unaudited)

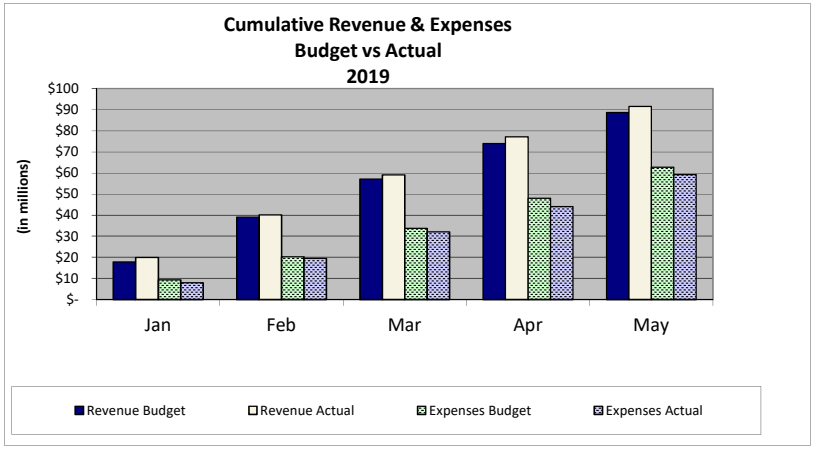
	PGE	Pacific Power	Subtotal Elec.	NWN Industrial	NW Natural Gas	Cascade	Avista	Subtotal Gas	Oregon Total	NWN WA	Solar LMI	Fund Development	Community Solar Operations	ETO Total	YTD Budget	Variance	% Var
Energy Efficiency																	
Commercial																	
Existing Buildings	$7,650,337	$3,822,619	$11,472,956	$254,117	$798,532	$231,681	$241,031	$1,525,361	$12,998,317	$222,278				$13,220,595	$16,028,894	$2,808,299	18%
Multifamily Buildings	2,392,221	535,806	2,928,028	3,823	384,174	6,570	39,290	433,856	3,361,884					3,361,884	3,693,502	331,618	9%
New Buildings	3,206,237	1,773,044	4,979,281	45,859	511,181	115,847	140,162	813,049	5,792,330					5,792,330	6,072,562	280,232	5%
NEEA	840,211	633,843	1,474,055		135,948	15,105		151,053	1,625,108					1,625,108	1,525,233	(99,875)	-7%
Total Commercial	**14,089,007**	**6,765,312**	**20,854,319**	**303,799**	**1,829,835**	**369,202**	**420,483**	**2,923,320**	**23,777,639**	**222,278**				**23,999,917**	**27,320,191**	**3,320,274**	**12%**
Industrial																	
Production Efficiency	5,129,896	4,997,829	10,127,724	484,365	152,033	50,405	12,921	699,725	10,827,449					10,827,449	11,440,610	613,161	5%
NEEA	32,775	24,726	57,501						57,501					57,501	57,112	(389)	-1%
Total Industrial	**5,162,671**	**5,022,554**	**10,185,225**	**484,365**	**152,033**	**50,405**	**12,921**	**699,725**	**10,884,950**					**10,884,950**	**11,497,722**	**612,772**	**5%**
Residential																	
Residential Combined	6,322,528	5,332,689	11,655,216		4,836,586	364,825	241,163	5,442,574	17,097,790	448,499				17,546,289	17,152,802	(393,487)	-2%
NEEA	858,678	647,775	1,506,453		384,975	42,775		427,750	1,934,203					1,934,203	1,922,807	(11,396)	-1%
Total Residential	**7,181,205**	**5,980,463**	**13,161,669**		**5,221,561**	**407,600**	**241,163**	**5,870,324**	**19,031,993**	**448,499**				**19,480,492**	**19,075,609**	**(404,883)**	**-2%**
Energy Efficiency Program Costs	**26,432,878**	**17,768,330**	**44,201,215**	**788,164**	**7,203,430**	**827,209**	**674,564**	**9,493,368**	**53,694,581**	**670,776**				**54,365,357**	**57,893,522**	**3,528,163**	**6%**
Renewables																	
Solar Electric (Photovoltaic)	1,949,045	1,348,809	3,297,854						3,297,854		24,002			3,321,856	3,147,740	(174,116)	-6%
Other Renewable	318,543	1,175,113	1,493,656						1,493,656					1,493,656	1,552,102	58,446	4%
Renewables Program Costs	**2,267,588**	**2,523,924**	**4,791,509**						**4,791,509**		**24,002**			**4,815,512**	**4,699,842**	**(115,670)**	**-2%**
Community Solar Operations													39,356	39,356	58,014	18,658	32%
Community Solar Development												6,252		6,252		(6,252)	
Cost Grand Total	**28,700,466**	**20,292,254**	**48,992,724**	**788,164**	**7,203,430**	**827,209**	**674,564**	**9,493,368**	**58,486,090**	**670,776**	**24,002**	**6,252**	**39,356**	**59,226,480**	**62,651,379**	**3,424,899**	**5%**

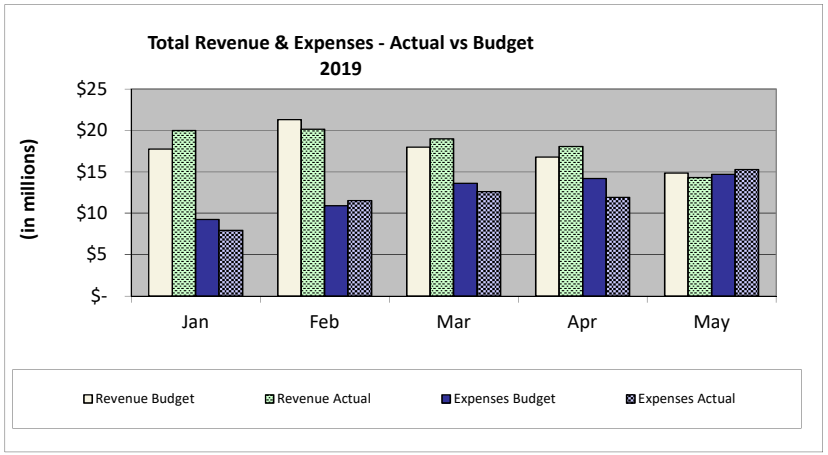
Energy Trust of Oregon
Administrative Expenses
For the Quarter and Five Months Ending May 31, 2019
(Unaudited)

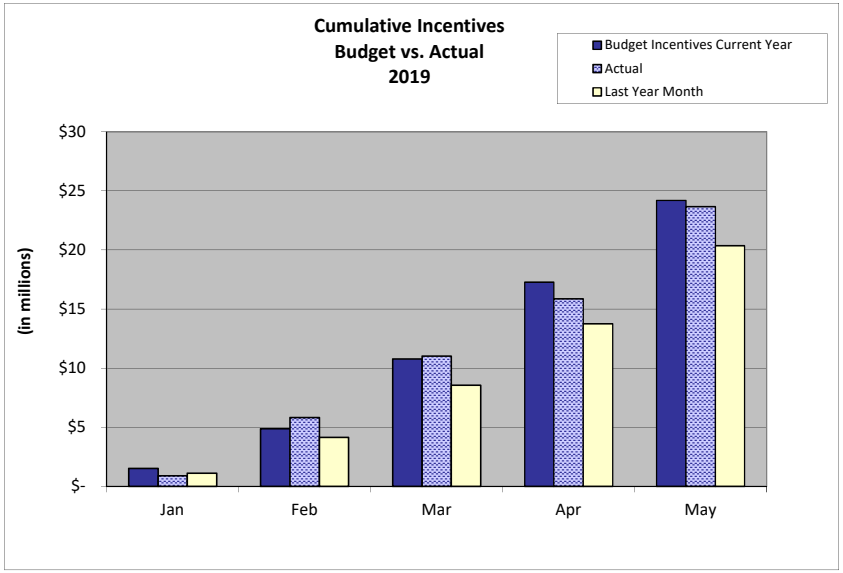
	MANAGEMENT & GENERAL						COMMUNICATIONS & CUSTOMER SERVICE					
	QUARTERLY			YTD			QUARTERLY			YTD		
	ACTUAL	BUDGET	REMAINING	ACTUAL	BUDGET	VARIANCE	ACTUAL	BUDGET	REMAINING	ACTUAL	BUDGET	VARIANCE
EXPENSES												
Outsourced Services	$64,732	$311,604	$246,872	$209,958	$439,924	$229,966	$295,899	$323,000	$27,101	$447,674	$538,333	$90,659
Legal Services	249	13,500	13,251	1,149	22,500	21,351						
Salaries and Related Expenses	489,744	842,264	352,521	1,313,530	1,407,020	93,490	316,420	527,111	210,692	896,263	880,821	(15,442)
Supplies	28	750	722	74	1,250	1,176	552	125	(427)	612	208	(403)
Postage and Shipping Expenses	223		(223)	223		(223)						
Printing and Publications		2,000	2,000	881	3,333	2,453		875	875		1,458	1,458
Travel	8,855	14,100	5,245	18,772	22,900	4,128	18,150	9,500	(8,650)	26,451	15,833	(10,618)
Conference, Training & Mtngs	21,277	13,075	(8,202)	25,556	22,792	(2,765)	5,983	7,625	1,642	14,097	12,708	(1,388)
Interest Expense and Bank Fees	(660)	1,500	2,160	1,915	1,000	(915)						
Miscellaneous Expenses				18		(18)						
Dues, Licenses and Fees	32,418	7,200	(25,218)	33,831	11,200	(22,631)	4,567	4,125	(442)	13,609	6,875	(6,734)
Shared Allocation (Note 1)	55,583	73,387	17,804	110,220	123,334	13,114	51,953	59,286	7,334	101,116	99,636	(1,480)
IT Service Allocation (Note 2)	72,647	86,206	13,558	124,380	146,366	21,986	78,698	85,446	6,747	123,284	145,076	21,793
Planning & Eval	512	1,044	532	1,462	1,728	266	14,774	32,100	17,326	44,985	53,134	8,150
TOTAL EXPENSES	**745,607**	**1,366,630**	**621,023**	**1,841,970**	**2,203,347**	**361,376**	**786,997**	**1,049,193**	**262,197**	**1,668,091**	**1,754,085**	**85,994**

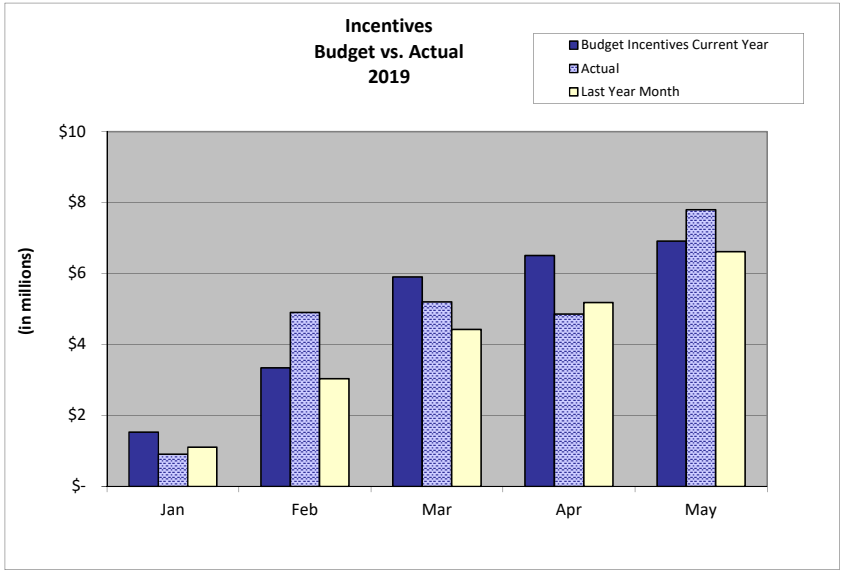
Note 1) Represents allocation of Shared (General Office Management) Costs
Note 2) Represents allocation of Shared IT Costs

Administrative Expenses 2nd Month of Quarter 2


Cumulative Revenue & Expenses
Budget vs Actual
2019
(in millions)
$100
$90
$80
$70
$60
$50
$40
$30
$20
$10
$-
Jan
Feb
Mar
Apr
May
Revenue Budget
Revenue Actual
Expenses Budget
Expenses Actual


Total Revenue & Expenses - Actual vs Budget
2019
(in millions)
$25
$20
$15
$10
$5
$-
Jan
Feb
Mar
Apr
May
Revenue Budget
Revenue Actual
Expenses Budget
Expenses Actual


Cumulative Incentives
Budget vs. Actual
2019
Budget Incentives Current Year
Actual
Last Year Month
(in millions)
$30
$25
$20
$15
$10
$5
$-
Jan
Feb
Mar
Apr
May


Incentives
Budget vs. Actual
2019
Budget Incentives Current Year
Actual
Last Year Month
(in millions)
$10
$8
$6
$4
$2
$-
Jan
Feb
Mar
Apr
May

PINK PAPER

R00407

Energy Trust of Oregon
Contract Status Summary Report

Report Date: 6/19/2019

For contracts with costs
through: 6/19/2019

CONTRACTOR	Description	City	EST COST	Actual TTD	Remaining	Start	End
Administration							
		Administration Total:	**13,513,440**	**6,077,128**	**7,436,312**		
Communications							
		Communications Total:	**3,482,559**	**2,075,186**	**1,407,373**		
Energy Efficiency							
Northwest Energy Efficiency Alliance	Regional EE Initiative Agmt	Portland	36,142,871	32,127,125	4,015,746	1/1/2015	7/1/2020
ICF Resources, LLC	2019 BE PMC	Fairfax	17,010,123	6,266,864	10,743,259	1/1/2019	12/31/2019
CLEAResult Consulting Inc	2019 Residential PMC	Austin	8,138,843	2,794,217	5,344,626	1/1/2019	12/31/2019
CLEAResult Consulting Inc	2019 NBE PMC	Austin	6,477,804	2,595,861	3,881,943	1/1/2019	12/31/2019
Northwest Energy Efficiency Alliance	Regional Gas EE Initiative	Portland	5,864,530	4,134,499	1,730,031	1/1/2015	7/1/2020
Lockheed Martin Corporation	2019 MF PMC	Grand Prairie	4,728,273	1,815,568	2,912,705	1/1/2019	12/31/2019
Energy 350 Inc	PE PDC 2019	Portland	3,523,160	1,348,868	2,174,292	1/1/2019	12/31/2019
Intel Corporation	EE Project Incentive Agmt	Hillsboro	2,400,000	0	2,400,000	11/13/2015	12/31/2019
Cascade Energy, Inc.	PE PDC 2019	Walla Walla	2,324,400	983,618	1,340,782	1/1/2019	12/31/2019
Evergreen Consulting Group, LLC	PE Lighting PDC2019	Tigard	2,271,740	869,324	1,402,416	1/1/2019	12/31/2019
RHT Energy Inc.	PE PDC 2019	Medford	2,199,922	919,819	1,280,103	1/1/2019	12/31/2019
TRC Engineers Inc.	2019 EPS New Const PDC	Irvine	2,135,341	924,331	1,211,010	1/1/2019	12/31/2019
Cascade Energy, Inc.	PE PDC 2019	Walla Walla	1,921,485	794,207	1,127,278	1/1/2019	12/31/2019
Northwest Power & Conservation Council	RTF Funding Agreement		1,825,000	1,695,057	129,943	2/25/2015	12/31/2019
CLEAResult Consulting Inc	2019 Retail PDC	Austin	1,403,837	557,191	846,646	1/1/2019	12/31/2019
Craft3	Manufactured Home Pilot Loan	Portland	1,000,000	0	1,000,000	9/20/2018	9/20/2033
Michaels Energy, Inc.	PE 16 &17 Impact Eval	La Crosse	539,000	422,251	116,749	7/1/2018	9/1/2019
Craft3	Loan Agreement	Portland	500,000	500,000	0	1/1/2018	12/31/2019
Pivotal Energy Solutions LLC	License Agreement	Gilbert	490,500	318,612	171,888	3/1/2014	12/31/2019
EnergySavvy Inc.	Optix Engage Online Audit Tool	Seattle	467,000	345,541	121,459	6/1/2016	5/31/2020
CLEAResult Consulting Inc	2019 Residential PMC - Pilots	Austin	400,790	97,699	303,091	1/1/2019	12/31/2019
Open Energy Efficiency, Inc.	Automated Meter Data Analysis	Mill Valley	400,000	244,633	155,367	1/1/2018	12/31/2019
Balanced Energy Solutions LLC	New Homes QA Inspections	Portland	381,575	197,812	183,763	4/27/2015	12/31/2019
KEMA Incorporated	EB & SEM 2017 Evaluation	Oakland	377,860	377,858	2	4/10/2018	7/31/2019
DNV GL Energy Services USA Inc	EB 2018 Impact Eval	Oakland	350,000	0	350,000	5/9/2019	5/31/2020
Craft3	Loan Agreement	Portland	300,000	300,000	0	6/1/2014	6/20/2025
ICF Resources, LLC	2019 BE NWN WA PMC	Fairfax	270,876	98,897	171,979	1/1/2019	12/31/2019
The Cadmus Group LLC	2017 NB Impact Eval	Portland	250,000	10,804	239,196	3/4/2019	3/31/2020
CLEAResult Consulting Inc	2019 Residential PMC - WA	Austin	222,790	74,890	147,900	1/1/2019	12/31/2019
ICF Resources, LLC	2019 BE DSM PMC	Fairfax	215,972	41,126	174,846	1/1/2019	12/31/2019
Colehour & Cohen	My Home Advertising Campaign		200,000	0	200,000	5/31/2019	5/31/2020

Energy Trust of Oregon
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For contracts with costs
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CONTRACTOR	Description	City	EST COST	Actual TTD	Remaining	Start	End
CLEAResult Consulting Inc	2019 Residential PMC - CustSvc	Austin	176,490	65,513	110,977	1/1/2019	12/31/2019
The Cadmus Group LLC	Site Speciific Impact Evals	Portland	170,000	3,600	166,400	2/8/2019	1/31/2021
The Cadmus Group LLC	Residential DHP Study	Portland	166,000	165,626	374	4/18/2018	6/30/2019
DNV GL Energy Services USA Inc	Ind O&M Persistence Study	Oakland	157,980	101,198	56,782	9/4/2018	6/30/2019
Opinion Dynamics Corporation	PE Process Evaluation	Waltham	150,850	126,092	24,758	4/2/2018	7/31/2019
TRC Engineers Inc.	2019 EPS New Const PDC - WA	Irvine	124,474	52,987	71,487	1/1/2019	12/31/2019
SBW Consulting, Inc.	BPA Air Source HP Study	Bellevue	119,500	20,534	98,966	11/26/2018	11/30/2019
Opinion Dynamics Corporation	Fast Feedback 2018	Waltham	117,000	115,488	1,512	2/15/2018	5/31/2019
Portland General Electric	Intel Mega project transition	Portland	110,000	46,974	63,026	1/1/2019	12/31/2019
Alternative Energy Systems Consulting, Inc.	PE Technical Review Assistance	Carlsbad	100,000	1,184	98,816	5/8/2019	4/30/2021
Cadeo Group LLC	Propensity Model	Washington	99,840	91,560	8,280	3/15/2019	12/31/2019
WegoWise Inc	benchmarking license	Boston	90,000	44,228	45,772	6/15/2014	12/31/2019
EES Consulting, Inc	Professional Services Agmt	Kirkland	80,430	35,638	44,793	10/1/2016	9/30/2020
Evergreen Economics	EM Process Evaluation	Portland	72,000	4,338	67,663	5/6/2019	12/31/2019
Battele Memorial Institute	PNNIL Services Agreement		70,142	70,142	0	5/9/2019	3/30/2020
Opinion Dynamics Corporation	Evaluation MHR Pilot	Waltham	66,000	31,085	34,915	5/1/2017	3/31/2020
BASE zero LLC	Quality Assurance Services	Bend	58,825	50,015	8,810	3/1/2016	12/31/2019
Craft3	SWR Loan Origination/Loss Fund	Portland	55,000	0	55,000	1/1/2018	12/31/2019
Alternative Energy Systems Consulting, Inc.	CSEM - PTT	Carlsbad	50,000	41,968	8,032	6/30/2018	9/30/2019
TRC Engineers Inc.	2019 EPS New Const-Grid Harmon	Irvine	50,000	49,943	57	1/1/2019	12/31/2019
Verde	Community based EE	Portland	50,000	0	50,000	3/22/2019	12/31/2019
RWDI USA LLC	Net Zero Fellowship Grant		40,500	12,500	28,000	9/1/2018	11/30/2019
Apex Analytics LLC	WhiskerLabs Optimization Pilot	Boulder	40,000	12,280	27,720	3/20/2019	12/31/2019
FMYI, INC	Subscription Agreement	Portland	39,650	39,650	0	4/25/2016	2/1/2020
KEMA Incorporated	Billing Analysis Review	Oakland	35,000	5,501	29,499	3/15/2015	12/31/2019
MetaResource Group	Intel Mod 1&2 Megaproject	Portland	35,000	11,537	23,463	3/1/2018	12/31/2019
Earth Advantage, Inc.	Decrease REA to EA	Portland	34,000	9,250	24,750	11/1/2018	10/31/2020
Northwest Energy Efficiency Council	Tool Lending Library	Seattle	30,500	30,500	0	1/1/2019	12/31/2019
INCA Energy Efficiency, LLC	Red Rock Evaluation	Grinnell	30,000	0	30,000	6/10/2018	6/9/2020
Pod4print	PGE 2019 Bill Inserts	Beaverton	30,000	8,900	21,100	1/1/2019	12/31/2019
University of Oregon	NB 2018 Net Zero Fellows Grant	Eugene	26,000	162	25,838	10/1/2018	3/30/2020
Bridgetown Printing Company	NWN 2019 Bill Inserts	Portland	25,000	5,844	19,156	1/1/2019	12/31/2019
Ecotope, Inc.	LR MultiFamily Field Studies	Seattle	25,000	25,000	0	11/13/2018	11/11/2019
Bridgetown Printing Company	Pacific Power 2019 Bill Insert	Portland	22,000	10,370	11,630	1/1/2019	12/31/2019
Cadeo Group LLC	Retail Lighting Tracking Analysis	Washington	21,120	4,013	17,108	4/1/2019	12/31/2019
American Council for and Energy Efficient Economy	2019 Sponsorships		20,000	10,000	10,000	1/1/2019	12/31/2019

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CONTRACTOR	Description	City	EST COST	Actual TTD	Remaining	Start	End
Community Energy Project, Inc.	Grant for MF Heating Workshops	Portland	18,400	9,000	9,400	4/24/2019	12/31/2019
Michaels Energy, Inc.	Large NB Impact Evaluation	La Crosse	18,000	6,715	11,286	8/1/2018	3/31/2020
Efficiency for Everyone, LLC	Benefit Outreach- Appliances	Portland	15,000	3,750	11,250	1/1/2019	12/31/2019
HST&V, LLC	Enhance Continuous SEM	Portland	14,700	14,700	0	2/6/2019	5/31/2019
LightTracker, Inc.	POS data development lighting	Boulder	10,000	0	10,000	4/1/2019	12/31/2019
Vermont Energy Investment Corp	2019 Grant Agreement	Burlington	9,000	4,500	4,500	2/1/2019	8/30/2019
American Council for and Energy Efficient Economy	2019 Summer Study		8,980	0	8,980	5/30/2019	9/1/2019
City of Portland Bureau of Planning & Sustainability	2019 Fix it Fair Sponsorship	Portland	8,000	8,000	0	1/1/2019	12/31/2019
Resource Innovation Institute	2019 EE PETraining Sponsorhip	Portland	7,500	7,500	0	2/6/2019	12/31/2019
Northwest Energy Efficiency Council	2019 BOC Technical Webinar	Seattle	6,780	6,780	0	1/1/2019	12/31/2019
The Cadmus Group Inc.	NB Evaluation Plan	Watertown	6,500	4,945	1,555	10/1/2017	5/31/2019
Carleton Hart Architecture PC	Net Zero Leaders Grant	Portland	6,000	6,000	0	11/15/2018	6/15/2019
Otak Incorporated	Net Zero Leaders Grant	Portland	6,000	6,000	0	11/12/2018	6/15/2019
Urban Land Institute	2019 Event Sponsorships	Washington	5,000	5,000	0	2/24/2019	12/31/2019
Speranza Architecture	Net Zero Leaders Grant	Eugene	3,840	0	3,840	11/14/2018	6/15/2019
Hennebery Eddy Architects Inc	Net Zero Emerging Leader Grant	Portland	3,333	7,143	(3,810)	11/19/2018	6/15/2019
Holst Architecture Inc	Net Zero Leaders Grant	Portland	3,000	(1,141)	4,141	11/13/2018	6/15/2019
Northwest Energy Efficiency Alliance	Lighting Design Lab WS	Portland	2,500	2,500	0	2/21/2019	6/30/2019
	Energy Efficiency Total:		**107,474,526**	**62,251,682**	**45,222,844**		
Joint Programs							
Structured Communications Systems, Inc.	ShoreTel Phone System Install	Clackamas	72,845	65,287	7,559	1/1/2017	12/31/2019
Pivot Advertising	TLM Pilots		40,000	0	40,000	5/7/2019	9/15/2020
Infogroup Inc	Data License & Service Agmt	Papillion	26,114	19,877	6,237	2/12/2018	2/12/2020
Consortium for Energy Efficiency	Benchmarking Project 2019	Boston	20,000	0	20,000	1/1/2019	12/31/2019
Efficiency for Everyone, LLC	Equity Metrics Research Grant	Portland	9,000	4,500	4,500	2/1/2019	8/30/2019
The Cadmus Group LLC	Capacity Savings Peak Periods	Portland	8,500	0	8,500	5/1/2019	12/31/2019
Portland State University	Training Writing User Stories		5,450	0	5,450	5/16/2019	8/15/2019
	Joint Programs Total:		**181,909**	**89,663**	**92,246**		
Renewable Energy							
Sunway 3, LLC	Prologis PV installation	Portland	3,405,000	3,261,044	143,956	9/30/2008	9/30/2028
City of Salem	Biogas Project - Willow Lake	Salem	3,000,000	0	3,000,000	9/4/2018	9/4/2038
Clean Water Services	Project Funding Agreement	Hillsboro	3,000,000	2,013,106	986,894	11/25/2014	11/25/2039

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CONTRACTOR	Description	City	EST COST	Actual TTD	Remaining	Start	End
Oregon Institute of Technology	Geothermal Resource Funding	Klamath Falls	1,550,000	1,550,000	0	9/11/2012	9/11/2032
Farm Power Misty Meadows LLC	Misty Meadows Biogas Facility	Mount Vernon	1,000,000	1,000,000	0	10/25/2012	10/25/2027
Farmers Conservation Alliance	Irrigation Modernization	Hood River	1,000,000	40,015	959,985	4/1/2019	3/31/2021
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	3/17/2038
Klamath Falls Solar 2 LLC	PV Project Funding Agreement	San Mateo	850,000	382,500	467,500	7/11/2016	7/10/2041
Old Mill Solar, LLC	Project Funding Agmt Bly, OR	Lake Oswego	490,000	490,000	0	5/29/2015	5/28/2030
City of Medford	750kW Combined Heat & Power	Medford	450,000	450,000	0	10/20/2011	10/20/2031
City of Pendleton	Pendleton Microturbines	Pendleton	450,000	150,000	300,000	4/20/2012	4/20/2032
Deschutes Valley Water District	Opal Springs Hydro Project	Madras	450,000	0	450,000	1/1/2018	4/1/2040
RES - Ag FGO LLC	Biogas Manure Digester Project	Washington	441,660	441,660	0	10/27/2010	10/27/2025
RES - Ag FGO LLC	Biogas Manure Digester - FGO	Washington	441,660	438,660	3,000	10/27/2010	10/27/2025
Three Sisters Irrigation District	TSID Funding Agreement	Sisters	400,000	300,000	100,000	1/1/2018	12/31/2038
Farmers Conservation Alliance	Program Support	Hood River	367,000	436,978	(69,978)	1/1/2018	12/31/2019
SunE Solar XVI Lessor, LLC	BVT Sexton Mtn PV	Bethesda	355,412	355,412	0	5/15/2014	12/31/2034
CIty of Gresham	City of Gresham Cogen 2		350,000	334,523	15,477	4/9/2014	7/9/2034
Clean Power Research, LLC	PowerClerk License	Napa	215,478	215,478	0	7/1/2017	6/30/2019
City of Astoria	Bear Creek Funding Agreement	Astoria	143,000	143,000	0	3/24/2014	3/24/2034
Energy Assurance Company	Solar Verifier	Milwaukie	100,000	85,260	14,740	11/15/2018	10/14/2020
Gary Higbee DBA WindStream Solar	Solar Verifier	Eugene	100,000	9,734	90,266	10/15/2018	10/14/2020
Kendrick Business Services LLC	Small Business Financial Dev	Albany	84,750	9,565	75,185	8/1/2018	6/30/2020
Wallowa County	Project Funding Agreement	Enterprise	80,000	0	80,000	4/1/2018	3/31/2038
SPS of Oregon Inc	Project Funding Agreement	Wallowa	75,000	74,513	488	10/15/2015	10/31/2036
Craft3	NON-EEAST OBR Svc Agrmt	Portland	60,000	45,000	15,000	1/1/2018	12/31/2019
Clean Power Research, LLC	WattPlan Software	Napa	56,000	38,000	18,000	11/17/2017	5/31/2020
Oregon Solar Energy Industries Association	Solar soft costs install price	Portland	54,200	17,225	36,975	12/21/2018	6/30/2020
TRC Engineers Inc.	2019 EPS New Const PDC-Solar	Irvine	53,016	22,334	30,683	1/1/2019	12/31/2019
Site Capture LLC	SiteCapture Subscription	Austin	42,000	30,000	12,000	2/1/2018	1/31/2020
Wallowa Resources Community Solutions, Inc.	Renewables Field Outreach	Enterprise	40,000	25,844	14,156	2/1/2018	1/31/2020
Faraday Inc	Software Services Subscription	Burlington	36,000	18,000	18,000	1/15/2019	12/14/2019

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CONTRACTOR	Description	City	EST COST	Actual TTD	Remaining	Start	End
University of Oregon	UO SRML Contribution 2019	Eugene	24,999	24,999	0	3/9/2019	3/8/2020
Robert Migliori	42kW wind energy system	Newberg	24,125	24,125	0	4/11/2007	1/31/2024
Oregon Solar Energy Industries Association	2019 Sponsorship	Portland	20,000	20,000	0	1/1/2019	12/31/2019
Warren Griffin	Griffin Wind Project	Salem	13,150	9,255	3,895	10/1/2005	10/1/2020
Flink Energy Consulting	Barriers Solutions Small RE PD	Portland	13,145	6,573	6,573	11/1/2018	3/31/2019
Lewis & Clark	Small Scale 20MW RE Projects	Portland	13,145	3,000	10,145	11/1/2018	3/31/2019
Mid Columbia Economic Development	2019 LMI Solar Grant	The Dalles	10,000	0	10,000	1/25/2019	3/31/2020
Sustainable Northwest	LMI Solar Innovation Grant	Portland	10,000	0	10,000	1/25/2019	3/31/2020
Verde	2019 LMI Solar Grant	Portland	10,000	3,000	7,000	1/25/2019	4/30/2020
Wallowa Resources Community Solutions Inc	LMI Solar Innovation Grant	Enterprise	10,000	0	10,000	1/25/2019	11/30/2019
Umpqua Community Development Corp.	LMI Solar Innovation Grant	Roseburg	9,000	0	9,000	1/25/2019	10/30/2019
Seeds for the Sol	2019 LMI Solar Grant		8,350	0	8,350	1/25/2019	10/30/2019
African American Alliance for Homeownership	LMI Solar Innovation Grant	Portland	8,000	0	8,000	1/25/2019	11/30/2019
Oregon Clean Power Cooperative	2019 LMI Solar Grant	Corvallis	6,250	0	6,250	1/25/2019	10/30/2019
National Association for the Advancement of Colored People	LMI Solar Energy Development	Eugene	3,920	3,376	544	9/1/2018	6/30/2019
Lower Columbia Hispanic Council	LMI Solar Energy Development	Astoria	3,736	2,342	1,395	9/1/2018	6/30/2019
Mid-Columbia Housing Authority	LMI Solar Energy Development	The Dalles	3,691	3,224	467	9/5/2018	6/30/2019
NeighborImpact	LMI Solar Energy Development	Redmond	3,627	3,709	(82)	9/4/2018	6/30/2019
African American Alliance for Homeownership	LMI Solar Energy Development	Portland	3,102	3,024	78	9/1/2018	6/30/2019
Habitat for Humanity of Oregon Inc	LMI Solar Energy Development	Portland	3,102	3,000	102	9/1/2018	6/30/2019
Housing Development Center Inc	LMI Solar Energy Development	Portland	3,102	1,000	2,102	9/1/2018	6/30/2019
Native American Youth & Family Center	LMI Solar	Portland	3,102	3,000	102	9/1/2018	6/30/2019
Portland Community Reinvestment Initiatives Inc	LMI Solar Energy Development	Portland	3,102	3,025	77	9/1/2018	6/30/2019
		Renewable Energy Total:	**22,115,823**	**14,394,500**	**7,721,323**		
		Grand Total:	**146,768,257**	**84,888,160**	**61,880,097**		

Tab 7

Policy Committee Meeting Notes

May 9, 2019

Attending at Energy Trust offices
Alan Meyer (committee chair)

Amber Cole, Michael Colgrove, Ryan Crews, Fred Gordon, Pati Presnail, Peter West, Zabyn Towner, John Volkman, Cheryle Easton (Energy Trust)

Attending by teleconference
Roger Hamilton, Elaine Prause, Eric Hayes, Ernesto Fonseca

Update on Diversity Advisory Council

Michael Colgrove and Ryan Crews updated the committee on the process of creating an Energy Trust Diversity Advisory Council (DAC). Staff has worked closely with a "foundational DAC" since January to develop an initial DAC charter. The committee asked several questions and discussed the next steps in the process.

Committee members discussed the need for stipends for DAC members. Committee members expressed differing levels of support. Michael Colgrove explained that stipends will not be automatic, but instead Energy Trust staff will approve stipends if a prospective DAC member shows need.

Staff explained that the foundational DAC and staff are still working on finalizing the DAC member nomination process.

The Policy Committee discussed the language in the DAC ground rules and Operating Guidelines. The Operating Guidelines are explicit reminders for DAC meetings to be conscious of race. Varying views were expressed by policy committee members. Staff explained that the Operating Guidelines are intended to be agreements among DAC committee members and will be reviewed regularly. They were included in the policy committee meeting materials to provide information to the committee as an example of ground rules that the Energy Trust DAC, once established, might adopt.

The policy committee also discussed whether eight DAC meetings per year might be too much of a burden on prospective DAC members. Staff explained that eight meetings is a smaller number of meetings than those of RAC and CAC.

Committee members expressed support for requiring at least five of the 11 DAC members to be from outside the Portland Metro area, instead of at least three members, as in the draft charter. Staff committed to examining this issue and bringing it back to the policy committee for discussion at the June 20 meeting.

Staff will finalize a draft DAC charter to present to the Policy Committee at the June 20, 2019 meeting. The Policy Committee will review the charter at that meeting and make any additional suggestions for revisions, with the goal of forwarding the draft charter to the Energy Trust Board of Directors for consideration at its July 24, 2019 meeting.

Policies Reviewed

a. Public Interest Policy 4.01.000-P

The committee considered the policy without discussion, accepting the staff recommendation to not make changes to the policy at this time. The policy is next scheduled for committee review in 2022.

b. Fuel-switching Policy 4.03.000-P

The committee considered the policy without discussion, accepting the staff recommendation to not make changes to the policy at this time. The policy is next scheduled for committee review in 2022.

c. Eligibility of Self-Direct Businesses for Energy Trust Incentives 4.10.000-P

Alan led a short discussion of the clarifying emails sent to the committee following the previous committee meeting. Alan stated that these emails satisfactorily answered his questions and that he had no further concerns about the policy. The committee did not recommend changes to the policy. It is next scheduled for committee review in 2022.

d. Using Reserves Policy and Implications for Community Solar Program Contract Revenues

Pati Presnail explained how Energy Trust accounts for revenues from Energy Trust's contract with Energy Solutions for the Community Solar Program administration services. Pati explained that Energy Trust tracks these revenues separately from public purpose charge funds and other revenues, and that Community Solar revenues are distinct from reserve funds under the Reserves Policy. Pati explained that all funding sources are tracked separately. Mike explained that the process for ensuring separate treatment of revenue and for providing board oversight is the budget process.

Alan requested a procedure to explain separate treatment of revenue from separate funding sources and to ensure transparency into Energy Trust's accounting for separate funding. Staff committed to discuss with the finance committee the best process for ensuring this transparency and communicating information about different funding sources to the Board.

Staff Updates

Pati updated the committee on the management review process. Staff have received bids for completing this work and are working with a finalist to draft a contract for review.

Michael updated the committee on the board governance assessment review. Staff are working to finalize a contract with a consultant for this work.

The meeting adjourned at 2:05 p.m.

The next Policy Committee meeting will be held on June 20, 2019 from 1:00 p.m. – 3:00 p.m.

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Policy Committee Meeting Notes

June 20, 2019

Attending at Energy Trust offices
Alan Meyer (committee chair), Henry Lorenzen

Amber Cole, Michael Colgrove, Cheryle Easton, Fred Gordon, Steve Lacey, Debbie Menashe (Energy Trust)

Attending by teleconference
Roger Hamilton, Elaine Prause

Second Review of Diversity Advisory Council Charter

At its previous meeting, the committee reviewed a draft of the proposed Diversity Advisory Council (DAC) charter. Committee members suggested changes with respect to provisions in the geographic diversity of the DAC and the membership approval process. The committee also discussed the DAC's Operating Guidelines. Debbie Menashe reported to the committee that staff had discussed policy committee suggestions for the DAC charter with members of the Foundational DAC, the group who have worked with staff since January to create a proposed DAC charter for board review. Based on these conversations, the proposed charter was revised. Debbie also reported that policy committee comments on the Operating Guidelines were also reported to the Foundational DAC. Those Operating Guidelines are expected to be revisited regularly by the DAC, and policy committee comments will be considered.

In reviewing the revised proposed DAC charter, three areas were discussed:

1. Policy committee members asked that the section outlining geographic membership include a reference to Energy Trust's service territory.
2. Policy committee members asked that language describing the membership approval process be revised to be more clear regarding Energy Trust staff's role in the recommendation of prospective DAC members.
3. Policy committee members had a number of questions regarding the stipend procedures. Given that providing stipends to advisory council members would be a new practice for Energy Trust, committee members asked that procedures for payments of such stipends be approved by the board.

Based on these comments, staff will revise the draft DAC charter and circulate revisions to committee members for comment. After reviewing any comments, staff will finalize the draft charter to present to the Energy Trust Board of Directors for consideration at its July 24, 2019 meeting.

Revision to NEEA Cycle 6 Funding Agreement Resolution

At the last Energy Trust board of directors meeting, staff recommended the NEEA Cycle 6 funding agreement for approval. The resolution authorized five-year funding for NEEA, up to $40,100,000, for electric and natural gas savings and regional market transformation services. The resolution was approved at the board's meeting on May 16, 2019. Following the board's approval of the NEEA funding resolution, NEEA staff advised Energy Trust staff of an error in calculating the five-year funding requirements. Energy Trust staff presented a revised resolution to the policy committee. Committee members reviewed the revised resolution and offered suggestions for clarification. Staff will revise the resolution consistent with committee discussions, and the revised resolution will be presented to the full board at its meeting in July.

Policies Reviewed

No policies were up for regular review at this meeting.

Staff Updates

Michael updated the committee on the board governance assessment review. Synergy Consultants, LLC, has been engaged to undertake this work. Synergy will be contacting board members for interviews and will be observing several committee meetings and board meetings. Christine Chin Ryan and Victoria Lara, part of the Synergy team, will be attending the board's next meeting in Pendleton. Henry Lorenzen has been working with staff to lead this project, and Mike expressed appreciation for Henry's support.

Mike also provided an update on the Management Review Project, noting that 1961 Consulting and Holly Valkama are looking at three areas: managing time for Energy Trust's contract in program design for Oregon's Community Solar program, time tracking tools and practices for Energy Trust in general, and allocation of time for innovation.

Committee members discussed interest in the review of innovation, and Elaine Prause reported that she had been interviewed by Holly Valkama earlier in the day regarding OPUC perspectives on innovation and longer-term evolution of Energy Trust programs and resources.

The meeting adjourned at approximately 2:15 p.m.

The next Policy Committee meeting will be held on September 5, 2019 from 1:00 – 3:00 p.m.

Tab 8

Strategic Planning Committee Meeting

April 22, 2019

Attending at Energy Trust offices
Roland Risser, Ruchi Sadhir, Michael Colgrove, Hannah Cruz, Cheryle Easton, Debbie Menashe, Lizzie Rubado, John Volkman

Attending by Teleconference
Mark Kendall (committee chair), Susan Brodahl, Elaine Prause, Roger Hamilton

Meeting began at 10:00 a.m.

Review Draft Agenda for May Workshop

Staff presented the draft workshop agenda to committee members. Committee members expressed support for the structure and content of the agenda.

The committee discussed desired content and participation from the OPUC. Elaine advised the committee that Commissioner Tawney will attend the Workshop. The committee then discussed the structure of Jason Eisdorfer's report to the board, and committee members recommend an overall presentation on the OPUC staff comments on the draft plan.

The committee also discussed the time set on day two of the workshop for a review of the organizational vision and purpose statements as contained in the strategic plan. Debbie Menashe advised that Kevin Hiebert will be facilitating that portion of the workshop discussion with board members and staff and public.

Review of Outreach Plan

Hannah Cruz presented the latest draft of the plan for public outreach on the draft strategic plan. Public outreach will follow the May workshop. Committee members asked that the public engagement communications reflect the early engagement through CAC and RAC, OPUC and staff.

Hannah then described plans for outreach with board members at the July board meeting which will take place in Pendleton. This meeting is an opportunity for board members and staff to engage with community members in eastern Oregon, and staff are planning an event in Pendleton.

Meeting adjourned at approximately 11:30 a.m.

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Strategic Planning Committee Meeting

June 3, 2019

Attending at Energy Trust offices
Mark Kendall (committee chair), Roland Risser, Roger Hamilton, Ruchi Sadhir, Michael Colgrove, Amber Cole, Hannah Cruz, Cheryle Easton, Fred Gordon, Debbie Menashe, Spencer Moersfelder, John Volkman

Attending by Teleconference
Susan Brodahl, Lindsey Hardy, Elaine Prause

Meeting began at 10:00 a.m.

Review of Revised Draft 2020-2024 Strategic Plan Document

The committee discussed the draft strategic plan document circulated for committee review. That draft reflected staff's revisions based on comments and discussion at the board's May strategic planning workshop. Staff also circulated a log of comments, identifying how such comments were addressed in the revised draft. Committee members and staff agree that this log should be circulated to the full board as well. Staff will circulate the log, along with the revised draft, to the board before the document is posted for public comment. Staff reported that the current schedule calls for public posting of a revised plan by June 21, 2019.

Committee members suggested that the draft be more explicit in addressing the possibility of the SB 1149 sunset and a sunset's implications for the strategic plan. Staff agreed to revise the language to be more explicit about the need to go back to the plan for review and possible revision if a sunset extension is not identified by the end of 2021.

Committee members also urged staff to revise the plan using a more active voice wherever possible.

Discussion of Vision and Purpose Statements

Staff distributed the results of the board's ranked choice voting on vision and purpose statements as generated by the board's discussions on day two of the May workshop. An hour is scheduled for further discussion among board members at the July board meeting. Committee members expressed general comfort with the concepts of the statements, providing some wording suggestions to staff. Staff will make some suggested wording changes then circulate the revised vision and purpose statements back to committee members for any further comment. After that, the proposed vision and purpose statements will be distributed to the full board for discussion in July.

Meeting adjourned at approximately 11:30 a.m.

PINK PAPER

DRAFT

Strategic Plan

2020-2024

Energy Trust of Oregon

About Us

Vision

Energy Trust envisions a high quality of life, a vibrant economy and a healthy environment and climate for generations to come, built with renewable energy, efficient energy use and conservation.

Purpose

Energy Trust provides comprehensive, sustainable energy efficiency and renewable energy solutions to those we serve.

WHO WE ARE

We are an Oregon nonprofit organization dedicated to benefiting the customers of Portland General Electric, Pacific Power, NW Natural, Cascade Natural Gas and Avista. We are primarily funded from public purpose charges paid by utility customers. We are accountable to an independent board of directors and the Oregon Public Utility Commission.

WHAT WE DELIVER

Our information, financial incentives and connections to contractors help people, businesses and communities save energy and generate renewable power. We are committed to helping all customers manage their energy use, especially people with lower incomes, communities of color, smaller businesses and rural areas.

OUR WORK

- Helps lower utility bills for participants
- Reduces overall energy costs for all ratepayers
- Contributes to a stronger economy
- Builds resilient and sustainable communities
- Avoids carbon emissions in our region

Our impact
Working with us, customers have so far saved and generated enough energy to fuel a clean energy power plant

Context

Energy Trust is a nationally recognized expert in energy efficiency and renewable energy program development and administration.

We have served thousands of businesses, many of them large commercial, industrial and multifamily properties. Over 600,000 households have installed efficient light bulbs, water-saving solutions and other very cost-effective energy-saving projects. We have achieved success in transforming markets that have historically been low-cost and high-volume sources of savings, such as the residential lighting market. We have also helped customers install thousands of small-scale solar, hydropower, biopower, wind and geothermal systems.

DYNAMICS SHAPING OUR PLAN

In the next five years, known challenges and emerging dynamics will require us to innovatively build upon this foundational customer and market success so we can accomplish our energy goals and deliver benefits to all customers.

First, traditional clean energy program approaches need to evolve. Until advances in technology open up large areas of opportunity, we anticipate projects will save less energy on average than in the past. Consequently, we will need to help customers complete more projects to achieve our annual savings goals. This will likely increase levelized costs for energy efficiency during this timeframe. Additionally, we expect market conditions and the policy environment will make it harder to develop renewable energy projects. New partnerships and project funding models will be needed to continue diversifying Oregon's power mix with small-scale renewable energy.

Levelized cost
Our total cost to save or generate each unit of energy over the lifetime of the measure

Second, customer demographics are shifting. Our state population is expected to grow during the next five years, and with this growth, the demographics of Oregonians are changing. Nearly a quarter of Oregonians belong to communities of color and that percentage is expected to increase. To deliver on our energy savings and generation goals, we will need to engage an even more diverse population in the future. Adapting our programs and services to be relevant for diverse customers is critical to achieving our core purpose.

Third, government policies are targeting emissions reductions. As Oregon focuses on addressing climate change and reducing greenhouse gas emissions in both our energy supply and how we use that energy, our programs will be key to the state's success. Low-cost energy efficiency and clean, renewable energy are important ways to lower carbon emissions. While state carbon emissions reduction policies will likely have modest impact on our programs in the 2020-2024 timeframe, we anticipate more significant impact in the longer term.

Fourth, utility system changes and emerging technologies are presenting new opportunities. Utilities in the Northwest are adapting to address constraints on their systems and reduce greenhouse gas emissions. In addition, technology advancement is enabling new ways for utilities to begin interacting with customers to address these constraints. Our experience working with customers and contractors to install energy-efficient and solar technology can inform utility-led demand response programs and defer utility infrastructure upgrades in targeted areas.

Our Role in 2020-2024

We will continue our role as a third-party program administrator. We will **provide impactful energy efficiency and renewable energy programs** to benefit utility customers. This is our core purpose. We are entrusted to deliver cost-effective energy efficiency, transform markets to higher-efficiency products and lower the costs of small-scale renewable energy systems. We will maintain a multiple-utility, dual-fuel perspective and use independent analyses to inform this work.

We will **connect the benefits of clean energy to additional public purposes**. Utilities, communities, policymakers and implementers can make progress toward their goals by integrating energy efficiency and renewable energy into decarbonization, environmental projects, local economic development, community planning, social justice, healthcare, affordable housing and other efforts. Through coordination and alignment, we will meet our goals and make our investments go further.

Clean energy
For the purposes of this strategic plan, we define clean energy as conservation, energy efficiency and small-scale renewables

We will **accelerate customer adoption of technologies and approaches** that save energy, generate renewable power and provide additional value to the utility system. We will look ahead to identify and support new approaches, technologies and markets. We will cultivate a network of trade ally contractors, installers, architects, retailers and other third-party businesses to serve customers. We will evolve our clean energy programs by incorporating the expertise of contractors, community-based organizations, utilities, tribal governments and public agencies.

We will **serve and benefit all eligible utility customers and be inclusive in our program offerings**. We will help current participants complete their next energy projects. We will strengthen our approaches and tailor our programs to ensure people with low and moderate incomes, communities of color and rural communities can participate with us. We will carry out our diversity, equity and inclusion commitment—expanding participation in our programs and enhancing diversity, equity and inclusion in our own operations.

We will **collaborate with communities working to extend the benefits of clean energy** to those they serve. We will be a resource to community-based organizations, cities, counties, customer associations and other networks who can help engage new customers. We will seek to understand community interests and identify the mutual benefits of working together. We will partner to develop economical approaches for serving customers with efficient and renewable energy options.

Where We Will Focus

Our past successes with transforming markets and codes combined with emerging technologies, changing energy policies and regulations, and shifting state demographics are converging to open up new needs and opportunities.

To maximize our energy efficiency and renewable energy investments for the benefit of customers in this dynamic time, we will focus on:

1. Providing relevant programs, information and services for all customers, with particular attention to underserved customers
2. Delivering energy efficiency and renewable energy initiatives that benefit customers and help utilities manage constrained systems
3. Supporting development and implementation of energy-related policies by sharing our expertise
4. Maximizing public purpose charge investments by leveraging additional funding to accomplish clean energy projects with multiple public benefits
5. Enhancing our ability to quickly and effectively respond to changes, needs and new opportunities

All five areas of focus are mutually supportive and necessary. **Our priority is the first focus area, and that is where the vast majority of our investments will be made.** And yet to succeed there, we must invest in the other four. Focus areas 2, 3 and 4 will expand opportunities for our core energy efficiency and renewable energy programs and provide additional benefits to customers as the energy landscape changes. Focus area 5 is critical to our success in every other area as the pace of change accelerates and new opportunities emerge more quickly than ever before.

FOCUS AREA 1

Provide relevant energy efficiency and renewable energy programs, information and services for all our customers, including information and services designed specifically for underserved customers.

STRATEGIES

Continue to provide services and incentives to spur customer investment in their next energy project.

- Significant clean energy opportunities remain for residential, commercial, industrial and agricultural customers, even those we have already served. We will continue to provide trusted, independent information to educate customers about remaining opportunities. Our services and incentives will be available to spur investment in their next project.

Deliver cost-effective programs designed specifically to engage underserved customers.

- We will design programs and outreach plans to serve customers in geographic areas and communities where participation has been lower. In alignment with our Diversity, Equity and Inclusion operations goals, we will work to reach people with low and moderate incomes, communities of color and rural communities. We will evolve our services, information and incentives to address their energy needs and ensure they can participate in, and benefit from, cost-effective energy efficiency and clean, renewable generation.

Serve customers through distributors, suppliers, retailers and other mid- and up-stream market actors.

- We will focus on lowering program costs by expanding mid- and up-stream approaches, which seek to influence distributor and retailer stocking and sales of efficient products. We will apply lessons from our residential mid-and up-stream delivery to the commercial, industrial and renewable energy sectors, and continue to coordinate closely with the Northwest Energy Efficiency Alliance to identify additional mid- and up-stream opportunities.

Evaluate new energy technologies in development and incorporate into program offers when they are cost-effective and ready for the market.

- When new technologies and approaches are ready, we will adapt programs to support customer awareness, education and adoption.

PROGRESS INDICATORS

We will know we are making progress in this focus area when:

- We achieve our annual savings and generation goals, making steady progress toward ambitious longer-term goals we will establish through a three-year planning process starting in 2021. We incorporate emerging sources of savings and generation in the three-year goals *(see callout box)*.
- We meet or exceed the goals we establish to increase the diversity of program participants.

WHY WE FOCUS HERE

Our core purpose is to deliver cost-effective energy efficiency and clean, renewable energy programs and services to our affiliated utility customers. It is the reason we were created, and it remains our top priority.

Working in coordination with utility integrated resource planning, we aim to achieve all available cost-effective energy efficiency over a 20-year planning horizon. We use multiyear planning and annual budgeting to determine how much of the 20-year resource we can capture in the near term.

Multiyear planning
We work with utilities to produce two-year integrated resource plan updates identifying short-term energy efficiency opportunities based on market intelligence. For 2020 and 2021, we will use our annual budgeting process to inform goal setting. For 2022 and beyond, we plan to adopt a new three-year action planning cycle that will inform annual budgets and goal setting.

Looking ahead, we must find new ways to support the higher-cost technologies that are still cost-effective and continue to develop markets for solar, hydropower and biopower technologies. Substantial efficiency and renewable energy opportunities remain for our customers and we need innovative approaches to our program design and delivery to support them.

Our focus on all customers highlights our commitment to achieve all available cost-effective energy efficiency and deliver renewable energy generation. It ensures all customers who pay the public purpose charge can be engaged by our programs and benefit from our services. Through our Diversity, Equity and Inclusion operations goals, we are committed to intentionally designing services to reach underserved customers with relevant offers. This is essential to accomplishing our annual savings and generation goals.

FOCUS AREA 2

Strengthen the value we deliver to customers by linking energy efficiency and renewable energy to the approaches utilities are using to meet changing customer energy needs.

STRATEGIES

Improve our ability to quantify and value the benefits of distributed energy efficiency and renewable energy to electric and natural gas utility systems.

- We will conduct further research to understand and account for all the benefits energy efficiency and renewable energy can provide to utility systems, including to what extent these benefits can lower customer costs, reduce utility peak consumption and defer utility investment in transmission, supply or distribution upgrades.

Educate, encourage and enable customers to install and realize benefits from clean energy projects that also help utilities efficiently lower the cost of operating their systems.

- By working with the OPUC, our partner utilities and other stakeholders, we will implement energy efficiency and renewable energy initiatives in ways that benefit customers and help utilities manage their local distribution systems. We will explore incentives and outreach strategies to help customers in specific locations adopt beneficial technologies and practices where utilities are integrating distributed energy resources and seeking additional load management and flexibility.

PROGRESS INDICATORS

We will know we are making progress in this focus area when:

- We develop a framework to value, deliver, report and evaluate energy efficiency and renewable energy resource opportunities in targeted locations in collaboration with utilities.
- We implement and evaluate initiatives designed to drive customer adoption of energy efficiency and renewable energy projects in targeted areas.

WHY WE FOCUS HERE

We help keep utility costs lower for all customers by using our program and delivery expertise to support customer adoption of clean energy technologies and practices. These efforts deliver customer benefits and they can also help utilities address specific challenges in meeting customer demand.

For instance, efficient heating and cooling systems that are grid-enabled with built-in Wi-Fi will deliver cost savings and can also be used in utility demand-response programs that encourage customers to use less energy at specific times. Contractors can be encouraged to construct efficient homes and buildings that are also electric vehicle-ready. Customer solar projects installed with battery storage can help utilities smooth the impacts of intermittent renewable energy on the grid, while also providing resilience benefits.

Distributed energy resources
Energy efficiency and renewable energy, together with battery storage, demand response and electric vehicles that are connected to the grid, are known as distributed energy resources

Distributed energy resources like energy efficiency and small-scale renewable energy have the potential to help electric and natural gas utilities moderate the effects of sudden swings in energy demand or defer investments in new transmission and distribution infrastructure. There is increasing interest at the OPUC and in the utility industry in using distributed energy resources in a more integrated way, and there is recognition that we have the skills and expertise to assist with this integration.

FOCUS AREA 3

Provide objective information and analyses to support development and implementation of energy policies.

STRATEGIES

Work with the OPUC to provide technical support and advice on energy policies and dockets.

- The OPUC is engaged in many policy processes that will impact the regulatory environment and set the direction for the utility industry in Oregon. These processes will include considering how energy efficiency and small-scale renewables can interact with a changing utility environment. We will maintain effective working relationships with commission staff and support their processes using a public benefits perspective.

Support energy-related policy initiatives, objectives and complementary programs led by local, state and federal governments.

- We will work with the OPUC to identify areas where Energy Trust's experience in energy efficiency and renewable energy program delivery and customer outreach may support government policy objectives or initiatives. This includes being an expert resource and providing data or analyses on customer participation in and results of our clean energy programs. We will provide this to the Oregon Legislature, Office of the Governor, Oregon Department of Energy, Oregon Housing and Community Services and others.
- We will identify areas where we can further support policy activities, and we will respond to policymakers' needs for information and advice in areas where our experience could help.
- We will continue our approach to coordinating with complementary programs at state and local agencies, including Oregon Department of Energy's schools program and low-income programs and pilots led by Oregon Housing and Community Services.

PROGRESS INDICATORS

We will know we are making progress in this focus area when:

- We establish a system for monitoring regulatory and policy initiatives. We participate in policy development and implementation when there is potential customer benefit related to energy efficiency and renewable energy in the resulting policy, and we contribute data analyses and technical expertise during development of the policy.

WHY WE FOCUS HERE

City, county and state policymakers in Oregon are increasingly interested in how energy efficiency, renewable energy and other distributed energy resources can help achieve public policy goals.

We are a resource with impartial, objective information that can educate and inform policymakers and implementers. We have historically participated in policy development and implementation by providing public agencies with information, data and analyses on energy efficiency and renewable energy opportunities, and program participation results and trends. Our technical knowledge and experience working directly with customers, contractors, the state's largest investor-owned utilities and other market actors can continue to be valuable inputs into policymaking discussions.

Through this work, we can enhance the effectiveness of policies and support our core purpose of delivering least-cost energy and developing renewable energy markets. Doing so can ultimately help achieve greater program participation, energy savings and renewable generation.

FOCUS AREA 4

Maximize the effectiveness and reach of public purpose funding by leveraging additional funding to advance clean energy investments that deliver multiple benefits.

STRATEGIES

Leverage outside funding to help customers complete projects with both energy and non-energy benefits.

- Clean energy projects can deliver significant non-energy benefits. Other organizations and agencies may have funding available for those benefits. By collaborating with external organizations to coordinate funding, and helping customers identify and secure these additional funding sources, more clean energy projects can be completed and our public purpose charge investments can go further.

Coordinate with communities to help integrate energy efficiency and renewable energy into climate action and resiliency plans or to accomplish other community energy goals.

- As more communities actively engage in energy, climate and resiliency planning, we can support those plans that complement our goals by pooling resources and providing technical and educational expertise.

Collaborate with utilities on carbon reduction strategies.

- As Oregon's greenhouse gas reduction strategy takes shape, we will help by bringing our energy efficiency and renewable energy expertise and resources. For example, we can lend our experience in developing biogas projects that produce renewable electricity to help natural gas utilities develop renewable natural gas projects that can reduce greenhouse gas emissions.

PROGRESS INDICATORS

We will know we are making progress in this focus area when:

- We acquire more energy savings and renewable generation than would otherwise be achieved with only public purpose charge funding.
- We coordinate with more organizations and communities where their additional resources help accomplish mutually supportive objectives.
- We establish a concept agreement with the OPUC and at least one natural gas utility to assess a joint carbon reduction effort.

WHY WE FOCUS HERE

We can achieve additional energy efficiency and renewable energy by identifying, coordinating and helping customers leverage non-energy benefits and the funding that comes with them. Clean energy projects frequently realize public benefits beyond energy savings and renewable generation. Organizations or customers who might value those additional non-energy benefits do not always recognize the contribution that efficiency and renewable projects can make, or they are not able to realize or maximize those benefits on their own.

Our incentives for irrigation modernization projects, for example, help irrigation districts convert open canals to pipes, which eliminates pumping, and install low-impact, in-conduit hydropower systems. These projects also deliver non-energy benefits, like water conservation, improved water quality and restored river flows. Our funding and collaboration in these projects attract other organizations who can support the non-energy benefits, like watershed enhancements in this example.

Building on experience with initiatives like irrigation modernization, we will explore partnerships with organizations focused on greenhouse gas reduction, public health, affordable housing, workforce development, environmental justice and other objectives benefiting customers and communities. The objective is to achieve both energy and non-energy benefits for the public good and broaden the impact of our investments.

FOCUS AREA 5

Enhance our ability to quickly and effectively respond to changes, needs and new opportunities.

STRATEGIES

Foster and retain talented staff skilled in innovation techniques and adapting to change.

- To continue to lead in the design and administration of programs for the benefit of utility customers and the State of Oregon, we will retain highly skilled and engaged staff and recruit passionate, diverse employees. We will provide support for staff who identify a promising idea or new opportunity and are actively pursuing innovation. We will implement organizational development initiatives, improve our ability to quickly scale and direct staff resources where needed, promote alignment to shared goals, and improve processes and systems for efficiency and effectiveness.

Intentionally cultivate diversity in our board of directors, advisory councils, executive leadership, staff, contractors, partners and vendors.

- Building a diverse and inclusive organization in all dimensions will bring a vibrant wealth of backgrounds, experiences, perspectives and creative approaches to our work in service to our diverse utility customers. We will improve our service to customers when we better reflect all communities.

PROGRESS INDICATORS

We will know we are making progress in this focus area when:

- Annual surveys indicate that staff are significantly aware of how annual goal setting, business planning and prioritization enables flexible resourcing of existing and new initiatives.
- We achieve Diversity, Equity and Inclusion goals for employee hiring and recruitment, and for the board of directors.

WHY WE FOCUS HERE

To achieve focus areas 1 through 4, we will need to evolve how we approach our work and customers. We cannot continue to deliver significant benefits to utility customers in the 2020-2024 plan period by relying only on our prior successes.

To reach more customers and rethink how our expertise in energy efficiency and renewable energy add value to an increasingly integrated and distributed energy system, our organization must be more innovative and quicker to pivot to new opportunities. We will need to develop new ways of working with more diverse customers and adapt program designs to find cost-effective approaches to serve them. In addition, changes underway in the utility system and Oregon's energy policy may drive additional opportunities to serve and benefit utility customers and the public.

In periods of change, successful organizations focus on employees, helping them grow, learn and work productively through the uncertainty and divergence that comes with change. We will focus on ensuring alignment to organizational goals, providing a welcoming environment open to new ideas and perspectives, and cultivating employees' continued passion to deliver on the vision and purpose of the organization.

Strategic Plan Development and Management

We are guided by a series of five-year strategic plans, required by a grant agreement with the OPUC. The strategic plan is developed in an open and transparent process that gives stakeholders, customers and interested citizens an opportunity to guide the organization's broad direction.

DEVELOPING THE PLAN

Development of the 2020-2024 Strategic Plan began in May 2018 and will conclude in October 2019 when the plan is presented by staff to the board of directors for adoption. During this time, we present and invite public comment on the draft strategic plan at board and advisory council meetings, at public outreach events in communities across the state and through our website and communications. The board considers public comments and they help shape the final strategic plan.

After the adoption of the strategic plan, we will use annual and multiyear planning and budgeting processes to identify, prioritize and resource specific initiatives.

MONITORING PROGRESS

In past strategic plans, we set quantitative five-year energy savings and generation goals and used them to measure progress. In this 2020-2024 plan period, we will establish:

- Multiyear energy savings and generation targets through our three-year planning process starting with 2022, and
- Annual energy savings and generation goals through annual budgets, which will be based on current market conditions, policy changes and input from utilities, regulators, stakeholders and staff

This plan provides additional progress indicators to help the board monitor and evaluate each focus area and identify if staff are on track to meeting them by 2025.

PLAN MANAGEMENT AND SENATE BILL 1149 SUNSET

As we implement this strategic plan over its five-year timeframe, market, policy and other conditions will differ from what we assumed when we developed the plan. As with past strategic plans, we will manage and respond to unanticipated changes through other planning processes, like our contributions to the utilities' two-year integrated resource plan updates and our three-year business plans, annual budgets and action plans.

One policy condition that could require a change to the plan's focus areas or strategies is the sunset of the public purpose charge (established in SB 1149) at the end of 2025. This plan assumes public purpose charge funding will continue beyond 2025. Throughout this five-year plan, staff will monitor the status of that sunset, reconvening the board to reassess the plan if this funding is not extended.

HOW WE ARE FUNDED

We are funded by customers of Portland General Electric, Pacific Power, NW Natural, Cascade Natural Gas and Avista. We receive a small, dedicated percentage of customer utility bills to invest in energy efficiency and renewable energy programs in Oregon and Southwest Washington. The Oregon Public Utility Commission oversees our investments.

1. **SB 1149**: We receive a portion of a 3% public purpose charge to fund electric efficiency, market transformation and small-scale renewable energy development.
2. **SB 838**: We coordinate with the two electric utilities to identify additional electric efficiency funding beyond the original amount determined in SB 1149.
3. **Natural gas tariffs**: We coordinate with the three natural gas utilities to identify natural gas efficiency funding.

NEXT STEPS: PUBLIC OUTREACH AND PLAN REVISION

We're interested in your thoughts and feedback. Here are some questions we'll be asking in our discussions with stakeholders and the public during our summer outreach.

- How does our strategic plan relate to your priorities over the next five years?
- Will our focus areas meet your energy goals and needs?
- What relative level of investment do you suggest we make in each of the five focus areas?
- What are we missing that we should consider when finalizing the plan?

Written public comments are accepted through August 2 and will be considered for inclusion as we finalize the plan for board adoption on October 16, 2019.

Find more information, including how to submit your feedback, at **www.energytrust.org/strategicplan**.

Energy Trust of Oregon 421 SW Oak St., Suite 300, Portland, OR 97204 1.866.368.7878 **energytrust.org**

Tab 9

Conservation Advisory Council Meeting Notes

May 22, 2019

Attending from the council:

Holly Braun, NW Natural
Charlie Grist, Northwest Power and Conservation Council
Dave Moody, Bonneville Power Administration
Jeff Mitchell, NW Energy Efficiency Alliance, for Julia Harper
Warren Cook, Oregon Department of Energy
Wendy Gerlitz, NW Energy Coalition
Tim Hendricks, Building Owners and Managers Association
Kari Greer, Pacific Power
Anna Kim, Oregon Public Utility Commission
Danny Grady, City of Portland Bureau of Planning and Sustainability
Jason Klotz, Portland General Electric
Kerry Meade, Northwest Energy Efficiency Council

Attending from Energy Trust:

Hannah Cruz
Fred Gordon
Peter West
Ryan Crews
Debbie Menashe
John Volkman
Jackie Goss
Cameron Starr
Kenji Spielman
Alex Novie
Lizzie Rubado
Spencer Moersfelder
Steve Lacey
Mark Wyman
Kati Harper
Kate Wellington
Ashley Bartels
Jeni Hall
Peter Schaffer
Amber Cole
Jessica Iplicki
Michael Colgrove
Amanda Zuniga
Kirsten Svaren
Kate Hanson
Jack Cullen
Rob Strange
Jessica Kramer
Jay Olson

Others attending:

Alan Meyer, Energy Trust board
Lindsey Hardy, Energy Trust board (on phone)
Elee Jen, Energy Trust board
Shelley Beaulieu, TRC
John Molnar, Rogers Machinery
Whitney Rideout, Evergreen
Jenny Sorich, CLEAResult
Aaron Leatherwood, Evergreen
Nick Dreves, ICF
Joe Marcotte, Lockheed Martin
Greg Harr, Evergreen
Jon Eicher, ICF
Karla Hendrickson, ICF
Laura Hall, ICF

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1. Welcome, Old Business and Short Takes

Hannah Cruz convened the meeting at 1:32 p.m. The agenda, notes and presentation materials are available on Energy Trust's website at www.energytrust.org/about/public-meetings/conservation-advisory-council-meetings/. The meeting was recorded on Go To Meeting. If you'd like to refer to the meeting recording for further detail on any of these topics, email info@energytrust.org.

2. Guest Speaker: NW Energy Coalition

Topic summary

Northwest Energy Coalition Policy Director Wendy Gerlitz provided an overview of recent clean energy advancements in Washington State, including three of the major bills her organization worked directly on. Northwest Energy Coalition's website contains a legislative digest with more information.

Discussion

The first bill, SB 5116, aims to transition the electric sector to 100 percent clean energy by 2045, with a key provision that coal-fired energy cannot be charged to customers after 2025. The bill also states that all electric utility retail sales must be greenhouse gas neutral by 2030 and electric utilities are required to pursue all cost-effective efficiency and demand response. The bill would begin factoring the social cost of carbon at a 2.5% discount rate. It also contains a low-income assistance section requiring all programs to make funding available by 2021. The requirements extend to all electric utilities.

The second bill, HB 1257, will implement energy performance standards for large commercial buildings. It includes a tiered implementation time period to meet the standard, which must include energy use intensity targets by building type. Another part of the bill introduces energy efficiency standards for natural gas utilities and requires that by 2022 all natural gas utilities must identify and acquire cost-effective conservation incorporating a 2.5% social cost of carbon instead of the current cost of carbon compliance.

Holly Braun: Using the social cost of carbon should create a higher bar and make more measures cost effective.
Hannah Cruz: Since we serve customers in Southwest Washington, would this affect our processes?
Holly Braun: Yes and no. We already get all cost-effective energy efficiency. We have to change one of the components of the cost-effectiveness calculation to include the societal cost of carbon. We don't think there's a huge difference but it's worth exploring.

Wendy went on to describe the third bill, SB 2044, which creates new energy and water use standards for 16 appliance products, and also allows the Department of Commerce to update the standards.

Next Steps

No next steps.

3. Review of Draft 2020 Organizational Goals

Topic summary

Staff described the process to developing the 2020 organizational goals. The goals are still in draft form and will be revised with further staff input and with feedback from members of the Conservation Advisory Council and Renewable Energy Advisory Council. When final, the goals will guide the organization in developing the 2020 budget and action plan this fall.

Mike Colgrove reviewed Energy Trust's draft 2020-2024 Strategic Plan goals in their current form and explained. He noted that this year's process to developing organizational goals is different from past years because the annual organizational goals are being developed ahead of the final strategic plan goals. In subsequent years, the strategic plan will be final and a reference point before developing annual organizational goals.

Discussion

The council broke out into small groups and were given questions to prompt a discussion about the draft goals. Each group reported out their feedback to the group. High-level takeaways are as follows:

Group 1:

- Overall, the first goal felt a lot like business as usual, whereas the second through fifth goals related to how Energy Trust is collaborating internally or externally.
- One concern is how Energy Trust will integrate with other organizations. Will it be cumbersome? From the utility side, the concern is how Energy Trust influence will be perceived in conversations with other organizations. For example, with the goal relating to local and statewide policies, Energy Trust has a lot of influence. How do you avoid showing advocacy while still supporting with technical experience for others to leverage?
- From a trade ally perspective, the goals are a little high level.

Group 2:

- We are supportive of the fourth and fifth goals. We need more clarity on the third goal and are curious to know the effects it may have on entities that currently conduct some of this work.
- It would be helpful to get more clarification on what non-market transformation innovations you're pursuing.
- This doesn't go into specifics so it's hard to give direct feedback. Are these goals in addition to current activity or supportive of it?
- Defining your role is a tangible thing you could call out in here.

Group 3:

- What underlies these goals? They lack specificity and a way to measure progress. Various goals stated seemed to be at different levels; some are broad and others very specific. Either simplify or build out each goal.
- These goals advance and expand Energy Trust's goals. But the current core work about delivery wasn't mentioned anywhere explicitly.
- Regional stakeholders and communities want to be part of the innovation conversation. How would they be impacted?
- We appreciate the exercise, and its valuable to do it early on. It would be nice to add an additional touchpoint to understand why and how the goals were developed.

Group 4:

- Thank you for doing this process. It feels more whole and complete. More time to complete the exercise fully would be great.
- The goals seem more specific to the current time compared with last year. These feel timely for 2020.
- Advancing flexibility is something you always should do.
- The goals should all be high level. It feels appropriate for us to engage with the top-level goal and then be informed on the second, activity-based level.
- Under the innovation goal, you should also identify barriers to innovation.
- In the fifth goal, the Portland Clean Energy Fund and state carbon policy appear to be linked but might deserve partitioning. You can still provide impartial information but figuring out what your role is as it pertains to implementing the Portland Clean Energy Fund isn't called out here. It would go beyond providing information and analysis, and you could expand that.

Group 5:

- Some of the goals seemed too technical.

- We liked the mentions of creating future savings opportunities. That's specific to today. The notion of sustaining efficiency in a changing world was good.
- The goals don't need to represent the totality of what the organization is doing.
- The goal relating to operational improvements was confusing and you may want to re-word it.
- We liked the "create" clause in goal one suggesting advancing and expanding because it reflects a pursuit of innovation.
- On the fifth goal regarding impartial objective analysis, it needs to reflect collaboration. Implementation of policy happens after, but information sharing could occur prior to that.
- Early engagement on developing these goals is appreciated. We would like to be involved in the tactics and understanding implementation strategies.

Hannah Cruz: Do you have interest in being involved in the next steps of the process as the goals are used to inform action plans?
Warren Cook: Yes. It helps link tactical decisions back to the "why."

Next Steps
With this feedback, staff will continue revising the draft 2020 organizational goals. The final goals will be brought back to the council at a later meeting as an informational item. The goals will also be referenced by program staff developing their 2020 action plans, and the council will receive presentations in the fall on this plan.

4. Commercial and Industrial Lighting Strategy
Topic summary
Staff is developing a longer-term lighting strategy for the Existing Buildings, Existing Multifamily and Production Efficiency programs. The council received an early look at the savings forecasts and how programs are proactively planning for anticipated savings declines.

Discussion
Jessica Kramer reviewed five-year lighting projections for commercial and industrial lighting. Staff convened a lighting strategy team to better understand future program savings and proactively plan for an expected reduction in savings from commercial lighting measures, which currently account for almost half of the total savings for the Existing Buildings, Existing Multifamily and Production Efficiency programs.

The lighting strategy team examined market effects for each technology to understand its savings potential, then looked at the delivery model which predicts cost effectiveness and whether each measure could continue. The team explored two scenarios: one in which there were no changes to the programs and another that factored in new program and delivery models.

Alan Meyer: Why is lighting not going to be cost effective?
Jessica Kramer: It's the changing baselines. There are fewer savings because highly efficient LED technology will become the standard.

Jessica described that the second scenario could include increased midstream delivery of commodity LEDs and a better designed program that could potentially provide design assistance to customers for major remodels. The second scenario predicts a much less steep drop-off in savings, which would decrease shock to the market.

Alan Meyer: Is the incentive spending the same in both scenarios?
Jessica Kramer: We haven't got to that level of detail evaluating the midstream and design incentives. We'd still have to stay within the maximum allowed incentive for each measure. We

want to support the midstream offering at a higher incentive rate to get the best adoption rate with distributors.
Jay Olson: We think we'll save a lot on operation costs. Program cost-effectiveness would go up.

Hannah Cruz: Are you largely maintaining TLEDs?
Jessica Kramer: Yes, that is the category that helps maintain savings throughout the years in the second scenario. It is the largest category for commodity LEDs.

Danny Grady: When you mentioned that in 2022 there were commodity LEDs that wouldn't be cost effective, is that using the existing baseline?
Jessica Kramer: In 2019, the baseline will still be the existing baseline but we're preparing for a dual baseline in 2020. We're in that transition period.
Jay Olson: Exploring the two scenarios helps determine the timing. At first, we wanted to move to midstream on January 1, 2020, but the study shows we would have lost savings by moving that quickly. We need more analysis to figure out when we should move forward.
Jeff Mitchell: What is the dual baseline?
Kenji Spielman: In Regional Technical Forum terminology, this is an early retirement baseline. It is trying to account for current practice after the technology that is replaced is expected to fail.

Dave Moody: Regional coordination will be important.
Jessica Kramer: The NEEA lighting meeting is happening in June. It would be good to come back after that with a regional perspective.

Kerry Meade: When you look at lighting savings from controls, how are you able to measure cost effectiveness since they impact HVAC and things other than the lighting portion? Is that something you're exploring in discussions? Should we be exploring it in our council meetings? Technology is moving toward connections within a building. It's a little easier in Washington to look at whole building impact. They just rolled out a commercial building performance standard to get past the cost-effectiveness barrier. There's still more out there that needs to happen. How are you thinking about that and how do we talk about it?
Jay Olson: Better lighting design approach comes into play to look at a system-based approach. Also, we're trying to launch a networked lighting controls pilot. It would incorporate the whole building approach with high-efficiency lighting, smart controls, lighting design, layout and exterior lighting. That's also part of what we want to come back in a few months. We're not looking at just these two things, but they are the two biggest we identified to not lose savings.

Anna Kim: I'd like to request more information on the lighting landscape.

Jason Klotz: Are there integration costs with the building management system if you're doing whole buildings with lighting?
Jessica Kramer: We haven't gotten to that level. The better design option is the least fleshed out. We'll bring that in.

Dave Moody: The post-2022 midstream approach looks like its protected. Do you anticipate that much of baseline savings to make that up? Are midstream savings really viable?
Jessica Kramer: According to the two factors we considered, we could prolong that into 2024. After 2024, we don't have that projection, but we think it will dramatically drop off. These are going to be consistently revisited. We'll have to test any scenario.

Anna Kim: Could you share more about what goes into your scenario?
Jessica Kramer: We'd love to do that in a follow-up. Would you like a short report?
Anna Kim: Yes, that would be good.

Alan Meyer: Thank you for bringing it to the CAC before it's a fully formed decision.

Kenji Spielman: Caveat is that we don't know as much about the market share as we'd like.
Dave Moody: Are you working with our market research team? I believe they have some good data.
Kenji Spielman: Yes. But working with NEEA and distributor-level data and piecing that together is challenging.
Jeff Mitchell: The market research indicates that there should be 200 million lamps, but we can only account for half of that.

Next Steps
Staff will continue developing the long-term business lighting strategy, and will follow-up wit the council at a later meeting in fall 2019 or early 2020.

5. Pilots Update
Topic summary
Staff provided an overview of recently completed and in-progress pilots. Kenji Spielman presented on Energy Trust's pilot process as a whole and some current ongoing pilots. Pilots are used to test technologies, behavioral change techniques and delivery methods and may or may not lead to a new measure being created.

Discussion
Holly Braun: What is the cadet plus heater?
Kenji Spielman: Cadet came out with a more efficient version of the traditional cadet wall heater, and we thought there may be savings in upgrading to that more advanced version. However, due to the sale of the company and distribution issues, we didn't get enough data.

Elee Jen: What about the data you are using for each of the pilots? For example, with the variable refrigerant flow pilot, how do you collect data?
Kenji Spielman: The pilot didn't come back with strong actionable results. We found barriers around permitting and how units were going in. Some of the modeling work and market research was used to create a different prescriptive measure that the New Buildings team is currently using. In terms of data collection around cadets, we need enough units going into buildings, but we just didn't get that.

Charlie Grist: I heard a talk yesterday on ductless heat pumps in manufactured housing that argued the Regional Technical Forum measure isn't really a good one. You should also have controls on the existing system or remove it. Have you looked at the effect of the existing embedded system working in conjunction with the new system?
Jackie Goss: It's an issue we need to look at, but won't address in the pilot.
Kenji Spielman: It's an issue with how we deal with the interaction between the ductless heat pump and backup heating.

Charlie Grist: In the multifamily homes, you were looking at regular and ductless heat pumps. Were ductless heat pumps installed through the wall or embedded in the ducts?
Jackie Goss: Through the wall.
Charlie Grist: Were there noise concerns?
Scott Leonard: It's two different ductless heat pumps, one on the lower and one on the upper floor with a ducted distribution system on the upper floor that connects to the bedrooms. The noise is coming from an inline fan within the distribution system that moves air through the ducts. Contractors have since discontinued using this system design and moved to manufacturer created duct systems that connect directly to the upstairs unit indoor head.

Next Steps
No next steps.

6. Establishing Baselines for Diverse Population Groups

Topic summary
This presentation examined what staff might be able to do from a data perspective to support more targeted program services and outreach to underserved customers. Kenji Spielman and Alex Novie presented highlights from a recent panel they participated in at NEEA's Efficiency Exchange Conference that looked at how a focus on equity could better quantify potential savings for certain customers. For example, secondary market purchases could potentially become cost effective if a different baseline were used. Energy Trust current baselines are calculated using a broad set of averages that don't necessarily reflect specific groups of participants.

Discussion
Hannah Cruz: How would you describe our current framework?
Kenji Spielman: We use measure-level cost effectiveness. We include fairly discrete ways to incorporate non-energy benefits. We assume certain customers, like very low-income populations, are specifically being served by other organizations. It is important to bring up that other jurisdictions use a 20 percent adder on savings reaching certain customer groups.

Alex Novie reviewed an example about residential clothes washers, explaining that the baseline for low-income customers could potentially be much lower because many purchases in this demographic are from a secondary market.

Alan Meyer: I understand what you're saying. You could offer higher incentives if you were getting more savings, but how do you know?
Kenji Spielman: Yes. It might not even be justifying higher incentives. We're normally only supporting front-loading washers. However, if it turns out there's a case that movement to an ENERGY STAR® top loader is cost effective, and we can get those into specific channels, maybe we have a different set of products to support.

Holly Braun: What happens to all these used appliances? Would re-use be better even if it's less efficient? What would be done to the used ones since if you're trying to look society wide.
Kenji Spielman: All those appliances have high value as scrap metal so they would likely end up in the recycling stream. We haven't looked into a full lifecycle assessment of the energy used in creating a new unit.
Holly Braun: I feel like this is a consideration even though we're about carbon emission. It feels congruent with better affordability.
Kenji Spielman: If existing units are wasting a lot of energy and water, the quality of the new appliances sometimes is much higher than what's on the secondary market.
Alex Novie: It's an important observation that we've also heard from customers.
Charlie Grist: The key from my point of view is getting data on a baseline for different populations: how much of that market is new and what level of efficiency are they buying? The market for efficient products is not ubiquitous. The Regional Technical Forum looks at four states and all income levels. If other markets are different, those need to be tapped but you have to find out what they're buying. It's hard, but I support that work.
Kenji Spielman: Also, what data do we have already? What else can we start to gather and leverage so it's not piecemeal and hyper-regional. Can there be regional collaboration to answer some of these questions? Are there enough savings to justify the effort to quantify it and gather enough data to support it?

Hannah Cruz: Beyond secondary markets, did the panel have other examples?
Kenji Spielman: Yes, for example small hardware stores and the baseline of what's being sold in urban versus rural areas. Also, the age of water heaters in rentals versus owned homes or units. And delving into different census tracks and what the housing conditions are.

Mike Colgrove: If there's a differential in installation cost in rural communities due to product and installer availability, could that be an example?

Alan Meyer: We pay on average now. If we pay above average in targeted areas, maybe we could pay less than average in other areas. That gets even more complicated.

Hannah Cruz: Were there any business examples?
Alex Novie: There are retail lighting examples for areas where there might not be a Lowes or a Home Depot. Installer availability is also a factor. The market baseline for lighting is a very broad average for commercial buildings. Are there ways we could segment the market more? We aren't necessarily collecting data to inform program design. We are also looking at operating hours between business types and digging deeper on business sizes.
Mike Colgrove: From the NEEA conference, I thought an interesting observation is the impact this could have on the rest of the population. If measures are averaged over whole populations and we pull out the higher savings component, is that even built in the assumption? What does that then do to the remainder?

Next Steps
No next steps.

7. Public Comment
There was no public comment.

8. Meeting Adjournment
The meeting adjourned at 4:30 p.m. The next meeting is Wednesday, June 26, 2019.

Tab 10

Renewable Energy Advisory Council Meeting Notes

Wednesday, May 22, 2019

Attending from the council:
Alexia Kelly, Electric Capital Management
Andria Jacob, City of Portland
Anna Kim, Oregon Public Utility Commission
Dick Wanderscheid, Bonneville Environmental Foundation
Erik Anderson, Pacific Power
Jaimes Valdez, Spark Northwest
Kendra Hubbard, Solar Energy Industries Association
Les Perkins, Farmers Irrigation District
Michael O'Brien, Renewable Northwest
Oriana Magnera, Northwest Energy Coalition
Rebecca Smith, Oregon Department of Energy
Susanne Leta, SunPower

Attending from Energy Trust:
Betsy Kauffman
Dave McClelland
Jed Jorgensen
Zach Sippel
Lizzie Rubado
Jeni Hall
Lily Xu
Dave Moldal
Peter West
Jay Ward
Mike Colgrove
Julianne Thacher
Samuel Girma
Peter West
Matt Getchell
Hannah Cruz
John Volkman

Others attending:
Kate Hawley, TRC
Shelley Beaulieu, TRC
Angela Crowley-Koch, Oregon Solar Energy Industries Association
Charity Fain, Community Energy Project
Josh Halley, Portland General Electric
Nate Larsen, Pacific Power
Caroline Moore, OPUC
Natasha Smith, OPUC
James Donnelly, Elevate Energy
Patrick Foley, Elevate Energy
Randy Feldhaus, Sunbreak Energy Advisors
Pat Daniels, Constructing Hope
Lindsay Hardy, Bend Environmental Center (Phone)
Katie Perkins, public
Ray Sanchez, Solarize Rogue (Phone)
Trisha Paul, CLEAResult

1. Welcome, Introductions, Announcements

Jed Jorgensen called the meeting to order at 9:30 a.m. 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/. The meeting was recorded on Go To Meeting. If you'd like to refer to the meeting recording for further detail on any of these topics, email info@energytrust.org.

Jed Jorgensen opened with brief notes and updates for the group.

Energy Trust staff recently attended two conferences:

1. The Renewable Power to Fuels Symposium by the Renewable Hydrogen Alliance, hosted by NW Natural.
2. Oregon's Energy Future Conference presented by the Northwest Environmental Business Council. Oriana Magnera, a member of the Renewable Energy Advisory Council, gave the opening keynote titled "Social Equity and Inclusion in the Clean Energy Economy".

2. Communication updates between the advisory council and board of directors

Jed Jorgensen reminded the council that communication updates will continue to be an agenda item despite no specific updates at this time.

3. Discussion about whether and how Energy Trust could provide incentives to Community Solar projects

Topic summary

Renewable Energy Advisory Council members and public attendees discussed whether and how Energy Trust could provide incentives to Community Solar projects.

Discussion

High-level feedback included:

- Energy Trust must be transparent about funding and staff resources.
- Energy Trust needs to define a clear process for determining which projects will receive funding, and why.
- Energy Trust has a potential role to play in this emerging market, and advisory council members support exploring this role. By providing incentives, Energy Trust could engage customers in underserved areas and customers who otherwise may not receive these benefits.
- The financial benefits should reach the customer and not the developer.
- This decision will require further discussion and assessment, including addressing perceived conflicts of interest.

Betsy Kauffman led a discussion about whether Energy Trust should provide incentives to these Oregon Community Solar Program projects. Historically, Energy Trust policy required a percentage of Renewable Energy Certificates (RECs) to be claimed by Energy Trust. Oregon's Community Solar Program requires that RECs remain with customers subscribing to community solar project. In December 2018, the Energy Trust board of directors voted to change the REC policy so that Energy Trust no longer takes ownership of RECs for solar projects under 360 kilowatts, which opens the door for providing incentives for smaller community solar projects. Now the question is whether to provide incentives to community

solar projects. To answer this, we need to assess our priorities and explore the positive and negative implications. Attendees broke into small groups to discuss:

- What benefits might Energy Trust incentives bring to the market?
- Could there be any disadvantages to Energy Trust providing incentives to the Community Solar projects? If so, what might those be?

Suzanne Leta: Has Energy Trust done any financial analysis for community solar projects and the potential need for incentives?
Dave McClelland: About a year ago, we modelled a variety of system sizes in different locations—this included larger systems in Klamath Falls as well as smaller systems in the Willamette Valley. We found that there is a wide range of costs and that community solar projects have additional costs (management, customer acquisition, etc.) that conventional projects do not. The smaller-sized systems Energy Trust would be able to support under the revised REC policy seem to have above-market costs. These small community solar projects are toward the larger end of what we provide incentives for right now.

After small group discussions, Betsy Kauffman each group shared out general thoughts and recommendations.

Andria Jacob: The economics of the Oregon Community Solar Program are daunting.
Alexia Kelly: Overall, I am generally supportive of Energy Trust incentives, but what should those incentives be going toward (i.e. feasibility funding, development, construction) and what is the role and importance of above-market costs? Energy Trust could play a role in feasibility funding or supporting third-party feasibility assessments for permitting, policy constraints and funding. Solar just doesn't pencil out here because it's hard to make it economically rational when power prices are so low and the payback long. Incentives have driven the market.
Betsy Kauffman: So, in the same way Energy Trust is needed in the residential and commercial market, we are needed for community solar.
Les Perkins: These projects are complex, especially in small communities where competition for land is high, which makes them more expensive.

Jaimes Valdez: At a high-level, one of the benefits of Energy Trust providing incentives for community solar projects is to make the legislative intent real—increasing access to underserved customers. This Community Solar Program is uniquely able to reach more customers. In terms of equity, homeowners have had disproportionate access to incentives compared to renters and low-income customers, which is a reason to provide incentives. At Spark Northwest, we see parity of access as necessary. Energy Trust can inspire participation by helping nonprofits and organizations that do not have access to federal tax credits.
Betsy Kauffman: This makes sense as part of Energy Trust's mission to serve and provide opportunities for all ratepayers.

Lizzie Rubado: These incentives may be critical for projects outside of the Portland Metro area and projects that cannot take advantage of the Portland Clean Energy Community Benefits Fund. Incentives can increase the diversity of developers, project managers and project types. The projects of this size are also more likely to be co-located with loads and could provide greater benefits to the grid and utility—benefits that may not be recognized economically otherwise.

Erik Anderson: The amount of money available from Energy Trust's solar budget isn't going to change the fundamental economics of these project and move the needle, unless Energy Trust's incentives are really targeted.

Angela Crowley-Koch: There are concerns about the pool of resources moving away from Energy Trust's original solar program. If that does happen, Energy Trust should focus on ratepayers that haven't had access to solar power before.

Lizzie Rubado: Energy Trust does not have incentive funding for Idaho Power customers. We understand that the Oregon customers in Idaho Power have lower average income, so lack of access to Energy Trust incentives could deepen disparities. Another issue to consider is that Energy Trust's budget for incentives is limited and may be insufficient to address the level of support that these projects, and low-income projects, may need. If Energy Trust provides incentives, then incentives may be small compared to what is really needed, but our provision of any amount of funding may make people feel like there is less of a need to solve the big problem.

Michael O'Brien: What are the impacts of spending the money? What is the goal of Energy Trust using this money?

Jeni Hall: An additional incentive might go to the developer rather than to participants. There is already a relatively small amount of funding and splitting it more ways is going to be challenging. It will be challenging and important to decide what projects Energy Trust should focus on as some are more beneficial than others.

Suzanne Leta: It's important to take it slow. We don't know what the economics will be in the long term.

Jaimes Valdez: There are two benefits to providing funding: opportunities to provide education in the community and delivering resources to low- and moderate-income customers in more rural areas. It is important to prioritize member-owned assets rather than a business to make sure benefits reach participants and not just developers.

Dave McClelland: What are the principles for having above-market cost incentives versus cost-effective incentives? This is about new market development and bringing new resources to the grid, which may prove to be more valuable than conventional projects. The disadvantage is that budget and staff time are limited, and this will require more work.

Patrick Foley: The nature of this work might increase questions about perceived conflicts of interest when picking which project to provide funding for or the amount of funding.

Anna Kim: Beyond targeting customers, you could also decide to support the first tranche—Energy Trust doesn't have to commit for the entirety of the program.

Alexia Kelly: Generally, people assume projects cost a premium and it is hard to convince them to subscribe if it will cost them more. Energy Trust needs to structure incentives in a way that does not hinder enrollment.
Suzanne Leta: Regardless of customer type, the purpose of Energy Trust and community solar is for customers to receive bill savings. No one should have to pay a premium—that should be a guiding principle.

Ray Sanchez (Phone): What kinds of solar projects are we talking about—member-owned or subscriber-owned? There is no disadvantage to providing incentives to individuals. The power of the incentive goes up with economies of scale.

Betsy Kauffman: Let's talk about the question of a perceived conflict of interest.
Jay Ward: Energy Trust must consider the public optics of participating and incenting success of the Community Solar Program.
Suzanne Leta: Is the Energy Solutions contract with the state milestone-driven?
Lizzie Rubado: Energy Trust's contract is not performance-metric driven. It's a time and materials contract.
Betsy Kauffman: Through a variety of procedures, Energy Trust already separates funds between utilities and programs. Funding from Energy Trust's subcontract to deliver the Community Solar Program is another separate entity. Energy Trust is cognizant that the organization receives funding from Oregon ratepayers and there is a responsibility that comes with that.

Suzanne Leta: Energy Trust needs to have clear procedures and documentation for how to appropriately allocate funds to community solar projects.
Anna Kim: It is important to consider and document your decisions and justifications as there are several perceived conflicts of interest that could arise.

Betsy Kauffman: Is the general feeling in the room that we should continue to consider incentives for community solar projects? Or is the perceived conflict of interest a red light?

Lizzie Rubado: Given that all Community Solar Program participants are Oregon ratepayers and Energy Trust is a public benefit organization, it is interesting that this potential opportunity to reach underserved customers is receiving such deliberation.
Suzanne Leta: Our goal is to help Energy Trust navigate this new opportunity.
Anna Kim: Thinking through how to address perceived conflicts of interest will help Energy Trust consider future relationships and funding streams.

Next steps
There was a group consensus that Energy Trust should explore providing incentives for community solar projects.

4. Business planning: draft 2020 organizational goals
Topic summary
Staff described the process to developing the 2020 organizational goals. The goals are still in draft form and will be revised with further staff input and with feedback from members of the Conservation Advisory Council and Renewable Energy Advisory Council. When final, the goals will guide the organization in developing the 2020 budget and action plan this fall.

Mike Colgrove reviewed Energy Trust's draft 2020-2024 Strategic Plan goals in their current form and explained. He noted that this year's process to developing organizational goals is different from past years because the annual organizational goals are being developed ahead of the final strategic plan goals. In subsequent years, the strategic plan will be final and a reference point before developing annual organizational goals.

Discussion
High-level feedback included:

- Advisory council and community-based input should be sought earlier in the drafting process in future years.
- Goals be more specific in order to be meaningful while also understanding that the market is changing, and Energy Trust needs to be agile.

Suzanne Leta: For the first goal, Energy Trust should add renewables. For the fourth goal, I suggest that Energy Trust include goals to retain high-quality staff. For the fifth goal, Energy Trust should include the Oregon Community Solar Program and incentives from the state and describe what the organization does that differs from state agencies.

Erik Anderson: The market isn't clear right now, so it is important for Energy Trust to have a broad focus without getting too specific. It is helpful for the Renewable Energy Advisory Council to be brought in early to help set goals, but we still want to be brought in when they become action items.

Anna Kim: The items listed here are big topics that Energy Trust is likely to be involved with, and I recommend Energy Trust does not state what the organization already does. I recommend you reword the fifth goal and consider what the organization is going to do in 2020 for these items.

Oriana Magnera: These goals are not specific, time-bound or measurable enough to be meaningful. Goals should be more focused to set staff up for success in the year. These goals were drafted internally, and I would recommend that Energy Trust create a more community-based process and evaluation of these organizational goals. Energy Trust should think about what the organization is trying to achieve and identify any gaps.

Charity Fain: The Diversity Advisory Council will be set up this year when these organizational goals will already be set. It is important that Energy Trust consider how these goals will be introduced to the new council.
Michael Colgrove: The Diversity Advisory Council will be invited to the next joint Renewable Energy Advisory Council and Conservation Advisory Council meetings about Energy Trust's strategic plan.

Michael O'Brien: For the fifth goal, I think the language is obscure and should be more explicit.
Angela Crowley-Koch: I agree. It would be meaningful if these goals were more specific.

Michael Colgrove: Energy Trust is considering what the organization needs to accomplish in 2020 to be successful at the end of the five-year strategic plan. The council's feedback on these organizational goals will be taken into consideration and once the plan is final, we will present it to the council.

Next Steps
With this feedback, staff will continue revising the draft 2020 organizational goals. The final goals will be brought back to the council at a later meeting as an informational item. The goals will also be referenced by program staff developing their 2020 action plans, and the council will receive presentations in the fall on this plan.

5. Public comment
There was no public comment.

6. Adjourn

The meeting adjourned at 12:04 p.m. The next council meeting will be held on June 26, 2019 from 9:00 a.m. – 12:00 p.m.