Energy Trust of Oregon
Board of Directors' Meeting

Hybrid on Zoom and at
421 SW Oak St., Ste 300, Portland, OR 97204

Register in advance for this webinar:

https://us06web.zoom.us/webinar/register/WN_NxTuCnPEQLCNQQVRTcN5QQ

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

PUBLIC COMMENT:

There will be opportunities for PUBLIC COMMENT during the meeting at 9:00 a.m. and 1:00 p.m. To request to speak, email meeting host in advance of the meeting at danielle.rhodes@energytrust.org with contact information and interested agenda topic.

*The next meeting of the Energy Trust Board of Directors will be a workshop held in Executive Session on July 17, 2024. Executive Session will be held pursuant to bylaws section 3.19.1 to discuss internal personal matters. T**he Executive Session is not open to the public.***

***The next regular meeting** of the Energy Trust of Oregon Board of Directors will be held August 14th, 2024, hybrid on Zoom and at 421 SW Oak St., Suite 300, Portland, OR 97204*

225th Board Meeting

June 12, 2024

Register to join Zoom Webinar:
https://us06web.zoom.us/webinar/register/WN_NxTuCnPEQLCNQQVRTcN5QQ

	Agenda	Tab	Purpose
9:00 a.m.	**Board Meeting Call to Order** (Henry Lorenzen) **General Public Comment** (5 minutes) *The president may defer specific public comment to the appropriate agenda topic.*		Info
9:05 a.m.	**President's Report and Consent Agenda** (Henry Lorenzen, 5 minutes) *The consent agenda may be approved by a single motion, second and vote of the board. Any item on the consent agenda will be moved to the regular agenda upon the request of any member of the board.*		
	• April 17, 2024, Board Meeting Minutes	**Tab 1**	Action
	• May 13, 2024, Board Workshop Minutes	**Tab 1**	Action
	• May 14, 2024, Board Workshop Minutes	**Tab 1**	Action
	• R1032: Authorizing $10 Million Line of Credit at Umpqua Bank	**Tab 1**	Action
	• R1035: Amend Nominating and Governance Committee Charter	**Tab 1**	Action
9:10 a.m.	**EPS New Construction Impact Evaluation Report** (Scott Leonard, Sarah Castor, 20 minutes)	**Tab 9**	Info
9:30 a.m.	**Strategic Planning: Areas of Focus** (Holly Valkama, 75 minutes)		Info
10:45 a.m.	**Break** (15 minutes)		
11:00 a.m.	**Strategic Planning: Outcomes & Goals** (Holly Valkama, 60 minutes		Action
12:00 p.m.	**Lunch** (60 minutes)		
1:00 p.m.	**Board Meeting Call to Order** (Henry Lorenzen) **General Public Comment** (5 minutes) *The president may defer specific public comment to the appropriate agenda topic.*		Info
1:05 p.m.	**Strategic Planning: Outcomes & Goals** (Holly Valkama, 60 minutes)		Info
2:05 p.m.	**Stakeholder Engagement for the Draft Strategic Plan** (Amber Cole/Holly Valkama, 20 minutes)		Info
2:25 p.m.	**Committee Reports** (60 minutes)		
	• Compensation & Human Resources Committee (Amanda Sales)	**Tab 2**	Info
	• Finance & Audit Committee (Thelma Fleming)	**Tab 3**	Info
	○ R1033: Approval of New Buildings Program Management Contractor (PMC) Agreement	**Tab 3**	Action

Agenda, Cont.			
	• Nominating and Governance Committee (Roland Risser)	**Tab 4**	Info
	○ R1034: Retirement of the Renewable Energy Certificate Policy	**Tab 4**	Action
	• Ad hoc Diversity Equity and Inclusion Committee (Alicia Moore)		Info
	• Ad hoc Strategic Planning Committee (Jane Peters)	**Tab 5**	Info
	• Conservation Advisory Council (Peter Therkelsen)	**Tab 6**	Info
	• Diversity Advisory Council (Michael Colgrove)	**Tab 7**	Info
	• Renewable Energy Advisory Council (Betsy Kaufmann)	**Tab 8**	Info
3:25 p.m.	**Adjourn** (Henry Lorenzen)		Info

The next meeting of the Energy Trust Board of Directors will be a workshop held in Executive Session on July 17, 2024. Executive Session will be held pursuant to bylaws section 3.19.1 to discuss internal personal matters. The Executive Session is not open to the public.

The next regular meeting of the Energy Trust of Oregon Board of Directors will be held August 14th, 2024, hybrid on Zoom and at 421 SW Oak St., Suite 300, Portland, OR 97204

Table of Contents

Tab 1

Board Meeting Minutes—223rd Meeting

April 17, 2024

Board members present: Thelma Fleming, Ellsworth Lang, Henry Lorenzen, Jane Peters, Anne Haworth Root, Roland Risser, Ruchi Sadhir (ODOE Special Advisor, ex-officio) Silvia Tanner, Letha Tawney (OPUC ex-officio), Bill Tovey, Ellen Zuckerman

Board members absent: Peter Therkelsen, Eric Hayes, Susan Brodahl (leave of absence), Melissa Cribbins, Eric Hayes, Peter Therkelsen

Staff attending: Scott Clark, Amber Cole, Michael Colgrove, Ryan Crews, Hannah Cruz, Elaine Dado, Chris Dunning, Emily Findley, Sue Fletcher, Cheryl Gibson, Fred Gordon, Isaiah Kamrar, Marshall Johnson, Scott Leonard, Alyson McKay, Debbie Menashe, Spencer Moersfelder, Alicia Moore, Kyle Morrill, Themba Mutepfa, Maddie Norman, Natalia Ojeda, Maddy Otto, Elaine Prause, Danielle Rhodes, Thad Roth, Lizzie Rubado, Amanda Sales, Sloan Schang, Tracy Scott, Jess Siegel, Abi Sloan, Michelle Spampinato, Abby Spegman, Jenny Sorich, Greg Stokes, Julianne Thacher, Shannon Todd, Patrick Urain

Others attending: Christopher Banks (Urban League), John Charles (Cascade Policy), Rob Fenty (1961 Consulting), Terrance Harris (Drexel University), Randy Hastings (DThree PDX),Jim Harvey (Alliance Compensation), Brooke Landon (CLEAResult), Lisa McGarity (Avista), Willa Perlman, Laney Ralph (NW Natural), Keith Simovic (Moss Adams), Sherry Tran (Alliance Compensation), Holly Valkama (1961 Consulting), Ezell Watson (OPUC)

Business Meeting

President Henry Lorenzen called the meeting to order at 9:04 a.m. Henry explained the hybrid format of the meeting.

General Public Comments

There were no public comments.

President's Report and Consent Agenda

Executive Director Michael Colgrove introduced Alicia Moore, Energy Trust's new Director of DEI Services. Alicia introduced herself and her background.

President Lorenzen referred the board to the Consent Agenda and asked if there were any calls to remove anything for discussion. No member of the board requested any item be removed.

MOTION: R1025 Approve consent agenda

Consent agenda includes:

1. February 21, 2024, Board Meeting Minutes
2. March 13, 2024, Board Workshop Minutes

Moved by:	Roland Risser	Seconded by:	Jane Peters
Vote:	In favor: 6	Abstained:	0
	Opposed: 0		

Strategic Planning: Unique Role of Value

Jane Peters, chair of the ad hoc Strategic Planning Committee described the committee's review of the "Unique Role of Value" statements that the board developed at their March workshop. Holly Valkama and Rob Fenty of 1961 Consulting helped facilitate board discussions to come to a final unique role of value statement. The board broke into small groups to discuss the proposed Unique Role of Value statements The breakout groups provided their thoughts to Rob and Holly who promised to compile them for the ad hoc Strategic Planning committee review.

Break

The board took a break at 10:38 a.m. and reconvened at 10:53 a.m.

Strategic Planning: Vision/Purpose

Rob then guided discussion for the next portion of the meeting which was focused on discussions regarding the high level and aspirational vision and purpose statements for Energy Trust, which are elements of a strategic plan. A Unique Role of Value Statement explains how and for whom an organization provides its purpose and aspires to its vision. Board members discussed possible vision and purpose statements that connect to the Unique Role of Value Statements discussed. Holly and Rob kept notes of these discussions, and these notes will be provided to the ad hoc Strategic Planning Committee for their next meeting. That committee will propose vision and purpose statements for discussion by the board at its next meeting where, among other things, a Diversity, Equity, Inclusion and Belonging lens will be applied and discussed.

Adjourn for Lunch

The board adjourned for lunch and reconvened at 12:53 p.m.

General Public Comments

There were no public comments.

Financial Audit Results

Chris Dunning, Energy Trust Chief Financial Officer, introduced Keith Simovic of Moss Adams to present the results of the 2023 Annual Financial Audit.

Keith Simovic, Engagement Review Partner completed the Energy Trust 2023 audit along with Julie Desimone, Concurring Review Parter; Matthew Shaw, Audit Manager; and Tanner Brown, In-Charge Staff Auditor.

The audit includes an Independent Auditors' Report on the financial statements of Energy Trust of Oregon; assistance with, and technical review of the financial statements for compliance with GAAP (generally accepted accounting principles); and communication to those charged with governance. During the process, Moss Adams tested internal controls through walkthroughs of relevant business cycles, examined procedures to confirm account balances and supporting documentation.

Following their audit work, Moss Adams provided an unmodified (clean) opinion on the final financial statements and found no material weaknesses or significant deficiencies in their communication to those charged with governance.

The audit team reported that management applied significant accounting policies appropriately and consistently and their judgment was sound. Keith noted that no difficulties were encountered during the audit.

There were no significant audit adjustments and unadjusted differences considered by management to be immaterial. Matt also noted they are required to report on any potential effects on the financial statements of significant risks, exposures, and uncertainties. No matters were noted that required

disclosure during 2023 or through their report date. There were no disagreements with management, and everything went smoothly.

In addition to their regular audit exercises, Moss Adams also selected a total of 30 incentive payment procedures for additional testing as requested by the Finance & Audit Committee. Moss Adams found no exceptions during the testing of these payments. Board members thanked the Moss Adams team for completing this additional testing as part of the audit.

As part of an annual audit, Moss Adams offers some recommendations for best practices. This year, Keith and the Moss Adams team recommends that Energy Trust examine and prepare internal policies based on federal grant policies and procedures in anticipation of receipt of more grant awards from federal agencies. Moss Adams recommended drafting formal policies that adhere to federal requirements relating to allowable costs, procurement, subrecipient monitoring, and other areas that may be required by the specific grant awards.

Another recommendation pertained to the expected transition to the new Enterprise Resource Planning system. As Energy Trust is planning to select and implement a new ERP system in the coming years, it will impact audit procedures for the year of implementation. Moss Adams recommends proactively involving their audit team so that their IT specialists can be involved.

Keith noted that neither of these recommendations were offered in response to concerns for material weaknesses or significant deficiencies in controls.

Keith concluded his report and thanked the Finance team at Energy Trust for their cooperation. Board members thanked staff and Moss Adams. Chris said on behalf of Energy Trust that it was a pleasure working with Keith and his team.

The board then acted to accept the 2023 financial audit.

RESOLUTION R1026 ACCEPTANCE OF AUDITED FINANCIAL REPORT

BE IT RESOLVED: That Energy Trust of Oregon, Inc., Board of Directors accepts the auditor's report on the financial statements, including an unmodified opinion, submitted by Moss Adams LLP for the calendar year ended December 31, 2023.

Moved by:	Jane Peters	Seconded by:	Silvia Tanner
Vote:	In favor: 7	Abstained:	0
	Opposed: 0		

Annual Report

Executive Director Michael Colgrove then presented the Energy Trust 2023 Annual Report, which describes 2023 organizational results. Mike first thanked Chris Dunning and his team for the leadership on the audit. Mike also thanked Thelma Fleming, chair of the Finance & Audit Committee, for her support of the process.

Mike then continued to describe 2023 results and the annual report, which is the most comprehensive account of Energy Trust performance and activities for the year. This year Energy Trust has added a public comment period through June 16 to take comments from stakeholders, a suggestion from OPUC staff and stakeholders, which will help inform changes to format and areas for needed clarification.

2023 saw improving economic conditions, but customers and program participants still express concern about rising prices; these concerns impact program participation and design. Programs did well during 2023, achieving 118% of expected electric savings, predominately driven by business lighting and by adjusting incentive levels to support savings. For gas efficiency, programs achieved 108% of expected savings. For Renewables, all goals were exceeded, including goals pertaining to serving low-to-moderate income customers. Mike provided more detail on a utility-by-utility basis as set forth in the Annual Report.

Mike also reported on Energy Trust's performance in 2023 as compared to its current Strategic Plan goal, and in all cases, Energy Trust is on track.

Mike then described some of 2023's program highlights:

- Community Partner Funding providing enhanced incentive support to community-based organizations that are already connected with priority customers
- Regionally- specific offers to rural residential customers
- Direct install lighting offers for small businesses
- Battery storage offer launched in mid-2023

Regarding comparison of actual to budget for 2023, Mike reported that Energy Trust's overall actual performance is consistent with budget. Additionally, Energy Trust met or exceeded its OPUC performance measures, except for those related to staffing costs and program support costs, which were waived for 2023 as Energy Trust increased staff and support for higher savings objectives.

This program performance was achieved cost-effectively under the total resource cost test in all but one program, although Energy Trust expects that updates to avoided costs coming soon should result in cost-effective levels across the Energy Trust portfolio.

Next Mike reported on the recently approved OPUC 2024 Performance Measures, noting areas of change:

- For 2024, the administrative cost metric will be as a function of expenditures, not revenues as in past years
- There is a new metric on trade ally and workforce development

Board members asked questions about the report and then thanked Mike, noting that it was a successful year.

Committee Reports

Compensation & Human Resources Committee (Amanda Sales)

Amanda Sales, Director of People Services and staff liaison to the Compensation & HR Committee, referred to the committee notes in the board packet, highlighting that the committee will be reviewing possible updates to the 401k investment policy.

Finance & Audit Committee (Thelma Fleming)

Thelma Fleming reported on three proposed contract extension resolutions discussed by the Finance & Audit Committee and recommended to the board, and the board acted on each of them as follows:

RESOLUTION 1027
AUTHORIZE A THREE YEAR EXTENSION TO THE PROGRAM MANAGEMENT CONTRACT WITH CLEARESULT CONSULTING, INC. FOR RESIDENTIAL PROGRAM SERVICES

WHEREAS:

1. In 2022, Energy Trust staff conducted a fair and open Request for Proposals procurement process to select a program management contractor to manage and deliver Residential program services for the next 2-5 years;
2. Staff recommended, and the board approved, a program management contractor (PMC) agreement with CLEAResult Consulting, Inc. (CLEAResult) for Residential program management services for an initial term of two years, with the option for three-one (1) year extensions;
3. Staff now recommends extending the CLEAResult PMC agreement for three additional years in light of CLEAResult's contract performance and program delivery stability and consistency to support and meet expectations for accelerated energy efficiency savings;
4. Staff presented information on their extension recommendation to the Energy Trust board of directors Finance & Audit Committee on February 29, 2024;
5. The Finance & Audit Committee supports staff's recommendation for an extension, subject to the conditions that the PDC agreement maintain the ability for termination by Energy Trust throughout the extended term and that staff present information annually to the Finance & Audit Committee on CLEAResult's PMC services and contract performance; and
6. If approved, the Energy Trust board will review actual savings and costs of the CLEAResult PMC agreement each year as part of its review of Energy Trust's annual budgets.

IT IS THEREFORE RESOLVED:

1. Subject to determination of contract cost amounts based on the board-approved 2025 annual budget and subsequent Energy Trust annual budgets for each of the years 2026 and 2027, the executive director or his designee is authorized to negotiate and to enter into an extension of Energy Trust's agreement with CLEAResult to provide Residential program management services through December 31, 2027.
2. PMC contract costs and savings goals included in the contract extension shall be consistent with the board-approved 2025 annual budget and actions plan(s) and thereafter staff may amend the contract consistent with Energy Trust's annual budgets. The executive director or his designee is authorized to sign any such contract amendment.
3. The PMC agreement extension amendment will include all appropriate terms for an extension including, but not limited to, a provision permitting early termination and a provision requiring staff to report on contract performance annually during the term of the PMC agreement to the Energy Trust board of directors Finance & Audit Committee.

Moved by:	Bill Tovey	Seconded by:	Jane Peters
Vote:	In favor: 7	Abstained:	0
	Opposed: 0		

RESOLUTION 1028

AUTHORIZE A THREE YEAR EXTENSION TO THE PROGRAM DELIVERY CONTRACT WITH TRC ENGINEERS, INC. FOR RESIDENTIAL NEW CONSTRUCTION PROGRAM SERVICES

WHEREAS:

1. In 2022, Energy Trust staff conducted a fair and open Request for Proposals procurement process to select a program delivery contractor to deliver Residential new construction program services for the next 2-5 years;
2. Staff recommended, and the board approved, a program delivery contractor (PDC) agreement with TRC Engineers, Inc. (TRC) for residential new construction program delivery services for an initial term of two years, with the option for three-one (1) year extension should certain performance criteria be met;
3. Staff now recommends extending the TRC PDC agreement for three additional years in light of TRC's contract performance and program delivery stability and consistency to support and meet expectations for accelerated energy efficiency savings;
4. Staff presented information on their extension recommendation to the Energy Trust board Finance & Audit Committee on February 29, 2024;
5. The Finance & Audit Committee supports staff's recommendation for an extension subject to the conditions that the PDC agreement maintain the ability for termination by Energy Trust throughout the extended term and that staff present information annually to the Finance & Audit Committee on TRC's PDC services and contract performance; and
6. If approved, the Energy Trust board will review actual savings and costs of the TRC PMC agreement each year as part of its review of the Energy Trust budget and financial and action plans.

IT IS THEREFORE RESOLVED:

4. Subject to determination of annual contract cost amounts based on the board-approved 2025 annual budget and subsequent Energy Trust annual budgets for each of the years 2026 and 2027, the executive director or his designee is authorized to negotiate and to enter into an extension of Energy Trust's PDC contract with TRC to deliver the Residential new construction program for through December 31, 2027.
5. PDC contract costs and savings goals included in the contract shall be consistent with the board-approved 2025 annual budget and action plan(s) and, thereafter, staff may amend the contract consistent with Energy Trust's annual budgets. The executive director or his designee is authorized to sign any such contract amendments.
6. The PDC extension amendment agreement will include all appropriate terms for an extension including, but not limited to, a provision permitting early termination and a provision requiring staff to report on contract performance annually during the term of the PDC Agreement to the Energy Trust board of directors Finance & Audit Committee.

Moved by:	Bill Tovey	Seconded by:	Jane Peters
Vote:	In favor: 7	Abstained:	0
	Opposed: 0		

RESOLUTION 1029
AUTHORIZE A PROGRAM DELIVERY CONTRACT (PDC) WITH CLEARESULT CONSULTING, INC. FOR RESIDENTIAL MIDSTREAM PROGRAM SERVICES

WHEREAS:

1. In 2022, Energy Trust staff conducted a fair and open Request for Proposals procurement process to select a program delivery contractor to deliver Residential midstream Residential program services for the next 2-5 years;

2. Staff recommended, and the board approved, a program delivery contractor (PDC) agreement with CLEAResult Consulting, Inc. (CLEAResult) for Residential midstream program delivery services for an initial term of two years, with the option for three-one (1) year extensions;
3. Staff now recommends extending the CLEAResult PDC agreement for three additional years in light of CLEAResult's contract performance and a longer term contract ability to support and meet expectations for accelerated energy efficiency savings achievements;
4. Staff presented information on their recommendations to the Energy Trust board of directors Finance & Audit Committee on February 29, 2024;
5. The Finance & Audit Committee supports staff's recommendation for an extension subject to the conditions that the PDC agreement maintain the ability for termination by Energy Trust throughout the extended term and that staff present information annually to the Finance & Audit Committee on the CLEAResult's PMC services and contract performance; and
6. If approved, the Energy Trust board will review actual savings and costs of the CLEAResult PDC agreement each year as part of its review of the Energy Trust budget and financial and action plans.

IT IS THEREFORE RESOLVED:

7. Subject to determination of annual contract cost amounts based on the board-approved 2025 annual budget and subsequent Energy Trust budgets, financial and action plans as approved for each of the years 2026 and 2027, the executive director or his designee is authorized to negotiate and to enter into an extension of Energy Trust's PDC contract with CLEAResult to deliver the Residential midstream program through December 31, 2027.
8. PDC contract costs and savings goals included in the contract shall be consistent with the board-approved 2025 annual budget and action plan(s). Thereafter, staff may amend the contract consistent with the board's budget and financial and action plan decisions and the executive director or his designee is authorized to sign any such contract amendments.
9. The PDC agreement extension amendment will include all appropriate terms for an extension including, but not limited to, a provision permitting early termination and a provision requiring staff to report on contract performance annually during the term of the PDC agreement to the Energy Trust board of directors Finance & Audit Committee.

Moved by:	Bill Tovey		Seconded by:	Jane Peters
Vote:	In favor:	7	Abstained:	0
	Opposed:	0		

Nominating & Governance Committee (Debbie Menashe)
Debbie Menashe reported on the Nominating & Governance Committee meeting of earlier in the month. Of particular note for this meeting is the committee's executive director review, which will be discussed with the full board later in the meeting.

Ad hoc Diversity Equity and Inclusion Committee (Michael Colgrove)
Michael Colgrove referred to the notes of the April ad hoc Diversity, Equity and Inclusion Committee, notes of which were included in the board packet. Mike noted that Alicia Moore, Energy Trust's new Director of Diversity Equity & Inclusion was introduced to the committee.

Ad hoc Strategic Planning Committee (Jane Peters)
Jane Peters, chair of the ad hoc Strategic Planning Committee, reported to the board, noting that the work of the committee led to the board's discussion earlier in the meeting.

Conservation Advisory Council (CAC) (Hannah Cruz)
Hannah Cruz, staff liaison to the CAC, updated the board on the most recent CAC meeting. At that meeting, staff presented information on the development of multiyear planning (MYP) for Energy Trust, and CAC members provided feedback.

Diversity Advisory Council (DAC) (Michael Colgrove)
Michael Colgrove reported on the most recent DAC meeting where board member-Melissa Cribbins joined to update the group on the board's DEI work. Additionally, DAC members received an update on MYP summary and had a discussion of topics of interest for future meetings.

Renewable Energy Advisory Council (Betsy Kauffman
RAC-Jess Siegel, Program Manager-Renewables Strategy and Community Solar, updated the board on the most recent RAC meeting discussions, which included an MYP update and information about renewable program activities and focus areas.

Community Partner Funding, Efficiency Resource Potential, Legislative Report Memos Q&A

Memoranda on community partner funding, efficiency resource potential, and legislative session results were provided to the board. Board members discussed the information provided. Board members noted particularly the plentiful energy efficiency resource potential, which is promising for the work of Energy Trust.

Break

The board adjourned for a break and reconvened at 3:18.

Strategic Planning: May Board Preview

Amber Cole, Director of CCS, and staff liaison to the ad hoc Strategic Planning Committee, gave the board a short preview of what the board will be doing in May for a 2-day workshop in Hood River. In addition to working through the strategic plan elements, Amber advised the board that Ashnie Butler will participate in the workshop and guide the use of a DEIB lens to the board's strategic planning work.

Executive Session

The board then adjourned to executive session to discuss the Executive Director performance evaluation.

Reconvene Public Meeting and Adjourn

Henry reconvened the meeting at 3:55 p.m.

RESOLUTION 1030
APPROVING MERIT AWARD INCREASE FOR EXECUTIVE DIRECTOR

WHEREAS:

1. **Energy Trust's board of directors Nominating & Governance Committee (the "Committee") completed its evaluation of Michael Colgrove's performance for the 2023 work plan and performance period.**

2. **At its meeting on April 8, 2024, the Committee considered an evaluation of Michael's performance compared to his 2023 work plan goals and competencies have been met and demonstrated. Michael is well-regarded by the board of directors, Energy Trust staff and stakeholders.**

3. **The Committee also considered and discussed market information on merit compensation prepared for and reviewed by the board of directors Compensation & Human Resources Committee**

4. **Based on Michael's performance review and market information on merit compensation, the Committee recommends a merit award increasing Executive Director Michael Colgrove's salary by 6% effective January 1, 2024**

It is therefore RESOLVED:

The Board of Directors authorizes a merit award increasing Executive Director Michael Colgrove's salary by 6% effective January 1, 2024.

Moved by:	Jane Peters	Seconded by: Thelma Fleming
Vote:	In favor: 5	Abstained: 0
	Opposed: 0	

Adjourn

The meeting adjourned at 3:59 p.m.

The next regular meeting of the Energy Trust of Oregon Board of Directors will be the regional board meeting held May 13th and May 14th, 2024, hybrid on Zoom and at the Hood River Hotel at 102 Oak St., Hood River, OR 97031

_____ ____/____/____
Signed: Eric Hayes Date

PINK PAPER

Board Meeting Minutes—224th Meeting: Regional Board Meeting in Hood River and Strategic Planning Workshop

May 13, 2024

Board members present: Janine Benner (ODOE Special Advisor, ex officio), Melissa Cribbins, Thelma Fleming, Eric Hayes, Ellsworth Lang, Henry Lorenzen, Jane Peters, Roland Risser, Silvia Tanner, Letha Tawney (OPUC ex-officio), Peter Therkelsen, Ellen Zuckerman

Board members absent: Anne Haworth Root, Bill Tovey

Staff attending: Caryn Appler, Kathleen Belkhayat, Sarah Castor, Amber Cole, Michael Colegrove, Hannah Cruz, Elaine Dado, Chris Dunning, Sue Fletcher, Jeni Hall, Chris Lyons, Debbie Menashe, Spencer Moersfelder, Alicia Moore, Alex Polley, Elaine Prause, Danielle Rhodes, Amanda Sales, Tracy Scott, Jess Siegel, Abby Spegman, Greg Stokes,

Others attending: Ashnie Butler (Inner Work, Outer Play), Sarah Hall (OPUC), Kari Greer (PacificCorp), Randy Hastings (DThree), Latisha Hill (Avista), Peter Kernan (OPUC), Lauren Kraemer (Oregon State University Extension Service), Steve Lacey, Lindsay McClure, (Mid-Columbia Economic Development District, Hood River Energy Council), Lisa McGarity (Avista), Mary Moerlins (NW Natural), Laney Ralph (NW Natural), Cory Scott (PacificCorp), Benedikt Springer (OPUC), Holly Valkama (1961 Consulting), Robert Wallace (Wy'east Resource Conversation and Development), Ezell Watson (OPUC), Jake Wise (PGE)

Opening

President Henry Lorenzen called the meeting to order at 10:02 a.m. and explained the structure and process of the hybrid meeting. Henry also noted that there would be opportunity for public comment later in the meeting. Henry then introduced Elaine Prause, Senior Manager of Regulatory and Funder Relations to introduce our Utility Representative Panel.

Utility Representative Panel

The utility representative panel consisted of Mary Moerlins, Director of Environmental Policy & Corporate Responsibility, NW Natural; Cory Scott, Vice President of Customer and Community Solutions, Pacific Power; and Latisha Hill, Vice President of Community Affairs & Chief Customer Officer, Avista. Elaine Prause, Senior Manager of Utility and Funder Relations moderated the panel. Each of the panelists introduced themselves and discussed their utilities strategic focus areas during the period of Energy Trust's strategic plan.

Mary Moerlins introduced herself and described NW Natural. NW Natural is focused on conservation and the products they develop for customers, including renewable natural gas and the role of the pipeline system for hydrogen. Using less is the first step and for this the company is looking to find deep energy efficiency with Energy Trust.

Cory Scott then introduced himself and noted that there is a wealth of topics and discussion on the connection with Energy Trust and there is a lot going on in the energy space, mentioning the great work that has happened over the years. Cory noted that Pacific Power's connection to Energy Trust is as strong as ever and he and the company look forward to the future together. Cory noted that Pacific Power territory is across hundreds of communities across the state and not contiguous. Because of this, Pacific Power is hyper focused on community connections, and Cory recognizes Energy Trust is also prioritizing this focus.

Cory pointed to some of the programming goals for efficiency, especially in harder to reach service areas to ensure that investments are for all customers and all customers have access to program offerings, and engaging the entirety of the community is a core focus of Pacific Power.

Latisha Hill pointed to Avista's three state service areas of fully integrated electric and natural gas: Washington, Oregon, and Idaho. In Oregon, Avista works closely with Energy Trust, pointing out its solid trend toward growth in budget and services here. The impact and outcomes of Energy Trust's programs have mattered to customers, and energy efficiency is the best way to impact affordability and deliver that to customers at a bill level.

Latisha addressed Avista's work with Energy Trust in greenhouse gas reduction and congratulated Energy Trust for its ability to maintain a multi-fuel and multi-utility focus that allows utilities to learn from one another and make an impact.

Elaine Prause moderated a discussion among panelists, asking them to identify their thoughts on areas of focus for Energy Trust looking forward to 2030. Mary said that it is to maintain a focus on conservation, deliver that to customers, and stewardship of the public purpose charges to deliver on the most aggressive achievable goals.

Cory agreed that making sure customers are aware of programs is key. To do that, Energy Trust and utilities must coordinate their efforts to build that awareness and program delivery. Cory noted that there are more innovative opportunities for clean energy that are emerging across Pacific Power territory with demand response, electric vehicles, and voluntary renewables. Energy Trust and the utilities must collaborate to communicate clearly and efficiently with customers to reduce confusion.

Latisha offered two basic areas of focus: relevance and accessibility. Energy Trust has demonstrated its relevance through the outcomes it has achieved. On accessibility, Energy Trust and utilities must focus on working with equity advisory groups and building trusted partnerships to increase accessibility with communities.

Board members and panelists then engaged in a robust discussion on changes in energy efficiency, particularly considering carbon reduction goals and value not just in energy delivery, but because of impact to the environment. Additional topics included the ongoing need to reach all customers given significant carbon reduction goals, with focus on low-to-moderate income customers, the importance of addressing peak energy needs, localized energy solutions, reliability of demand management savings, resilience, changing demographics and technologies, co-benefits of energy efficiency, and coordinated distribution system planning.

The board thanked the utility panel for a very good discussion, their comments and time presenting to the board.

Adjourn Public Meeting and Meet in Executive Session

Henry adjourned the public meeting and reconvened in executive session. Ashnie Butler, board DEI consultant, led a discussion about applying a DEI lens to the strategic planning work and documentation thus far.

Recess for Lunch

The board recessed at 12:35 p.m.

Call to Order and Invitation for Public Comment

President Henry Lorenzen called the meeting back to order at 1:34 p.m. There was no public comment.

Community Representatives Panel

The community representative panel consisted of Robert Wallace, Executive Director, Wy'east Resource Conversation and Development, Commissioner for the Port of The Dalles, Dufur School Board Member; Lindsay McClure, Program Manager, Mid-Columbia Economic Development District and Hood River Energy Council; and Lauren Kraemer, Associate Professor, Family and Community Health, Board members Oregon State University Extension Service. Caryn Appler, Senior Outreach Manager for Eastern Oregon, moderated the panel.

Each one of the panelists introduced themselves and explained their work. The panelists touched on electrification of transportation, climate change mitigation strategies (including decarbonization), community-based organizations work in delivering Energy Trust programs to rural areas, and resiliency considerations for communities, particularly to plan and prepare for wildfire and earthquake disasters.

The board thanked the panel for their time and perspectives and asked the panelists for their perspectives on Energy Trust's work in the future. Panel members suggested continued focus on communities, renewable energy support, and the nexus between energy and health and resilience.

President Henry Lorenzen thanked the panel for their time and informing the board about things happening in the communities.

Break

The board recessed for a break at 2:35 p.m. and reconvened at 2:45 p.m.

Strategic Planning: Vision, Purpose, Unique Role of Value

The board reconvened for a discussion, facilitated by Rob Fenty, about the Vision, Purpose, and Unique Role of Value Statements that are elements of the strategic plan. Purpose statement must have who we served, what do we do, and to what end. Rob asked board members to focus on the vision and purpose, and if they create an effective north star for the organization.

General Counsel Debbie Menashe expressed some concern for the use of the work "partner" in the vision statement, and then the board discussed all three aspirational statements. Based on feedback from this discussion, the ad hoc Strategic Planning Committee will finalize the precise words for presentation at the June meeting. Tomorrow, the board will use these initial aspirational statements to outline the areas of focus of work in the strategic plan.

Closing

Henry thanked the board for their attention and work today. Henry then mentioned the community event to follow and adjourned the meeting until tomorrow.

Adjourn

The meeting adjourned at 3:33.

The next regular meeting of the Energy Trust of Oregon Board of Directors will be held June 12, 2024, hybrid on Zoom and at the Energy Trust of Oregon, 421 SW Oak St., Suite 300, Portland, OR 97204.

_____ ____/____/____

Signed: Eric Hayes Date

PINK PAPER

Board Meeting Minutes—224th Meeting: Regional Board Meeting in Hood River and Strategic Planning Workshop

May 14, 2024

Board members present: Janine Benner (ODOE Special Advisor, ex officio), Melissa Cribbins, Thelma Fleming, Eric Hayes, Ellsworth Lang, Henry Lorenzen, Roland Risser, Silvia Tanner, Letha Tawney (OPUC ex-officio), Peter Therkelsen, Bill Tovey, Ellen Zuckerman

Board members absent: Anne Haworth Root, Jane Peters

Staff attending: Caryn Appler, Kathleen Belkhayat, Shelly Carlton, Sarah Castor, Amber Cole, Michael Colegrove, Hannah Cruz, Elaine Dado, Mia Deonate, Chris Dunning, Sue Fletcher, Jeni Hall, Marshall Johnson, Chris Lyons, Debbie Menashe, Spencer Moersfelder, Alicia Moore, Alex Polley, Elaine Prause, Danielle Rhodes, Laura Schaefer, Tracy Scott, Jess Siegel, Abby Spegman, Greg Stokes,

Others attending: Mayor Witt Anderson (City of Mosier), Kari Greer (Pacific Corp), Sarah Hall (OPUC), Randy Hastings (DThree), Peter Kernan, (OPUC) Steve Lacey, Representative Pam Marsh, Brian Mayfield (CLEAResult), Lisa McGarity (Avista), Laney Ralph (NW Natural), Jenny Sorich (CLEAResult), Benedikt Springer (OPUC), Holly Valkama (1961 Consulting), Jake Wise (PGE)

Opening

President Henry Lorenzen called the meeting back in session at 9:02 a.m. and explained the process of a hybrid meeting. Henry also previewed the agenda.

Strategic Planning: Areas of Focus

Holly Valkama of 1961 Consulting previewed the strategic planning development topics for the day: Areas of Focus and Outcomes/Goals. Regarding the Areas of Focus, Holly noted that staff input had been compiled for the board for their review and consideration. Holly also noted that in this strategic plan, areas of focus will be considered in the context of a multiyear plan process, which means that the board and staff can be more specific about goals that are measurable over the course of the multiyear plan as well as over the strategic plan period.

Executive Director Michael Colgrove then discussed his vision for the relationship between the new strategic plan and multiyear planning, noting that he believes that the new strategic plan would set forth a higher level and comprehensive vision and areas of focus, with the multiyear being more specific about how to achieve that vision in a variety of ways over time. Mike suggested a number of high-level issues and questions for the board to consider in their discussion. The board then broke into small groups for discussions and then reconvened for reports outs.

Break

The board recessed for a break at 10:45 and reconvened at 11 a.m.

State and Local Representatives Panel

Following the break, the board welcomed Oregon State Representative Pam Marsh, District 5 (Southern Jackson County), Chair of the House Housing and Homelessness Committee, member of House Climate, Energy, and Environment Committee, member of House Agriculture, Land Use, Natural Resources, and Water Committee, and Mayor Witt Anderson of the City of Mosier. Chris

Lyons, Senior Manager of Stakeholder Relations and Policy, moderated the panel.

Mayor Anderson talked about the need for community engagement and the way in which communities focus together on energy efficiency. He described how Energy Trust can help community projects by supplementing community resources with technical and financial assistance.

Representative Marsh then shared context about her district, which is focused on, and has experienced wildfire devastation in its more urban and dense areas and its rural areas alike. For Representative Marsh, Energy Trust has an important role in community resilience and getting to 100% clean energy that addresses heavy load growth, housing, and the lack thereof.

Board members thanked the panel members for their comments and asked several questions about community interest in resiliency and decarbonization strategies. Board members also asked the pane for their thoughts on how Energy Trust can best disseminate information about its programs and offerings to their communities. Both Panel members expressed their appreciation for Energy Trust's support and engagement of their communities and urged the board to support continued community support efforts. Panel members also stressed how important it is to have multiple voices around planning tables to make sure that barriers for participation are minimized.

Board members and Chris Lyons thanked the panelists for a great discussion, offered Energy Trust as a resource and asked them both to look at our draft strategic plan and offer comments.

Recess for Lunch

The board recessed for lunch at 12:03 p.m.

Call to Order and Invitation for Public Comment

Henry called the meeting back to order at 1:01 pm. There was no public comment.

Strategic Planning: Areas of Focus

Henry then turned the meeting over to Holly Valkama for continued discussion on the Areas of Focus portion of the plan. Holly explained the next small group assignment to identify no more than five areas of focus and answer the question: What must Energy Trust prioritize or focus on to deliver the highest possible value?

Following their breakout sessions, each of the small groups reported on their discussions. Board members discussed the various topics that emerged out of the discussions, which include community engagement, influx of federal funding and collaboration with agencies, reaching customers not yet reached, and resiliency.

Break

The board recessed for a 15-minute break at 3:30 p.m. and reconvened at 3:45 p.m.

Final Closing: Strategic Planning

The board finished the day by confirming the following possible focus area descriptions:

- Optimize customer use of energy resources in service to decarbonization but Ellen's not satisfied with either.
- Deeper work in historically underserved customer groups.
- Resilience
- Increase the affordability of the system – the board discussed how to think about the system more broadly over merely electric/renewable energy/energy efficiency/batteries.

Next steps are for the ad hoc Strategic Planning Committee to revise language for presentation at the June board meeting. Additionally, the board asked that the committee return with some proposals for outcomes and goals that could flow from these focus areas.

Adjourn

The meeting adjourned at 4:05 p.m.

The next regular meeting of the Energy Trust of Oregon Board of Directors will be held June 12, 2024, hybrid on Zoom and at the Energy Trust of Oregon, 421 SW Oak St., Suite 300, Portland, OR 97204.

_____ ____/____/____

Signed: Eric Hayes Date

PINK PAPER

Resolution 1032
AUTHORIZE $10 MILLION LINE OF CREDIT AT UMPQUA BANK
June 12, 2024

RESOLUTION R1032
AUTHORIZE $10 MILLION LINE OF CREDIT AT UMPQUA BANK

WHEREAS:

1. **Energy Trust of Oregon, Inc. (Energy Trust) wishes to establish a $10 million line of credit at Umpqua Bank to bridge timing issues of revenue receipt and program expense, if the need arises.**

2. **Umpqua Bank has authorized a commitment for a line of credit for a term of two years in the amount of $10 million at a floating interest rate of the Secured Overnight Financing Rate (SOFR) + 1.75% conditioned upon the board's approval of, and documented by, an agreement which will contain other terms, conditions, representations, covenants, warranties and other provisions typically used by Umpqua Bank for such credit facilities.**

3. **There is no annual fee charged by Umpqua Bank for this service.**

It is therefore RESOLVED:

1. **Energy Trust, may:**
    a. **Enter into a line of credit agreement to permit Energy Trust to borrow up to $10 million from a revolving unsecured line of credit offered by Umpqua Bank at an interest rate of SOFR + 1.75%. Chris Dunning, Chief Financial Officer of Energy Trust, is hereby authorized to serve as the designated individual to request draws against the line of credit.**
    b. **In the event Energy Trust borrows from the line of credit, Energy Trust shall inform the Finance & Audit Committee at the next available opportunity. Energy Trust would repay the line of credit with monthly interest payments and principal due at maturity consistent with the terms and conditions of the line of credit agreement.**
    c. **Renew the line of credit agreement with Umpqua Bank under substantially similar terms and for up to three years from the date of the line of credit agreement.**
2. **Michael Colgrove, Executive Director of Energy Trust, is hereby authorized and directed to execute and deliver to Umpqua Bank and Umpqua Bank is requested to accept all documents, instruments, and agreements which evidence the obligations**

of Energy Trust under the line of credit obtained or to be obtained pursuant to this resolution.

3. **Umpqua Bank is authorized to act upon the foregoing resolution until written notice of revocation is received by Umpqua Bank, and the authority hereby granted shall apply with equal force and effect to Michael Colgrove and Chris Dunning or their designees or successors.**

Moved by: Seconded by:

Vote: In favor: Abstained:

Opposed:

PINK PAPER

Resolution 1035

AMEND NOMINATING & GOVERNANCE COMMITTEE CHARTER
June 12, 2024

RESOLUTION 1035

AMEND NOMINATING & GOVERNANCE COMMITTEE CHARTER

WHEREAS:

1. **The Energy Trust Board of Directors Nominating & Governance Committee has considered and reviewed updates to its charter regarding (i) review of Energy Trust board of director committee charter and (ii) the executive director review process.**
2. **These proposed changes were reviewed and discussed by the Nominating & Governance Committee at their meetings in January and April 2024.**
3. **Based on its review, the Nominating & Governance Committee recommends that the proposed charter changes be approved by the full board at its next meeting.**
4. **The proposed revised Finance & Audit Committee Charter is attached to this resolution as *Attachment 1*, with proposed revisions tracked, and presented for full board review and approval.**

IT IS THEREFORE RESOLVED: That Energy Trust of Oregon, Inc., Board of Directors approves revisions of the Nominating & Governance Committee Charter in the form attached as *Attachment 1* hereto.

Moved by: Seconded by:

Vote: In favor: Abstained:

Opposed:

ATTACHMENT 1

Board Nominating & Governance Committee Charter

Action	Originator	Date
Board approved Charter	R956	December 17, 2021
Board approved Chair and committee	R	February 23, 2022
Nominating & Governance Committee approved changes		April 4, 2024

Purpose Statement:
The Nominating & Governance Committee (the "Committee") provides leadership to the Board in the development, organization, and implementation of Energy Trust of Oregon's ("Energy Trust") corporate governance principles, policies and practices

Responsibilities:

Board Charter and Policies

- DDevelop, review, amend, revise, retire, or ~~and~~ repeal Board Policies with consideration for delegating responsibility for select existing policies to Energy Trust staff and recommend adoption to the Board with modifications, if any.
- Annually, or in a timeframe as determined by the Committee, review the Committee Charter and recommend readoption to the Board with modifications, if any.
- Upon referral from a board committee, review proposed changes to each board committee charter to recommend readoption to the Board with modifications, if any.

Nominations

- Create qualification standards for Directors.
- Recruit and vet Director candidates from a range of sources with due consideration for diversity.
- Nominate candidates for Director to the Board.
- Advise the President regarding appointments to Board Committees and selection of Committee chairs.
- Recommend nominations for Board officers' positions to the Board.

Director Training and Board Review

- Develop new Director orientation and Director continuing education programs.
- Annually conduct a self-evaluation of its own Committee performance and implement process improvements.
- Assist other Board Committees with an annual self-evaluation of Committee performance and implementation of improvements.
- Assist the board with an annual performance self-evaluation and facilitate implementation of identified Board process improvements.

Executive Director Performance Measures and Review

- Recommend, for Board adoption, Executive Director annual performance objectives that consider Energy Trust's desired organizational achievements, expected leadership

behaviors and outcomes, stakeholder engagement, key risk identification and mitigation activities, Board relations, employee engagement results, strategic plan implementation and other Board priorities.

The board president and the chair of the Committee will c~~C~~onduct an annual comprehensive Executive Director evaluation, leadership and operational performance review and report back to the Committee.~~;~~

Based on a comprehensive Executive Director evaluation, leadership and operational performance review report and ~~and recommend to the Board an Executive Director performance rating and compensation package, taking into consideration competitive~~ compensation data and analysis prepared by the Board Compensation and Human Resources Committee and submitted to the Committee, the Committee will recommend to the Board an Executive Director compensation package.

General Responsibilities

Recommend general format, templates, and structure for content of pre-meeting materials for the Board and Committees.

Recommend general format, templates and structure for content of Board and Committee presentations.

Recommend structure and Board norms for meaningful discussions, deliberations and decision making in Board and Committee meetings.

Recommend topics for inclusion in Board and its own Committee agendas.

Other duties as assigned by the Board.

Delegated Board Authority:

Retention of independent advisors, including recruiters, compensation or other subject matter consultants

Membership will be approved by the board.

Member Roles and Responsibilities:

Chair

Collaborate with the Committee membership to develop its agendas and meeting schedules

Facilitate participation and presentations and lead meeting discussions

Preparation of the agenda and materials for distribution prior to meetings

Oversee documentation of meeting proceedings and Committee recommendations

Prepare and deliver Committee recommendations to the Board

With the Board president, conduct annual comprehensive Executive Director evaluation, leadership and operational performance reviews

Members, Ex-Officio Members:

Participate in Committee meetings and deliberations

Use personal and professional experience and materials to support Committee discussions and decision making

Collaboratively form recommendations to the Board

Energy Trust Staff:

Provide staff resources to support the Committee in fulfilling its responsibilities

Support Committee Chair on development of agenda and materials, meeting scheduling and documentation of meeting proceedings

Provide materials and resources to support discussions as needed

Participate in Committee meetings and deliberations

Use personal and professional experience and materials to support Committee decision making

Collaboratively form recommendations to the Board

Progress and/or Success Indicators:

Operating Guidelines:

Decision-making is based on group consensus and collaborative decision development.

Meeting discussions are conducted inclusively and with respect for all views.

Meetings and Schedule:

Committee and Charter Review:

This Charter is a living and organizing document to clarify and communicate to membership and others the bounds, roles, actions and expectations of this committee. This Charter shall be reviewed by the Committee at least once per year and submitted for Board approval with or without modifications.

Tab 2

Compensation and Human Resources Committee Meeting Minutes

April 30, 2024, 1:00 p.m.

Committee Members Attending by teleconference: Eric Hayes, Henry Lorenzen, Bill Tovey

Committee Members Absent: Ellsworth Lang.

Staff attending: Michael Colgrove, Debbie Menashe, Danielle Rhodes, Jason Rieke

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

Eric Hayes called the meeting to order at 1:02 p.m.

Fiduciary Retirement Plan Review

Ryan Christiansen and Tonya Hirte provided an update on the proposed changes to the fixed return fund option that the committee made at the last meeting. Pursuant to discussions over the last few months, the plan now offers a short-term fixed income bond from Fidelity as well as a new Principal guaranteed return fund option. These options will allow for a 12-month transition from the current, lower interest paying, guaranteed fund. Ryan and Tonya will monitor activity and provide reports to the committee at future meetings.

Committee members asked how the presentation on plan changes we received. Ryan reported that the session was well attended and well received. In addition to updates on the guaranteed return fund, Cable Hill presented a 401k and basic retirement investing training.

Ryan then presented the 2023 year-end Fiduciary Investment Review. U.S. equities are outpacing international equities in the first quarter, and bonds continue to struggle in a high interest rate environment. In summary, at the end of 2023, large growth assets outperformed every other area, and the trend continues in Q1 2024, with large growth assets up 11%. The Principal balanced portfolio is currently showing returns of 5%.

Ryan and Tonya reported that Energy Trust plan health, as measured by participation and deferrals is healthy, with most participants using the Retireview models. Because of the extensive use of Retireview, the plan reflects a diversification rate of 88.5% and is outpacing other plans and industries in terms. Also, Energy Trust participants are using most of the tools that Principal offers, and because we have many low-cost funds offerings, our fees are below average. Tonya further noted thought that Energy Trust's plan participation rate has decreased slightly, and this could be due to new hires. Ryan noted also that other plans are also seeing a dip in contributions and an increase in loans due to inflation.

Tonya concluded by advising the committee that Principal will be rolling out updates on cybersecurity and authentication to ensure security for participant accounts.

Upcoming Committee Topics

Debbie Menashe advised the committee that the 401k plan annual audit is underway. As part of that audit, we have reviewed the board's current plan investment policy; given changes in

committee structure and nomenclature, it is time for a review and update of the policy. Working with Cable Hill and The Principal, staff will propose updates to the investment policy and present them to the committee at its next meeting.

In addition, at a future meeting, the committee will review and update its charter. Updates may include provisions to do periodic reviews of the investment policy.

Adjourn meeting

Eric Hayes adjourned the meeting at approximately 1:34 p.m.

Next meeting of the Committee is the joint Compensation & HR Committee and Finance & Audit Committee meeting to review the annual audit of the Energy Trust 401K retirement benefit plan. The joint committee meeting is scheduled for July 30, 2024, 3:00 p.m. – 5:00 p.m.

Tab 3

Finance & Audit Committee Meeting Minutes

April 4, 2024, at 3 p.m.

Committee Members Attending by Teleconference: Thelma Fleming, Henry Lorenzen, Silvia Tanner, Peter Therkelsen

Committee Members Absent: Anne Root, Karen Ward

Staff Attending by Teleconference: Melanie Bissonette, Amber Cole, Michael Colgrove, Chris Dunning, Cheryl Gibson, Debbie Menashe, Danielle Rhodes, Michelle Spampinato, Scott Swearingen

Others Attending: Keith Simovic (Moss Adams), Matthew Shaw (Moss Adams)

Thelma Fleming convened the meeting at 3:04 p.m.

2023 Audit Results

Keith Simovic and Matthew Shaw presented the results of the 2023 financial statement audit for Energy Trust. They thanked the team for the smooth and straightforward process in the delivery of their product. The audit was completed by Keith Simovic, Engagement Review Parter; Julie Desimone, Concurring Review Parter; Matthew Shaw, Audit Manager; and Tanner Brown, In-Charge Staff Auditor.

The audit includes an Independent Auditors' Report on the financial statements of Energy Trust of Oregon; assistance with, and technical review of the financial statements for compliance with GAAP (generally accepted accounting principles); and communication to those charged with governance. During the process, Moss Adams managed internal control testing that included walkthroughs surrounding all relevant business cycles, including IT; analytical procedures of revenue and expenses, and then completed trend analysis, comparisons to previous years and expectations for years ahead; and substantiative procedures to confirm account balances, vouching supporting documentation, engaging with representation with attorneys and management, and examining objective evidence.

Moss Adams has provided an unmodified (clean) opinion on the final financial statements and found no material weaknesses or significant deficiencies in their communication to those charged with governance.

Matthew then reviewed the audit organization's responsibilities under US Generally Accepted Auditing Standards, which include: "To express our opinion on whether the financial statements prepared by management with your oversight are fairly presented, in all material respects, and in accordance with U.S. GAAP. However, our audit does not relieve you or management of your responsibilities;" "To perform an audit in accordance with generally accepted auditing standards issued by the AICPA, and design the audit to obtain reasonable, rather than absolute, assurance about whether the financial statements are free of material misstatement;" "To consider internal control over financial reporting as a basis for designing audit procedures but not for the purpose of expressing an opinion on its effectiveness or to provide assurance concerning such internal control;" and "To communicate findings that, in our judgment, are relevant to your responsibilities in overseeing the financial reporting process. However, we are not required to design procedures for the purpose of identifying other matters to communicate to you."

Matthew reviewed the scope and timing of the audit, which was communicated to Energy Trust in their engagement letter on December 7, 2023. In their review of significant accounting policies and unusual transactions and found that “Management has the responsibility for the selection and use of appropriate accounting policies. The significant accounting policies used by the Organization are described in the Footnotes to the financial statements. Throughout the course of an audit, we review changes, if any, to significant accounting policies or their application, and the initial selection and implementation of new policies. The Organization adopted Financial Instruments – Credit Losses (Topic 326) which is discussed in Note 2 in the Annual Financial Statements. We believe management has selected and applied significant accounting policies appropriately and consistently with those of the prior year.”

Also in communications with Energy Trust’s governing body, Moss Adams found that “Management’s judgments and accounting estimates are based on knowledge and experience about past and current events and assumptions about future events. We apply audit procedures to management’s estimates to ascertain whether the estimates are reasonable under the circumstances and do not materially misstate the financial statements. Significant management estimates impacting the financial statements include the following: Useful lives of long-lived assets, and functional allocation of expenses. We deemed them to be reasonable.” Moss Adams also found that the disclosures in the financial statements are clear and consistent. Certain financial statement disclosures are particularly sensitive because of their significance to financial statement users; however, they did not note any disclosures in the financial statements which they would consider sensitive to potential users of the financial statements. No difficulties were encountered during the audit.

There were no significant audit adjustments and unadjusted differences considered by management to be immaterial. Matt also noted they are required to report on any potential effects on the financial statements of significant risks, exposures, and uncertainties. No matters were noted that required disclosure during 2023 or through their report date. There were no disagreements with management, and everything went smoothly. Moss Adams is required to report on deficiencies in internal controls and there were no material weaknesses or significant deficiencies and non-compliance. Moss Adams was not aware of any significant accounting or auditing matters for which management consulted with other accountants. Regarding communications, Moss Adams noted that other than the engagement letter, management representation letter, and communication to those charged with governance, there have been no other significant communications. They found no doubt about the organization’s ability to continue as a going concern.

Moss Adams reported no known instances of fraud or noncompliance with laws and regulations. This year, Moss Adams also selected a total of 30 incentive payments for additional testing as requested by the Finance & Audit Committee. During that testing, they reviewed the selection of invoices and contracts to verify that the check was paid to the correct party, the address per the check agreed to the address Energy Trust had on file, the participant had waived the right to receive the funds directly, the amount per the check was calculated correctly and agreed to the invoice that the participant received, the payment was charged to the correct account in the accounting system, and applicable payments were audited as appropriate. They found no exceptions during the testing of these payments. Henry thanked the Moss Adams team for completing this additional testing.

Keith then presented recommendations for best practices after the audit process, which included addressing federal grant policies and procedures. As the organization continues to receive more grant awards from federal agencies, we recommend drafting formal policies that adhere to federal requirements. This may include policies relating to allowable costs, procurement, subrecipient monitoring, and other areas that may be required by the specific grant awards. He also addressed the transition to the new Enterprise Resource Planning system. As Energy Trust is planning to select and implement a new ERP system in the coming years, it will impact audit procedures for the year of implementation. Moss Adams recommends proactively involving their audit team as we can have their IT specialists involved to communicate best practices and documentation to maintain to ensure the audit progresses appropriately. They will focus on the accuracy and completeness of data transfers to the new system, as well as the initial system setup of individuals, roles and overall security and access. These recommendations were not considered material weaknesses or significant deficiencies in controls.

Henry asked how close we are to implementing the internal controls on federal grants. Chris noted that this is in process. Matt noted that one trigger to watch for is reports on federal funds received versus federal funds expended. We currently have a good control structure in place as is, and can implement these recommendations on top of our system. Cheryl Gibson noted that the InnDev team is aware of the controls that will need to be in place as seeking federal grants is pursued. Henry asked for periodic updates to the committee as these controls are implemented. Keith recommended that maintaining communication with their team can assist in implementing preparation for federal audits.

Keith and Matt also thanked the Energy Trust team as the audit progressed on time and in an orderly fashion; all requested schedules and draft financial statements were received on a timely basis. Additionally, all personnel across all departments were courteous, responsive, and fulfilled all their requests in a timely manner, and “tone at the top” and attitude from management was one of helpfulness, candor, and openness in response to audit requests and discussion points.

Henry asked that in the future for a midpoint meeting with Moss Adams and the board if any issues seem to arise during the audit process next year. Chris and Thelma thanked the Moss Adams for their diligent work and the relationship with their team. They also thanked the staff for a smooth audit experience and all the work that went into working with Moss Adams.

Keith will present the audit results at the April 17th board meeting.

Line of Credit Renewal Proposal

Chris presented the finance and audit committee briefing and decision paper proposing a new line of credit contract. Energy Trust’s current line of credit agreement expires on July 31, 2024. The Board resolution which authorized this line of credit does not permit further extension, and staff has obtained line of credit term sheets from both Umpqua Bank and First Interstate Bank, the two banks with whom Energy Trust has cash on deposit. Staff proposes to engage in the line of credit agreement with Umpqua Bank and requests that the Finance and Audit Committee make a recommendation to the Board endorsing this course of action, and that the board approves a resolution accordingly.

Henry asked if we have tapped the current line of credit, and we have not. It costs $7,000 a year to have this in place. There will be no for either of the proposed lines of credit. We would need to do liquidity planning before tapping into this line. Henry also asked if we have completed a cash needs projection in order to predict when we may need a line of credit. Chris mentioned

that cash flow forecasting is something we hope to implement as we increase staffing capacity. The line of credit stands as a fourth line of defense for liquidity. Program reserves, operational contingency reserves, and emergency contingency reserves function as the other lines of defense to strengthen liquidity in the event of operational business threats. Silvia asked if this is necessary, and while Chris answered that the intention is not to use it, this adds another level of protection for the organization. As Energy Trust considers the landscape for 2024 and beyond, two key factors stand out. First, Energy Trust's budgeted expenditures increased by 35% from 2023 to 2024 and are expected to increase by another 8% for 2025. Second, Energy Trust is planning to consume $40.4m and $16.2m of excess net assets in 2024 and 2025, respectively. The use of excess net assets decreases the value of program reserves as the first line of defense as our intent is for program reserves to be lower, and more in line with target levels. Both trends diminish the value of contingency reserves as the second and third lines of defense as their levels are generally fixed and not indexed to budgeted expenditures.

Silvia also asked if the board would be notified which reserves will be utilized, or if a new resolution grants full authority of the organization to utilize the line of credit. Chris suggested that notice to the board should be an edit to the resolution. Henry suggested that notification could go to the Finance & Audit Committee as opposed to the full Board.

Staff are recommending that the committee approves staff's proposal to enter into the line of credit agreement offered by Umpqua Bank to be brought to the board at the June meeting. Henry asked for the committee to review the resolution at the next committee meeting to bring to the board, and this will be revisited at the next committee meeting.

Multiyear Planning Update

Melanie Bissonette provided an update on multiyear planning process, noting recent accomplishments. Programs and the assessment team have brainstormed strategies to maximize acquisition of cost-effective savings by 2030. The assessment team has also met with CUB and NWEC regarding multiyear planning and involvement in this project. The next steps are to get input from utilities on strategies and ways we can collaborate on the process.

The Multiyear Plan Process Design team has been outlining the components of the multiyear plan and has outlined basic process timeline including stakeholder engagement points, established analytical methodology for the financial plan, and settled on plan management approach for managing to financial plan. The next steps for this team will be to document the requirements for rolling forecast & financial plan and continue to build out details around process, stakeholder engagement, intake templates and plan management.

Staff is also working on an analytical methodology for the financial plan. The model will assess high, medium, and low scenarios primarily driven by incentives and delivery spending. The medium line is the most likely outcome to achieve savings based on current cost structures, but adding additional bands will inform the projections for unknowns and factors not anticipated.

Henry asked how the budgeting process will inform the projections for this plan, and if other measures of success will be measured in a five-year increment. Chris and Mike noted that there will be milestone markers that will be key to assess on an annual basis that will be included in the multiyear plan, including performance measures. Those are under development. Henry also asked for feedback from on the OPUC of this plan, and Melanie and Chris noted that they have been supportive thus far. Thelma asked how often we update the OPUC, and staff meets with them twice a month on project status.

Chris then presented the cost structure that will inform the financial plan. Half of our costs are incentives, 30% of our costs are deliveries, 10% of our costs are staffing and 10% is everything else. The expenditures that are modeled in aggregate and allocated by funder include other internal costs and staffing driven by the workforce plan. Expenditures modeled by funder and aggregated to total include incentives and delivery quantity. Both incentives and deliveries will have ranges estimated by run rates applied to the savings targets.

Staff are proposing a six-quarter rolling forecast as the plan management tool for the financial plan. After establishing the five-year budget, a six-quarter rolling forecast is updated each quarter (six quarters to enable alignment with heating & cooling seasons and the calendar year). When the six-quarter rolling forecast spans a full calendar year, we take a snapshot of the forecast and label it the annual budget. This allows to adjust a new forecast based on current trends, course corrections every quarter, and track cumulative progress toward our five year goal. This will also allow for clearer forecasting to stakeholders as to the year ahead.

Thelma inquired as to the activities that will shape adjustments to the projections, and Chris noted that this will be part of the planning process for the multiyear plan, and what's in process is the hierarchy of corrective actions. Silvia asked what will have the biggest impact on the "band" of high, medium and low scenarios, and Chris explained that will be the run rate of incentives and delivery as one of the largest factors, and staffing cost ranges will also be a factor that impacts the range. This would not refresh or change the five-year plan, however.

First Quarter Energy & Incentive Pipeline

Scott Swearingen presented the energy and incentive pipeline for Q1 2024. We have met 15% of our electric savings to date, 25% of our OPUC gas savings, and met 18% of electric generation savings and 30% of our NW Natural Washington gas savings.

In our Oregon efficiency goals, we are on track to meet and exceed our savings target for both electric utilities at the portfolio level. We are exceeding in industrial and residential for PGE and in all three sectors for PAC. For this point at the year, we are 6% higher than our savings achievement in prior years. In gas, we are forecasted to achieve our goal in total, and all utilities save for CNG are forecasted to exceed their savings goals. We are in negotiations with Avista Transport as to an action plan in the absence of a carbon compliance plan for 2024. We have 180,000 therms in that pipeline and $500,000 in incentives in that pipeline that are still in negotiation. We are running an 11% increase at this year's Q1 metrics for gas compared to other years.

For our Washington efficiency goals, we are also forecasted to meet and exceed our savings targets. Commercial has been driving the activity here, and we are forecasted to close at 106% by the end of the year.

In renewables, we are forecasted below our goals, which is a deviation from our historical figures; however there is a period of transition in place leading to a pipeline that is not as robust as we normally see, as solar offerings are being re-examined; however, other renewables are on track to date. There are much fewer solar installations in the market, and we are about 5% under in what we have traditionally meet to goal in prior years.

By sector, we are meeting about 97% of our electric savings goals in the commercial sector, and 103% of our gas savings goal. In the industrial sector, we have a specific situation in our downstream lighting program, namely cannabis lighting that is significantly over budget, and they have announced changes to that offering, announcing a $500 per fixture cap and working

on avoiding and mitigating incentive overruns. In our industrial gas savings pipeline, we are at 113% of goal. In the residential electric pipeline, we are forecasted to achieve goal and come in under budget, as last year, this incentive run rate was not as successful, and is becoming more aligned in 2024. In the residential gas pipeline, we are on track to meet our savings goals.

Silvia asked for more insight as to some of the factors influencing PAC and the solar programs. Scott mentioned that the team is revising incentive offers based on the Q1 results. ODOE is sunsetting its current solar rebate, so they believe they will be able to support the solar market in coming quarters. Some trade allies have stopped applying for our incentive, as it was not enough to move the market, and we're working on obtaining more data to improve the market figures.

Adjourn Meeting

Thelma Fleming adjourned the meeting at 5:04 p.m.

Next meeting is April 25th at 3 p.m.

PINK PAPER

Finance & Audit Committee Meeting Minutes

April 25, 2024, at 3 p.m.

Board Attending by teleconference: Thelma Fleming, Silvia Tanner, Peter Therkelsen

Staff attending by teleconference: Melanie Bissonette, Amber Cole, Michael Colgrove, Chris Dunning, Emily Estrada, Cheryl Gibson, Devin Liebmann, Lori Lull, Cameron Mathews, Dave McClelland, Debbie Menashe, Helen Rabold, Danielle Rhodes, Tracy Scott, Scott Swearingen

Others in attendance: Karen Ward (outside expert)

Committee Absent: Anne Root, Henry Lorenzen

Thelma Fleming convened the meeting at 3:02 p.m.

Q1 2024 Financial Results

Chris presented the first quarter's financial results. Numbers show typical net assets and income due to winter utility loads, and lower expenses due to the "hockey stick" effect that allows for building net assets in the first portion of the year.

Avista is running hot and has a lot of activity in efficiency achievements and incentive spend. This will be monitored by staff throughout the following months, and there are no current concerns.

We have moved $800,000 from our Craft3 Loan to our operational contingency budget for manufactured home replacement to exit out of that product, as it was not getting much uptake. That program was reduced from $1 million dollars to $200,000.

We do not yet have insight into what the utility loads are looking like compared to expectations, and we will be able to update the committee at the next meeting.

We are running about 11.5% over our year-to-date shaped budget for incentives as we heard at the last meeting, and overperformance is due to industrial projects for electric, and Avista's performance for gas. At the last meeting, we covered that commercial grow lights are driving some of the performance. We have put some protective measures in place as of April 1to cap measures and continuing to monitor this month to month. We have caught this early enough to manage this at a portfolio level across all programs.

Delivery contractors are the next biggest expense category, which makes up about 30% of our total expenditure structure, and we are currently running 10% below our shaped budget; however, this can pick up significantly toward the latter half of the year. Staff have had conversations on how to improve forecasting and foresight capabilities.

We are running under employee salaries by about 5.5%, and this will even out by next month due to our performance salary adjustment process that is implemented in April and backdates to January. The merit pay was released in April, and this budget item is expected to narrow by next month's meeting.

Chris also pointed to other professional services, which are running $1.3 million under budget. Our budget increased from 2023 to 2024 due to the infrastructure building in the budget to

strengthen community-based organizations, workforce, and trade allies. Staff will also monitor this item. We do anticipate fulfilling this budget for 2024; however, the time needed to build these relationships is required and we expect to fulfill this budget item for 2024. Q1 shows a ramp period for this item.

Other deltas show deviations due to budget timing issues and there will be an expectation that these items will adjust in the coming quarters and be monitored by staff. Thelma noted we expect to catch up on planning and evaluation services and when we expect to see that item catch up – whether that will be Q2 or Q3 that we find the catch up. Chris will bring a clearer outline to next month's meeting.

Chris then presented net income by funder, combining the deltas with each funder for both expenses and revenue to show how we are performing on a net income basis against budget. PGE and PacificCorp are where we planned to bring our reserves down to target levels over the course of the year and will be monitored closely as the year progresses.

Karen asked how these reports will be used to monitor changes over the next few months. Chris mentioned that these reports will be presented more consistently to executive team, as well as speaking with budget managers monthly to assess the data coming from the reports to better distill the targets and signals that should be coming to the committee.

Multiyear Planning Update

Melanie Bissonette presented an update on the status of the transition to multiyear planning. The assessment team has held meetings with each utility to get their input on program strategies, and shared utility feedback with program managers. The next steps will be to sketch out process steps for setting savings targets next year and estimate savings impact from strategies brainstormed.

The design team has documented requirements for rolling forecast and the financial plan, drafted rolling forecast process documentation, outlined tariff approach options in multiyear framework, and discussed how to incorporate new funding targets and a development strategy into the multiyear plan. We have already begun conversations with the OPUC regarding tariff approach options. The next steps for the design team are to continue to build out details around process and stakeholder engagement.

Chris added that we are thinking of ideas to bring to the utilities and OPUC on tariff approaches and would like this to be a collaborative project. One idea includes a flat tariff for five years, collecting more in the earlier years and building reserves to draw upon in later years. Other options include an upward sloping tariffs over a multiyear period and adjusting revenue levels on a yearly or periodic basis.

We are still discussing new funding targets, and whether to have a dollar value metric to meet over the course of the plan, offsetting grants and other funding with the resources required by our utility funders. We will keep the committee updated on the status and progress of those conversations.

Mike asked if staff have begun hypothetical models of the tariff approaches and how those may impact rates. We have not yet done modeling of that yet, but will be discussing approaches with the internal team.

Silvia inquired as to how the utilities are reacting to preliminary engagements. Melanie noted we have set up a series of three meetings with the gas and electric utilities to discuss tariff adjustments that are coming out of the design team's project outcomes. The initial assessment is that the six-quarter rolling forecast model seems intuitive.

Scott Swearingen presented staff's implementation and work product on plan management. The team is pointing to a system of adaptive plan management, the benefits of which allow the team to obtain an early awareness of potential performance issues, an early identification and response to dynamic market conditions and then will allow for outlining actions to take and stakeholders to engage depending on the level of variance from interim milestones and overarching goals.

Scott presented draft versions of triggers and responses in the adaptive plan management system that the multiyear planning team is developing.

First level response issues would be those internal levers on normal a business cycle. These could include savings/generation cumulative actuals plus the rolling forecast vary by more than X% from expected acquisition curve, or expenditures cumulative actuals plus the rolling forecast vary by more than X% from expected spending curve. Some possible response actions at this level could include collaborating with staff on adaptive responses; balancing levers and resources across portfolio in response to market conditions; potentially pushing or pulling funds across years; using reserves; or adjusting contracts with PMCs/PDCs.

Second level triggers would involve larger internal levers requiring external agreement, such as savings/generation are trending below goal and are "off track;" the expenditures forecast varies from expectation and signals a potential deviation from range; or moderate underperformance on qualitative goals. Possible response actions to a second level response could include determining larger cross-portfolio responses; consulting regulatory and other system level changes that would open program strategies such as the OPUC; consulting our InnDev team to find alternate funding to augment PPC funding; or renegotiating funding agreements with utilities.

A third level response would be our most escalated scenario and would require the need to revisit scenarios, assumptions, and strategies. Some triggers could include that the macroeconomic scenario is no longer relevant; expenditures forecast being outside bounds of expected range; savings/generation being significantly below goal; or significant underperformance on qualitative goals. Possible response actions could include negotiating and agreeing on an updated multiyear plan with public input; negotiating and agreeing on a written plan of action with our impacted stakeholders; and potential renegotiating revised funding agreements with impacted utilities. We want to visit the third level rarely or never but should always be optimizing and calibrating the status of the multiyear plan.

Karen asked how these triggers are tied to the methodology of building the budget. Chris noted we plan to build reserves and that one option would be to assess revenue yearly to make less of an impact on reserves. Chris noted our methodologies for assessing the budget apply mostly to expenses, and expenses would be assessed as the committee discussed at the last meeting: three levels of projections throughout the year. Assessing how often we would want to go back to utilities to renegotiate funding over the course of the five-year period is the key consideration, and to minimize doing so, staff is proposing taking an aggressive approach to estimating savings and revenue. We also need to keep in mind ratepayer impact, and we may not know some of these parameters until next year.

Management Review Update

Chris presented an update on the management review process as per our OPUC grant agreement. As outlined in our grant agreement requirements, a management review and evaluation is required that states, “The Energy Trust will contract for an independent management review and evaluation not less frequently than every five years (the “Management Review”). The first such Management Review will be completed not later than three years after the Effective Date. The Management Review will be designed to review the efficiency and effectiveness of Energy Trust operations under this Agreement and make specific suggestions for improvement.” The Management Review involves a review of operational and administrative costs, cost allocations between administration management and programs, as well as responses to suggested changes by the OPUC.

Energy Trust is coming up on another required review period by the OPUC, as our last review was in 2019. We currently have already engaged with a specialist CPA firm ML Weekes to assist in the “analysis of cost allocations between administration, management and programs.” We have utilized this firm before. Our RFP for Management Review was posted on March 15, and asked for two specific points of focus: to “Identify appropriate metrics for administrative and staffing costs, relative to total expenditures, based on similar organizational peers and nonprofits;” and to “Identify best practices for forecasting costs, including any such best practices demonstrated by similar organizational peers and nonprofits.” Proposals for were due April 12, and we are beginning our interview process next week from April 29-May 3. We will make a final decision on May 8th and have a contract signed by May 27th, so that a final report can be delivered by September 30th.

Silvia Tanner, Finance & Audit Committee Member, will participate in the interview panel. The committee will receive periodic updates during the performance of fieldwork, as well as receive a presentation of the results of the review from the consultant. The size of this contract does not require approval by the committee or the full board.

Thelma asked if we see a barrier with our time limit if we do not find a contractor, and Chris noted we do have until the end of the year to complete this project. If we did have to adjust timing, we would reach out to the OPUC to discuss the timing.

RFQ Preview: Verification Services for Solar Program

Helen Rabold, Lori Lull, and Dave McClelland, solar program staff, presented on an upcoming RFQ for Energy Trust’s solar program verifier services. The expected expenditure under the resulting contract for these services is expected to be $725,000.00 in budgeted public purpose charge funds and up to $300,000 in grant funds, for a total of $1,025,000.00. When awarded, it is expected that this contract would run from October 2024 through October 2026.

Energy Trust has worked with verifier programs since 2023 to ensure that systems comply with the program’s published installation requirements. Along with design reviews and installation verifications, verifiers have supported the program with technical consulting and training and support for trade allies. Verifiers need to be well-versed in solar technology and code requirements and must be considered a neutral body; they cannot be employed by any solar trade ally contractor, municipal office, or permitting agency. There is a narrow pool of prospective contractors that meet these requirements.

On April 22, 2024, Energy Trust, as part of the Oregon Solar for All Coalition, was granted federal funds as part of the Oregon Solar for All grant. $300,000 from those grant funds could go towards the verifier contract to meet the in-person verification and quality control expectations of the grant for all low-income solar projects funded by the Oregon Solar for All Coalition. While this is not budgeted public purpose charge funds, this amount would be part of

the contract budget, an amount requiring board approval.

The Energy Trust solar team will release an RFQ for verifier services for 2024-2026 in mid-May, with responses due in June, and have offered time with the committee to answer questions, concerns and hear recommendations. Following committee approval, a contract will be presented to the full for approval.

Silvia asked how much of the funds will come from ratepayer money and how much will come from the Solar for All grant. Lori mentioned that while some logistics are being developed, initial plans are that $300,000 was budgeted for this work to provide wrap around services and provide in person verifications for low-income installations. David McClelland mentioned that these services will extend outside of Pacific Power and PGE territory. Projects within our service territory would receive our Solar within Reach incentives and eligible for PPC funded verifications. But for projects outside of those scopes, we would access and utilize Solar for All Funding.

We received less funding than we hoped for, and we may research ways to backfill funding with public purpose charge funds to stretch these grant dollars. All states received about 62% of what they originally asked for, likely in an effort of the EPA to equally distribute the funding. Staff will continue to examine ways to streamline projects and services to maximize grant funds.

Peter asked if other states have the same requirements in procuring verification services, and Lori noted that we are expecting more requirements to be issued on a federal level, and the current contractor that provides energy assurance services is also conversing with some other states as well. Staff will continue to update the committee with developments.

Line of Credit Proposed Board Resolution

Chris presented a preview of the resolution to bring to the board establishing a line of credit at Umpqua Bank. This will be a commitment to a line of credit for two years for $10 million at a floating interest rate (SOFR) + 1.75% conditioned on the terms and conditions of the line of credit provided by Umpqua Bank. There will be no annual fee for this service, and the resolution provides that Chris Dunning as CFO is authorized to request draws against the line of credit. Any withdrawals are to be reported to the committee, and this has been added to the resolution.

Adjourn Meeting

Thelma Fleming adjourned the meeting at 4:43 p.m.

Next meeting is May 23rd at 3 p.m.

PINK PAPER

Statement of Net Assets
Period Ending March2024

Overview:

- Net Assets have increased by $16M since the beginning of the year.
- An increase in Net Assets is typical in the first three quarters as revenues are generally high and incentive spending is comparatively low until the trend reverses in the final quarter of the year.

Funding Source	Net Assets Beginning of Year	Current Year Net Income	Interest Income Distribution	Transfer Between FS	Net Assets
PGE	$ 26,314,101	$ 3,737,258	$ 318,207	$ -	$ 30,369,566
PAC	$ 7,952,189	$ 1,138,491	$ 96,214	$ -	$ 9,186,894
NW Natural	$ 10,610,922	$ 6,007,345	$ 153,720	$ -	$ 16,771,987
NWN - Industrial	$ 3,303,684	$ 1,229,806	$ 44,244	$ -	$ 4,577,734
CNG	$ 3,452,582	$ 39,107	$ 39,203	$ -	$ 3,530,893
Avista Gas	$ 1,254,246	$ (186,196)	$ 13,110	$ -	$ 1,081,160
AVI Interruptible	$ 278,144	$ 20,931	$ -	$ -	$ 299,075
OPUC Efficiency	**$ 53,165,868**	**$ 11,986,742**	**$ 664,699**	**$ -**	**$ 65,817,309**
PGE	$ 12,550,933	$ 1,186,067	$ 148,407	$ -	$ 13,885,407
PAC	$ 8,420,425	$ 943,754	$ 100,402	$ -	$ 9,464,580
OPUC Renewables	**$ 20,971,358**	**$ 2,129,821**	**$ 248,808**	**$ -**	**$ 23,349,987**
NWN Washington	$ 587,590	$ 513,644	$ 9,534	$ -	$ 1,110,768
NWN Transport	$ -	$ -	$ -	$ -	$ -
CNG Transport	$ -	$ -	$ -	$ -	$ -
AVI Transport	$ 174,550	$ (34,655)	$ -	$ -	$ 139,895
LMI	$ (5,004)	$ (651)	$ (60)	$ -	$ (5,715)
Community Solar	$ 0	$ 58,734	$ 332	$ -	$ 59,065
PGE Smart Battery	$ 31,440	$ (4,362)	$ 330	$ -	$ 27,409
NWN Geo TLM Phase 3	$ 348,408	$ -	$ 3,934	$ -	$ 352,342
NREL Program	$ (0)	$ (0)	$ (0)	$ -	$ (0)
SALMON Program	$ (42,471)	$ (50,106)	$ (762)	$ -	$ (93,339)
FEMA Program	$ (13,397)	$ (1,474)	$ (160)	$ -	$ (15,031)
PGE Inverter	$ 13,617	$ (33)	$ 275	$ -	$ 13,859
ODOE Cooling	$ (0)	$ 0	$ (0)	$ -	$ 0
FlexFeeder	$ 51,836	$ 12,242	$ -	$ -	$ 64,079
Development	$ 573,673	$ 102	$ 6,354	$ -	$ 580,129
Total Contracts + Grants	**$ 1,720,242**	**$ 493,442**	**$ 19,777**	**$ -**	**$ 2,233,461**
Craft3 Loans	$ 2,300,000	$ -	$ -	$ (800,000)	$ 1,500,000
Operational Contingency	$ 5,487,654	$ 1,066,799	$ (933,284)	$ 800,000	$ 6,421,169
Emergency Contingency	$ 3,000,000	$ -	$ -	$ -	$ 3,000,000
Total Investments + Contingency	**$ 10,787,654**	**$ 1,066,799**	**$ (933,284)**	**$ -**	**$ 10,921,169**
Total Net Assets	**$ 86,645,121**	**$ 15,676,805**	**$ 0**	**$ -**	**$ 102,321,926**

Statement of Profit and Loss
Period Ending March2024

Overview:

- Revenue is 3% under the Current Period budget and 1% under the YTD budget.
- Expenses are 7% under the Current Period budget and 6% under the YTD budget.

	Current Period Actual	Current Period Budget	$ Variance	% Variance	YTD Actual	YTD Budget	$ Variance	% Variance	Annual Budget	Notes
Revenue from Utilities	$ 22,360,828	$ 23,310,282	$ (949,454)	-4.07%	$ 65,923,091	$ 67,255,647	$ (1,332,556)	-1.98%	$ 261,373,443	
Contract Revenue	$ 107,723	$ 191,510	$ (83,787)	-43.75%	$ 392,985	$ 560,622	$ (167,636)	-29.90%	$ 2,403,804	
Grant Revenue	$ -	$ 500	$ (500)	-100.00%	$ -	$ 1,500	$ (1,500)	-100.00%	$ 6,000	
Contributed Income	$ 19	$ -	$ 19		$ 87	$ -	$ 87		$ -	
Investment Income	$ 353,841	$ 125,000	$ 228,841	183.07%	$ 1,066,799	$ 375,000	$ 691,799	184.48%	$ 1,500,000	
Revenue	**$ 22,822,412**	**$ 23,627,292**	**$ (804,881)**	**-3.41%**	**$ 67,382,963**	**$ 68,192,769**	**$ (809,806)**	**-1.19%**	**$ 265,283,247**	
Incentives	$ 9,675,192	$ 9,882,150	$ (206,958)	-2.09%	$ 21,786,991	$ 19,545,116	$ 2,241,875	11.47%	$ 161,445,804	
Program Delivery Contractors	$ 6,985,042	$ 7,485,584	$ (500,542)	-6.69%	$ 20,256,148	$ 22,456,752	$ (2,200,605)	-9.80%	$ 90,427,897	
Employee Salaries & Fringe Benefits	$ 2,078,915	$ 2,081,326	$ (2,412)	-0.12%	$ 5,957,065	$ 6,307,584	$ (350,519)	-5.56%	$ 26,935,883	Under-budget due to retroactive merit increase paid in April. Delta expected to reduce significantly next month.
Agency Contractor Services	$ 105,664	$ 177,308	$ (71,643)	-40.41%	$ 301,029	$ 531,923	$ (230,894)	-43.41%	$ 2,127,692	Delayed contractor hires/onboarding.
Planning and Evaluation Services	$ 240,504	$ 346,774	$ (106,270)	-30.65%	$ 680,042	$ 1,040,322	$ (360,280)	-34.63%	$ 4,161,288	Budget timing issues; spending will occur later in the year.
Advertising and Marketing Services	$ 206,819	$ 408,000	$ (201,181)	-49.31%	$ 519,886	$ 1,224,000	$ (704,114)	-57.53%	$ 4,896,000	Delay in campaign launch and media buys; spending will increase in Q2.
Other Professional Services	$ 508,243	$ 872,786	$ (364,543)	-41.77%	$ 1,420,472	$ 2,679,857	$ (1,259,385)	-46.99%	$ 10,534,929	Budget timing issues; spending will occur later in the year.
Travel, Meetings, Trainings & Conferences	$ 44,902	$ 82,980	$ (38,077)	-45.89%	$ 110,860	$ 285,439	$ (174,579)	-61.16%	$ 1,033,756	Budget timing issues; spending will occur later in the year.
Dues, Licenses and Fees	$ 30,586	$ 40,507	$ (9,921)	-24.49%	$ 59,251	$ 121,521	$ (62,270)	-51.24%	$ 486,160	Budget timing issues; spending will occur later in the year.
Software and Hardware	$ 71,363	$ 131,280	$ (59,918)	-45.64%	$ 208,233	$ 393,841	$ (185,608)	-47.13%	$ 1,575,365	EFS project postponed to 2025. Budget timing issues; non-EFS spending will occur later in the year.
Depreciation & Amortization	$ 22,786	$ 40,315	$ (17,528)	-43.48%	$ 69,215	$ 103,612	$ (34,397)	-33.20%	$ 459,373	
Office Rent and Equipment	$ 108,905	$ 113,809	$ (4,903)	-4.31%	$ 289,010	$ 341,427	$ (52,417)	-15.35%	$ 1,365,707	
Materials Postage and Telephone	$ 3,392	$ 15,518	$ (12,127)	-78.14%	$ 23,414	$ 46,555	$ (23,141)	-49.71%	$ 186,220	Budget timing issues; spending will occur later in the year.
Miscellaneous Expenses	$ (0)	$ 981	$ (981)	-100.00%	$ 24,540	$ 2,943	$ 21,598	734.00%	$ 11,770	Craft3 LLR Claim
Expenditures	**$ 20,082,313**	**$ 21,679,317**	**$ (1,597,004)**	**-7.37%**	**$ 51,706,158**	**$ 55,080,892**	**$ (3,374,734)**	**-6.13%**	**$ 305,647,844**	
Net Income	**$ 2,740,098**	**$ 1,947,975**	**$ 792,123**	**40.66%**	**$ 15,676,805**	**$ 13,111,877**	**$ 2,564,928**	**19.56%**	**$ (40,364,597)**	

Net Income by Funder
Period Ending March2024

Overview:
- Total net income is 41% over the Current Period budget and 20% over the YTD budget.

Funder	Current Period Actual	Current Period Budget	$ Variance	% Variance	YTD Actual	YTD Budget	$ Variance	% Variance
PGE Efficiency	$ (257,957)	$ (1,285,315)	$ 1,027,358	-79.93%	$ 4,055,465	$ 1,916,047	$ 2,139,418	111.66%
PGE Renewables	$ 475,525	$ 70,630	$ 404,896	573.26%	$ 1,334,474	$ 602,265	$ 732,209	121.58%
Total PGE	**$ 217,568**	**$ (1,214,685)**	**$ 1,432,253**	**-117.91%**	**$ 5,389,939**	**$ 2,518,312**	**$ 2,871,627**	**114.03%**
PAC Efficiency	$ (30,372)	$ (979,465)	$ 949,094	-96.90%	$ 1,234,705	$ 1,100,523	$ 134,182	12.19%
PAC Renewables	$ 294,897	$ 27,894	$ 267,003	957.19%	$ 1,044,155	$ 336,442	$ 707,713	210.35%
Total PAC	**$ 264,526**	**$ (951,571)**	**$ 1,216,097**	**-127.80%**	**$ 2,278,860**	**$ 1,436,966**	**$ 841,895**	**58.59%**
NW Natural	$ 728,743	$ 1,496,882	$ (768,139)	-51.32%	$ 6,161,065	$ 6,318,038	$ (156,973)	-2.48%
NWN - Industrial	$ 2,131,249	$ 2,333,864	$ (202,615)	-8.68%	$ 1,274,050	$ 1,168,644	$ 105,406	9.02%
Cascade Natural Gas	$ (277,498)	$ (6,187)	$ (271,311)	4385.01%	$ 78,311	$ 417,942	$ (339,631)	-81.26%
Avista Gas	$ (135,508)	$ (14,784)	$ (120,723)	816.56%	$ (173,086)	$ 84,317	$ (257,403)	-305.28%
AVI Interruptible	$ 26,936	$ 6,573	$ 20,363	309.77%	$ 20,931	$ (35,673)	$ 56,605	-158.68%
NWN Washington	$ (245,340)	$ (270,007)	$ 24,667	-9.14%	$ 523,178	$ 446,368	$ 76,811	17.21%
NWN Transport	$ -	$ 442,273	$ (442,273)	-100.00%	$ -	$ 397,881	$ (397,881)	-100.00%
AVI Transport	$ (13,720)	$ (5,691)	$ (8,030)	141.10%	$ (34,655)	$ (4,060)	$ (30,595)	753.61%
LMI	$ (673)	$ 500	$ (1,173)	-234.56%	$ (711)	$ 1,500	$ (2,211)	-147.41%
Community Solar	$ 11,712	$ 15,730	$ (4,018)	-25.54%	$ 59,065	$ 43,536	$ 15,529	35.67%
PGE Smart Battery	$ 2,512	$ (564)	$ 3,076	-545.25%	$ (4,031)	$ (3,846)	$ (185)	4.81%
NWN Geo TLM Phase 3	$ 1,266	$ -	$ 1,266		$ 3,934	$ -	$ 3,934	
NREL Program	$ -	$ -	$ -		$ -	$ -	$ -	
SALMON Program	$ (21,800)	$ (4,496)	$ (17,303)	384.82%	$ (50,868)	$ (18,815)	$ (32,053)	170.36%
FEMA Program	$ (888)	$ -	$ (888)		$ (1,633)	$ -	$ (1,633)	
PGE Inverter	$ 425	$ 672	$ (247)	-36.82%	$ 242	$ 1,624	$ (1,382)	-85.10%
ODOE Cooling	$ 0	$ 2,017	$ (2,017)	-100.00%	$ 0	$ (11,121)	$ 11,121	-100.00%
FlexFeeder	$ 5,525	$ (3,901)	$ 9,426	-241.64%	$ 12,242	$ (13,474)	$ 25,716	-190.86%
Development	$ 667	$ (3,650)	$ 4,317	-118.27%	$ 6,456	$ (11,262)	$ 17,718	-157.32%
Investment & Contingency	$ 44,398	$ 125,000	$ (80,602)	-64.48%	$ 133,515	$ 375,000	$ (241,485)	-64.40%
Total	**$ 2,740,098**	**$ 1,947,975**	**$ 792,123**	**40.66%**	**$ 15,676,805**	**$ 13,111,877**	**$ 2,564,928**	**19.56%**

Revenue Statement by Funder
Period Ending March2024

Overview:
- Total revenue is 3% under the Current Period budget and 1% under the YTD budget.

Funding Source	Current Period Actual	Current Period Budget	$ Variance	% Variance	YTD Actual	YTD Budget	$ Variance	% Variance	Notes
PGE Efficiency	$ 7,960,249	$ 7,908,547	$ 51,702	0.65%	$ 24,643,053	$ 25,033,768	$ (390,715)	-1.56%	
PGE Renewables	$ 1,211,139	$ 1,099,800	$ 111,339	10.12%	$ 3,565,586	$ 3,408,790	$ 156,796	4.60%	
Total PGE	**$ 9,171,387**	**$ 9,008,347**	**$ 163,040**	**1.81%**	**$ 28,208,639**	**$ 28,442,558**	**$ (233,919)**	**-0.82%**	
PAC Efficiency	$ 5,316,390	$ 5,475,375	$ (158,985)	-2.90%	$ 16,721,192	$ 17,247,217	$ (526,025)	-3.05%	
PAC Renewables	$ 792,736	$ 714,532	$ 78,204	10.94%	$ 2,382,131	$ 2,255,988	$ 126,143	5.59%	
Total PAC	**$ 6,109,126**	**$ 6,189,907**	**$ (80,781)**	**-1.31%**	**$ 19,103,323**	**$ 19,503,205**	**$ (399,882)**	**-2.05%**	
NW Natural	$ 3,250,255	$ 3,825,328	$ (575,073)	-15.03%	$ 12,049,174	$ 12,265,229	$ (216,056)	-1.76%	
NWN - Industrial	$ 3,110,529	$ 3,110,530	$ (1)	0.00%	$ 3,110,529	$ 3,110,530	$ (1)	0.00%	
Cascade Natural Gas	$ 408,127	$ 367,619	$ 40,508	11.02%	$ 1,444,680	$ 1,380,753	$ 63,927	4.63%	
Avista Gas	$ 275,349	$ 275,349	$ (0)	0.00%	$ 826,046	$ 826,047	$ (1)	0.00%	
AVI Interruptible	$ 36,055	$ 36,055	$ -	0.00%	$ 36,055	$ 36,055	$ -	0.00%	
NWN Washington	$ -	$ -	$ -		$ 1,144,645	$ 1,144,645	$ -	0.00%	
NWN Transport	$ -	$ 472,409	$ (472,409)	-100.00%	$ -	$ 472,409	$ (472,409)	-100.00%	Project start delayed. Will proceed with only SEM services/decreased activity.
CNG Transport	$ -	$ -	$ -		$ -	$ -	$ -		
AVI Transport	$ -	$ 24,738	$ (24,738)	-100.00%	$ -	$ 74,216	$ (74,216)	-100.00%	Offering paused until ~2025.
LMI	$ -	$ 500	$ (500)	-100.00%	$ -	$ 1,500	$ (1,500)	-100.00%	Revenue expected later in the year, contract extension through September recently finalized.
Community Solar	$ 39,042	$ 45,058	$ (6,016)	-13.35%	$ 141,021	$ 135,174	$ 5,846	4.33%	
PGE Smart Battery	$ 5,704	$ 33,933	$ (28,229)	-83.19%	$ 5,704	$ 101,800	$ (96,096)	-94.40%	Primarily driven by incentive underspend - slower to gain participation than expected.
NWN Geo TLM Phase 3	$ -	$ -	$ -		$ -	$ -	$ -		
NREL Program	$ -	$ -	$ -		$ -	$ -	$ -		
SALMON Program	$ 20,815	$ 38,605	$ (17,789)	-46.08%	$ 69,943	$ 115,814	$ (45,871)	-39.61%	Budget timing issue.
FEMA Program	$ -	$ -	$ -		$ -	$ -	$ -		
PGE Inverter	$ 494	$ 4,792	$ (4,297)	-89.69%	$ 469	$ 14,375	$ (13,906)	-96.74%	Primarily driven by incentive underspend - slower to gain participation than expected.
ODOE Cooling	$ 23,786	$ 46,923	$ (23,138)	-49.31%	$ 140,935	$ 126,861	$ 14,074	11.09%	
FlexFeeder	$ 17,881	$ 22,199	$ (4,318)	-19.45%	$ 32,756	$ 66,598	$ (33,842)	-50.82%	Primarily driven by incentive underspend - slower to gain participation than expected.
Development	$ 19	$ -	$ 19		$ 2,245	$ -	$ 2,245		
Investment & Contingency	$ 353,841	$ 125,000	$ 228,841	183.07%	$ 1,066,799	$ 375,000	$ 691,799	184.48%	Annual estimate/12. Expect lower monthly revenue as the year progresses and reserves decrease.
Total	**$ 22,822,412**	**$ 23,627,292**	**$ (804,881)**	**-3.41%**	**$ 67,382,963**	**$ 68,192,769**	**$ (809,806)**	**-1.19%**	

Expenses by Funder
Period Ending March2024

Overview:
- Total expenses are 7% under the Current Period budget and 6% under the YTD budget.

Funder	Current Period Actual	Current Period Budget	$ Variance	% Variance	YTD Actual	YTD Budget	$ Variance	% Variance
PGE Efficiency	$ 8,319,247	$ 9,193,862	$ (874,615)	-9.51%	$ 20,905,794	$ 23,117,721	$ (2,211,927)	-9.57%
PGE Renewables	$ 785,010	$ 1,029,170	$ (244,161)	-23.72%	$ 2,379,519	$ 2,806,525	$ (427,006)	-15.21%
Total PGE	**$ 9,104,257**	**$ 10,223,032**	**$ (1,118,776)**	**-10.94%**	**$ 23,285,313**	**$ 25,924,246**	**$ (2,638,933)**	**-10.18%**
PAC Efficiency	$ 5,377,494	$ 6,454,840	$ (1,077,346)	-16.69%	$ 15,582,701	$ 16,146,694	$ (563,993)	-3.49%
PAC Renewables	$ 531,155	$ 686,638	$ (155,483)	-22.64%	$ 1,438,377	$ 1,919,546	$ (481,168)	-25.07%
Total PAC	**$ 5,908,649**	**$ 7,141,478**	**$ (1,232,828)**	**-17.26%**	**$ 17,021,078**	**$ 18,066,239**	**$ (1,045,161)**	**-5.79%**
NW Natural	$ 2,573,578	$ 2,328,446	$ 245,132	10.53%	$ 6,041,829	$ 5,947,191	$ 94,638	1.59%
NWN - Industrial	$ 1,001,594	$ 776,666	$ 224,928	28.96%	$ 1,880,723	$ 1,941,886	$ (61,163)	-3.15%
Cascade Natural Gas	$ 697,137	$ 373,806	$ 323,330	86.50%	$ 1,405,573	$ 962,811	$ 442,762	45.99%
Avista Gas	$ 414,543	$ 290,133	$ 124,410	42.88%	$ 1,012,243	$ 741,730	$ 270,513	36.47%
AVI Interruptible	$ 9,119	$ 29,482	$ (20,363)	-69.07%	$ 15,124	$ 71,728	$ (56,605)	-78.92%
NWN Washington	$ 247,461	$ 270,007	$ (22,546)	-8.35%	$ 631,001	$ 698,277	$ (67,276)	-9.63%
NWN Transport	$ -	$ 30,136	$ (30,136)	-100.00%	$ -	$ 74,528	$ (74,528)	-100.00%
AVI Transport	$ 13,720	$ 30,429	$ (16,708)	-54.91%	$ 34,655	$ 78,276	$ (43,621)	-55.73%
LMI	$ 651	$ -	$ 651		$ 651	$ -	$ 651	
Community Solar	$ 27,482	$ 29,328	$ (1,847)	-6.30%	$ 82,287	$ 91,638	$ (9,351)	-10.20%
PGE Smart Battery	$ 3,308	$ 34,497	$ (31,189)	-90.41%	$ 10,066	$ 105,646	$ (95,580)	-90.47%
NWN Geo TLM Phase 3	$ -	$ 0	$ (0)	-100.00%	$ -	$ 0	$ (0)	-100.00%
NREL Program	$ -	$ 0	$ (0)	-100.00%	$ -	$ 0	$ (0)	-100.00%
SALMON Program	$ 42,288	$ 43,101	$ (814)	-1.89%	$ 120,049	$ 134,629	$ (14,580)	-10.83%
FEMA Program	$ 833	$ -	$ 833		$ 1,474	$ -	$ 1,474	
PGE Inverter	$ 159	$ 4,119	$ (3,960)	-96.13%	$ 502	$ 12,751	$ (12,249)	-96.06%
ODOE Cooling	$ 23,786	$ 44,906	$ (21,120)	-47.03%	$ 140,934	$ 137,982	$ 2,953	2.14%
FlexFeeder	$ 12,356	$ 26,100	$ (13,744)	-52.66%	$ 20,513	$ 80,071	$ (59,558)	-74.38%
Development	$ 1,392	$ 3,650	$ (2,258)	-61.86%	$ 2,143	$ 11,262	$ (9,119)	-80.97%
Total	**$ 20,082,313**	**$ 21,679,317**	**$ (1,597,004)**	**-7.37%**	**$ 51,706,158**	**$ 55,080,892**	**$ (3,374,734)**	**-6.13%**

Statement of Functional Expenses
Period Ending March2024

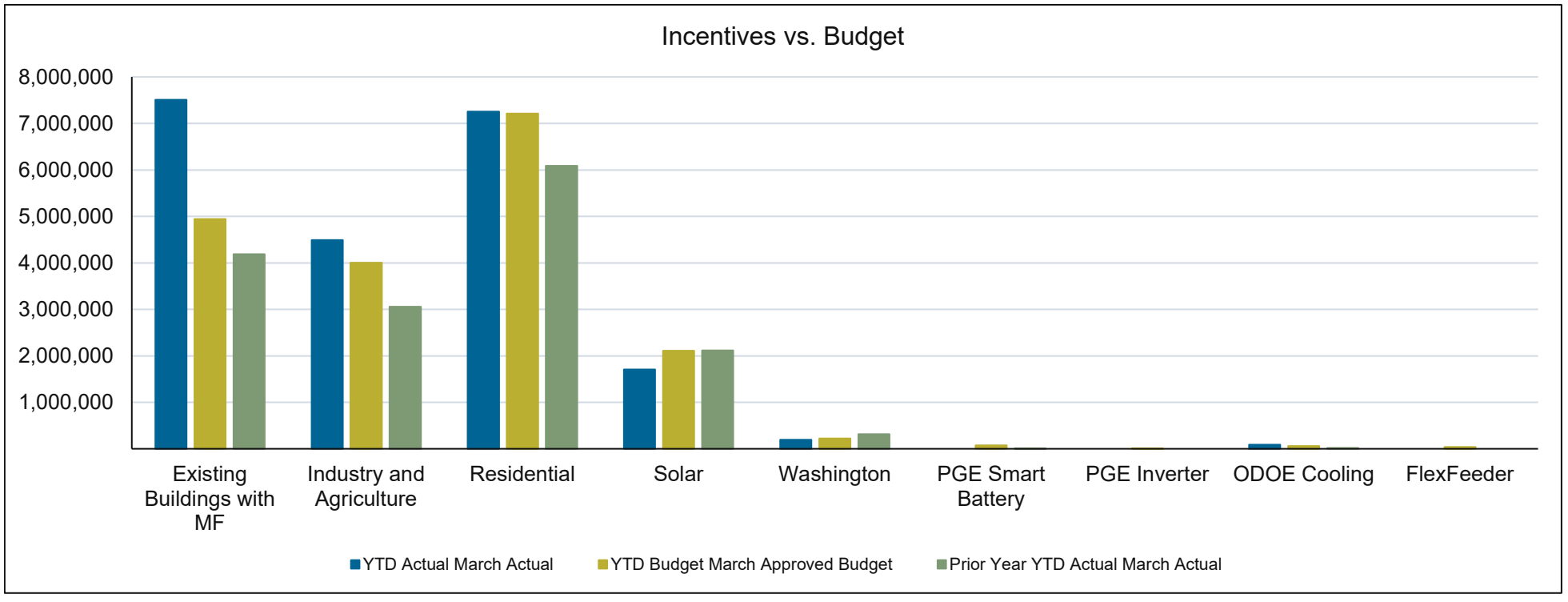
OPUC Only Performance Metric	Measure	Current Metric	Status	Notes
Administrative Costs	<= 6.5% of Expenses	6.8%	Exceeding Metric	Common to exceed early in the year due to expense timing curves.
Employee Salaries + Fringe Benefits	<= 9.5% of Expenses	11.2%	Exceeding Metric	Common to exceed early in the year due to expense timing curves.

Total Organizational Expenses	Efficiency Programs	Renewables Programs	Washington Programs	Contracts + Grants	Total Programs	Fund Development	Communications + Outreach	Management + General	Total Administrative	Total Company
Incentives	$ 19,663,466	$ 1,841,444	$ 191,653	$ 90,428	**$ 21,786,991**	**$ -**	$ -	$ -	**$ -**	**$ 21,786,991**
Program Delivery Contractors	$ 19,530,412	$ 430,991	$ 267,404	$ 27,341	**$ 20,256,148**	**$ -**	$ -	$ -	**$ -**	**$ 20,256,148**
Employee Salaries & Fringe Benefits	$ 2,541,203	$ 768,410	$ 93,748	$ 161,056	**$ 3,564,417**	**$ 1,259**	$ 876,204	$ 1,515,186	**$ 2,391,390**	**$ 5,957,065**
Agency Contractor Services	$ 15,126	$ 53,709	$ 570	$ 16,669	**$ 86,073**	**$ 9**	$ 7,548	$ 207,399	**$ 214,947**	**$ 301,029**
Planning and Evaluation Services	$ 659,544	$ 15,101	$ 2,159	$ (0)	**$ 676,804**	**$ -**	$ 3,238	$ -	**$ 3,238**	**$ 680,042**
Advertising and Marketing Services	$ 204,168	$ 61,111	$ -	$ (2,158)	**$ 263,121**	**$ -**	$ 256,765	$ -	**$ 256,765**	**$ 519,886**
Other Professional Services	$ 776,504	$ 237,730	$ 6,658	$ 43,395	**$ 1,064,287**	**$ 1**	$ 2,555	$ 353,630	**$ 356,185**	**$ 1,420,472**
Travel, Meetings, Trainings & Conferences	$ 23,722	$ 10,275	$ 32	$ 32	**$ 34,062**	**$ 751**	$ 17,626	$ 58,422	**$ 76,048**	**$ 110,860**
Dues, Licenses and Fees	$ 21,926	$ 5,281	$ 17,759	$ 46	**$ 45,012**	**$ 1**	$ 8,271	$ 5,968	**$ 14,239**	**$ 59,251**
Software and Hardware	$ 66,444	$ 84,312	$ 2,154	$ 4,093	**$ 157,003**	**$ 30**	$ 18,272	$ 32,928	**$ 51,199**	**$ 208,233**
Depreciation & Amortization	$ 40,564	$ 6,705	$ 808	$ 1,530	**$ 49,607**	**$ 12**	$ 6,988	$ 12,609	**$ 19,597**	**$ 69,215**
Office Rent and Equipment	$ 121,986	$ 40,924	$ 4,873	$ 9,255	**$ 177,038**	**$ 78**	$ 39,887	$ 72,007	**$ 111,894**	**$ 289,010**
Materials Postage and Telephone	$ 9,029	$ 2,596	$ 326	$ 612	**$ 12,563**	**$ 2**	$ 2,723	$ 8,126	**$ 10,849**	**$ 23,414**
Miscellaneous Expenses	$ 20,593	$ -	$ -	$ (0)	**$ 20,593**	**$ -**	$ -	$ 3,947	**$ 3,947**	**$ 24,540**
Expenditures	**$ 43,694,686**	**$ 3,558,588**	**$ 588,144**	**$ 352,300**	**$ 48,193,718**	**$ 2,143**	**$ 1,240,076**	**$ 2,270,222**	**$ 3,510,297**	**$ 51,706,158**

Incentives Expense by Program
Period Ending March2024

Overview:
- Total incentive expenses are 11% over the YTD budget.
- Efficiency incentive expenses are 16% over the YTD budget.
- Renewables incentive expenses are 15% under the YTD budget.
- Other Contract + Grant incentive expenses are 31% under the YTD budget.

	YTD Actual	YTD Budget	$ Variance	% Variance	Prior Year YTD Actual	Prior Year YTD Budget	$ Variance	% of Variance
New Buildings	$ 405,970	$ 801,249	$ (395,279)	-49.33%	$ 271,826	$ 795,452	$ (523,626)	-65.83%
Existing Buildings with MF	$ 7,510,689	$ 4,944,846	$ 2,565,843	51.89%	$ 4,189,531	$ 3,121,733	$ 1,067,798	34.21%
Industry and Agriculture	$ 4,493,475	$ 4,006,401	$ 487,075	12.16%	$ 3,060,036	$ 2,373,718	$ 686,319	28.91%
Residential	$ 7,253,331	$ 7,210,945	$ 42,386	0.59%	$ 6,089,300	$ 5,302,860	$ 786,439	14.83%
OPUC Efficiency	**$ 19,663,466**	**$ 16,963,441**	**$ 2,700,025**	**15.92%**	**$ 13,610,693**	**$ 11,593,763**	**$ 2,016,930**	**17.40%**
Solar	$ 1,705,709	$ 2,112,014	$ (406,305)	-19.24%	$ 2,113,949	$ 2,186,371	$ (72,422)	-3.31%
Other Renewables	$ 135,735	$ 61,746	$ 73,989	119.83%	$ 78,159	$ 169,824	$ (91,665)	-53.98%
OPUC Renewables	**$ 1,841,444**	**$ 2,173,760**	**$ (332,316)**	**-15.29%**	**$ 2,192,108**	**$ 2,356,195**	**$ (164,087)**	**-6.96%**
Washington	$ 191,653	$ 225,798	$ (34,145)	-15.12%	$ 314,422	$ 203,038	$ 111,384	54.86%
PGE Smart Battery	$ -	$ 77,760	$ (77,760)	-100.00%	$ 5,000	$ 62,500	$ (57,500)	-92.00%
PGE Inverter	$ -	$ 6,250	$ (6,250)	-100.00%	$ -	$ 12,500	$ (12,500)	-100.00%
ODOE Cooling	$ 90,428	$ 60,000	$ 30,428	50.71%	$ 21,308	$ 96,409	$ (75,101)	-77.90%
FlexFeeder	$ -	$ 38,107	$ (38,107)	-100.00%	$ -	$ -	$ -	
Total	**$ 21,786,991**	**$ 19,545,116**	**$ 2,241,875**	**11.47%**	**$ 16,143,532**	**$ 14,324,405**	**$ 1,819,126**	**12.70%**



Expenses by Program
Period Ending March2024

	Current Period Actual	Current Period Budget	$ Variance	% Variance	YTD Actual	YTD Budget	$ Variance	% Variance
New Buildings	$ 991,746	$ 1,413,353	$ (421,607)	-29.83%	$ 3,037,004	$ 3,781,457	$ (744,453)	-19.69%
Existing Buildings with MF	$ 7,307,132	$ 6,755,436	$ 551,696	8.17%	$ 17,752,362	$ 17,318,474	$ 433,887	2.51%
NEEA Commercial	$ 406,848	$ 416,258	$ (9,410)	-2.26%	$ 1,225,451	$ 1,270,769	$ (45,318)	-3.57%
Commercial Sector	$ 8,705,726	$ 8,585,046	$ 120,679	1.41%	$ 22,014,817	$ 22,370,701	$ (355,884)	-1.59%
Industry and Agriculture	$ 3,692,697	$ 4,006,985	$ (314,287)	-7.84%	$ 9,177,535	$ 9,486,559	$ (309,024)	-3.26%
NEEA - Industrial	$ 0	$ 6,730	$ (6,730)	-100.00%	$ (5)	$ 20,551	$ (20,556)	-100.02%
Industry and Agriculture Sector	$ 3,692,697	$ 4,013,714	$ (321,017)	-8.00%	$ 9,177,531	$ 9,507,111	$ (329,580)	-3.47%
Residential	$ 5,633,069	$ 6,524,904	$ (891,835)	-13.67%	$ 14,530,455	$ 16,032,082	$ (1,501,627)	-9.37%
NEEA Residential	$ 374,941	$ 384,135	$ (9,195)	-2.39%	$ 1,155,840	$ 1,172,671	$ (16,832)	-1.44%
Residential Sector	$ 6,008,009	$ 6,909,039	$ (901,030)	-13.04%	$ 15,686,294	$ 17,204,753	$ (1,518,459)	-8.83%
OPUC Efficiency	**$ 18,406,432**	**$ 19,507,800**	**$ (1,101,367)**	**-5.65%**	**$ 46,878,642**	**$ 49,082,565**	**$ (2,203,923)**	**-4.49%**
Solar	$ 1,254,213	$ 1,632,895	$ (378,682)	-23.19%	$ 3,655,266	$ 4,472,501	$ (817,235)	-18.27%
Other Renewables	$ 61,952	$ 82,913	$ (20,961)	-25.28%	$ 162,630	$ 253,569	$ (90,939)	-35.86%
OPUC Renewables	**$ 1,316,165**	**$ 1,715,808**	**$ (399,643)**	**-23.29%**	**$ 3,817,896**	**$ 4,726,070**	**$ (908,174)**	**-19.22%**
Total OPUC Programs	**$ 19,722,597**	**$ 21,223,608**	**$ (1,501,011)**	**-7.07%**	**$ 50,696,538**	**$ 53,808,635**	**$ (3,112,097)**	**-5.78%**
Washington	$ 247,461	$ 270,007	$ (22,546)	-8.35%	$ 631,001	$ 698,277	$ (67,276)	-9.63%
LMI	$ 651	$ -	$ 651		$ 651	$ -	$ 651	
Community Solar	$ 27,482	$ 29,328	$ (1,847)	-6.30%	$ 82,287	$ 91,638	$ (9,351)	-10.20%
PGE Smart Battery	$ 3,308	$ 34,497	$ (31,189)	-90.41%	$ 10,066	$ 105,646	$ (95,580)	-90.47%
NWN Geo TLM Phase 3	$ -	$ 0	$ (0)	-100.00%	$ -	$ 0	$ (0)	-100.00%
NREL Program	$ -	$ 0	$ (0)	-100.00%	$ -	$ 0	$ (0)	-100.00%
SALMON Program	$ 42,288	$ 43,101	$ (814)	-1.89%	$ 120,049	$ 134,629	$ (14,580)	-10.83%
FEMA Program	$ 833	$ -	$ 833		$ 1,474	$ -	$ 1,474	
PGE Inverter	$ 159	$ 4,119	$ (3,960)	-96.13%	$ 502	$ 12,751	$ (12,249)	-96.06%
ODOE Cooling	$ 23,786	$ 44,906	$ (21,120)	-47.03%	$ 140,934	$ 137,982	$ 2,953	2.14%
FlexFeeder	$ 12,356	$ 26,100	$ (13,744)	-52.66%	$ 20,513	$ 80,071	$ (59,558)	-74.38%
Other Contracts + Grants	**$ 358,324**	**$ 452,060**	**$ (93,736)**	**-20.74%**	**$ 1,007,477**	**$ 1,260,995**	**$ (253,517)**	**-20.10%**
Development	**$ 1,392**	**$ 3,650**	**$ (2,258)**	**-61.86%**	**$ 2,143**	**$ 11,262**	**$ (9,119)**	**-80.97%**
Total Company	**$ 20,082,313**	**$ 21,679,317**	**$ (1,597,004)**	**-7.37%**	**$ 51,706,158**	**$ 55,080,892**	**$ (3,374,734)**	**-6.13%**

Balance Sheet
Period Ending March2024

	March2024	February2024	March2023	One Month Change	One Year Change
Cash	$ 107,561,872	$ 105,882,413	$ 119,942,475	$ 1,679,459	$ (12,380,603)
Accounts Receivable	$ 222,265	$ 282,264	$ 214,005	$ (60,000)	$ 8,260
Prepaid	$ 1,238,907	$ 1,281,869	$ 750,066	$ (42,962)	$ 488,841
Advances to Vendors	$ 2,380,504	$ 743,459	$ 2,072,847	$ 1,637,045	$ 307,657
Current Assets	$ 111,403,548	$ 108,190,005	$ 122,979,393	$ 3,213,542	$ (11,575,845)
Fixed Assets	$ 7,894,978	$ 7,931,481	$ 8,639,464	$ (36,503)	$ (744,486)
Depreciation	$ (6,163,371)	$ (6,140,585)	$ (5,856,399)	$ (22,786)	$ (306,972)
Net Fixed Assets	$ 1,731,607	$ 1,790,896	$ 2,783,065	$ (59,290)	$ (1,051,459)
Deposits	$ 280,899	$ 267,559	$ 267,559	$ 13,340	$ 13,340
Deferred Compensation Asset	$ 1,257,457	$ 1,255,571	$ 1,212,256	$ 1,885	$ 45,200
Note Receivable, net of allowance	$ 1,288,151	$ 1,288,151	$ 1,282,331	$ -	$ 5,821
Other Assets	$ 2,826,507	$ 2,811,282	$ 2,762,146	$ 15,225	$ 64,361
Assets	**$ 115,961,661**	**$ 112,792,183**	**$ 128,524,604**	**$ 3,169,478**	**$ (12,562,942)**
Accounts Payable and Accruals	$ 7,570,584	$ 7,357,193	$ 6,190,336	$ 213,391	$ 1,380,248
Deposits Held for Others	$ 45,000	$ 45,000	$ 25,000	$ -	$ 20,000
Salaries, Taxes, & Benefits Payable	$ 1,509,885	$ 1,183,535	$ 1,626,537	$ 326,350	$ (116,652)
Deferred/Unearned Revenue	$ 1,391,512	$ 1,415,298	$ 1,790,756	$ (23,786)	$ (399,244)
Current Liabilities	$ 10,516,981	$ 10,001,027	$ 9,632,629	$ 515,955	$ 884,352
Deferred Compensation Payable	$ 1,259,860	$ 1,257,975	$ 1,214,462	$ 1,885	$ 45,398
Deferred Rent	$ 1,857,661	$ 1,946,121	$ 2,919,181	$ (88,460)	$ (1,061,520)
Other Long Term Liabilities	$ 5,230	$ 5,230	$ 5,230	$ -	$ -
Long Term Liabilities	**$ 3,122,750**	**$ 3,209,325**	**$ 4,138,873**	**$ (86,575)**	**$ (1,016,123)**
Liabilities	**$ 13,639,732**	**$ 13,210,352**	**$ 13,771,502**	**$ 429,380**	**$ (131,770)**
Net Assets	**$ 102,321,926**	**$ 99,581,828**	**$ 114,753,099**	**$ 2,740,098**	**$ (12,431,173)**

Energy Trust of Oregon
Contract Status Summary Report

Report Date: 4/17/2024

For contracts with costs through: 4/1/2024

Complete List of Contracts Grouped by Size

Contracts in effect on March 31, 2024 including those contracts executed for 2024 and beyond and excluding contracts completed prior to this date

Grouping by Contract Size	Dollars	Number of Contracts	Distribution of Dollars	Distribution of Count
Over $500K	$258,118,059	43	92%	14%
From $400K to $500K	$6,815,170	15	2%	5%
Under $400K	$17,057,778	254	6%	81%
Total	$281,991,007	312		

Grouping by Contract Size	Contract Amount	Contractor	Description	Program	Start	End
Over $500K	42,866,366	Northwest Energy Efficiency Alliance	NEEA Funding Agreement	Energy Efficiency	1/1/2020	8/1/2025
Over $500K	33,662,505	Northwest Energy Efficiency Alliance	Regional EE Initiative Agmt	Energy Efficiency	1/1/2015	8/1/2025
Over $500K	30,853,332	TRC Environmental Corporation	2024 BE PMC	Energy Efficiency	1/1/2024	12/31/2024
Over $500K	22,190,011	TRC Environmental Corporation	2023 EB PMC	Energy Efficiency	1/1/2023	12/31/2023
Over $500K	15,177,862	CLEAResult Consulting Inc	2024 Residential PMC	Energy Efficiency	1/1/2024	12/31/2024
Over $500K	11,584,800	Energy 350 Inc	2024 PE PMC	Energy Efficiency	1/1/2024	12/31/2024
Over $500K	11,343,292	G&I VII Five Oak Owner LLC	Office Lease - 421 SW Oak	Administration	11/21/2011	12/31/2025
Over $500K	10,368,842	CLEAResult Consulting Inc	2023 Residential PMC	Energy Efficiency	1/1/2023	12/31/2023
Over $500K	9,538,754	Energy 350 Inc	2023 PE PMC	Energy Efficiency	1/1/2023	12/31/2023
Over $500K	7,984,733	CLEAResult Consulting Inc	2024 NBE PMC	Energy Efficiency	1/1/2024	12/31/2024
Over $500K	6,868,034	CLEAResult Consulting Inc	2023 NBE PMC	Energy Efficiency	1/1/2023	12/31/2023
Over $500K	6,221,925	CLEAResult Consulting Inc	2024 Lighting PDC	Energy Efficiency	1/1/2024	12/31/2024
Over $500K	5,549,673	CLEAResult Consulting Inc	2023 Lighting PDC	Energy Efficiency	1/1/2023	12/31/2023
Over $500K	3,203,706	TRC Engineers Inc.	2024 EPS New Const PDC	Energy Efficiency	1/1/2024	12/31/2024
Over $500K	3,135,397	TRC Engineers Inc.	2023 EPS New Const PDC	Energy Efficiency	1/1/2023	12/31/2023
Over $500K	3,078,000	Grady Britton, Inc	Media Services Agreement	Communications	1/1/2023	12/31/2024
Over $500K	3,000,000	Clean Water Services	Project Funding Agreement	Renewable Energy	11/25/2014	11/25/2039
Over $500K	3,000,000	City of Salem	Biogas Project - Willow Lake	Renewable Energy	9/4/2018	11/30/2040
Over $500K	2,500,000	Farmers Conservation Alliance	Irrigation Modernization	Renewable Energy	4/1/2019	3/31/2024
Over $500K	2,097,000	Colehour & Cohen	Public Relations Services	Communications	2/1/2022	12/31/2024
Over $500K	2,081,000	Northwest Power & Conservation Council	Regional Technical Forum Agrmt	Energy Efficiency	1/1/2020	12/31/2024
Over $500K	1,950,000	Intel Corporation	EE Project Funding Agreement	Energy Efficiency	12/2/2021	12/31/2025
Over $500K	1,800,000	Water Environment Services, A Dept. of Clackamas County	Bio Water Cogeneration System	Renewable Energy	11/15/2019	9/30/2041
Over $500K	1,728,537	CLEAResult Consulting Inc	2023 Retail PDC	Energy Efficiency	1/1/2023	12/31/2023
Over $500K	1,728,537	CLEAResult Consulting Inc	2024 Retail PDC	Energy Efficiency	1/1/2024	12/31/2024

For contracts with costs through: 4/1/2024

Grouping by Contract Size	Contract Amount	Contractor	Description	Program	Start	End
Over $500K	1,550,000	Oregon Institute of Technology	Geothermal Resource Funding	Renewable Energy	9/11/2012	9/11/2032
Over $500K	1,000,000	Three Sisters Irrigation District	TSID Hydro	Renewable Energy	4/25/2012	9/30/2032
Over $500K	1,000,000	Farm Power Misty Meadows LLC	Misty Meadows Biogas Facility	Renewable Energy	10/25/2012	10/25/2027
Over $500K	928,040	CLEAResult Consulting Inc	2024 Residential PMC SOLAR	Renewable Energy	1/1/2024	12/31/2024
Over $500K	900,000	Farmers Irrigation District	FID - Plant 2 Hydro	Renewable Energy	4/1/2014	4/1/2034
Over $500K	876,733	Cascade Energy, Inc.	Subscription ServicesAgreement	Energy Efficiency	1/21/2022	8/31/2024
Over $500K	865,000	Three Sisters Irrigation District	Mckenize Reservoir Irrigation	Renewable Energy	3/18/2019	3/17/2039
Over $500K	850,000	Klamath Falls Solar 2 LLC	PV Project Funding Agreement	Renewable Energy	7/11/2016	7/10/2041
Over $500K	827,000	Stahlbush Island Farms, Inc.	Funding Assistance Agreement	Renewable Energy	6/24/2009	6/24/2029
Over $500K	816,549	TRC Environmental Corporation	2023 BE PMC DSM	Energy Efficiency	1/1/2023	12/31/2023
Over $500K	748,000	CLEAResult Consulting Inc	2024 Residential PMC Innov	Energy Efficiency	1/1/2024	12/31/2024
Over $500K	725,000	Energy Assurance Company	Verifier Services Agreement	Renewable Energy	10/15/2022	10/14/2024
Over $500K	641,500	Pivotal Energy Solutions LLC	Software Product Support	Energy Efficiency	1/1/2020	12/31/2024
Over $500K	630,067	CLEAResult Consulting Inc	2023 Residential PMC SOLAR	Renewable Energy	1/1/2023	12/31/2023
Over $500K	588,880	CLEAResult Consulting Inc	2023 Residential PMC Innov	Energy Efficiency	1/1/2023	12/31/2023
Over $500K	573,729	TRC Environmental Corporation	2024 BE PMC WA	Energy Efficiency	1/1/2024	12/31/2024
Over $500K	549,254	TRC Environmental Corporation	2023 BE PMC WA	Energy Efficiency	1/1/2023	12/31/2023
Over $500K	536,000	Community Energy Project, Inc.	HPWH & CPFE Measures	Energy Efficiency	1/25/2022	12/31/2024
From $400K to $500K	500,000	Craft3	Loan Agreement	Energy Efficiency	1/1/2018	12/31/2027
From $400K to $500K	500,000	Craft3	Loan Funding for EE Projects	Energy Efficiency	1/1/2021	9/30/2025
From $400K to $500K	500,000	Verde	DHP Installation Program	Energy Efficiency	1/1/2022	12/31/2024
From $400K to $500K	490,000	Old Mill Solar, LLC	Project Funding Agmt Bly, OR	Renewable Energy	5/29/2015	5/28/2030
From $400K to $500K	483,052	LD Consulting LLC	BL Consulting Services	Energy Efficiency	4/27/2022	1/31/2025
From $400K to $500K	460,000	The Cadmus Group LLC	2022 PE Impact Evaluation	Energy Efficiency	11/1/2023	10/31/2024
From $400K to $500K	460,000	Dell Marketing LP.	Blanket Purhcase Order	Administration	1/1/2023	12/31/2024
From $400K to $500K	450,000	Deschutes Valley Water District	Opal Springs Hydro Project	Renewable Energy	1/1/2018	4/1/2040
From $400K to $500K	450,000	City of Medford	750kW Combined Heat & Power	Renewable Energy	10/20/2011	10/20/2031
From $400K to $500K	450,000	City of Pendleton	Pendleton Microturbines	Renewable Energy	4/20/2012	4/20/2032
From $400K to $500K	428,900	OMBU Inc	New Interactive Forms	Administration	4/2/2018	12/31/2024
From $400K to $500K	420,000	Alternative Energy Systems Consulting, Inc.	TechnicalEnergy Studies& Audit	Energy Efficiency	7/1/2021	6/30/2024
From $400K to $500K	411,718	CLEAResult Consulting Inc	2024 Residential PMC Custsvc	Energy Efficiency	1/1/2024	12/31/2024
From $400K to $500K	411,500	Lake County Resources Initiative	Outreach Services	Communications	1/1/2024	12/31/2024

For contracts with costs through: 4/1/2024

Grouping by Contract Size	Contract Amount	Contractor	Description	Program	Start	End
From $400K to $500K	400,000	Three Sisters Irrigation District	TSID Funding Agreement	Renewable Energy	1/1/2018	12/31/2038
Under $400K	380,000	Tetra Tech Inc	NB Impsct Eval 2021-22	Energy Efficiency	3/1/2023	4/30/2024
Under $400K	355,412	SunE Solar XVI Lessor, LLC	BVT Sexton Mtn PV	Renewable Energy	5/15/2014	12/31/2034
Under $400K	350,000	ThinkShout, Inc.	Web Services & Dev Agreement	Communications	1/1/2024	12/31/2024
Under $400K	350,000	CIty of Gresham	City of Gresham Cogen 2	Renewable Energy	4/9/2014	7/9/2034
Under $400K	337,740	Prophix. Inc	Cloud Services Agreement	Administration	9/1/2022	6/30/2025
Under $400K	329,777	Carahsoft Technology Corporation	DocuSign Master Agreement	Communications	1/31/2018	7/31/2024
Under $400K	326,250	Ekotrop, Inc.	ModelingSoftware for NC	Energy Efficiency	1/21/2020	12/31/2024
Under $400K	315,000	CLEAResult Consulting Inc	HE Assessment Tool	Energy Efficiency	12/16/2021	12/31/2024
Under $400K	306,846	CLEAResult Consulting Inc	2024 Residential PMC WA	Energy Efficiency	1/1/2024	12/31/2024
Under $400K	301,208	CLEAResult Consulting Inc	2023 Residential PMC-CustSvc	Energy Efficiency	1/1/2023	12/31/2023
Under $400K	300,000	Craft3	Loan Agreement	Energy Efficiency	6/1/2014	6/20/2025
Under $400K	286,240	Paladin Risk Management, Ltd	Cert Tracking & License Svc	Administration	9/1/2015	10/1/2024
Under $400K	275,120	Solar Oregon	Outreach & Education Agreement	Renewable Energy	7/1/2022	6/30/2024
Under $400K	270,000	Craft3	NON-EEAST OBR Svc Agrmt	Renewable Energy	1/1/2018	12/31/2024
Under $400K	254,276	CLEAResult Consulting Inc	2023 Residential PMC WA	Energy Efficiency	1/1/2023	12/31/2023
Under $400K	249,394	Wallowa Resources Community Solutions, Inc.	Project Development Assistance	Renewable Energy	4/1/2022	3/31/2025
Under $400K	243,000	The Cadmus Group LLC	C&I LG Impact Evaluations	Energy Efficiency	1/1/2022	12/31/2024
Under $400K	230,000	TRC Environmental Corporation	PDC - Landlord Cooling	Energy Efficiency	4/1/2022	9/30/2024
Under $400K	224,050	Wallowa Resources Community Solutions Inc	Outreach Services	Joint Programs	3/1/2024	2/28/2025
Under $400K	221,492	Latino Built Association for Contractors	Training & Support Services	Communications	1/1/2023	12/31/2024
Under $400K	216,000	Faraday Inc	Software Services Subscription	Renewable Energy	1/15/2019	12/14/2024
Under $400K	200,000	Farmers Conservation Alliance	Irrigation Modernization Serv	Renewable Energy	4/1/2024	3/31/2025
Under $400K	200,000	Craft3	Manufactured Home Pilot Loan	Energy Efficiency	9/20/2018	9/20/2033
Under $400K	200,000	1961 Consulting, LLC	Strategic Planning Services	Communications	8/15/2023	3/31/2025
Under $400K	200,000	ADM Associates, Inc.	2024_25 Fast Feedback Survey	Energy Efficiency	1/8/2024	7/31/2026
Under $400K	198,159	Encore Business Solutions (USA)	Technical Support for GP	Administration	5/1/2021	12/31/2024
Under $400K	197,800	ADM Associates, Inc.	2022_23 Fast Feedback Survey	Energy Efficiency	3/1/2022	6/30/2024
Under $400K	188,766	Borders, Perrin &Norrander, Inc. dba BPN	RES Photo Update Services	Communications	9/1/2023	12/31/2024
Under $400K	185,393	CTX Businss Solutions Inc	Copier Purchase & Maintenance	Administration	1/27/2015	12/31/2024
Under $400K	185,000	Seeds for the Sol	CPF RES Partner Services	Energy Efficiency	2/1/2022	12/31/2024
Under $400K	184,000	3Point Brand Management	Blanket PO	Communications	1/1/2021	12/31/2024
Under $400K	170,000	Community Energy Project, Inc.	Workshop Sponsorship	Energy Efficiency	4/1/2023	3/31/2024

For contracts with costs through: 4/1/2024

Grouping by Contract Size	Contract Amount	Contractor	Description	Program	Start	End
Under $400K	167,767	Clean Power Research, LLC	CPR License Service Agreement	Renewable Energy	7/1/2023	6/30/2024
Under $400K	165,000	DNV Energy Services USA Inc	HER Impact Evaluation	Energy Efficiency	7/11/2023	5/31/2024
Under $400K	161,000	Evergreen Economics	TA Interview Survey	Energy Efficiency	8/23/2023	6/30/2024
Under $400K	150,000	Apex Analytics LLC	No Cost Pilots	Energy Efficiency	4/1/2024	12/31/2026
Under $400K	145,000	EUVALCREE	Energy Assessment Services	Energy Efficiency	2/1/2022	12/31/2024
Under $400K	145,000	Oregon Solar Energy Fund	Solar Education Training	Renewable Energy	6/1/2022	3/31/2024
Under $400K	144,360	TRC Engineers Inc.	2023 EPS New Const PDC Solar	Renewable Energy	1/1/2023	12/31/2023
Under $400K	144,202	Illinois Valley Community Development Organization	Strategic Partnership Services	Energy Efficiency	6/1/2023	12/31/2024
Under $400K	143,688	Allstream	Internet Services	Administration	9/22/2017	1/1/2025
Under $400K	143,000	City of Astoria	Bear Creek Funding Agreement	Renewable Energy	3/24/2014	3/24/2034
Under $400K	142,247	Encore Business Solutions (USA)	GP Annual Enhancement	Administration	9/14/2011	8/31/2024
Under $400K	138,400	Clean Power Research, LLC	WattPlan Software	Renewable Energy	11/17/2017	6/30/2024
Under $400K	136,116	TRC Engineers Inc.	2023 EPS New Const PDC WA	Energy Efficiency	1/1/2023	12/31/2023
Under $400K	135,000	Printable Promotions	Promotional Materials	Communications	4/13/2017	12/31/2024
Under $400K	127,124	EnerCity Collaborative	Workforce Dev Services	Energy Efficiency	3/1/2024	12/31/2024
Under $400K	120,000	Self Enhancement Inc.	Community Support Services	Energy Efficiency	3/15/2024	12/31/2024
Under $400K	115,287	TRC Engineers Inc.	2024 EPS New Const PDC Solar	Renewable Energy	1/1/2024	12/31/2024
Under $400K	112,837	Airespring Inc	T1 Connectivity Services	Administration	12/22/2016	1/15/2024
Under $400K	110,000	Verdant Associates LLC	TStat Evaluation Study	Energy Efficiency	12/1/2023	3/31/2025
Under $400K	109,620	Archive Systems Inc	Record Management Services	Administration	1/1/2011	12/31/2024
Under $400K	108,938	E Source Companies LLC	Membership Services Agreement	Energy Efficiency	1/1/2024	12/31/2025
Under $400K	100,000	APANO Communities United	Engagement Outreach Services	Energy Efficiency	9/22/2023	12/31/2024
Under $400K	100,000	ADM Associates, Inc.	LED Grow Lights MarketResearch	Energy Efficiency	2/2/2024	10/30/2024
Under $400K	100,000	CLEAResult Consulting Inc	Call CenterServices Comm Solar	Administration	8/1/2019	3/4/2025
Under $400K	95,000	Borders, Perrin &Norrander, Inc. dba BPN	Creative & Media Services	Energy Efficiency	9/1/2023	12/31/2024
Under $400K	95,000	Home Performance Contractors Guild of Oregon	HPG Grant Agreement	Energy Efficiency	1/1/2024	12/31/2024
Under $400K	91,900	Earth Advantage, Inc.	Contractor Training Services	Energy Efficiency	9/1/2023	5/1/2025
Under $400K	90,000	Verdant Associates LLC	MF Weatherization Impact Eval	Energy Efficiency	10/12/2023	6/30/2024
Under $400K	88,500	Inner Work, Outer Play LLC	Board DEI Support Services	Administration	11/1/2023	12/31/2024
Under $400K	85,000	Insight Direct USA	Blanket PO	Administration	8/1/2023	12/31/2024
Under $400K	85,000	City of Hillsboro	Project Funding Agreement	Renewable Energy	6/8/2020	12/31/2040
Under $400K	82,870	TRC Engineers Inc.	2024 EPS New Const PDC WA	Energy Efficiency	1/1/2024	12/31/2024
Under $400K	81,600	Wallowa Resources Community Solutions Inc	Collaboration Services	Renewable Energy	4/1/2023	3/31/2024

For contracts with costs through: 4/1/2024

Grouping by Contract Size	Contract Amount	Contractor	Description	Program	Start	End
Under $400K	80,000	Wallowa County	Project Funding Agreement	Renewable Energy	4/1/2018	3/31/2038
Under $400K	80,000	Umpqua Community Development Corp.	EE Initiatives Rural Counties	Energy Efficiency	1/1/2024	12/31/2024
Under $400K	80,000	DocuMart of Portland	Blanket PO	Communications	1/1/2021	12/31/2024
Under $400K	80,000	The Cadmus Group LLC	Industrial Plant Closure Study	Energy Efficiency	6/30/2023	6/30/2024
Under $400K	78,702	Siteimprove Inc	Web Governance and Monitoring	Administration	1/27/2017	10/31/2024
Under $400K	75,000	SPS of Oregon Inc	Project Funding Agreement	Renewable Energy	10/15/2015	10/31/2036
Under $400K	75,000	1961 Consulting, LLC	CANI RES Strategic Services	Joint Programs	1/1/2024	12/31/2024
Under $400K	66,637	LinkedIn Corporation	Webinar Learning	Administration	1/7/2020	2/15/2025
Under $400K	66,000	Adre LLc	Net Zero Fellowship	Joint Programs	9/22/2022	7/31/2024
Under $400K	64,842	dThree Productions Inc.	Videography Services Agreement	Administration	1/1/2024	12/31/2024
Under $400K	64,315	Tetra Tech Inc	Other RE Services	Renewable Energy	4/1/2022	3/31/2024
Under $400K	64,265	LinkedIn Corporation	LinkedIn Recruiting License	Administration	12/15/2022	2/15/2025
Under $400K	63,564	Pod4print	2023 PGE Printing Bill Inserts	Communications	1/1/2023	12/31/2024
Under $400K	62,935	Xenium Resources	HR Consulting Agreement	Administration	4/1/2022	4/30/2024
Under $400K	61,028	Wisewood, Inc	RE Biomass Energy Tool	Renewable Energy	12/1/2023	8/1/2024
Under $400K	61,000	Pacific Crest Affordable Housing	NZF Grant Agreements	Joint Programs	9/22/2023	11/30/2024
Under $400K	61,000	Lever Architecture	NZF Grant Agreements	Joint Programs	9/20/2023	3/31/2025
Under $400K	60,000	IZO Public Relations	TA CDP Support Services	Communications	10/2/2023	12/31/2024
Under $400K	60,000	Indika Sugathadasa dba PDX Hive	TA CDP Support Services	Communications	10/2/2023	12/31/2024
Under $400K	60,000	Polk Community Development Corporation	RES Outreach Housing Services	Energy Efficiency	1/1/2024	12/31/2024
Under $400K	60,000	Beira Consulting LLC	SMB Research Eval	Energy Efficiency	2/1/2023	7/31/2024
Under $400K	60,000	Burch Energy Services Inc	TA Contractor Dev Pathway	Communications	10/2/2023	12/31/2024
Under $400K	60,000	Twirl Advertising & Design	TA CDP Support Services	Communications	10/2/2023	12/31/2024
Under $400K	59,773	RStudio PBC	Software License Agreement	Energy Efficiency	6/5/2022	4/1/2024
Under $400K	57,732	Excidian LLC	AMC Custom Calculator Model	Renewable Energy	11/15/2023	12/31/2024
Under $400K	55,000	DNV Energy Services USA Inc	Lighting PLUS Market Agreement	Energy Efficiency	1/18/2024	12/31/2024
Under $400K	55,000	Craft3	SWR Loan Origination/Loss Fund	Energy Efficiency	1/1/2018	12/31/2024
Under $400K	55,000	INCA Energy Efficiency, LLC	MOD 3 Evaluation	Energy Efficiency	10/1/2022	3/31/2025
Under $400K	54,349	xByte Technologies, Inc	Dell Server Purchase	Administration	10/1/2023	3/30/2024
Under $400K	52,000	RR Donnelley	2023 NWN Printing Bill Inserts	Communications	1/1/2023	12/31/2024
Under $400K	52,000	Talence Group LLC	Executive Search Svcs Agrmnt	Administration	8/1/2023	7/31/2024
Under $400K	50,000	SBW Consulting, Inc.	2024 Measure Dev Support	Energy Efficiency	1/1/2024	12/31/2024
Under $400K	50,000	Anchor Blue LLC	Planning Consulting Services	Energy Efficiency	1/1/2023	12/31/2024

For contracts with costs through: 4/1/2024

Grouping by Contract Size	Contract Amount	Contractor	Description	Program	Start	End
Under $400K	50,000	Arnold Cushing LLC	PE REDA Grant Agreement	Renewable Energy	10/11/2021	7/31/2024
Under $400K	50,000	University of Oregon	U of O REDA Grant	Renewable Energy	12/1/2023	3/31/2025
Under $400K	49,350	Moss Adams LLP	Financial Statement Audit	Administration	1/1/2024	12/31/2024
Under $400K	47,541	Pantheon Systems, Inc	Website Hosting Services	Communications	5/1/2019	4/30/2024
Under $400K	47,500	Pacific Office Furnishings	Blanket PO-Cube Adjustments	Administration	1/1/2019	12/31/2024
Under $400K	46,250	Theodore Blaine Light III	Planning Consulting Services	Energy Efficiency	1/1/2023	12/31/2024
Under $400K	46,000	Alliance Compensation LLC	*PA Umbrella Agreement	Administration	2/1/2023	1/31/2025
Under $400K	45,000	PBDG Foundation	Relationship Develop Services	Communications	1/1/2023	3/31/2024
Under $400K	45,000	Geograde Constructors LLC	Contractor Development Pathway	Energy Efficiency	2/3/2023	12/31/2024
Under $400K	42,400	Headspace Inc.	Employee Assistance Program Ap	Administration	2/1/2024	10/31/2024
Under $400K	41,640	GuildQuality Inc.	License Agreement	Renewable Energy	6/1/2023	12/31/2024
Under $400K	40,425	Northwest Energy Efficiency Council	BOC & TLL Sponsorship	Energy Efficiency	1/1/2024	12/31/2024
Under $400K	40,000	Portland HR Solutions, Inc.	HR Consulting Services	Administration	4/1/2022	3/31/2024
Under $400K	39,500	Happy Cup Coffee LLC	Blanket PO-Coffee	Administration	1/1/2019	12/31/2024
Under $400K	39,500	Clean Energy States Alliance	Memorandum of Understanding	Renewable Energy	7/1/2023	6/30/2024
Under $400K	38,608	Consortium for Energy Efficiency	2024 Membership Dues	Energy Efficiency	2/1/2024	12/31/2024
Under $400K	36,000	RR Donnelley	2024 PAC Printing Bill Inserts	Communications	1/1/2023	12/31/2024
Under $400K	35,000	Rose City Moving & Storage	Blanket PO Cube Moving	Administration	1/1/2019	12/31/2024
Under $400K	35,000	Anthony Carothers	ISO Systems SecurityConsulting	Administration	11/5/2020	12/31/2024
Under $400K	33,320	Infogroup Inc	Data License & Service Agmt	Joint Programs	2/4/2020	12/31/2024
Under $400K	32,000	Elephants Catering	Blanket PO-Food Catering	Administration	1/1/2019	12/31/2024
Under $400K	30,229	Smartsheets Inc.	Subscription ServicesAgreement	Administration	1/1/2023	12/31/2024
Under $400K	30,000	Structured Communications Systems, Inc.	Mircosoft Teams Voice POC	Administration	10/6/2023	12/31/2024
Under $400K	26,220	Wallowa Resources Stewardship Center LLC	Enterprise, OR Lease Agreement	Communications	11/1/2013	9/1/2024
Under $400K	25,580	Floor Solutions LLC	Carpet Cleaning Services	Administration	1/1/2019	12/31/2024
Under $400K	25,000	G&I VII Lincoln Building LP	Parking Agreement	Administration	5/1/2023	4/30/2024
Under $400K	25,000	Eric (EJ) Jordon	Tribal Engagment Services	Administration	6/1/2023	3/31/2024
Under $400K	25,000	English 2 Spanish LLC	Translation Services Agreement	Communications	9/1/2023	12/31/2024
Under $400K	25,000	Efficiency for Everyone, LLC	Eval Advisory Group Services	Energy Efficiency	3/9/2022	12/31/2024
Under $400K	25,000	Encolor LLC	Eval Advisory Group Services	Energy Efficiency	3/9/2022	12/31/2024
Under $400K	25,000	Encolor LLC	Strategic Consulting Services	Joint Programs	11/30/2023	7/31/2024
Under $400K	25,000	ELSO Incorporated	Workforce Development Services	Energy Efficiency	9/13/2023	5/31/2024
Under $400K	25,000	Electronic Management Corp	Blanket PO	Communications	1/1/2024	12/31/2024
Under $400K	25,000	DNV Energy Services USA Inc	Evaluation Advisory Group	Energy Efficiency	3/9/2022	12/31/2024

For contracts with costs through: 4/1/2024

Grouping by Contract Size	Contract Amount	Contractor	Description	Program	Start	End
Under $400K	25,000	Apex Analytics LLC	Evaluation Advisory Group	Energy Efficiency	3/9/2022	12/31/2024
Under $400K	25,000	Barbier International Inc	Translation Services Agreement	Communications	9/1/2023	12/31/2024
Under $400K	25,000	AlamaLuna LLC	Translation Services Agreement	Communications	1/1/2024	12/31/2024
Under $400K	25,000	American Microgrid Solutions LLC	Solar+Storage RES EPS NC	Renewable Energy	12/29/2022	6/3/2024
Under $400K	25,000	Cadeo Group LLC	Evaluation Advisory Group	Energy Efficiency	3/9/2022	12/31/2024
Under $400K	25,000	Starla Green	Tribal Engagement Services	Administration	8/1/2022	7/30/2024
Under $400K	25,000	TRANSLAT INC	Translation Services Agreement	Communications	9/1/2023	12/31/2024
Under $400K	25,000	Pinnacle Economics Inc	2023 Economic Impact Study	Energy Efficiency	2/1/2024	5/31/2024
Under $400K	25,000	SBW Consulting, Inc.	Evaluation Advisory Group	Energy Efficiency	3/9/2022	12/31/2024
Under $400K	25,000	Saedgraphic, LLC	Translation Services Agreement	Communications	6/1/2023	12/31/2024
Under $400K	25,000	Seong Yun Kim	Translation Services Agreement	Communications	10/9/2023	12/31/2024
Under $400K	25,000	Puget Sound Cooperative Credit Union	LoanLossReserve Fund Agreement	Energy Efficiency	1/1/2022	12/31/2024
Under $400K	25,000	Helen Eby dba Gaucha Translation	Translation Services Pool	Communications	1/1/2024	12/31/2024
Under $400K	25,000	Lisa Greenfield LLC	Engagement Letter	Administration	12/16/2022	12/31/2024
Under $400K	25,000	Northwest Interpreters, Inc dba NWI Global	Translation Services Agreement	Communications	9/1/2023	12/31/2024
Under $400K	25,000	Leona Enright	Tribal Engagement Services	Communications	8/1/2022	7/30/2024
Under $400K	25,000	Monica Paradise	Tribal Engagement Agreement	Communications	3/7/2023	3/6/2025
Under $400K	25,000	Oregon Translation LLC dba Verbio	Translation Services Agreement	Communications	9/1/2023	12/31/2024
Under $400K	25,000	Oregon Certified Interpreters Network Inc	Translation Services Agreement	Communications	9/1/2023	12/31/2024
Under $400K	24,999	University of Oregon	UO SRML Sponsorship	Renewable Energy	3/9/2024	3/8/2025
Under $400K	24,500	Empress Rules LLC	Coaching Equity Training SBDI	Joint Programs	1/2/2024	8/31/2024
Under $400K	24,000	CuraLinc Healthcare	EAP Agreement	Administration	1/1/2022	9/30/2024
Under $400K	24,000	Bonneville Environmental Foundation	Comm Outreach Services	Renewable Energy	4/1/2022	1/31/2025
Under $400K	24,000	Site Capture LLC	Subscription Agreement	Renewable Energy	6/1/2023	5/31/2024
Under $400K	22,250	Jodi Tanner Tell LLC	Grant Writing Services	Joint Programs	1/1/2023	12/31/2024
Under $400K	22,000	Sustainable Northwest	Community Outreach Services	Communications	1/1/2023	12/31/2024
Under $400K	22,000	Rainy Day Printing LLC dba Smart Payables	Check Printing Services	Administration	2/28/2024	2/27/2025
Under $400K	22,000	1961 Consulting, LLC	ET Strategic Support Services	Administration	10/2/2023	12/31/2025
Under $400K	21,643	CTX Businss Solutions Inc	Small Printer Maintenance	Administration	4/1/2012	3/30/2024
Under $400K	20,000	Asana Inc.	User License Agreement	Administration	3/1/2024	12/31/2024
Under $400K	20,000	Brown Printing Inc	Blanket PO	Communications	1/1/2021	12/31/2024
Under $400K	20,000	LifeLabs Learning LLC	Virtual Manager Training	Administration	1/23/2024	2/28/2025
Under $400K	20,000	Moss Adams LLP	EFS Consulting Services	Administration	2/1/2024	12/31/2024
Under $400K	19,500	Diligent Corporation	Board Management Software	Administration	6/23/2023	8/1/2024

For contracts with costs through: 4/1/2024

Grouping by Contract Size	Contract Amount	Contractor	Description	Program	Start	End
Under $400K	18,993	Enna CIC	Neurodiversity Training	Administration	10/3/2023	11/1/2025
Under $400K	18,820	Freshworks Inc.	IT License Subscription	Administration	7/1/2023	4/15/2025
Under $400K	18,000	Kleinschmidt Associates	Other RE Professional Services	Renewable Energy	4/1/2022	3/31/2024
Under $400K	18,000	HMI Oregon Dealership, Inc.	Blanket PO-Storage	Administration	1/1/2019	12/31/2024
Under $400K	17,850	Moss Adams LLP	Retirement Plan Audit	Administration	1/1/2024	12/31/2024
Under $400K	17,500	Resonate, Inc	Strategic Project Services	Administration	10/1/2023	12/31/2024
Under $400K	17,000	PrintSync	Blanket PO Printing	Communications	10/27/2022	12/31/2024
Under $400K	16,000	The Benson Hotel	Hotel Rate Agreement	Communications	1/1/2024	12/31/2024
Under $400K	15,744	Tri-Met	2023-24 Rate Agreement	Administration	9/1/2023	8/31/2024
Under $400K	15,000	eTargetMedia.com, LLC	Target Emailing Service	Communications	11/1/2023	12/31/2024
Under $400K	14,980	Adelante Mujeres	Solarize Outreach Services	Renewable Energy	3/1/2024	6/30/2024
Under $400K	13,935	Naim Hasan	Photographer	Administration	7/19/2019	8/1/2024
Under $400K	13,500	ABM Parking Services	Board Parking reimbursement	Administration	4/1/2019	12/31/2024
Under $400K	13,220	Emburse Inc.	Services Agreement Travel App	Administration	8/27/2020	2/28/2025
Under $400K	13,000	Environmental Leadership Program	2023-25 RAY Fellow Agreement	Administration	1/1/2023	7/15/2025
Under $400K	13,000	Sheraton Portland Airport Hotel	2024 TA Forum	Communications	1/26/2024	5/31/2024
Under $400K	12,650	Rene Leger Coaching & Consulting LLC	Coaching Services	Administration	2/1/2024	12/31/2024
Under $400K	12,650	Rene Leger Coaching & Consulting LLC	Professional Coaching Services	Administration	4/1/2024	5/31/2025
Under $400K	11,906	Vital Smarts LC dba Crucial Learning	Influence Training	Administration	2/13/2024	4/30/2024
Under $400K	11,313	Flores & Associates LLC	FMLA Administration	Administration	10/1/2018	7/1/2024
Under $400K	10,721	Structured Communications Systems, Inc.	VEEAM License Agreement	Administration	1/8/2024	12/1/2024
Under $400K	10,500	Northwest Earth Institute	EcoChallenge ServicesAgreement	Energy Efficiency	3/1/2024	12/31/2024
Under $400K	10,500	Digital by Design	Digital Transformation Service	Energy Efficiency	3/8/2024	5/4/2024
Under $400K	10,486	Survey Monkey	User License Agreement	Administration	1/19/2024	1/18/2026
Under $400K	10,000	Susan Badger-Jones	DAC Stipend Agreement	Administration	4/15/2020	12/31/2026
Under $400K	10,000	Rebecca Descombes	DAC Stipend Agreement	Administration	3/1/2021	12/31/2026
Under $400K	10,000	Oregon Native American Chamber	Working Together Grant	Communications	10/24/2023	10/1/2024
Under $400K	10,000	Moss Adams LLP	Chart of Accounts Services	Administration	2/1/2024	12/31/2024
Under $400K	10,000	Metropolitan Family Services	Working Together Grant	Communications	10/24/2023	10/1/2024
Under $400K	10,000	Indika Sugathadasa dba PDX Hive	DAC Stipend Agreement	Administration	2/18/2020	12/31/2026
Under $400K	10,000	Dolores Martinez	DAC Stipend Agreement	Administration	2/18/2020	12/31/2026
Under $400K	10,000	eTargetMedia.com, LLC	E-targeted Media Services	Communications	3/1/2024	12/31/2024
Under $400K	10,000	Ethiopian & Eritrean Community Resoure Center	Working Together Grant	Communications	10/24/2023	10/1/2024
Under $400K	10,000	Environmental Leadership Program	2022-24 RAY Fellowship	Administration	10/16/2022	10/15/2024

For contracts with costs through: 4/1/2024

Grouping by Contract Size	Contract Amount	Contractor	Description	Program	Start	End
Under $400K	10,000	Central Oregon Environmental Center	Outreach Services RES EE	Energy Efficiency	2/22/2024	12/31/2024
Under $400K	10,000	Willamette Valley Hispanic Chamber of Commerace	2024 Expo Negocio Sposorship	Communications	2/26/2024	11/30/2024
Under $400K	9,600	Amy Marie Seward	Grant Writers Pool	Energy Efficiency	6/1/2023	12/31/2024
Under $400K	9,250	Portland State University	Prof Cert Tribal Relations	Communications	9/12/2023	9/30/2024
Under $400K	9,000	HVAC Inc	Service Agreement	Administration	7/1/2022	8/30/2024
Under $400K	9,000	Oregon ASK-OAEYC	SEM Training Class Services	Energy Efficiency	10/31/2023	3/29/2024
Under $400K	8,320	Seeds for the Sol	Working Together Grant	Communications	10/24/2023	10/1/2024
Under $400K	8,000	Studio E Architecture PC	NZL Grant Agreement	Energy Efficiency	9/6/2023	6/30/2024
Under $400K	8,000	Oregon ASK-OAEYC	Curriculum & Training Services	Energy Efficiency	1/30/2024	5/3/2024
Under $400K	8,000	Opsis Achitecture LLC	NZELI Grant Agreement	Energy Efficiency	9/8/2023	6/30/2024
Under $400K	8,000	Morel Inc	Blanket PO	Communications	1/1/2021	12/31/2024
Under $400K	8,000	MWA Architects Inc.	NZELI Grant Agreement	Energy Efficiency	9/7/2023	6/30/2024
Under $400K	8,000	Holmes US	NZELI Grant Agreement	Energy Efficiency	9/20/2023	6/30/2024
Under $400K	8,000	Hood River Hotel Partners LLC	July Board Meeting Event Space	Administration	1/1/2024	8/30/2024
Under $400K	8,000	Health Equity Inc.	FSA/HSA Administration Service	Administration	1/1/2024	12/31/2024
Under $400K	8,000	Bora Achitects Inc.	NZELI Grant Agreement	Energy Efficiency	9/6/2023	6/30/2024
Under $400K	7,000	First Interstate Bank	Line of Credit Agreement	Administration	8/9/2023	8/8/2024
Under $400K	6,450	The Option Agency	Photoshoot Talent Services	Communications	12/15/2021	12/15/2024
Under $400K	6,420	Ecotrust	All Staff Meeting Agreement	Administration	3/20/2024	7/31/2024
Under $400K	6,000	American Institute of Architects, Southwestern Oregon Chapter	2024 AIA Sponsorship	Communications	3/1/2024	12/31/2024
Under $400K	6,000	PhotoShelter Inc	Cloud Photobank Services	Communications	3/25/2024	3/24/2025
Under $400K	6,000	Momentum Procurement Group, Inc	Blanket PO Office Supply	Administration	9/10/2020	12/31/2024
Under $400K	5,940	Storage Concepts LLC	Eastern OR Storage Unit	Administration	5/30/2019	3/30/2025
Under $400K	5,849	Bonneville Environmental Foundation	REC WRC Purchase	Joint Programs	9/1/2023	8/30/2024
Under $400K	5,388	SmartyStreets LLC	EmailVerfication Cloud License	Administration	7/1/2023	6/1/2024
Under $400K	5,000	Terrance Harris	DAC Stipend Agreement	Administration	6/15/2021	6/30/2024
Under $400K	5,000	Rhea StandingRock	DAC Stipend Agreement	Administration	6/30/2022	6/1/2024
Under $400K	5,000	Rural Development Initiatives Inc	2024 Sponsorhip	Communications	1/1/2024	5/30/2024
Under $400K	5,000	Miller Nash LLP	Trademark	Administration	9/1/2014	9/1/2024
Under $400K	5,000	Moss Adams LLP	Consulting Services	Administration	1/1/2024	12/31/2024
Under $400K	5,000	Oswaldo Beral Lopez	DAC Stipend Agreement	Administration	9/17/2019	12/31/2026
Under $400K	5,000	Illinois Valley 2010 Community Response Team	Working Together Grant	Communications	10/24/2023	10/1/2024
Under $400K	5,000	Jose Garcia	Advisory Committee PSP	Energy Efficiency	1/1/2024	12/31/2024
Under $400K	5,000	Julio Valera	Advisory Committee PSP	Energy Efficiency	9/1/2023	12/31/2024
Under $400K	5,000	Janel Rupp	Advisory Committee PSP	Energy Efficiency	8/21/2023	12/31/2024

For contracts with costs through: 4/1/2024

Grouping by Contract Size	Contract Amount	Contractor	Description	Program	Start	End
Under $400K	5,000	Martin Campos-Davis	DAC Stipend Agreement	Administration	1/1/2024	12/31/2026
Under $400K	5,000	Leesha Posey	Advisory Committee PSP	Energy Efficiency	9/3/2023	12/31/2024
Under $400K	5,000	Bright Sky LLC	Writers Pool Services	Communications	3/1/2024	2/28/2026
Under $400K	5,000	Blue Moon Industries	Microsoft GP Support Services	Administration	6/1/2023	5/30/2024
Under $400K	5,000	Catalyst Partnerships	Working Together Grant	Communications	10/24/2023	10/1/2024
Under $400K	5,000	Community Service Network	Working Together Grant	Communications	10/24/2023	10/1/2024
Under $400K	5,000	Common Connections	Working Together Grant	Communications	10/24/2023	10/1/2024
Under $400K	5,000	Gustavo Gordillo	Advisory Committee PSP	Energy Efficiency	7/23/2023	12/31/2024
Under $400K	4,800	Sarah Noll Wilson, Inc	Professional Services Contract	Administration	12/1/2023	12/1/2025
Under $400K	4,750	Susan Lucer Consulting Services	Grant Writing Services	Joint Programs	1/1/2023	12/31/2024
Under $400K	4,230	National Small Business Utility Council	Working Together Grant	Communications	10/24/2023	10/1/2024
Under $400K	4,000	Central Oregon Environmental Center	Working Together Grant	Communications	10/20/2023	10/1/2024
Under $400K	3,420	D&B	D&B	Administration	3/31/2021	3/31/2024
Under $400K	3,000	Structured Communications Systems, Inc.	DMARC Implementation	Administration	1/1/2024	12/31/2024
Under $400K	2,200	Jim Craven Photography	Photography Services *$25,000	Energy Efficiency	5/1/2023	4/30/2025
Under $400K	2,000	NeighborWorks Umpqua	Working Together Grant	Communications	10/24/2023	10/1/2024
Under $400K	1,519	Lighthouse Services, Inc.	Compliance Hotline	Administration	5/1/2017	4/1/2024
Under $400K	950	Susan T Rosene	Writers Pool Services	Communications	3/1/2024	2/28/2026
Under $400K	950	Cara Griffin	Professional Services Writers	Communications	3/1/2024	2/28/2026
TOTAL	**281,991,007.17**					

R00407

Energy Trust of Oregon
Contract Status Summary Report

Report Date: 4/17/2024

For contracts with costs through: 4/1/2024

CONTRACTOR	Description	City	EST COST	Actual TTD	Remaining	Start	End
Administration							
		Administration Total:	**15,580,821**	**12,420,442**	**3,160,378**		
Communications							
		Communications Total:	**8,350,011**	**4,495,219**	**3,854,792**		
Energy Efficiency							
Northwest Energy Efficiency Alliance	NEEA Funding Agreement	Portland	42,866,366	35,788,933	7,077,433	1/1/2020	8/1/2025
Northwest Energy Efficiency Alliance	Regional EE Initiative Agmt	Portland	33,662,505	33,569,081	93,424	1/1/2015	8/1/2025
TRC Environmental Corporation	2024 BE PMC	Windsor	30,853,332	6,214,261	24,639,071	1/1/2024	12/31/2024
TRC Environmental Corporation	2023 EB PMC	Windsor	22,190,011	20,304,634	1,885,377	1/1/2023	12/31/2023
CLEAResult Consulting Inc	2024 Residential PMC	Austin	15,177,862	2,951,471	12,226,391	1/1/2024	12/31/2024
Energy 350 Inc	2024 PE PMC		11,584,800	2,453,609	9,131,191	1/1/2024	12/31/2024
CLEAResult Consulting Inc	2023 Residential PMC	Austin	10,368,842	10,142,310	226,532	1/1/2023	12/31/2023
Energy 350 Inc	2023 PE PMC		9,538,754	9,295,730	243,024	1/1/2023	12/31/2023
CLEAResult Consulting Inc	2024 NBE PMC	Austin	7,984,733	1,828,973	6,155,760	1/1/2024	12/31/2024
CLEAResult Consulting Inc	2023 NBE PMC	Austin	6,868,034	6,648,435	219,600	1/1/2023	12/31/2023
CLEAResult Consulting Inc	2024 Lighting PDC	Austin	6,221,925	1,446,494	4,775,431	1/1/2024	12/31/2024
CLEAResult Consulting Inc	2023 Lighting PDC	Austin	5,549,673	5,536,353	13,320	1/1/2023	12/31/2023
TRC Engineers Inc.	2024 EPS New Const PDC	Irvine	3,203,706	828,598	2,375,108	1/1/2024	12/31/2024
TRC Engineers Inc.	2023 EPS New Const PDC	Irvine	3,135,397	3,111,968	23,429	1/1/2023	12/31/2023
Northwest Power & Conservation Council	Regional Technical Forum Agrmt	Portland	2,081,000	2,021,929	59,071	1/1/2020	12/31/2024
Intel Corporation	EE Project Funding Agreement	Hillsboro	1,950,000	1,300,000	650,000	12/2/2021	12/31/2025
CLEAResult Consulting Inc	2023 Retail PDC	Austin	1,728,537	1,511,764	216,773	1/1/2023	12/31/2023
CLEAResult Consulting Inc	2024 Retail PDC	Austin	1,728,537	515,544	1,212,993	1/1/2024	12/31/2024
Cascade Energy, Inc.	Subscription ServicesAgreement	Walla Walla	876,733	809,773	66,960	1/21/2022	8/31/2024
TRC Environmental Corporation	2023 BE PMC DSM	Windsor	816,549	816,549	0	1/1/2023	12/31/2023
CLEAResult Consulting Inc	2024 Residential PMC Innov	Austin	748,000	76,448	671,552	1/1/2024	12/31/2024
Pivotal Energy Solutions LLC	Software Product Support	Gilbert	641,500	530,061	111,440	1/1/2020	12/31/2024
CLEAResult Consulting Inc	2023 Residential PMC Innov	Austin	588,880	582,405	6,475	1/1/2023	12/31/2023
TRC Environmental Corporation	2024 BE PMC WA	Windsor	573,729	154,088	419,641	1/1/2024	12/31/2024
TRC Environmental Corporation	2023 BE PMC WA	Windsor	549,254	549,204	50	1/1/2023	12/31/2023
Community Energy Project, Inc.	HPWH & CPFE Measures	Portland	536,000	365,000	171,000	1/25/2022	12/31/2024
Craft3	Loan Agreement	Portland	500,000	500,000	0	1/1/2018	12/31/2027
Craft3	Loan Funding for EE Projects	Portland	500,000	500,000	0	1/1/2021	9/30/2025
Verde	DHP Installation Program	Portland	500,000	326,275	173,725	1/1/2022	12/31/2024
LD Consulting LLC	BL Consulting Services		483,052	326,354	156,698	4/27/2022	1/31/2025
The Cadmus Group LLC	2022 PE Impact Evaluation	Portland	460,000	87,608	372,392	11/1/2023	10/31/2024
Alternative Energy Systems Consulting, Inc.	TechnicalEnergy Studies& Audit	Carlsbad	420,000	419,973	27	7/1/2021	6/30/2024
CLEAResult Consulting Inc	2024 Residential PMC Custsvc	Austin	411,718	101,733	309,986	1/1/2024	12/31/2024
Tetra Tech Inc	NB Impsct Eval 2021-22	Portland	380,000	346,404	33,596	3/1/2023	4/30/2024
Ekotrop, Inc.	ModelingSoftware for NC	Boston	326,250	292,348	33,903	1/21/2020	12/31/2024
CLEAResult Consulting Inc	HE Assessment Tool	Austin	315,000	165,000	150,000	12/16/2021	12/31/2024
CLEAResult Consulting Inc	2024 Residential PMC WA	Austin	306,846	77,811	229,035	1/1/2024	12/31/2024

CONTRACTOR	Description	City	EST COST	Actual TTD	Remaining	Start	End
CLEAResult Consulting Inc	2023 Residential PMC-CustSvc	Austin	301,208	262,994	38,214	1/1/2023	12/31/2023
Craft3	Loan Agreement	Portland	300,000	300,000	0	6/1/2014	6/20/2025
CLEAResult Consulting Inc	2023 Residential PMC WA	Austin	254,276	222,122	32,154	1/1/2023	12/31/2023
The Cadmus Group LLC	C&I LG Impact Evaluations	Portland	243,000	104,598	138,402	1/1/2022	12/31/2024
TRC Environmental Corporation	PDC - Landlord Cooling	Windsor	230,000	155,510	74,490	4/1/2022	9/30/2024
Craft3	Manufactured Home Pilot Loan	Portland	200,000	0	200,000	9/20/2018	9/20/2033
ADM Associates, Inc.	2024_25 Fast Feedback Survey	Seattle	200,000	263	199,738	1/8/2024	7/31/2026
ADM Associates, Inc.	2022_23 Fast Feedback Survey	Seattle	197,800	170,936	26,864	3/1/2022	6/30/2024
Seeds for the Sol	CPF RES Partner Services		185,000	73,756	111,244	2/1/2022	12/31/2024
Community Energy Project, Inc.	Workshop Sponsorship	Portland	170,000	170,088	(88)	4/1/2023	3/31/2024
DNV Energy Services USA Inc	HER Impact Evaluation	Oakland	165,000	69,350	95,650	7/11/2023	5/31/2024
Evergreen Economics	TA Interview Survey	Portland	161,000	133,054	27,946	8/23/2023	6/30/2024
Apex Analytics LLC	No Cost Pilots	Boulder	150,000	0	150,000	4/1/2024	12/31/2026
EUVALCREE	Energy Assessment Services		145,000	82,450	62,550	2/1/2022	12/31/2024
Illinois Valley Community Development Organization	Strategic Partnership Services		144,202	93,902	50,300	6/1/2023	12/31/2024
TRC Engineers Inc.	2023 EPS New Const PDC WA	Irvine	136,116	131,504	4,612	1/1/2023	12/31/2023
EnerCity Collaborative	Workforce Dev Services		127,124	0	127,124	3/1/2024	12/31/2024
Self Enhancement Inc.	Community Support Services		120,000	0	120,000	3/15/2024	12/31/2024
Verdant Associates LLC	TStat Evaluation Study		110,000	17,643	92,358	12/1/2023	3/31/2025
E Source Companies LLC	Membership Services Agreement	Boulder	108,938	52,627	56,311	1/1/2024	12/31/2025
APANO Communities United	Engagement Outreach Services		100,000	4,455	95,545	9/22/2023	12/31/2024
ADM Associates, Inc.	LED Grow Lights MarketResearch	Seattle	100,000	15,934	84,066	2/2/2024	10/30/2024
Borders, Perrin &Norrander, Inc. dba BPN	Creative & Media Services		95,000	30,000	65,000	9/1/2023	12/31/2024
Home Performance Contractors Guild of Oregon	HPG Grant Agreement	Portland	95,000	63,000	32,000	1/1/2024	12/31/2024
Earth Advantage, Inc.	Contractor Training Services	Portland	91,900	31,500	60,400	9/1/2023	5/1/2025
Verdant Associates LLC	MF Weatherization Impact Eval		90,000	85,928	4,073	10/12/2023	6/30/2024
TRC Engineers Inc.	2024 EPS New Const PDC WA	Irvine	82,870	19,906	62,964	1/1/2024	12/31/2024
Umpqua Community Development Corp.	EE Initiatives Rural Counties	Roseburg	80,000	15,960	64,040	1/1/2024	12/31/2024
The Cadmus Group LLC	Industrial Plant Closure Study	Portland	80,000	77,887	2,113	6/30/2023	6/30/2024
Polk Community Development Corporation	RES Outreach Housing Services		60,000	8,960	51,040	1/1/2024	12/31/2024
Beira Consulting LLC	SMB Research Eval		60,000	41,400	18,600	2/1/2023	7/31/2024
RStudio PBC	Software License Agreement		59,773	56,935	2,838	6/5/2022	4/1/2024
DNV Energy Services USA Inc	Lighting PLUS Market Agreement	Oakland	55,000	0	55,000	1/18/2024	12/31/2024
Craft3	SWR Loan Origination/Loss Fund	Portland	55,000	51,338	3,662	1/1/2018	12/31/2024
INCA Energy Efficiency, LLC	MOD 3 Evaluation	Grinnell	55,000	13,806	41,195	10/1/2022	3/31/2025
SBW Consulting, Inc.	2024 Measure Dev Support	Bellevue	50,000	11,010	38,990	1/1/2024	12/31/2024
Anchor Blue LLC	Planning Consulting Services	Vancouver	50,000	26,940	23,060	1/1/2023	12/31/2024
Theodore Blaine Light III	Planning Consulting Services		46,250	20,163	26,087	1/1/2023	12/31/2024
Geograde Constructors LLC	Contractor Development Pathway		45,000	29,925	15,075	2/3/2023	12/31/2024
Northwest Energy Efficiency Council	BOC & TLL Sponsorship	Seattle	40,425	39,525	900	1/1/2024	12/31/2024

CONTRACTOR	Description	City	EST COST	Actual TTD	Remaining	Start	End
Consortium for Energy Efficiency	2024 Membership Dues	Boston	38,608	38,608	0	2/1/2024	12/31/2024
Efficiency for Everyone, LLC	Eval Advisory Group Services	Portland	25,000	3,586	21,414	3/9/2022	12/31/2024
Encolor LLC	Eval Advisory Group Services		25,000	1,073	23,928	3/9/2022	12/31/2024
ELSO Incorporated	Workforce Development Services		25,000	25,000	0	9/13/2023	5/31/2024
DNV Energy Services USA Inc	Evaluation Advisory Group	Oakland	25,000	4,455	20,545	3/9/2022	12/31/2024
Apex Analytics LLC	Evaluation Advisory Group	Boulder	25,000	5,216	19,784	3/9/2022	12/31/2024
Cadeo Group LLC	Evaluation Advisory Group	Washington	25,000	6,309	18,691	3/9/2022	12/31/2024
Pinnacle Economics Inc	2023 Economic Impact Study	Camas	25,000	0	25,000	2/1/2024	5/31/2024
SBW Consulting, Inc.	Evaluation Advisory Group	Bellevue	25,000	3,579	21,421	3/9/2022	12/31/2024
Puget Sound Cooperative Credit Union	LoanLossReserve Fund Agreement		25,000	0	25,000	1/1/2022	12/31/2024
Northwest Earth Institute	EcoChallenge ServicesAgreement	Portland	10,500	0	10,500	3/1/2024	12/31/2024
Digital by Design	Digital Transformation Service		10,500	5,250	5,250	3/8/2024	5/4/2024
Central Oregon Environmental Center	Outreach Services RES EE		10,000	5,000	5,000	2/22/2024	12/31/2024
Amy Marie Seward	Grant Writers Pool		9,600	800	8,800	6/1/2023	12/31/2024
Oregon ASK-OAEYC	SEM Training Class Services		9,000	0	9,000	10/31/2023	3/29/2024
Studio E Architecture PC	NZL Grant Agreement		8,000	0	8,000	9/6/2023	6/30/2024
Oregon ASK-OAEYC	Curriculum & Training Services		8,000	0	8,000	1/30/2024	5/3/2024
Opsis Achitecture LLC	NZELI Grant Agreement		8,000	0	8,000	9/8/2023	6/30/2024
MWA Architects Inc.	NZELI Grant Agreement		8,000	0	8,000	9/7/2023	6/30/2024
Holmes US	NZELI Grant Agreement		8,000	0	8,000	9/20/2023	6/30/2024
Bora Achitects Inc.	NZELI Grant Agreement		8,000	0	8,000	9/6/2023	6/30/2024
Jose Garcia	Advisory Committee PSP		5,000	0	5,000	1/1/2024	12/31/2024
Julio Valera	Advisory Committee PSP		5,000	0	5,000	9/1/2023	12/31/2024
Janel Rupp	Advisory Committee PSP		5,000	0	5,000	8/21/2023	12/31/2024
Leesha Posey	Advisory Committee PSP		5,000	338	4,663	9/3/2023	12/31/2024
Gustavo Gordillo	Advisory Committee PSP		5,000	0	5,000	7/23/2023	12/31/2024
Jim Craven Photography	Photography Services *$25,000	Medford	2,200	1,947	253	5/1/2023	4/30/2025
	Energy Efficiency Total:		**232,055,815**	**155,283,645**	**76,772,170**		
Joint Programs							
Wallowa Resources Community Solutions Inc	Outreach Services	Enterprise	224,050	0	224,050	3/1/2024	2/28/2025
1961 Consulting, LLC	CANI RES Strategic Services	Portland	75,000	18,090	56,910	1/1/2024	12/31/2024
Adre LLc	Net Zero Fellowship		66,000	50,000	16,000	9/22/2022	7/31/2024
Pacific Crest Affordable Housing	NZF Grant Agreements		61,000	0	61,000	9/22/2023	11/30/2024
Lever Architecture	NZF Grant Agreements		61,000	30,000	31,000	9/20/2023	3/31/2025
Infogroup Inc	Data License & Service Agmt	Papillion	33,320	32,724	596	2/4/2020	12/31/2024
Encolor LLC	Strategic Consulting Services		25,000	0	25,000	11/30/2023	7/31/2024
Empress Rules LLC	Coaching Equity Training SBDI		24,500	8,775	15,725	1/2/2024	8/31/2024
Jodi Tanner Tell LLC	Grant Writing Services		22,250	12,000	10,250	1/1/2023	12/31/2024
Bonneville Environmental Foundation	REC WRC Purchase	Portland	5,849	5,849	0	9/1/2023	8/30/2024
Susan Lucer Consulting Services	Grant Writing Services		4,750	4,750	0	1/1/2023	12/31/2024
	Joint Programs Total:		**602,719**	**162,188**	**440,531**		
Renewable Energy							
Clean Water Services	Project Funding Agreement	Hillsboro	3,000,000	2,013,106	986,894	11/25/2014	11/25/2039
City of Salem	Biogas Project - Willow Lake	Salem	3,000,000	3,000,000	0	9/4/2018	11/30/2040

CONTRACTOR	Description	City	EST COST	Actual TTD	Remaining	Start	End
Farmers Conservation Alliance	Irrigation Modernization	Hood River	2,500,000	2,483,510	16,490	4/1/2019	3/31/2024
Water Environment Services, A Dept. of Clackamas County	Bio Water Cogeneration System	Clackamas	1,800,000	1,800,000	0	11/15/2019	9/30/2041
Oregon Institute of Technology	Geothermal Resource Funding	Klamath Falls	1,550,000	1,550,000	0	9/11/2012	9/11/2032
Three Sisters Irrigation District	TSID Hydro	Sisters	1,000,000	1,000,000	0	4/25/2012	9/30/2032
Farm Power Misty Meadows LLC	Misty Meadows Biogas Facility	Mount Vernon	1,000,000	1,000,000	0	10/25/2012	10/25/2027
CLEAResult Consulting Inc	2024 Residential PMC SOLAR	Austin	928,040	191,344	736,696	1/1/2024	12/31/2024
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	465,000	400,000	3/18/2019	3/17/2039
Klamath Falls Solar 2 LLC	PV Project Funding Agreement	San Mateo	850,000	382,500	467,500	7/11/2016	7/10/2041
Stahlbush Island Farms, Inc.	Funding Assistance Agreement	Corvallis	827,000	827,000	0	6/24/2009	6/24/2029
Energy Assurance Company	Verifier Services Agreement	Milwaukie	725,000	543,369	181,631	10/15/2022	10/14/2024
CLEAResult Consulting Inc	2023 Residential PMC SOLAR	Austin	630,067	487,562	142,505	1/1/2023	12/31/2023
Old Mill Solar, LLC	Project Funding Agmt Bly, OR	Lake Oswego	490,000	490,000	0	5/29/2015	5/28/2030
Deschutes Valley Water District	Opal Springs Hydro Project	Madras	450,000	450,000	0	1/1/2018	4/1/2040
City of Medford	750kW Combined Heat & 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
Three Sisters Irrigation District	TSID Funding Agreement	Sisters	400,000	400,000	0	1/1/2018	12/31/2038
SunE Solar XVI Lessor, LLC	BVT Sexton Mtn PV	Bethesda	355,412	355,412	0	5/15/2014	12/31/2034
CIty of Gresham	City of Gresham Cogen 2	Gresham	350,000	334,523	15,477	4/9/2014	7/9/2034
Solar Oregon	Outreach & Education Agreement	Portland	275,120	217,903	57,217	7/1/2022	6/30/2024
Craft3	NON-EEAST OBR Svc Agrmt	Portland	270,000	225,000	45,000	1/1/2018	12/31/2024
Wallowa Resources Community Solutions, Inc.	Project Development Assistance	Enterprise	249,394	190,106	59,288	4/1/2022	3/31/2025
Faraday Inc	Software Services Subscription	Burlington	216,000	198,000	18,000	1/15/2019	12/14/2024
Farmers Conservation Alliance	Irrigation Modernization Serv	Hood River	200,000	0	200,000	4/1/2024	3/31/2025
Clean Power Research, LLC	CPR License Service Agreement	Napa	167,767	145,480	22,287	7/1/2023	6/30/2024
Oregon Solar Energy Fund	Solar Education Training	Portland	145,000	139,230	5,770	6/1/2022	3/31/2024
TRC Engineers Inc.	2023 EPS New Const PDC Solar	Irvine	144,360	143,726	634	1/1/2023	12/31/2023
City of Astoria	Bear Creek Funding Agreement	Astoria	143,000	143,000	0	3/24/2014	3/24/2034
Clean Power Research, LLC	WattPlan Software	Napa	138,400	138,400	0	11/17/2017	6/30/2024
TRC Engineers Inc.	2024 EPS New Const PDC Solar	Irvine	115,287	27,544	87,743	1/1/2024	12/31/2024
City of Hillsboro	Project Funding Agreement	Hillsboro	85,000	85,000	0	6/8/2020	12/31/2040
Wallowa Resources Community Solutions Inc	Collaboration Services	Enterprise	81,600	60,855	20,745	4/1/2023	3/31/2024
Wallowa County	Project Funding Agreement	Enterprise	80,000	80,000	0	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
Tetra Tech Inc	Other RE Services	Portland	64,315	37,975	26,340	4/1/2022	3/31/2024
Wisewood, Inc	RE Biomass Energy Tool		61,028	32,913	28,115	12/1/2023	8/1/2024
Excidian LLC	AMC Custom Calculator Model	Wheeling	57,732	38,700	19,032	11/15/2023	12/31/2024
Arnold Cushing LLC	PE REDA Grant Agreement	Portland	50,000	25,000	25,000	10/11/2021	7/31/2024
University of Oregon	U of O REDA Grant	Eugene	50,000	0	50,000	12/1/2023	3/31/2025
GuildQuality Inc.	License Agreement		41,640	20,800	20,840	6/1/2023	12/31/2024
Clean Energy States Alliance	Memorandum of Understanding	Montpelier	39,500	39,500	0	7/1/2023	6/30/2024
American Microgrid Solutions LLC	Solar+Storage RES EPS NC	Easton	25,000	6,520	18,480	12/29/2022	6/3/2024

CONTRACTOR	Description	City	EST COST	Actual TTD	Remaining	Start	End
University of Oregon	UO SRML Sponsorship	Eugene	24,999	24,999	0	3/9/2024	3/8/2025
Bonneville Environmental Foundation	Comm Outreach Services	Portland	24,000	5,475	18,525	4/1/2022	1/31/2025
Site Capture LLC	Subscription Agreement	Austin	24,000	19,952	4,048	6/1/2023	5/31/2024
Kleinschmidt Associates	Other RE Professional Services	Pittsfield	18,000	15,736	2,264	4/1/2022	3/31/2024
Adelante Mujeres	Solarize Outreach Services		14,980	0	14,980	3/1/2024	6/30/2024
		Renewable Energy Total:	**25,401,641**	**21,409,652**	**3,991,990**		
		Grand Total:	**281,991,007**	**193,771,146**	**88,219,861**		
		Contracts without Incentives Total:	**258,841,201**	**173,613,517**	**85,227,685**		
		Renewable Energy Incentives Total:	**21,139,806**	**18,848,669**	**2,291,137**		
		Energy Efficiency Incentives Total:	**2,010,000**	**1,308,960**	**701,040**		

PINK PAPER

Finance & Audit Committee Meeting Minutes

May 23, 2024, at 3 p.m.

Board Attending by teleconference: Thelma Fleming, Henry Lorenzen, Silvia Tanner

Staff attending by teleconference: Melanie Bissonette, Shelly Carlton, Michael Colgrove, Oliver Kesting, Devin Liebmann, Cameron Matthews, Debbie Menashe, Spencer Moersfelder, Derek Olson, Dan Peterson, Danielle Rhodes, Lizzie Rubado, Jenny Urbina, Robert Wylie

Others in attendance:

Committee Absent: Anne Root, Peter Therkelsen, Karen Ward

Thelma Fleming convened the meeting at 3:04 p.m.

Multiyear Planning Update

Melanie Bissonette, project manager for the Multiyear Planning project, provided updates on the multiyear planning project.

For the multiyear savings assessment project, recent accomplishments include a second session of working strategy meetings with utility partners and brainstorming savings range build-up strategies. Staff will continue to estimate savings impact and prepare for closing meetings with utilities in mid-June.

In the multiyear plan process design project, staff has finalized requirements for the rolling forecast and financial plan, refined the plan management framework, and shared the revenue model approaches with utilities, and will continue to refine details around plan management, process and stakeholder engagement.

The committee asked a few questions, including whether a similar planning process technique is used by other nonprofit entities. Staff will provide follow-up information on this at a future meeting.

Melanie then shared the anticipated timeline of multiyear planning. Elements of the plan will be developed in a January – May timeframe, beginning next year, and in June, content will be drafted for a public comment period in July and August. Revisions will occur in September and in October a final version will be presented to the board for approval.

Devin Liebman, Manager of Financial Planning & Analysis, then provided information to the committee on impact of multiyear planning for program planning. Devin explained that transitioning to a multiyear plan affords Energy Trust great financial flexibility and provides the ability to reallocate funds across programs and years to achieve targets. Debbie Menashe, General Counsel, then explained that this kind of financial flexibility will warrant consideration of changes to Energy Trust's board Policy 4.2.000-P, the Program Approval Process Policy. This policy is currently structured based on an annual budgeting process, as opposed to multiyear planning. Debbie will work with this committee and the Nominating & Governance Committee to consider changes for better alignment with a multiyear planning process and regular reporting to the Finance & Audit Committee.

Committee members asked questions about and discussed the impact of multiyear planning on assessing program performance.

Management Review Update

Jenny Urbina, project manager, presented an update on the RFP for management review services, as discussed at the last committee meeting.

The RFP sought proposals for consulting services to identify appropriate metrics for administrative and staffing costs, relative to total expenditures and best practices for forecasting costs. 1961 Consulting was selected through the RFP process and will begin its work by the end of May in order to deliver a final report by September 30th. ML Weekes & Co., a firm specializing in cost allocation methodologies, is reviewing Energy Trust's allocation methodologies under a separate contract, and it will provide a final report on its findings on the same timeline.

RFP for 2025 Program Management Contractor (PMC) Agreement for the New Buildings Program

Shelly Carlton presented staff's recommendation for a new PMC Agreement for the New Buildings Program. The current contract expires December 31, 2024. The contract was initially authorized by the board in 2018, to a five-year term, and in 2022, the board approved a one-year extension.

Staff issued announcements for an RFP in 2023 and provided educational webinars for potential bidders and 17 firms submitted interest. The RFP was announced in January 2024 for an implementation program that begins in January 2025. The RFP included a supplier diversity spend goal that required bidders to demonstrate that implementation services would utilize Supplier Diversity Contractors at or above 20% that are COBID (Oregon Certification Office for Business Inclusion and Diversity) or SBA certified.

Energy Trust received two proposals in response to the RFP. Staff reviewed and scored the proposals based on proposed cost and energy savings; strength and cohesion of bidder team; diversity, equity, and conclusion; and the strength of the proposal. As a result of this review, staff recommends contracting with CLEAResult, the incumbent, for PMC services for the New Buildings Program for a five-year term, beginning January 1, 2025, with potential for two one-year extensions recommended upon satisfaction of identified performance metrics.

Committee members asked a number of questions to understand the differences between proposals. In addition, committee members asked for information about CLEAResult's performance as an incumbent in achieving savings targets.

After discussion, the committee agreed with staff's recommendation, and the recommendation will be presented to the full board at the June board meeting.

April 2024 Financial Results

Devin Liebman, Manager of Financial Planning and Analysis, presented on the month-end financial results for April. Incentives are tracking 4% over budget due to a few of the programs running hot as reviewed in the last committee meeting. Other expense categories are in line with what we see in historical trends.

Revenue is under budget, primarily attributable to implementation of tariff increases in April instead of January. We should see smaller budget variances beginning in May. Devin noted that Energy Trust is continually working with utilities on revenue projections.

We are over budget on commercial incentives, and that is being driven by the existing buildings and commercial lighting programs. Offsetting this are the residential incentives, which were under budget. Devin also noted that we are monitoring third-party contracting expenses, but in discussions with staff, contracts are expected to be executed in Q3.

Committee members asked questions about catching up in contracting expenses, and staff members provided explanation and plans, particularly with regard to spending in the Planning & Evaluation group. The committee also noted an increase in accounts payable between March and April, and staff explained that they will provide an update as soon as possible.

E&I Pipeline Update

Derek Olson provided energy and incentives pipeline updates. At the end of April, we are forecasted on track to achieve and exceed our savings targets for both electric utilities at the portfolio level, and we are forecasted to exceed our budget for PAC, and still within our initial 2024 budget for PGE.

At the end of April, we are forecasted on track to achieve and exceed our collective OPUC gas goals, although Cascade Natural Gas is forecasted below our 2024 savings targets. Energy Trust is currently working with both NW Natural and Avista on services to transportation customers. There is a robust pipeline for these projects.

Derek then reviewed the Washington efficiency for NW Natural Gas. We are forecasted on track to achieve and exceed our savings targets and within budget.

Derek continued with information about the Renewables Sector. This sector is currently in a period of transition so their generation goals and achievement to date are not necessarily the same as previous years. They are also reexamining the Solar offering and the pipeline for that is not as robust as in previous years. To date, we forecast significantly below our generation targets for PAC, but low-to-moderate customer (LMI) targets are close to goal. We are forecasted to achieve and exceed our generation targets for PGE, but our LMI targets are far from goal. In April, the team revised both standard and LMI solar incentive offers based on Q1 forecast results and ODOE sunsetting its current solar rebate so we can further support the solar market.

Inn Dev Updates

Robert Wylie from the Innovation and Development services team presented updates on funding awards and upcoming opportunities and highlighted some of the key developments for the quarter.

Energy Trust staff are accelerating preparation for Solar for All funding, based on the recent funding award announcement. EPA announced an $86.6 million award to Oregon, and we are in the process of contracting as a sub-awardee before the September deadline. Renewables, InnDev, and other relevant staff are in early-stage prep for Solar for All implementation.
For the HOMES and HEAR Federal Home Energy and Electrification Rebate, we are awaiting award notice. ODOE led a statewide application for these EPA funds, and Energy Trust has agreed to be the HOMES & HEAR program implementer in IOU service area, as a sub-awardee

to ODOE. Internal work continues to prepare Energy Trust programs and systems for the Homes & HEAR implementation. This will be a $113 million grant with a 10-year period of performance, and we are currently supporting ODOE in finalizing their detailed implementation blueprint to US DOE.

Lizzie Rubado also noted possible upcoming opportunities with the Portland Clean Energy Fund. The Inn Dev group continues to work closely with PCEF and monitor opportunities that support Energy Trust's core work. In addition, in April 2024, the PCEF announced a Collaborating for Climate Action grant, in response to unexpected additional PCEF revenues. Over $150M will be awarded, in grants between $20M-$100M, for high-impact, multi-stakeholder projects that create equitable climate-action solutions over the next five years. Energy Trust is submitting a letter of interest for a concept to braid PCEF dollars with Solar for All, to serve more low-income Portlanders more deeply.

Committee members thanked Robert and Lizzie for their report. They urged staff to be mindful of the impact of additional opportunities on Energy Trust's core work. Staff and the committee will work together to confirm the most effective regular reporting format for InnDev work; this topic will be discussed at a future meeting.

Adjourn Meeting

Thelma Fleming adjourned the meeting at 5:07 p.m.

Next meeting is June 27, 2024, at 3 p.m.

PINK PAPER

Statement of Net Assets
Period Ending April2024

Overview:

- Net Assets have increased by $16M since the beginning of the year.

- An increase in Net Assets is typical in the first three quarters as revenues are generally high and incentive spending is comparatively low until the trend reverses in the final quarter of the year.

Funding Source	Net Assets Beginning of Year	Current Year Net Income	Interest Income Distribution	Transfer Between FS	Net Assets
PGE	$ 26,314,101	$ 3,359,028	$ 420,493	$ -	$ 30,093,622
PAC	$ 7,952,189	$ 824,388	$ 125,642	$ -	$ 8,902,218
NW Natural	$ 10,610,922	$ 6,739,447	$ 210,004	$ -	$ 17,560,373
NWN - Industrial	$ 3,303,684	$ 702,027	$ 54,897	$ -	$ 4,060,609
CNG	$ 3,452,582	$ 107,223	$ 52,667	$ -	$ 3,612,471
Avista Gas	$ 1,254,246	$ (553,590)	$ 14,682	$ -	$ 715,338
AVI Interruptible	$ 278,144	$ 53,411	$ -	$ -	$ 331,554
OPUC Efficiency	**$ 53,165,868**	**$ 11,231,933**	**$ 878,386**	**$ -**	**$ 65,276,186**
PGE	$ 12,550,933	$ 1,603,142	$ 200,569	$ -	$ 14,354,644
PAC	$ 8,420,425	$ 1,275,146	$ 136,061	$ -	$ 9,831,631
OPUC Renewables	**$ 20,971,358**	**$ 2,878,288**	**$ 336,629**	**$ -**	**$ 24,186,275**
NWN Washington	$ 587,590	$ 334,262	$ 11,337	$ -	$ 933,189
NWN Transport	$ -	$ -	$ -	$ -	$ -
CNG Transport	$ -	$ -	$ -	$ -	$ -
AVI Transport	$ 174,550	$ (35,568)	$ -	$ -	$ 138,982
LMI	$ (5,004)	$ (103)	$ (76)	$ -	$ (5,183)
Community Solar	$ 0	$ 76,409	$ 574	$ -	$ 76,983
PGE Smart Battery	$ 31,440	$ (6,130)	$ 426	$ -	$ 25,737
NWN Geo TLM Phase 3	$ 348,408	$ -	$ 5,233	$ -	$ 353,641
NREL Program	$ (0)	$ (0)	$ (0)	$ -	$ (0)
SALMON Program	$ (42,471)	$ (57,190)	$ (1,067)	$ -	$ (100,728)
FEMA Program	$ (13,397)	$ (1,717)	$ (214)	$ -	$ (15,329)
PGE Inverter	$ 13,617	$ (244)	$ 364	$ -	$ 13,737
ODOE Cooling	$ (0)	$ 0	$ (0)	$ -	$ (0)
FlexFeeder	$ 51,836	$ 17,729	$ -	$ -	$ 69,566
Development	$ 573,673	$ (4,293)	$ 8,420	$ -	$ 577,800
Total Contracts + Grants	**$ 1,720,242**	**$ 323,156**	**$ 24,997**	**$ -**	**$ 2,068,394**
Craft3 Loans	$ 2,300,000	$ -	$ -	$ (800,000)	$ 1,500,000
Operational Contingency	$ 5,487,654	$ 1,420,572	$ (1,240,012)	$ 800,000	$ 6,468,214
Emergency Contingency	$ 3,000,000	$ -	$ -	$ -	$ 3,000,000
Total Investments + Contingency	**$ 10,787,654**	**$ 1,420,572**	**$ (1,240,012)**	**$ -**	**$ 10,968,214**
Total Net Assets	**$ 86,645,121**	**$ 15,853,948**	**$ (0)**	**$ -**	**$ 102,499,070**

Statement of Profit and Loss
Period Ending April2024

Overview:
- Revenue is 12% under the Current Period budget and 4% under the YTD budget.
- Expenses are 14% under the Current Period budget and 8% under the YTD budget.

	Current Period Actual	Current Period Budget	$ Variance	% Variance	YTD Actual	YTD Budget	$ Variance	% Variance	Annual Budget
Revenue from Utilities	$ 18,257,618	$ 20,999,048	$ (2,741,430)	-13.06%	$ 84,180,709	$ 88,254,695	$ (4,073,986)	-4.62%	$ 261,373,443
Contract Revenue	$ 128,264	$ 239,817	$ (111,553)	-46.52%	$ 521,249	$ 800,439	$ (279,189)	-34.88%	$ 2,403,804
Grant Revenue	$ 548	$ 500	$ 48	9.68%	$ 548	$ 2,000	$ (1,452)	-72.58%	$ 6,000
Contributed Income	$ 309	$ -	$ 309		$ 396	$ -	$ 396		$ -
Investment Income	$ 353,773	$ 125,000	$ 228,773	183.02%	$ 1,420,572	$ 500,000	$ 920,572	184.11%	$ 1,500,000
Revenue	**$ 18,740,512**	**$ 21,364,365**	**$ (2,623,853)**	**-12.28%**	**$ 86,123,475**	**$ 89,557,134**	**$ (3,433,659)**	**-3.83%**	**$ 265,283,247**
Incentives	$ 8,462,479	$ 9,600,605	$ (1,138,126)	-11.85%	$ 30,249,470	$ 29,145,720	$ 1,103,749	3.79%	$ 161,445,804
Program Delivery Contractors	$ 6,607,293	$ 7,497,250	$ (889,957)	-11.87%	$ 26,863,441	$ 29,954,002	$ (3,090,561)	-10.32%	$ 90,427,897
Employee Salaries & Fringe Benefits	$ 2,167,879	$ 2,223,327	$ (55,448)	-2.49%	$ 8,124,945	$ 8,530,911	$ (405,967)	-4.76%	$ 26,935,883
Agency Contractor Services	$ 120,461	$ 177,308	$ (56,846)	-32.06%	$ 421,491	$ 709,231	$ (287,740)	-40.57%	$ 2,127,692
Planning and Evaluation Services	$ 263,584	$ 346,774	$ (83,190)	-23.99%	$ 943,626	$ 1,387,096	$ (443,470)	-31.97%	$ 4,161,288
Advertising and Marketing Services	$ 304,640	$ 408,000	$ (103,360)	-25.33%	$ 824,527	$ 1,632,000	$ (807,473)	-49.48%	$ 4,896,000
Other Professional Services	$ 396,330	$ 872,786	$ (476,456)	-54.59%	$ 1,816,802	$ 3,552,643	$ (1,735,841)	-48.86%	$ 10,534,929
Travel, Meetings, Trainings & Conferences	$ 46,041	$ 82,980	$ (36,939)	-44.52%	$ 156,902	$ 368,419	$ (211,517)	-57.41%	$ 1,033,756
Dues, Licenses and Fees	$ 13,416	$ 40,507	$ (27,091)	-66.88%	$ 72,667	$ 162,028	$ (89,361)	-55.15%	$ 486,160
Software and Hardware	$ 56,833	$ 131,280	$ (74,447)	-56.71%	$ 265,066	$ 525,122	$ (260,056)	-49.52%	$ 1,575,365
Depreciation & Amortization	$ 22,786	$ 41,181	$ (18,395)	-44.67%	$ 92,002	$ 144,793	$ (52,792)	-36.46%	$ 459,373
Office Rent and Equipment	$ 93,810	$ 113,809	$ (19,999)	-17.57%	$ 382,820	$ 455,236	$ (72,416)	-15.91%	$ 1,365,707
Materials Postage and Telephone	$ 7,815	$ 15,518	$ (7,704)	-49.64%	$ 31,229	$ 62,073	$ (30,844)	-49.69%	$ 186,220
Miscellaneous Expenses	$ 0	$ 981	$ (981)	-100.00%	$ 24,540	$ 3,923	$ 20,617	525.50%	$ 11,770
Expenditures	**$ 18,563,369**	**$ 21,552,306**	**$ (2,988,937)**	**-13.87%**	**$ 70,269,527**	**$ 76,633,198**	**$ (6,363,671)**	**-8.30%**	**$ 305,647,844**
Net Income	**$ 177,144**	**$ (187,941)**	**$ 365,084**	**-194.26%**	**$ 15,853,948**	**$ 12,923,936**	**$ 2,930,012**	**22.67%**	**$ (40,364,597)**

Net Income by Funder
Period Ending April2024

Funder	Current Period Actual	Current Period Budget	$ Variance	% Variance	YTD Actual	YTD Budget	$ Variance	% Variance
PGE Efficiency	$ (275,944)	$ (1,161,851)	$ 885,907	-76.25%	$ 3,779,521	$ 754,197	$ 3,025,325	401.13%
PGE Renewables	$ 469,237	$ (219,975)	$ 689,211	-313.31%	$ 1,803,711	$ 382,290	$ 1,421,420	371.82%
Total PGE	**$ 193,293**	**$ (1,381,825)**	**$ 1,575,118**	**-113.99%**	**$ 5,583,232**	**$ 1,136,487**	**$ 4,446,745**	**391.27%**
PAC Efficiency	$ (284,676)	$ 731,839	$ (1,016,515)	-138.90%	$ 950,029	$ 1,832,362	$ (882,332)	-48.15%
PAC Renewables	$ 367,051	$ 76,311	$ 290,740	380.99%	$ 1,411,207	$ 412,754	$ 998,453	241.90%
Total PAC	**$ 82,376**	**$ 808,150**	**$ (725,775)**	**-89.81%**	**$ 2,361,236**	**$ 2,245,116**	**$ 116,120**	**5.17%**
NW Natural	$ 788,386	$ 1,236,666	$ (448,280)	-36.25%	$ 6,949,451	$ 7,554,704	$ (605,253)	-8.01%
NWN - Industrial	$ (517,125)	$ (733,092)	$ 215,967	-29.46%	$ 756,925	$ 435,552	$ 321,373	73.79%
Cascade Natural Gas	$ 81,579	$ 60,104	$ 21,475	35.73%	$ 159,890	$ 478,046	$ (318,156)	-66.55%
Avista Gas	$ (365,822)	$ (17,046)	$ (348,776)	2046.12%	$ (538,908)	$ 67,271	$ (606,179)	-901.10%
AVI Interruptible	$ 32,479	$ 8,933	$ 23,546	263.57%	$ 53,411	$ (26,740)	$ 80,150	-299.74%
NWN Washington	$ (177,580)	$ (273,513)	$ 95,934	-35.07%	$ 345,599	$ 172,855	$ 172,744	99.94%
NWN Transport	$ -	$ (26,622)	$ 26,622	-100.00%	$ -	$ 371,259	$ (371,259)	-100.00%
AVI Transport	$ (913)	$ (2,854)	$ 1,941	-68.00%	$ (35,568)	$ (6,914)	$ (28,654)	414.43%
LMI	$ 532	$ 500	$ 32	6.40%	$ (179)	$ 2,000	$ (2,179)	-108.96%
Community Solar	$ 17,918	$ 14,859	$ 3,059	20.59%	$ 76,983	$ 58,394	$ 18,589	31.83%
PGE Smart Battery	$ (1,672)	$ (886)	$ (787)	88.80%	$ (5,703)	$ (4,732)	$ (972)	20.53%
NWN Geo TLM Phase 3	$ 1,300	$ (0)	$ 1,300	##########	$ 5,233	$ (0)	$ 5,234	##########
NREL Program	$ (0)	$ (0)	$ 0	-99.99%	$ (0)	$ (0)	$ 0	-99.99%
SALMON Program	$ (7,389)	$ (5,854)	$ (1,535)	26.23%	$ (58,258)	$ (24,669)	$ (33,589)	136.16%
FEMA Program	$ (298)	$ -	$ (298)		$ (1,931)	$ -	$ (1,931)	
PGE Inverter	$ (121)	$ 585	$ (706)	-120.77%	$ 120	$ 2,209	$ (2,088)	-94.55%
ODOE Cooling	$ (0)	$ 6,642	$ (6,642)	-100.00%	$ 0	$ (4,479)	$ 4,479	-100.00%
FlexFeeder	$ 5,487	$ (3,905)	$ 9,391	-240.52%	$ 17,729	$ (17,378)	$ 35,108	-202.02%
Development	$ (2,329)	$ (3,783)	$ 1,455	-38.45%	$ 4,127	$ (15,045)	$ 19,172	-127.43%
Investment & Contingency	$ 47,045	$ 125,000	$ (77,955)	-62.36%	$ 180,560	$ 500,000	$ (319,440)	-63.89%
Total	**$ 177,144**	**$ (187,941)**	**$ 365,084**	**-194.26%**	**$ 15,853,948**	**$ 12,923,936**	**$ 2,930,012**	**22.67%**

Revenue Statement by Funder
Period Ending April2024

Overview:

- Total revenue is 12% under the Current Period budget and 4% under the YTD budget.

Funding Source	Current Period Actual	Current Period Budget	$ Variance	% Variance	YTD Actual	YTD Budget	$ Variance	% Variance
PGE Efficiency	$ 7,355,136	$ 7,930,933	$ (575,797)	-7.26%	$ 31,998,188	$ 32,964,701	$ (966,513)	-2.93%
PGE Renewables	$ 1,192,980	$ 831,182	$ 361,798	43.53%	$ 4,758,566	$ 4,239,972	$ 518,594	12.23%
Total PGE	**$ 8,548,116**	**$ 8,762,115**	**$ (214,000)**	**-2.44%**	**$ 36,756,754**	**$ 37,204,673**	**$ (447,919)**	**-1.20%**
PAC Efficiency	$ 4,836,484	$ 7,095,236	$ (2,258,752)	-31.83%	$ 21,557,676	$ 24,342,453	$ (2,784,777)	-11.44%
PAC Renewables	$ 765,056	$ 778,757	$ (13,701)	-1.76%	$ 3,147,187	$ 3,034,745	$ 112,442	3.71%
Total PAC	**$ 5,601,540**	**$ 7,873,993**	**$ (2,272,453)**	**-28.86%**	**$ 24,704,863**	**$ 27,377,198**	**$ (2,672,335)**	**-9.76%**
NW Natural	$ 3,425,552	$ 3,588,780	$ (163,228)	-4.55%	$ 15,474,726	$ 15,854,009	$ (379,283)	-2.39%
NWN - Industrial	$ -	$ -	$ -		$ 3,110,529	$ 3,110,530	$ (1)	0.00%
Cascade Natural Gas	$ 371,006	$ 438,018	$ (67,012)	-15.30%	$ 1,815,687	$ 1,818,771	$ (3,084)	-0.17%
Avista Gas	$ 275,349	$ 275,349	$ (0)	0.00%	$ 1,101,395	$ 1,101,396	$ (1)	0.00%
AVI Interruptible	$ 36,055	$ 36,055	$ -	0.00%	$ 72,110	$ 72,110	$ -	0.00%
NWN Washington	$ -	$ -	$ -		$ 1,144,645	$ 1,144,645	$ -	0.00%
NWN Transport	$ -	$ -	$ -		$ -	$ 472,409	$ (472,409)	-100.00%
CNG Transport	$ -	$ -	$ -		$ -	$ -	$ -	
AVI Transport	$ -	$ 24,738	$ (24,738)	-100.00%	$ -	$ 98,954	$ (98,954)	-100.00%
LMI	$ 548	$ 500	$ 48	9.68%	$ 548	$ 2,000	$ (1,452)	-72.58%
Community Solar	$ 58,026	$ 45,058	$ 12,968	28.78%	$ 199,047	$ 180,232	$ 18,815	10.44%
PGE Smart Battery	$ -	$ 33,933	$ (33,933)	-100.00%	$ 5,704	$ 135,733	$ (130,029)	-95.80%
NWN Geo TLM Phase 3	$ -	$ -	$ -		$ -	$ -	$ -	
NREL Program	$ -	$ -	$ -		$ -	$ -	$ -	
SALMON Program	$ 13,576	$ 38,605	$ (25,029)	-64.83%	$ 83,519	$ 154,419	$ (70,899)	-45.91%
FEMA Program	$ -	$ -	$ -		$ -	$ -	$ -	
PGE Inverter	$ -	$ 4,792	$ (4,792)	-100.00%	$ 469	$ 19,167	$ (18,697)	-97.55%
ODOE Cooling	$ 33,059	$ 95,230	$ (62,171)	-65.29%	$ 173,993	$ 222,091	$ (48,098)	-21.66%
FlexFeeder	$ 20,120	$ 22,199	$ (2,079)	-9.37%	$ 52,875	$ 88,797	$ (35,921)	-40.45%
Development	$ 3,792	$ -	$ 3,792		$ 6,037	$ -	$ 6,037	
Investment & Contingency	$ 353,773	$ 125,000	$ 228,773	183.02%	$ 1,420,572	$ 500,000	$ 920,572	184.11%
Total	**$ 18,740,512**	**$ 21,364,365**	**$ (2,623,853)**	**-12.28%**	**$ 86,123,475**	**$ 89,557,134**	**$ (3,433,659)**	**-3.83%**

Expenses by Funder
Period Ending April2024

Overview:
- Total expenses are 14% under the Current Period budget and 8% under the YTD budget.

Funder	Current Period Actual	Current Period Budget	$ Variance	% Variance	YTD Actual	YTD Budget	$ Variance	% Variance
PGE Efficiency	$ 7,733,366	$ 9,092,784	$ (1,359,418)	-14.95%	$ 28,639,160	$ 32,210,504	$ (3,571,344)	-11.09%
PGE Renewables	$ 775,905	$ 1,051,157	$ (275,251)	-26.19%	$ 3,155,424	$ 3,857,682	$ (702,257)	-18.20%
Total PGE	**$ 8,509,271**	**$ 10,143,940**	**$ (1,634,669)**	**-16.11%**	**$ 31,794,585**	**$ 36,068,186**	**$ (4,273,602)**	**-11.85%**
PAC Efficiency	$ 5,150,587	$ 6,363,397	$ (1,212,810)	-19.06%	$ 20,733,289	$ 22,510,091	$ (1,776,803)	-7.89%
PAC Renewables	$ 433,664	$ 702,446	$ (268,782)	-38.26%	$ 1,872,041	$ 2,621,991	$ (749,950)	-28.60%
Total PAC	**$ 5,584,251**	**$ 7,065,843**	**$ (1,481,592)**	**-20.97%**	**$ 22,605,330**	**$ 25,132,082**	**$ (2,526,753)**	**-10.05%**
NW Natural	$ 2,693,450	$ 2,352,114	$ 341,336	14.51%	$ 8,735,279	$ 8,299,305	$ 435,974	5.25%
NWN - Industrial	$ 527,778	$ 733,092	$ (205,314)	-28.01%	$ 2,408,502	$ 2,674,978	$ (266,476)	-9.96%
Cascade Natural Gas	$ 302,891	$ 377,914	$ (75,023)	-19.85%	$ 1,708,464	$ 1,340,725	$ 367,738	27.43%
Avista Gas	$ 642,743	$ 292,395	$ 350,348	119.82%	$ 1,654,986	$ 1,034,125	$ 620,861	60.04%
AVI Interruptible	$ 3,576	$ 27,122	$ (23,546)	-86.82%	$ 18,699	$ 98,850	$ (80,150)	-81.08%
NWN Washington	$ 179,382	$ 273,513	$ (94,131)	-34.42%	$ 810,383	$ 971,790	$ (161,407)	-16.61%
NWN Transport	$ -	$ 26,622	$ (26,622)	-100.00%	$ -	$ 101,150	$ (101,150)	-100.00%
AVI Transport	$ 913	$ 27,592	$ (26,679)	-96.69%	$ 35,568	$ 105,868	$ (70,300)	-66.40%
LMI	$ 1	$ -	$ 1		$ 652	$ -	$ 652	
Community Solar	$ 40,350	$ 30,199	$ 10,151	33.61%	$ 122,637	$ 121,838	$ 800	0.66%
PGE Smart Battery	$ 1,768	$ 34,819	$ (33,051)	-94.92%	$ 11,834	$ 140,465	$ (128,631)	-91.58%
NWN Geo TLM Phase 3	$ -	$ 0	$ (0)	-100.00%	$ -	$ 0	$ (0)	-100.00%
NREL Program	$ -	$ 0	$ (0)	-100.00%	$ -	$ 0	$ (0)	-100.00%
SALMON Program	$ 20,660	$ 44,459	$ (23,798)	-53.53%	$ 140,710	$ 179,087	$ (38,378)	-21.43%
FEMA Program	$ 243	$ -	$ 243		$ 1,717	$ -	$ 1,717	
PGE Inverter	$ 211	$ 4,207	$ (3,996)	-94.99%	$ 713	$ 16,958	$ (16,245)	-95.80%
ODOE Cooling	$ 33,059	$ 88,588	$ (55,529)	-62.68%	$ 173,993	$ 226,569	$ (52,576)	-23.21%
FlexFeeder	$ 14,633	$ 26,104	$ (11,471)	-43.94%	$ 35,146	$ 106,175	$ (71,029)	-66.90%
Development	$ 8,187	$ 3,783	$ 4,404	116.40%	$ 10,330	$ 15,045	$ (4,715)	-31.34%
Total	**$ 18,563,369**	**$ 21,552,306**	**$ (2,988,937)**	**-13.87%**	**$ 70,269,527**	**$ 76,633,198**	**$ (6,363,671)**	**-8.30%**

EnergyTrust of Oregon

Statement of Functional Expenses
Period Ending April2024

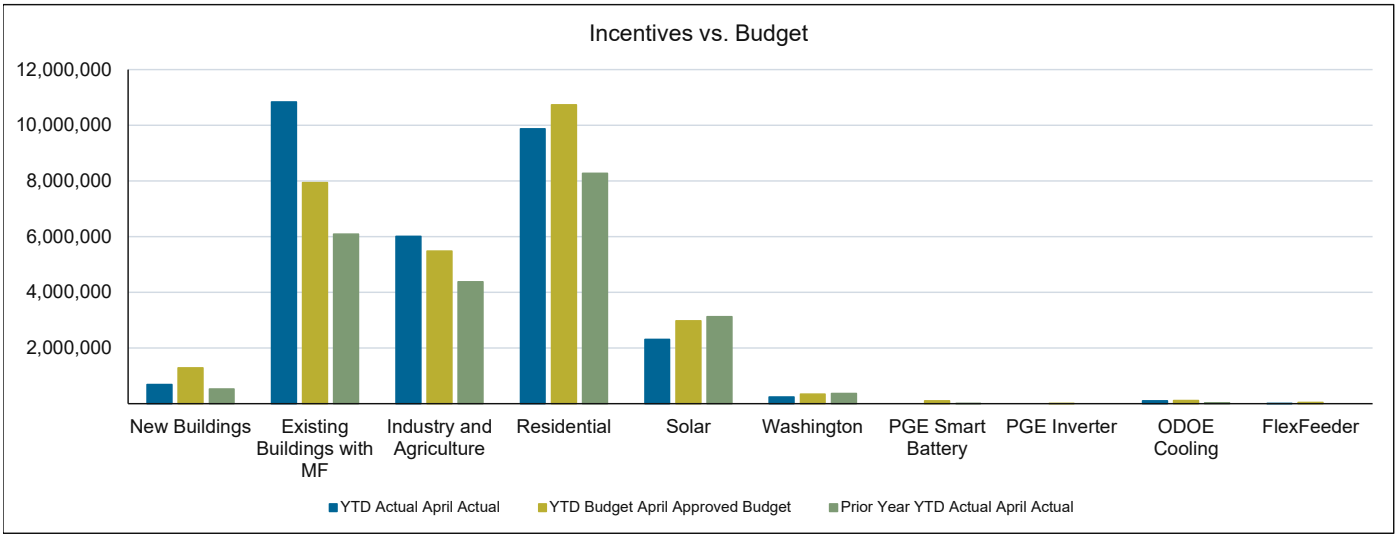
OPUC Only Performance Metric	Measure	Current Metric	Status	Notes
Administrative Costs	<= 6.5% of Expenses	6.9%	Exceeding Metric	Common to exceed early in the year due to expense timing curves.
Employee Salaries + Fringe Benefits	<= 9.5% of Expenses	11.2%	Exceeding Metric	Common to exceed early in the year due to expense timing curves.

	Efficiency Programs	Renewables Programs	Renewables Programs	Washington Programs	Contracts + Grants	Total Programs	Fund Development	Communications + Outreach	Management + General	Total Administrative	Total Company
Incentives	$ 27,432,667	$ -	$ 2,470,471	$ 239,844	$ 106,488	**$ 30,249,470**	**$ -**	$ -	$ -	**$ -**	**$ 30,249,470**
Program Delivery Contractors	$ 25,984,768	$ -	$ 497,309	$ 344,939	$ 36,425	**$ 26,863,441**	**$ -**	$ -	$ -	**$ -**	**$ 26,863,441**
Employee Salaries & Fringe Benefits	$ 3,442,082	$ 334,530	$ 1,039,511	$ 126,497	$ 223,753	**$ 4,831,843**	**$ 8,762**	$ 1,181,514	$ 2,102,826	**$ 3,284,340**	**$ 8,124,945**
Agency Contractor Services	$ 23,775	$ 6,272	$ 75,290	$ 785	$ 24,556	**$ 124,406**	**$ 61**	$ 13,670	$ 283,353	**$ 297,023**	**$ 421,491**
Planning and Evaluation Services	$ 909,544	$ 22,383	$ 22,383	$ 4,680	$ 0	**$ 936,607**	**$ -**	$ 7,020	$ -	**$ 7,020**	**$ 943,626**
Advertising and Marketing Services	$ 328,724	$ -	$ 80,423	$ -	$ (2,158)	**$ 406,990**	**$ -**	$ 417,537	$ -	**$ 417,537**	**$ 824,527**
Other Professional Services	$ 1,005,305	$ 62,690	$ 300,221	$ 9,340	$ 46,458	**$ 1,361,325**	**$ 7**	$ 9,063	$ 446,408	**$ 455,471**	**$ 1,816,802**
Travel, Meetings, Trainings & Conferences	$ 48,709	$ 3,630	$ 16,783	$ 117	$ 83	**$ 65,693**	**$ 835**	$ 23,904	$ 66,470	**$ 90,374**	**$ 156,902**
Dues, Licenses and Fees	$ 29,400	$ 2,124	$ 5,763	$ 17,952	$ 46	**$ 53,161**	**$ 1**	$ 11,950	$ 7,555	**$ 19,505**	**$ 72,667**
Software and Hardware	$ 84,098	$ 22,514	$ 107,508	$ 2,664	$ 5,221	**$ 199,491**	**$ 158**	$ 23,101	$ 42,316	**$ 65,418**	**$ 265,066**
Depreciation & Amortization	$ 53,845	$ 8,820	$ 8,820	$ 1,052	$ 2,070	**$ 65,787**	**$ 70**	$ 9,226	$ 16,918	**$ 26,144**	**$ 92,002**
Office Rent and Equipment	$ 160,902	$ 53,684	$ 53,684	$ 6,343	$ 12,508	**$ 233,437**	**$ 408**	$ 52,588	$ 96,386	**$ 148,974**	**$ 382,820**
Materials Postage and Telephone	$ 12,129	$ 3,509	$ 3,509	$ 432	$ 845	**$ 16,915**	**$ 28**	$ 3,860	$ 10,427	**$ 14,286**	**$ 31,229**
Miscellaneous Expenses	$ 20,593	$ -	$ -	$ -	$ -	**$ 20,593**	**$ -**	$ -	$ 3,947	**$ 3,947**	**$ 24,540**
Expenditures	**$ 59,536,542**	**$ 520,155**	**$ 4,681,674**	**$ 754,644**	**$ 456,296**	**$ 65,429,156**	**$ 10,330**	**$ 1,753,433**	**$ 3,076,607**	**$ 4,830,040**	**$ 70,269,527**

Incentives Expense by Program
Period Ending April2024

Overview:
- Total incentive expenses are 4% over the YTD budget.
- Efficiency incentive expenses are 8% over the YTD budget.
- Renewables incentive expenses are 19% under the YTD budget.
- Other Contract + Grant incentive expenses are 44% under the YTD budget.

	YTD Actual	YTD Budget	$ Variance	% Variance	Prior Year YTD Actual	Prior Year YTD Budget	$ Variance	% of Variance
New Buildings	$ 693,741	$ 1,287,346	$ (593,605)	-46.11%	$ 527,886	$ 1,278,033	$ (750,147)	-58.70%
Existing Buildings with MF	$ 10,848,843	$ 7,944,759	$ 2,904,085	36.55%	$ 6,097,534	$ 5,015,609	$ 1,081,924	21.57%
Industry and Agriculture	$ 6,008,923	$ 5,486,514	$ 522,409	9.52%	$ 4,385,053	$ 3,250,513	$ 1,134,540	34.90%
Residential	$ 9,881,159	$ 10,743,986	$ (862,826)	-8.03%	$ 8,282,774	$ 7,901,024	$ 381,750	4.83%
OPUC Efficiency	**$ 27,432,667**	**$ 25,462,605**	**$ 1,970,062**	**7.74%**	**$ 19,293,247**	**$ 17,445,179**	**$ 1,848,068**	**10.59%**
Solar	$ 2,317,425	$ 2,977,218	$ (659,794)	-22.16%	$ 3,129,869	$ 3,038,761	$ 91,107	3.00%
Other Renewables	$ 153,047	$ 82,092	$ 70,955	86.43%	$ 112,049	$ 227,431	$ (115,383)	-50.73%
OPUC Renewables	**$ 2,470,471**	**$ 3,059,310**	**$ (588,839)**	**-19.25%**	**$ 3,241,918**	**$ 3,266,193**	**$ (24,275)**	**-0.74%**
Washington	$ 239,844	$ 340,983	$ (101,139)	-29.66%	$ 365,219	$ 310,189	$ 55,030	17.74%
PGE Smart Battery	$ -	$ 103,680	$ (103,680)	-100.00%	$ 13,000	$ 83,333	$ (70,333)	-84.40%
PGE Inverter	$ -	$ 8,333	$ (8,333)	-100.00%	$ -	$ 25,000	$ (25,000)	-100.00%
ODOE Cooling	$ 105,528	$ 120,000	$ (14,472)	-12.06%	$ 37,726	$ 192,818	$ (155,092)	-80.43%
FlexFeeder	$ 960	$ 50,809	$ (49,849)	-98.11%	$ -	$ -	$ -	
Total	**$ 30,249,470**	**$ 29,145,720**	**$ 1,103,749**	**3.79%**	**$ 22,951,109**	**$ 21,322,712**	**$ 1,628,397**	**7.64%**



Expenses by Program
Period Ending April2024

	Current Period Actual	Current Period Budget	$ Variance	% Variance	YTD Actual	YTD Budget	$ Variance	% Variance
New Buildings	$ 1,264,960	$ 1,495,831	$ (230,871)	-15.43%	$ 4,301,964	$ 5,277,289	$ (975,324)	-18.48%
Existing Buildings with MF	$ 6,942,778	$ 7,188,515	$ (245,737)	-3.42%	$ 24,695,139	$ 24,506,989	$ 188,150	0.77%
NEEA Commercial	$ 295,191	$ 418,518	$ (123,327)	-29.47%	$ 1,520,643	$ 1,689,287	$ (168,645)	-9.98%
Commercial Sector	$ 8,502,929	$ 9,102,864	$ (599,935)	-6.59%	$ 30,517,747	$ 31,473,565	$ (955,819)	-3.04%
Industry and Agriculture	$ 3,267,574	$ 3,285,936	$ (18,362)	-0.56%	$ 12,445,109	$ 12,772,495	$ (327,386)	-2.56%
NEEA - Industrial	$ 1,176	$ 6,771	$ (5,595)	-82.63%	$ 1,171	$ 27,323	$ (26,152)	-95.71%
Industry and Agriculture Sector	$ 3,268,750	$ 3,292,707	$ (23,957)	-0.73%	$ 12,446,280	$ 12,799,818	$ (353,538)	-2.76%
Residential	$ 5,165,425	$ 6,511,264	$ (1,345,838)	-20.67%	$ 19,695,880	$ 22,543,345	$ (2,847,465)	-12.63%
NEEA Residential	$ 118,200	$ 386,197	$ (267,996)	-69.39%	$ 1,274,040	$ 1,558,868	$ (284,828)	-18.27%
Residential Sector	$ 5,283,626	$ 6,897,460	$ (1,613,834)	-23.40%	$ 20,969,920	$ 24,102,213	$ (3,132,293)	-13.00%
OPUC Efficiency	**$ 17,055,305**	**$ 19,293,031**	**$ (2,237,727)**	**-11.60%**	**$ 63,933,946**	**$ 68,375,596**	**$ (4,441,650)**	**-6.50%**
Solar	$ 1,196,718	$ 1,670,486	$ (473,768)	-28.36%	$ 4,851,985	$ 6,142,987	$ (1,291,003)	-21.02%
Other Renewables	$ 12,851	$ 83,116	$ (70,265)	-84.54%	$ 175,481	$ 336,685	$ (161,205)	-47.88%
OPUC Renewables	**$ 1,209,569**	**$ 1,753,602**	**$ (544,033)**	**-31.02%**	**$ 5,027,465**	**$ 6,479,673**	**$ (1,452,208)**	**-22.41%**
OPUC Programs	**$ 18,264,874**	**$ 21,046,634**	**$ (2,781,760)**	**-13.22%**	**$ 68,961,412**	**$ 74,855,269**	**$ (5,893,857)**	**-7.87%**
Washington	$ 179,382	$ 273,513	$ (94,131)	-34.42%	$ 810,383	$ 971,790	$ (161,407)	-16.61%
LMI	$ 1	$ -	$ 1		$ 652	$ -	$ 652	
Community Solar	$ 40,350	$ 30,199	$ 10,151	33.61%	$ 122,637	$ 121,838	$ 800	0.66%
PGE Smart Battery	$ 1,768	$ 34,819	$ (33,051)	-94.92%	$ 11,834	$ 140,465	$ (128,631)	-91.58%
NWN Geo TLM Phase 3	$ -	$ 0	$ (0)	-100.00%	$ -	$ 0	$ (0)	-100.00%
NREL Program	$ -	$ 0	$ (0)	-100.00%	$ -	$ 0	$ (0)	-100.00%
SALMON Program	$ 20,660	$ 44,459	$ (23,798)	-53.53%	$ 140,710	$ 179,087	$ (38,378)	-21.43%
FEMA Program	$ 243	$ -	$ 243		$ 1,717	$ -	$ 1,717	
PGE Inverter	$ 211	$ 4,207	$ (3,996)	-94.99%	$ 713	$ 16,958	$ (16,245)	-95.80%
ODOE Cooling	$ 33,059	$ 88,588	$ (55,529)	-62.68%	$ 173,993	$ 226,569	$ (52,576)	-23.21%
FlexFeeder	$ 14,633	$ 26,104	$ (11,471)	-43.94%	$ 35,146	$ 106,175	$ (71,029)	-66.90%
Other Contracts + Grants	**$ 290,308**	**$ 501,889**	**$ (211,581)**	**-42.16%**	**$ 1,297,785**	**$ 1,762,883**	**$ (465,099)**	**-26.38%**
Development	**$ 8,187**	**$ 3,783**	**$ 4,404**	**116.40%**	**$ 10,330**	**$ 15,045**	**$ (4,715)**	**-31.34%**
Total Company	**$ 18,563,369**	**$ 21,552,306**	**$ (2,988,937)**	**-13.87%**	**$ 70,269,527**	**$ 76,633,198**	**$ (6,363,671)**	**-8.30%**

Balance Sheet
Period Ending April2024

	April2024	March2024	April2023	One Month Change	One Year Change
Cash	$ 113,193,117	$ 107,561,872	$ 111,321,246	$ 5,631,244	$ 1,871,870
Accounts Receivable	$ 225,755	$ 222,265	$ 247,772	$ 3,491	$ (22,017)
Prepaid	$ 1,298,955	$ 1,238,907	$ 1,025,950	$ 60,048	$ 273,005
Advances to Vendors	$ 1,587,002	$ 2,380,504	$ 1,381,898	$ (793,501)	$ 205,104
Current Assets	$ 116,304,830	$ 111,403,548	$ 113,976,867	$ 4,901,282	$ 2,327,963
Fixed Assets	$ 7,834,630	$ 7,894,978	$ 8,570,112	$ (60,348)	$ (735,482)
Depreciation	$ (6,186,157)	$ (6,163,371)	$ (5,891,841)	$ (22,786)	$ (294,317)
Net Fixed Assets	$ 1,648,472	$ 1,731,607	$ 2,678,271	$ (83,134)	$ (1,029,798)
Deposits	$ 280,899	$ 280,899	$ 267,559	$ -	$ 13,340
Deferred Compensation Asset	$ 1,259,361	$ 1,257,457	$ 1,213,107	$ 1,904	$ 46,254
Note Receivable, net of allowance	$ 1,288,151	$ 1,288,151	$ 1,282,331	$ -	$ 5,821
Other Assets	$ 2,828,411	$ 2,826,507	$ 2,762,997	$ 1,904	$ 65,415
Assets	**$ 120,781,714**	**$ 115,961,661**	**$ 119,418,134**	**$ 4,820,052**	**$ 1,363,580**
Accounts Payable and Accruals	$ 12,269,413	$ 7,570,584	$ 5,855,323	$ 4,698,829	$ 6,414,089
Deposits Held for Others	$ 45,000	$ 45,000	$ 25,000	$ -	$ 20,000
Salaries, Taxes, & Benefits Payable	$ 1,573,579	$ 1,509,885	$ 1,455,518	$ 63,694	$ 118,061
Deferred/Unearned Revenue	$ 1,358,454	$ 1,391,512	$ 1,753,349	$ (33,059)	$ (394,896)
Current Liabilities	$ 15,246,446	$ 10,516,981	$ 9,089,191	$ 4,729,464	$ 6,157,255
Deferred Compensation Payable	$ 1,261,765	$ 1,259,860	$ 1,215,313	$ 1,904	$ 46,451
Deferred Rent	$ 1,769,201	$ 1,857,661	$ 2,830,721	$ (88,460)	$ (1,061,520)
Other Long Term Liabilities	$ 5,230	$ 5,230	$ 5,230	$ -	$ -
Long Term Liabilities	**$ 3,036,195**	**$ 3,122,750**	**$ 4,051,264**	**$ (86,556)**	**$ (1,015,069)**
Liabilities	**$ 18,282,640**	**$ 13,639,732**	**$ 13,140,454**	**$ 4,642,909**	**$ 5,142,186**
Net Assets	**$ 102,499,070**	**$ 102,321,926**	**$ 106,277,676**	**$ 177,144**	**$ (3,778,606)**

R00407

Energy Trust of Oregon
Contract Status Summary Report

Report Date: 5/17/2024

For contracts with costs through: 5/1/2024

Complete List of Contracts Grouped by Size

Contracts in effect on April 30, 2024 including those contracts executed for 2024 and beyond and excluding contracts completed prior to this date

Grouping by Contract Size	Dollars	Number of Contracts	Distribution of Dollars	Distribution of Count
Over $500K	$196,154,061	32	89%	10%
From $400K to $500K	$7,685,170	17	3%	6%
Under $400K	$16,677,875	260	8%	84%
Total	$220,517,105	309		

Grouping by Contract Size	Contract Amount	Contractor	Description	Program	Start	End
Over $500K	42,866,366	Northwest Energy Efficiency Alliance	NEEA Funding Agreement	Energy Efficiency	1/1/2020	8/1/2025
Over $500K	33,662,505	Northwest Energy Efficiency Alliance	Regional EE Initiative Agmt	Energy Efficiency	1/1/2015	8/1/2025
Over $500K	30,853,332	TRC Environmental Corporation	2024 BE PMC	Energy Efficiency	1/1/2024	12/31/2024
Over $500K	15,177,862	CLEAResult Consulting Inc	2024 Residential PMC	Energy Efficiency	1/1/2024	12/31/2024
Over $500K	11,584,800	Energy 350 Inc	2024 PE PMC	Energy Efficiency	1/1/2024	12/31/2024
Over $500K	11,343,292	G&I VII Five Oak Owner LLC	Office Lease - 421 SW Oak	Administration	11/21/2011	12/31/2025
Over $500K	7,984,733	CLEAResult Consulting Inc	2024 NBE PMC	Energy Efficiency	1/1/2024	12/31/2024
Over $500K	6,221,925	CLEAResult Consulting Inc	2024 Lighting PDC	Energy Efficiency	1/1/2024	12/31/2024
Over $500K	3,203,706	TRC Engineers Inc.	2024 EPS New Const PDC	Energy Efficiency	1/1/2024	12/31/2024
Over $500K	3,078,000	Grady Britton, Inc	Media Services Agreement	Communications	1/1/2023	12/31/2024
Over $500K	3,000,000	Clean Water Services	Project Funding Agreement	Renewable Energy	11/25/2014	11/25/2039
Over $500K	3,000,000	City of Salem	Biogas Project - Willow Lake	Renewable Energy	9/4/2018	11/30/2040
Over $500K	2,500,000	Farmers Conservation Alliance	Irrigation Modernization	Renewable Energy	4/1/2019	3/31/2024
Over $500K	2,097,000	Colehour & Cohen	Public Relations Services	Communications	2/1/2022	12/31/2024
Over $500K	2,081,000	Northwest Power & Conservation Council	Regional Technical Forum Agrmt	Energy Efficiency	1/1/2020	12/31/2024
Over $500K	1,950,000	Intel Corporation	EE Project Funding Agreement	Energy Efficiency	12/2/2021	12/31/2025
Over $500K	1,800,000	Water Environment Services, A Dept. of Clackamas County	Bio Water Cogeneration System	Renewable Energy	11/15/2019	9/30/2041
Over $500K	1,728,537	CLEAResult Consulting Inc	2024 Retail PDC	Energy Efficiency	1/1/2024	12/31/2024
Over $500K	1,550,000	Oregon Institute of Technology	Geothermal Resource Funding	Renewable Energy	9/11/2012	9/11/2032
Over $500K	1,000,000	Three Sisters Irrigation District	TSID Hydro	Renewable Energy	4/25/2012	9/30/2032
Over $500K	1,000,000	Farm Power Misty Meadows LLC	Misty Meadows Biogas Facility	Renewable Energy	10/25/2012	10/25/2027
Over $500K	928,040	CLEAResult Consulting Inc	2024 Residential PMC SOLAR	Renewable Energy	1/1/2024	12/31/2024
Over $500K	900,000	Farmers Irrigation District	FID - Plant 2 Hydro	Renewable Energy	4/1/2014	4/1/2034
Over $500K	876,733	Cascade Energy, Inc.	Subscription ServicesAgreement	Energy Efficiency	1/21/2022	8/31/2024

For contracts with costs through: 5/1/2024

Grouping by Contract Size	Contract Amount	Contractor	Description	Program	Start	End
Over $500K	865,000	Three Sisters Irrigation District	Mckenize Reservoir Irrigation	Renewable Energy	3/18/2019	3/17/2039
Over $500K	850,000	Klamath Falls Solar 2 LLC	PV Project Funding Agreement	Renewable Energy	7/11/2016	7/10/2041
Over $500K	827,000	Stahlbush Island Farms, Inc.	Funding Assistance Agreement	Renewable Energy	6/24/2009	6/24/2029
Over $500K	748,000	CLEAResult Consulting Inc	2024 Residential PMC Innov	Energy Efficiency	1/1/2024	12/31/2024
Over $500K	725,000	Energy Assurance Company	Verifier Services Agreement	Renewable Energy	10/15/2022	10/14/2024
Over $500K	641,500	Pivotal Energy Solutions LLC	Software Product Support	Energy Efficiency	1/1/2020	12/31/2024
Over $500K	573,729	TRC Environmental Corporation	2024 BE PMC WA	Energy Efficiency	1/1/2024	12/31/2024
Over $500K	536,000	Community Energy Project, Inc.	HPWH & CPFE Measures	Energy Efficiency	1/25/2022	12/31/2024
From $400K to $500K	500,000	Craft3	Loan Agreement	Energy Efficiency	1/1/2018	12/31/2027
From $400K to $500K	500,000	Craft3	Loan Funding for EE Projects	Energy Efficiency	1/1/2021	9/30/2025
From $400K to $500K	500,000	Verde	DHP Installation Program	Energy Efficiency	1/1/2022	12/31/2024
From $400K to $500K	490,000	Old Mill Solar, LLC	Project Funding Agmt Bly, OR	Renewable Energy	5/29/2015	5/28/2030
From $400K to $500K	483,052	LD Consulting LLC	BL Consulting Services	Energy Efficiency	4/27/2022	1/31/2025
From $400K to $500K	465,000	Alternative Energy Systems Consulting, Inc.	TechnicalEnergy Studies& Audit	Energy Efficiency	7/1/2021	7/31/2024
From $400K to $500K	460,000	Dell Marketing LP.	Blanket Purhcase Order	Administration	1/1/2023	12/31/2024
From $400K to $500K	460,000	The Cadmus Group LLC	2022 PE Impact Evaluation	Energy Efficiency	11/1/2023	10/31/2024
From $400K to $500K	450,000	Deschutes Valley Water District	Opal Springs Hydro Project	Renewable Energy	1/1/2018	4/1/2040
From $400K to $500K	450,000	City of Medford	750kW Combined Heat & Power	Renewable Energy	10/20/2011	10/20/2031
From $400K to $500K	450,000	City of Pendleton	Pendleton Microturbines	Renewable Energy	4/20/2012	4/20/2032
From $400K to $500K	428,900	OMBU Inc	New Interactive Forms	Administration	4/2/2018	12/31/2024
From $400K to $500K	425,000	Opinion Dynamics Corporation	2023 EB Impact Evaluation	Energy Efficiency	4/12/2024	4/30/2025
From $400K to $500K	411,718	CLEAResult Consulting Inc	2024 Residential PMC Custsvc	Energy Efficiency	1/1/2024	12/31/2024
From $400K to $500K	411,500	Lake County Resources Initiative	Outreach Services	Communications	1/1/2024	12/31/2024
From $400K to $500K	400,000	Illume Advising, LLC	Small Restaurant Study	Energy Efficiency	4/10/2024	4/30/2025
From $400K to $500K	400,000	Three Sisters Irrigation District	TSID Funding Agreement	Renewable Energy	1/1/2018	12/31/2038
Under $400K	380,000	Tetra Tech Inc	NB Impsct Eval 2021-22	Energy Efficiency	3/1/2023	4/30/2024
Under $400K	379,757	Carahsoft Technology Corporation	DocuSign Master Agreement	Communications	1/31/2018	7/31/2024
Under $400K	369,540	Prophix. Inc	Cloud Services Agreement	Administration	9/1/2022	6/30/2025
Under $400K	355,412	SunE Solar XVI Lessor, LLC	BVT Sexton Mtn PV	Renewable Energy	5/15/2014	12/31/2034
Under $400K	350,000	ThinkShout, Inc.	Web Services & Dev Agreement	Communications	1/1/2024	12/31/2024
Under $400K	350,000	CIty of Gresham	City of Gresham Cogen 2	Renewable Energy	4/9/2014	7/9/2034
Under $400K	326,250	Ekotrop, Inc.	ModelingSoftware for NC	Energy Efficiency	1/21/2020	12/31/2024

For contracts with costs through: 5/1/2024

Grouping by Contract Size	Contract Amount	Contractor	Description	Program	Start	End
Under $400K	315,000	CLEAResult Consulting Inc	HE Assessment Tool	Energy Efficiency	12/16/2021	12/31/2024
Under $400K	306,846	CLEAResult Consulting Inc	2024 Residential PMC WA	Energy Efficiency	1/1/2024	12/31/2024
Under $400K	300,000	Craft3	Loan Agreement	Energy Efficiency	6/1/2014	6/20/2025
Under $400K	286,240	Paladin Risk Management, Ltd	Cert Tracking & License Svc	Administration	9/1/2015	10/1/2024
Under $400K	275,120	Solar Oregon	Outreach & Education Agreement	Renewable Energy	7/1/2022	6/30/2024
Under $400K	270,000	Craft3	NON-EEAST OBR Svc Agrmt	Renewable Energy	1/1/2018	12/31/2024
Under $400K	249,394	Wallowa Resources Community Solutions, Inc.	Project Development Assistance	Renewable Energy	4/1/2022	3/31/2025
Under $400K	243,000	The Cadmus Group LLC	C&I LG Impact Evaluations	Energy Efficiency	1/1/2022	12/31/2024
Under $400K	230,000	TRC Environmental Corporation	PDC - Landlord Cooling	Energy Efficiency	4/1/2022	9/30/2024
Under $400K	224,050	Wallowa Resources Community Solutions Inc	Outreach Services	Joint Programs	3/1/2024	2/28/2025
Under $400K	221,492	Latino Built Association for Contractors	Training & Support Services	Communications	1/1/2023	12/31/2024
Under $400K	216,000	Faraday Inc	Software Services Subscription	Renewable Energy	1/15/2019	12/14/2024
Under $400K	202,159	Encore Business Solutions (USA)	Technical Support for GP	Administration	5/1/2021	12/31/2024
Under $400K	200,000	Farmers Conservation Alliance	Irrigation Modernization Serv	Renewable Energy	4/1/2024	3/31/2025
Under $400K	200,000	Craft3	Manufactured Home Pilot Loan	Energy Efficiency	9/20/2018	9/20/2033
Under $400K	200,000	1961 Consulting, LLC	Strategic Planning Services	Communications	8/15/2023	3/31/2025
Under $400K	200,000	ADM Associates, Inc.	2024_25 Fast Feedback Survey	Energy Efficiency	1/8/2024	7/31/2026
Under $400K	197,800	ADM Associates, Inc.	2022_23 Fast Feedback Survey	Energy Efficiency	3/1/2022	6/30/2024
Under $400K	188,766	Borders, Perrin &Norrander, Inc. dba BPN	RES Photo Update Services	Communications	9/1/2023	12/31/2024
Under $400K	185,393	CTX Businss Solutions Inc	Copier Purchase & Maintenance	Administration	1/27/2015	12/31/2024
Under $400K	185,000	DNV Energy Services USA Inc	HER Impact Evaluation	Energy Efficiency	7/11/2023	8/31/2024
Under $400K	185,000	Seeds for the Sol	CPF RES Partner Services	Energy Efficiency	2/1/2022	12/31/2024
Under $400K	184,000	3Point Brand Management	Blanket PO	Communications	1/1/2021	12/31/2024
Under $400K	170,088	Community Energy Project, Inc.	Workshop Sponsorship	Energy Efficiency	4/1/2023	3/31/2024
Under $400K	167,767	Clean Power Research, LLC	CPR License Service Agreement	Renewable Energy	7/1/2023	6/30/2024
Under $400K	161,000	Evergreen Economics	TA Interview Survey	Energy Efficiency	8/23/2023	6/30/2024
Under $400K	150,000	ADM Associates, Inc.	EB Process Evaluation	Energy Efficiency	4/15/2024	2/28/2025
Under $400K	150,000	Apex Analytics LLC	No Cost Pilots	Energy Efficiency	4/1/2024	12/31/2026
Under $400K	145,000	EUVALCREE	Energy Assessment Services	Energy Efficiency	2/1/2022	12/31/2024
Under $400K	145,000	Oregon Solar Energy Fund	Solar Education Training	Renewable Energy	6/1/2022	3/31/2024
Under $400K	144,202	Illinois Valley Community Development Organization	Strategic Partnership Services	Energy Efficiency	6/1/2023	12/31/2024
Under $400K	143,688	Allstream	Internet Services	Administration	9/22/2017	1/1/2025
Under $400K	143,000	City of Astoria	Bear Creek Funding Agreement	Renewable Energy	3/24/2014	3/24/2034

For contracts with costs through: 5/1/2024

Grouping by Contract Size	Contract Amount	Contractor	Description	Program	Start	End
Under $400K	142,247	Encore Business Solutions (USA)	GP Annual Enhancement	Administration	9/14/2011	8/31/2024
Under $400K	138,400	Clean Power Research, LLC	WattPlan Software	Renewable Energy	11/17/2017	6/30/2024
Under $400K	135,000	Printable Promotions	Promotional Materials	Communications	4/13/2017	12/31/2024
Under $400K	132,037	Airespring Inc	T1 Connectivity Services	Administration	12/22/2016	1/15/2025
Under $400K	127,124	EnerCity Collaborative	Workforce Dev Services	Energy Efficiency	3/1/2024	12/31/2024
Under $400K	120,000	Self Enhancement Inc.	Community Support Services	Energy Efficiency	3/15/2024	12/31/2024
Under $400K	115,287	TRC Engineers Inc.	2024 EPS New Const PDC Solar	Renewable Energy	1/1/2024	12/31/2024
Under $400K	110,000	Verdant Associates LLC	TStat Evaluation Study	Energy Efficiency	12/1/2023	3/31/2025
Under $400K	109,620	Archive Systems Inc	Record Management Services	Administration	1/1/2011	12/31/2024
Under $400K	108,938	E Source Companies LLC	Membership Services Agreement	Energy Efficiency	1/1/2024	12/31/2025
Under $400K	100,000	APANO Communities United	Engagement Outreach Services	Energy Efficiency	9/22/2023	12/31/2024
Under $400K	100,000	ADM Associates, Inc.	LED Grow Lights MarketResearch	Energy Efficiency	2/2/2024	10/30/2024
Under $400K	100,000	CLEAResult Consulting Inc	Call CenterServices Comm Solar	Administration	8/1/2019	3/4/2025
Under $400K	95,000	Borders, Perrin &Norrander, Inc. dba BPN	Creative & Media Services	Energy Efficiency	9/1/2023	12/31/2024
Under $400K	95,000	Home Performance Contractors Guild of Oregon	HPG Grant Agreement	Energy Efficiency	1/1/2024	12/31/2024
Under $400K	91,900	Earth Advantage, Inc.	Contractor Training Services	Energy Efficiency	9/1/2023	5/1/2025
Under $400K	91,273	RStudio PBC	Software License Agreement	Energy Efficiency	6/5/2022	4/1/2025
Under $400K	90,000	Verdant Associates LLC	MF Weatherization Impact Eval	Energy Efficiency	10/12/2023	6/30/2024
Under $400K	88,500	Inner Work, Outer Play LLC	Board DEI Support Services	Administration	11/1/2023	12/31/2024
Under $400K	85,000	Insight Direct USA	Blanket PO	Administration	8/1/2023	12/31/2024
Under $400K	85,000	City of Hillsboro	Project Funding Agreement	Renewable Energy	6/8/2020	12/31/2040
Under $400K	82,870	TRC Engineers Inc.	2024 EPS New Const PDC WA	Energy Efficiency	1/1/2024	12/31/2024
Under $400K	81,600	Wallowa Resources Community Solutions Inc	Collaboration Services	Renewable Energy	4/1/2023	3/31/2024
Under $400K	80,000	Wallowa County	Project Funding Agreement	Renewable Energy	4/1/2018	3/31/2038
Under $400K	80,000	Umpqua Community Development Corp.	EE Initiatives Rural Counties	Energy Efficiency	1/1/2024	12/31/2024
Under $400K	80,000	DocuMart of Portland	Blanket PO	Communications	1/1/2021	12/31/2024
Under $400K	80,000	The Cadmus Group LLC	Industrial Plant Closure Study	Energy Efficiency	6/30/2023	6/30/2024
Under $400K	78,702	Siteimprove Inc	Web Governance and Monitoring	Administration	1/27/2017	10/31/2024
Under $400K	75,000	SPS of Oregon Inc	Project Funding Agreement	Renewable Energy	10/15/2015	10/31/2036
Under $400K	75,000	1961 Consulting, LLC	CANI RES Strategic Services	Joint Programs	1/1/2024	12/31/2024
Under $400K	66,637	LinkedIn Corporation	Webinar Learning	Administration	1/7/2020	2/15/2025
Under $400K	66,000	Adre LLc	Net Zero Fellowship	Joint Programs	9/22/2022	7/31/2024
Under $400K	64,842	dThree Productions Inc.	Videography Services Agreement	Administration	1/1/2024	12/31/2024

For contracts with costs through: 5/1/2024

Grouping by Contract Size	Contract Amount	Contractor	Description	Program	Start	End
Under $400K	64,315	Tetra Tech Inc	Other RE Services	Renewable Energy	4/1/2022	3/31/2024
Under $400K	64,265	LinkedIn Corporation	LinkedIn Recruiting License	Administration	12/15/2022	2/15/2025
Under $400K	63,564	Pod4print	2023 PGE Printing Bill Inserts	Communications	1/1/2023	12/31/2024
Under $400K	62,935	Xenium Resources	HR Consulting Agreement	Administration	4/1/2022	3/31/2024
Under $400K	61,028	Wisewood, Inc	RE Biomass Energy Tool	Renewable Energy	12/1/2023	8/1/2024
Under $400K	61,000	Pacific Crest Affordable Housing	NZF Grant Agreements	Joint Programs	9/22/2023	11/30/2024
Under $400K	61,000	Lever Architecture	NZF Grant Agreements	Joint Programs	9/20/2023	3/31/2025
Under $400K	60,000	Indika Sugathadasa dba PDX Hive	TA CDP Support Services	Communications	10/2/2023	12/31/2024
Under $400K	60,000	IZO Public Relations	TA CDP Support Services	Communications	10/2/2023	12/31/2024
Under $400K	60,000	Polk Community Development Corporation	RES Outreach Housing Services	Energy Efficiency	1/1/2024	12/31/2024
Under $400K	60,000	Beira Consulting LLC	SMB Research Eval	Energy Efficiency	2/1/2023	7/31/2024
Under $400K	60,000	Burch Energy Services Inc	TA Contractor Dev Pathway	Communications	10/2/2023	12/31/2024
Under $400K	60,000	Twirl Advertising & Design	TA CDP Support Services	Communications	10/2/2023	12/31/2024
Under $400K	57,732	Excidian LLC	AMC Custom Calculator Model	Renewable Energy	11/15/2023	12/31/2024
Under $400K	55,000	DNV Energy Services USA Inc	Lighting PLUS Market Agreement	Energy Efficiency	1/18/2024	12/31/2024
Under $400K	55,000	Craft3	SWR Loan Origination/Loss Fund	Energy Efficiency	1/1/2018	12/31/2024
Under $400K	55,000	INCA Energy Efficiency, LLC	MOD 3 Evaluation	Energy Efficiency	10/1/2022	3/31/2025
Under $400K	54,349	xByte Technologies, Inc	Dell Server Purchase	Administration	10/1/2023	3/30/2024
Under $400K	52,000	RR Donnelley	2023 NWN Printing Bill Inserts	Communications	1/1/2023	12/31/2024
Under $400K	52,000	Talence Group LLC	Executive Search Svcs Agrmnt	Administration	8/1/2023	7/31/2024
Under $400K	50,000	SBW Consulting, Inc.	2024 Measure Dev Support	Energy Efficiency	1/1/2024	12/31/2024
Under $400K	50,000	Arnold Cushing LLC	PE REDA Grant Agreement	Renewable Energy	10/11/2021	7/31/2024
Under $400K	50,000	Anchor Blue LLC	Planning Consulting Services	Energy Efficiency	1/1/2023	12/31/2024
Under $400K	50,000	University of Oregon	U of O REDA Grant	Renewable Energy	12/1/2023	3/31/2025
Under $400K	49,350	Moss Adams LLP	Financial Statement Audit	Administration	1/1/2024	12/31/2024
Under $400K	47,541	Pantheon Systems, Inc	Website Hosting Services	Communications	5/1/2019	4/30/2024
Under $400K	47,500	Pacific Office Furnishings	Blanket PO-Cube Adjustments	Administration	1/1/2019	12/31/2024
Under $400K	46,250	Theodore Blaine Light III	Planning Consulting Services	Energy Efficiency	1/1/2023	12/31/2024
Under $400K	46,000	Alliance Compensation LLC	*PA Umbrella Agreement	Administration	2/1/2023	1/31/2025
Under $400K	45,000	Geograde Constructors LLC	Contractor Development Pathway	Energy Efficiency	2/3/2023	12/31/2024
Under $400K	45,000	PBDG Foundation	Relationship Develop Services	Communications	1/1/2023	3/31/2024
Under $400K	42,400	Headspace Inc.	Employee Assistance Program Ap	Administration	2/1/2024	10/31/2024
Under $400K	41,640	GuildQuality Inc.	License Agreement	Renewable Energy	6/1/2023	12/31/2024

For contracts with costs through: 5/1/2024

Grouping by Contract Size	Contract Amount	Contractor	Description	Program	Start	End
Under $400K	40,425	Northwest Energy Efficiency Council	BOC & TLL Sponsorship	Energy Efficiency	1/1/2024	12/31/2024
Under $400K	40,000	Portland HR Solutions, Inc.	HR Consulting Services	Administration	4/1/2022	3/31/2024
Under $400K	39,500	Happy Cup Coffee LLC	Blanket PO-Coffee	Administration	1/1/2019	12/31/2024
Under $400K	39,500	Clean Energy States Alliance	Memorandum of Understanding	Renewable Energy	7/1/2023	6/30/2024
Under $400K	38,608	Consortium for Energy Efficiency	2024 Membership Dues	Energy Efficiency	2/1/2024	12/31/2024
Under $400K	36,000	RR Donnelley	2024 PAC Printing Bill Inserts	Communications	1/1/2023	12/31/2024
Under $400K	35,000	Rose City Moving & Storage	Blanket PO Cube Moving	Administration	1/1/2019	12/31/2024
Under $400K	35,000	Anthony Carothers	ISO Systems SecurityConsulting	Administration	11/5/2020	12/31/2024
Under $400K	33,320	Infogroup Inc	Data License & Service Agmt	Joint Programs	2/4/2020	12/31/2024
Under $400K	32,000	Elephants Catering	Blanket PO-Food Catering	Administration	1/1/2019	12/31/2024
Under $400K	30,229	Smartsheets Inc.	Subscription ServicesAgreement	Administration	1/1/2023	12/31/2024
Under $400K	30,000	Structured Communications Systems, Inc.	Mircosoft Teams Voice POC	Administration	10/6/2023	12/31/2024
Under $400K	30,000	California Oregon Broadcasting Inc	Sucess Stories Agreement	Communications	4/1/2024	3/31/2025
Under $400K	27,000	Environmental Leadership Program	2022-24 RAY Fellowship	Administration	10/16/2022	10/15/2024
Under $400K	26,220	Wallowa Resources Stewardship Center LLC	Enterprise, OR Lease Agreement	Communications	11/1/2013	9/1/2024
Under $400K	26,000	Environmental Leadership Program	2023-25 RAY Fellow Agreement	Administration	1/1/2023	7/15/2025
Under $400K	25,580	Floor Solutions LLC	Carpet Cleaning Services	Administration	1/1/2019	12/31/2024
Under $400K	25,000	G&I VII Lincoln Building LP	Parking Agreement	Administration	5/1/2023	4/30/2024
Under $400K	25,000	Helen Eby dba Gaucha Translation	Translation Services Pool	Communications	1/1/2024	12/31/2024
Under $400K	25,000	Eric (EJ) Jordon	Tribal Engagment Services	Administration	6/1/2023	3/31/2025
Under $400K	25,000	English 2 Spanish LLC	Translation Services Agreement	Communications	9/1/2023	12/31/2024
Under $400K	25,000	ELSO Incorporated	Workforce Development Services	Energy Efficiency	9/13/2023	5/31/2024
Under $400K	25,000	Encolor LLC	Eval Advisory Group Services	Energy Efficiency	3/9/2022	12/31/2024
Under $400K	25,000	Encolor LLC	Strategic Consulting Services	Joint Programs	11/30/2023	7/31/2024
Under $400K	25,000	Efficiency for Everyone, LLC	Eval Advisory Group Services	Energy Efficiency	3/9/2022	12/31/2024
Under $400K	25,000	Electronic Management Corp	Blanket PO	Communications	1/1/2024	12/31/2024
Under $400K	25,000	DNV Energy Services USA Inc	Evaluation Advisory Group	Energy Efficiency	3/9/2022	12/31/2024
Under $400K	25,000	Cadeo Group LLC	Evaluation Advisory Group	Energy Efficiency	3/9/2022	12/31/2024
Under $400K	25,000	American Microgrid Solutions LLC	Solar+Storage RES EPS NC	Renewable Energy	12/29/2022	6/3/2024
Under $400K	25,000	Apex Analytics LLC	Evaluation Advisory Group	Energy Efficiency	3/9/2022	12/31/2024
Under $400K	25,000	Barbier International Inc	Translation Services Agreement	Communications	9/1/2023	12/31/2024
Under $400K	25,000	AlamaLuna LLC	Translation Services Agreement	Communications	1/1/2024	12/31/2024
Under $400K	25,000	Starla Green	Tribal Engagement Services	Administration	8/1/2022	3/31/2025
Under $400K	25,000	TRANSLAT INC	Translation Services Agreement	Communications	9/1/2023	12/31/2024
Under $400K	25,000	Seong Yun Kim	Translation Services Agreement	Communications	10/9/2023	12/31/2024

For contracts with costs through: 5/1/2024

Grouping by Contract Size	Contract Amount	Contractor	Description	Program	Start	End
Under $400K	25,000	SBW Consulting, Inc.	Evaluation Advisory Group	Energy Efficiency	3/9/2022	12/31/2024
Under $400K	25,000	Pinnacle Economics Inc	2023 Economic Impact Study	Energy Efficiency	2/1/2024	5/31/2024
Under $400K	25,000	Saedgraphic, LLC	Translation Services Agreement	Communications	6/1/2023	12/31/2024
Under $400K	25,000	Puget Sound Cooperative Credit Union	LoanLossReserve Fund Agreement	Energy Efficiency	1/1/2022	12/31/2024
Under $400K	25,000	Lisa Greenfield LLC	Engagement Letter	Administration	12/16/2022	12/31/2024
Under $400K	25,000	Northwest Interpreters, Inc dba NWI Global	Translation Services Agreement	Communications	9/1/2023	12/31/2024
Under $400K	25,000	Leona Enright	Tribal Engagement Services	Communications	8/1/2022	7/30/2024
Under $400K	25,000	Monica Paradise	Tribal Engagement Agreement	Communications	3/7/2023	3/31/2025
Under $400K	25,000	Oregon Translation LLC dba Verbio	Translation Services Agreement	Communications	9/1/2023	12/31/2024
Under $400K	25,000	Oregon Certified Interpreters Network Inc	Translation Services Agreement	Communications	9/1/2023	12/31/2024
Under $400K	24,999	University of Oregon	UO SRML Sponsorship	Renewable Energy	3/9/2024	3/8/2025
Under $400K	24,500	Empress Rules LLC	Coaching Equity Training SBDI	Joint Programs	1/2/2024	8/31/2024
Under $400K	24,000	CuraLinc Healthcare	EAP Agreement	Administration	1/1/2022	9/30/2024
Under $400K	24,000	Bonneville Environmental Foundation	Comm Outreach Services	Renewable Energy	4/1/2022	1/31/2025
Under $400K	24,000	Site Capture LLC	Subscription Agreement	Renewable Energy	6/1/2023	5/31/2024
Under $400K	22,250	Jodi Tanner Tell LLC	Grant Writing Services	Joint Programs	1/1/2023	12/31/2024
Under $400K	22,000	Solar Oregon	2024 Sponsorship	Renewable Energy	5/7/2024	12/31/2024
Under $400K	22,000	Sustainable Northwest	Community Outreach Services	Communications	1/1/2023	12/31/2024
Under $400K	22,000	Rainy Day Printing LLC dba Smart Payables	Check Printing Services	Administration	2/28/2024	2/27/2025
Under $400K	22,000	1961 Consulting, LLC	ET Strategic Support Services	Administration	10/2/2023	12/31/2025
Under $400K	21,643	CTX Businss Solutions Inc	Small Printer Maintenance	Administration	4/1/2012	3/30/2025
Under $400K	20,000	Asana Inc.	User License Agreement	Administration	3/1/2024	12/31/2024
Under $400K	20,000	Brown Printing Inc	Blanket PO	Communications	1/1/2021	12/31/2024
Under $400K	20,000	Quantum Energy Analytics LLC	Indoor Ag Dehumidiifer Scoping	Energy Efficiency	4/15/2024	7/31/2024
Under $400K	20,000	LifeLabs Learning LLC	Virtual Manager Training	Administration	1/23/2024	2/28/2025
Under $400K	20,000	Moss Adams LLP	EFS Consulting Services	Administration	2/1/2024	12/31/2024
Under $400K	19,500	Diligent Corporation	Board Management Software	Administration	6/23/2023	8/1/2024
Under $400K	18,993	Enna CIC	Neurodiversity Training	Administration	10/3/2023	11/1/2025
Under $400K	18,820	Freshworks Inc.	IT License Subscription	Administration	7/1/2023	4/15/2025
Under $400K	18,000	HMI Oregon Dealership, Inc.	Blanket PO-Storage	Administration	1/1/2019	12/31/2024
Under $400K	18,000	Kleinschmidt Associates	Other RE Professional Services	Renewable Energy	4/1/2022	3/31/2024
Under $400K	17,850	Moss Adams LLP	Retirement Plan Audit	Administration	1/1/2024	12/31/2024
Under $400K	17,500	Resonate, Inc	Strategic Project Services	Administration	10/1/2023	12/31/2024
Under $400K	17,000	PrintSync	Blanket PO Printing	Communications	10/27/2022	12/31/2024

For contracts with costs through: 5/1/2024

Grouping by Contract Size	Contract Amount	Contractor	Description	Program	Start	End
Under $400K	16,000	The Benson Hotel	Hotel Rate Agreement	Communications	1/1/2024	12/31/2024
Under $400K	15,744	Tri-Met	2023-24 Rate Agreement	Administration	9/1/2023	8/31/2024
Under $400K	15,000	Missi'ipi Chef LLC	Catering Services May AllStaff	Administration	4/15/2024	6/30/2024
Under $400K	15,000	eTargetMedia.com, LLC	Target Emailing Service	Communications	11/1/2023	12/31/2024
Under $400K	14,980	Adelante Mujeres	Solarize Outreach Services	Renewable Energy	3/1/2024	6/30/2024
Under $400K	13,935	Naim Hasan	Photographer	Administration	7/19/2019	8/1/2024
Under $400K	13,500	ABM Parking Services	Board Parking reimbursement	Administration	4/1/2019	12/31/2024
Under $400K	13,220	Emburse Inc.	Services Agreement Travel App	Administration	8/27/2020	2/28/2025
Under $400K	13,000	Sheraton Portland Airport Hotel	2024 TA Forum	Communications	1/26/2024	5/31/2024
Under $400K	12,650	Rene Leger Coaching & Consulting LLC	Coaching Services	Administration	2/1/2024	12/31/2024
Under $400K	12,650	Rene Leger Coaching & Consulting LLC	Professional Coaching Services	Administration	4/1/2024	5/31/2025
Under $400K	12,300	Sarah Noll Wilson, Inc	Professional Services Contract	Administration	12/1/2023	12/1/2025
Under $400K	11,906	Vital Smarts LC dba Crucial Learning	Influence Training	Administration	2/13/2024	4/30/2024
Under $400K	11,313	Flores & Associates LLC	FMLA Administration	Administration	10/1/2018	7/1/2024
Under $400K	10,721	Structured Communications Systems, Inc.	VEEAM License Agreement	Administration	1/8/2024	12/1/2024
Under $400K	10,500	Northwest Earth Institute	EcoChallenge ServicesAgreement	Energy Efficiency	3/1/2024	12/31/2024
Under $400K	10,500	Digital by Design	Digital Transformation Service	Energy Efficiency	3/8/2024	5/4/2024
Under $400K	10,486	Survey Monkey	User License Agreement	Administration	1/19/2024	1/18/2026
Under $400K	10,000	Susan Badger-Jones	DAC Stipend Agreement	Administration	4/15/2020	12/31/2026
Under $400K	10,000	Rebecca Descombes	DAC Stipend Agreement	Administration	3/1/2021	12/31/2026
Under $400K	10,000	Oregon Native American Chamber	Working Together Grant	Communications	10/24/2023	10/1/2024
Under $400K	10,000	Moss Adams LLP	Chart of Accounts Services	Administration	2/1/2024	12/31/2024
Under $400K	10,000	Metropolitan Family Services	Working Together Grant	Communications	10/24/2023	10/1/2024
Under $400K	10,000	Indika Sugathadasa dba PDX Hive	DAC Stipend Agreement	Administration	2/18/2020	12/31/2026
Under $400K	10,000	Dolores Martinez	DAC Stipend Agreement	Administration	2/18/2020	12/31/2026
Under $400K	10,000	eTargetMedia.com, LLC	E-targeted Media Services	Communications	3/1/2024	12/31/2024
Under $400K	10,000	Ethiopian & Eritrean Community Resoure Center	Working Together Grant	Communications	10/24/2023	10/1/2024
Under $400K	10,000	Central Oregon Environmental Center	Outreach Services RES EE	Energy Efficiency	2/22/2024	12/31/2024
Under $400K	10,000	Willamette Valley Hispanic Chamber of Commerace	2024 Expo Negocio Sposorship	Communications	2/26/2024	11/30/2024
Under $400K	9,600	Amy Marie Seward	Grant Writers Pool	Energy Efficiency	6/1/2023	12/31/2024
Under $400K	9,250	Portland State University	Prof Cert Tribal Relations	Communications	9/12/2023	9/30/2024
Under $400K	9,000	HVAC Inc	Service Agreement	Administration	7/1/2022	8/30/2024
Under $400K	9,000	Oregon ASK-OAEYC	SEM Training Class Services	Energy Efficiency	10/31/2023	5/1/2024
Under $400K	8,320	Seeds for the Sol	Working Together Grant	Communications	10/24/2023	10/1/2024

For contracts with costs through: 5/1/2024

Grouping by Contract Size	Contract Amount	Contractor	Description	Program	Start	End
Under $400K	8,000	Studio E Architecture PC	NZL Grant Agreement	Energy Efficiency	9/6/2023	6/30/2024
Under $400K	8,000	Oregon ASK-OAEYC	Curriculum & Training Services	Energy Efficiency	1/30/2024	5/3/2024
Under $400K	8,000	Opsis Achitecture LLC	NZELI Grant Agreement	Energy Efficiency	9/8/2023	6/30/2024
Under $400K	8,000	MWA Architects Inc.	NZELI Grant Agreement	Energy Efficiency	9/7/2023	6/30/2024
Under $400K	8,000	Morel Inc	Blanket PO	Communications	1/1/2021	12/31/2024
Under $400K	8,000	Hood River Hotel Partners LLC	July Board Meeting Event Space	Administration	1/1/2024	8/30/2024
Under $400K	8,000	Bora Achitects Inc.	NZELI Grant Agreement	Energy Efficiency	9/6/2023	6/30/2024
Under $400K	8,000	Holmes US	NZELI Grant Agreement	Energy Efficiency	9/20/2023	6/30/2024
Under $400K	8,000	Health Equity Inc.	FSA/HSA Administration Service	Administration	1/1/2024	12/31/2024
Under $400K	7,000	First Interstate Bank	Line of Credit Agreement	Administration	8/9/2023	8/8/2024
Under $400K	6,450	The Option Agency	Photoshoot Talent Services	Communications	12/15/2021	12/15/2024
Under $400K	6,420	Ecotrust	All Staff Meeting Agreement	Administration	3/20/2024	7/31/2024
Under $400K	6,064	Moss Adams LLP	2023 Tax Preparation	Administration	4/1/2024	12/31/2024
Under $400K	6,000	Momentum Procurement Group, Inc	Blanket PO Office Supply	Administration	9/10/2020	12/31/2024
Under $400K	6,000	PhotoShelter Inc	Cloud Photobank Services	Communications	3/25/2024	3/24/2025
Under $400K	6,000	StarWind Software, Inc	Server Storage Purchase	Administration	5/12/2024	12/31/2024
Under $400K	6,000	American Institute of Architects, Southwestern Oregon Chapter	2024 AIA Sponsorship	Communications	3/1/2024	12/31/2024
Under $400K	5,940	Storage Concepts LLC	Eastern OR Storage Unit	Administration	5/30/2019	3/30/2025
Under $400K	5,849	Bonneville Environmental Foundation	REC WRC Purchase	Joint Programs	9/1/2023	8/30/2024
Under $400K	5,388	SmartyStreets LLC	EmailVerfication Cloud License	Administration	7/1/2023	6/1/2024
Under $400K	5,225	Centro Cultural of Washington County	Solarize Campaign	Renewable Energy	3/1/2024	5/31/2024
Under $400K	5,000	Catalyst Partnerships	Working Together Grant	Communications	10/24/2023	10/1/2024
Under $400K	5,000	Bright Sky LLC	Writers Pool Services	Communications	3/1/2024	2/28/2026
Under $400K	5,000	Blue Moon Industries	Microsoft GP Support Services	Administration	6/1/2023	5/30/2024
Under $400K	5,000	Community Service Network	Working Together Grant	Communications	10/24/2023	10/1/2024
Under $400K	5,000	Common Connections	Working Together Grant	Communications	10/24/2023	10/1/2024
Under $400K	5,000	Gustavo Gordillo	Advisory Committee PSP	Energy Efficiency	7/23/2023	12/31/2024
Under $400K	5,000	Rural Development Initiatives Inc	2024 Sponsorhip	Communications	1/1/2024	5/30/2024
Under $400K	5,000	Rhea StandingRock	DAC Stipend Agreement	Administration	6/30/2022	6/1/2024
Under $400K	5,000	Terrance Harris	DAC Stipend Agreement	Administration	6/15/2021	6/30/2024
Under $400K	5,000	Oswaldo Beral Lopez	DAC Stipend Agreement	Administration	9/17/2019	12/31/2026
Under $400K	5,000	Moss Adams LLP	Consulting Services	Administration	1/1/2024	12/31/2024
Under $400K	5,000	Illinois Valley 2010 Community Response Team	Working Together Grant	Communications	10/24/2023	10/1/2024
Under $400K	5,000	Janel Rupp	Advisory Committee PSP	Energy Efficiency	8/21/2023	12/31/2024
Under $400K	5,000	Miller Nash LLP	Trademark	Administration	9/1/2014	9/1/2024

Energy Trust of Oregon
Contract Status Summary Report

Report Date: 5/17/2024

For contracts with costs through: 5/1/2024

Grouping by Contract Size	Contract Amount	Contractor	Description	Program	Start	End
Under $400K	5,000	Martin Campos-Davis	DAC Stipend Agreement	Administration	1/1/2024	12/31/2026
Under $400K	5,000	Jose Garcia	Advisory Committee PSP	Energy Efficiency	1/1/2024	12/31/2024
Under $400K	5,000	Julio Valera	Advisory Committee PSP	Energy Efficiency	9/1/2023	12/31/2024
Under $400K	5,000	Leesha Posey	Advisory Committee PSP	Energy Efficiency	9/3/2023	12/31/2024
Under $400K	5,000	Waterfront Blues Production LLC	2024 Jazz Festival Sponsorship	Communications	4/1/2024	7/30/2024
Under $400K	4,750	Susan Lucer Consulting Services	Grant Writing Services	Joint Programs	1/1/2023	12/31/2024
Under $400K	4,230	National Small Business Utility Council	Working Together Grant	Communications	10/24/2023	10/1/2024
Under $400K	4,000	Central Oregon Environmental Center	Working Together Grant	Communications	10/20/2023	10/1/2024
Under $400K	3,420	D&B	D&B	Administration	3/31/2021	3/31/2024
Under $400K	3,000	Structured Communications Systems, Inc.	DMARC Implementation	Administration	1/1/2024	12/31/2024
Under $400K	2,400	Jason Quigley Photography LLC	Professional Services Contract	Communications	1/1/2024	12/31/2025
Under $400K	2,200	Jim Craven Photography	Photography Services *$25,000	Energy Efficiency	5/1/2023	4/30/2025
Under $400K	2,000	NeighborWorks Umpqua	Working Together Grant	Communications	10/24/2023	10/1/2024
Under $400K	1,819	Lighthouse Services, Inc.	Compliance Hotline	Administration	5/1/2017	4/1/2025
Under $400K	950	Susan T Rosene	Writers Pool Services	Communications	3/1/2024	2/28/2026
Under $400K	950	Cara Griffin	Professional Services Writers	Communications	3/1/2024	2/28/2026
TOTAL	**220,517,105.34**					

R00407

Energy Trust of Oregon
Contract Status Summary Report

Report Date: 5/17/2024

For contracts with costs through: 5/1/2024

CONTRACTOR	Description	City	EST COST	Actual TTD	Remaining	Start	End
Administration							
		Administration Total:	**15,700,684**	**12,416,212**	**3,284,472**		
Communications							
		Communications Total:	**8,437,390**	**4,900,283**	**3,537,107**		
Energy Efficiency							
Northwest Energy Efficiency Alliance	NEEA Funding Agreement	Portland	42,866,366	35,363,142	7,503,224	1/1/2020	8/1/2025
Northwest Energy Efficiency Alliance	Regional EE Initiative Agmt	Portland	33,662,505	33,569,081	93,424	1/1/2015	8/1/2025
TRC Environmental Corporation	2024 BE PMC	Windsor	30,853,332	8,262,861	22,590,471	1/1/2024	12/31/2024
CLEAResult Consulting Inc	2024 Residential PMC	Austin	15,177,862	4,038,685	11,139,177	1/1/2024	12/31/2024
Energy 350 Inc	2024 PE PMC		11,584,800	3,325,102	8,259,698	1/1/2024	12/31/2024
CLEAResult Consulting Inc	2024 NBE PMC	Austin	7,984,733	2,480,861	5,503,872	1/1/2024	12/31/2024
CLEAResult Consulting Inc	2024 Lighting PDC	Austin	6,221,925	1,985,275	4,236,650	1/1/2024	12/31/2024
TRC Engineers Inc.	2024 EPS New Const PDC	Irvine	3,203,706	1,106,663	2,097,043	1/1/2024	12/31/2024
Northwest Power & Conservation Council	Regional Technical Forum Agrmt	Portland	2,081,000	2,021,929	59,071	1/1/2020	12/31/2024
Intel Corporation	EE Project Funding Agreement	Hillsboro	1,950,000	1,300,000	650,000	12/2/2021	12/31/2025
CLEAResult Consulting Inc	2024 Retail PDC	Austin	1,728,537	699,451	1,029,086	1/1/2024	12/31/2024
Cascade Energy, Inc.	Subscription ServicesAgreement	Walla Walla	876,733	853,200	23,533	1/21/2022	8/31/2024
CLEAResult Consulting Inc	2024 Residential PMC Innov	Austin	748,000	117,818	630,182	1/1/2024	12/31/2024
Pivotal Energy Solutions LLC	Software Product Support	Gilbert	641,500	556,746	84,755	1/1/2020	12/31/2024
TRC Environmental Corporation	2024 BE PMC WA	Windsor	573,729	200,017	373,712	1/1/2024	12/31/2024
Community Energy Project, Inc.	HPWH & CPFE Measures	Portland	536,000	391,950	144,050	1/25/2022	12/31/2024
Craft3	Loan Agreement	Portland	500,000	500,000	0	1/1/2018	12/31/2027
Craft3	Loan Funding for EE Projects	Portland	500,000	500,000	0	1/1/2021	9/30/2025
Verde	DHP Installation Program	Portland	500,000	351,395	148,605	1/1/2022	12/31/2024
LD Consulting LLC	BL Consulting Services		483,052	326,354	156,698	4/27/2022	1/31/2025
Alternative Energy Systems Consulting, Inc.	TechnicalEnergy Studies& Audit	Carlsbad	465,000	428,132	36,868	7/1/2021	7/31/2024
The Cadmus Group LLC	2022 PE Impact Evaluation	Portland	460,000	264,026	195,974	11/1/2023	10/31/2024
Opinion Dynamics Corporation	2023 EB Impact Evaluation	Waltham	425,000	0	425,000	4/12/2024	4/30/2025
CLEAResult Consulting Inc	2024 Residential PMC Custsvc	Austin	411,718	101,733	309,986	1/1/2024	12/31/2024
Illume Advising, LLC	Small Restaurant Study	Verona	400,000	0	400,000	4/10/2024	4/30/2025
Tetra Tech Inc	NB Impsct Eval 2021-22	Portland	380,000	364,642	15,358	3/1/2023	4/30/2024
Ekotrop, Inc.	ModelingSoftware for NC	Boston	326,250	298,910	27,341	1/21/2020	12/31/2024
CLEAResult Consulting Inc	HE Assessment Tool	Austin	315,000	165,000	150,000	12/16/2021	12/31/2024
CLEAResult Consulting Inc	2024 Residential PMC WA	Austin	306,846	98,296	208,550	1/1/2024	12/31/2024
Craft3	Loan Agreement	Portland	300,000	300,000	0	6/1/2014	6/20/2025
The Cadmus Group LLC	C&I LG Impact Evaluations	Portland	243,000	104,598	138,402	1/1/2022	12/31/2024
TRC Environmental Corporation	PDC - Landlord Cooling	Windsor	230,000	155,510	74,490	4/1/2022	9/30/2024
Craft3	Manufactured Home Pilot Loan	Portland	200,000	0	200,000	9/20/2018	9/20/2033
ADM Associates, Inc.	2024_25 Fast Feedback Survey	Seattle	200,000	13,233	186,767	1/8/2024	7/31/2026
ADM Associates, Inc.	2022_23 Fast Feedback Survey	Seattle	197,800	171,521	26,279	3/1/2022	6/30/2024
DNV Energy Services USA Inc	HER Impact Evaluation	Oakland	185,000	69,350	115,650	7/11/2023	8/31/2024
Seeds for the Sol	CPF RES Partner Services		185,000	82,918	102,082	2/1/2022	12/31/2024

CONTRACTOR	Description	City	EST COST	Actual TTD	Remaining	Start	End
Community Energy Project, Inc.	Workshop Sponsorship	Portland	170,088	170,088	1	4/1/2023	3/31/2024
Evergreen Economics	TA Interview Survey	Portland	161,000	139,583	21,417	8/23/2023	6/30/2024
ADM Associates, Inc.	EB Process Evaluation	Seattle	150,000	0	150,000	4/15/2024	2/28/2025
Apex Analytics LLC	No Cost Pilots	Boulder	150,000	6,645	143,355	4/1/2024	12/31/2026
EUVALCREE	Energy Assessment Services		145,000	82,650	62,350	2/1/2022	12/31/2024
Illinois Valley Community Development Organization	Strategic Partnership Services		144,202	93,902	50,300	6/1/2023	12/31/2024
EnerCity Collaborative	Workforce Dev Services		127,124	0	127,124	3/1/2024	12/31/2024
Self Enhancement Inc.	Community Support Services		120,000	0	120,000	3/15/2024	12/31/2024
Verdant Associates LLC	TStat Evaluation Study		110,000	17,643	92,358	12/1/2023	3/31/2025
E Source Companies LLC	Membership Services Agreement	Boulder	108,938	52,627	56,311	1/1/2024	12/31/2025
APANO Communities United	Engagement Outreach Services		100,000	4,455	95,545	9/22/2023	12/31/2024
ADM Associates, Inc.	LED Grow Lights MarketResearch	Seattle	100,000	15,934	84,066	2/2/2024	10/30/2024
Borders, Perrin &Norrander, Inc. dba BPN	Creative & Media Services		95,000	30,000	65,000	9/1/2023	12/31/2024
Home Performance Contractors Guild of Oregon	HPG Grant Agreement	Portland	95,000	63,000	32,000	1/1/2024	12/31/2024
Earth Advantage, Inc.	Contractor Training Services	Portland	91,900	31,500	60,400	9/1/2023	5/1/2025
RStudio PBC	Software License Agreement		91,273	56,935	34,338	6/5/2022	4/1/2025
Verdant Associates LLC	MF Weatherization Impact Eval		90,000	85,928	4,073	10/12/2023	6/30/2024
TRC Engineers Inc.	2024 EPS New Const PDC WA	Irvine	82,870	26,184	56,686	1/1/2024	12/31/2024
Umpqua Community Development Corp.	EE Initiatives Rural Counties	Roseburg	80,000	15,960	64,040	1/1/2024	12/31/2024
The Cadmus Group LLC	Industrial Plant Closure Study	Portland	80,000	77,887	2,113	6/30/2023	6/30/2024
Polk Community Development Corporation	RES Outreach Housing Services		60,000	10,300	49,700	1/1/2024	12/31/2024
Beira Consulting LLC	SMB Research Eval		60,000	41,400	18,600	2/1/2023	7/31/2024
DNV Energy Services USA Inc	Lighting PLUS Market Agreement	Oakland	55,000	0	55,000	1/18/2024	12/31/2024
Craft3	SWR Loan Origination/Loss Fund	Portland	55,000	51,338	3,662	1/1/2018	12/31/2024
INCA Energy Efficiency, LLC	MOD 3 Evaluation	Grinnell	55,000	13,888	41,112	10/1/2022	3/31/2025
SBW Consulting, Inc.	2024 Measure Dev Support	Bellevue	50,000	18,970	31,030	1/1/2024	12/31/2024
Anchor Blue LLC	Planning Consulting Services	Vancouver	50,000	31,845	18,155	1/1/2023	12/31/2024
Theodore Blaine Light III	Planning Consulting Services		46,250	20,638	25,612	1/1/2023	12/31/2024
Geograde Constructors LLC	Contractor Development Pathway		45,000	33,750	11,250	2/3/2023	12/31/2024
Northwest Energy Efficiency Council	BOC & TLL Sponsorship	Seattle	40,425	39,525	900	1/1/2024	12/31/2024
Consortium for Energy Efficiency	2024 Membership Dues	Boston	38,608	38,608	0	2/1/2024	12/31/2024
ELSO Incorporated	Workforce Development Services		25,000	25,000	0	9/13/2023	5/31/2024
Encolor LLC	Eval Advisory Group Services		25,000	1,073	23,928	3/9/2022	12/31/2024
Efficiency for Everyone, LLC	Eval Advisory Group Services	Portland	25,000	3,586	21,414	3/9/2022	12/31/2024
DNV Energy Services USA Inc	Evaluation Advisory Group	Oakland	25,000	4,455	20,545	3/9/2022	12/31/2024
Cadeo Group LLC	Evaluation Advisory Group	Washington	25,000	6,309	18,691	3/9/2022	12/31/2024
Apex Analytics LLC	Evaluation Advisory Group	Boulder	25,000	5,216	19,784	3/9/2022	12/31/2024
SBW Consulting, Inc.	Evaluation Advisory Group	Bellevue	25,000	3,579	21,421	3/9/2022	12/31/2024
Pinnacle Economics Inc	2023 Economic Impact Study	Camas	25,000	24,750	250	2/1/2024	5/31/2024
Puget Sound Cooperative Credit Union	LoanLossReserve Fund Agreement		25,000	0	25,000	1/1/2022	12/31/2024
Quantum Energy Analytics LLC	Indoor Ag Dehumidiifer Scoping		20,000	4,140	15,860	4/15/2024	7/31/2024

CONTRACTOR	Description	City	EST COST	Actual TTD	Remaining	Start	End
Northwest Earth Institute	EcoChallenge ServicesAgreement	Portland	10,500	0	10,500	3/1/2024	12/31/2024
Digital by Design	Digital Transformation Service		10,500	10,500	0	3/8/2024	5/4/2024
Central Oregon Environmental Center	Outreach Services RES EE		10,000	5,000	5,000	2/22/2024	12/31/2024
Amy Marie Seward	Grant Writers Pool		9,600	800	8,800	6/1/2023	12/31/2024
Oregon ASK-OAEYC	SEM Training Class Services		9,000	0	9,000	10/31/2023	5/1/2024
Studio E Architecture PC	NZL Grant Agreement		8,000	8,000	0	9/6/2023	6/30/2024
Oregon ASK-OAEYC	Curriculum & Training Services		8,000	0	8,000	1/30/2024	5/3/2024
Opsis Achitecture LLC	NZELI Grant Agreement		8,000	0	8,000	9/8/2023	6/30/2024
MWA Architects Inc.	NZELI Grant Agreement		8,000	8,000	0	9/7/2023	6/30/2024
Bora Achitects Inc.	NZELI Grant Agreement		8,000	0	8,000	9/6/2023	6/30/2024
Holmes US	NZELI Grant Agreement		8,000	8,000	0	9/20/2023	6/30/2024
Gustavo Gordillo	Advisory Committee PSP		5,000	0	5,000	7/23/2023	12/31/2024
Janel Rupp	Advisory Committee PSP		5,000	0	5,000	8/21/2023	12/31/2024
Jose Garcia	Advisory Committee PSP		5,000	0	5,000	1/1/2024	12/31/2024
Julio Valera	Advisory Committee PSP		5,000	810	4,190	9/1/2023	12/31/2024
Leesha Posey	Advisory Committee PSP		5,000	338	4,663	9/3/2023	12/31/2024
Jim Craven Photography	Photography Services *$25,000	Medford	2,200	1,947	253	5/1/2023	4/30/2025
	Energy Efficiency Total:		**171,121,872**	**101,961,080**	**69,160,792**		
Joint Programs							
Wallowa Resources Community Solutions Inc	Outreach Services	Enterprise	224,050	10,000	214,050	3/1/2024	2/28/2025
1961 Consulting, LLC	CANI RES Strategic Services	Portland	75,000	24,570	50,430	1/1/2024	12/31/2024
Adre LLc	Net Zero Fellowship		66,000	50,000	16,000	9/22/2022	7/31/2024
Pacific Crest Affordable Housing	NZF Grant Agreements		61,000	30,000	31,000	9/22/2023	11/30/2024
Lever Architecture	NZF Grant Agreements		61,000	30,000	31,000	9/20/2023	3/31/2025
Infogroup Inc	Data License & Service Agmt	Papillion	33,320	32,724	596	2/4/2020	12/31/2024
Encolor LLC	Strategic Consulting Services		25,000	18,075	6,925	11/30/2023	7/31/2024
Empress Rules LLC	Coaching Equity Training SBDI		24,500	8,775	15,725	1/2/2024	8/31/2024
Jodi Tanner Tell LLC	Grant Writing Services		22,250	12,000	10,250	1/1/2023	12/31/2024
Bonneville Environmental Foundation	REC WRC Purchase	Portland	5,849	5,849	0	9/1/2023	8/30/2024
Susan Lucer Consulting Services	Grant Writing Services		4,750	4,750	0	1/1/2023	12/31/2024
	Joint Programs Total:		**602,719**	**226,743**	**375,976**		
Renewable Energy							
Clean Water Services	Project Funding Agreement	Hillsboro	3,000,000	2,013,106	986,894	11/25/2014	11/25/2039
City of Salem	Biogas Project - Willow Lake	Salem	3,000,000	3,000,000	0	9/4/2018	11/30/2040
Farmers Conservation Alliance	Irrigation Modernization	Hood River	2,500,000	2,483,510	16,490	4/1/2019	3/31/2024
Water Environment Services, A Dept. of Clackamas County	Bio Water Cogeneration System	Clackamas	1,800,000	1,800,000	0	11/15/2019	9/30/2041
Oregon Institute of Technology	Geothermal Resource Funding	Klamath Falls	1,550,000	1,550,000	0	9/11/2012	9/11/2032
Three Sisters Irrigation District	TSID Hydro	Sisters	1,000,000	1,000,000	0	4/25/2012	9/30/2032
Farm Power Misty Meadows LLC	Misty Meadows Biogas Facility	Mount Vernon	1,000,000	1,000,000	0	10/25/2012	10/25/2027
CLEAResult Consulting Inc	2024 Residential PMC SOLAR	Austin	928,040	191,592	736,448	1/1/2024	12/31/2024
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	465,000	400,000	3/18/2019	3/17/2039
Klamath Falls Solar 2 LLC	PV Project Funding Agreement	San Mateo	850,000	382,500	467,500	7/11/2016	7/10/2041
Stahlbush Island Farms, Inc.	Funding Assistance Agreement	Corvallis	827,000	827,000	0	6/24/2009	6/24/2029

CONTRACTOR	Description	City	EST COST	Actual TTD	Remaining	Start	End
Energy Assurance Company	Verifier Services Agreement	Milwaukie	725,000	579,994	145,006	10/15/2022	10/14/2024
Old Mill Solar, LLC	Project Funding Agmt Bly, OR	Lake Oswego	490,000	490,000	0	5/29/2015	5/28/2030
Deschutes Valley Water District	Opal Springs Hydro Project	Madras	450,000	450,000	0	1/1/2018	4/1/2040
City of Medford	750kW Combined Heat & 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
Three Sisters Irrigation District	TSID Funding Agreement	Sisters	400,000	400,000	0	1/1/2018	12/31/2038
SunE Solar XVI Lessor, LLC	BVT Sexton Mtn PV	Bethesda	355,412	355,412	0	5/15/2014	12/31/2034
CIty of Gresham	City of Gresham Cogen 2	Gresham	350,000	334,523	15,477	4/9/2014	7/9/2034
Solar Oregon	Outreach & Education Agreement	Portland	275,120	225,002	50,118	7/1/2022	6/30/2024
Craft3	NON-EEAST OBR Svc Agrmt	Portland	270,000	225,000	45,000	1/1/2018	12/31/2024
Wallowa Resources Community Solutions, Inc.	Project Development Assistance	Enterprise	249,394	196,394	53,000	4/1/2022	3/31/2025
Faraday Inc	Software Services Subscription	Burlington	216,000	198,000	18,000	1/15/2019	12/14/2024
Farmers Conservation Alliance	Irrigation Modernization Serv	Hood River	200,000	18,061	181,939	4/1/2024	3/31/2025
Clean Power Research, LLC	CPR License Service Agreement	Napa	167,767	145,480	22,287	7/1/2023	6/30/2024
Oregon Solar Energy Fund	Solar Education Training	Portland	145,000	139,230	5,770	6/1/2022	3/31/2024
City of Astoria	Bear Creek Funding Agreement	Astoria	143,000	143,000	0	3/24/2014	3/24/2034
Clean Power Research, LLC	WattPlan Software	Napa	138,400	138,400	0	11/17/2017	6/30/2024
TRC Engineers Inc.	2024 EPS New Const PDC Solar	Irvine	115,287	37,844	77,443	1/1/2024	12/31/2024
City of Hillsboro	Project Funding Agreement	Hillsboro	85,000	85,000	0	6/8/2020	12/31/2040
Wallowa Resources Community Solutions Inc	Collaboration Services	Enterprise	81,600	60,855	20,745	4/1/2023	3/31/2024
Wallowa County	Project Funding Agreement	Enterprise	80,000	80,000	0	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
Tetra Tech Inc	Other RE Services	Portland	64,315	37,975	26,340	4/1/2022	3/31/2024
Wisewood, Inc	RE Biomass Energy Tool		61,028	32,913	28,115	12/1/2023	8/1/2024
Excidian LLC	AMC Custom Calculator Model	Wheeling	57,732	40,700	17,032	11/15/2023	12/31/2024
Arnold Cushing LLC	PE REDA Grant Agreement	Portland	50,000	25,000	25,000	10/11/2021	7/31/2024
University of Oregon	U of O REDA Grant	Eugene	50,000	50,000	0	12/1/2023	3/31/2025
GuildQuality Inc.	License Agreement		41,640	22,880	18,760	6/1/2023	12/31/2024
Clean Energy States Alliance	Memorandum of Understanding	Montpelier	39,500	39,500	0	7/1/2023	6/30/2024
American Microgrid Solutions LLC	Solar+Storage RES EPS NC	Easton	25,000	6,520	18,480	12/29/2022	6/3/2024
University of Oregon	UO SRML Sponsorship	Eugene	24,999	24,999	0	3/9/2024	3/8/2025
Bonneville Environmental Foundation	Comm Outreach Services	Portland	24,000	5,475	18,525	4/1/2022	1/31/2025
Site Capture LLC	Subscription Agreement	Austin	24,000	21,952	2,048	6/1/2023	5/31/2024
Solar Oregon	2024 Sponsorship	Portland	22,000	0	22,000	5/7/2024	12/31/2024
Kleinschmidt Associates	Other RE Professional Services	Pittsfield	18,000	15,736	2,264	4/1/2022	3/31/2024
Adelante Mujeres	Solarize Outreach Services		14,980	0	14,980	3/1/2024	6/30/2024
Centro Cultural of Washington County	Solarize Campaign		5,225	0	5,225	3/1/2024	5/31/2024
	Renewable Energy Total:		**24,654,439**	**20,913,064**	**3,741,376**		
	Grand Total:		**220,517,105**	**140,417,382**	**80,099,724**		
	Contracts without Incentives Total:		**197,367,299**	**120,252,124**	**77,115,175**		
	Renewable Energy Incentives Total:		**21,139,806**	**18,854,957**	**2,284,849**		
	Energy Efficiency Incentives Total:		**2,010,000**	**1,310,300**	**699,700**		

PINK PAPER

Board Briefing and Decision Paper
Resolution 1033: Authorize a Program Management Contract for the Energy Trust New Buildings Program

June 12, 2024

Summary
Staff recommends that the board approve negotiation and execution of a Program Management Contractor (PMC) agreement for CLEAResult, Inc. for the program management services of the Energy Trust New Buildings Program.

The contract term for the PMC agreement would begin January 1, 2025, for five years, with two optional one-year extensions. Statements of work for the PMC agreement are approved on an annual basis, subject to annual budgets and savings goals.

Staff presented detailed information about the proposed PMC agreement selection and recommendation to the board's Finance & Audit Committee on Thursday, May 23, 2024, and the Finance & Audit Committee supports staff's recommendation.

Background: 2024 New Buildings Program Management RFP
- The New Buildings program is currently managed by a single PMC, CLEAResult, Inc., serving the new construction and major renovation market throughout the entire Energy Trust service area.
- The current PMC agreement, which began January 1, 2019, will expire December 31, 2024. This contract was initially authorized by the board in 2018, for up to a five-year term, through December 31, 2023 (Resolution 841). In 2022, staff requested, and the board approved, an additional one-year contract extension (Resolution 985). The 2024 program year represents the 6th and final extension period.
- In anticipation of the RFP, staff issued announcements in early November 2023 that Energy Trust would release an RFP and invited interested parties to attend an informational webinar later in the month. In addition, staff announced an opportunity for potential bidders to indicate their interest in teaming with other firms in response to the RFP.
- In late November 2023, staff held an informational webinar to provide potential bidders with details about the New Buildings program. A total of 12 firms participated in the November informational webinar, where Energy Trust staff also announced the upcoming RFP.
- In December 2023, staff listed those firms that indicated they were interested in teaming with potential partners on Energy Trust's website page for the RFP. A total of 17 firms submitted a request to be posted to Energy Trust's interest in teaming page as a result of the outreach.

- In January 2024, staff issued a Request for Proposals for a PMC to implement the New Buildings program beginning January 1, 2025.
- The RFP was announced via the Energy Trust website, in a press release, via Energy Trust social media accounts, and via email to a list of interested parties who submitted requests for notification of competitive solicitations via Energy Trust's website, and to a distribution list of potential interested parties identified by the Small Business Administration's Dynamic Small Business Search (DSBS) and from the System for Award Management (SAM), and other industry contacts. The RFP was also announced at Energy Trust advisory council meetings.
- In February 2024, staff held a second webinar to provide potential bidders with information about the RFP and solicited questions from interested parties. A total of 10 organizations attended the webinar. Staff received questions in advance of the webinar from potential bidders and posted answers on the website after the webinar.
- The RFP included a Supplier Diversity Spend Goal that required bidders to demonstrate that their program implementation services would utilize Supplier Diversity Contractors in an amount equal to or exceeding 20% of bidder's proposed annual contract payment amount (excluding incentive funding). Supplier Diversity Contractors refers to a company on an implementation team (including the prime contractor) that meets one or more requirements from either the Oregon Certification Office for Business Inclusion and Diversity (COBID) certifications or from the Federal contracting assistant program benefits or certifications managed by the U.S. Small Business Administration (SBA).
- The RFP reflected the program's future-looking structure for delivering the New Buildings program and requirements for diversity, equity, and inclusion related to bidder's company policies, program implementation approaches, and the Supplier Diversity requirements noted above. The following program strategies were described: Integrating diversity, equity and inclusion into all parts of the program, focusing on whole building approaches for both training and project participation, and a goal of increasing Net Zero buildings across the service area.
- Energy Trust received notice from two companies with their intent to respond to the RFP as prime bidders.
- Energy Trust received two RFP response proposals by the due date of March 20, 2024.
- A team of 18 Energy Trust staff and one external reviewer (an expert in Diversity, Equity, and Inclusion) reviewed the proposals. Eight out of 18 were identified as Scoring and Evaluation members. The review team:
    - Reviewed the proposals for adherence with financial, legal and IT requirements outlined in the RFP
    - Provided preliminary scores based on the written proposals
    - Posed questions to both prime bidders to address in writing in advance of interviews, as well as questions to address in their interview presentations
    - Interviewed both bidders
    - Participated in follow-up discussions and updated scoring
    - Made a recommendation for the selection

Discussion

Energy Trust received proposals from CLEAResult, the incumbent PMC, and another prime contractor firm. Both proposals were strong contenders and included strategies to increase program participation and diversity. During the proposal review stage, Energy Trust's RFP review team advanced both proposals to the finalist round where interviews and written follow-ups were conducted. During the preliminary scoring round, the review team ranked CLEAResult's proposal highest in three out of four of the evaluation criteria.

After the interview process, scoring members completed a second round of scoring based on the proposals, interview presentations, and written responses to pre- and post-interview questions from staff. The full team of 18 reviewed final scores. The aggregate score was higher for CLEAResult.

The proposals were evaluated using the criteria shown in Table 1.

TABLE 1: PROPOSAL EVALUATION CRITERIA

Criteria	Weight	Description
Cost and Energy Savings	30%	Price Proposal and Energy Savings
Strength and Cohesion of Bidder Team	30%	Project Team Qualifications and Experience
Diversity, Equity, and Inclusion (DEI)	25%	DEI Qualifications; DEI Experience and Program Design Strategy; and Supplier Diversity Subcontracting Plan
Strength of Proposal	15%	Proposal Presentation of Program Design, Strategy, and Approaches

CLEAResult offered a clear and compelling approach that included three main strategies to achieve savings and market transformation. In addition, CLEAResult presented a comprehensive workforce development plan that further strengthened their DEI approach.

Shelly Carlton, Senior Program Manager of the New Buildings Program, and Oliver Kesting, Sector Lead-Commercial, presented detailed RFP evaluation and selection information to the board's Finance & Audit Committee on May 23, 2024. The committee reviewed the information and asked questions regarding the process and the proposals of staff. Following the discussion, the committee indicated their support for staff's recommendation and asked that staff's recommendation for a PMC agreement with CLEAResult be presented to the full board with a recommendation for approval.

Recommendation

Authorize Executive Director Michael Colgrove, or his designee, to negotiate and execute a **New Buildings Program Management Contractor Agreement with CLEAResult** for a five-year term, beginning January 1, 2025, with potential for two one-year extensions recommended upon satisfaction of identified performance metrics.

RESOLUTION 1033

AUTHORIZE A PROGRAM MANAGEMENT CONTRACTOR AGREMENT WITH CLEARESULT, INC FOR NEW BUILDINGS PROGRAM MANAGEMENT SERVICES

WHEREAS:

1. With the assistance of outside expertise, Energy Trust staff conducted a fair and open procurement process to select a program management contractor to manage and deliver New Buildings program services for the next 5-7 years;
2. Staff selected and recommends CLEAResult to provide the New Buildings program management services proposal that would best meet the needs of Energy Trust and Energy Trust customers;
3. Staff has estimated a total first-year New Buildings program management and delivery budget of up to $10,000,000 for this PMC contract with an incentive budget of approximately $13,000,000 based on proposed energy savings levels. Final details for the exact cost will be approved by this Board as part of the New Buildings 2025 annual budget approval process;
4. Staff presented their recommendation to the Energy Trust's board's Finance & Audit Committee on May 23, 2024, and the committee supports staff's recommendations and requested that the proposal be forwarded to the full board for consideration and approval; and
5. If approved, the Energy Trust board will review actual savings and costs of the CLEAResult PMC agreement each year as part of its review of Energy Trust's annual budgets.

IT IS THEREFORE RESOLVED:

1. Subject to determination of a contract cost amount based on the board-approved 2025 annual budget, the executive director or his designee is authorized to negotiate and to enter into a PMC agreement with CLEAResult to manage the New Buildings program for an initial term from January 1, 2025, through December 31, 2029.
2. First-year contract costs and savings goals included in the contract shall be consistent with the board-approved 2025 annual budget and action plan(s). Thereafter, staff may amend the contract consistent with the board's annual budget and financial and action plan decisions and the executive director or his designee is authorized to sign any such contract amendments.
3. The contract may include a provision allowing staff to offer up to two one-year extensions beyond the initial term if the program management contractor meets certain established performance criteria, including but not limited to Diversity, Equity, and Inclusion contracting performance criteria.
4. The PMC agreement will contain all appropriate terms to manage Energy Trust's risk, including but not limited to, a provision permitting early termination and a provision requiring staff to report on contract performance annually during the term of the PMC Agreement to the board of directors Finance & Audit Committee.

5. Before extending the PMC agreement with CLEAResult beyond the initial term, staff will report to the board on the program management contractor’s progress and staff's recommendation for any additional extension time periods. If the board approves an extension, contract terms would remain as approved in the most recent action plans, budgets, and contract at the time of extension, and the executive director or his designee would be authorized to sign any such contract extensions.

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

Tab 4

Nominating & Governance Committee Notes

April 8, 2024, 2:30 p.m.

Committee members attending: Janine Benner (ODOE Special Advisor, ex-officio), Melissa Cribbins, Henry Lorenzen, Jane Peters, Roland Risser (Chair)

Committee members absent from meeting: Anne Root, Letha Tawney (OPUC, ex-officio)

Staff attending: Amber Cole, Michael Colgrove, Betsy Kauffman, Debbie Menashe, Danielle Rhodes, Amanda Sales, Bayoan Ware

Others attending: Sherry Tran, Alliance Compensation

Chair Roland Risser opened the meeting at approximately 2:31 p.m.

Consent and Appointment of Members to Conservation Advisory Council (CAC) and Renewable Energy Council (RAC)

Staff proposed appointments to the CAC and RAC and requested committee approval. For the CAC, the proposed members are:

Corinne Olson, an attorney with Davison Van Cleve, a Portland law firm; representing Alliance of Western Energy Consumers (AWEC). Corrine would replace prior council member Tyler Pepple, also of Davison Van Cleve AWEC is a nonprofit whose membership consists of approximately 40 end users of electricity and natural gas with major facilities in Oregon, Washington, and Idaho. AWEC also represents those customers in matters before the OPUC. Staff recommends there by continued AWEC representation on CAC, and staff suggest Corinne Olson.

Peter Kernan, Senior Utility Analyst with Oregon Public Utility Commission (OPUC). Peter would replace prior council member Anna Kim of the OPUC, who has taken on a different role at the OPUC. Staff recommends continued OPUC representation on CAC, and staff suggest Peter Kernan. Peter works primarily on energy efficiency, flexible demand and community-based renewable energy topics for the Energy Resources and Planning team. In this role, he collaborates on and reviews Energy Trust and utility program proposals.

The proposed new members for the RAC are:

Stasia Brownell, Senior Product Portfolio Specialist, Residential Renewables at Portland General Electric. Her role involves managing their residential and small commercial voluntary green power products. As a member of PGE's Clean Energy Acquisition team, Stasia is also working to bring Community-Based Renewable Energy (CBRE) projects to PGE's clean energy portfolio. She has been with PGE since 2020. Stasia also brings to the RAC an additional 12 years of experience in REC markets, environmental claims, and utility green power product management from 3Degrees where she worked with Pacific Power and NW Natural, among other utilities nationwide. Stasia serves on the Freshwater Trust's Headwaters Council. Staff recommends that Stasia replace Jake Wise who was temporarily standing in for Tess Jordan, a previous RAC member for PGE and who was assigned to new duties at PGE.

Rob Del Mar, senior policy analyst at the Oregon Department of Energy (ODOE). He is responsible for evaluating policies relating to renewable energy and energy resilience projects in Oregon. Rob is currently involved with several initiatives to enhance the collection, analysis and dissemination of data related to solar energy and storage projects in Oregon. Rob is also managing the development of new financial incentive programs at ODOE to support more low-income participation, community renewable energy and resiliency projects, and grid infrastructure projects. Previously Rob worked as a project manager in the solar programs at Energy Trust of Oregon and as a design engineer for a renewable energy engineering firm.

The committee approved the proposed appointments to the CAC and the RAC.

Discussion of Next Steps on Renewable Energy Certificate Policy for Retirement and Referral to Energy Trust Staff

Debbie Menashe and Betsy Kaufmann. Renewables Sector Lead, updated the committee on staff discussions regarding retirement of the Renewable Energy Certificate (REC) Policy and referral to Energy Trust staff. This is the one of the policies that the board has considered over the last year as an operational policy and determined that referral to staff for decision making was appropriate.

Debbie referred the committee to the briefing memo that was provided prior to the committee meeting, and the committee continued its discussion, including discussing the fact that RECs are not part of a path to full clean energy generation as set forth in HB 2021. The committee confirmed their determination that the REC policy should be referred to staff for management in renewable program design and will recommend its retirement as a board-level policy at the June board meeting.

Betsy noted that ongoing revisions and execution procedures would be discussed by Energy Trust staff with the RAC.

Update on Grant Agreement Discussions with Oregon Public Utility Commission (OPUC)

Debbie Menashe presented updates to the committee on the discussions with the OPUC. In 2022, significant changes occurred in the legislature regarding the scope and term of public purpose charge funding. These changes have not yet been reflected in Energy Trust's grant agreement with the OPUC. However, early in 2024, Energy Trust and OPUC staff began work to update the current agreement to reflect the legislative changes and to update the agreement generally.

Debbie described the public process planned by OPUC staff. A Notice of Schedule for the process was filed in UM 1158. The schedule calls for a draft agreement to be available for public review on or around April 25th. Then a public workshop will be scheduled in early May. OPUC staff is aiming to present a recommended updated agreement to the OPUC commissioners at their public meeting on July 9.

Energy Trust and OPUC staff are working closely to revise the agreement.

Committee members asked questions about the proposed agreement, including whether how it might impact Energy Trust's work with ODOE and the timeline for the review. Debbie noted that these questions have been discussed with OPUC staff. Energy Trust will preserve its ability to

coordinate with ODOE and others on additional funding. Additionally, OPUC staff will work closely with stakeholders on process timing concerns. A subgroup of the committee agreed to review the draft agreement, and Debbie will provide a copy to them.

Executive Director Review Process

With the support of Ellen Raim of 1961 Consulting, President Henry Lorenzen and Committee Chair Roland Risser undertook Michael Colgrove's performance review. Henry and Roland reported on that process and the results. Sherry Tran from Alliance Compensation presented additional information to the committee on executive director compensation. The committee discussed the information and will present their recommendation to the full board during and executive session during the full board meeting on April 17th.

Proposed Updates to Nominating and Governance Committee Charter

Following discussions at prior meetings on updates to the committee's charter, Debbie presented proposed final revisions. The committee charter will grant authority to revise and retire board policies, review proposed modifications to committee charters, and recommend modifications to the board. Additionally, revisions to the charter will clarify the annual executive director review process. Debbie will finalize the proposed changes, and the revised charter will be recommended to the full board for approval at its June board meeting.

Adjourn

Roland Risser adjourned the meeting at 4:11 p.m.

The next meeting of the Nominating and Governance Committee is June 10th, 2024 at 2:30 p.m.

PINK PAPER

Resolution 1034
Retiring the Renewable Energy Certificate (REC) Policy 4.11.000-P

June 12, 2024

RESOLUTION 1034
RETIRING THE RENEWABLE ENERGY CERTIFICATE (REC) POLICY
4.15.000-P

WHEREAS:

1. **The Renewable Energy Certificate (REC) Policy (the "REC Policy") directs Energy Trust to take title to RECs from all renewable energy projects receiving an incentive in order to demonstrate the "green" value of Energy Trust supported renewable energy projects.**

2. **Over time, as a result competing and significant interest in RECs, a number of REC Policy exceptions were approved by the Energy Trust board of directors to support the effectiveness of Energy Trust's Renewable Energy programs;**

3. **Energy Trust staff continue to monitor the efficacy of the REC Policy to demonstrate the value of Energy Trust's renewable energy projects and currently applies the policy to a limited number of projects;**

4. **Energy Trust staff supports a retirement of the REC Policy from board purview and referral to Energy Trust staff for continued monitoring and application;**

5. **The REC Policy was reviewed by the Nominating & Governance Committee in June 2023 as part of the committee's regular cycle of policy reviews and its analysis of whether policies are governance or operational based on various factors including:**
    - Degree of relevance to board-level decision-making
    - Degree of advancing transparency of board's work
    - Identification of board's ends, objectives and goals
    - Identification of guardrails and sideboards between board governance work and staff operational work

6. **Nominating & Governance Committee members discussed whether the policy is relevant to board-level decision making, given that the policy describes program design and operations. Committee members believe that the policy is operational and, as a result, suggested that it be retired and referred to Energy Trust staff; and**

7. **The Nominating & Governance Committee supports the suggested policy retirement and referral to Energy Trust staff for ongoing management of the REC Policy based on staff's presentation regarding the policy approach anticipated.**

It is therefore RESOLVED that the Board of Directors hereby approves retirement of the REC Policy and refers the policy to Energy Trust staff.

Moved by:

Vote:	In favor:	Second By:
	Opposed:	Abstained:

ATTACHMENT 1 (Proposed for Retirement)

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

History			
Source	Date	Action/Notes	Next Review Date
Board Decision	May 8, 2001	Approved (R27)	November 28, 2001
Board Decision	November 28, 2001	Reviewed, Revised (R58)	January 30, 2002
Board Decision	January 30, 2002	Reviewed, Revised (R69, R70)	April 3, 2002
Board Decision	April 3, 2002	Reviewed, Revised (R96)	October 30, 2002
Board Decision	October 30, 2002	Reviewed, Revised (R137)	October 2005
Board Decision	May 25, 2006	Reviewed, Revised (R392)	May 2009
Policy Committee	September 2, 2009	Reviewed, no changes	August 2012
Policy Committee	October 23, 2012	Reviewed, no changes	October 2015
Board Decision	December 12, 2014	Amended (R732)	December 2017
Board Decision	February 24, 2016	Amended (R769)	February 2019
Policy Committee	May 09, 2019	Reviewed, no changes	May 2022
Board Decision	December 15, 2023	Retired via R1012	NA

Introduction

Oregon law allows entities that use over one average megawatt of electricity a year at a single site to direct their own electric efficiency and renewable energy projects and deduct the cost from the public purpose charge on their electric bills. In 2002, Energy Trust adopted a policy allowing self-directors a full Energy Trust incentive for the new project only if the self-director agrees not to use self-direct credits at the same site for 36 months. The policy recognizes that self-directors should not have the same access to Energy Trust incentives as electric users who pay the public purpose charge.

Policy

Purpose: Energy Trust generally supports projects only of energy users who pay into the three percent public purpose fund on which Energy Trust programs are based. At the same time, Oregon's self-direction requirement can lead to situations in which an energy user reduces or eliminates its contribution to the public purpose fund by implementing energy efficiency or renewable energy measures certified by the Oregon Department of Energy at a self-direct site. This policy outlines circumstances in which a self-directing energy user nevertheless qualifies for Energy Trust support.

1. Limitations on incentives at sites that are eligible to self-direct:

   A. No incentives for self-directed measures: No Energy Trust incentive will be given for any measure ("measure" includes technical studies and commissioning services) for which self-direction credit is also claimed.

   B. All other measures: However, an energy user that is eligible to self-direct may seek an Energy Trust incentive for a measure if the energy user:

- agrees not to use any self-direct credits for 36 months at the same ODOE-certified site as the site of the proposed Energy Trust measure, and may receive 100% of the standard Energy Trust incentive for the measure. After 36 months, the energy user may resume using self-direct credits, or

- if the energy user continues to use any self-direct credits for non-Energy Trust measures at the same site, the energy user may receive up to 50% of the standard Energy Trust incentive for the measure for which an Energy Trust incentive is sought.

C. Measures exempted: As long as it claims no self-direct credit for these measures, an energy user may receive 100% of the standard Energy Trust incentive for the following measures even if the energy user uses self-direct credits for other measures at the same site:

- Non-lighting prescriptive measures. These are measures where Energy Trust offers consumers a fixed payment per piece of efficient equipment, per watt, per square foot, or other simple basis. Prescriptive measures are subject to eligibility requirements but involve no site-specific technical analysis. In most situations, customers may apply for prescriptive measures after installation. In some situations, the customer has an option to assign the incentive to a contractor. This exemption does not include prescriptive lighting measures where incentives are calculated and pre-approved in a standardized procedure, or other measures where incentives are based on multi-variable calculations and include pre-approval of incentive offers.

- Midstream and upstream incentives. These incentives are offered to retailers, distributors, manufacturers or other agents in the supply chain to provide efficient equipment or efficiency services to customers.

- Measures determined by Energy Trust staff to have modest costs to Energy Trust ($5,000 or less per project) and savings, and where application of this policy's requirements would unreasonably interfere with efforts to encourage participation in an Energy Trust program.

2. Allocation by customer class. Allocation of Energy Trust funds to self-directing end-users will not change the allocation of funds by customer class.

3. Repayment requirement: If the energy user accepts a full Energy Trust incentive for a measure and agrees not to use self-direction credits on its electric bill at a site for a 36-month period, Energy Trust staff:

   A. Shall require repayment if the self-director begins using credits before the 36 months has ended. If required, recovery will be by the following formula: Refund Amount = 0.5 x A x B, *where* A = total amount of Energy Trust incentives paid and B = 36 minus the number of months elapsed since measure installation or completion, divided by 36. Repayment must be completed within two years of the time the repayment obligation is triggered.

   B. May waive repayment for projects whose repayment obligation would be $5,000 or less.

4. Energy efficiency and renewable energy measures considered separately: Energy efficiency and renewable energy measures shall be considered separately for the purposes of this policy. That is, during the 36 months after a measure is installed at a site, a self-director may use self-direction credits for a renewable energy project at an ODOE-certified site if it receives Energy Trust incentives for an energy efficiency project at that site, or *vice versa,* with no repayment requirement.

Tab 5

Ad hoc Strategic Planning Committee Meeting Notes

May 8, 2024

Committee members attending: Henry Lorenzen, Jane Peters (Chair), Letha Tawney (OPUC ex-officio), Bill Tovey

Committee members absent from meeting: Janine Benner (ODOE Special Advisor, ex-officio), Michael Colgrove, Amber Cole, Peter Therkelsen, Ellen Zuckerman

Staff attending: Sarah Castor, Amber Cole (Staff Liaison), Elaine Prause, Danielle Rhodes, Abby Spegman, Greg Stokes,

Others attending: Holly Valkama (1961 Consulting)

Jane Peters opened the meeting at 3:33 p.m.

Unique Role of Value

Holly reviewed the Unique Role of Value (UROV) statement that will be proposed at the May board meeting:

Through its strong network of relationships, Energy Trust is uniquely positioned to support utility customers and communities in saving energy and adopting customer-sited clean energy solutions that reduce energy costs, while contributing to:

- *Community-centered benefits.*
- *Energy just outcomes.*
- *State, local and tribal energy objectives.*

She reviewed the current iterations of Vision and Purpose. Henry proposed that we add "We partner with customers, utilities, and communities to save energy and adopt clean energy solutions, reducing costs and accelerating community-centered benefits," as we should emphasize how we work with utilities to achieve these goals. Jane agrees this addition would be beneficial to adopt.

Members of the internal strategic planning team examined the UROV statement to evaluate its ability to remain unique, and the "what" and the "how" allows the statement to provide unique value.

Henry asked how we distinguish ourselves from other organizations that have public purpose charge funds for low-income energy initiatives, such as Portland Clean Energy Fund and Portland Housing and Community Services. Jane noted that PCF and these other organizations have unique roles that overlap with our organization in some ways, but that Energy has a unique role that is much broader in scope.

Elaine noted that the engine of our planning, program and reporting processes is what makes Energy Trust unique. Holly also provided that it is rare that a UROV statement doesn't share some overlap with other market offerings, but components of it should allow an organization to provide unique value.

Holly previewed discussions for the May board meeting. She noted there will be an executive session with Ashnie Butler, board DEI consultant, to review the unique role of value from an equity and inclusion lens. The board has received the current iteration of the unique role of value statement and will break into pairs to have further discussion.

The committee discussed the language in the UROV and suggested adding “tribal entities” and will take this suggestion to Amber for further follow up.

Strengths and Capabilities Map

Holly reviewed the current iteration of the Strengths and Capabilities map with the committee, showing the revised version with lines connecting which capabilities support related strengths. This map will help in informing the next stage of the strategic planning, especially Areas of Focus. The unique role of value broadens the field of possible focus areas and goals, and this map will help narrow down the focus areas and goals to undertake and reflect in the strategic plan.

May Board Workshop Topics and Timeline

After Ashnie helps the board apply an equity lens to the unique role of value statement, the vision, purpose, and unique role of value statements will be reviewed again with the full board in the afternoon.

On day two, the workshop will then move to identifying potential areas of focus. This will kick off planning to identify and stage key deliverables associated with each strategic area of focus.

We will have three panels during the May workshop: a panel comprised of utility representatives, a panel of community representatives, and a panel of state and local elected representatives.

Holly then reviewed the timeline with the committee, noting that we should have a draft version of the strategic plan to present to the committee in the summer, with the full board receiving a final draft at the August board meeting. Feedback will be gathered from stakeholders during a public comment period. Then revisions will be made during the fall to complete the strategic plan in December.

The committee thanked Holly for the smooth process throughout strategic planning thus far.

Adjourn

The meeting adjourned at 4:12 p.m.

The next meeting of the ad hoc Strategic Planning Committee is scheduled for May 22nd, 2024, from 3:30 to 4:30 p.m.

PINK PAPER

Ad hoc Strategic Planning Committee Meeting Notes

May 22, 2024

Committee members attending: Janine Benner (ODOE Special Advisor, ex-officio), Henry Lorenzen, Jane Peters (Chair), Peter Therkelsen, Bill Tovey

Committee members absent from meeting: Letha Tawney (OPUC ex officio), Ellen Zuckerman

Staff attending: Sarah Castor, Amber Cole (Staff Liaison), Michael Colgrove, Elaine Prause, Danielle Rhodes, Abby Spegman, Jess Siegel, Greg Stokes

Others attending: Holly Valkama (1961 Consulting)

Jane Peters opened the meeting at 3:03 p.m.

Purpose Statement

Amber reviewed the progress on the purpose statement from the May board meeting and proposes that "partner" changes to "work together" to remain in alignment with language Energy Trust uses. Jane does not object but would like to adjust the word "adopt" in the purpose statement as it lacks clarity. Holly recommended that Amber's team resolve this via email with the committee rather than bring it back for any more discussion and all agreed.

Areas of Focus

Amber presented a document prepared by the internal strategic planning team (ISPT) describing the Areas of Focus that emerged from the May board meeting discussion. Staff's purpose in writing the descriptions was to reflect their understanding of the focus areas and gather committee perspectives to further refine an accurate reflection of the board's intent. The four focus areas more fully described in the document are:

- Maximizing the contribution of energy efficiency and renewable energy resources in service to those decarbonization goals

- Acquiring as much energy efficiency and renewable energy as possible and supporting customer-sited distribution system connected technologies to mitigate cost- and system-management pressures on Oregon's energy systems and help ensure future costs are as low as possible for customers.

- Increasing and deepening participation among:
    - Priority customer groups – including customers of color, customers experiencing low and moderate incomes, and customers from rural communities—that Energy Trust has historically underserved.
    - Those we have not yet motivated to act yet on clean energy opportunities or have more energy savings potential.

- Working with local and state government agencies and other entities with resilience and planning and management responsibilities to support incorporation of clean energy solutions into community resilience efforts.

The committee walked through the document and expressed various points of view, including consideration of whether the first two focus areas ought to be combined or remain separate, and whether the customer participation focus area should be divided into two, given the complexity in describing them together.

Committee members and internal strategic planning team members expressed the following perspectives during discussion on the areas of maximizing clean energy for decarbonization and for mitigating energy system costs pressure:

- Henry noted that if the organization's focus is decarbonization, we could be looking at a distinct set of activities versus having a singular focus of increasing affordability. This could come up especially around electrification where one might consider fuel switching.
- Mike noted that the focus area on mitigating costs emphasizes affordability and believes it would be wise for the board to put a marker on electrification as an area to come back to as staff will need more guidance there.
- Jane likes that a focus area on mitigating system cost pressures also calls out targeting energy efficiency, renewable energy and customer-sited distribution system connected technologies to address system constraints.
- Peter appreciated that the first area of focus calls out decarbonization in support of state policy mandates and our role in support of utility partners and customers to keep the costs of decarbonizing as low as possible. Noted familiarity with BC Hydro plans that put to energy efficiency as the first step for basically every objective they have around greenhouse gas reduction, electrification, affordability, peak reduction, etc.
- Henry prefers to keep the focus areas on decarbonization and mitigating costs separate as they provide for separate aspects of what Energy Trust does and wants to achieve.
- Committee members shared that they agreed with keeping them as separate focus areas.
- Greg appreciated the committee's discussion on how each area provides nuance to Energy Trust's work.
- Elaine shared an alternative view that she sees the focus areas on decarbonization and mitigating costs as different ways to "get it all" in service to the system and policy mandates.
- Sarah believes that some of the intentions in the mitigating costs focus area should be more targeted and fleshed out with the utilities to address load growth.
- Janine recalled that there was some small group discussion at the May board workshop about working specifically with utilities on targeted strategies and likes seeing these as two separate focus areas.

Holly presented the focus area on increasing and deepening participation and noted that the internal team thought that this could end up as two separate areas of focus due to the different types of customer groups that should be addressed, as the board discussed at the May meeting. These customer groups are different and may need separate pathways toward engagement. Staff and the committee discussed the categories of customers in each group and how they could be defined and the importance of obtaining savings across the board. Bill suggested that staff guide on this area of focus due to knowing Energy Trust's programs thoroughly. Jane expressed support for specifically identifying the customer groups but thought there may be benefit to reinforcing that program strategies need to be integrated to reach all customers. She doesn't want to see programs approach customers in silos. The committee discussed further and generally supported that they be reflected as separate focus areas.

Holly presented the focus area on resilience. Staff and committee discussed whether this should be subset of one of the other focus areas or called out alone.

- Janine likes the language used in this focus area.
- Amber mentioned that utilities should be mentioned as entities that Energy Trust works with in this space.
- Henry shared a concern about how Energy Trust would engage in this space and that this could become too complex and divert resources from energy efficiency and renewable focuses if we are engaging with emergency management organizations. It also raises interesting questions about where to apply funding.
- Mike said that keeping this as a standalone focus area allows us to broaden focus on clean energy solutions that are currently constrained by our funding requirements and have been time consuming to develop in cases where we have been involved to date. This would also spur us to consider other sources of funding that could apply.
- Jess highlighted the work that the Renewables and Community and New Initiatives teams are already doing in community resilience with support from a grant to help counties develop clean energy resilience plans. The renewables team is hearing from communities that resiliency plans are a priority and want Energy Trust to work with them to support those plans. She noted that resiliency goes beyond power outages to cooling solutions during extreme heat.
- Jane mentioned it can be difficult to determine what energy benefits arise from resiliency plans and it may make sense to be assumed under another focus area.
- Peter advocated for keeping resilience a standalone focus area for Energy Trust as it is critical to the state and communities we are serving.
- Bill appreciates all perspectives shared and noted it is our goal to work with counties and tribes on this and does not see this language implying that Energy Trust would become a first responder in an emergency.
- The committee agreed to continue the discussion offline to doublecheck for alignment among the committee before the next committee meeting.

Outcomes and Goals

Holly pointed to the initial Outcomes and Goals document shared with the committee and the committee will examine and give feedback offline before the next committee meeting.

Adjourn

The meeting adjourned at 4:37 p.m.

The next meeting of the ad hoc Strategic Planning Committee is scheduled for June 5, 2024, from 3:30 to 4:30 p.m.

Tab 6

Conservation Advisory Council Meeting Notes

April 10, 2024

Attending from the council:

Laney Ralph, NW Natural
Corinne Olson, AWEC
Noemi Ortiz, Cascade Natural Gas
Lisa McGarity, Avista
Jonathon Belmont, Bonneville Power Administration
Charity Fain, Community Energy Project
Peter Kernan, Oregon Public Utility Commission
Andy Cameron, Oregon Department of Energy
Becky Walker, Northwest Energy Efficiency Alliance
Jake Wise, Portland General Electric
Kari Greer, Pacific Power

Attending from Energy Trust:

Hannah Cruz
Alex Novie
Tom Beverly
Elaine Dado
Janelle St. Pierre
Elizabeth Fox
Jeni Hall
Cameron Starr
Chris Lyons
Debbie Menashe
Abi Sloan
Elaine Prause
Kirstin Pinit
Scott Leonard
Maddie Norman
Thad Roth
Fred Gordon
Cory Hertog
Marshall Johnson
Natalia Ojeda
Themba Mutepfa
Jackie Goss
Maddy Otto
Spencer Moersfelder
Oliver Kesting
Julianne Thacher
Amanda Thompson
Michael Hoch
Sue Fletcher
Kathleen Belkhayat
Greg Stokes
Amanda Zuniga
Laura Schaefer
Patrick Urain
Amber Cole
Andrew Shepard
Willa Perlman
Michael Colgrove
Tiffany Hatteberg

Others attending:

John Molnar, Rogers Machinery
Candice Norton, Resource Innovations
Jenny Sorich, CLEAResult
Brooke Landon, CLEAResult
Kris Grube, City of Portland
Zac Gomez, Resource Innovations
Heath Heiberg, TRC Companies
Henry Lorenzen, Energy Trust board

1. Welcome and announcements

Hannah Cruz, senior stakeholder relations and policy manager, convened the meeting at 1:30 p.m. via Zoom. The agenda, notes and presentation materials are available at https://www.energytrust.org/wp-content/uploads/2023/11/CAC-Packet-April-2024.pdf

She then introduced Janelle St. Pierre, senior project manager for Energy Trust's communities and new initiatives sector, who will take over as council facilitator starting in June. Hannah also introduced new

council members: Corinne Olson, who takes over for Tyler Pepple representing Alliance of Western Energy Consumers, and Peter Kernan, who represents the Oregon Public Utility Commission.

Hannah Cruz noted an opportunity to give feedback and public comment on Energy Trust's 2023 Annual Report. The OPUC directed Energy Trust to gather feedback on what is include in the report, and staff will use any feedback as inputs into the 2024 report. More information is available at www.energytrust.org/reports.

2. Revisions to Energy Trust's grant agreement

Topic summary

The OPUC is modernizing its grant agreement with Energy Trust, through which Energy Trust receives and is held accountable for investment of ratepayer funds in cost-effective energy efficiency, small-scale renewable energy and market transformation. The update will occur within OPUC docket UM 1158.

Debbie Menashe, Energy Trust general counsel, provided an overview of the OPUC schedule and process. Many things have changed since the grant agreement was enacted. Energy Trust has been working closely with OPUC staff on the public process of revising the grant agreement. The draft agreement will be open for public comment April 26 to May 10. Commissioners will review the updated document starting in July. Council members are invited to monitor the schedule and engage in the process.

The OPUC has already talked with several utilities and stakeholders and welcomes additional direct conversations. Peter Kernan will be the OPUC point of contact for input and discussions.

Discussion

None.

Next steps

Staff will share materials for public comment when posted by the OPUC later in April.

3. 2025-2030 Strategic Plan development

Topic summary

Greg Stokes, organizational development manager, provided an update on the Energy Trust board's recent 2025-2030 Strategic Plan development workshop and discussed next steps in the process. Council members who attended the workshop were encouraged to share their thoughts.

Discussion

The council stated it was a great experience overall, with good prompts to get everyone thinking and expressed appreciation for the opportunity to contribute (Andy Cameron, Jake Wise and Lisa McGarity). It said the face-to-face conversations were very helpful due to the complexity and nature of issues being faced and it was clear that staff weren't just checking boxes in a process, but instead truly considered the feedback (Jake Wise). The council pointed out it was a great development opportunity for anyone who hasn't been involved in a planning activity of this sort (Lisa McGarity).

Next steps

Updates will be brought to future council meetings. The next board engagement on the strategic plan is at the board's May 13-14 meeting.

4. Legislative update

Topic summary

Chris Lyons and Natalia Ojeda from Energy Trust's policy services team gave a summary of energy-related bills that passed in Oregon's 2024 legislative session:

- SB 1525, which revises some ODOE programs
- SB 1530, which funded existing programs, including Oregon Heath Authority Healthy Homes program and ODOE Rental Home Heat Pump program
- SB 4015, which creates a siting pathway for standalone, large-scale battery storage systems
- HB 4080, which establishes a state policy on offshore wind
- SB 1581, which requires Portland General Electric and Pacific Power to report on any activities taken toward participation in a regional energy market

Housing was one of the top issues in the session. The housing package (SB 1537, SB 1530 and HB 4134) commits $376 million to address homelessness and support housing development. Emerging themes for Oregon's 2025 legislative session include a state transportation package, renewable energy and transmission siting, and state greenhouse gas emissions targets.

The following relevant bills passed in Washington's 2024 legislative session:

- HB 1589, which allows the Washington Utilities and Transportation Commission to implement consolidated planning for "large combination utilities" (gas and electric), which applies only to Puget Sound Energy
- HB 1185, which restricts the sale of mercury-containing lights starting in January 2029
- SB 6058, which allows the Washington Department of Ecology to link the state's carbon market with California's and Quebec's market

Discussion
None.

Next steps
None.

5. Residential program delivery pilots

Topic summary
Scott Leonard, Residential program manager, provided an overview of how Energy Trust is progressing through active program delivery pilots, which are used to test new delivery strategies and models. (See CAC agenda and presentations for details.) Energy Trust has learned community-based organization (CBO) partners are a viable pathway to reach energy burdened customers. Cost is a key barrier and offers must be made at no cost to the customer. There is considerable demand. Complementary funding is on the horizon via Inflation Reduction Act programs, ODOE community heat pumps, Portland Clean Energy Community Benefits Fund (PCEF), Oregon Health Authority's Healthy Homes and potential outcomes from an OPUC process (docket UM 2211).

Staff is also looking at in-home energy services. Complementary funding will be needed to support it and expand into other areas. This delivery pilot will test whether infrastructure and capacity are available to offer in-home energy services to customers.

Discussion
The council asked how complementary funding offsets costs, such as through incentives or removing other barriers (Jake Wise). Staff responded that complementary funding helps fund technologies that are not cost-effective and helps with critical home repairs that are barriers to energy efficiency. Other sources of funding can help cover those costs that Energy Trust can't.

The council asked if income eligibility criteria are the same as for Savings Within Reach and if Savings Within Reach will continue (Lisa McGarity). The requirements are 60% of state median income, and Savings Within Reach will continue. Staff noted there could be a space where in-home energy services come in. No-cost offers are limited to customers experiencing low incomed. There could be a future

where in-home services support moderate-income customers, and specific incomes need to be evaluated over the next few months.

The council asked if Energy Trust has any intention of looking at other potential issues that arise because of equipment installed in customer homes (Jon Belmont). Staff explained there are contractor, CBO and customer surveys to determine potential challenges the process may have.

The council pointed out many customers who are energy burdened will still keep their thermostats turned down after completing work and that it should be taken into account with evaluations. There may not be a huge reduction in energy use, and a normal, baseline house might need to be considered (Lisa McGarity).

The council noted the in-home energy services pilot very closely follows what Community Energy Project offers, including an identical name (Charity Fain).

Next steps
None.

6. Existing Buildings program updates
Topic summary
Patrick Urain, senior Existing Buildings program manager, reviewed adjustments made to the small business offering to increase participation, including changes to the Trade Ally Network and application process.

Discussion
The council asked if Energy Trust is looking at other pathways for participation, like community-based organizations or customers who do their own journey (Lisa McGarity). Staff replied Energy Trust is looking at everything within the capacity of the contractor and Energy Trust to prioritize what can be tackled, adding that there is room for expansion, and it's up to the program to determine ways to find and engage customers.

Next steps
None.

7. Multifamily workshop expansion
Topic summary
Kathleen Belkhayat, commercial program manager, discussed plans to expand affordable multifamily strategic energy management (SEM) workshops. Energy Trust initially worked with Community Energy Project to deliver renter workshops, then rolled out an SEM offer for affordable multifamily. Energy Trust released requests for proposals and qualifications for curriculum and delivery in 2023 to expand education across the state. There is room for additional community-based organizations and small businesses around the state to facilitate these workshops.

Discussion
The council asked how Energy Trust envisions working with community action agencies and community-based organizations as this expands, adding these organizations offer the same type of education with the same qualifiers for participation (Lisa McGarity). Staff responded Energy Trust will work with them to deliver and more outreach will be necessary to ensure coordination.

The council noted Community Energy Project previously ran the same program statewide (Charity Fain).

The council noted community partners sometimes do outreach, workshops, education or installation with Energy Trust, and may even play multiple roles. With program delivery pilots, program management contractors are also involved. It would be helpful to understand the various pathways for participation. UM 2211 is an opportunity to take inventory of the dollars going especially to low-income customers and how they are delivered in partnership with state agencies (Jake Wise). Staff replied this will be brought forward to Energy Trust's leadership team, adding there was a questionnaire related to this topic with UM 2211.

Next steps
Staff will follow-up on the various approaches Energy Trust uses to serve customers with low incomes and discuss feedback that program approaches replicate Community Energy Project programs.

8. Council member announcements
Becky Walker, NW Energy Efficiency Alliance, announced that the Residential Building Stock Assessment was just released on April 8. NEEA will host a workshop for people to learn more about it.

9. Public comment
There was no public comment.

10. Adjournment
The meeting was adjourned at 3:30 p.m. The next meeting will be held June 5, 2024.

Tab 7

Diversity Advisory Council Meeting Notes

April 9, 2024

Attending from the council:
Oswaldo Bernal, OBL Media
Indika Sugathadasa, PDX HIVE
Dolores Martinez, EUVALCREE
Susan Badger-Jones, special projects consultant
Christopher Banks, Urban League of Portland
Terrance Harris, Drexel University.

Attending from Energy Trust:
Michael Colgrove
Emily Findley
Any Coles
Chris Lyons
Abi Sloan
Natalia Ojeda
Lindsey Diercksen
Caryn Appler
Sue Fletcher
Cody Kleinsmith
Kate Wellington
Mia Deonate
Lexi Brunelle
Alyson McKay
Cameron Starr
Bayo Ware
Lidia Garcia
Hannah Cruz
Sloan Schang
Laura Schaefer
Thad Roth
Jeni Hall
Elizabeth Fox
Patrick Urain
Michael Hoch
Themba Mutepfa
Andi Nix
Kirstin Pinit
Adam Bartini
Taylor Ford
Maddy Otto
Maddie Norman
Amber Cole
Amanda Zuniga

Others attending:
Melissa Cribbins, Energy Trust board
Henry Lorenzen, Energy Trust board
Ezell Watson, Oregon Public Utility Commission
Benedikt Springer, Oregon Public Utility Commission
Lauren Rosenstein, Oregon Department of Energy
Ashnie Butler, Inner Work, Outer Play
Shelly Beaulieu, Dragonfly Consulting
Alder Miller, CLEAResult
Ivonne Saed, Saedgraphic

1. Welcome and introductions

Mike Colgrove, executive director, convened the meeting at 9:04 a.m. The agenda, notes and presentation materials are available on Energy Trust's website at https://www.energytrust.org/about/public-meetings/diversity-advisory-council-meetings/.

Mike Colgrove reviewed the agenda and led a round of introductions among the council members and attendees representing Oregon Public Utility Commission and Oregon Department of Energy. He then introduced Ashnie Butler, a consultant for Energy Trust's board of directors for diversity, equity and inclusion development since 2023. She provided an overview of her background and experience and an update on work she has been doing with the board. She has since facilitated surveys, one-on-one

meetings and cohort meetings. There will be extended workshops later this year to dive into more challenging conversations.

Mike Colgrove noted a recurring topic with the board is how the Diversity Advisory Council might contribute more directly to its development work. Council member Susan Badger-Jones serves on the board's ad hoc committee, but other council members are also invited to get involved.

2. Energy Trust's tribal workgroup

Topic summary

Staff members Caryn Appler, Mia Deonate and Kate Wellington provided an update on Energy Trust's tribal community workgroup and lessons learned so far. They shared a purpose statement developed by the group to define its scope and activities: "To support Energy Trust's strategies to improve Energy Trust outreach, coordination, understanding, and service to Tribal communities and customers to increase program participation and make recommendations to Energy Trust staff on assessing and measuring progress in this work."

The group was formed in 2022 and worked to recruit members with a goal of members from each of the nine federally recognized tribes in Oregon. In 2023, it focused on developing a charter and goals and adapting to changes in membership. In 2024, staff is building awareness of the group's activities and impact. Other priorities include expanding membership to include representation from more tribes, members of non-federally recognized tribes and organizations that serve tribes; hiring a tribal outreach manager; creating a policy around meaningful engagement; and developing a cross-program strategic initiative to create a consistent experience for tribal members who participate in Energy Trust programs. The group provided input to improve Energy Trust's programs and strategies. For example, it suggested opportunities to engage with tribal members and provided feedback on Energy Trust's DEI metrics, 2024 budget and annual goals. There is also an effort underway to build a comprehensive set of data on tribal projects.

Caryn Appler shared examples of recent tribal energy projects including Klamath Tribes' participation in a no-cost ductless heat pump program; Confederated Tribes of Warm Springs participation in Community Partner Funding offer, which it used to complete home energy assessments and attic insulation upgrades for its members; Confederated Tribes of Grand Ronde participation with the new homes program, leading to new efficient, resilient housing built for tribal elders; and Confederated Tribes of the Umatilla Indian Reservation, which recently worked with the new multifamily program to build efficient apartment units, with energy use offset by a solar array that also received incentives.

Discussion

Mike Colgrove asked the presenters how they see the tribal community workgroup's relationship with Diversity Advisory Council, and how the groups might intersect. Caryn Appler said the workgroup would welcome council members' input and support on recruitment for additional members to get more tribal communities represented. She added they would appreciate insight and experience from Diversity Advisory Council members to inform the strategic, cross program initiative that's under development, which will incorporate opportunities for tribal communities to leverage federal funding.

The council asked if Energy Trust has a one-pager on the tribal workgroup available (Lauren Rosenstein). Caryn Appler answered that is under development and can be shared with the council once complete. The council said it would appreciate a quarterly update by email on the workgroup's progress, especially information about what's going on "on the ground" or opportunities to visit tribal communities (Martin Campos-Davis). The council asked what tribes are currently represented in the workgroup (Lauren Rosenstein). Caryn Appler said it currently has members representing the confederated tribes of Grande Ronde, Umatilla and Warm Springs, and Klamath tribes. The council

suggested staff should share in-person engagement opportunities that council members might be interested in, such as ribbon-cutting events (Susan Badger-Jones).

Next steps
Diversity Advisory Council members are encouraged to let Energy Trust know if and how they want to stay informed about this work, or if they would like to be involved, by emailing Elaine Dado.

3. Offers to support Trade Ally Network
Topic summary
Cameron Starr, senior customer service strategy manager, provided an update on a suite of offers that help new BIPOC, woman-owned and rural trade allies to grow their businesses and complete more energy projects. He provided an overview of Energy Trust's Trade Ally Network and the Contractor Development Pathway (CDP), which connects Black-owned, Indigenous-owned, person of color-owned, women-owned, and rural contractor businesses with resources to grow their businesses and complete more projects with Energy Trust. Two cohorts of commercial contractors have completed the pathway since 2022, and a third cohort has just been recruited to participate in 2024. The latest cohort had 17 applicants, the highest application volume to date; combined participation across all three cohorts is 35 contractors. In 2023, Energy Trust added an optional Contractor Connect Mentorship Pathway for participants who want additional support from experienced peer businesses that reflect their own identities and lived experiences. Mentorship matches are determined through looking at skillset compatibility, mentee preferences, personality fit and demographic indicators.

Energy Trust also offers business development funds and resources that trade allies can tap into. All trade allies are eligible to receive up to $4,000 per year for eligible items to support and promote their business such as marketing, technology, tools and business support. Contractors who participate in the mentorship program are also eligible for support services through a Small Business Trade Ally Resource Network, which launched in late 2023. Services include help with accounting, project estimating, consultation and development, web design and business planning.

In 2024, the Contractor Development Pathway will launch a new cohort that includes both commercial and residential contractors, and the Small Business Trade Ally Resource Network will be enhanced with even more resources.

Discussion
The council asked about Energy Trust's use of the Noodle intranet platform to share resources and foster engagement on workforce initiatives, stating it appears to be a nice platform that could be customized to specific purposes (Martin Campos-Davis). Cameron Starr said they currently use a free version to avoid licensing fees and he would be happy to have the team present on that.

A council member asked if support and resources are still available to CDP participant after they complete the pathway (Susan Badger-Jones). Participants stay engaged and can continue getting support if they need help completing energy projects. With very small operations with only one or two staff members, completing incentive paperwork is a big barrier.

The council asked about the participation of Latino-owned businesses in these programs and whether they are available in Spanish (Oswaldo Bernal). All applications and learning materials are available in Spanish, and all the workshops also have interpretation services so Spanish-speaking participants can hear and participate in their preferred language.

Mike Colgrove said that having a robust Trade Ally Network is critical to accelerating savings through 2030 and asked if there were any plans to expand these offers to include more trade allies. There are

plans to expand and staff needs to evaluate the existing network to identify opportunities because there are many enrolled contractors who are not actively completing projects.

The council noted Energy Trust needs to find solutions to increase capacity in rural areas, stating it is a struggle to find HVAC contractors in small areas; new contractors may be reluctant to join the network in mixed utility areas where only some projects would qualify for Energy Trust incentives (Susan Badger-Jones).

Mike Colgrove suggested some administrative support could be provided virtually, which could be a pathway for Energy Trust to facilitate back-office support at a lower cost. The council suggested Energy Trust could add value by creating a technology solution for contractors to determine all available incentive funding for a given project (Susan-Badger Jones).

Next steps
Council members were invited to share workforce opportunities happening in their spheres on an ongoing basis.

4. Legislative update
Topic summary
Members of Energy Trust's policy services team provided an update on outcomes from the 2024 legislative session and reviewed Energy Trust's non-lobbying stance, which is required in its grant agreement with Oregon Public Utility Commission.

The short legislative session began on February 5 and ended on March 8, during which time nearly 300 bills were introduced. Leadership's top priorities included housing, homelessness, addiction, education and campaign finance. The Senate also confirmed the appointment of new Oregon Public Utility Commissioner Les Perkins during this time.

Energy-related bills were a lower priority this session, but still present. Staff reviewed a list of energy-related bills that Energy Trust monitored. A handful of these passed, including a bill that revises some existing Oregon Department of Energy programs; a bill that adds funding to other existing energy programs; a bill that creates a pathway for large-scale battery storage; a bill establishing a state policy on offshore wind; and a bill adding new reporting requirements for Portland General Electric and Pacific Power for activities taken toward participating in a regional energy market.

Staff also provided detail on a package of housing-related bills that commits $376 million to address homelessness and support housing development.

Discussion
The council expressed excitement about the appointment of Les Perkins as Oregon Public Utility Commission's newest commissioner (Martin Campos-Davis).

Next steps
None.

5. Director of DEI services update
Topic summary
Mike Colgrove announced that Energy Trust has hired a director of DEI services: Alicia Moore. She brings 15 years of diversity, equity and inclusion experience, and most recently served as senior program manager of DEI at Columbia Sportswear, where she oversaw the creation of its first DEI operating model and infrastructure strategy. In the coming months, she will also take ownership of facilitating all future Diversity Advisory Council meetings.

Discussion
A council member who participated on the hiring panel for this position shared that the panelists collectively thought Alicia Moore brought great energy and a skillset that will greatly benefit Energy Trust (Terrance Harris).

Next steps
Council members will have the opportunity to connect with Alicia Moore soon through one-on-one meetings and at the next council meeting.

6. Energy Trust's 2023 annual report
Topic summary
Mike Colgrove provided an update on Energy Trust's 2023 Annual Report to Oregon Public Utility Commission, which is published on April 15. This year, Energy Trust is seeking public comments on its annual report contents on its website from April 15 through June 15. Advisory council members can also provide comments on the annual report at their June meetings, which will be attended by an Oregon Public Utility Commission staff member.

Mike Colgrove also shared a related announcement that Oregon Public Utility Commission has commenced its review of Energy Trust's grant agreement, which is the contract between OPUC and Energy Trust that allows the transfer of ratepayer funds to administer clean energy programs. This review will lead to needed changes that modernize areas of the grant agreement to reflect the current energy and policy environment.

Discussion
None.

Next steps
Energy Trust staff will follow up with specific directions on how to submit a comment once the annual report is published on April 15.

7. Adjournment
The meeting adjourned at 11:30 a.m. The next Diversity Advisory Council meeting will take place on June 11, 2024 and details will be posted on Energy Trust's website.

Tab 8

Renewable Energy Advisory Council Meeting Notes

April 18, 2024

Attending from the council:
Alan Beane, Geograde Constructors
Amy Schlusser, Oregon Department of Energy
Angela Crowley-Koch Oregon Solar + Storage Industries Association
Joe Abraham, Oregon Public Utility Commission
Josh Peterson, Solar Monitoring Lab, University of Oregon
Rob Del Mar, Oregon Department of Energy
Stasia Brownell, Portland General Electric

Attending from Energy Trust:

Adam Shick	Dave McClelland	Leila Shokat
Alex Novie	Dave Moldal	Lidia Garcia
Alicia Li	Elaine Prause	Natalia Ojeda
Alicia Moore	Eduardo Beltrán	Matt Getchell
Alina Lambert	Elisa Simko	Michael Colgrove
Andi Nix	Hannah Cruz	Patrick Urain
Bayo Ware	Helen Rabold	Renita Lamberth
Betsy Kauffman	Joshua Reed	Thad Roth
Cameron Starr	Julianne Thacher	Willa Perlman
Chris Lyons	Kate Wellington	
Cody Kleinsmith	Kyle Petrocine	

Others attending:
Berit Kling, PacifiCorp
Haley Ellett, City of Hood River
Kyle Holmes, CLEAResult
Kheoshi Owens, Empress Rules Equity Consulting
Brian Lynch, AESC Inc.
Susan Brodahl, Energy Trust board
Clair Scribner, Bonneville Environmental Foundation
Evan Ramsey, Bonneville Environmental Foundation

1. Welcome and announcements

Dave Moldal, senior program manager, convened the hybrid meeting at 1:32 pm. 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/.

Staff introduced Merissa Larson, Energy Trust's new community solar project manager.

Staff noted Energy Trust released its 2023 Annual Report to the OPUC on April 15 and is looking for feedback on the report's contents from advisory council members and the public through June 15. More information is at energytrust.org/reports.

2. Council engagement and recruiting

Topic summary

Staff presented on a project with Empress Rules Equity Consulting to help the council become more inclusive and lead with race, culminating in draft recommendations for engagement, membership and recruitment. Kheoshi Owens of Empress Rules expressed the need for the organization to have social infrastructure and more education to help further what she called net-zero racism. Staff discussed recommendations developed through the project, which include more dedicated staffing for advisory council management, council governance review, increased recruitment, a welcome packet for new members and council relationship development.

Discussion
The council expressed support for a welcome packet as a helpful reference (Stasia Brownell). It agreed with the need for increased resources to achieve council goals (Joe Abraham). The council suggested implementing terms for members might lead to decreased usefulness of the council due to limited membership (Josh Peterson) and recommended staff continually assess if membership remains mutually beneficial (Angela Crowley-Koch). Staff added this allows for educational opportunities to be presented cyclically.

The council asked how many people are on the council (Josh Peterson). Currently 12 members fill 18 slots.

Next steps
Staff will discuss recommendations with the board and develop an implementation team to undertake the approved recommendations.

3. Solar for All
Topic summary
Staff from Energy Trust, Oregon Department of Energy and Bonneville Environmental Foundation presented on preparations regarding the anticipated announcement of the Solar for All federal grant program. The ODOE-led Oregon Solar for All Coalition (OSFAC) applied for $139 million to serve about 13,000 households through single-family and multifamily solar and community solar over five years. Participants would receive 20% household savings from solar generation. OSFAC strives to maximize existent household and community ownership models to increase resilience and grid benefits and develop a solar workforce in underserved communities.

Clair Scribner will manage Bonneville's Solar for All programs. It is the lead applicant in Idaho, Montana and Wyoming, totaling $200 million. In Oregon, it plans to focus on community solar projects in community-owned utility territories. These utilities have developed six projects.

Grant recipients could receive initial funding in July.

Discussion
The council noted a risk in overreliance on customer data from other sources as customers may opt out of data sharing (Stasia Brownell). It suggested categorical eligibility, for example, if a household qualified for SNAP benefits, may be a path to take (Evan Ramsey).

Next steps
None.

4. Draft energy resilience strategy and expected offers
Topic summary

Staff presented on the development of Energy Trust's energy resilience strategy, potential focus areas and incentives for battery storage systems. There is an increased need, especially in environmental justice communities, for resilience. Energy Trust is uniquely suited to support statewide resilience planning. The strategy will include access to funding, community engagement and capacity building, community planning and prioritization, tailored solutions, site specific planning, supply chain readiness and implementation.

The near-term focus will be increasing market-rate residential battery incentives on April 29 and opening a prescriptive non-residential battery incentive in June. There is also increased prescriptive development assistance for design, feasibility studies and planning for nonprofits, public, tribal entities and utility grant applicants.

To date, there have been more than 100 residential battery incentives, most of which have been market rate. Since Q1 2024, about 25% and 15% of solar applications have included storage in PGE and Pacific Power service areas respectively. Additionally, Energy Trust created custom development assistance for solar + storage projects for complex projects, including private entities.

Discussion
The council asked what supply chain readiness activities staff proposed to conduct (Angela Crowley-Koch). It would include increasing contractor awareness of new opportunities and developing the story of resilience in Oregon, so communities can understand the benefits of resilience technologies. The council also asked how long the battery incentives will remain at this level (Angela Crowley-Koch). Because Energy Trust's renewable program is currently in a budget surplus, there will be increased residential incentives this summer and for the remainder of the year.

The council asked if there have been studies to find the funding gaps and gluts (Stasia Brownell). ODOE's C-REP program is exclusively for tribal and public entities, so Energy Trust aims to serve private customers. There will be gaps and gluts; these funds are aimed at influencing the outcomes. PGE would like customers to seek funds from Energy Trust first before them. Additionally, it values relevant stories, so any stories that Energy Trust has would be helpful for marketing (Stasia Brownell).

Next steps
Staff will send the presentation that was reviewed and these questions to the council for additional responses.

5. Dee Bridge In-Conduit PRV Hydroelectric Project
Topic summary
Staff reviewed a proposed renewable energy installation incentive for the City of Hood River's pressure reduction valve (PRV) project. The city submitted an application in January 2024 for an incentive to install a hydroelectric turbine that will be operated in parallel with their existing PRV system. It plans to build a new powerhouse building, install a turbine and controls and interconnect it to the grid. There is no external environmental impact, as the system already exists; they are just adding equipment to harness the otherwise wasted energy. It is a low-risk project that has already received $100,000 in development assistance. Energy Trust recommends a $525,000 incentive and won't obtain Renewable Energy Credits.

Discussion

Considering that many similar projects have not been cost effective, staff asked what made this one successful. New direct pay provisions through the Inflation Reduction Act, technological advances, and current infrastructure already in place minimized capital expenditure. Staff stated there are six similar projects in Energy Trust's portfolio. Projects that can net-meter are more financially viable and qualifying facilities might have more opportunities due to IRA funding.

Next steps
None.

6. Revisions to Energy Trust's grant agreement
Topic summary
Energy Trust's Debbie Menashe gave an update on revisions to Energy Trust's grant agreement with the Oregon Public Utilities Commission that articulates terms and conditions for directing funding for renewable energy and energy efficiency support. In 2022, some of the funding was recharacterized, including stating that efficiency should be considered part of the utilities' generation portfolio and expanding the allowable purposes for renewables funding to include thresholds for supporting communities experiencing low incomes and adding distribution system connected technologies. It lifted the agreement sunset for energy efficiency funding and extended renewable energy funding sunset to 2035. The OPUC decided to sole-source this contract to Energy Trust instead of competitively bidding. OPUC staff sent the first draft of the updated agreement to Energy Trust, which in turn submitted comments. There will be a public process aligned with UM 1158, which includes a notice of schedule for an agreement to direct funding to a non-governmental entity (Energy Trust). On April 25, a copy of this agreement will be filed and there will be an opportunity for public comment in May.

OPUC staff will take in comments before and after the workshop and work with Energy Trust staff to come to a final proposed agreement, which will be sent to commissioners for approval in July.

Discussion
Staff asked if there is anything related to the renewables sector. Energy Trust staff informed OPUC staff that the language around renewables, which was similar to the current agreement, was out of date with what the sector now does and is identified under statute. There are two new appendices: Program Requirements and Equity Objectives. Staff recommended council members review and provide formal and informal comments to OPUC staff. Members may also provide comments to Energy Trust via Debbie Menashe (Debbie.Menashe@energytrust.org).

Next steps
None.

7. Public comment
There was no public comment.

8. Adjourn
The meeting adjourned at 4:04 p.m.

Tab 9

Energy Trust of Oregon Impact Evaluation of the New Homes Program 2012–2019

Submitted by Apex Analytics LLC

April 11, 2023

Contents

MEMO

Date: 4/13/2023
To: Energy Trust Board of Directors
From: Dan Rubado, Sr. Project Manager – Evaluation
Fred Gordon, Director of Planning and Evaluation
Scott Leonard, Program Manager – Residential
Subject: Staff Response to the 2012-2019 New Homes Billing Analysis

Apex Analytics completed a billing analysis of homes that received support for above-code energy performance from Energy Trust's New Homes program. The analysis showed systematic errors in the simulated energy use of program homes and much lower than expected energy savings, when evaluated against a matched comparison group of similar, non-program homes. Not only did the program homes use more energy than expected from the simulations, but their non-program counterparts used less energy than expected. This resulted in a relatively narrow gap between program and non-program home energy usage, equating to low energy savings and realization rates. These results indicate the program's impact on individual new construction projects is relatively small. This is partly due to the unexpectedly high performance of homes not affiliated with the program, indicating they may have been built above the energy code standards at the time of construction. Another interpretation is the program's simulation models, and the embedded assumptions about how builders comply with code, are not accurately modelling the choices builders make in practice. Since non-program homes are performing better than expected, it is more difficult for program homes to exceed this elevated baseline. However, this conclusion does not recognize the nearly two-decade history of the program in influencing the market and working with code officials to advance residential energy codes over several code update cycles.

The program has a strong relationship with the Oregon Building Code Division and has worked closely with officials to provide information and recommendations about code updates. These activities, combined with the program's project level impacts, have influenced the code and the entire residential new construction market to create market conditions where program and non-program homes are being built to relatively high levels of performance. Part of the stated purpose and justification for the New Homes program is to transform the residential new construction market, which will be cost-effective over the long run, even if individual projects are not in the short run. With that perspective in mind, we have the following responses to Apex's recommendations for the New Homes program.

1. ***Recommendation to direct downstream savings impacts of the program.*** *Future efforts may consider examining the annual energy use of new homes built during the same timeframe but in other communities outside of program areas*.

   At the core of this recommendation is an assertion that Energy Trust should determine the energy savings claims for program homes using a market baseline by comparing energy use in program homes to those built outside the program. While this makes sense in many markets, and is consistent with Energy Trust guidelines, the new homes market is a special case due to the integral impact of Energy Trust's and the Northwest Energy Efficiency Alliance's (NEEA) efforts on codes and practice in Oregon.

Counter to Apex's recommended approach, we believe the New Homes program should continue using the current energy code as the baseline against which energy savings are measured and claimed for participating homes.

The program's activities over the past two decades have allowed the current energy code to become as stringent as it is today and have helped builders both meet and exceed energy codes. Energy Trust provides data to stakeholders involved in the code development process, to indicate whether the construction industry is ready to adopt above-code building practices into the next code, based on adoption rates in Energy Trust programs. The program has also introduced new measures and building techniques into the market, widely promoted efficient practices to make them more common, worked with code officials to adopt new requirements and supported builders to meet and exceed new requirements after new codes are adopted. Without this support, new homes would not only fall short of the current energy code, we believe the energy code itself would be a much lower bar. Therefore, all energy performance improvements in program homes beyond the energy code can be attributed to the program, either through its direct influence on individual projects, or its broader influence on shifting the codes and market over time. As such, Energy Trust should continue to use the energy code as the baseline when claiming savings for New Homes projects.

In practice, this means the program should continue to create an energy simulation model to estimate the energy use of each program home. Then a separate simulation should be specified as minimally code compliant and compared to the as-built simulation to estimate the difference in energy usage. This course of action is contingent on calibrating the energy simulation models used by the program and adjusting the energy modeling process to better align with current conditions and the observed energy performance, as described in more detail below. As an alternative path, the program is expanding its prescriptive measure portfolio to use in place of energy simulations, estimating savings for each efficiency measure above the code requirements for individual systems. This approach does not capture the nuances of individual homes, nor account for interactions between measures, although it avoids many of the pitfalls of simulation models described in this report, as well as the administrative burden of the energy simulation process.

2. ***Recommendation to support market effects.*** *Energy Trust may consider additional research to help identify market effects and how influential the program may be in advancing above-code construction.*

   We agree that market research is necessary to confirm the influence of the New Homes program and NEEA on market transformation, residential energy codes and the degree to which they have been transformed. If existing evidence and research on market transformation influence is insufficient, Energy Trust's Evaluation team will conduct follow-up market research in 2024 for this purpose. This would include interviews with a variety of market actors, including those who work outside of the program, to help establish how much the program's activities and the building practices it promotes have influenced market actors and code updates over the years. However, we do not see value in pursuing additional research related to building practices in states that have no residential new construction programs to create a point of comparison to building practices in Oregon. There are too many differences between states – from climates and building codes and regulatory environments – to obtain any reliable or actionable information from such an exercise.

We will consider conducting field research to verify code compliance and above-code efficiency measures and building practices in program and non-program homes. However, we foresee this type of field research being costly and it may not provide much additional value to Energy Trust in making a market transformation case, although it may be useful for improving the accuracy of energy simulations. A less costly alternative would be to consult data from NEEA's forthcoming Residential Buildings Stock Assessment (RBSA) to determine newer homes' relative energy performance and whether they are likely to meet or exceed the energy code.

If follow-up research confirms the program's role in helping to transform and shift the residential new construction market, this will provide further support for our assertion that we use the current energy code as the baseline for program homes when claiming savings. In addition, the program will develop a more formal market transformation strategy and logic model to ensure that it is positioned to continue pushing the new construction market and code towards higher efficiency.

3. ***Recommendation to address some of the program-side drivers behind savings realization rates.*** *Energy Trust should conduct an internal review and validation of the process associated with AXIS database data entry and program verifiers.*

   We agree the program needs to improve the accuracy of its energy savings estimates. However, part of the poor realization rates found in the evaluation may be due to non-program homes being built more efficiently than required by code. The energy simulation models used as the basis for these savings claims consistently underestimate energy use in program homes and slightly overestimate it for the code-built baseline. The New Homes program will calibrate the simulation models based on the energy use values listed for the most recent code cycle (2017) in this report. This may involve applying adjustment factors to simulation outputs or making adjustments to model assumptions.

   Energy Trust will analyze data for recently built homes in the forthcoming RBSA and align key model inputs and assumptions with RBSA results. This exercise should include inputs that are not known prior to occupancy and therefore not available to program verifiers during the simulation modeling process, such as number of occupants, occupancy schedule, presence of air conditioning, major plug loads (like hot tubs, freezers, etc.), thermostat temperature set points and schedule, and other drivers of home energy use. Inputting more accurate assumptions into the model should reduce the discrepancy between modeled and observed energy usage, on average. In addition, the program may need to make adjustments to the simulation models, or add correction factors to the outputs, to better account for interactive effects, especially with heat pump water heaters or similar equipment. Depending on where and how heat pump water heaters are installed in homes, they could have much larger space heating penalties than assumed in the simulation models, which could at least partly explain the low realization rates we observed in gas heated homes with electric water heating.

   Lastly, the program should review its processes for reviewing and validating data collection on-site by program verifiers and entry into the program's AXIS database. There may be points in this process where characteristics are incorrectly recorded on-site, data are incorrectly entered into the database, the program does not have sufficient visibility or oversight, the simulation software is using inappropriate default values, or there are errors in the simulation model itself. This review should include how data are captured, how quality control is conducted, and how the simulation models are

specified and run. In addition to program processes, a review of technical processes with the database and modeling vendors may be necessary.

The program will consider conducting enhanced quality assurance for a time, to confirm certain key model inputs, especially in gas heated homes. This is in response to the findings in the report that program verifiers may be incorrectly recording the water heating fuel for some gas heated homes, and that other simulation model inputs may be incorrectly entered by verifiers. Enhanced quality assurance may include requiring verifiers to photograph the water heater and nameplate, along with other efficiency measures, or program staff could accompany program verifiers on home inspections to check that the water heater type and other parameters are recorded correctly. It may make sense to validate other key inputs while on-site.

4. ***Recommendation to adjust the assumed baseline "code" home.*** *If the program is unable to garner sufficient evidence to support substantial market transformation impacts, Energy Trust may also consider taking steps to calibrate the REM/Rate models with the energy use values reported here.*

   As noted above, if follow-up research finds that the New Homes program has not been pivotal in transforming the new homes market and the residential energy codes, then Energy Trust must consider transitioning the program to use a market baseline. In practice, this would involve calibrating the assumed energy usage of the baseline code homes to be in line with what was observed in this study for non-program homes. This could involve applying an adjustment factor to the code home simulation model outputs or adjusting the input parameters to achieve a similar outcome.

5. ***Recommendation to evolve and futureproof the program.*** *Consider alternate program design opportunities to advance building practices beyond current program requirements.*

   We agree with Apex that the program will need to continue to evolve its offerings and services to stay ahead of advancing codes. The program will identify, test, and support emerging advanced building practices and efficient technologies with enhanced incentives and services. This work has already started with the inclusion of new program offers such as net zero, battery storage/electric vehicle ready, and other initiatives, but the program will continue to look at alternative options. The program will help introduce new efficiency measures to the market and promote them to program builders and subcontractors. In addition to introducing more aggressive building techniques, the program may consider adopting more prescriptive measures focused on specific systems. This approach may help the program reduce its complexity and improve cost-effectiveness in the face of an increasing baseline efficiency, increasingly costly efficiency measures, and reduced energy savings. There is also some evidence from the interviews to suggest that some builders may be more responsive to more targeted offers for specific technologies and practices, at this point in the market's evolution.

   In addition, the program will consider how to better position itself as a market transformation program and what new activities it might undertake to continue pushing the entire market and ultimately codes. As stated above, depending on the outcome of new construction market research in 2024, Energy Trust may begin to quantify and claim above-code energy savings occurring in non-program homes, if it is established that the program is pushing the entire market beyond the current energy code. Having a clear market transformation framework will further increase the impacts of the program and add credibility to any market transformation savings claims that are made.

Executive Summary

Energy Trust of Oregon (Energy Trust) has offered performance-based energy efficiency incentives to Oregon home builders through its New Homes program since 2009. Energy Trust expanded the program to builders in Southwest Washington in 2016. To participate in the program builders must become Energy Trust trade allies, going through training and signing participation agreements. The program provides builders with incentives, education, and training, among other support. Participating builders constructed almost 20,000 high-efficiency new homes in Oregon between 2012 and 2019 and 2,000 high-efficiency new homes in Washington between 2016 and 2019.

In early 2022, Energy Trust hired Apex Analytics (Apex) to validate electric and natural gas energy savings resulting from the New Homes program during the 2012–2019 timeframe. To estimate annual energy use, Apex followed a similar approach as previous studies, comparing energy usage from weather normalized billing data for program homes to energy use estimated by REM/Rate building simulation model. In addition, Apex purchased statewide assessor data to develop a matched comparison group of non-program homes, matching non-program homes to program homes based on closest geographic distances, square footage, and HVAC heating system types. The matched non-program homes served two purposes: to compare as-built conditions of non-program homes to reference homes used for REM/Rate simulation models, and to calculate energy savings by comparing weather normalized energy use of the program and matched comparison non-program homes.

To help draw supporting insights about the program and to identify potential drivers of differences between evaluated savings and program-claimed savings, Apex completed interviews with program and implementation staff, third-party program verifiers, and program trade ally builders. Benchmarking the results and methods from this evaluation relative to other evaluations uncovered additional insights.

The following information summarizes the key research objectives, questions asked, high-level descriptions of the approach, and key findings.

Objective: Determine building simulation model accuracy in estimating annual energy usage.	
Research Question	Approach
Are program homes more efficient than building model estimates?	Compare the actual weather normalized energy use with building simulation modeled energy usage of program homes.
Do building model reference code estimates accurately reflect the energy use of non-program homes?	Compare the actual weather normalized energy use for the matched comparison non-program home with building simulation modeled energy usage for code-built specification of program homes.

Building simulation modeling does not accurately reflect actual energy use for program and non-program homes. This evaluation found that program homes use more energy – and are therefore less efficient – and non-program homes use less energy – and are therefore more efficient – than predicted by the building simulation models.

Objective: Determine building simulation model accuracy in estimating energy savings.	
Research Question	Approach
Do program homes use less energy than homes built outside of the program?	Compare program home actual weather normalized energy use relative to a matched comparison sample of similar homes.
What is the evaluated realization rate of program claimed savings?	Compare energy savings reported by the program relative to evaluated, in both absolute and relative (as a percent of annual load) terms.

Homes built through the New Homes program save energy, though not at levels reported. The weather normalized billing data suggested that program homes use more energy than anticipated, while non-program homes use less energy than building simulation would predict. As a result, program homes save less energy than expected and the program has a relatively low savings realization rate.[1] Overall per home electric savings were 241 kWh versus 1,313 kWh claimed, resulting in a **18% electric realization rate.** For natural gas, overall per home savings were 35 therms versus 165 claimed, resulting in a **21% natural gas realization rate**.

Objective: Determine energy savings variance based on household characteristics.	
Research Question	Approach
Do savings depend on factors like building vintage (year built) or applicable energy code cycle, square footage, space heating fuel, water heating fuel, builder type (large production vs. moderate or low-volume builders)?	Segment the analysis and energy savings results based on household characteristics.

While household attributes may drive some differences in achieved energy savings, they are not sufficient, alone, to drive the discrepancy between measured and reported energy savings. Some groups tended to show higher realization rates than others, though no subgroups had realization rates aligned with program claims. The groups showing the strongest realization rates were moderately priced homes, built to earlier code cycles. Some groups showed higher electric realization rates while either opposite or indeterminate for natural gas, and vice-versa.

Objective: Identify key drivers behind energy use and realization rate differences.	
Research Question	Approach
Are there factors within or external to the program that influence the energy simulation model, energy savings, or building practices across the new homes market?	Conduct series of interviews with program staff, program verifiers, and trade ally builders and benchmark other new homes evaluations.

The low savings realization rate across the New Homes program is a function of a multitude of factors. Factors include building simulation modeling calibration, program tracking errors – especially with hot water fuel type, uncertainty around unidentified occupancy and behavioral characteristics, massaging of model inputs by verifiers, increased demand for energy-efficient homes among consumers in general, and spillover. Evidence from this

[1] The realization rate is the ratio of evaluated savings to claimed savings.

evaluation, from the quantitative impact, the qualitative interviews, and benchmarking, suggest the low realization rates are partly a function of all of these factors. Benchmarked studies have also found substantial evidence for spillover (market effects) from new homes programs.

In light of the findings presented in this study, there are some unresolved questions and recommendations for Energy Trust to consider.

1) **Recommendation to improve direct downstream savings impacts of the program**: **In future efforts, Energy Trust should examine the annual energy use of new homes built during the same timeframe but in other communities outside of program areas**.
    a. The analysis did not include homes built in other communities outside of the areas that included New Homes projects, by design. A benchmarked evaluation conducted for Wisconsin Focus on Energy added non-program groups outside of the program areas and found marginally higher baseline non-program energy use, improving the realization rates.
2) **Recommendation to measure market effects**: **Energy Trust may consider additional research to help identify market effects and how influential the program has been in advancing above-code construction.**
    a. Energy Trust should consider conducting outreach from voices not covered in this evaluation, namely from tradespeople (more broadly) and builders operating outside of the program.
    b. Energy Trust may consider benchmarking states with similar stringent building codes but lacking new homes programs.
    c. Energy Trust may consider collecting primary data through onsite research for program and non-program homes.
3) **Recommendation to address some of the program-side drivers behind savings realization rates: Energy Trust should conduct an internal review and validation of the process associated with AXIS database data entry and program verifiers**.
    a. Energy Trust should also work with PDC and PMC contractors to root out potential hot water fuel misclassifications. The negative savings realization rates for mixed fuel households revealed the potential for data entry errors.
    b. Energy Trust should work with verifiers to learn more about ways the current building simulation process is possibly being massaged to capture deeper, though maybe not realistic, energy savings.
4) **Recommendation to adjust the assumed baseline "code" home**: If the program is unable to garner sufficient evidence to support claiming substantial market transformation impacts, Energy Trust may also consider taking steps to calibrate the REM/Rate models with the energy use values reported here. This could include revising the assumed baseline code home accounting for the lower weather normalized energy use found in this study. The Wisconsin Focus on Energy program is currently adjusting baseline "code" homes in building simulation models after several years and multiple studies attempting to explain lower than anticipated evaluated realization rates.

5) **Recommendation to evolve and futureproof the program: Consider alternate program design opportunities to advance building practices beyond current program requirements.**

    a. Energy Trust could help builders stay ahead of the market by advancing higher-efficiency new construction, through pilot offerings, deeper incentives, training and other support, for efforts including net-zero homes, microgrid-enabled communities, passive-house design and developments, or even greater tiered options to exceed current stretch code requirements. These efforts should include establishing baseline building practices and logic models with key performance criteria to support future market transformation claims.

1. Introduction

This report details the approach and findings from an impact evaluation of the Energy Trust of Oregon (Energy Trust) New Homes program. Energy Trust has offered a residential New Homes program since 2009. The New Homes program provides trade ally builders training, support, and performance-based incentives to build homes that exceed statewide building code for energy efficiency. The performance-based incentives are based on a home's Energy Performance Score (EPS), a building energy scoring system based on building energy simulation to quantify savings for homes designed to exceed energy efficiency standards in the state building code. New Homes program savings have been evaluated twice and were last evaluated in 2018 for program years 2015-2016.[2,3] The primary goal of past analyses was to understand how building simulation (REM/Rate) energy models estimated program home energy use relative to actual weather normalized billing data use. This current evaluation, conducted by Apex Analytics (Apex), reviews an extended timeframe of program home participation data (2012–2019) and expands the analysis to compare actual weather normalized billing data use between program homes and a comparison group of similar, new construction homes built outside of the program. This report contains the following sections:

- Background
- Evaluation objectives
- Methodology
- Impact findings
- Exploratory interviews
- Benchmarking
- Conclusions and recommendations

2. Background

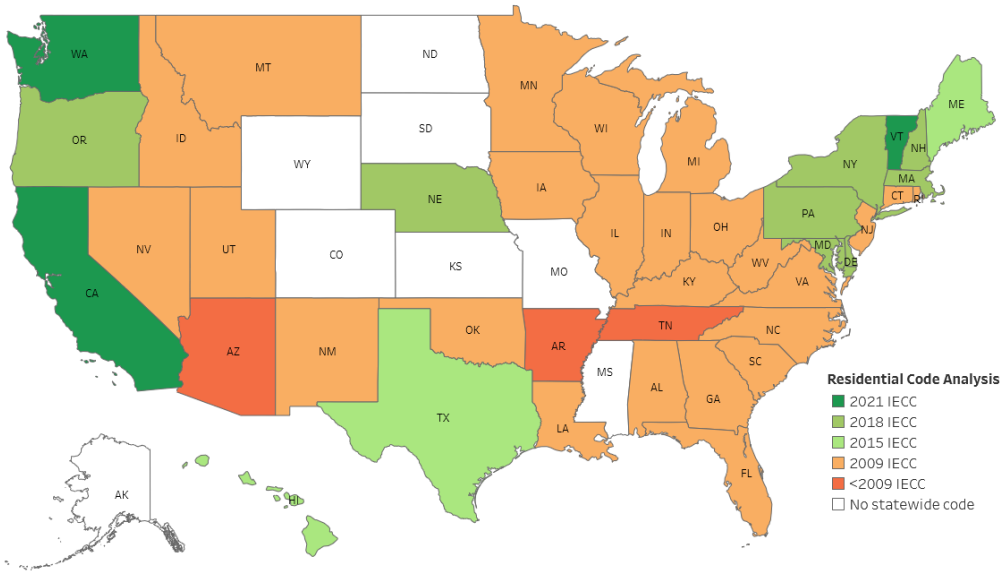
Over the past 20 years, Oregon and Washington have led the country in advancing higher efficiency-focused statewide building codes (see Figure 1 **Error! Reference source not found.**below).[4] A big push towards advancing building code began in 2006, when Oregon Governor Ted Kulongoski mandated a 15% increase in new residential construction energy performance by 2015. Resulting from this order and enacted during the evaluation 2012–2019 timeframe, Oregon passed two updates to their statewide residential building code (in 2014, and again in 2017) while Washington went through one revision (in 2015). A summary table of building code updates is shown in Table 1 below.

[2] Rubado, Dan, Energy Trust of Oregon, June 2015. 2009–2011 New Homes Billing Analysis. Accessed at https://www.energytrust.org/wp-content/uploads/2016/12/2009-2011_New_Homes_Billing_Analysis.pdf

[3] Cadeo Group, April 2018. EPS-HES Comparison Analysis. Accessed at https://www.energytrust.org/wp-content/uploads/2018/07/EPS-HES-final-report-wSR-final.pdf

[4] Information compiled from the https://bcapcodes.org/code-status/state/oregon/ website.

Figure 1. State Residential Energy Code (as of June 2022)



Source: Department of Energy State Code Tableau-based reporting, available at: https://www.energycodes.gov/status/residential

Table 1. Oregon and Washington Building Code Updates

State	Code Version	Code Based on	Code Enforced Starting	Code Enforced Ending
OR	2011	2009 IECC	7/1/2011	12/31/2014
OR	2014	State-developed, more stringent vs. 2009 IECC	1/1/2015	12/31/2017
OR	2017	Intl. Residential Code 2015 (IRC 2015)	1/1/2018	9/31/2021
WA	2012	2012 IECC	7/1/2013	6/30/2016
WA	2015	Intl. Residential Code 2015 (IRC 2015)	7/1/2016	1/31/2021

2.1 Program Description

Energy Trust's New Homes program offers builders incentives for new homes built with efficiency levels that exceed the building code minimum requirements. Energy Trust staff set the above-code building requirements based on discussions with builders, code officials, and program verifiers. Program verifiers began working with the program in 2012 and provide independent third-party inspection and verification of the new construction buildings. Some of the key upgrades builders use to qualify homes include efficient lighting, whole-home performance upgrades, higher levels of insulation, high-efficiency equipment and appliances, windows, air sealing, and solar systems. The program offers four unique tiered incentives, with higher-tiered incentives promoting more efficient construction. New

Homes incentives are based on a home's EPS, a measurement tool that assesses a home's energy use, estimated utility costs, and carbon impact. Energy Trust developed the performance-based EPS track in 2008 in response to the more stringent state building code mentioned above and the limitations of the prescriptive ENERGY STAR® framework. EPS was formally launched in mid-2009 along with an education and promotion campaign to recruit builders, verifiers, and real estate professionals. The EPS allows builders to clearly demonstrate how efficient the home is beyond code and helps homebuyers compare homes based on energy costs and efficiency.

To qualify for incentives, builders must become Energy Trust trade allies. Energy Trust program staff provide training to builders to encourage early-stage project inclusion during the design stage of new construction. Program-qualified new homes must be inspected by a third-party verifier before drywall is installed. If the building plans are set or construction has just begun, Energy Trust will provide free project modeling using the home plans. The verifier uses REM/Rate energy modeling software to estimate the energy savings of the home and determine the incentive amount. Energy savings are estimated based on the program home estimated energy use difference from a reference code home as defined in the REM/Rate modeling software. Energy Trust offers additional incentives for solar electric systems. The verifier inspects each home after insulation is installed and before drywall is completed, and also performs diagnostic tests to evaluate energy performance. Once construction is complete, the verifier returns for a final visit to ensure the home meets EPS requirements. The verifier updates the project model (stored in the AXIS database system[5]) with inspection details and performance results, confirms the energy savings and cash incentives, and issues the final EPS certificate.

The New Homes program savings has been evaluated twice since 2009: the first impact evaluation was conducted by Energy Trust staff in 2015[6] (for program years 2009–2011), and the second impact evaluation was conducted by Cadeo in 2018[7] (for program years 2015–2016). The primary goals of the prior evaluations were to determine the accuracy of modeled energy use reported by the New Homes program to claim savings, assess how modeled estimates perform in real-world conditions, and help better calibrate the models to improve energy use and savings estimates. The studies were also used to provide feedback to NEEA and Northwest utilities that were investigating similar performance-based incentive programs for new residential construction. The previous two evaluations found some areas of misalignment between actual and building model energy use and recommended calibrating the building simulation models to account for the differences.

[5] AXIS is a Pivotal Energy Solutions cloud-based software product. AXIS software includes a centralized database and user interface to integrate energy ratings and energy efficiency program participation through data sharing by connecting raters/verifiers, certification organizations, QA organizations, utilities and others.

[6] Rubado, Dan, Energy Trust of Oregon, June 2015. 2009–2011 New Homes Billing Analysis. Accessed at https://www.energytrust.org/wp-content/uploads/2016/12/2009-2011_New_Homes_Billing_Analysis.pdf

[7] Cadeo Group, April 2018. EPS-HES Comparison Analysis. Accessed at https://www.energytrust.org/wp-content/uploads/2018/07/EPS-HES-final-report-wSR-final.pdf

Though these studies were useful in providing Energy Trust with comparisons of actual weather normalized billing usage relative to building simulation usage, they did not compare program home use against a baseline non-program energy usage comparison group to validate modeled versus actual energy savings. Furthermore, previous studies lacked the ability to discern the energy use of non-program homes or to understand how non-program homes usage compared against the baseline reference code homes from the REM/Rate building simulation models. This study is an attempt to close this gap, allowing Energy Trust to gain insight into validated energy savings from program-built homes against a reference non-program-home baseline.

2.2 Historical Program Activity

The New Homes program experienced slow but steady growth in participation by trade ally builders since inception in 2009. The annual program participation rates – provided by Energy Trust staff – across Oregon (since 2009) and Washington (since 2016) are shown in Table 2 below (current evaluation 2012–2019 timeframe is thick-bordered). According to calculations compiled by the program implementation contractor, TRC Companies (TRC), using the assessor database, participating program homes currently represent approximately 35% of newly built homes in Energy Trust's service territory in Oregon and Washington. The share of new homes participating in the program has increased over time in line with participation. According to program staff, the percentage of electric- versus gas-heated participating homes is consistent with the current housing stock heating fuel saturations.

Table 2. Annual Program Participation and Savings by State and Heating Fuel

Year	Number of Program Homes		% Electric-Heated Program Homes*		% Gas-Heated Program Homes*		Program as % of Total New Homes	Claimed Electric Savings (kWh)	Claimed Natural Gas Savings (therms)
State	OR	WA	OR	WA	OR	WA	All	All	All
2009	292	-	29%	-	69%	-	13%	821,500	105,110
2010	616	-	19%	-	79%	-	13%	472,200	72,510
2011	813	-	17%	-	82%	-	20%	686,400	116,370
2012	1,319	-	24%	-	75%	-		1,291,711	197,791
2013	1,540	-	20%	-	80%	-		1,512,435	227,483
2014	2,178	-	16%	-	84%	-		2,098,437	223,646
2015	2,530	-	15%	-	84%	-		2,779,255	351,859
2016	3,342	671	20%	4%	80%	92%		5,490,995	555,173
2017	3,125	793	16%	0%	84%	98%	34%	4,851,627	498,413
2018	2,755	711	17%	0%	82%	100%	31%	5,091,630	524,899
2019	3,051	741	16%	0%	84%	100%	32%	4,369,552	553,580

**The percentages may not add up to 100% because some sites are missing information about heating system fuel or have non-electric or non-gas heating system fuels listed in CRM.*
*** Source: Provided by Energy Trust staff*

To estimate annual energy savings, the New Homes program relies on program verifiers to enter program homes' characteristics into the REM/Rate model to determine anticipated annual energy use coupled with the baseline reference code-home energy use. This data is entered into the AXIS database system where the program tracks program-claimed energy savings. Apex summarized the average reported energy use by relevant state and building code cycle for each primary fuel type according to the AXIS system for program homes, the average reference baseline code-home use, and the difference between the two (average savings). As demonstrated in Table 3 below, the New Homes program assumed average per home 15% electric energy savings and average per home 30% natural gas savings for Oregon homes (Washington gas savings were lower, at 23%).

Table 3. Average New Home Program Claimed Usage and Savings (per Rem/Rate)

State and Code Cycle	Electricity Use and Savings (kWh)			Natural Gas Use and Savings (therms)		
	Program Home	Reference Home	Savings	Program Home	Reference Home	Savings
Oregon	**7,705**	**9,018**	**-15%**	**409**	**584**	**-30%**
OR2011	7,957	8,875	-10%	451	617	-27%
OR2014	7,964	9,474	-16%	386	564	-32%
OR2017	6,505	7,902	-18%	411	590	-30%
Washington				**387**	**504**	**-23%**
WA2012				380	546	-30%
WA2015				389	493	-21%

**Source: Apex calculated averages from the AXIS tracking system*

2.3 Glossary

For this evaluation, it is important to set clear definitions around the evaluated components. Some definitions are provided below.

- **Program Home**: Any new construction home affiliated with an Energy Trust funding utility that met or exceeded program requirements and was built between 2012 and 2019 (for Oregon) or between 2016 and 2019 (for Washington), where the builder received an incentive and the home existed in Energy Trust's program tracking database.
- **Non-Program Home**: Any new construction home identified through a purchased assessor dataset that was built in Oregon or Washington between 2012 and 2019, where the builder did not receive an incentive and the home was not in the program tracking database.
  - **Comparison Matched Home**: A subset of non-program homes that were matched to program homes by location (would also be served by Energy Trust funding utility), HVAC type, and square footage (greater details on the matching logic is provided below in Impact Analysis Approach section).
- **Reference Home**: The series of baseline reference "homes" used for building simulation modeling to represent a code-built home. Used to estimate program-claimed savings from program model estimated usage.

- **Weather Normalized (WxN) Energy Use**: A home's annual energy use, according to actual billed usage, and normalized to account for weather (electric in kWh or natural gas in therms).
- **Building Simulation (Sim) Model Use**: A home's estimated annual energy use according to REM/Rate building simulation software used by the program (electric in kWh or natural gas in therms).
- **Evaluated Energy Savings**: The weather normalized energy use difference between a program home and matched comparison non-program home (electric in kWh or natural gas in therms).
- **Program Claimed Savings**: The building simulation modeled energy use difference between a program home and reference code home (electric in kWh or natural gas in therms).
- **Realization Rate (RR)**: The ratio of evaluated energy savings to program-claimed savings. A realization rate above 1.0 (or 100%) implies evaluated savings exceeded program claimed, anything below this implies evaluated savings fell short of program claims.

3. Evaluation Objectives

The primary research objective of this impact evaluation was to verify the electric and natural gas savings attributable to the Energy Trust New Homes program for Oregon and Washington during the 2012–2019 timeframe. Apex first assessed the accuracy of the building simulation models by comparing weather normalized use to modeled use for both program and matched non-program new homes. Then we estimated energy-use savings by comparing weather normalized use of program homes to the matched non-program homes. This impact evaluation also sought to understand the drivers behind any observed differences in savings from the impact research. The specific research objectives for this study are discussed in Table 4.

Table 4. New Homes Impact Evaluation Objectives, Questions, and Approach

Research Objective	Research Question	Approach
Determine building simulation model accuracy in estimating annual energy usage.	Are program homes more efficient than building model estimates?	Compare the actual weather normalized energy use with building simulation modeled energy usage of program homes.
	Are non-program homes more efficient than building model reference code estimates?	Compare the actual weather normalized energy use for the matched comparison non-program home with building simulation modeled energy usage for code-built specification of program homes.
Determine building simulation model accuracy in estimating energy savings.	Do program homes use less energy than homes built outside of the program?	Compare program home actual weather normalized energy use relative to a matched comparison sample of similar homes.
	What is the evaluated realization rate of program claimed savings?	Compare energy savings reported by the program relative to evaluated, in both absolute and relative (as a percent of annual load) terms.
Determine energy savings variance based on household characteristics.	Do savings depend on factors like building vintage (year built) or applicable energy code cycle, square footage, space heating fuel, water heating fuel, builder type (large production vs. moderate or low-volume builders)?	Segment the results based on household characteristics.

4. Methodology

To address these research objectives and questions, Apex collected, processed, standardized, and analyzed numerous datasets, developed a process to match non-participating homes with participating homes based on a series of attributes, and estimated participating new homes' energy savings net of the matched non-participating home baseline. The following section details the approach used to determine electric and natural gas impacts from the 2012–2019 New Homes program.

4.1 Impact Analysis Approach

To estimate the energy impacts of the New Homes program, Apex compared weather normalized billing data for program homes against the matched non-program-home baseline. To run this analysis, we followed these key steps:

- Cleaned and processed tracking and assessor data sets.
- Merged program home addresses from tracking with assessor data set using software designed for this purpose called fuzzy join.

- Established a "test / validation" matching process using within program (program versus program) homes using known program tracking parameters
  - Matching process relied on home vintage, home square footage, location, neighborhood type (urban/suburban/rural), building type, home space heating fuel, and water heating fuel.
- Applied this same matching process to identify non-program homes using purchased statewide assessor data for all newly built OR and WA homes since 2009.[8]
- Requested electric (OR only) and natural gas (both OR and WA) billing data for program and matched non-program baseline homes.
  - Energy Trust staff performed the address merge to pull billing data for accounts on their system.
- Cleaned billing data sets.
- Merged dataset incorporating relevant home characteristic data from program tracking (program homes) and assessor data (non-program homes).
- Conducted Variable Base Degree Day (VBDD) modeling of billing data and weather normalization using the TMY3 data set.
- Reviewed data for outliers and flagged anomalous data.
- Compared the usage (savings is difference between program and non-program home annual weather normalized energy usage).
- Segmented the results.
- Developed confidence and precision estimates.

Developing the counterfactual (from matched non-program homes) to program home energy usage was a central component of this evaluation. To build this counterfactual, Apex required a comparison group of matched homes outside the program with sufficient data, both for the matching itself and for analysis of their energy usage. Because non-participating homes were not program participants, data normally ingested via the program were not available (i.e., building attributes, including mechanical, structural, and footprint). Apex identified data vendors that sell residential property data from publicly available assessor databases and compared the availability of particular property characteristics (percent of variables populated, at the county level). Ultimately, Apex purchased data from Estated, one such assessor data vendor.

Apex reviewed and standardized the Estated premise level data and then merged this dataset with tracking and Utility Customer Information (UCI) billing data using address matching logic. We then validated the Estated data, focusing on the following:

- **Year Built** (and applicable energy code, by extension)
- **HVAC System/Fuel Type**
- **Home Size**
- **Location** (Latitude and Longitude)

[8] Though this analysis focused on new homes built between 2012 and 2019, Apex included several additional years of new construction data from the assessor data purchase to account for potential misalignment in construction timeframes.

During initial data intake and processing, the Apex team verified that all required files and fields were provided by Energy Trust staff. Apex also checked the data to assess validity before moving on to the analysis. We also tested data source crosswalks for missing account/premise data and developed matching logic to merge Estated assessor data with program-tracking and utility-billing data.

Apex downloaded Census shapefiles representing the geometric boundaries of Urban, "Urban Cluster" (small town/suburban), and Rural areas. Then, we used the ArchGDAL GIS package to determine whether a point (new built residence) was inside a given boundary and assigned it the corresponding designation. This designation was then used in the matching process.

Apex generated five matches per program home to represent the assumed baseline "code" home according to REM/Rate, with the expectation of some attrition after matching. The matching algorithm had the following parameters:

- **Year Built:** Matches had to be built in the same or prior year as the program home.
- **Urban/Rural:** Matches had to fall into the same Urban/Urban Cluster/Rural designation as the program home.
- **Least Distance:** A least distance matching algorithm by home square footage and home location determined the best matches fitting the two prior criteria. The two parameters were normalized to weight them similarly, according to the following logic:
  - **Home Square Footage** was normalized to 2.5% increments from the program home square footage and capped at a maximum difference of 350 square feet.
  - **Locational Distance** was normalized to 750-meter (0.466-mile) increments from the program home location for Urban and Urban Cluster homes, and 7500-meter increments from the program home location for Rural homes. Homes 200 meters away or less were all considered to be 200 meters away to avoid overweighting nearness within a neighborhood.

To assess the effectiveness of the matching algorithm, we first matched program homes to other program homes and compared data not used in matching, including energy use.[9] This verification step indicated a high degree of alignment in energy use between the program homes and their matches, providing confidence that the algorithm successfully matched similar homes. After this verification step, we proceeded to match non-program homes to program homes in order to estimate energy use differences between otherwise similar properties.

As an additional step after Energy Trust exported a second UCI data set of matched non-program homes, we used a combination of program and billing data to align HVAC heating system types between program and non-program matches. For program homes, we used system information where available to determine whether the home had natural gas heat and natural gas water heating. For program homes where this information was unavailable and for non-program homes, we used natural gas consumption in winter as an indicator of a gas heating system, and natural gas consumption in summer as an indicator of a gas water

[9] Each home was matched to multiple other program homes, with replacement. In this step, poor matching could result in misalignment, so it serves as a valid verification procedure before true program to non-program matching.

heating system. We did not attempt to align cooling information because of Oregon and Washington's mild climates in summer, which would make it more difficult to conclusively detect a cooling-equipped home in the electric billing data.

As in the study of 2009–2011 homes, Apex utilized site-level VBDD models with a two-dimensional (heating and cooling) grid search to determine the best model fit for heating and cooling load, for electricity and natural gas usage. We then used these best-fit models to generate energy use, weather normalized to TMY3[10], for comparison with REM/Rate results. For program homes, we compared the site-level results for modeled energy use from billing data with the modeling software outputs and assessed whether there had been any change in comparability since the last analysis.

We compared the counterfactual modeled energy use estimates for associated program homes from REM/Rate with the actual energy use of matched baseline code homes, weather normalized to TMY3, to assess how well the modeling software captures code-home energy use. This analysis allowed the team to explore whether code-built homes have complied with or exceeded Oregon energy codes.

As part of the data processing task, Apex leveraged previously developed logic to flag or exclude homes with issues (missing data, erratic energy patterns, outliers, and net metering, among others). A summary of the attrition from this analysis is reviewed in the Appendix. Additionally, a summary of the final analysis dataset, including number of homes, square footage, average sales price, simulated energy usage, and REM/Rate predicted energy savings (in site BTU) are reviewed in the Analysis Dataset (5.2) section below.

Apex compared the weather normalized results obtained via billing analysis for program homes against those of code homes to determine top-line energy impacts and realization rates for the program. Apex tracked the evolution of code-home and program-home energy use, along with the difference between the two, across subsequent years after building. These results provided estimated program gas and electricity savings, percent savings, and realization rates. Apex aggregated these metrics to report on overall program savings, broken out by state, year built and state code cycle, and heating system type, among other explanatory parameters.

The outcome of this approach allowed the team to report on whether any actual or modeled energy use differences are due to misaligned assumptions in program-home energy use, code-home energy use, or both. We also paid particular attention to electrically heated homes to address discrepancies identified in previous modeling efforts. We segmented the results to assess whether these differences are more pronounced in certain groups.

4.2 Supplemental Interviews

Apex conducted interviews with program and implementation staff and trade ally builders to discuss the findings of the impact analysis and to gain greater understanding of any drivers that may have influenced the savings realization rates. Staff interviews included internal

[10] While new construction building simulations from 2011 to 2017 used TMY2, analysis and evaluation at Energy Trust use TMY3 for more up-to-date weather normalization. We use TMY3 for our weather normalization in this study, so differences in predicted use include that change of basis.

staff with Energy Trust; the Program Management Contractor (PMC), CLEAResult; and the Program Delivery Contractor (PDC), TRC. Apex also conducted interviews with program verifiers and trade ally builders. The interviewed trade ally builders represented 15% of the program homes built during the evaluation timeframe and were exclusively Oregon-based companies. Table 5 summarizes the completed interviews.

Table 5. Completed Interviews

Interviewees	Completed
Internal Energy Trust staff	2
PMC CLEAResult staff	4
PDC TRC staff	2
Verifiers	3
Builders – Large production (+500 projects)	2
Builders – Moderate size (100–500 projects)	4

Apex developed an interview guide, which was reviewed and approved by Energy Trust staff. We also worked with Energy Trust to identify and contact the appropriate interview targets. The primary goal of the interviews was to help interpret and explain the findings, especially those that did not align with expectations. This included reviewing the potential drivers of differences between actual and modeled energy usage and energy savings identified during the analysis. Ultimately, these interviews helped corroborate the drivers identified in the analysis and identified hypotheses explaining variances between expectations and results.

5. Impact Findings

The results of the impact research are reviewed in this report chapter, beginning with the results of the matching process and characterizing data contained in the final analysis dataset. This section then reviews each of the research objectives and specific research questions individually in distinct subsections.

5.1 Matching Results

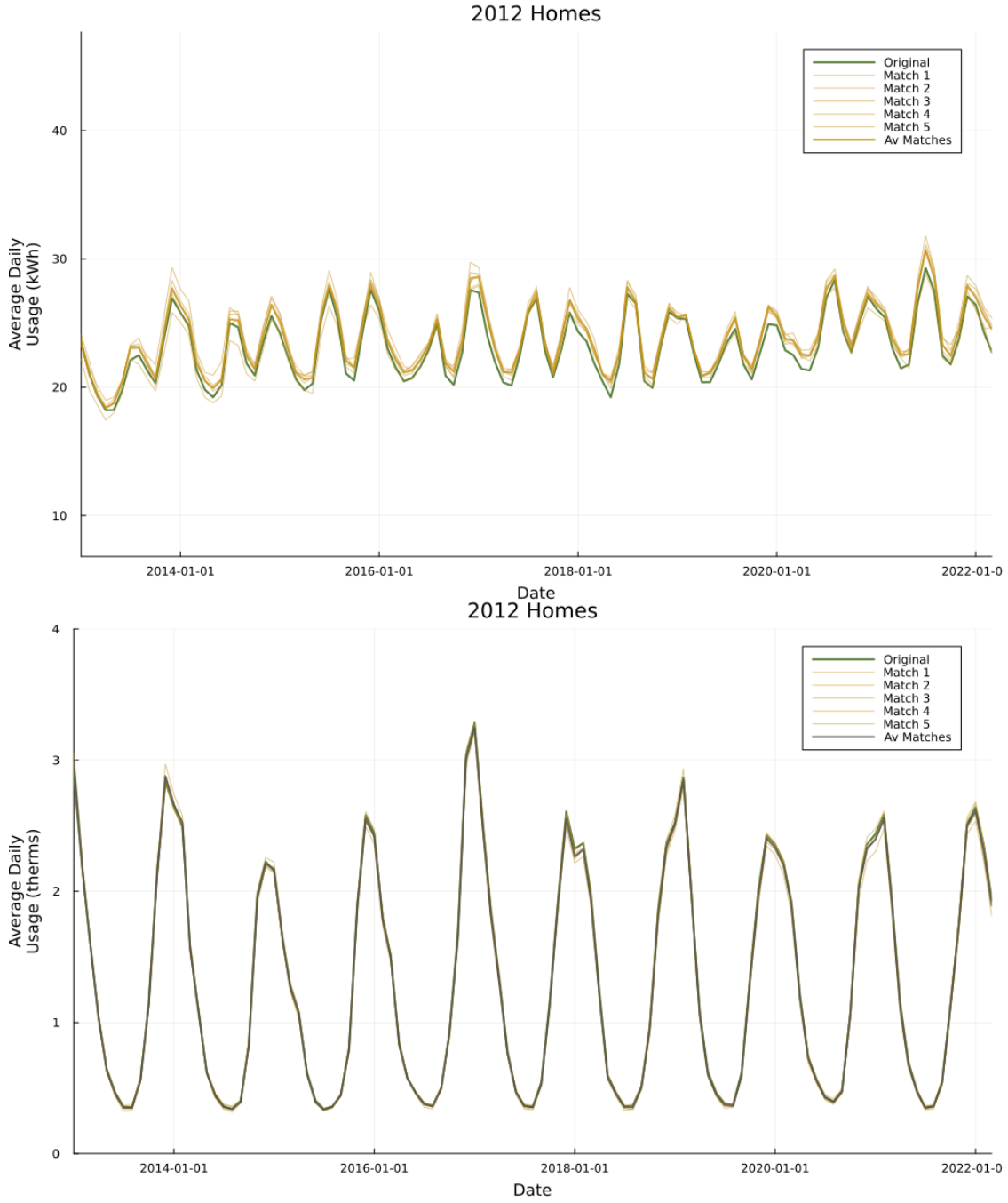
Apex conducted the matching analysis as described in the Methodology section. To test the efficacy of the method, we report the results of a comparison of post-construction energy use for program homes matched to other program homes. The energy use of these two groups should be equivalent, validating the matching algorithm. If that is the case, it would suggest that any differences between program and non-program home energy use are due to program effects and not to bias introduced in matching.[11]

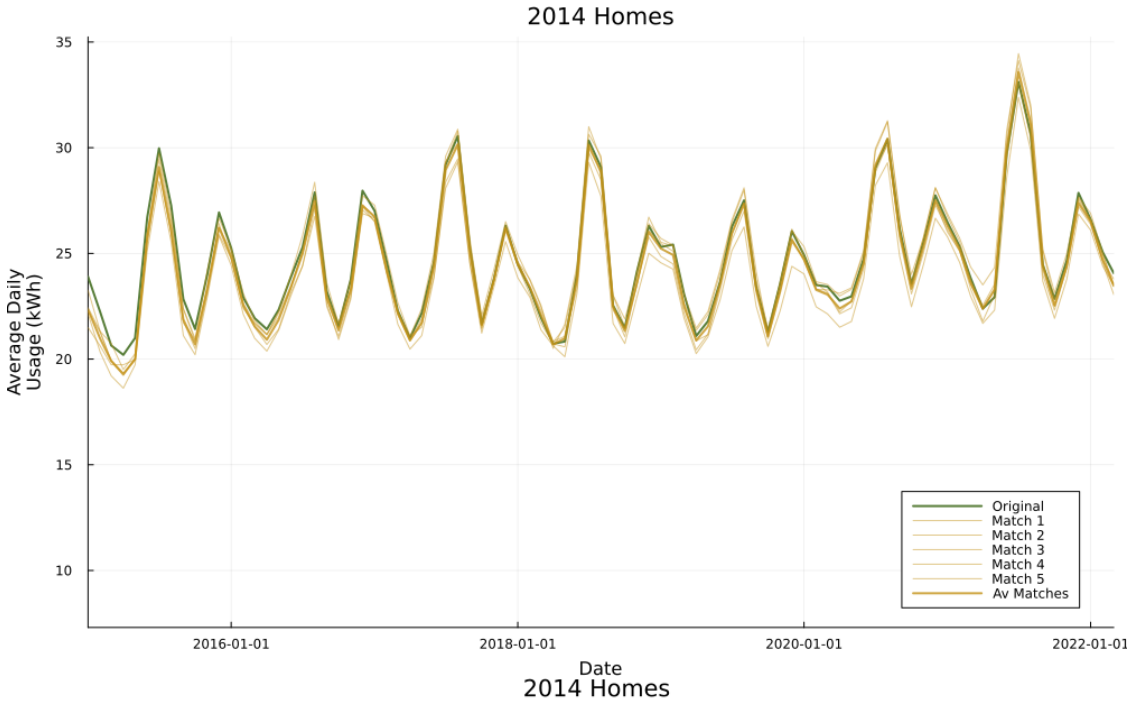
[11] Note that this cannot assure that all bias has been removed—if buyers of program homes have substantially different behavior due to differing family compositions or levels of wealth, their energy usage could be materially different. In other energy efficiency program evaluations, pre-period energy

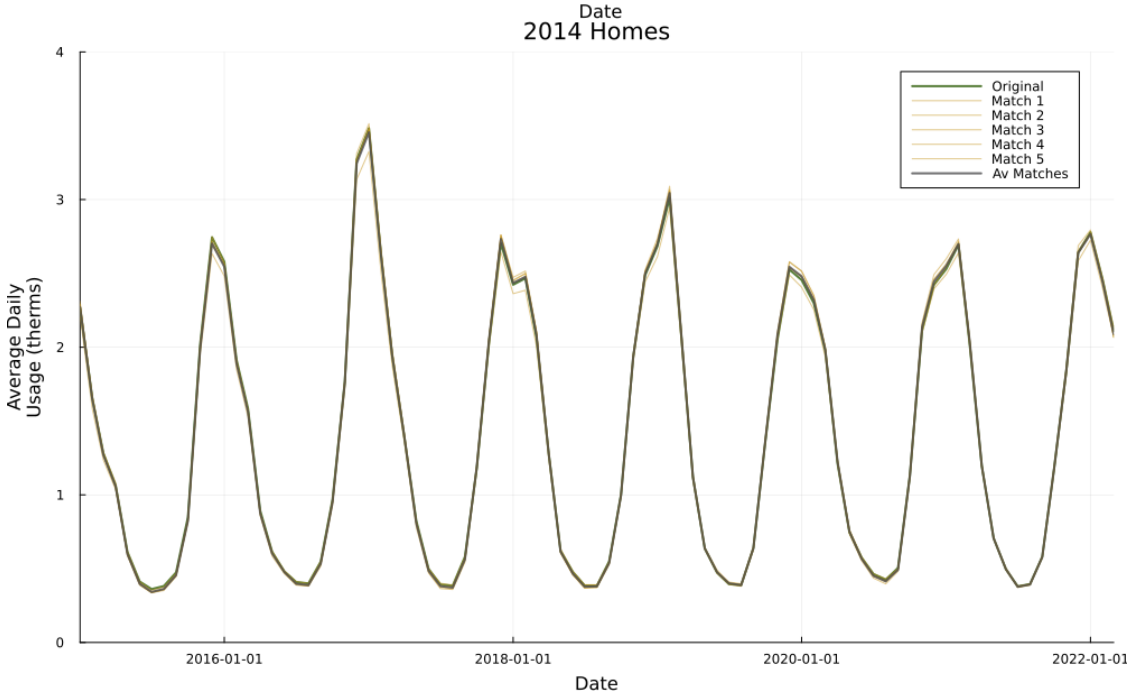
Monthly calendarized energy use aligns between program homes and their within-program matched comparison homes. A sample of average energy use for program homes and their within-program matches for program years 2012, 2014, and 2017 is provided in Figure 2. The figures show good alignment and similar energy usage patterns in aggregate.

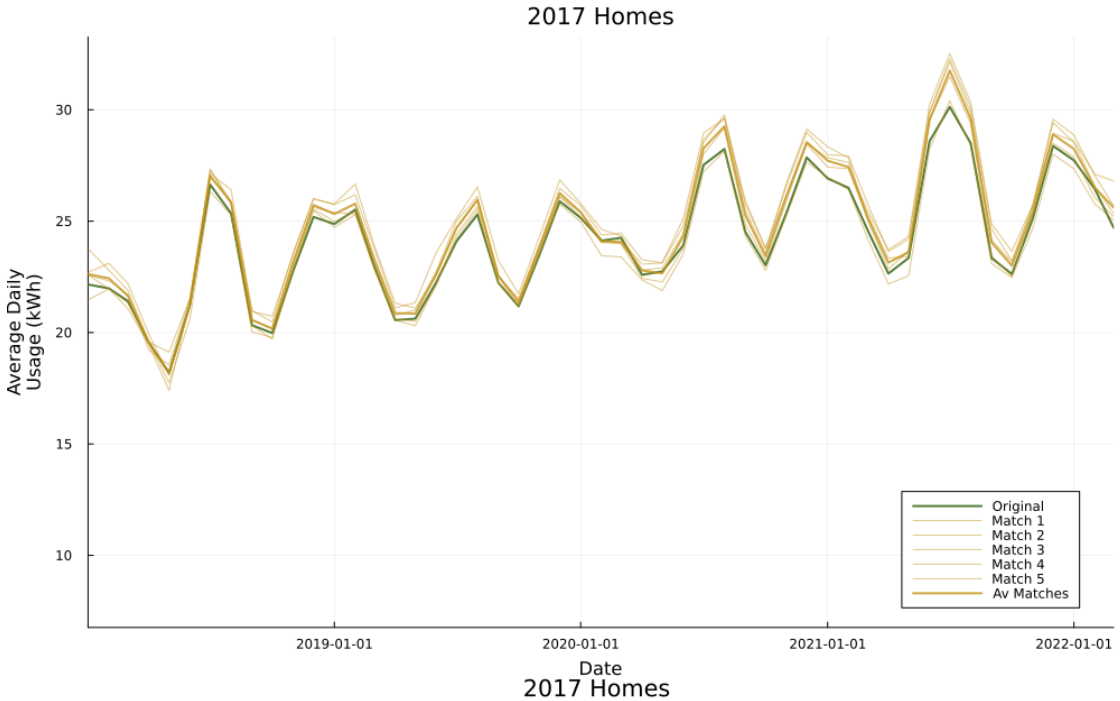
use data can be used to check the equivalency of matches. As these homes are new, this is not possible. Nonetheless, given that our matches should be similar in size and location to program homes, we do not anticipate major behavioral differences that would lead to bias.

Figure 2. Examples of Average Daily Usage Comparisons between Matched and Program Homes from Three Program Years




2014 Homes
Average Daily Usage (kWh)
35
30
25
20
15
10
2016-01-01
2018-01-01
2020-01-01
2022-01-01
Date
Original
Match 1
Match 2
Match 3
Match 4
Match 5
Av Matches


2014 Homes
Average Daily Usage (therms)
4
3
2
1
0
2016-01-01
2018-01-01
2020-01-01
2022-01-01
Date
Original
Match 1
Match 2
Match 3
Match 4
Match 5
Av Matches



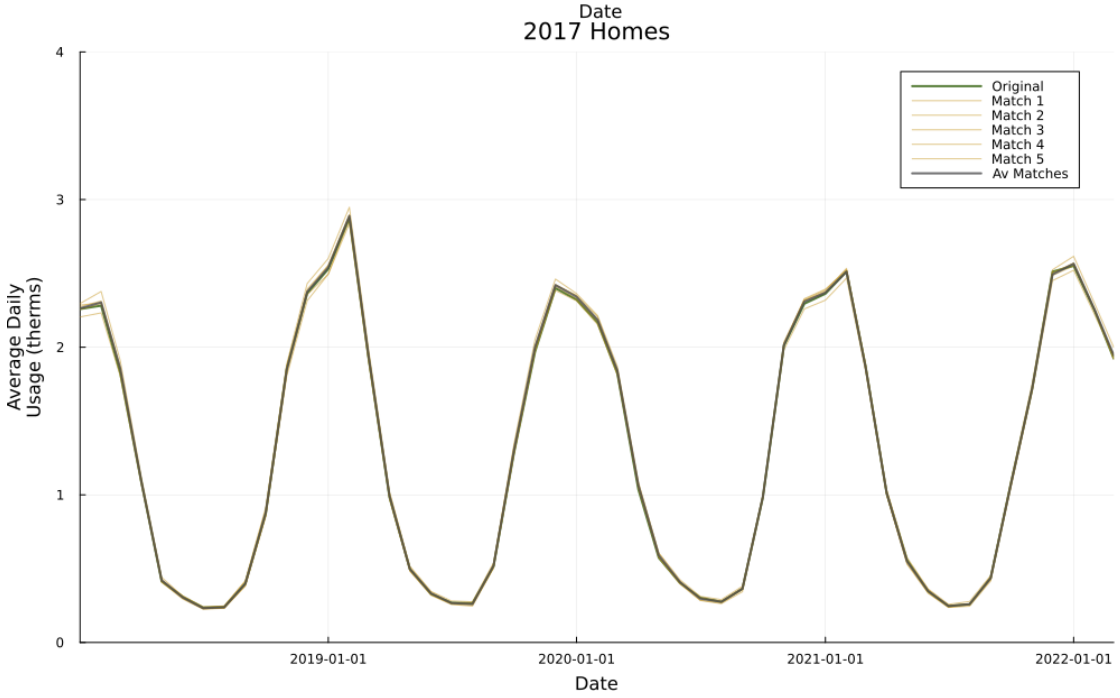
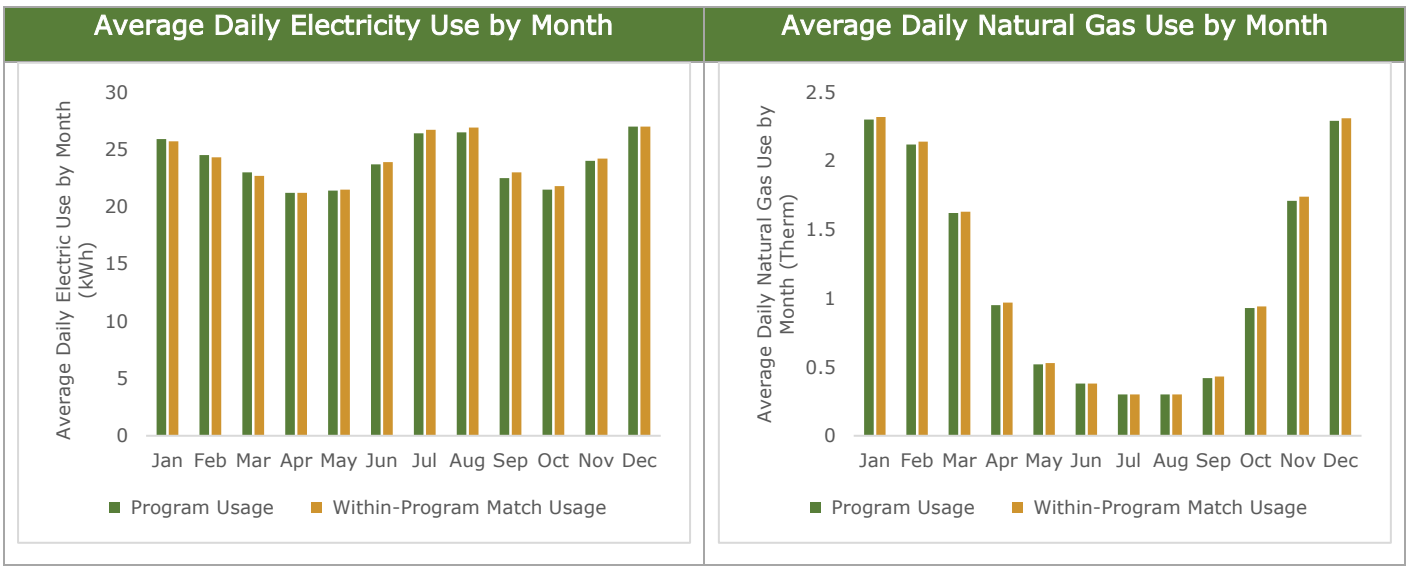


Table 6 summarizes average daily usage for these two groups. Aggregate average differences between groups for a given month do not exceed 2%, suggesting reasonable alignment after matching.

Table 6. Average Monthly Usage of Program and Matched Program Homes by Fuel



To confirm that these groups are not distinguishable, we ran significance tests (T-tests) of the within-program matches against the program homes for a given month, program year, and fuel. The T-tests result in a confidence estimate (p-value) for the probability of a given month being indistinguishable, with 100% indicating that they absolutely cannot be distinguished from each other and 0% indicating that month of data must have come from two different groups. Ideally this number is above 25%, with 5% being a lower bound on acceptability. Figure 3 shows the results by month, with each dot corresponding to a program year and fuel. The clustering of dots closer to 1 than to 0.05 indicates a higher degree of similarity than dissimilarity.

Figure 3. Degree of Similarity between Program Homes and Matches, by Month and Year of Construction

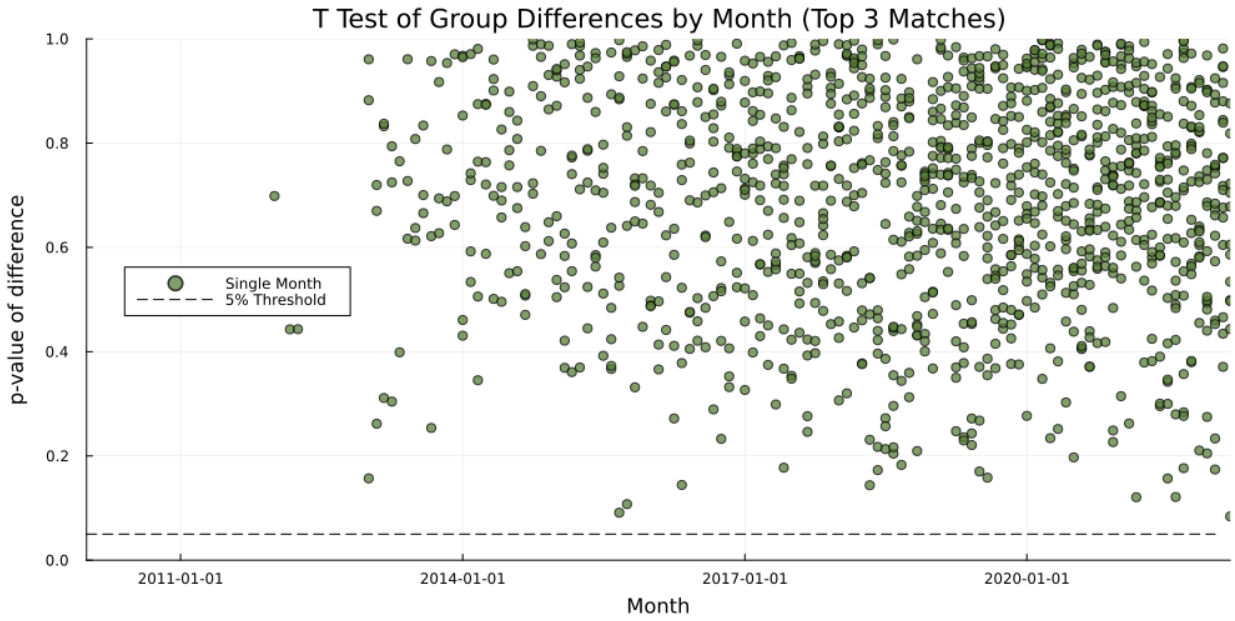


Table 7 shows average p-values by year for each fuel. As shown, the average values are all above 30%. In an individual month, no p-values were below 5% and few were below 25% (36 of 1196 months, or 3%). Therefore, Apex was confident the program and non-program home matching was sufficiently robust to compare energy use and estimate savings.

Table 7. T-Test for Distinguishability between Monthly Data for Program and Matched Program Homes

Program Year	Fuel	Average p-value (all months)	p-value of 10th percentile	p-value of 90th percentile
2012	Electricity	63%	30%	90%
2013	Electricity	76%	50%	97%
2014	Electricity	67%	41%	94%
2015	Electricity	79%	52%	97%
2016	Electricity	65%	35%	93%
2017	Electricity	65%	37%	95%
2018	Electricity	58%	34%	87%
2019	Electricity	79%	64%	96%
2012	Gas	81%	56%	97%
2013	Gas	69%	42%	95%
2014	Gas	82%	63%	97%

Program Year	Fuel	Average p-value (all months)	p-value of 10th percentile	p-value of 90th percentile
2015	Gas	56%	28%	86%
2016	Gas	65%	40%	86%
2017	Gas	81%	61%	96%
2018	Gas	64%	28%	96%
2019	Gas	69%	43%	90%

5.2 Analysis Dataset

After matching and filtering for outliers and other data anomalies in the dataset, 14,504 homes remained for analysis, with 12,142 in Oregon and 2,362 in Washington. Table 8 shows a summary (mean value) of these homes' characteristics by code version.

Table 8. Characteristics of Homes in the Analysis Dataset

Sample Characteristic	OR2011	OR2014	OR2017	WA2012	WA2015
Total Number of Homes	3,490	6,393	2,259	501	1,861
Mean Square Footage	2,327	2,404	2,262	2,513	2,404
Mean Price	$335,445	$454,066	$463,970	$632,748	$568,432
Mean Simulated Natural Gas Use (ex ante therms)	445	386	411	380	389
Mean Simulated Electricity Use (ex ante kWh)	7,969	7,975	6,505		
Mean Predicted energy savings (in site BTU) using simulation	21%	25%	26%	20%	14%

5.3 Energy Usage Comparisons

The following sections describe our analysis of comparing the building simulation model predictions of both program and non-program homes to actual weather normalized energy use from billing data. Unless otherwise specified, results are reported by default for "All groups," which reflects fuel usage across the entire available sample of homes for a given fuel for homes that had service of that fuel, i.e., electricity results include electricity used in both gas heat and electric heat homes.

5.3.1 Building Simulation Model Accuracy: Program Homes

Building simulation models underestimated program homes annual energy use. Apex compared weather normalized energy use from actual energy bills with building simulation model predicted energy usage of program homes. As shown in Table 9, the simulation model underestimated both gas and electric use for program homes in all code years. The underestimation is smallest for the Oregon 2011 code with 2011 electric and gas use

underestimated by 4% and 16%, while electric underestimation was worst for the Oregon 2017 code at 24% and gas underestimation was worst for the Washington 2012 code at 45%. The last column in that table shows the percentage difference of program-home weather normalized usage from simulated, with positive numbers indicating the program home used more energy than the simulation predicted.

Overall, the simulations underestimated weather normalized use by an average of 8% of electric use and 26% of natural gas use. As illustrated in Figure 4 (density plots showing the distribution of simulated versus weather normalized use of program homes across all groups[12]), the gas chart on the left shows a systematic skewing of the actual usage being above simulated usage, while the electric chart on the right shows the distribution occurring more randomly around the prediction. These plots suggest that the natural gas discrepancy may be an issue with the simulations or with the pipeline to reported savings, while the electricity use discrepancy is likely due to differences in occupancy or behavioral assumptions.

Figure 4. Density Plot of Program Home Annual Weather Normalized versus Simulated Natural Gas (left) and Electric (right) Usage

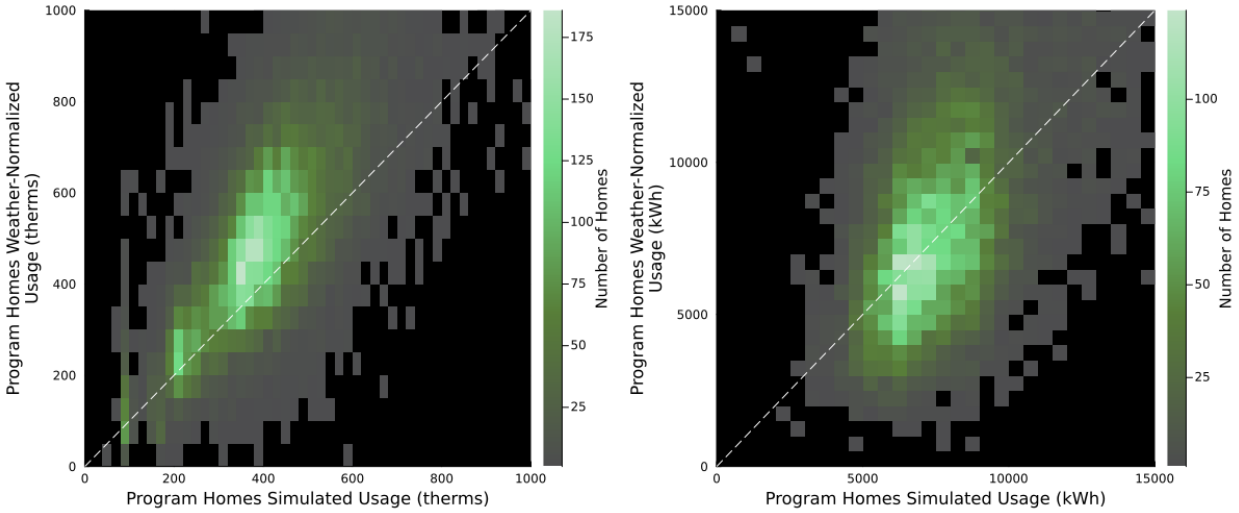


Table 9. Program Home Annual Weather Normalized versus Simulated Natural Gas and Electric Usage, by Code Version

State	Fuel	Code Version	Number of Homes	WxN Usage	Simulated Usage	WxN Usage vs. Simulated
OR	Electricity	OR2011	3,195	8,309	7,969	4%
OR	Electricity	OR2014	5,563	8,406	7,975	5%
OR	Electricity	OR2017	1,869	8,054	6,505	24%
OR	Gas	OR2011	3,148	518	445	16%

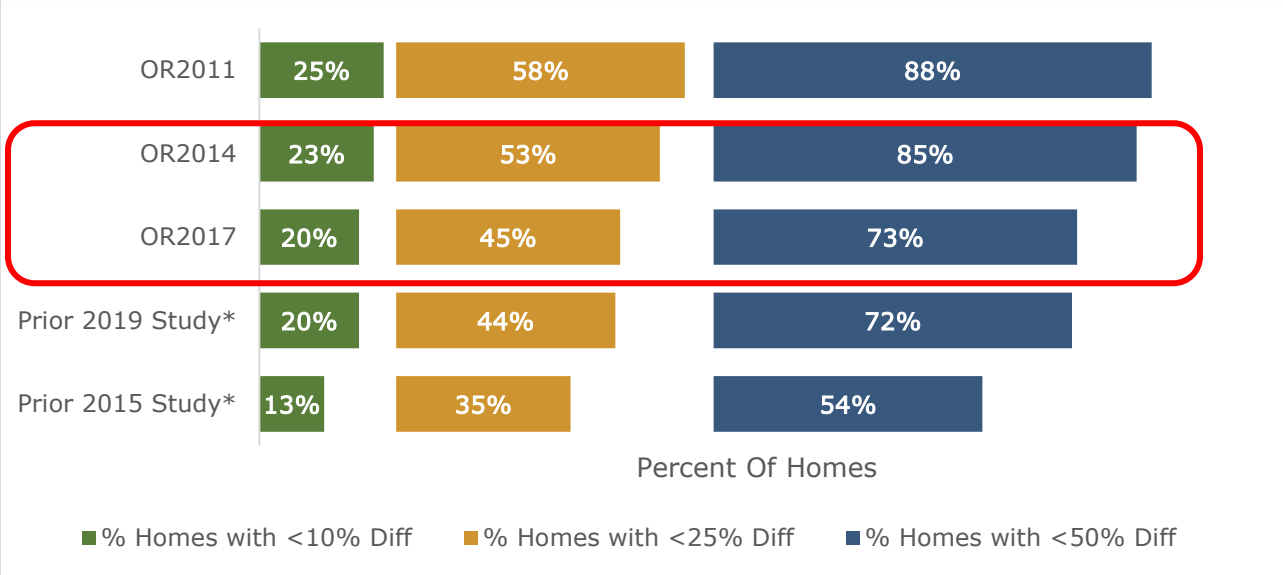
[12] "All groups" implies fuel usage across the entire available sample of homes for a given fuel for homes that had service of that fuel, i.e., the electricity figure includes electricity use in both gas heat and electric heat homes.

State	Fuel	Code Version	Number of Homes	WxN Usage	Simulated Usage	WxN Usage vs. Simulated
OR	Gas	OR2014	5,920	502	386	30%
OR	Gas	OR2017	2,076	494	411	20%
WA	Gas	WA2012	504	550	380	45%
WA	Gas	WA2015	1,861	513	389	32%

For breakouts by system type, see Table 24 in Appendix 4.

In , we compare the simulated versus weather normalized usage differences by three percentage difference bins consistent with those seen in the prior New Homes evaluation studies.[13] The simulated therm usage for homes in the current evaluation (386–445 therms) was substantially lower than in the prior New Homes analysis (488–517 therms), resulting in a much larger difference from the weather normalized usage. The Apex team checked the simulated usage carefully in both the program-tracking and AXIS datasets to ensure that we did not miss any reported data. The building simulation model used in the current study is different than previous studies, and we determined that the models predicted gas use for the same homes differently, which explains these results.

Figure 5. Absolute Differences Between Weather Normalized and Simulated Usage by Code Version



**Note: Prior 2015 study electric differences weighted based on number of homes between gas and electric heat.*

5.3.2 Building Simulation Model Accuracy: Non-Program Homes

Building simulation models overestimated the annual energy use associated with non-program reference homes in some groups. Apex compared the weather normalized energy use with building simulation modeled energy usage of non-program reference homes. The

[13] Rubado, Dan, Energy Trust of Oregon. June 2015. 2009-2011 New Homes Billing Analysis

results by state and code version are shown in Table 10. The simulation model overestimated gas and electric use for reference homes in Oregon in all but one code year, and underestimated gas use for non-program reference homes in Washington. Figure 6 shows the distribution of simulated reference homes versus weather normalized use of non-program homes as density plots, with Washington and Oregon homes combined. In both cases, simulated usage is slightly lower than average usage, indicated by falling below the dotted white line.

Figure 6. Density Plot of Non-Program Home Annual Weather Normalized versus Simulated Natural Gas and Electric Usage

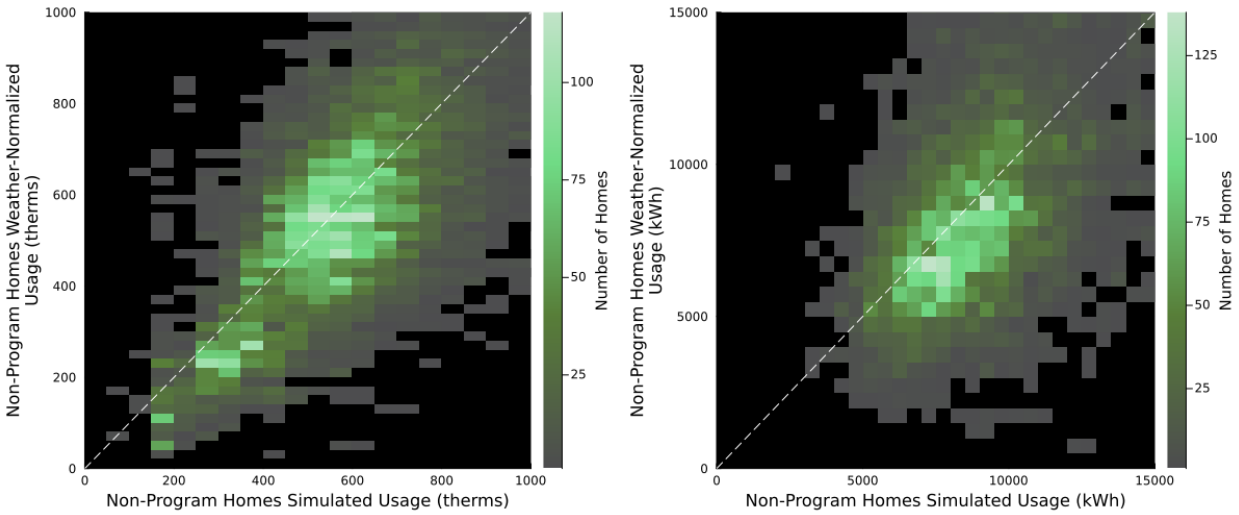


Table 10. Non-Program Home Annual Weather Normalized versus Simulated Natural Gas and Electric Usage, by Code Version

State	Fuel	Code Version	Number of Homes	WxN Usage	Simulated Usage	WxN Usage vs. Simulated
OR	Electricity	OR2011	8,337	8,371	8,888	-6%
OR	Electricity	OR2014	12,573	8,754	9,485	-8%
OR	Electricity	OR2017	4,249	8,291	7,901	5%
OR	Gas	OR2011	8,424	568	611	-7%
OR	Gas	OR2014	14,045	535	564	-5%
OR	Gas	OR2017	4,930	509	589	-14%
WA	Gas	WA2012	1,399	566	546	4%
WA	Gas	WA2015	4,592	555	493	13%

For breakouts by system type, see Table 25 in Appendix 4.

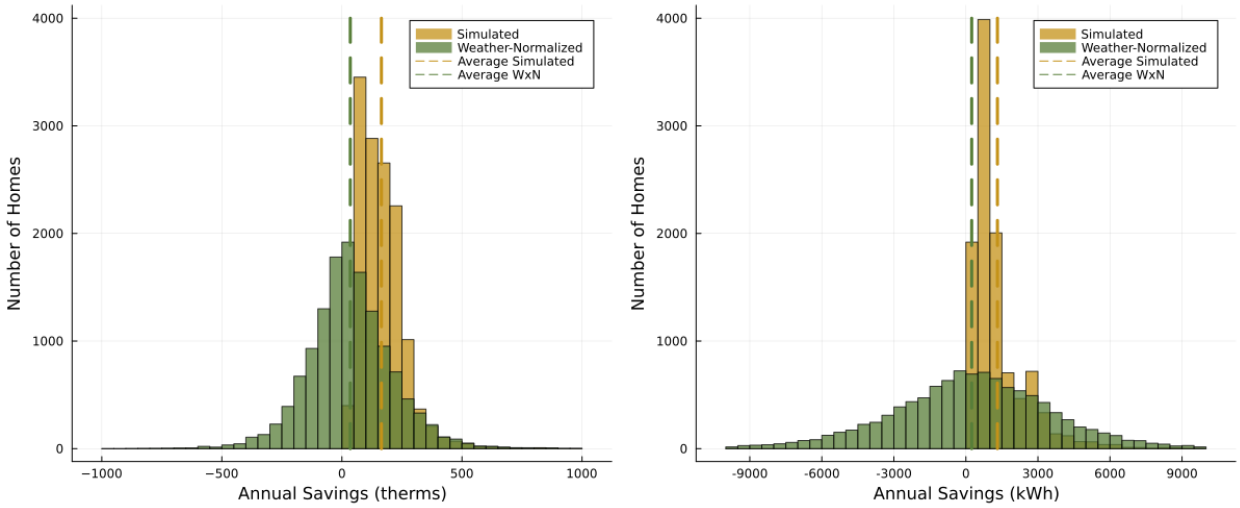
Averaged across both states, building simulations overestimated use by 5% for both electric and gas. Unlike the estimates for program homes, these simulations assume that the reference home has appliances and shell characteristics that match code, as the team did not have this data. It is likely that the matched non-program homes are slightly more energy efficient than simulated by the model,[14] either through customer behavior, construction above code, or subsequent retrofits and upgrades to energy-efficient appliances.

5.3.3 Program Savings Accuracy

Weather normalized billing data suggest program homes use less energy than non-program homes. Apex compared program home actual weather normalized energy use to the matched non-program homes. For each fuel type and code version in both Oregon and Washington, the program homes used less energy than the matched non-program homes and the differences were statistically significant. As discussed earlier, we also found statistically significant differences from simulated savings across all groups.

Figure 7 is a histogram of simulated savings for program homes overlaid with a histogram of weather normalized differences from the matched comparison group. While the building simulation model will always find that similarly sized homes with a more efficient shell and appliances will use less energy than homes without these features, occupant behaviors can have large impacts on energy use, and it is possible to have non-program homes that use less energy than their program counterparts, even when the sites are matched well. The histogram shows this distribution of savings, along with averages which are lower for weather normalized usage compared to simulated usage.

Figure 7. Histograms of Program Home versus Counterfactual (Non-Program) Energy Savings



[14] Note, there is no comparison with the prior study since non-program homes were not included in that study.

Table 11 shows these savings by group, along with the half-width of the 90% confidence interval, and the resulting realization rate (weather normalized savings/simulated savings). The Oregon program achieved an RR of 18% for electricity and 20% for natural gas across all years, while Washington achieved an RR of 30% for its natural gas program across all years.

Given that the building simulation underestimated program-home usage and overestimated non-program-home usage, relatively low realization rates are expected. Program home savings is the difference between usage and its counterfactual, typically with values between 10% and 35% of the counterfactual. Deviations from program estimates of household energy usage result in three to ten times the impact on the resulting realization rate. In other words, a 5% deviation from one estimate could result in a realization rate of 50% to 85%, and deviations observed in these data exceeded 5%. In the case of this program, deviations from both program and reference home simulations contributed to this reduction.

Table 11. Program Home Annual Weather Normalized versus Simulated Natural Gas and Electric Savings, by Code Version

State	Fuel	Code Version	# of Homes	# of Matches	Simulated Savings	WxN Savings	WxN Savings CI (90%)	Realization Rate
OR	Electricity	OR2011	3,195	8,337	918	62	10.6	7%
OR	Electricity	OR2014	5,563	12,573	1,510	348	9.3	23%
OR	Electricity	OR2017	1,869	4,249	1,396	237	16.2	17%
OR	Gas	OR2011	3,148	8,424	165	50	0.5	30%
OR	Gas	OR2014	5,920	14,045	178	33	0.4	19%
OR	Gas	OR2017	2,076	4,930	179	15	0.8	8%
WA	Gas	WA2012	504	1,399	166	16	1.3	10%
WA	Gas	WA2015	1,861	4,592	104	42	0.7	41%
OR	Electricity	All	10,663	25,249	1,313	241	6.5	18%
OR	Gas	All	11,165	27,458	175	35	0.3	20%
WA	Gas	All	2,367	5,996	117	37	0.6	31%

For breakouts by system type, see Table 26 in Appendix 4.

Note that the issue with underestimation of therm usage in program homes (called out in Section 5.3.1) reduces our reported realization rates, but not the estimates of therm savings themselves. If this issue is addressed and the reported therms are altered retroactively, they can be compared to weather normalized therm savings to arrive at new realization rates. In other words, if the model simulation inaccuracy is addressed, realization rates of the program will be higher.

5.4 Segmentation of Impact Results

Apex segmented the analysis to identify drivers behind realization rate differences between groups. The following section includes charts and findings based on the segmentation of impact results.

5.4.1 Results by Code Version and Heating and Water heating Fuel Type

We segmented the realization rate results by code version and system type. In Oregon, electricity use data was available for homes with natural gas heat and water heat, homes with electric heat and non-gas (electric, propane, wood) water heat, and a mix of the two. The portion of homes with natural gas water heat and another fuel source for home heating was small (346 sites), so we did not break them out separately. Some sites had natural gas data despite having electric heat and water heat, which may be due to gas fireplaces or stoves, but we excluded their gas data from this analysis.

Figure 8 and Figure 9 show the realization rates by code version for both Oregon and Washington program homes. Realization rates for all-gas homes (homes using natural gas fuel for both space and water heating), the largest group in the study (10,433 sites), were positive and similar to the overall values, with a slight decline by code year in Oregon and the reverse trend in Washington. Realization rates for the smaller group of all-electric homes were less consistent, rising in the 2014 code version and then dropping to roughly zero for OR2017. Notably, the electric realization rates for all-gas homes were quite high. We expect that this is because the electric-appliance measures contributed strongly to the estimated electric savings in these cases, and they are both routinely evaluated in other programs and not coupled to the other measures.

Figure 8. Natural Gas Savings Realization Rates by Code Version and System Type

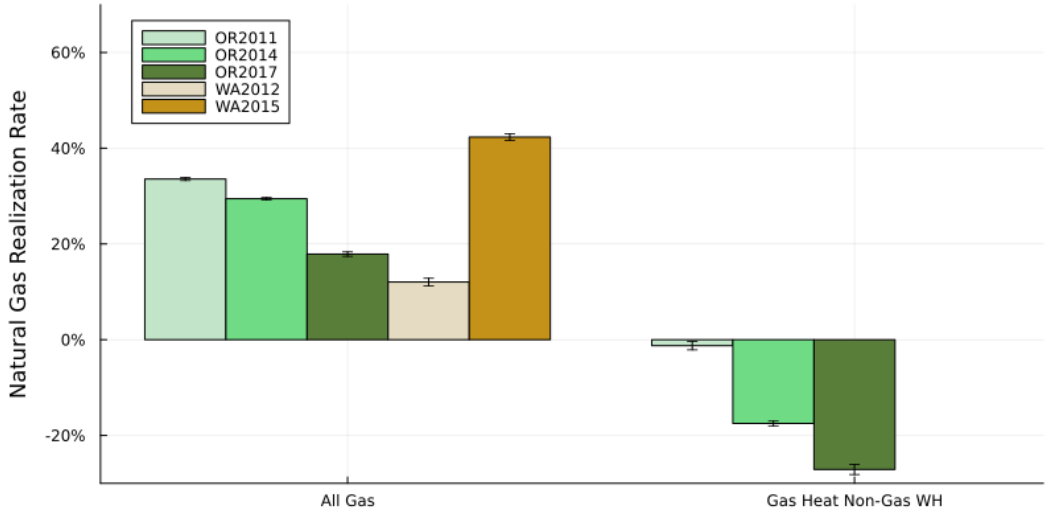
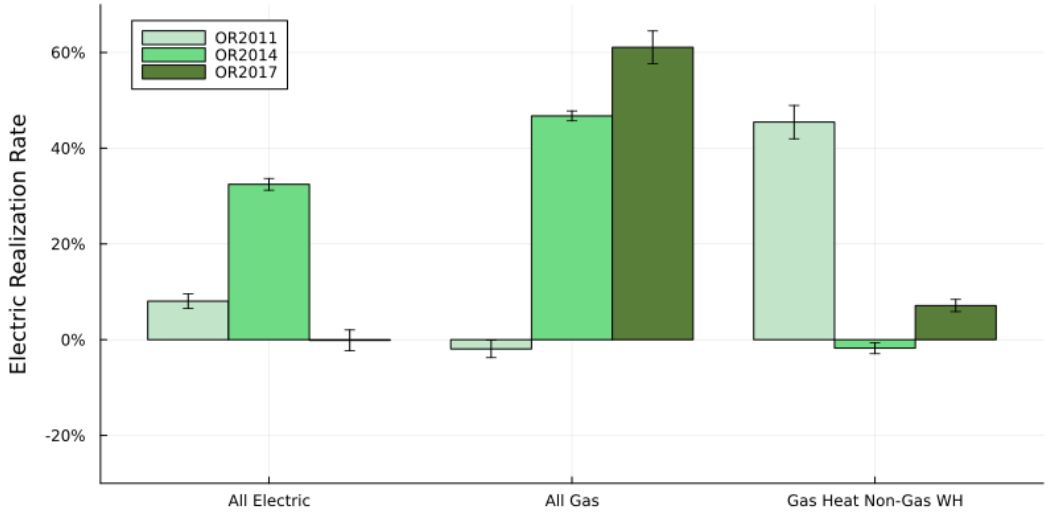


Figure 9. Electricity Savings Realization Rates by Code Version and System Type



Surprisingly, gas realization rates for homes with gas heat and non-gas water heaters were negative. That suggests that comparison homes used less natural gas than program homes. One potential cause could be erroneous assignment of water heater type in the program data. Our matching logic gave program data primacy for determining water heater type and assigned it secondarily (when program data was "NA") based on summer consumption. For the matches, only billing data could be used. If these homes have gas water heaters when program data indicated they do not, they would consume more natural gas. If they are compared to homes that do not have gas water heaters (determined by billing data), they would likely use more natural gas, resulting in negative realization rates. While this is a possibility, the evaluation team did not have sufficient information to assess it beyond speculation.

For completeness in reporting, Table 12 shows the realization rates by fuel and code version, excluding homes that used a different fuel for home heating than water heating (i.e., thereby removing the homes leading to the issues noted above). The realization rates are higher, at roughly 30% for both electric and gas fuel savings, indicating that either the simulations are better for single-fuel homes or that excluding the aforementioned potential error improves achievement. The changes to estimated savings are small compared to estimated whole-home use, but because they are a comparison between a program home and a counterfactual non-program home, they are proportionally up to 1.6 times the estimates with all homes included.

Table 12. Annual Weather Normalized versus Simulated Natural Gas and Electric Usage, excluding Dual-Fuel Homes, by Code Version

State	Fuel	Code Version	# of Homes	Weather Normalized Usage	Weather Normalized Usage (Matches)	WxN Savings	Realization Rate
OR	Electricity	OR2011	2,734	8,219	8,235	16	2%
OR	Electricity	OR2014	3,730	8,038	8,622	584	43%
OR	Electricity	OR2017	1,209	7,663	7,985	322	35%

OR	Gas	OR2011	2,690	563	622	59	34%
OR	Gas	OR2014	4,036	591	651	60	29%
OR	Gas	OR2017	1,347	582	621	39	18%
WA	Gas	WA2012	445	583	604	21	12%
WA	Gas	WA2015	1,800	518	562	44	42%
OR	Electricity	All	7,673	8,044	8,384	340	30%
OR	Gas	All	8,073	580	637	56	29%
WA	Gas	All	2,245	530	570	40	34%

For breakouts by system type, see Table 27 in Appendix 4

5.4.2 Results by Property Size

We segmented overall realization rates by home square footage. Figure 10 and Figure 11 show the natural gas and electric realization rates by square footage bin. Realization rates don't scale linearly with home size but are generally higher for the square footage bins above 2,000 square feet. This could be because larger homes have a more stable weather dependency independent of resident behavior, so the simulations are more accurate.

Figure 10. Natural Gas Savings Realization Rates by Home Square Footage

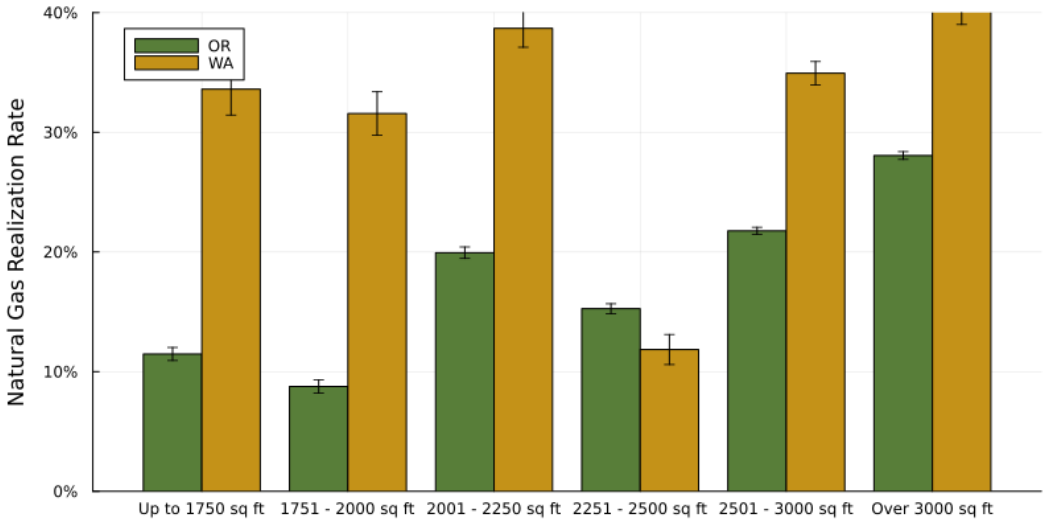
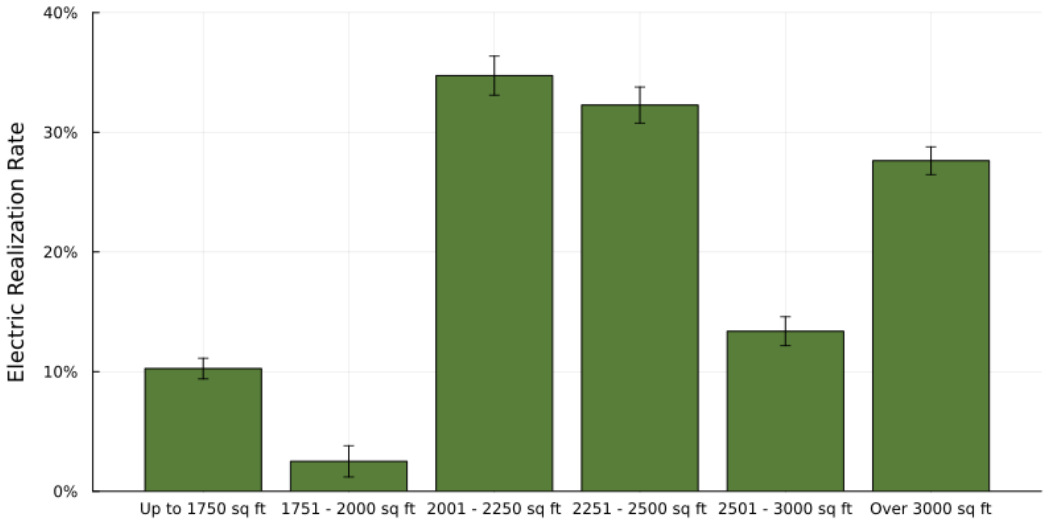


Figure 11. Electricity Savings Realization Rates by Home Square Footage



5.4.3 Results by System and Savings Tier

We analyzed site-level, all-fuel predicted energy usage and savings to segment the realization rates by system and savings tier. We combined the reported savings from program tracking on the basis of MMBtu at the site level. The natural quintiles of the data set were very close to the 5% breaks shown in Figure 12 and Figure 13, so the bins shown have similar numbers of homes for each fuel type (although not necessarily fuel and system type). Figure 14 shows these values for Washington, which are not broken out by system type as only natural gas data is available and very few systems are not single-fuel natural gas.

Figure 12. Oregon Natural Gas Savings Realization Rates by Savings Tier and System Type

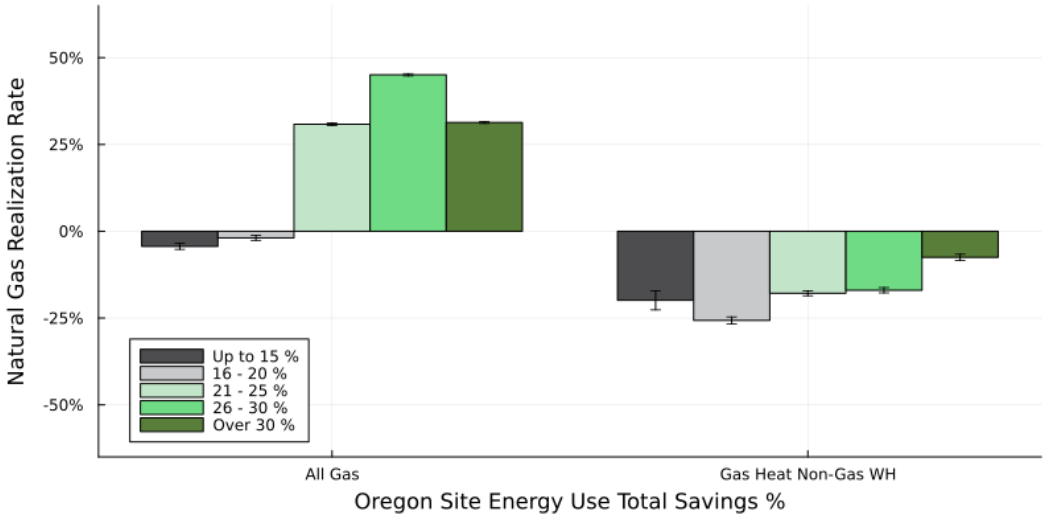


Figure 13. Oregon Electric Savings Realization Rates by Savings Tier and System Type

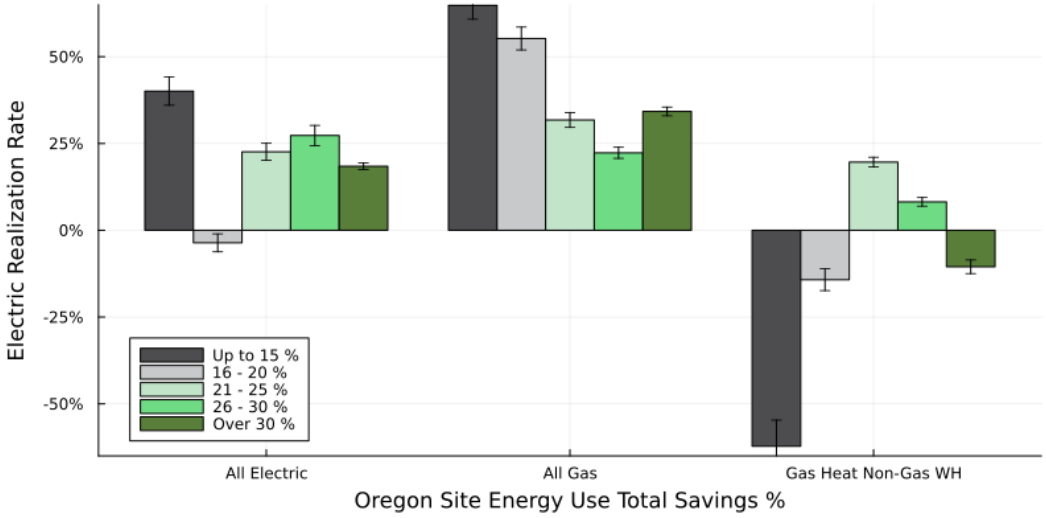
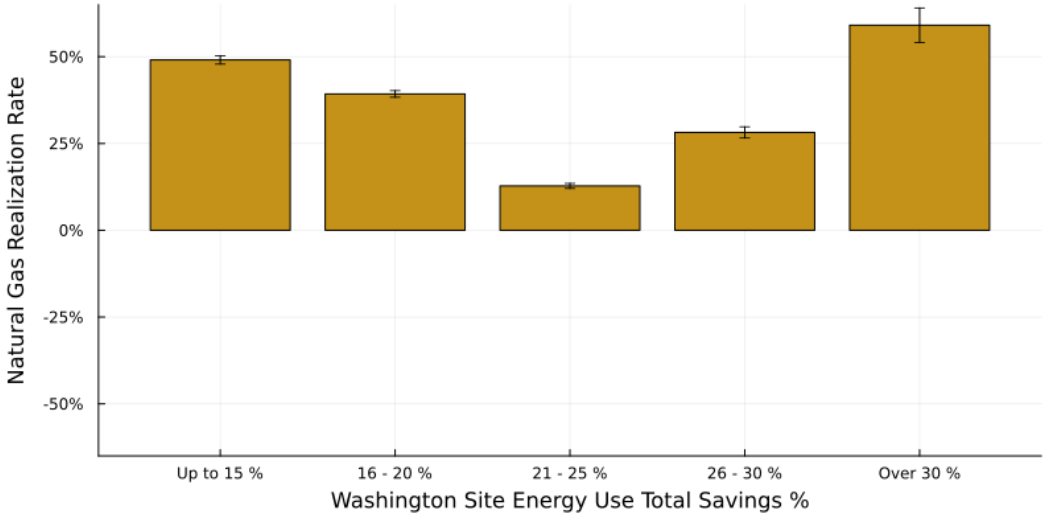


Figure 14. Washington Gas Savings Realization Rates by Savings Tier



As with the segmentation by code version and system type, gas-heated homes with non-gas water heaters have overall negative realization rates. However, as shown in Table 13, the number of sites with single-fuel-system combinations outweighs the number of sites with mixed fuels, with only ≈25% of sites in either the natural gas or electric fuel analyses having gas heat and non-gas water heat. Nonetheless, it is important to note that natural gas realization rates for single-fuel homes are modestly higher than the overall averages when these mixed-fuel homes are excluded. In all cases except for natural gas realization rates for mixed fuel systems, the realization rate for the middle tier is similar to the overall realization rate for the whole fuel.

Table 13. Natural Gas and Electric Savings Realization Rates by Savings Tier and System Type

System Combination	Fuel	Quintile	# of Homes	Avg. sq ft	Sim Savings	WxN Savings	RR
All Gas	Gas	Up to 15%	1,654	2,202	87	-4	-4%
All Gas	Gas	16 - 20%	1,059	2,501	149	-3	-2%
All Gas	Gas	21 - 25%	1,883	2,509	192	59	31%
All Gas	Gas	26 - 30%	1,934	2,576	226	102	45%
All Gas	Gas	Over 30%	1,562	2,649	316	99	31%
Gas Heat Non-Gas WH	Gas	Up to 15%	173	1,676	62	-12	-20%
Gas Heat Non-Gas WH	Gas	16 - 20%	622	1,763	85	-22	-26%
Gas Heat Non-Gas WH	Gas	21 - 25%	1,012	2,090	111	-20	-18%
Gas Heat Non-Gas WH	Gas	26 - 30%	692	2,551	144	-24	-17%
Gas Heat Non-Gas WH	Gas	Over 30%	238	2,400	214	-16	-8%
All Electric	Electricity	Up to 15%	164	1,839	1,686	676	40%
All Electric	Electricity	16 - 20%	151	1,814	2,430	-88	-4%
All Electric	Electricity	21 - 25%	123	1,987	3,213	726	23%
All Electric	Electricity	26 - 30%	71	1,816	3,571	975	27%
All Electric	Electricity	Over 30%	288	1,816	5,511	1,017	18%
All Gas	Electricity	Up to 15%	1,392	2,177	375	243	65%
All Gas	Electricity	16 - 20%	915	2,492	644	356	55%
All Gas	Electricity	21 - 25%	1,446	2,530	789	251	32%
All Gas	Electricity	26 - 30%	1,717	2,588	942	210	22%
All Gas	Electricity	Over 30%	1,439	2,673	1,370	469	34%
Gas Heat Non-Gas WH	Electricity	Up to 15%	155	1,622	732	-456	-62%
Gas Heat Non-Gas WH	Electricity	16 - 20%	626	1,730	894	-127	-14%
Gas Heat Non-Gas WH	Electricity	21 - 25%	1,003	2,092	1,562	307	20%
Gas Heat Non-Gas WH	Electricity	26 - 30%	673	2,559	2,336	191	8%
Gas Heat Non-Gas WH	Electricity	Over 30%	194	2,478	2,864	-301	-11%

5.4.4 Results by Builder Size

We broke out realization rates by the volume of homes built by a given builder within the program period to check for a correlation. Builders were classified as large if they had completed over 500 homes, and small if they had completed less than 50. We found higher electric savings realization rates for medium builders (Figure 15), and lower realization rates in the medium builder size for gas use (Figure 16).

Figure 15. Electric Savings Realization Rates by Builder Size

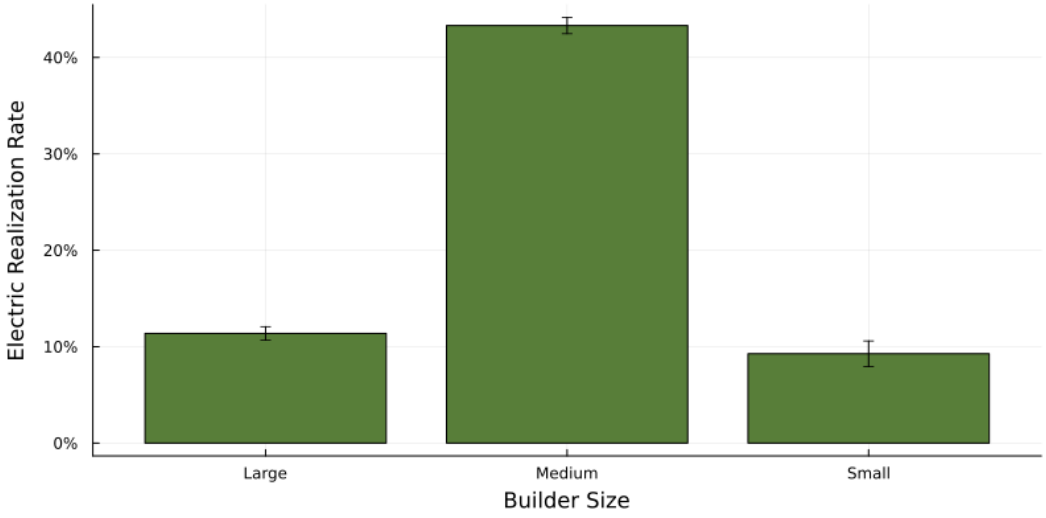
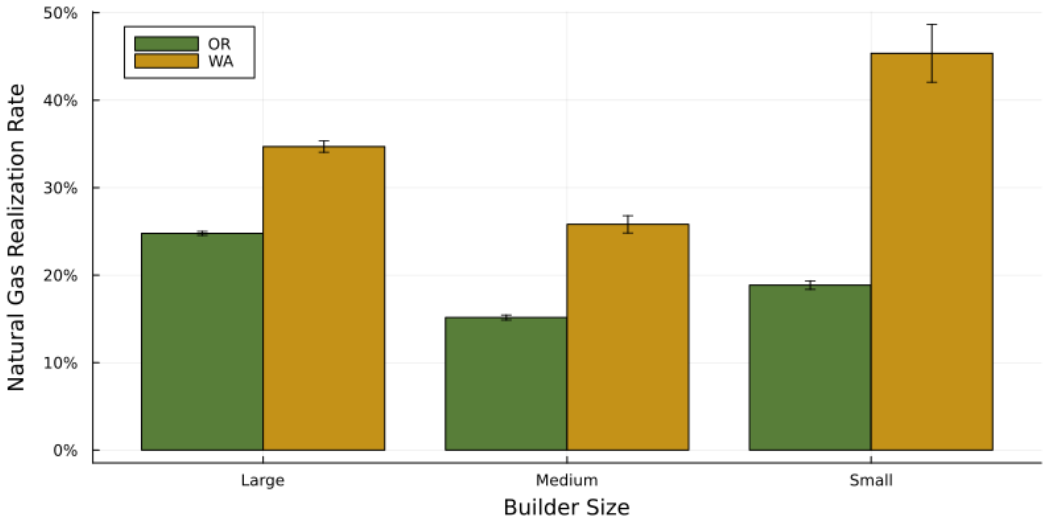


Figure 16. Natural Gas Realization Rates by Builder Size



The number of homes within each bin and the average square footage per home are summarized in Table 14. Large installers tend to build larger homes, by 100 to 300 square feet on average, compared to medium and small installers. This tendency doesn't correlate consistently with realization rate differences among groups.

Table 14. Number of Homes and Average Square Footage by Builder Size Bin

State	Fuel	Builder Size	Total Homes	Avg. Sq Ft
OR	Electricity	Large	4,907	2,390
OR	Electricity	Medium	3,443	2,310
OR	Electricity	Small	1,419	2,256
OR	Gas	Large	5,353	2,426

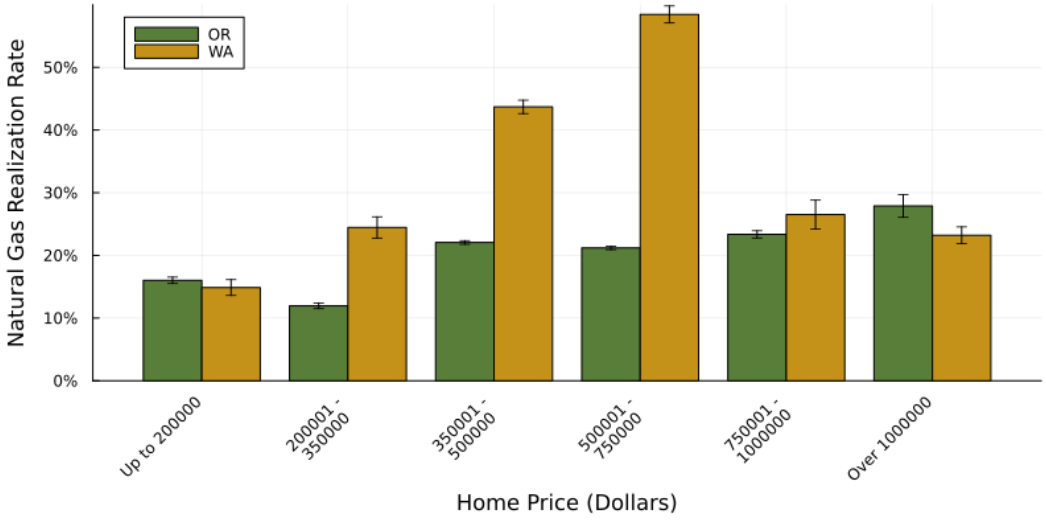
OR	Gas	Medium	3,438	2,347
OR	Gas	Small	1,421	2,353
WA	Gas	Large	1,226	2,588
WA	Gas	Medium	1,025	2,250
WA	Gas	Small	95	2,312

5.4.5 Results by Property Value

We summarized realization rate results by home price (in nominal dollars) in Figure 17 and Figure 18. These figures show higher realization rates for both natural gas and electricity in the middle of the price band, between $350,000 and $1,000,000 sale price. These home prices were from 2011 to 2019 in unadjusted dollars, so they have undoubtedly risen in the current Oregon and Washington housing markets.

Figure 17. Electric Savings Realization Rates by Initial Home Sale Price

Figure 18. Natural Gas Savings Realization Rates by Initial Home Sale Price

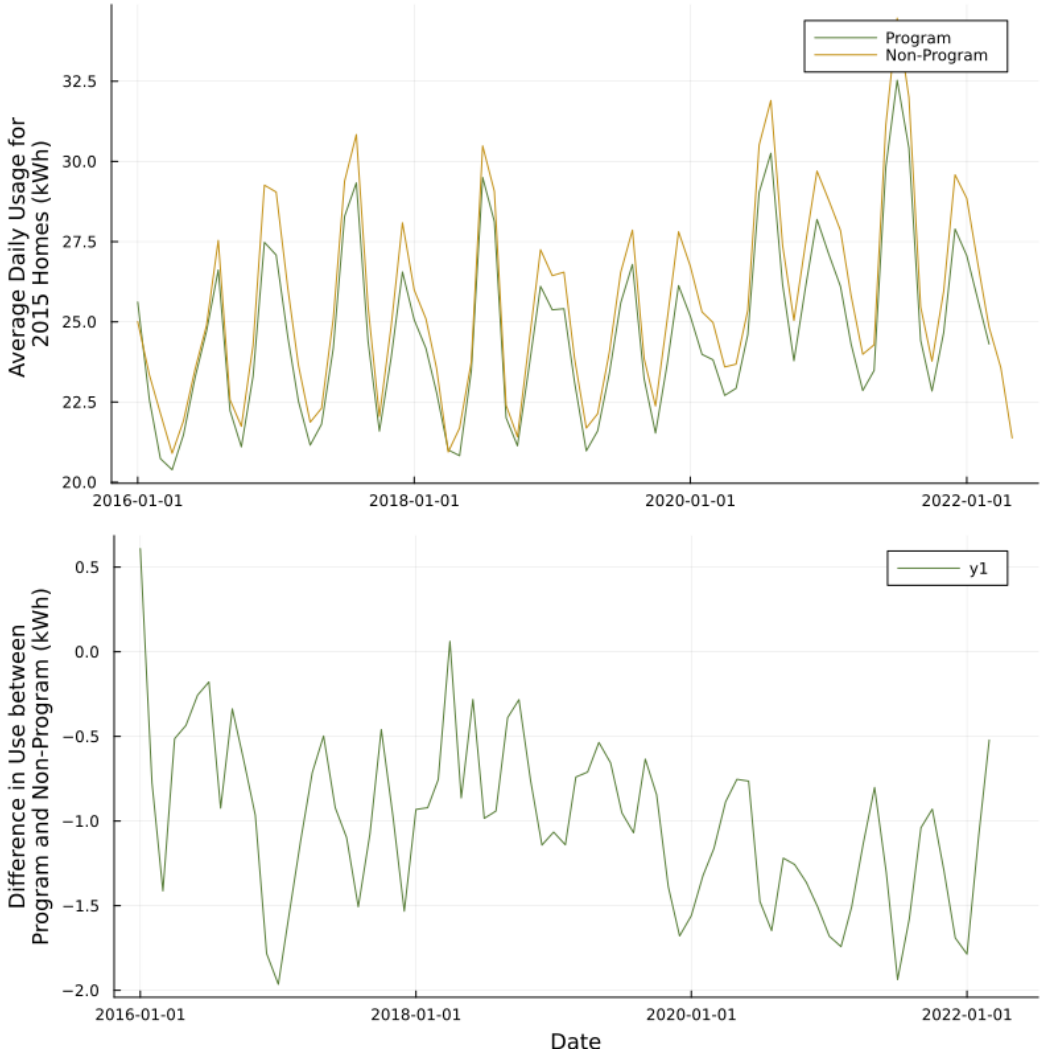


5.4.6 Savings Persistence

The Apex Team investigated whether program homes and non-program homes had different time trends to their energy usage. Depending on the relationship between these groups, realization rates might improve or degrade with time. An example of these trends for 2015 program and non-program home electric use is shown in Figure 19. The average daily electric use for program and non-program homes grew over time, though at a higher rate for non-program homes[15].

[15] Note that these graphs were generated from the pre-filtered data in order to provide directional guidance. In other words, absolute differences will likely not line up with final estimated values in TMY3 because only the fully cleaned data is included in that analysis.

Figure 19. Energy Use Trends from 2015 Program and Non-Program Homes



For this investigation, we looked at the average daily usage of program homes built before 2016, for 1 to 5 years after their construction. We compared this to the matched group of non-program homes built before 2016. We selected homes built before 2016 to provide a sufficiently-long time trend while grouping multiple years of data. We found steady increases in use for both groups across the 5 years, as shown in Table 15. However, the program homes' energy use, for both natural gas and electricity, increased by less than their matched comparison homes. This difference resulted in an increase in annual savings over time for program homes, which would result in a slightly increasing realization rate.

Table 15. Program and Matched Non-Program Home Energy Use, by Year after Build Date

Years post Cx	Annual Use (kWh)	Baseline Annual Use (kWh)	Annual Savings (kWh)	Annual Use (therms)	Baseline Annual Use (therms)	Annual Savings (therms)
1	8,646	8,903	257	461	506	45.9

Years post Cx	Annual Use (kWh)	Baseline Annual Use (kWh)	Annual Savings (kWh)	Annual Use (therms)	Baseline Annual Use (therms)	Annual Savings (therms)
2	8,714	8,967	252	481	528	46.9
3	8,715	8,986	271	498	548	50.7
4	8,860	9,183	323	502	553	50.9
5	9,069	9,374	305	503	554	50.8
Δ(1 to 5)	**423**	**471**	**49**	**43**	**48**	**4.9**

In Figure 20 and Figure 21, we show these trends for homes built between 2013 and 2018. We see consistent deepening of savings across program years. This persistence, and increase in savings, may suggest program homes are higher-quality built homes, with greater resilience to decay and offsetting increases in energy use over time.

Figure 20. Difference between Program and Matched Non-Program Home Annual Natural Gas Use, by Year

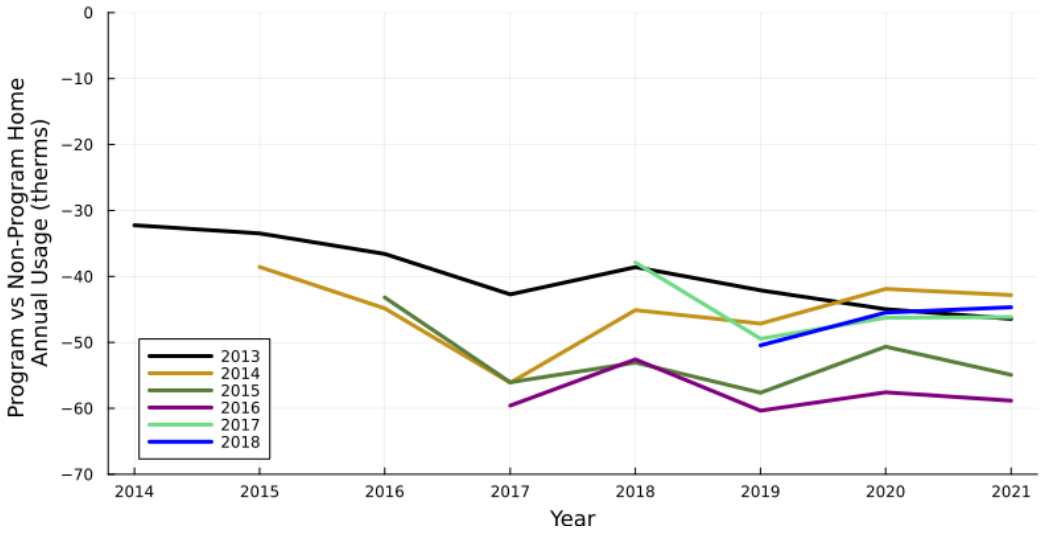
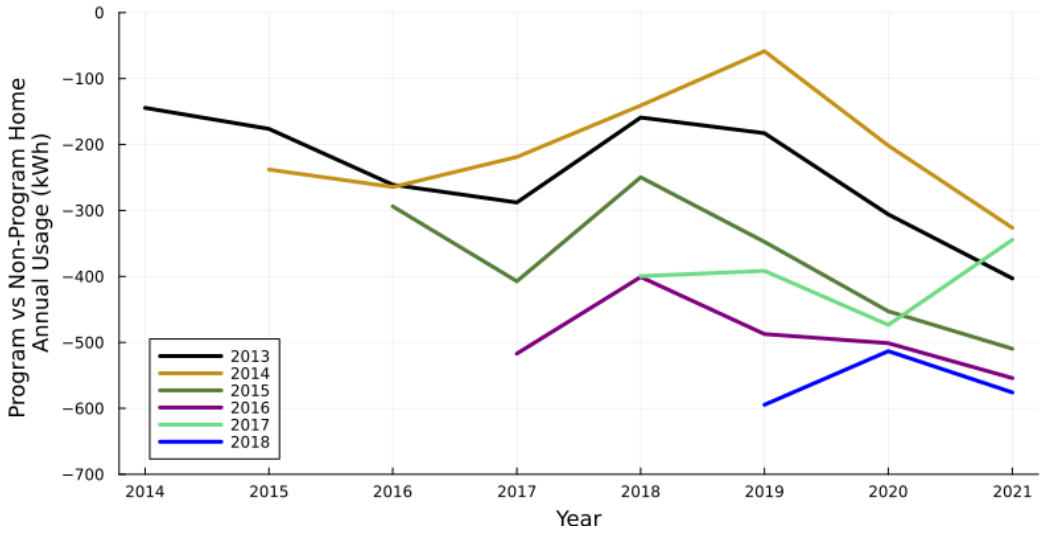


Figure 21. Difference between Program and Matched Non-Program Home Annual Electric Use, by Year



5.4.7 Treating for COVID Impacts

The usage data used as inputs to weather normalization spanned the period from 2012 through March 2022. Beginning in March 2020, residents' energy usage patterns shifted as their behaviors changed in response to COVID19. These changes could have been due to state and local lockdown orders, greater reliance on food delivery, online purchasing, remote schooling, remote work, and other related factors. Those changes in turn may have reduced the efficacy of energy-saving features such as automatic thermostat setbacks or occupancy-sensing lighting. To determine whether these changes had a strong impact on realization rates, we segmented the data into pre-COVID (up to February 2020) and post-COVID (March 2020 onward) sets and re-ran the weather normalization for each. This analysis produced new estimates for weather normalized use for program and matched non-program homes, allowing us to calculate pre-COVID and post-COVID realization rates.

The new energy use estimates for both scenarios are shown in Table 16. Weather normalized electric use increased by 7.5% to 9.5% for both program and matched homes, which is likely due to more time spent at home (comparing data during COVID to data before COVID in Table 16). Natural gas use changed by less than 2.5% for each group. Note that the number of included homes for code version OR2017 and WA2015 drops substantially using only pre-COVID data due to an insufficient post-period data[16]. We report them here as-is despite the difference in groups because the values shown would have been used to calculate the realization rate if our analysis had been limited to pre-COVID data only.

[16] The program homes built in the later code periods had fewer post-built (yet pre-COVID) years of data.

Table 16. Pre- and Post-COVID New Homes Usage

State	Fuel	Code Version	Data before COVID # of Homes	WxN Use	Base WxN Use	Data during COVID # of Homes	WxN Use	Base WxN Use
OR	Electricity	OR2011	3,162	8,199	8,215	3,077	8,716	8,865
OR	Electricity	OR2014	5,513	8,098	8,435	5,233	8,865	9,214
OR	*Electricity*	*OR2017**	*811*	*7,736*	*8,381*	*1,861*	*8,158*	*8,388*
OR	Gas	OR2011	3,141	514	564	3,134	528	579
OR	Gas	OR2014	5,890	506	540	5,697	498	530
OR	*Gas*	*OR2017**	*877*	*728*	*754*	*2,048*	*489*	*503*
WA	Gas	WA2012	502	551	563	482	547	569
WA	*Gas*	*WA2015**	*1,483*	*579*	*640*	*1,859*	*514*	*554*
OR	Electricity	All	9,522	8,105	8,359	10,207	8,692	8,956
OR	Gas	All	9,928	528	566	10,900	505	539
WA	Gas	All	1,987	572	621	2,343	521	557

*** Note the large discrepancy between number of included homes for pre-COVID and post-COVID scenarios**

The calculated realization rates in the two scenarios are shown in Table 17. For the comparable groups (OR2011, OR2014, WA2012), savings and realization rates were similar using either data set, albeit slightly lower using the pre-COVID data. The increase in usage in both program and non-program homes offset, resulting in very little change to savings. For the groups limited by the post-period data available, realization rates are higher using only the pre-COVID data. The resultant values for overall realization rates were highly similar in Oregon. For Washington natural gas, realization rates using pre-COVID data were higher, 41% vs 30%. These results are inclusive of the differing groups sizes for OR2017 and WA2015 code homes.

Table 17. Pre- and Post-COVID New Homes Savings and Realization Rates

State	Fuel	Code Version	Savings (data before COVID)	Savings (data during COVID)	RR before	RR during
OR	Electricity	OR2011	16.1	149.1	2%	16%
OR	Electricity	OR2014	336.2	349.4	22%	23%
OR	*Electricity*	*OR2017*	*644.8*	*229.6*	*48%*	*16%*
OR	Gas	OR2011	49.9	50.8	30%	31%
OR	Gas	OR2014	33.8	32.0	19%	18%
OR	*Gas*	*OR2017*	*26.1*	*14.3*	*15%*	*8%*
WA	Gas	WA2012	12.3	21.8	7%	13%
WA	*Gas*	*WA2015*	*61.5*	*39.3*	*60%*	*38%*
OR	Electricity	All	254.4	263.6	20%	20%

State	Fuel	Code Version	Savings (data before COVID)	Savings (data during COVID)	RR before	RR during
OR	Gas	All	38.2	34.1	22%	19%
WA	Gas	All	48.9	35.4	41%	30%

*** Note the large discrepancy between number of included homes for pre-COVID and post-COVID scenarios.**

Ultimately, these results are complicated by the results from the persistence analysis in Section 5.4.6. Realization rates improve over time further out from the original construction date, which may offset any reduction in realization rates caused by changes in behavior due to COVID19. Given that the overall impacts are small, we recommend using the full pre- and post-COVID usage data as the basis for reported results.

6. Exploratory Interviews

To corroborate the drivers identified in the analysis or develop new hypotheses explaining variances in the results compared to expected, Apex conducted interviews with program staff (Energy Trust, PMC, and PDC), program verifiers, and trade ally builders. The staff interviews focused on understanding what may have influenced the energy use differences and savings realization rates, while the builder interviews focused on understanding building practices and how they relate to above code construction. A discussion of the key findings from the interviews is found below.

6.1 Staff Interview Findings

Program verifiers believe the primary driver of the low realization rates found in this analysis is the accuracy of the software used to model program homes. Essentially, the models are built on several assumptions including occupancy and other non-controllable factors which lead to inaccurate projections of a home's energy use. Internal program staff believe that the program likely experiences a certain amount of "massaging". Staff expressed that "some modelers are savvier with software", and that verifiers know that different software and model types (custom vs standard) will result in different incentive amounts, and they manipulate model inputs to take advantage of this.[17] This idea was corroborated by one verifier who indicated that there are "ways to massage a model to make it pass…kind of a game". This verifier expressed that things are generally accurate, but that it is dependent on the "integrity of the verifier". Another issue identified by both verifiers and staff is that verifiers used to pay more attention and take more time in the testing and verification process, and that to a certain extent complacency in the process had set in. Considering this, some program staff advised for "100% QA on every home", to

[17] The segmentation analysis included exploration of specific verifier and builder realization rates, and while there was individual variation (some better or worse than others), we did not identify singular outliers or notable companies as having "massaged" the energy model system.

ensure that models are accurately representing homes, and that nobody is "gaming anything".[18]

Concerning the low realization rates, internal staff and verifiers agreed with a sentiment shared by builders that non-participating home builders had increased the efficiency and performance of their homes, which contributed to the low realization rates found in the analysis. Interviewees identified several potential drivers for why code homes are not the market baseline, including builders trying to stay ahead of code changes, spillover among subs who work with both program and non-program builders, and a general increase in interest among home buyers.

Verifiers also agreed with builders in identifying durability and longevity as a key differentiation between program homes and non-program homes, indicating that program homes are more strongly built, deteriorate more slowly, have fewer issues with mold and ventilation, and lead to fewer callbacks, so that builders "have a better house to sell". Builders believed the higher quality builds associated with program homes also translated into improved energy efficiency, as the better built homes have less issues with poorly installed insulation, and other factors that can impact air leakage, among others. This sentiment was verified in the analysis, as the evaluation found that over time, program homes' energy use for both natural gas and electricity increased by less than their matched comparison homes.

Verifiers and builders both noted that it is difficult to collaborate with trade workers/subcontractors on a home, and there is a lack of training for this group.[19] One verifier noted that, while the program is focused on construction as it should be, it could do more to get involved in the design side, including assistance designing around the issues found onsite (i.e., framing, ductwork and placement), and early design assistance, adding that subs never talk directly to architects or structural firms or HVAC designers. Program staff noted that when subs are better trained, they do better work, and that in previous years there was a more concerted effort to provide outreach, training, and engagement on program requirements, to both subs and builders, but the program moved away from this model after 2016.

6.2 Program Builder Interview Findings

Apex staff completed six interviews with Oregon-based builders, representing both large-production and moderate-sized builders. The interviewed builders' companies represented 15 percent of all New Homes projects. The objectives of the interviews were to learn about standard building practices, how the program may have influenced these building practices, gain an understanding about homes built outside of the program, and identify strengths and opportunities for program improvement.

[18] The program completes a file quality assurance check on every home.

[19] Training could improve realization rates by ensuring trades are following best practices and understand key installation techniques that provide higher energy savings.

6.2.1 Building Practices

Interviewed builders' insights were focused on homes built within the program, and all interviewed builders build above code both within and outside the program. Most of the interviewed participating builders' new construction projects are built within the New Homes program: four builders said all of their homes qualified for New Homes incentives, one builder's homes were 85-90% New Homes-qualified, and the other builder stated that "most were." Builders were asked their reasons for building both program and non-program homes above code. The top reasons (not in any order and noting that builders often had multiple reasons) could be grouped as (1) an **industry standard and expectation**, (2) **higher-quality homes**, and (3) **program influence**.

6.2.1.1 Building Above Energy Code as an Industry Standard

Building above-code homes was desirable for home buyers in Oregon and became the market standard. Two builders interviewed spoke of above-energy-code homes being the industry norm, with one stating:

> *"…everybody around here is going to build above code, some of them market it, some of them don't. It's not just a financial consideration, it's a demographic consideration. If you live in the Pacific Northwest, if you're not building a home that's considered energy friendly in some ways, then you are kind of behind the 8-ball. Everybody tries to exceed code one way or the other, some do it more, some do it less, but everybody's trying to achieve that above code status."*

This same builder spoke of adopting above-code practices back in 2012, as more "*of a marketing strategy back then, a way to separate ourselves from the competition."* Yet, this same builder reflected that this tendency to build above code has by now become standard practice: *"It's got to the point (by 2019) that everyone's doing it. It's expected now, for savvy homeowners, rather than a feature, it's almost expected."* Other builders repeated this sentiment:

> *"We've always marketed ourselves as a high-performance builder, building at or above code in most areas. We don't ever do code minimum—I mean some things we do, but where it makes sense, we go above code."*
>
> *"As the standard, everything is above code."*
>
> *"At this point it's kind of become a default for us…we've been doing it so long now that most of our subcontractors are comfortable with it and know the routine and it's nothing out of the ordinary now."*
>
> *"Exceeding code in energy was a no brainer, so we were always that way. Even in these later years, as code took all the low hanging fruit, all the things that could be done without danger, just became base code. So that's where we are at right now."*

Other interviewed builders echoed the general market demand for higher-than-code specifications: "*They want energy efficiency, most of them are asking questions about it. They're concerned about energy and the world*." Therefore, building above energy code was

influenced by external conditions like perceptions of market norms and the desire to differentiate oneself from other builders.

Yet, there were several builders who disagreed, and believed there was still plenty of residential new construction out there being built just to meet code. As one builder framed it, "*I don't know if I can speak to all around Oregon, but I would tend to think that as far as Oregon goes, it just kind of makes sense to build to code.*" Another builder echoed this sentiment, suggesting, "*Most of the builders just meet code. They do the most that they have to do and they just walk away.*" Another builder split the difference, noting that "*There's going to be some builders that will build to code, but in our market, and the buyers that we market to, our direct competition, are more ahead of code.*"

6.2.1.2 Quality Associated with Above-Code Homes

Builders believed higher-efficiency, above-code-built homes are also higher-quality homes. As one interviewed builder expressed, "*so we as the builder have a better house to sell*." These other non-energy attributes associated with building above code included better build quality, durability, and less detrimental environmental impact. Two builders described this as:

> *"If you're going to build an energy efficient home it's going to be a better built home because of all the things you have to do. To get a blower test of 2.4 [ACH], you have to seal it well, that's quality you can feel when you leave the house."*

> *"We can argue the energy savings, one way or the other. But I still think that using certain insulation, I still think using heat pump water heaters, the overall benefit is still there."*

Building above code was perceived by one builder as a preventative opportunity to avoid future issues or callbacks about the project, namely to "*minimize any issues down the road. I think that's kind of what people are typically pretty mindful of when they go above and beyond the code*." The value associated with building above code was evident even after learning the results of the underperforming energy savings of the modeling software, one builder stated that, "*I still think it's worth building those homes, because they're sustainable and not going to come apart.*"

Interviewed builders cared deeply about higher-efficiency construction and were committed to building above code. Yet, some of the builders believed that the customers were indifferent to making investments in efficiency to get program homes qualified. Despite half the interviewed builders describing customer expectations as a reason to build above code, the other three builders believed customers have little interest in energy-related specifications when it becomes their choice (e.g., customization).

> *"We noticed that when we make it the buyers' options, they don't make the home green the way we'd like. We have a property that's stringently green, and one that's less green, but we build that one green because we want to be better for the environment, better for the world."*

Another builder echoed this sentiment about low customer interest:

"I don't think customers see value even when we have energy efficiency options available to them. Very few homebuyers will choose that because of the upfront financial investment it takes to get the return on the money. I would say 10-20% of homebuyers will see the value in purchasing these items. And it's going to depend on how long they live in their property."

These builders perceived customer indifference and reluctance to investing in higher-efficiency options when available, but the builders nonetheless found quality and efficiency reasons to build above code. Above-energy-code homes were viewed as more durable and higher quality compared to homes built merely to code. And supporting builders' effort to build above code was the program.

6.2.1.3 Program Influence

Some, but not all, of the interviewed builders believed the program contributed to above-code building practices. Four of the six builders appreciated the program's ability to shoulder some of the cost for high-efficiency practices, materials, and appliances to produce customer energy savings. One builder described the way the program supported their investment in higher-efficiency equipment, whereby the program incentives were highly influential in their decision to make higher-efficiency equipment purchases for the new homes, stating that:

"…we're always weighing the cost of adding something. I always weigh a [standard] furnace versus a super high efficiency furnace and it's $500 more. But the program has opened my eyes to the rebates which I think plays a big part in the decision making, when we're on the fence. Like hey this is an important feature, but it's going to cost us more. The next question is, can we get more rebate for that. We talk to our certifier, and they give us guidance on how much we can get back."

Two builders echoed the importance of the incentives, noting how expensive the upgrades were to build and needing the incentives to offset this cost:

"…the program drove builders to [upgrade the efficiency of the new homes] by offering them a rebate, but sometimes to reach those rebates to even be worth it, the money that we were putting out was pretty, pretty significant."

"The financial aspect, there came a point up until the last few years where our rebates were exceeding our cost to implement these Energy Trust guidelines. And so there was a financial benefit to it as well. We've seen that dissipate in the last two years, but prior to that, it was a very successful program for us financially and it was just an added benefit to the buyer. And just to build in this market, it made sense."

Two builders felt differently about program influence and about their building practices. This was true to the point that one of them expressed they likely would have gone above energy code independently without program support: "*The way I look at the program, there's a lot of things we do on our homes as a standard anyways, so why not take advantage of it.*" However, another builder's commitment to build above code in some ways was made possible through the program: "*Prior to 2019 I think there would be elements we would*

have done above code, specifically in areas of insulation. Outside of that, no I don't think we would have [built above energy code]."

The program offered non-financial benefits to builders as well. Interviewed builders noted the importance of training and education and the overall support that the program provided. One builder remarked how the program has led to more of a green building "community", noting:

> *"It's also created a very big community in this area and just the brainstorming and the conversations that get had and the different ways we can come together to kind of figure things out has always been really fun for me. And I think the way that Energy Trust has worked with building officials to be more collaborative, has also been a benefit. I think those have been good things."*

The support, training, and education piece was also critical to another builder, who remarked, *"In the 2012-19 range there was quite a bit of improved practices by production builders, and that came about by improved subcontracting practices. And the home insulators, if they wanted to get contracts from production builders, they had to learn how to air seal…. If they're not in a certified program, they're not getting the training they need to meet those codes."* This last item is topical, as it speaks to how the program offered support and benefits to address some of the challenges, especially centered on subcontractor/trades, which is discussed in greater detail below.

6.2.2 Challenges

Participating home builders described various challenges during their participation between 2012 through 2019, challenges both program-related and other challenges more broadly about the industry in general. Although program staff make significant effort to prepare builders and verifiers in advance of changes, one builder stated that **advance notice of program changes** and time to adjust to new program requirements could be helpful. As they described, "*a little more, hey this is coming, not bam, here you go*..."[20] Two builders spoke of the **difficulty collaborating with trade workers/subcontractors** and the absence of training and program support for this group. One builder described that those working in the trades often lacked the training necessary to meet New Homes requirements, which affected the building process regardless of the education of the home builder. This builder went on to state:

> *"[W]e often had to be the ones to initiate that conversation with our trades to get educated. I don't necessarily need more certifiers, but I need the trades to be more educated and I think it would be great if we weren't the ones constantly having to initiate that education. I think there just needs to be a little more collaboration on that part, especially with the HVAC and the plumbers as those are the two main trades that have the most impact ultimately on what we end up getting score wise."*

[20] For the past two code changes, program staff have worked with builders for over a year in advance of code changes, providing trainings on measures to change and when program updates will take place. This builder may not have been monitoring program communication channels and overlooked outreach.

One builder supported this perception that trade contractors could have difficulties in the New Homes program, although they did not name it outright as a program negative. They stated that, *"Home designers don't work with the HVAC contractors who install the ductwork, so you end up with beams in the way. And they're trying to stick everything in the attic. It's just all wrong. If they're not in a certified program, they're not getting the training they need to meet those codes."*

Another builder spoke of the difficulty in collaborating with subcontractors, but within the context of the complexity of New Homes criteria. They reported trade workers' difficulty in deciphering codes, stating that:

> *"Many times, the trades struggle with the codes, either by Oregon or Energy Trust. Inspectors struggle, especially when requirements change. Sometimes you need energy consultants to help guide the trades and the builders."*

To aid in the ambiguous language, the company used contractors and engineers to help translate new codes and program requirements, which was "*expensive and time consuming*" for the company.

Two builders felt that the **program requirements were too high** due to the ever-rising state code requirements. For one of the two builders, this meant that they often struggled to find trades contractors to carry out that work and there could be high unintended costs in reaching the code requirements:

> *"I'd say that sometimes to reach certain percentages above code, the expectations were set a little too high. Sometimes I think that they went into it, what their intent is: let's drive builders to do this and by offering them a rebate. But sometimes to reach those rebates to even be worth it, the money that we were putting out was significant. And the lack of trades in our area that's specialized in certain things like the heat pump water heaters and things of that nature. I think that there was a miss on the trajectory of what they wanted us to be above code in order to maximize our rebates, compared to the market, the distribution, and the labor force we had. I don't think that they ever quite intersected 100%, which often made it difficult."*

Builders also identified the disconnect between a well-built high-efficiency home and the likelihood the occupants will adhere to requirements to ensure the home uses less energy. Several of the builders believed homeowners are unlikely to have interest in, or lack the knowledge of, and are possibly indifferent to understanding the necessary conditions for optimal home performance. Citing one common example, builders noted the challenges of getting occupants to learn how to use and program their smart thermostats correctly. Further, as one builder stated:

> *"In the past, it pretty much addressed the things that could be accomplished, and not be onerous for the owner. But now, you're changing the way people live in a house. I think that's the biggest challenge. How do they teach those people how to live in the house? They have to help builders do that. It also takes cooperation from the owner. If you tell the owner you have to take a class that's 3 hours a week once a month, they're not going to do that."*

7. Benchmarking

The analysis presented in this evaluation is comprised of three primary analytical comparisons:

1. Program home weather normalized billing data compared to program home building simulation data
2. Program home weather normalized billing data compared to non-program home weather normalized billing data
3. Non-program home weather normalized billing data compared to non-program home building simulation data

Apex sought to identify comparable studies that utilized each of the comparisons; however, we were unable to identify another study that did so. Furthermore, we were only able to identify three studies that compared the weather normalized billing data of participant homes to non-participant homes, which is necessary to calculate realization rates.

The studies documented in the benchmarking effort are thus comprised of some combination of these three analytical comparisons, and also include some comparisons of program home building simulation data to non-program home building simulation data. We also include discussions of any identified market effects, either quantifiable or anecdotal. The benchmarking analysis is divided into: 1) methodological comparison; 2) realization rates of billing analysis compared to building simulation models; and 3) market effects.

7.1 Methodological Comparison

The evaluated programs and analysis approaches are documented in Table 18.

Table 18. Analysis Approaches of Benchmarked Programs

Utility/Program	Year	Analysis Approaches	Energy Comparison	Matching Criteria
PG&E – California Advanced Homes Program (CAHP)	2019	1, 2	Total EUI	Non-participating homes constructed during similar years as the participant sample, within a local radius, binned by home size (sf), clustered by climate zone and distances on a city level.
New Jersey's Clean Energy Program	2009	1, 2	Electric and gas analyzed separately, normalized by HH SQFT	New non-participating homes that matched selected participant homes in terms of housing unit characteristics and demographics, segmented into four groups: Age-Restricted One-Story, Age-Restricted Two-Story, Other Single Family, and Other Townhomes.
Wisconsin – Focus on Energy Residential New Construction	2019-2022	2, 4, 5	Electric and gas analyzed separately, normalized	New residential addresses in similar geographic areas as Program homes that matched selected participant homes in terms of housing unit characteristics and were not certified by the New Homes Program.

Offering and Market Effects Study			by HH SQFT	
NEEA – Next Step Homes	2016-2021	4	NA	NA
Energize CT – Connecticut Residential New Construction	2018	4, 5	NA	NA
Massachusetts Residential New Construction	2014	4, 5	NA	NA

Analysis Approach Key
1: Program-Home Billing compared to Program-Home Building Simulation
2: Program-Home Billing compared to Non-Program-Home Billing
3: Non-Program-Home Billing compared to Reference Home
4: Program-Home Building Simulation Compared to Reference Home
5: Delphi Panel

Each of the benchmarked studies are discussed in greater detail below.

- **PG&E:** PG&E commissioned this study to assess actual energy performance of occupied program homes compared with performance of non-participant homes built in the same geographic cluster (30-mile radius), normalizing results by conditioned floor area (CFA).
- **New Jersey:** The analysis compared usage for homes that received ENERGY STAR incentives to those that did not receive incentives. In general, comparison homes matched ENERGY STAR homes in terms of the most important household and housing unit characteristics.
- **Wisconsin:** The Evaluation Team conducted billing analyses of Program and non-Program homes to estimate the program's net electric and natural gas savings. Using a year of post-construction billing data from utilities where Program homes were constructed in CY 2018, the Team determined energy consumption for Program and non-Program homes. The Team used the difference in consumption per square foot between the two home types to determine the CY 2019 electric and natural gas net-to-gross (NTG) rates.
- **NEEA**: The study relied on comparing modeled results of program homes to modeled code baseline homes. With respect to the program homes, this effort incorporated a unique Northwest version of the commercially available home rating software, REM/Rate.

The other two studies (Connecticut and Massachusetts) utilized builder surveys and interviews to develop a hypothetical scenario in which the program had been canceled at the end of 2011. Findings were presented to a Delphi panel, where the panelists estimated how much less efficient homes would have been without the program. The results were compared to the programs' gross savings to estimate an overall NTG ratio.

7.2 Realization Rates and Market Effects

Realization rates and NTG research are two sides of the same coin when it comes to residential new construction evaluation. New Homes benchmarking proved to be challenging to attempt to isolate or disentangle realization rates from NTG rates. For this benchmarking, realization rates are discussed according to the application of the same approach used in this study, namely a matched comparison group and weather normalized billing analysis. So, realization rates are focused purely on the quantified—and validated—energy savings. Yet, by running a quasi-experimental design analysis, with a matched comparison group, the resulting realization rates are considered net savings, in that the analysis should reflect at least partial freeridership (FR) and participant spillover (SO) values.[21] For other benchmarked studies, however, the research is often split, one focused on more of a gross savings analysis from an engineering review of the energy impacts using calibrated building simulation models, and then secondly on program influence (i.e., NTG). This alternate approach uses a combination of freeridership and participant spillover, and possibly non-participant spillover (NPSO), to estimate overall NTG as the program realization rate. A deeper exploration of each of these topics are reviewed in Table 19 below.

Table 19. Gross and Net Realization Rates and Market Effects

	Gross	Net			
Evaluation Approach	Gross RR	FR	Participant SO	NPSO (market effects)	Other Market Effects (not NPSO)
Engineering building models	Based on calibrating building models	Surveys	Surveys	Surveys/ interviews	Delphi panels, interviews, market research
Quasi-experimental (matched comparison using billing)	Based on quasi experimental design (assumes most of the FR and SO are included w the match comp group)			Surveys/ interviews	Delphi panels, interviews, market research

7.2.1 Realization Rates of Billing Analysis Compared to Building Simulation Models

Consistent with the glossary definition, realization rates in this study are defined as the ratio of 1) evaluated energy savings (program home weather normalized billing data compared to non-program home weather normalized billing data), and 2) program claimed savings (the difference between building simulation modeled energy use of a program home and reference code home). None of the benchmarked studies implicitly discussed realization rates; the realization rates for the New Jersey study were thus assumed by dividing the evaluated energy savings (gas and electric) by the program claimed savings (calculated by dividing reported gross gas savings by the gross gas realization rate). The realization rates

[21] For a more detailed discussion of this, please see Uniform Methods Project, Chapter 21: Estimating Net Savings – Common Practices, available online at https://www.nrel.gov/docs/fy17osti/68578.pdf

for the Wisconsin study are extensions of the reported NTG values, which utilized the expected program (claimed) savings as the gross savings value and the evaluated energy savings as the net savings value.

The realization rates provided in each evaluation were quite low (Table 20), with the New Jersey evaluation reporting a realization rate of 51% for gas and 17% for electric, while the Wisconsin evaluation found realization rates of 5% for gas, and -67% for electric.[22] Each evaluation found substantially higher realization rates for gas savings compared to electric, while the New Jersey study found much higher realization rates overall.

Table 20. Benchmarked Program Realization Rates

Utility/Program	Realization Rates
New Jersey's Clean Energy Program	Gas: 51% Electric: 17%
Wisconsin – Focus on Energy Residential New Construction Offering	Gas: 5% Electric: -67%

7.3 Market Effects

Several of the benchmarked studies included spillover research to quantify market effects. The ensuing market effects of new home construction programs are important to consider when evaluating program impacts. New home construction programs can influence markets in several ways, including but not limited to the increased availability and lower cost of efficient products to builders through equipment suppliers and distributers, increased competition between builders, and increased demand for efficient products among homebuyers.

Only two of the benchmarked studies (Energize CT, Massachusetts) attempted to quantify the market effects—via estimation of non-participant spillover—of the evaluated programs (Table 21). Each of these evaluations found high levels of non-participant spillover, with Energize CT and Massachusetts reporting values of 1.3 and 1.4 respectively[23]. We present these values alongside their respective NTG values to illustrate how inclusion of non-participant spillover greatly impacts a program's NTG value and, in turn, the effective realization rate: the high levels of non-participant spillover found in the Energize CT and Massachusetts evaluations contributed to substantially higher NTG values than those found in the New Jersey and Wisconsin evaluations, which modeled energy impacts of non-participating homes but did not attempt to quantify spillover.

[22] Note that none of the realization rates presented account for freeridership or non-participant spillover in their calculations; later in the Market Effects section, we discuss how the inclusion of these metrics would likely lead to substantially higher NTG values and realization rates.

[23] The non-participant spillover values represent the net savings ratio produced by Delphi-panel builders. The ratio was determined by estimating REM/Rate energy use of homes built outside of the program built with (numerator) and without (denominator, or baseline) the program.

Table 21. Market Effects of Benchmarked Programs

Utility/Program	Non-participant Spillover	NTG	Market Effects Discussion
Energize CT – Connecticut Residential New Construction**	1.3	Overall:1.6	Yes
Massachusetts Residential New Construction**	1.4	Overall:1.9	Yes
New Jersey's Clean Energy Program	NA	Gas: 0.5 Electric: 0.3	Yes
Wisconsin – Focus on Energy Residential New Construction Offering	NA	Gas: .05 Electric: -.67	Yes

***It is worth noting, the CT and MA studies showed NTG values pre-market NPSO/market effects of 0.3 and 0.5, respectively. This is more indicative of high freeridership, as these studies did not include non-program comparison group to derive realization rates.*

While the New Jersey and Wisconsin evaluations did not attempt to quantify the market effects impacting their respective programs, the New Jersey evaluation included a discussion of the evidence of non-participant spillover, while the Wisconsin evaluation convened a Delphi panel to qualify the impacts[24]. Each evaluation concluded that, to some extent, the program had likely changed both the behavior of non-participating builders and the desires of buyers of non-program homes to the point that non-program homes are being built above code in both markets.

- **New Jersey:** Due to resource limitations, the study was not able to quantify freeridership or spillover. However, one interpretation of the programs low realization rates and NTG values is that non-participating builders in the same market segments as program home builders have had to upgrade their construction practices to effectively compete. Under this scenario, the spillover to new homes market has resulted in far greater energy and electric demand savings than were quantified in the evaluation. There is evidence that the market in New Jersey has been transformed to the point that all new homes in the current program market segments are being constructed to minimum ENERGY STAR standards.
- **Wisconsin:** The 2019 evaluation found that non-Program homes are being built above code and to a high level of efficiency. Furthermore, builder and contractor interviews suggest the Program's longevity and use of building performance contractors could be influencing residential construction practices beyond Program homes. The evaluation convened a Delphi panel, which concluded that over the course of its history the Residential New Construction offering has had an impact on the construction of non-Program homes. Panelists decided that, in the absence of the offering, a new counterfactual home would be less airtight, have a less efficient furnace, have lower insulation quality, be less likely to have a correctly sized heating or cooling system, and have a lower saturation of efficient lighting technology. A 2021 update to this

[24] The panel is reconvening at the end of the 2019-22 quadrennium to quantitatively assess market impacts, and a value is not currently available.

study[25] found additional supporting evidence for market effects, though the estimated market effects impacts were low. The 2021 study included additional interviews with program builders, delved into greater detail on builders' decisions regarding building practices, and described how the program "*may influence the efficiency of non-program homes by raising homebuyer demand for energy-efficient homes.*" This study went on to also suggest homebuyers show little interest in higher-efficiency construction, consistent with the builders interviewed in this study. As the Cadmus Focus on Energy study mentions, "*However, builders noted demand outstripped supply for new homes and homebuyers showed low interest in energy efficiency. Under these conditions, the primary pathway for market effects is likely to be contractor skills carryover*." Apex used the additional energy savings from the market effects findings from the Focus on Energy program, estimated at 2,700 MMBtu per year, and found the incremental market effects represented only 4.3% of the gross evaluated energy savings. Resulting from the findings from the above studies, FOE New Homes program is planning on adjusting the assumed code baseline home for their future program building simulation models to account for the lower observed energy use associated with these homes.[26]

- **Connecticut:** Panelists estimated that the program strongly improved duct leakage, air infiltration, and insulation installation quality in Connecticut homes; and modestly impacted insulation R-values and efficient lighting. Panelists described the program as only slightly affecting mechanical system efficiencies, and they saw limited impact on market adoption of solar PV and Net Zero designs. The program trains Connecticut market actors and requires panelists to meet advanced building practices; word-of-mouth helps spread these best practices from well-trained market actors, such as HERS raters and program builders, to those working on non-program homes.
- **Massachusetts:** The Delphi panel estimated that, if the Program had not existed between 2004 and 2011, homes completed in 2011 would have been quite a bit less efficient—both those that would have participated in the program and those that would not have participated. The Program has a moderate freeridership rate (0.53) and estimates high non-participant spillover (1.87). As a result, non-program homes are responsible for 75% of net savings in terms of MMBtu (68% of electric savings and 71% of natural gas savings). The Delphi panelists noted that the program has had a particularly strong effect on air infiltration, duct leakage, lighting, insulation installation grades[27], and some heating system efficiencies.

[25] Cadmus, July 2021, Focus on Energy Residential New Construction Market Effects, available online at https://s3.us-east-1.amazonaws.com/focusonenergy/staging/inline-files/Potential_Study-Market_Effects-Residental_New_Construction.pdf

[26] Based on conversations with the Cadmus group, the lead evaluator for this program.

[27] Raters evaluate insulation on a 1-3 scale (i.e., grades) based on the quality of the install.

8. Conclusions and Recommendations

Since 2009, Energy Trust's New Homes program has supported residential builders—through training, education, and incentives, among other support—to construct high-efficiency homes that exceed building code. The program has grown to represent approximately one-third of all new construction in Oregon.[28] Historically, to determine energy savings, the program has relied on building simulation modeling to estimate program home energy use and compare this use against a reference code-specified home, determined through a combination of REM/Rate and AXIS project tracking software. This evaluation used weather normalized billing data for program and matched comparison non-program homes, focusing on determining the accuracy of building simulation modeling and ultimately energy savings claimed by the program.

8.1 Conclusions

Conclusion 1: Building simulation modeling does not accurately reflect weather normalized energy use for program and non-program homes. This evaluation showed program homes use more energy than predicted by the building models, and are therefore less efficient, while non-program homes use less energy – and are therefore more efficient - than predicted by the building models. Analysis of weather normalized billing data showed that the REM/Rate building simulation models moderately underestimated residential electric use and significantly underestimated residential natural gas use in program homes, while slightly overestimating use in reference homes. Inconsistencies in gas use estimation between weather normalized usage and simulation model usage were likely attributable to a combination in discrepancies in the REM/Rate inputs, model updates, or outputs. These findings are consistent with a former New Homes study,[29] which also showed energy consumption estimates were inaccurate for some segments of homes, though not consistently in the same direction.

Conclusion 2: Homes built through the New Homes program save energy compared to non-program homes, though not at levels reported. The combination of divergent factors—that program homes use more energy and non-program homes use less energy than expected—means that program homes are saving less energy than expected and the program has a relatively low savings realization rate. Overall per home electric savings were 241 kWh versus 1,313 kWh claimed, resulting in a **18% electric savings realization rate**. For natural gas, overall per home savings were 35 therms versus 165 claimed, resulting in a **21% natural gas savings realization rate**. Negative realization rates for mixed-fuel households (gas space heat with electric water heat, or electric space heat with gas water heat) may be more reflective of issues with building simulation or tracking data rather than true energy use differences. Nonetheless, savings for single-heating-fuel homes also fell well below typical claimed savings, at about 60 therms per gas-heated home and 340 kWh per single heating fuel (either electric or gas) home. Claimed savings were 1129 kWh and 180 therms,

[28] The program has worked for a shorter period and in a smaller region in Washington.

[29] Cadeo Group, April 2018. EPS-HES Comparison Analysis

respectively, for realization rates of 30% for electric savings and 33% for natural gas savings.

Conclusion 3: While household attributes may drive some differences in achieved energy savings, they are not sufficient, alone, to drive the discrepancy between measured and reported energy savings. Apex segmented the analysis to investigate whether household or demographic indicators helped explain differences in energy savings and realization rates. Some groups tended to show improved realization rates over others, though no subgroups had realization rates aligned with program claims. The highest and lowest priced home groups tended to show poor realization rates, with moderate and moderate-high priced homes performing better. Realization rates increased, albeit inconsistently, with square footage, suggesting that larger homes were either less behavior-dependent or better represented by the building simulations.

Conclusion 4: The low savings realization rate across the New Homes program may be a function of a multitude of factors: poor building simulation modeling calibration, program tracking errors, uncertainty around unidentified occupancy and behavioral characteristics, increased demand for energy-efficient homes among consumers in general, and spillover to non-participating homes. This confluence of issues contributing to the low realization rates is indicative of the complexity of the new home construction process and the wide range of experiences of the various market actors. The range of experiences is evident in the limited consensus among market actors with regards to the impact and prevalence of the factors identified as impacting realization rates: for example, divergent opinions among builders with regards to the demand for efficiency among homebuyers in the market, and somewhat conflicting opinions regarding the program's contribution to above-code building practices overall.

Conclusion 5: The New Homes program may have contributed to the market transformation of residential new construction in Oregon and Washington, though more research is needed to validate this claim. This analysis found significantly lower savings relative to program claims, which is at least partly due to the lower-than-anticipated energy use of non-program homes. What is unknown at this time is the degree to which program support, incentives, training, and education may have contributed to statewide transformation of the new homes market, including homes built outside of the program. Evidence collected from program trade partner interviews suggested that the program was at least partially influential in transforming the new homes market in Oregon and Washington, while benchmarking similar programs revealed substantial support for market effects considerations. Interviews with program trade partner builders suggest the program indeed offered substantial—and sustaining—support to allow expansion of high-efficiency new construction practices. Interviewed builders believed customer indifference and unwillingness to invest meant that it was up to builders to deliver higher efficiency new construction. Some of the builders also believed the program incentives allowed them to build above code homes, making the difference in key purchasing and upgrade decisions. Yet, similar conversations with other builders revealed their motivations to build above code were based on inherent business decisions, a desire to meet or exceed market expectations, and the overall quality of above code-built homes. Further, a review of other new homes evaluations provided additional evidence that suggests programs like Energy Trust are causal drivers for transformation of new construction markets.

8.2 Recommendations

In light of the findings presented in this study, there are some unresolved questions and recommendations for Energy Trust to consider. Given the multitude of factors likely explaining the low realization rates, it will be important for the program to focus on—and to prioritize—those factors that are actionable in the short term versus those addressable through ongoing research. We have differentiated the recommendations accordingly.

1) **Recommendation to direct downstream savings impacts of the program: Future efforts may consider examining the annual energy use of new homes built during the same timeframe but in other communities outside of program areas.** The analysis did not include homes built in communities outside of the areas that included New Homes projects, by design. The benchmarked Wisconsin Focus on Energy evaluation cited above added non-program groups outside of the program areas and found marginally higher baseline non-program energy use, improving the realization rates.

2) **Recommendation to support market effects: Energy Trust may consider additional research to help identify market effects and how influential the program may be in advancing above-code construction.**

    a. **Energy Trust should consider conducting outreach from voices not covered in this evaluation, namely from tradespeople (more broadly) and builders operating outside of the program:** The builder interviews were limited to six builders (though they represented 15% of New Homes projects), and more importantly, the interviews included only participating trade ally builders. Given the interviewed builders built almost exclusively within the New Homes program (so few if any homes built outside of the program), coupled with 65% of the New Homes market built outside of the program, gaining insight into building practices from builders outside of the program would be critical to compiling evidence to establish market effects. Furthermore, given the prevalence of subcontractors and tradespeople doing much of the mechanical, envelope, and other key energy-efficiency installations, the program could benefit from hearing from this group, as this group has not been included in historical program efforts and evaluation.

    b. **Energy Trust may also consider benchmarking stringent building code states that lack new homes programs in order to refine baseline code homes.** Research could include benchmarking other states with more stringent code (per Figure 1, could include several New England states, PA, NY, MD, and DE) that LACK new construction programs. Further, this research in other regions could include builder interviews for large-production and moderate-sized builders to assess differences between regional practices relative to non-program practices. The goal of this research would be to examine whether buildings in stringent code states that lack New Homes programs still build above code (or not) to help refine the assumed code baseline home.

    c. **Energy Trust may consider collecting primary data through onsite research.** Similar to other Energy Trust research, including recent code compliance studies, Energy Trust could also consider conducting a site study, whereby technicians visited construction sites in both program and non-program homes to verify meeting or exceeding codes. While expensive, this study could help determine how building

practices differ between program and non-program homes, with the primary objective to validate this reports findings. Alternatives or complementary research could also include ride-alongs with key trades people on sizing and quality installs of equipment.

3) **Recommendation to address some of the program-side drivers behind savings realization rates: Energy Trust should conduct an internal review and validation of the process associated with AXIS database data entry and program verifiers**. As noted in the conclusion above, a multitude of factors may be impacting the simulated energy use and resulting energy savings, including poor building simulation modeling calibration, program tracking errors, and the massaging of model inputs by verifiers. In particular, the assignment of gas heat fuel appeared to be a key driver in producing negative realization rates, potentially indicating the misclassification of system types.

4) **Recommendation to adjust the assumed baseline "code" home**: If the program is unable to garner sufficient evidence to support substantial market transformation impacts, Energy Trust may also consider taking steps to calibrate the REM/Rate models with the energy use values reported here. This could include revising the assumed baseline code home accounting for the lower weather normalized energy use found in this study. Adjusting baseline "code" homes in building simulation models is what the Wisconsin Focus on Energy program is doing after several years and multiple studies attempting to explain lower than anticipated evaluated realization rates.

5) **Recommendation to evolve and futureproof the program: Consider alternate program design opportunities to advance building practices beyond current program requirements.** Energy Trust may consider pioneering more advanced new construction opportunities like net-zero building paths, microgrid enabled communities, passive-house design and developments, or even greater tiered options to exceed current stretch code requirements. These efforts should include establishing baseline building practices and logic models with key performance criteria to support future market transformation claims.

Appendix 1: Analysis Attrition

Table 22. Program Home Attrition

Step	Total Sites	Gas Sites	Electric Sites	Bills per Site	Percent Remaining
Initial UCI Data	26,416	24,862	18,192	126	**100%**
Calendarized UCI Data	26,347	24,813	18,078	123	**100%**
After Data Quality Filters (negatives, zero kWh, < 15 days)	26,345	24,813	18,076	120	**100%**
After Outlier Filters	26,337	24,808	18,066	119	**100%**
Found in Estated Data	23,130				**88%**
After Modeling	21,823	20,476	16,043		**83%**
After Joining with Matches	21,552	20,213	15,822	108	**82%**
After Filtering Out Solar and >1 Match	17,491	15,958	13,481	103	**66%**
After Screening for Matching Heating Fuels	14,569	13,532	10,663		**55%**

Table 23. Non-Program Home Attrition

Step	Total Sites	Gas Sites	Electric Sites	Bills per Site	Percent Remaining
Matches in Estated Data	22,228				**100%**
Calendarized UCI Data	20,015	17,615	13,582	129	**90%**
After Data Quality Filters (negatives, zero kWh, < 15 days)	20,014	17,615	13,580	126	**90%**
After Outlier Filters	20,009	17,611	13,575	124	**90%**
After Modeling	18,478	16,009	12,399		**83%**

Appendix 2: Staff Interview Guide

Staff Interview Opening

Thank you for taking the time to talk with me today. As we approach solidifying the impact findings with this evaluation, we want to make sure we have a good understanding of the New Homes program. We understand you have been involved in the design or the day-to-day implementation of the program, and we want to hear your perspective on how things have gone so far.

Do you mind if I record our conversation? The recording is just to help with my notetaking. We won't share it with anyone, and we won't identify any individual respondents in our reporting.

Do you have any questions before we start?

Background

1. Please tell me about your role for the New Homes program *[Probe on years at role – see if their role has changed]*
2. What have been the key changes to the New Homes program over the past decade that are likely to have influenced program participation?
    a. Similarly, what key changes may have impacted program savings claimed per home or modeled energy usage?
    b. [*If not addressed, probe on model details*] Can you speak to changes related to building simulation modeling or engineering related changes that could have driven changes in modeled energy usage and savings claims?
3. [*If not addressed:*] How, if at all, has the way the program works with builders and their subcontractors changed along with the program?
4. [*If not addressed:*] How, if at all, has the way the program works with verifiers changed with the program?
5. [*If not addressed:*] In what ways does the program anticipate or adapt to changes to building codes *[if needed, such as establishing new requirements*]?
6. In what ways does the New Homes program differ from other New Homes programs? [*Probe: in what ways do you believe this program is an improvement over others*]

Changes to Building Practices

7. What differences, if any, have you seen over time in the types of homes in the program and the types of measures installed? [Probe on home type/size, home styles, neighborhood type, location, heating and water heating fuels and technologies]

1. *Similarly, what differences, if any, have you seen over time in non-program homes?*
2. *Similarly, what differences, if any, have you seen over time in the types of measures builders are installing?*
3. *How have code changes affected builder practices? How have these changes impacted program homes? Non-program homes?*
4. *To what extent does building a program-qualified home require the builders to modify their standard building practices?*

8. To what extent does building a program-qualified home require the builders to modify their standard building practices?

    a. Do you see New Homes projects and program activities influencing building practices outside the program? Why do you think that is?

    5. *Can you provide specific examples of program influenced changes to building practices?*
    6. *Has this effect increased or decreased over time?*
    7. *Probe on the most common reasons homes may fail to qualify*

9. What shifts, if any, have you seen in the ways builders are engaging with the program?

    8. [*If not addressed:*] Are there participating builders that have become more or less active in the program? [*If so:*] Why do you think that is?
    9. [*If not addressed:*] Have new builders sought to join the program? [*If so:*] What motivated them to join?

Results of this evaluation

10. How do you anticipate that the electric and natural gas savings results from this impact evaluation will compare to what the program has reported? Why do you think that is?

    10. [*If not addressed:*] Are there other impact studies you are aware of that informed your perspective on the results? [*If so:*] What makes you think results for the Energy Trust New Homes program would (or would not) be different?

11. For this evaluation, our team developed a carefully matched comparison group of code-built, new construction, non-program homes that were as similar as possible to the program homes. We compared the energy use of both groups with the predicted energy use from program-generated building models. Then, we compared program home energy use to the non-program home energy use. The draft results show program homes are not as efficient as predicted by the building models, while non-

program homes are more efficient than predicted by the building models. The combination of these divergent factors means that program homes are saving less energy than expected and the program has a relatively low savings realization rate.

Is this surprising to you?

11. Please explain why the results are surprising [or not surprising].

12. What do you think could explain these results? What do you believe may be the key drivers behind these findings?

    12. Why do you think these factors are drivers behind the differences in actual versus predicted energy use?

13. What, if any, changes to the New Homes program do you think could improve these realization rates?

14. Our current plan is to provide results based on code/year, heating/cooling system type, state, home size, among other variables. Do you believe there may be other segments we should consider for reporting the savings? [*Probe: why do you believe this would help explain underlying differences in savings?*]

Closing

15. What are the most important things you have learned about working with builders and verifiers for the New Home program?

16. What do you see as the greatest strengths of the New Homes program?

17. What do you see as the program's greatest challenges?

    13. How, if at all, would you change the program to better meet those challenges?

18. How do you see the New Homes program evolving as you look to the future?

19. What, if any, feedback do you have that may help this evaluation and other New Home programs improve?

20. Is there anything about specific builders that you are aware of to help us with interview sampling that isn't obvious from the list?

    14. For example, do we want to know if there are any smaller builders that are particularly engaged with the program?

21. Those are all the questions I had prepared. Is there anything else you think it's important for me to know as we move forward with the study?

Appendix 3: Builder Interview Guide

Interview Opening

Thank you for taking the time to talk with me today. We understand your company, [builder company name] has participated in the Energy Trust New Homes program, and we want to hear your perspective on your experience with the program and to learn more about your building practices in general. Do you have time now or should we schedule a time to discuss, we'll likely need between 45 minutes to an hour. [RESCHEDULE IF NEEDED]

Do you mind if I record our conversation? The recording is just to help with my notetaking. We won't share it with anyone, and we won't identify any individual respondents in our reporting.

Do you have any questions before we start?

Background

22. Please tell me about your company [*Probe on: do they strictly build residential, primary types of homes built, how long in business, any certifications, ie LEED*]
    a. Approximately what percent of your residential new construction projects are spec versus custom homes?
23. How familiar are you with the New Homes program (probe on home qualification criteria, incentives, documentation).
    a. Approximately what percent of your residential new construction projects qualify for New Homes incentives? [Probe – do you have homes that may qualify yet are not submitted for the program?]
24. Have there been any program changes that affect qualifying program homes energy use and resulting energy savings?
25. (If yes and they describe) How does this change affect program homes' energy use and savings, compared to a typical newly built home outside of the program?

Changes to Building Practices

26. In what ways, if any, do you design the homes you build that do not qualify for Energy Trust program incentives to exceed energy code?
    a. Describe to me some of the key upgrades or changes you might make to have a newly constructed home exceed code?
    b. How would this differ from homes built to meet New Homes program qualifications?
    c. Do these upgrades to meet New Homes requirements have an impact on the cost of these projects relative to just code-built homes?

d. How challenging are program qualified new homes to build relative to code homes?

27. What decisions to meet New Homes guidelines does the homeowner make, versus you as the builder? (probe a known suggestion)

    a. What decisions are completely your decisions as the builder?

28. Have any of the building practices you developed to meet New Homes criteria been used for other, non-program homes? In what ways?

    a. Does this differ based on whether the home is a spec or custom-built home?

We are going to switch gears and speak more broadly about the construction industry and building code.

29. What are some trends in what consumers want in their new construction homes, in the last few years?

30. Do you believe building code has kept up, outpaced, or fallen behind building practices?

31. Is your belief that standard built homes are built to just meet code, or would there be rationale where homes may exceed code? In what ways?

Results of this evaluation

32. Our company, Apex, has been conducting an evaluation to determine the energy impacts of this program. Our team developed a baseline comparison group of new construction, non-program homes that were as similar as possible to the program homes. We used this baseline comparison group to compare how well the program-generated building models predicted energy use in baseline homes. Then, we compared program home energy use to the baseline non-program home energy use. The draft results show program homes are not as efficient as predicted by the building models, while non-program homes are more efficient than predicted by the building models. The combination of these divergent factors means that program homes are saving less energy than expected.

    Is this surprising to you?

    a. Please explain why the results are surprising [or not surprising].

33. What do you think could explain these results? What do you believe may be the key drivers behind these findings?

    a. Why do you think these factors are drivers behind the differences in actual versus predicted energy use?

34. What, if any, changes to the New Homes program do you think could increase participating home energy savings?

Closing

35. What do you see as the greatest strengths of the New Homes program?
36. What do you see as the program's greatest challenges?
    a. How, if at all, would you change the program to better meet those challenges?
37. What, if any, feedback do you have that may help this evaluation and other New Home programs improve?
38. Those are all the questions I had prepared. Is there anything else you think it's important for me to know as we move forward with the study?

Appendix 4: Additional Breakouts

Table 24. Program Home Annual Weather Normalized versus Simulated Natural Gas and Electric Usage, by Code Version and System Type

State	Fuel	System Type	Code Version	Number of Homes	WxN Usage	Simulated Usage	WxN Usage vs. Simulated
OR	Electricity	All Electric	OR2011	307	12,004	12,055	0%
OR	Electricity	All Electric	OR2014	336	11,346	9,724	17%
OR	Electricity	All Electric	OR2017	139	10,422	8,747	19%
OR	Electricity	All Gas	OR2011	2,427	7,740	7,267	7%
OR	Electricity	All Gas	OR2014	3,394	7,711	7,530	2%
OR	Electricity	All Gas	OR2017	1,070	7,305	6,124	19%
OR	Electricity	Gas Heat Non-Gas WH	OR2011	429	8,821	8,926	-1%
OR	Electricity	Gas Heat Non-Gas WH	OR2014	1,585	9,364	8,713	7%
OR	Electricity	Gas Heat Non-Gas WH	OR2017	634	8,735	6,637	32%
OR	Gas	All Gas	OR2011	2,690	563	482	17%
OR	Gas	All Gas	OR2014	4,036	591	445	33%
OR	Gas	All Gas	OR2017	1,347	582	478	22%
OR	Gas	Gas Heat Non-Gas WH	OR2011	429	259	234	11%
OR	Gas	Gas Heat Non-Gas WH	OR2014	1,612	337	289	17%
OR	Gas	Gas Heat Non-Gas WH	OR2017	694	338	295	15%
WA	Gas	All Gas	WA2012	445	583	402	45%
WA	Gas	All Gas	WA2015	1,800	518	393	32%

Table 25. Non-Program Home Annual Weather Normalized versus Simulated Natural Gas and Electric Usage, by Code Version and System Type

State	Fuel	System Type	Code Version	Number of Homes	WxN Usage	Simulated Usage	WxN Usage vs. Simulated
OR	Electricity	All Electric	OR2011	793	12,242	15,019	-18%
OR	Electricity	All Electric	OR2014	637	12,734	14,002	-9%
OR	Electricity	All Electric	OR2017	324	10,417	12,230	-15%
OR	Electricity	All Gas	OR2011	6,661	7,728	7,897	-2%
OR	Electricity	All Gas	OR2014	8,695	8,215	8,609	-5%
OR	Electricity	All Gas	OR2017	2,706	7,669	6,720	14%
OR	Electricity	Gas Heat Non-Gas WH	OR2011	845	9,232	9,831	-6%
OR	Electricity	Gas Heat Non-Gas WH	OR2014	2,883	9,335	10,333	-10%
OR	Electricity	Gas Heat Non-Gas WH	OR2017	1,159	8,893	8,861	0%
OR	Gas	All Gas	OR2011	7,478	622	658	-5%
OR	Gas	All Gas	OR2014	10,632	651	649	0%
OR	Gas	All Gas	OR2017	3,585	621	697	-11%
OR	Gas	Gas Heat Non-Gas WH	OR2011	913	258	342	-25%
OR	Gas	Gas Heat Non-Gas WH	OR2014	3,032	314	417	-25%
OR	Gas	Gas Heat Non-Gas WH	OR2017	1,271	310	399	-22%
WA	Gas	All Gas	WA2012	1,267	604	575	5%
WA	Gas	All Gas	WA2015	4,478	562	498	13%

Table 26. Program Home Annual Weather Normalized versus Simulated Natural Gas and Electric Savings, by Code Version and System Type

State	Fuel	System Type	Code Version	# of Homes	# of Matches	Simulated Savings	WxN Savings	WxN Savings CI (90%)	Realization Rate
OR	Electricity	All Electric	OR2011	307	793	2,964	239	1.5%	8%
OR	Electricity	All Electric	OR2014	336	637	4,278	1388	1.2%	32%
OR	Electricity	All Electric	OR2017	139	324	3,483	-5	2.2%	0%
OR	Electricity	All Gas	OR2011	2,427	6,661	631	-12	1.8%	-2%
OR	Electricity	All Gas	OR2014	3,394	8,695	1,079	504	1.0%	47%

OR	Electricity	All Gas	OR2017	1,070	2,706	596	364	3.4%	61%
OR	Electricity	Gas Heat Non-Gas WH	OR2011	429	845	905	411	3.5%	45%
OR	Electricity	Gas Heat Non-Gas WH	OR2014	1,585	2,883	1,620	-29	1.1%	-2%
OR	Electricity	Gas Heat Non-Gas WH	OR2017	634	1,159	2,223	159	1.3%	7%
OR	Gas	All Gas	OR2011	2,690	7,478	176	59	0.3%	34%
OR	Gas	All Gas	OR2014	4,036	10,632	204	60	0.2%	29%
OR	Gas	All Gas	OR2017	1,347	3,585	219	39	0.5%	18%
OR	Gas	Gas Heat Non-Gas WH	OR2011	429	913	107	-1	0.9%	-1%
OR	Gas	Gas Heat Non-Gas WH	OR2014	1,612	3,032	128	-22	0.5%	-18%
OR	Gas	Gas Heat Non-Gas WH	OR2017	694	1,271	104	-28	1.1%	-27%
WA	Gas	All Gas	WA2012	445	1,267	173	21	0.8%	12%
WA	Gas	All Gas	WA2015	1,800	4,478	105	44	0.7%	42%

Table 27. Annual Weather Normalized versus Simulated Natural Gas and Electric Usage, excluding Dual-Fuel Homes, by Code Version and System Type

State	Fuel	System Type	Code Version	# of Homes	Weather Normalized Usage	Weather Normalized Usage (Matches)	WxN Savings	RR
OR	Electricity	All Electric	OR2011	307	12,004	12,242	239	8%
OR	Electricity	All Electric	OR2014	336	11,346	12,734	1,388	32%
OR	Electricity	All Electric	OR2017	139	10,422	10,417	-5	0%
OR	Electricity	All Gas	OR2011	2,427	7,740	7,728	-12	-2%
OR	Electricity	All Gas	OR2014	3,394	7,711	8,215	504	47%

OR	Electricity	All Gas	OR2017	1,070	7,305	7,669	364	61%
OR	Gas	All Gas	OR2011	2,690	563	622	59	34%
OR	Gas	All Gas	OR2014	4,036	591	651	60	29%
OR	Gas	All Gas	OR2017	1,347	582	621	39	18%
WA	Gas	All Gas	WA2012	445	583	604	21	12%
WA	Gas	All Gas	WA2015	1,800	518	562	44	42%