

Conservation Advisory Council Agenda

September 18, 2019 1:30 p.m. – 4:30 p.m. 421 SW Oak St., #300, Portland, OR 97204

Follow-ups from previous meetings:

Draft strategic plan feedback and next steps

1:30 Welcome, old business and short takes (information)

- Introductions, agenda review and approve July 31 meeting minutes
- Review previous meeting follow-ups
- Social hour with board of directors and advisory councils, Tuesday, October 15, 5:30 – 7:30 p.m. at the Independent

1:40 Year-end forecast (Q&A)

Director of Energy Programs Peter West will highlight progress to achieving the 2019 annual energy efficiency goals. Questions welcome from members.

1:50 2020 action plans preview (Q&A)

The council will hear about 2020 action plan development for each sector, including overarching context, new strategies for 2020 and any significant changes from 2019. Presenters are Residential Program Manager Marshall Johnson, Commercial Sector Lead Oliver Kesting and Industrial/Ag Sector Lead Amanda Potter. This information will prepare the council for the public budget workshop in October.

2:35 Break

2:50 2020 program and measure changes (discussion)

As a follow-on to the July meeting, staff will provide further details on measure and program changes in development for 2020, including a status on measures with OPUC cost-effectiveness exception requests. This information is more detailed than what will be covered at the public budget workshop.

- Residential program (Scott Leonard)
- Existing Multifamily program (Kate Wellington)
- Existing Buildings program (Jay Olson or Oliver Kesting)
- Commercial and industrial lighting (Jay Olson, Jessica Kramer and Kate Wellington)

3:50 Board nominating committee (discussion)

Director Debbie Kitchin, chair of the board's nominating committee, will present an overview of the current member composition of the board and host a discussion with council members on the skills, experience and perspectives the nominating committee should consider when recruiting for board members.

4:20 Public comment

4:30 Adjourn

Meeting materials (agendas, presentations and notes) are available online.

Next meeting: Our next meeting is the budget workshop with the board and other advisory councils on Wednesday, October 16, 2019. The last meeting of the year is Wednesday, November 20. Hannah will out on leave and Peter will be the meeting facilitator.



Conservation Advisory Council Meeting Notes

July 31, 2019

Attending from the council:

Holly Braun, NW Natural

Brent Coleman (for Tyler Pepple, Alliance of

Western Energy Consumers)

Warren Cook, Oregon Department of

Energy (phone)

Kari Greer, Pacific Power (phone)

Julia Harper, Northwest Energy Efficiency

Alliance

Tim Hendricks, Building Owners and

Managers Association

Anna Kim, Oregon Public Utility

Commission

Jason Klotz, Portland General Electric

Lisa McGarity, Avista (phone)

Kerry Meade, Northwest Energy Efficiency

Council (phone)

Dave Moody, Bonneville Power

Administration

Alyn Spector, Cascade Natural Gas

Attending from Energy Trust:

Kathleen Belkhayat

Melanie Bissonnette Michael Colgrove

Amber Cole

Ryan Crews

Hannah Cruz

Jack Cullen

Mana Haeri

Fred Gordon

Jackie Goss

Marshall Johnson

Oliver Kesting

Steve Lacey

Others attending:

David Beaulieu, TRC

Rachel Dawson, Cascade Policy Institute

Jon Eichler, ICF

Laura Hall, ICF

Scott Leonard

Spencer Moersfelder

Alex Novie

Thad Roth

Dan Rubado

Peter Schaffer

Kenii Spielman

Cameron Starr

Julianne Thacher

Jay Ward

Kate Wellington

Peter West

John Volkman

Matt Artell, Delta Connects

Lindsey Hardy, Energy Trust board Genevieve London, Stillwater Energy

Joe Marcotte, Lockheed Martin Alan Meyer, Energy Trust board

Brian Sipe, CLEAResult

1. Welcome, Old Business and Short Takes

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

Hannah introduced the agenda. The June meeting minutes were approved with no changes.

2. 2020 Organizational Goals

Topic summary

Michael Colgrove described the purpose and intent of Energy Trust's 2020 organizational goals and how they drive the organizational annual budget. These goals were informed by the draft 2020-2024 Strategic Plan and will help the organization start to make progress toward the strategic plan focus areas.

Goals include: 1) meet savings and generation targets and create future opportunities, 2) use guidelines to determine resource investments in community efforts, 3) provide information to policymakers, agencies and implementers, 4) strengthen internal innovation capabilities and develop new proposals and 5) make operational improvements. Areas of emphasis for each goal were also explained; they serve to help guide staff in prioritizing activities but do not encompass all activities for the coming year.

Discussion

Conservation Advisory Council asked questions and gave feedback about Energy Trust's 2020 organizational goals.

Questions were about the definition of higher-value renewable energy and energy efficiency (Dave Moody), what is meant by capacity building for community-based organizations (Holly Braun), and how Energy Trust is balancing near-term concerns such as cost-effective constraints and staffing constraints with longer-term needs to innovate and evolve (Holly Braun).

Alan Meyer requested that the language in one of the sub-goals be changed from "coordinate utility efforts" to "coordinate with utility efforts." Staff will make the change.

Members discussed the term "clean energy" used in the goals to refer to energy efficiency and renewable energy, with Holly Braun, Alyn Spector and Kari Greer voicing concerns that the term could be confusing for customers because it can refer to a broader set of clean energy actions and could be understood to exclude energy efficiency.

Next Steps

Conservation Advisory Council will see these goals reflected in the draft budget and action plan presented at the October budget workshop, and Energy Trust will seek feedback from members at that workshop.

3. 2020 Budget Engagement Schedule

Topic summary

Staff reviewed the 2020 budget engagement schedule and key dates, including when the Conservation Advisory Council will be engaged and have opportunities for feedback. Staff highlighted how changes from last year's budget engagement process were incorporated into this year's schedule, including earlier engagement with utilities, publishing the draft budget earlier and providing more time for the public and stakeholders to provide comments, and focusing council meetings on major program changes.

Discussion

Jason Klotz asked about opportunities for early utility engagement, which will occur in August.

Next Steps

Staff will present major program changes at the September meeting. Conservation Advisory Council was encouraged to review the draft budget when posted online on October 8, attend the board budget workshop on October 16 and submit feedback.

4. 2020 Measure and Cost-Effectiveness Exceptions

Topic summary

Planning and Program staff discussed the major and minor cost-effectiveness exceptions requests submitted to the Oregon Public Utility Commission with impact on 2020 measure offerings. Staff provided details on the measure exception requests and the impact of each measure on their respective program savings portfolio. Staff also described changes to some measures to ensure cost-effectiveness. The presentation focused on requests related to ductless heat pumps and insulation in the Residential and Existing Multifamily programs, hydronic heat circulators and Existing Multifamily in-unit installation of lighting.

Discussion

Conservation Advisory Council members discussed and asked questions about measure exceptions.

Members discussed the ductless heat pump cost-effectiveness exceptions including requirements that could bring savings back up to expectations (Dave Moody), potential Wi-Fi capabilities and controls integrations (Anna Kim), alignment with Bonneville Power Administration offerings (Dave Moody) and alternative equipment options (Holly Braun). Holly Braun noted that ductless heat pumps have been under exception for several years.

Members discussed insulation exceptions, including the history of exceptions (Julia Harper) and consideration of additional non-energy benefits, such as comfort (Holly Braun) and noise reduction (Jason Klotz), and impact on multifamily and low- and moderate-income customers (Alan Meyer). Jason Klotz expressed interest in PGE collaborating with Energy Trust to quantify the value of insulation upgrades at peak times and incent insulation as part of PGE's demand response efforts.

Members asked about Energy Trust's planned collaboration with Community Action Partnership agencies to increase energy savings for low- and moderate-income customers, including about additional benefits expected from collaboration (Holly Braun) and how savings will be claimed by Energy Trust and Oregon Housing and Community Services (Alan Meyer). Lisa McGarity suggested Energy Trust consider a bulk-buying strategy to reach underserved rural customers.

Members asked about potential impact that discontinuing LED incentives could have on the Existing Multifamily offering of in-unit installation of lighting, showerheads and faucet aerators and distribution of advanced power strips (Alan Meyer). If the cost-effectiveness exception request is not approved, Energy Trust staff will look at options to redesign the offering to continue other cost-effective measures, which would likely be a leave-behind kit for maintenance staff to install. Savings and participation rates are expected to decline with a leave-behind offering.

Next Steps

Staff will provide an update on the status of the cost-effectiveness exception requests at the September meeting. Anna Kim expects that two of the major exceptions will be presented to the commission in early September for approval.

Marshall Johnson will reach out to the gas utilities to discuss possibilities regarding collaboration with low-income programs.

5. Eastern Oregon Program Outreach Strategy

Topic summary

Staff provided an update on a program outreach strategy to better reach and serve customers in Eastern Oregon, including enhanced program offers and targeted marketing and outreach efforts to reach residential and business customers in Pendleton, Hermiston and Ontario.

Discussion

Conservation Advisory Council discussed barriers to participation for rural customers, such as lower wages, higher energy burdens (Lisa McGarity) and long drives for trade allies to serve customers (Tim Hendricks).

Holly Braun and Alan Meyer commended staff for pursuing enhanced offerings and outreach efforts to serve Eastern Oregon communities.

Lisa McGarity suggested Energy Trust consider collaborating with Idaho Power for Eastern Oregon outreach efforts, and Julia Harper suggested a contact at Idaho Power.

Anna Kim wondered if incentives for companies in rural areas translate into financial benefits for the community. Staff noted efforts are focused largely on small and medium businesses and explained that siting large national businesses in rural communities has a positive local economic impact.

Alan Meyer suggested Energy Trust consider additional grassroots outreach to residents of rural communities.

Next Steps

Hannah Cruz will email members a link to a video featuring an Eastern Oregon project with Yellowhawk Tribal Health Center.

6. Commercial Pay for Performance Design Update

Topic summary

Staff provided an update on a design revision being considered for the commercial Pay for Performance offer for 2020. Pay for Performance is a way of paying for validated energy savings at the meter. Energy Trust's Pay for Performance pilot is a transactional approach to achieving savings, as opposed to its commercial Strategic Energy Management offering, which is an organizational approach to achieving savings.

Discussion

Tim Hendricks shared that he worked on the 1000 Broadway building that participated in the Pay for Performance pilot in 2016, and he noted several challenges: the contract, the limited timespan to sign up projects and the time to wait for incentives.

Members discussed the timing of incentive payments (Tim Hendricks and Holly Braun), which would change from three years to one year. Tim suggested that a one-year payment schedule would help the offering be more successful.

Holly Braun asked about the persistence of savings from Pay for Performance projects and wondered if some incentives should be reserved for payment after one year. Tim Hendricks explained that from his experience managing buildings, changes implemented in one year would persist over the next several years.

Alan Meyer asked if customers could change rate schedules as a result of participation in a Pay for Performance offering, and staff explained that this is prohibited.

Kerry Meade asked if a project must be cost-effective overall or if all individual measures must also be cost-effective. Staff responded that projects are only required to be cost-effective overall.

Julia Harper offered that Northwest Energy Efficiency Alliance is interested in collaborating with Energy Trust to overcome common Pay for Performance barriers.

Alan Meyer asked if Pay for Performance reaches customers that are not currently being served by Energy Trust's Strategic Energy Management, and staff said yes. Some companies don't have the infrastructure needed to participate in Strategic Energy Management. Pay for Performance helps these customers achieve operations and maintenance savings in addition to capital improvements.

Next Steps

Staff will provide future Pay for Performance updates if requested by Conservation Advisory Council.

7. Public Comment

There was no public comment.

8. Meeting Adjournment

The meeting adjourned at 4:45 p.m. The next meeting is September 18, 2019.



2020 Budget Engagement Schedule with CAC, RAC and DAC

As a nonprofit organization investing utility customer funds, Energy Trust of Oregon conducts an open annual budgeting and planning process. We develop an annual budget and two-year action plan collaboratively with our five utility partners, and we ask for feedback from the board of directors, advisory councils, Oregon Public Utility Commission, utilities, community organizations, other stakeholders and the public. We value and appreciate all feedback and insights.

Budgeting for Energy Efficiency and Renewable Energy

Guided by the draft 2020-2024 Strategic Plan, the budget sets annual revenues, expenditures and organizational goals that include energy-saving goals and renewable generation goals. The budget is to deliver energy-efficiency and renewable energy programs for investor-owned utilities in Oregon, energy-efficiency programs for NW Natural in SW Washington and on a subcontract for the state's Community Solar Program.

Activities needed to achieve the organizational goals, acquire all identifiable cost-effective energy efficiency and generate renewable energy from small-scale systems are detailed in program and support group action plans. There are separate action plans for the programs delivered in Oregon, the two programs delivered in NW Natural's Washington territory and for the Community Solar Program subcontract. Each action plan lists major strategies, key activities, expected changes for 2021 and other contextual information.

Budget Process Overview

We start developing the budget in the summer of each year. We work with each of our five partner utilities and preview to them in August major changes and new activities for the upcoming year.

We provide high-level overviews of program and support group action plans to our three advisory councils in September: Conservation Advisory Council, Diversity Advisory Council and Renewable Energy Advisory Council. These meetings are open to the public.

We assemble a comprehensive draft budget with two-year action plans by the end of September. This budget package is posted for public review and comment in early October, and our Executive Director Michael Colgrove presents on the budget at a public workshop in October with key attendees being the board of directors and our three advisory councils. Comments are solicited from the public and stakeholders through these meetings and our website, where the draft budget and a recorded presentation are available. Staff also present to OPUC commissioners in early November at a public meeting.

All feedback is considered as staff completes revenue discussions with each utility in October and refines the draft budget throughout November. The board acts on a final proposed budget in December, and the final budget is posted online and submitted to the OPUC by year-end.

Key Dates for CAC, RAC and DAC

July

- Staff determine new activities for 2020 and identify significant changes from 2019 budget.
- July 31 public meeting: CAC: early information on measure reviews.

September

- September 17 public meeting: DAC; overview of budget process and schedule.
- September 18 public meeting: CAC and RAC; high-level description of what is driving
 activities in draft program action plans. At CAC, update on measure reviews, including status of
 OPUC cost-effectiveness exception requests.

October

- October 8: Draft budget posted on www.energytrust.org/budget.
- October 9: Public comment period opens; CAC, RAC and DAC members encouraged to submit comments. Announcements and link to budget package emailed to CAC, RAC, and DAC.
- October 16 public meeting: Budget workshop with board, CAC, RAC, DAC, community-based
 organizations and the public. Draft budget and action plans discussed with an executive summary
 presentation followed by participatory workshop with staff to review program and support group
 activities.
- October 30: Public comment period closed.

November

• **November 20 – public meeting**: CAC and RAC; review significant changes to draft budget, if any.

December

- **December 5:** Final proposed budget posted on www.energytrust.org/budget.
- **December 13 public meeting:** Board of Directors; final proposed budget and action plan presented for board consideration and vote of approval.
- December 31: Board-approved budget submitted to OPUC and posted on www.energytrust.org/budget.

Forecasted 2019 Results

| | 2019 Goal | 2019 Forecast | % of Goal |
|----------------------------|-----------|---------------|-----------|
| PGE (Efficiency) | 33.5 aMW | 30.4 aMW | 91% |
| Pacific Power (Efficiency) | 19.7 aMW | 19.6 aMW | 99% |
| NW Natural (OR) | 5.17 MMTh | 4.78 MMTh | 93% |
| NW Natural (WA) | 0.37 MMTh | 0.37 MMTh | 100% |
| Cascade Natural Gas | 0.51 MMTh | 0.54 MMTh | 106% |
| Avista | 0.36 MMTh | 0.38 MMTh | 104% |

^{*} Values are in net savings



Preview of Draft 2020 Action Plans Conservation Advisory Council September 18, 2019



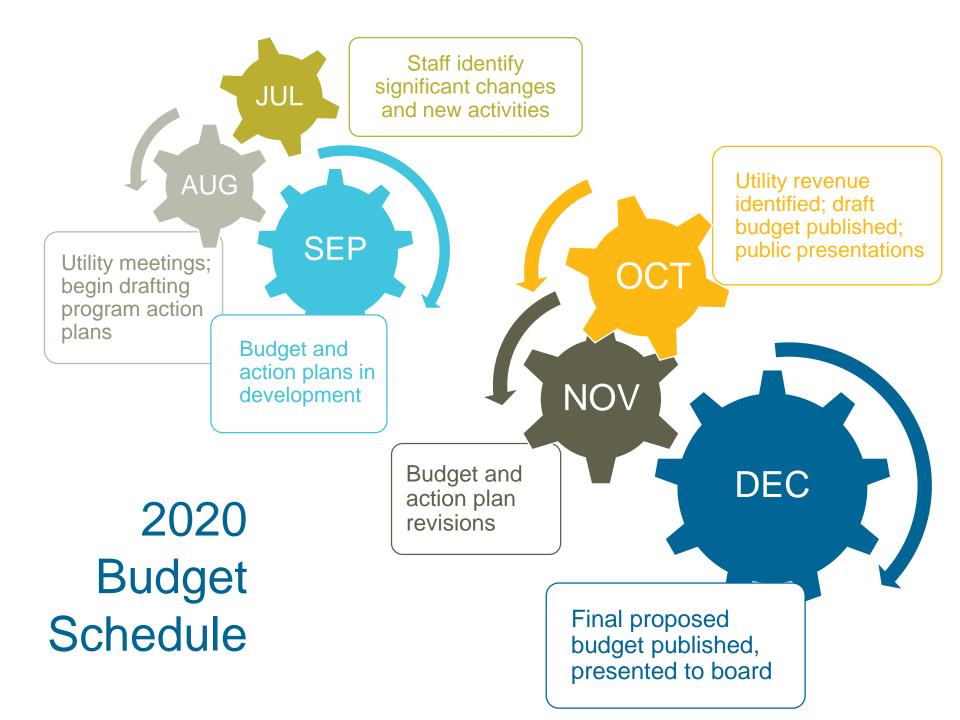
Agenda

Reminder on where we are in the process

Residential Sector

Commercial Sector

Industrial and Agriculture Sector





Residential Sector

Residential Program Context

- Federal retail lighting standards will not be implemented
- New construction savings decline
 - Fewer new home starts
 - Savings per home decline as baselines increase
 - New code implementation will drive market transformation savings
- HVAC impacts
 - Electric market-rate declining
 - Gas furnaces relatively flat



Residential Strategic Focus

- Expand participation and achieve diversity, equity and inclusion goals through partnerships with community organizations, low-income implementers and utilities
- Expand utility-driven programs focus on targeted load management and demand response initiatives
- Shift HVAC design toward fixed-price offers, income-qualified programs and rental properties
- Continue to expand retail and distributor offers

Residential Program Changes and New Opportunities

- New construction
 - Implementing net zero and grid smart pathways
 - New code development for adoption in 2021
- Assess new opportunities
 - New measures
 - Pilots and research
- Evolve retail engagements





Commercial Sector

Commercial Programs and Services Context

- Savings are decreasing
 - Fewer new, large customer opportunities
 - Lighting savings decreasing
 - Boiler savings decreasing
 - Strong economy/labor shortages divert customer attention
 - Construction leveling off
- New commercial code
- Focus on working with more small-to-medium customers



Commercial Programs and Services Key Activities

- Expanding regional outreach
- Collaboration
- Community support and targeted load management efforts with utilities
- New Strategic Energy Management cohort



Commercial Programs and Services New Activities and Changes

- More activity in schools
- Pilots
- Location specific incentives
- Revised Pay-for-Performance Offering
- Release RFP for Multifamily, Existing Buildings and commercial and industrial lighting





Industrial Sector

Industrial Programs Context

- Savings are decreasing
 - Fewer new, large customer opportunities
 - Lighting savings decreasing
 - Strong economy/labor shortages diverting customer attention
- Focus on working with more small-to-medium customers
- New lighting strategy



Industrial Programs and Services New Strategies

- Release RFP for commercial and industrial lighting
- Network Lighting Controls Pilot
- New direct install pipe insulation offering
- Strategic Energy Management evolution continues
- Assess and implement strategies for hemp market



Industrial Programs and Services Changes in 2020

- Considering increasing custom and lighting incentives
- Continue/expand marketing and outreach to small/medium customers
- Assess/expand streamlined technical study process
- Continue to add new standard measures
- Expand support for community efforts including outreach and C&I TLED direct install





Thank You

www.energytrust.org/budget





2020 Residential Measure Updates September 18, 2019



Agenda

New measures

- Grow lights
- Central air conditioning
- Net zero/smart grid interactive technology
- New manufactured homes

Measure changes

- Ductless heat pump incentives
- Savings Within Reach & rentals
- Retail lighting
- Smart thermostats
- EPS new construction
- Manufactured homes air and duct sealing
- Insulation

New

Grow lights

Description

Residential Cannabis Integrated LED Grow Fixtures used by indoor growers in a residential setting (i.e., not production or industrial grow operations)

Delivery

Brick and mortar retail locations, point of purchase incentives

Incentive

Tiered incentive base on watt equivalency

Next steps

Launch Jan. 1, 2020 or sooner

Central Air Conditioning

Description

Residential Central Air Conditioning, including multifamily 2-4 unit and side-byside; includes both new and replacement equipment

Delivery

Trade ally contractors and non trade ally contractors

Incentive

\$250 for 15+ SEER and 12+ EER ratings

Next steps

Offer soft-launched through trade allies in July 2019, consumer launch in 2020

Net Zero and Smart Grid Interactive

Description

Bonus incentives for achieving Energy Trust's Net Zero designation and/or installing technology that has a demand response benefit

Delivery

Must be participating in the EPS New Construction track

Incentive

TBD co-funded incentives between the Residential program and Solar program

Next steps

More discussion at the November meetings of the Conservation Advisory Council and Renewable Energy Advisory Council; launch in Q1 2020

New Manufactured Homes

Description

Adding a consumer-facing incentive and new qualified efficiency rating

Delivery

Maintain retailer incentive, add a downstream consumer track

Incentive

Incentive tiers based on the efficiency of the home certification and on the installation of energy-efficient products

Next steps

Launch October 2019

Changes

Ductless Heat Pumps

Change description

Approved OPUC cost-effectiveness exception(s) for single family and multifamily. Exception is valid through March 31, 2022. New installation requirements.

Delivery

Trade ally contractors market rate, rental, CBO, Savings Within Reach, fixedprice promotions and partnerships with CAP agencies

Incentive

Market reduction to \$500, Savings Within Reach and rental properties remain at \$1,000, fixed price promotions vary

Next steps

Q2 changes to incentives and installation requirements

Multi-year research and potential field test on ductless heat pump controllers in

collaboration with PGE

Heat pump water heaters

Change description

Reduction in savings and specialized track incentives to account for updated measure analysis and reduced incremental costs

Tier 1 and Tier 2 HPWH – no longer eligible

Delivery

Single family and multifamily: Trade ally contractors replacing electric resistance tanks for moderate-income customers

SWR & SF Rental Incentives

Reduced to \$270 to maintain cost-effectiveness levels, plus maintain \$500 midstream distributor

Next steps

Jan. 1, 2020 changes to incentives

Lighting

Change description

Federal standard, EISA, not implemented in 2020; Residential program will continue in all cost-effective lighting categories

Delivery

Remain in all retail locations; maintain offer for trade ally direct installation and reduced lighting incentives

Incentive

Generally incentives are lower, with some variables dependent on store location and customer type

Next steps

Continue to monitor the lighting market, consider timing and exit for each product category

Monitor products and retail locations for 2021 planning

Smart Thermostats

Description

Web-enabled smart thermostats with occupancy detection provide energy savings through reduced run time of heating and/or cooling systems

Delivery

Single family and multifamily: Maintain retail downstream via consumer applications, and midstream/downstream through instant coupon platforms or allocation tools

Incentive

Increase incentive to \$100

Next steps

Jan. 1, 2020 incentive change

EPS New Construction

Change description

Baseline adjustments in 1) air infiltration, 2) furnace fan motors and the inclusion of fireplace savings

Delivery

Trade ally builders

Incentive

Increased incentives and increased baseline leading to overall reduction in incentives

Next steps

Feb. 1, 2020 launch

Existing Manufactured Homes: Air Sealing & Duct Repair

Description

New incentive for Complex Air Sealing and increased incentive for Complex Duct Repair

Delivery

Maintain trade ally submissions for free manufactured homes service, incentives paid to trade ally

Incentive

New incentive: \$250 for Complex Air Sealing (air sealing for double wide or larger homes.) Increased incentive: \$300 for Complex Duct Repair

Next steps

Jan. 1, 2020 incentive change

Insulation

Change description

Pending an OPUC "minor" exception approval

Delivery

Single family and multifamily: Trade ally contractors both market rate and Savings within Reach, single and multifamily

Incentive

If exception is not approved, remaining insulation measures include: Attic Insulation, Wall Insulation and Floor Insulation.

Next steps

Jan. 1, 2020 incentive change



Thank You

Scott Leonard, Sr. Project Manager Residential





Existing Multifamily Program Updates

Conservation Advisory Council September, 18 2019



Agenda

- Recap: 2019 mid-year updates
- 2020 changing measures
- 2020 new measures
- OPUC cost-effectiveness exception requests



2019 mid-year measure changes

| Measure | Change |
|--|--|
| Heat pump water heaters | Shifted to midstreamAligns with Residential program |
| Gas tank water heaters | Shifted to midstreamAligns with Residential program |
| In-unit clothes washers | Incentive reduced from \$120 to \$65 Expanded to midstream; further shift midstream anticipated mid-2020 Aligns with Residential program |
| Domestic hot water recirculation pump controls | Incentive updated to tiers: \$100-\$500 (was \$420) Updated specifications |

2019 mid-year new measures

| Measure | Details |
|--------------------------|---|
| Central air conditioning | Incentive: \$250 Available for duplex, triplex, fourplex and side-by-side structures Aligns with Residential program |
| Savings Within Reach | Primarily for duplex, triplex, fourplex and side-by-side structures On-bill repayment available Aligns with Residential program |

2020 measure changes

| Measure | Change |
|----------------------------------|---|
| Ductless heat pumps | New installation requirements Potential increased incentives for targeted efforts and fixed-price promotions |
| Smart thermostats | Increasing incentive to \$100 |
| Boilers | Incentive reductions planned; amounts TBD |
| Building Operator Certificate | Increasing dual-duel territory incentive from \$600 to \$1,600 Adding gas-only territory incentive: \$400 |
| Custom track | Considering potential incentive changes |

2020 new measures

| Measure | Details |
|------------------------------|---|
| Commercial pool pumps | Incentive: \$230Aligns with Existing Buildings program |
| Condensing pool heaters | Incentive: \$2.35 - \$3.50/SF Aligns with Existing Buildings program Covered pools not eligible |
| Efficient spa covers | Incentive: \$100Aligns with Residential program |
| Hydronic heating circulators | Incentive: TBD Pending OPUC cost-effectiveness exception request |
| Midstream clothes dryers | Incentive: \$25In coordination with ResidentialMid-2020 |

OPUC cost-effectiveness exception requests

Awaiting responses on several exception requests:

- In-unit LEDs (direct-install)
- Insulation
- Hydronic heating circulators

Resolved exception requests:

- DHPs: approved
- Windows (large MF, electric): now cost-effective; no longer require exception



Thank you

Kate Wellington
Multifamily Program Manager
kate.wellington@energytrust.org





Existing Buildings Program Updates Conservation Advisory Council September 18, 2019





Agenda

- Recap of Mid-year Additions
- Measures Changing in 2020
- New Measures in 2020
- Custom Incentive Rates
- Pilots and Targeted Load Management Support

2019 Mid-year Measure Additions

- Added in April:
 - Gas-fired conveyor broilers
- Added in July:
 - Overwrappers
- Added in August:
 - Commercial pool pumps
 - Commercial condensing pool heaters
 - Direct-install refrigeration measures for small business



2020 Major Measure Changes

- Boilers
 - Savings declining by over 60%
 - Incentive levels will be much lower
- Building operator certification
 - Savings increased
 - Gas-only territory added
 - Incentives are planned to increase from \$600 to \$1,600 in dual-fuel territory
- Vent hoods
 - Gas-only territory added



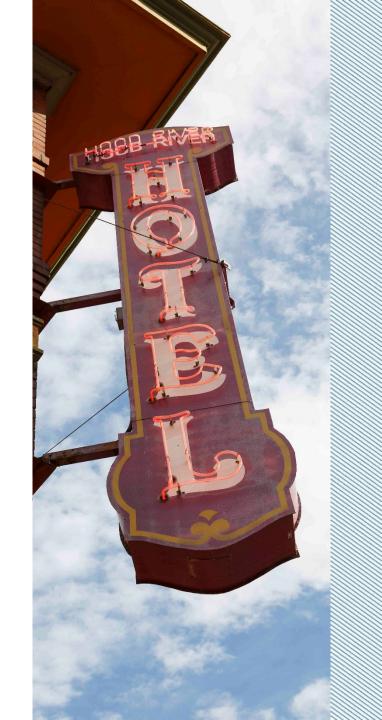


2020 Custom Rate Change

 Considering increasing custom electric incentive rates

New Measures in 2020

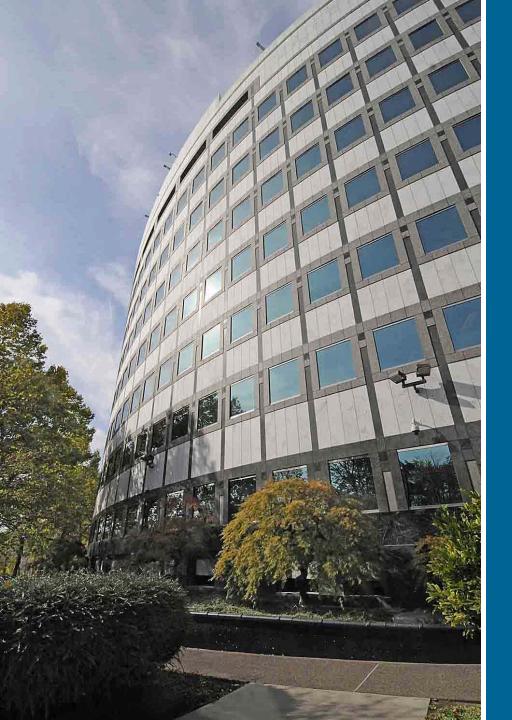
 Ductless heat pump, in-unit lodging



Pilots and TLM Support in 2020

- Networked Lighting Controls
- Supporting PGE's smart thermostat pilot
- Targeted load management efforts in Southern Oregon
- Targeted load management in Cottage Grove





Thank You

Jay Olson Sr. Program Manager jay.olson@energytrust.org





C&I Lighting 5 Year Strategy- Revisit CAC 9/18/2019



Commercial & Industrial Lighting

Today's CAC:

Update on lighting strategy activities and move to RFP

Future CAC:

RFP team inform on program program

Recap of May CAC C&I Strategy

Projected decrease of C&I lighting savings Scenarios presented of no change and rolling out a new lighting program in 2020 Program design options presented: Midstream and Better Lighting Design

Activities since May

Completed MADs, clearer picture of savings changes

Proposing
higher
incentives
for noncommodity
lighting
measures

Consider
Postpurchase
incentive
option for
Multifamily

TLED
Promotion
in Eastern
Oregon

Midstream and Better Design Research

Next Steps for C&I Lighting Program

Part of the Commercial Rebid

Will include midstream and better design

RFP

Rebid in 2020 for launch in 2021

Bidders can bid on entire RFP or parts of the RFP (example: C&I Lighting only)

RFP Next Steps



Thank you!

Jessica Kramer Sr. Program Manager Production Efficiency

Jay Olson Sr. Program Manager Commercial Existing Buildings

Kate Wellington
Program Manager
Commercial Multifamily



Appendix slides from previous CAC meeting

Lighting and % of Program Savings

| YEAR | TOTAL kWh/ % Lighting | INDUSTRIAL | COMM – EXISTING BUILDINGS | COMM – MULTIFAMILY | ALL PROGRAMS TOTAL |
|-----------------|--------------------------|------------|---------------------------------|-----------------------|--------------------------|
| 2019 (goals) | Total Prgm kWh(M) | 164 | 165 | 14 | 343 |
| | Lighting | 37% | 60% | 54% | 49% |
| 2018 | Total Prgm kWh(M) | 162 | 132 | 16 | 310 |
| | Lighting | 38% | 62% | 51% | 49% |
| 2017 | Total Prgm kWh(M) | 171 | 128 | 16 | 315 |
| | Lighting | 27% | 65% | 50% | 44% |
| 2016 | Total Prgm kWh(M) | 128 | 124 | 19 | 271 |
| | Lighting | 30% | 66% | 41% | 47% |

Scenarios

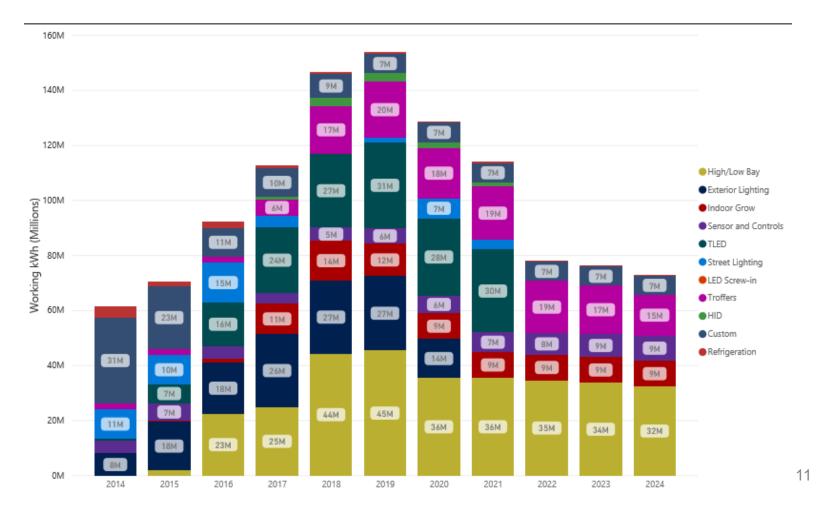
No Change

New Program Delivery & Offers

No Change Scenario

Lighting Scenario Analysis: 2020 - 2024





No Change Scenario

| Year | Working kWh | LY % Diff |
|------|-------------|-----------|
| 2014 | 68,394,721 | |
| 2015 | 78,017,803 | 14.1 % |
| 2016 | 100,979,478 | 29.4 % |
| 2017 | 116,962,853 | 15.8 % |
| 2018 | 150,052,836 | 28.3 % |
| 2019 | 156,302,625 | 4.2 % |
| 2020 | 130,086,280 | -16.8 % |
| 2021 | 114,744,995 | -11.8 % |
| 2022 | 78,168,523 | -31.9 % |
| 2023 | 76,348,818 | -2.3 % |
| 2024 | 72,977,500 | -4.4 % |

New Program Delivery & Offers Scenario

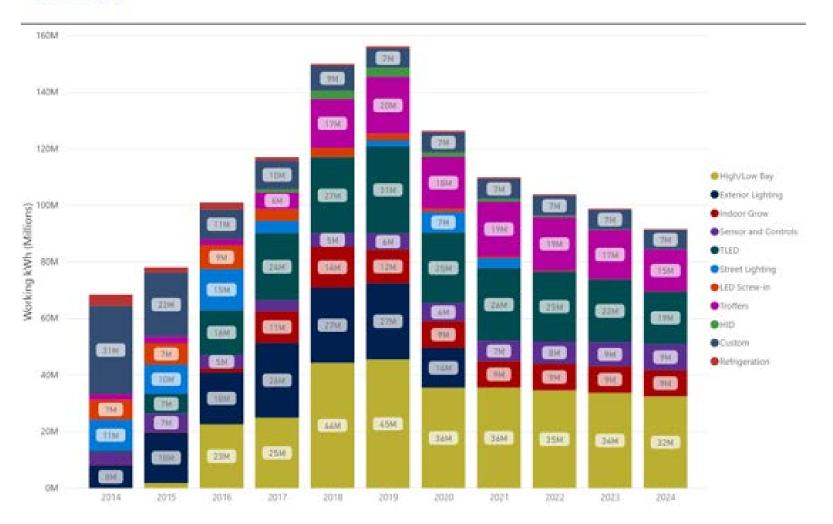
Midstream

Better Design

New Program Delivery & Offers Scenario

Lighting Scenario Analysis: 2020 - 2024



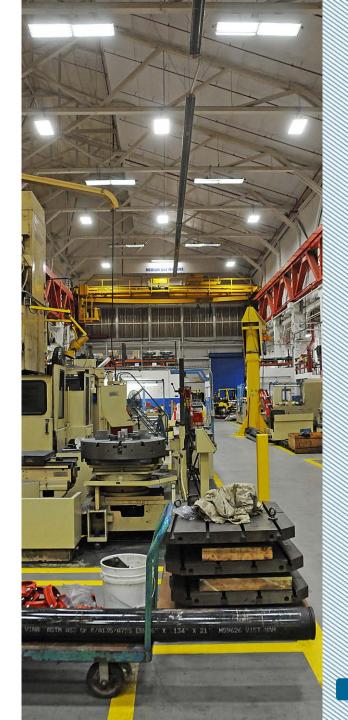


New Program Delivery & Offers Scenario

| Year | Working kWh | LY % Diff |
|------|-------------|-----------|
| 2014 | 68,394,721 | |
| 2015 | 78,017,803 | 14.1 % |
| 2016 | 100,979,478 | 29.4 % |
| 2017 | 116,962,853 | 15.8 % |
| 2018 | 150,052,836 | 28.3 % |
| 2019 | 156,302,625 | 4.2 % |
| 2020 | 126,309,379 | -19.2 % |
| 2021 | 109,839,179 | -13.0 % |
| 2022 | 103,817,291 | -5.5 % |
| 2023 | 98,864,847 | -4.8 % |
| 2024 | 91,683,332 | -7.3 % |

Future Engagement with CAC re: C&I Lighting

- Discuss
- Coming back in a few months with detailed presentation on scenarios and updates to program delivery and offers



Thank you!

Jessica Kramer
Sr. Program Manager
Production Efficiency

Jay Olson Sr. Program Manager Commercial Existing Buildings

Kate Wellington
Program Manager
Commercial Multifamily





Board of Directors

Board composition and process for recruiting new directors



Agenda

- 1) Overview: Board structure and composition
- 2) Recruiting new board members
- 3) Your input



Board structure and composition

Energy Trust Board of Directors

"The board sets our strategic direction, policies and budget and offers independent perspectives."

"All meetings of the board of directors shall be open to the public, except executive sessions and committees."

Members

- 13 x Directors
 - Non-stakeholder
 - Volunteers
- 2 x Ex-officio board members (non-voting)
 - Oregon Public Utility Commission
 - Oregon Department of Energy

Time Commitment

- 3-year terms, which can be renewed
- 6 x public board meetings per year, plus committee participation

Positions:

- President
- Vice President
- Secretary
- Treasurer

Energy Trust Board of Directors

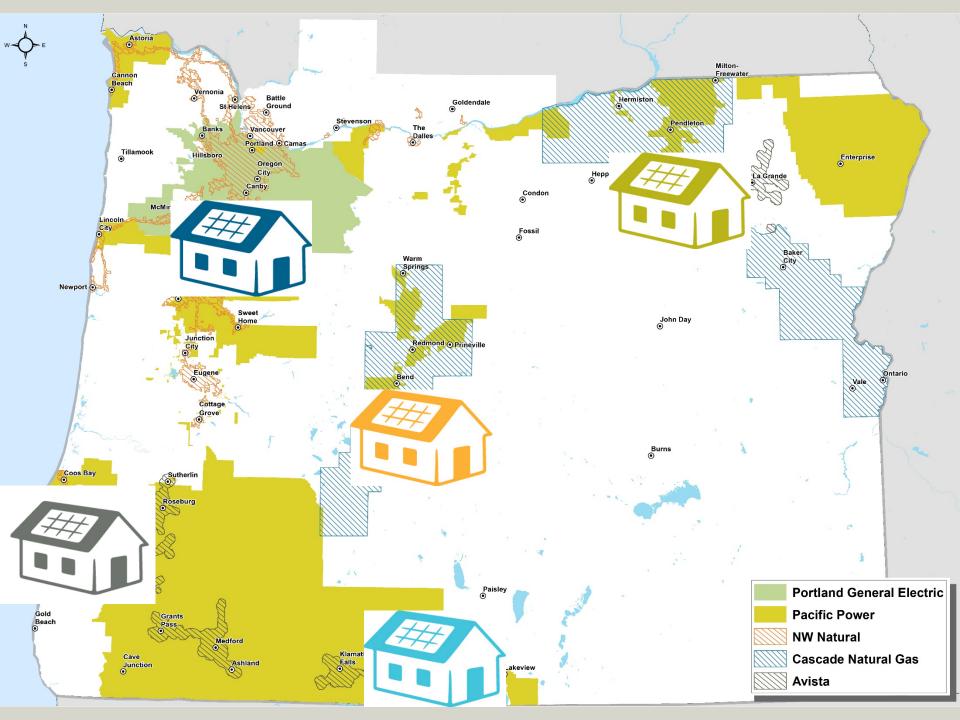
Committees

- Audit
- Board Nominating
- Compensation
- Executive Director Review
- Finance
- Policy
- Program Evaluation
- Strategic Planning

Advisory Councils

- Conservation (CAC)
- Renewable Energy (RAC)
- Diversity (DAC)



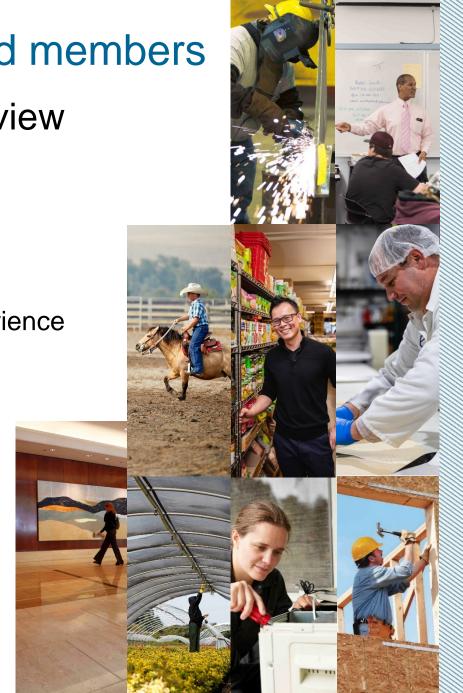


Recruiting new board members

Recruiting new board members

The different ways we view board composition . .

- Knowledge and experience
- Industry contacts, influence
- Public, private, nonprofit experience
- Geographic representation
- Age
- Gender
- Race and ethnicity



Recruiting new board members

What knowledge, experience and perspectives should we consider recruiting for the board at this time?

How do you want to be involved in the process?





Thank you!

Debbie Kitchin

Board Director and
Chair of the Board
Nominating Committee

Debbie.Kitchin@energytrust.org



Alan Meyer

Alan Meyer, Salem, recently retired as director of energy management for Weyerhaeuser Company, a diversified forest products manufacturing company. In that role, he was responsible for coordinating energy management



activities at numerous manufacturing facilities throughout North America. Prior to joining Weyerhaeuser, he was director of energy for Willamette Industries, holding similar responsibilities. He also worked for PacifiCorp as the Oregon large industrial accounts manager. He previously served on the board of directors of Industrial Customers of Northwest Utilities, a nonprofit advocacy organization focused on energy policies. He has also served for more than 20 years on the City of Salem Morningside Neighborhood Association board. Joined Energy Trust Board of Directors September 2005, current Vice President, Chairs the Policy Committee.

Anne Haworth Root

Anne Haworth Root, Medford, is co-owner and general manager of EdenVale Winery and Eden Valley Orchards, a destination winery, historic pear orchard and events center in southeast Medford. A second tasting room called



Enoteca is located in Ashland. An award-winning entrepreneur, she developed the concept and helped found the Oregon Wine and Farm Tour, an agritourism coalition of Southern Oregon wineries, historic farms and specialty food and cheese companies. Anne is a graduate of Southern Oregon University, where she was student body president and chair of the Oregon Student Lobby. She pursued postgraduate studies in the Master of Commerce program at Wollongong University in Australia. Joined Energy Trust Board of Directors December 2011, chairs the Audit Committee.

Debbie Kitchin

Debbie Kitchin, Portland, is the co-owner of InterWorks LLC, a construction company engaged in commercial tenant improvement and renovation and residential remodeling services. InterWorks is an award-winning contractor specializing in sustainable building practices.



Prior to joining the family business in 1996, Debbie served as senior economist for the Northwest Power Planning Council (now the Northwest Power and Conservation Council) for 15 years and was a regional economist for the Bonneville Power Administration for three years. Debbie is chair of the Portland Business Alliance, president of the Central Eastside Industrial Council and a board member of the Portland Building Owners and Managers Association. She is a past president of the Portland Commercial Real Estate Women. Joined Energy Trust Board of Directors April 2004, chairs the Board Nomination Committee.

Elee Jenn

Elee Jenn, Newberg, is principal marketing and business development manager at Energy Performance Engineering LLC in Newberg. She helps building owners construct and maintain high-performance energy-efficient facilities through system commissioning and building control services. Many of Energy Performance Engineering's clients are schools, colleges and governments, including Police 1.



clients are schools, colleges and governments, including Portland Community College in Newberg. An accredited Leadership in Energy and Environmental Design professional, Elee holds a Master of Science in analytical chemistry and a Bachelor of Science in chemistry. Joined Energy Trust Board of Directors October 2018.

Eric Hayes

Eric Hayes, Beaverton, is the state organizing coordinator for the International Brotherhood of Electrical Workers. He engages and organizes electrical workers to achieve better wages, pension, insurance and training. With 23 years at IBEW, Eric's multiple roles included recording secretary,



vice president and president of Local 48. During this time, Eric served as a trustee of the Edison Pension Trust, Harrison Health Trust and the Apprenticeship Trust. He was also president of the Electrical Minority Workers Caucus Portland Chapter, which promotes minorities and women in IBEW. Joined Energy Trust Board of Directors October 2018.

Ernesto Fonseca

Dr. Ernesto Fonseca, Portland, is the Chief Executive
Officer of Hacienda, an Oregon Community Development
Corporation and Social Enterprise that advances the
livability, health and economic progress of underserved
communities in the Pacific Northwest. Ernesto has
dedicated the last 16 years of his career to the
development of high-quality, affordable housing and social services in
Mexico and the United States. Ernesto brings ample experience in
community development, housing and energy access from his time working
with the Housing Authority of Maricopa County and the City of Avondale,
and Arizona State University. Ernesto holds a Master of Science in Energy
Performance and Climate Responsive Architecture, and a doctorate in
Environmental Design and Planning from Arizona State University. Joined
Energy Trust's Board of Directors March 2018.

Henry Lorenzen

Henry Lorenzen, Pendleton, has a resume that spans from working as a partner at Corey, Byler, Rew, Lorenzen and Hojem law firm to running his family's 4,000-acre wheat farm. From 2002 to 2018, he served as member on the Northwest Power and Conservation Council, which



develops a regional power plan and fish and wildlife program. He has also served on the Oregon State Board of Higher Education, Oregon Fish and Wildlife Commission and Oregon Environmental Quality Commission, and on the boards of Oregon Public Broadcasting and the Oregon Historical Society. Henry's education includes a Juris Doctor from Lewis and Clark Law School, a Master of Business Administration from Harvard University and a Bachelor of Science in electrical engineering from Oregon State University. He is certified as a Professional Electrical Engineer. Joined Energy Trust's Board of Directors October 2018.

Janine Benner

Janine Benner is the director of the Oregon Department of Energy (ODOE). Janine joined ODOE in 2017 as assistant director for planning and innovation. In this role, she lead the department's work on clean energy policy development and implementation of energy efficiency programs and



services. Janine came to ODOE from the U.S. Department of Energy (DOE), where she was served as associate assistant secretary in the Office of Energy Efficiency and Renewable Energy, the largest government funder of clean energy research and development. Before that, she served as deputy assistant secretary in DOE's Office of Congressional and Intergovernmental Affairs. Janine also spent 12 years working for Congressman Earl Blumenauer (D-OR), first as an energy and environmental policy advisor and then as deputy chief of staff. She grew up in Portland, OR and has a degree in history from Princeton University. Joined Energy Trust's Board of Directors April 2017.

Letha Tawney

Letha Tawney, Portland, is one of three Oregon Public Utility Commissioners and was appointed by Governor Kate Brown in June 2018. Prior to this, Letha worked for the World Resources Institute as an expert on clean energy



development and large customer buying strategies. As the Polsky Chair for Renewable Energy, she led the Institute's work on propelling innovation in business and regulatory models in the power sector. Now Letha represents Oregon on the Electricity and the Critical Infrastructure committees for the National Association of Regulatory Utility Commissioners. She also serves on the Energy Imbalance Market Board of State Regulators, engaging closely on Western electricity market development. Letha holds a Master of Public Administration from the Harvard Kennedy School and a Bachelor of Science in business and computer science from George Fox University. Joined Energy Trust's Board of Directors October 2019.

Lindsey Hardy

Lindsey Hardy, Bend, is the project director of the Bend Energy Challenge, a program of The Environmental Center. The Bend Energy Challenge is competing for the Georgetown University Energy Prize, a national, two-year competition to reduce energy use. Most recently Lindsey



was the outreach director at Sunlight Solar Energy. She sat on the Steering Committee of the High Desert Branch of the Cascadia Green Building Council for three years and planned Central Oregon's Green and Solar Tour. Previously as an AmeriCorps volunteer with the University of Oregon's Resource Assistance for Rural Environments, she oversaw the Solarize Pendleton campaign, helping neighborhoods benefit from efficiency of scale in residential solar installations. Lindsey graduated from Ithaca College with a Bachelor of Arts in Environmental Studies. Joined Energy Trust's Board of Directors May 2015, chairs the Program Evaluation Committee.

Mark Kendall

Mark Kendall, Salem, has more than 33 years of experience in energy management and renewable resource development in Oregon. Prior to founding his own consultancy, Kendall Energy, in 2009, he spent 19 years with the Oregon Department of Energy working in commercial and industrial energy management policy, including serving as the governor's appointee to the Northwest Energy Efficiency Alliance board from 2001-2006. Before working for the state, he spent 11 years with the Eugene Water and Electric Board. He also served on the Oregon Low Carbon Fuel Standard Advisory Committee, and facilitated the 2009 Industrial Greenhouse Gas Reduction subcommittee of the Oregon Global Warming Commission. He received his bachelor's degree from Linfield College with an emphasis in communications and energy management, and his master's degree in organizational development from the Leadership Institute of Seattle City University. Joined Energy Trust's Board of Directors August 2012, current Secretary, chairs the Strategic Planning Committee.

Melissa Cribbins

Melissa Cribbins, Coos Bay, is a Coos County Commissioner and an attorney. Prior to her election in 2012, she worked for the Coquille Indian Tribe as in-house counsel for six years. Before Melissa became an attorney, she worked for the City of Spokane and Eugene Water and

Electric Board in the field of water quality. She is a member of the Oregon State Bar and the Washington State Bar, and is active in many organizations both in Coos County and statewide. Melissa is a graduate of Portland State University and Gonzaga University. Joined Energy Trust Board of Directors February 2014, chairs the Compensation Committee.

Roger Hamilton

Roger Hamilton, Eugene, recently retired as a consultant with Western Grid Group, an organization that promotes transmission access for renewable energy projects across the West. He also worked as a consultant with The Resource Innovation Group on climate change adaptation



and mitigation. He has spent many years in public service as a Klamath County commissioner, an advisor on energy and watersheds to Governor John Kitzhaber and an Oregon Public Utility Commissioner. He previously served on the Oregon State Parks Commission, the National Association of Public Utility Commissioners and the board of directors of the Regulatory Assistance Project. Joined Energy Trust Board of Directors April 2008, current President.

Roland Risser

Roland Risser, Washington County, has extensive knowledge of residential, commercial and industrial energy efficiency program design, development and implementation, including low-income energy efficiency programs. He recently retired from the U.S. Department of



Energy, where he was the director of the Building Technologies Office and then deputy assistant secretary of Renewable Power. His decades of energy experience include multiple leadership positions at Pacific Gas and Electric and serving on national boards for the American Council for an Energy-Efficient Economy and the Consortium for Energy Efficiency. Roland earned a Master of Science in biology from California Polytechnic State University, a Bachelor of Science in biology from the University of California at Irvine, and graduated from the University of California at Berkeley, Haas School of Business. Joined Energy Trust's Board of Directors October 2018.

Susan Brodahl

Susan Brodahl, Portland, is a vice president in the Portland office of Heffernan Insurance Brokers as well as an owner of Heffernan Group. Heffernan Group has more than 400 employees, and is ranked in the top tier of all privately held brokerages in the country. Susan believes in a creative approach to insurance using a risk funding model. Her



philosophy is "clients for life." Susan is a frequent featured speaker at regional and national conventions as well as published in various trade and mainstream journals. She has been awarded the Lifetime Achievement Award from the Painting and Decorating Contractors of America, and has an ecoomics degree from Willamette University. Joined Energy Trust's Board of Directors February 2014, chairs the Finance Committee.