

Conservation Advisory Council Agenda

Virtual meeting

Wednesday, August 4, 2021

1:30 – 3:30 p.m.

To join the Zoom meeting, register at this link:

<https://us06web.zoom.us/meeting/register/tJApd-ytpjMsHtYm2LVUPzbuh0sB1KBZ1ril>. After registering, you will receive a confirmation email containing information about joining the meeting.

1:30 Welcome and announcements

- ... Introductions
- ... Agenda review
- ... June notes approval

1:40 Exploration of ways to provide cost-effective energy efficiency measures to DEI communities (*discussion*)

Energy Trust has been exploring how cost-effectiveness rules can be applied to expand the measures and incentives available for limited-income customers. After a brief background on cost-effectiveness, staff will provide two presentations that cover the impacts of leveraging two provisions of the cost-effectiveness methodology: non-energy benefits and external co-funding sources.

1:50 Estimation of non-energy benefit impacts of reduced utility customer arrearages from energy-saving measures

Energy Trust estimated the monetary impact that energy-savings measures could have on reducing utility customer arrearages, or past due bills. Monetary benefits were estimated based on reductions of arrearages on utility bills and reductions in utility administrative costs to carry arrearages. This is a rare case where the non-energy benefit applies to the Utility Cost Test instead of the Total Resource Cost Test. The findings indicate that the maximum incentives that we could provide increased on the measures reviewed; however, current budget constraints prevent us from significantly increasing incentives on these measures.

Presenter: Spencer Moersfelder

2:20 Energy Trust co-funding results with Community Action Organization of Washington County

Staff will present a summary of results from a collaboration to fund energy-saving improvements in low-income customer homes served by Community Action Organization of Washington County. The presentation will provide policy context around public purpose funding provided to community action agencies, a summary of the co-funding model, results from two years of partnership with Community Action Organization and next steps.

Presenter: Marshall Johnson

2:50 HB 3141 passage and implementation *(information)*

Staff will review the elements of HB 3141, the public purpose charge modernization bill that also affirms and advances Energy Trust's work as a nongovernmental entity investing utility customer funds in energy efficiency and small-scale renewable energy. The OPUC is expected to define the implementation timeline this summer for the energy efficiency and renewable energy provisions.

Presenter: Hannah Cruz

3:10 Member share-out

This is time for council members to share what their organizations are focused on at this time; particularly, planning efforts and actions to support customers with their energy efficiency goals and needs. This is also time to provide feedback on how our programs could be more effective and provide suggestions for future agenda topics.

3:20 Public comment

3:30 Adjourn

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

Next meeting: Our next meeting is September 15, 2021.

Conservation Advisory Council Meeting Notes

June 16, 2021

Attending from the council:

Jeff Bissonnette, NW Energy Coalition
Roger Kainu, Oregon Department of Energy
Don Jones, Jr. (for Kari Greer), Pacific Power
Tim Hendricks, Building Owners and Managers Association
Rick Hodges, NW Natural
Tina Jayaweera, NW Power and Conservation Council
Anna Kim, Oregon Public Utility Commission
Lisa McGarity, Avista
Becky Walker, Northwest Energy Efficiency Alliance
Tyler Pepple, Alliance for Western Energy Consumers
Alyn Spector, Cascade Natural Gas
Matt Tidwell (for Jason Klotz), Portland General Electric

Attending from Energy Trust:

Hannah Cruz	Amanda Potter
Elizabeth Fox	Adam Bartini
Caryn Appler	Tom Beverly
Auric Armstrong	Jessica Kramer
Kathleen Belkhatat	Amanda Thompson
Melanie Bissonnette	Amanda Zuniga
Shelly Carlton	Amber Cole
Karen Chase	Eric Braddock
Alex Novie	Debbie Menashe
Kirstin Pinit	Jay Ward
Thad Roth	MacKenzie Kurtzner
Fred Gordon	Mark Wyman
Susan Jowaiszas	Ryan Crews
Steve Lacey	Tara Crookshank
Cameron Starr	Wendy Gibson
Julianne Thacher	Salvatore Militello
Oliver Kesting	Scott Leonard
Jackie Goss	Tracy Scott

Others attending:

Alan Meyer, Energy Trust board	Raphaella Hsu-Flanders, Bonneville
Lindsey Hardy, Energy Trust board	Environmental Foundation
Elee Jen, Energy Trust board	Cheryl LaCombe, TRC
Beth Baxter, TRC	Misti Nelmes, CLEAResult
Shelly Beaulieu, TRC	Chris Smith, Energy 350
Andy Cameron, Oregon Department of Energy	Josh Peterson, University of Oregon
Eric Holman, Cascade Energy	Jenny Sorich, CLEAResult
Eric Koch, CLEAResult	Heather Moline, NW Energy Coalition
	Joe Marcotte, TRC
	Shannon Todd, TRC

1. Welcome

Hannah Cruz, senior communications manager, convened the meeting at 1:30 p.m. via Zoom. The agenda, notes and presentation materials are available at www.energytrust.org/about/public-meetings/conservation-advisory-council-meetings.

Hannah Cruz opened with a summary of the agenda and noted that the meeting is recorded. There were no concerns with the previous meeting notes. A council member commented that it's harder to get the full picture without attributions in the notes (Lisa McGarity).

Hannah provided a brief update on HB 3141, which seeks to modify the public purpose charge. It's the result of months of negotiation between the Governor's office, electric utilities, customer and environmental justice advocates, the OPUC and others. It was referred to the Joint Ways and Means Committee and passed the Transportation and Economic Development subcommittee yesterday. The legislative session will end on June 27 and staff will send an update on the final status of the bill.

2. Update on business incentives management

Topic summary

Oliver Kesting, business sector lead, and Amanda Potter, industry and agriculture sector lead, provided an update on the changes implemented to manage the commercial and industrial incentive budgets.

Amanda Potter explained that the industrial sector started 2021 with strong pipelines due to bonuses and higher demand in 2020. As expected 2021 will be a dynamic year with stronger than expected industrial activity. Wood products have been very busy with production. Hi-tech is booming due to the global chip shortage and there's strong interest in energy efficiency there. Food and consumer products remained strong, along with agriculture. Airline and petroleum were hit hard during the pandemic. Labor is still an issue due to a shortage of available workers.

Custom industrial is forecasting to hit its savings goal and land at budget. Energy Trust put a waiting list into place along with caps of \$250,000 on all new projects. The track could come in under budget if projects move into 2022. There's a strong pipeline for Portland General Electric (PGE) due to hi-tech customers. Staff will need to continue the waiting list in 2022, along with the cap. Pacific Power looks similar to other years. The gas side on custom is tracking to savings goal and budget.

Lighting has lower than expected uptake. The cap of \$6,000 on most lighting projects may be the cause of reduced interest in lighting. Energy Trust expects to be below budget on lighting and funds may shift into other commercial and industrial areas with higher demand.

The standard track is more active than expected. On the gas side, standard is stronger than expected. Greenhouses are seeing higher activity. They were busy in 2020 and now have money and interest in energy efficiency. Chicken farmers are expanding operations and looking at energy efficiency. Energy Trust had caps on electric at the beginning of the year, but now will implement caps on gas standard projects and is looking to coordinate with the commercial team.

Oliver Kesting presented for the commercial sector. Existing Buildings is seeing stability and renewed interest from the healthcare industry. The public sector is short on dollars and projects are pushing to 2022. There is a continued focus on indoor air quality. Large office occupancy rates are increasing as people transition back. Delayed projects are starting to move forward. For schools, they're expecting HVAC controls projects to increase in 2022. They are being delayed due to incentive caps this year. Schools have received additional federal funding

focused on improving indoor air quality and student learning in classrooms. Multifamily owners are pulling back on their projects. Data center interest is quite high.

In New Buildings, multifamily starts are continuing to decline in the Portland area. Projects are unable to complete as they are waiting for appliances to arrive. It may push projects into 2023. Grocery stores are busy and there will be four new grocery stores in Portland in 2022. Offices tenant improvements are strong this year due to airflow design and bringing employees back. Warehouse projects remain at an all-time high.

Commercial programs are on track for PGE, Pacific Power and Cascade Natural Gas. NW Natural is forecasting to exceed budget, and Energy Trust and NW Natural are working together to decide how to respond. Lighting and non-lighting program changes that were put in place earlier this year have been in the market for three months and the pipeline is slightly lower. Non-lighting is on track for goal and budget for all utilities. Existing Buildings is a little over budget in Pacific Power but offset by the shortfall in lighting as lighting is slightly behind.

New Buildings is on track to meet savings goals and budgets. Pacific Power and NW Natural are slightly ahead and Energy Trust is working with them.

Energy Trust is in discussions with NW Natural about the forecast indicating exceeding goals and budget. To manage the NW Natural budget, Energy Trust is looking to work with customers and may eliminate some gas measures that are least disruptive for customers.

Discussion

A council member pointed out that data centers do a lot of energy efficiency on their own and asked how Energy Trust is reaching this difficult market and if they are doing a free-rider assessment on them (Tina Jayaweera). Oliver Kesting responded that Energy Trust has good relationships with data centers and work closely with them to employ best practices. Data centers are secretive about what they're doing. It's similar on the Existing Buildings side. For savings determinations, Energy Trust works closely with its evaluations team to update estimates and use the latest information for baselines.

Council members also asked about demand in the Klamath Falls area (Don Jones, Jr.). Amanda Potter responded that they have an outreach person in Bend who spends time in Klamath County. They are seeing more uptake in irrigation projects due to that outreach, and she can share more data.

Next steps

Energy Trust is closing quarter two and looking at the pipeline. Staff will present plans for 2022 to the council in August and September. This will be informed by updates in the pipelines and forecasts. Staff will follow-up with Pacific Power on Klamath area irrigator activity.

3. Residential sector budget management update

Topic Summary

Thad Roth, residential sector lead, provided an update on budget and management tools. Trends from quarter four 2020 have continued into 2021. Some customers are spending more time at home and making improvements to support comfort and functionality. Those who can invest in home improvements are upgrading windows, insulation and smart thermostats. There is more demand than budgeted for. New home demand is strong in the Portland area and Willamette Valley. Interest rates and inventory are both very low. At the same time, there is a continued need to support other groups of customers who were impacted by the pandemic.

Forecasts show natural gas exceeding budget. Demand is strong for market rate measures. There's an expanded focus on income qualified offers. Wildfire recovery has been uneven, but

engagement has driven more demand. Top measures contributing driving demand are insulation, windows, thermostats and new construction.

So far, staff responses to this high uptake have included ending bonuses for insulation and gas furnaces, reducing incentives for smart thermostats and engagement with the utilities. Energy Trust will need to make some additional adjustments to manage budgets for NW Natural and Avista. Criteria for determining adjustments include minimizing market disruption and impact on customers.

For windows, there are multiple incentive tiers and Energy Trust can eliminate the least efficient tier while still maintaining a presence in the market,.

Discussion

Council members asked if there are any markets that have been transformed, like the clothes washer market. A member asked if there are any markets close enough to be considered transformed (Lisa McGarity). Thad Roth responded that windows may be closest to that. The baseline for a standard window is close to their lowest-tier incentive. Energy Trust could decide to eliminate the lowest tier.

A council member asked if this might be part of the market disruption and market rate portion of the criteria and if there are interactions with other collaborators or organizations in this area (Anna Kim). The council member also asked if there would be an impact on specific targeted offers and, if so, whether there will be consideration on the interactions of incentive changes on other offers. Thad Roth responded that there may be state funding for some of these activities where Energy Trust is engaged and will keep this in mind.

Energy Trust met with the gas utilities about the magnitude of the forecasted budget overages and where the program can make changes. For some measures it will take several weeks to make changes. For those, they will act in the next couple of weeks. Smart thermostat changes are something that can happen right away. If demand is greatly, smart thermostats can be reinstated quickly. Action will be sooner rather than later if there are changes to measures delivered by trade allies.

Council members asked if Energy Trust will track on the impacts of these changes and reverse some of them in the future (Becky Walker). Thad Roth stated that they are trying to manage in 2021 with the intention of re-establishing these offers and support levels in 2022.

Next Steps

Energy Trust is likely to provide an update on how well changes are working and any measure changes for 2022 at the September council meeting.

4. Wildfire rebuilding support

Topic summary

Karen Chase, outreach manager, and Scott Leonard, senior project manager, provided an update on wildfire rebuilding efforts. The Oregon Department of Forestry just announced that fire season is already here, a month early. Today's update is a very early preview of ongoing measure development.

For the Labor Day wildfires, cleanup is ahead of schedule, but recovery will take longer. There are challenges with builder availability and astronomical material costs. Energy Trust is working closely with local and regional organizations and municipalities. The fires strongly impacted affordable housing. Energy Trust is supporting by way of the residential new construction offers through program incentives and early design assistance. Energy Trust is also offering

manufactured home replacement as this moves from pilot to program. On the New Buildings side, program incentives and early design assistance are being offered.

Manufactured home replacement was covered at the last council meeting. Any site impacted by a state-declared disaster area will be eligible. Energy Trust is directly funding a position at the Jackson County Housing Authority to hire a manufactured home specialist. They are trying to get in front of community leaders to help with early design assistance and are working closely with Fred Gant, the outreach contact in the new construction field in the area. He has waived his fees for verifications and that has had a great impact. Lumber costs are pushing some rebuilding efforts into 2022.

Codes with Building Codes Division were discussed to consider using an older code. Customers rebuilding are able to waive the requirement or modify a code requirement as long as there isn't health and safety issue. The authority is left to the local jurisdiction. There is mixed feedback from Jackson and Douglas counties, but Jackson County gave full support.

There is legislative support. HB 2289 allows the 2008 code to be used. HB 3127-4 provides additional funding for Oregon Housing and Community Services and Oregon Department of Energy for wildfires. SB 405 allows homes to be rebuilt to original standards and extends permitting into 2025.

Energy Trust is looking at 2008 code but with updated market realities, like using LEDs. They would pay incentives for builders to go beyond the 2008 and the current (2021) code. This will make more value available from energy savings, leading to a higher incentive and will help Energy Trust provide more money for rebuilding efforts. They plan to discuss this with the local market actors, like building officials, to ensure they are still onboard. Code changes in 2021 and program changes go into effect in 2022. They are trying to align the regular EPS offer and wildfire offer.

Energy Trust wants to add wildfire resilience, including resistant materials that prevent ignition and spread of fire in structures. It also wants to consider air sealing and barriers for smoke resistance and HVAC systems. Materials that help with tips for smoke events will be provided. Solar + storage will allow homes to continue working during power outages.

Discussion

A council member asked whether the fire resilience savings are based on current code or 2008 code (Becky Walker). Scott Leonard responded that they are based on current code. Council members asked if it is possible for someone to exceed 2008 code but not meet current code and if projects have to pass current code or older code to get incentives (Don Jones). Scott Leonard responded that they would have to exceed current code to receive incentives.

Council members commented that NEEA is doing some work with builders around thin triple-pane windows and there may be some opportunities to coordinate and align on this (Becky Walker).

Council members suggested Energy Trust look for a builder in Southern Oregon to give an on-the-ground look at whether or not they would use that code. A member noted that there might be consequences from the decision to move backward in code which may diminish how good the story sounds (Don Jones). Scott Leonard explained that Energy Trust did run it by the local verifier and plans to run it past the Jackson County code official, who has already signed off. It's still a question of whether individual builders will want to build to older code.

Council members commented that they appreciate the presentation. If HB 3127 does go through, Energy Trust will be the first place Oregon Department of Energy calls to wade through the discussion and will probably bring in Building Code Division and Energy Trust.

Next steps

Energy Trust will share this again in the fall when it has a more developed offer. Incentives, requirements and bumps in the road will be more complete at that point.

5. Commercial and Industrial performance tracking tool platform

Topic summary

Kathleen Belkhat, program manager, provided an overview of the new tracking tool. This is a new tool designed for customers to track their performance and is a cornerstone of our engagements in Energy Performance Management, Strategic Energy Management (SEM) and Pay for Performance. Previously it was time consuming to update, maintain and retrieve information for the growing volume of participants. The solution will be a customized web tool that will contain an energy model, reporting dashboard and opportunity register.

Energy Trust has offered industrial SEM since 2009 and commercial SEM since 2011. The offering focuses on low-cost approaches and maintenance. It uses an education and cohort approach which helps increase awareness across organizations and drive action to improve energy use.

The current process uses Excel spreadsheets shared with SEM coaches and then customers. It's time consuming and feedback suggested it should be streamlined. Cascade Energy has adapted Energy Sensei, the platform selected for this project, since 2010. It streamlines the process for both customers and SEM coaches. Benefits of the new tool include supporting diversity, equity and inclusion goals (through supporting small/medium businesses and rural customers with capacity constraints), cutting management and delivery costs, redirecting cost savings with value-added activities, improved data for forecasting savings and incentives, and improved user experience for customers. It's specifically built for SEM. Energy Trust will begin working with Energy350 on the tool in early 2022.

Discussion

Council members asked about data security (Lisa McGarity). Kathleen Belkhat replied that they currently email spreadsheets back and forth with password protection. A cloud-based platform improves security.

Hannah Cruz asked how long engagements are with these customers and if they retain access to the tool after the contracted relationship ends. Kathleen Belkhat explained that it's a continuous engagement for both industrial and commercial customers. Energy Trust hasn't decided if it will allow ongoing access, although it makes sense to allow ongoing access with the five- to seven-year measure life in SEM.

Hannah Cruz asked if there are concerns with rural customers having bandwidth issues. Kathleen Belkhat replied that she doesn't see that as an issue. The program has already worked with these customers on applications that require a lot of bandwidth, but it haven't encountered problems. They plan to talk with customers about whether use of the tool would be a deal breaker for them.

Council members asked for companies that have sites in investor-owned utility (IOU) and consumer owned utility territories, but have gas at both, if the program could support building an electric model for those consumer-owned electric properties. A council member asked if it would be affordable enough to do that (Rick Hodges). Kathleen Belkhat responded that there's an

opportunity to collaborate more with non-IOUs, but they would currently only build a model for utilities in their territory.

Next steps

Staff will follow-up with Lisa McGarity on the data security details of the tool.

6. 2022 Organizational Goals and Budget Development Schedule

Topic summary

Melanie Bissonnette, senior project manager, provided an update on the organizational goals the council provided input on in April. Energy Trust sought input from the board, staff and advisory councils to create four goals for 2022 that will help guide 2022-2023 action plans and budget development.

The budget process kicks off this month and the draft budget will be posted in October. Revisions will happen in November and the final proposed budget will be presented to the board in December. The next three months will be spent in early development and engagement with utilities. The council engagement points include September for information on new or changed activities for 2022, October for the budget workshop and public comment period and November to see major revisions between the draft and final proposed budgets.

Discussion

Council members asked if the electric utilities will be engaged to discuss the definitions of peak savings before the value is added into the goal statement (Don Jones). Fred Gordon, director of planning and evaluation, responded that they plan to consult with each utility about how peak savings are estimated. Pacific Power and PGE define peak differently, so they will be discussing it to define this accordingly.

A council member asked if Energy Trust is thinking about high energy burden for commercial customers as well as residential customers (Tina Jayaweera). Melanie Bissonnette and Fred Gordon stated that they are more focused on residential customers. Council members suggested considering commercial also (Tina Jayaweera). Alan Meyer, Energy Trust board representative, agreed that it's a good suggestion since the vast majority of savings are from commercial and industrial, so they should be part of the focus.

A council member asked if staff already track community energy policy efforts or if that will need to be set up in 2022 (Lisa McGarity). Amber Cole, director of communications and customer service, noted Energy Trust outreach managers currently keep track of community planning and policy efforts that engage them. She anticipates that that work should continue to be a focus so Energy Trust can better anticipate and plan for customer engagement opportunities that surface through these community activities.

Hannah Cruz called for comments from council members about areas within the goals where staff should focus.

Council member Tina Jayaweera, Northwest Power and Conservation Council, stated that as the council works on the next power plan, it is finding that the cost competitiveness of energy efficiency is challenging. The goal that highlighted co-funding and developing energy efficiency more holistically will be important going forward.

The council commented that goals are broad and asked how Energy Trust will measure success and give visibility (Lisa McGarity). Melanie Bissonnette responded that Energy Trust develops metrics each year about how to measure achievement.

Next steps

Staff will present to the council in September on early action plan drafts before they are prepared for the draft budget workshop and public comment period.

7. Member share-out

Council member Tina Jayaweera, Northwest Power and Conservation Council, shared that the council is working on the 2021 Power Plan. The draft will be released in August, which is delayed by a month. Energy efficiency is becoming challenging from a cost competitiveness perspective. Renewables have become dramatically less expensive. Low-cost energy-efficiency measures have largely been achieved. The Power Council staff anticipate a lower efficiency target than in the 7th Power Plan. The utilities and region will need to be more creative about how to accomplish efficiency. The council is seeing a different kind of capacity going forward that is less about peak hours and more about ramping during evening hours. The ramping hours may have greater weight. The presence of more renewables for all utilities is changing the dynamic. There's a lot to be done to finish the draft power plan between now and the release date.

8. Public comment

There was no additional public comment.

9. Adjournment

The meeting adjourned at 4:07 p.m. The next meeting will be held on August 4, 2021.



Applying Cost-effectiveness Rules to Investigating Expanding Measures and Incentives for Limited-income Customers

August 4, 2021

Two Presentations That Cover How Cost-effectiveness Rules Effect Outcomes

1. Estimating **non-energy benefit** impacts of reduced arrearages from energy-saving measures
2. Energy Trust **co-funding** with Community Action Organization of Washington County

These are examples of how we are exploring how we can use our current cost-effectiveness framework to offer more measures or provide higher incentives to limited-income customers

Cost Effectiveness 101

- Cost effectiveness is central to how Energy Trust plans and delivers energy efficiency programs
 - Informs which measures Energy Trust offers incentives for and places an upper bound on the incentive amount, except where the OPUC provides exceptions
- **Measure and program cost effectiveness** is required in Oregon under PUC rule UM-551 to ensure that Energy Trust is making good investments for utility customers. UM-551 establishes:
 - Which cost-effectiveness tests to use
 - How to calculate benefits and costs
 - What criteria is allowed to request exceptions to cost-effectiveness
- Aligns with utility long-term integrated resource planning (IRP)
 - Efficiency is a resource used to meet energy needs at least overall cost
 - Efficiency costs are compared to supply resources
 - Cost-effectiveness tests are a simple way to determine whether investments in efficiency and compare with other supply side resources

Two Tests, Two Perspectives

Total Resource Cost Test (TRC):

- Determines measure and program eligibility for inclusion in programs
- Reflects the combined perspectives of participant and utility
- Includes all benefits and all costs to utility system and to participants
- Program and administrative costs are not included for measure analysis, but are for analyzing programs

$$TRC = \frac{NPV ((Savings \times Avoided\ cost) + Non-energy\ benefits)}{NPV (Incremental\ measure\ cost)}$$

Utility Cost Test (UCT):

- Primarily used to determine maximum incentives (sometimes limits eligibility)
- Benefits to the utility system and costs to the program administrator
- Program and administrative costs are not included for measure analysis

$$UCT = \frac{NPV (Savings \times Avoided\ cost)}{NPV (Incentives\ Paid)}$$

UM 551 Criteria for Cost Effectiveness Exceptions

1. Significant but non-quantifiable non-energy benefits
2. Will increase market acceptance and lead to reduced costs
3. For consistency with other programs in region
4. Helps increase participation in cost-effective program
5. Package of measures cannot be changed frequently and will be cost effective in future
6. Pilot or research project
7. Required by law or is consistent with Commission policy and/or direction



Estimation of Non-Energy Benefit Impacts of Reduced Arrearages From Energy-Saving Measures

Agenda

- Staff estimated the impacts that energy savings can have on reducing arrearages for utilities as a non-energy benefit
- Overview of the method used to estimate the impacts
- Results of impacts on a few select measures
- Questions and answers

Non-energy Benefits (NEBs)

- Non-energy benefits are benefits that are not directly related to energy and the utility system
- Those that can be quantified are included in cost-effectiveness calculations
- Even if they are not quantified or quantifiable, large, clear non-energy benefits can lead to a cost-effectiveness exception

Quantifying the Theoretical Value of Arrearages as NEBs

- Utilities incur additional costs when customers are unable to pay their bills
- The utility takes on customer debt, experiences interest cost and may have to write the debt off
- Additional expenses include utility disconnection, collections and administration expenditures
- Data from January 2020 – March 2021 shows on average there have been about 252,000 residential customers in arrears for an average amount of \$234/customer
- There is a non-energy benefit for a utility to reduce these arrearage costs
 - A rare case where NEBs directly reduce utility costs, so are applied to the numerator of the Utility Cost Test

Calculating Value of Arrearages

- Reduced Arrearage Carrying Cost (RACC)

$$RACC = PV(\text{Average Customer Arrearage} * \text{Annual Bill Reduction} * \text{Arrearage Impact} * \text{Utility Discount Rate})$$

Input	Source	Value
Average customer arrearage	UM 2114 workshop data	\$234
Average Measure Life (years)	Measure Specific	Depends on measure
Total Customer Annual Bill	Weighted average bill for 0-200% FPL from DOE LEAD tool	\$1,590
Total Bill Reduction	Measure specific savings multiplied by an assumed blended residential rate of \$0.119/kWh	Depends on measure
Arrearage Impact- % of Bill Savings that Result in Lower Arrearages	APPRISE. (2021). California Energy Savings Assistance Program Non-Energy Benefits Final Report.	32%
Utility Discount Rate	Energy Trust Blended Discount Rate	4.50%

Calculating Value of Arrearages

- Reduced Arrearage Expenditures (RAE)

$$RAE = PV(\text{Average Customer Utility Arrearage Expenditure} * \text{Annual Bill Reduction} * \text{Arrearage Impact})$$

Input	Source	Value
Average Utility Expenditure per Customer in Arrears	UM 2114 workshop data	\$131
Average Measure Life (years)	Measure Specific	Depends on measure
Total Customer Annual Bill	Weighted average bill for 0-200% FPL from DOE LEAD tool	\$1,590
Total Bill Reduction	Measure specific savings multiplied by an assumed blended residential rate of \$0.119/kWh	Depends on measure
Arrearage Impact- % of Bill Savings that Result in Lower Arrearages	APPRISE. (2021). California Energy Savings Assistance Program Non-Energy Benefits Final Report.	32%
Utility Discount Rate	Energy Trust Blended Discount Rate	4.50%

Outcomes of Applying Arrearages NEBs

- Increases the incentive cap on these measures but not by a lot
- Incentive offers for these measures are currently below the incentive maximum
- Would not move the needle significantly for the UCT or the TRC

Measure	Average Measure Life	Average kWh Savings	Average therm Savings	Average Incremental Costs	Current Average Incentive Maximum	Increase in Maximum Incentive from this NEB	% Increase of Potential Incentive from this NEB	Current Incentive Offerings
Ductless Heat Pumps in Single Family and Manufactured Homes	18	3,011	0	\$3,973	\$3,458	\$0 - \$115	0% -3%	Savings Within Reach: \$1,000 + \$2,900 from Community Partner
Manufactured Homes Replacement	45	5,858	525	\$106,526	\$23,057	\$177 - \$1984	2% - 4%	\$10,000/home
Single Family Insulation Retrofit Attic, Wall, Floor Insulation (assuming 1,000 sq ft home)	45	178	44	\$1,995	\$1,165	\$0 - \$40	0% - 3%	Savings Within Reach Attic&Wall: \$500/home Floor: \$400/home
Direct Install Ceiling Insulation (assuming 1,000 sq ft home)	45	462	51	Variable - depends on partner funding	\$2,215	\$29 - \$97	2% - 3%	\$1,500/home

Conclusions

- This benefit would theoretically increase the maximum amount of incentive we can pay, but not by a lot
 - Incentive offers for these measures are currently below the incentive maximums
 - Increasing incentive offerings has budget impacts
- This benefit would not move the needle on the UCT or TRC
- By itself, this benefit doesn't significantly change our offers

Context for Moving Forward

- We can still pursue measures that are not cost-effective via measure exceptions granted by the OPUC
- Emerging policy considerations could change the way that we serve limited income markets



Energy Trust Co-funding with Community Action Organization of Washington County

Agenda

- Background on Energy Trust Co-funding
 - Policy context
- Community Action Organization of Washington County (CAO)
 - Operational details
 - Outcomes of Program Year (PY) '19-'20
 - Forecasted results of PY '20-'21
- Next Steps
 - Continue collaboration for PY '21-'22
 - Explore expansion to other agencies
 - Intersection with recently passed legislation

Background

- Public purpose charge statute, ORS 757.612, establishes separate funding streams for energy efficiency to be administered by Energy Trust and Oregon Housing and Community Services (OHCS)
- Low-income public purpose funds are delivered through OHCS in alignment with other low-income services; historically, these funds were delivered independently, without project overlap
- In July 2019, the OPUC approved a framework around attribution, reporting and cost effectiveness expectations for collaborations between Energy Trust and CAP agencies funding low-income energy efficiency

Background

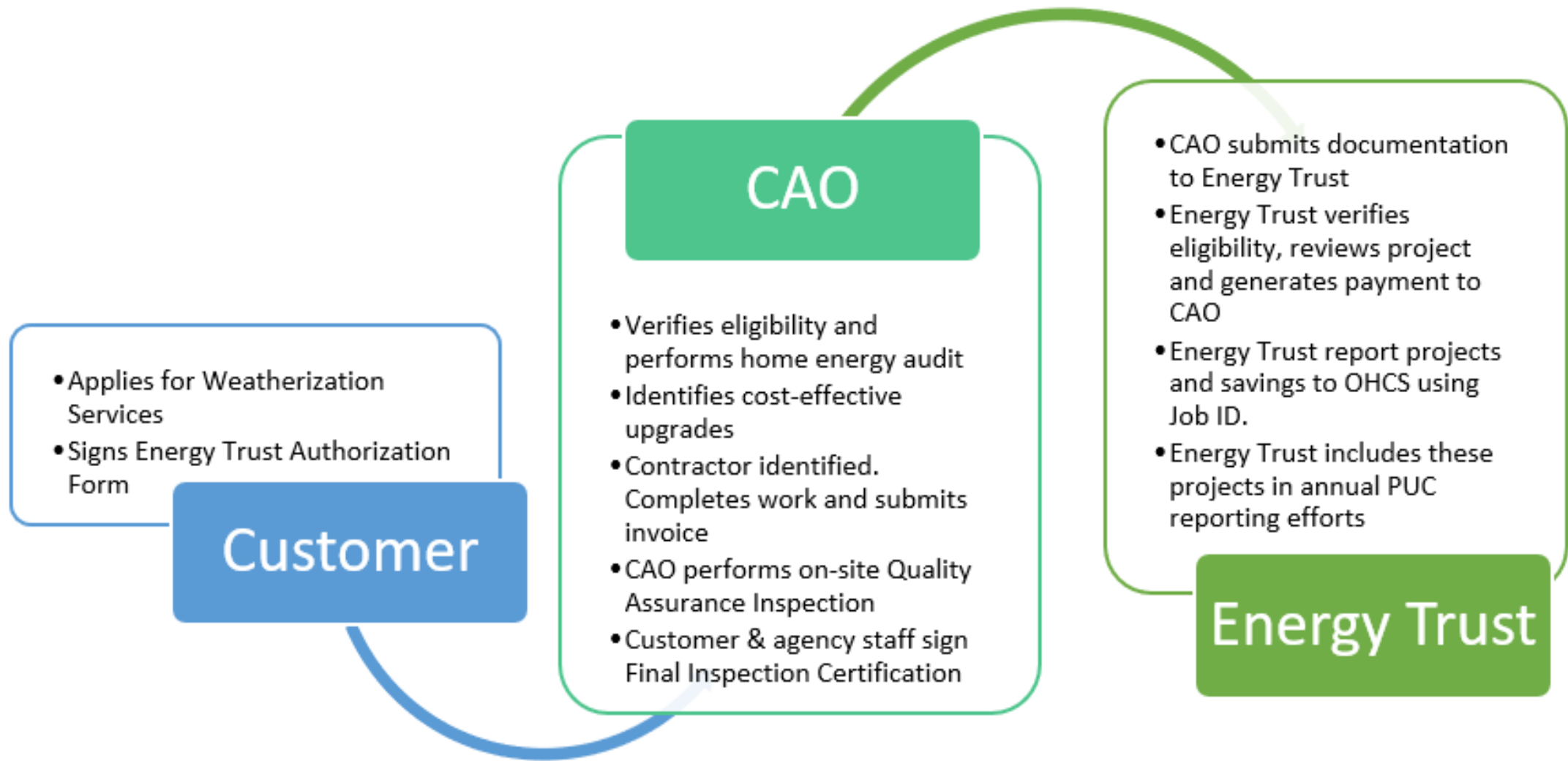
- Initial demonstration project between Energy Trust and Community Action Organization of Washington County focused on residential customers
- Worked with OPUC, PGE, Pacific Power, OHCS, Community Action Partnership of Oregon and community action agencies
- Additional areas of co-funding between Energy Trust and OHCS include:
 - Manufactured Homes Replacements (MHR) – eligible communities can benefit from combined funds to replace inefficient units
 - Multifamily Efficiency Program (MEP) – drives additional electric savings through combined funds to enhance project scopes and/or support more efficiency projects in the affordable housing sector

Co-funding Overview

- **Goal:** Support Community Action Agencies to serve more low-income residents and achieve greater energy savings
- **How:** Combine Energy Trust funding with ECHO-funded HVAC and weatherization measures



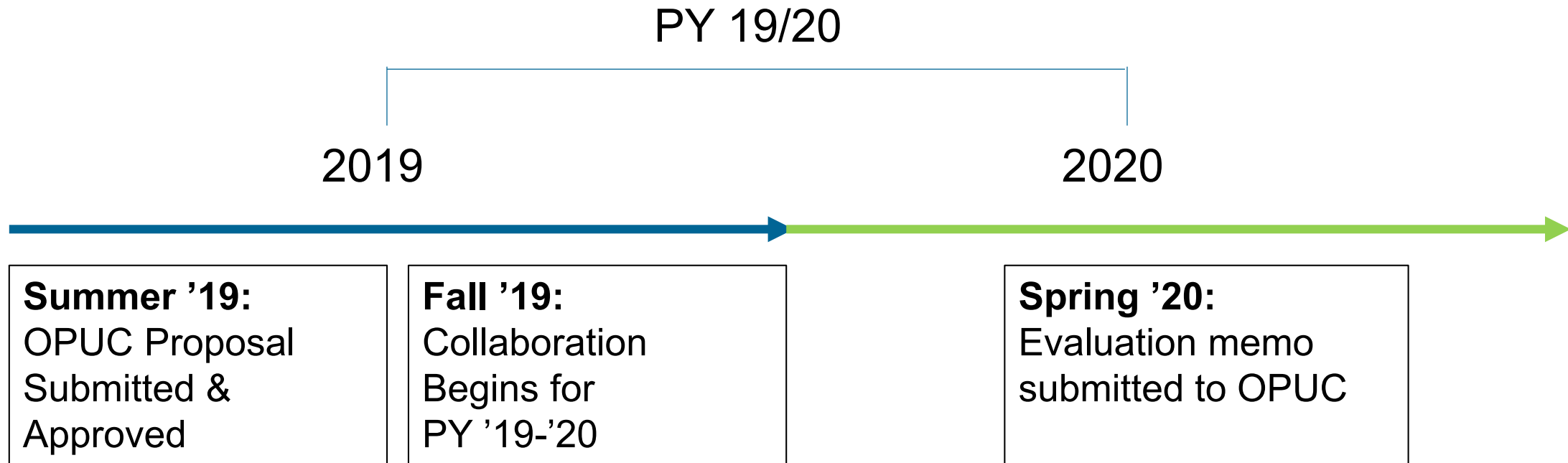
Operational Details



Co-funding Amounts By Upgrade

Upgrade	Co-Funding Amount
Ducted Heat Pump	\$3,000
Ductless Heat Pump	\$2,000 - \$2,800
Heat Pump Water Heater	\$498
Attic Insulation	\$1.25 / square foot
Wall Insulation	\$1.50 / square foot
Floor Insulation	\$1.00 / square foot
Windows	\$4 - \$15 / square foot
Duct Sealing (manufactured home only)	\$300
Duct Repair (manufactured home only)	\$150
Home Energy Assessment	\$250 -\$500 per site

First Collaboration: Community Action of Washington County



Outcomes of '19-'20 PY Collaboration

- **Co-funding Provided:** \$301,449
- **Demonstrating Additionality:** By providing 22% more electric budget to CAO:
 - 32% more measures were installed
 - 29% more savings were achieved
- **Outcome:** Evaluation completed in May 2020
 - Used extrapolation to analyze results before PY ended
 - '19-'20 Program Year a success, renewed for the '20-'21 Program Year

PY '19-'20 Co-funding Outcomes

Energy Trust Co-funding Metrics	Measure Goals	Results	Percent to Goal
HVAC	48	55	115%
Insulation	72	65	90%
Audit Fees	120	127	106%
Total Core Measures	120	120	100%
Total Other Measures*	N/A	197	N/A
Total kWh Savings**	281,900	355,889	126%
Total Sites Served by Energy Trust	N/A	88	N/A
Total Incentives	\$300,000	\$301,449	100.5%

*Other measures include HVAC controls, wall insulation, air/duct sealing, duct repair, etc. since these were not included in original goals. Savings and incentives from these other measures are included in the table totals.

**The reportable kWh savings are listed as determined by Energy Trust. The reportable kWh savings goal of 281,900 was set using 2019 “savings per unit” multipliers. The progress and extrapolated columns represent a blend of savings from 2019 and 2020 measure installs. 2020 measure installs may have different “savings per unit” multipliers.

PY '20-'21 Co-funding Outcomes

- **Co-funding Provided:** \$247,703
 - 83% to \$300,000 goal due to material/contractor shortages
- **Forecasted Additionality:** By providing 23% more budget to CAO, forecasts indicate:
 - 34% more installed measures
 - 33% more savings
- **Results:** Evaluation completed in May 2021
 - Forecasted results provided confidence to deem PY '20-'21 a success, renewed for the PY '21-'22
 - Final additionality results will be available in September
 - Considering additional evaluation methodology for '21-'22

PY '20-'21 Co-funding Outcomes

Energy Trust Co-funding Metrics	Measure Goals	Results	Percent to Goal
HVAC	49	41	84%
Insulation	69	55	80%
Audit Fees	120	102	85%
Total Core Measures	118	100	85%
Total Other Measures*	N/A	140	N/A
Total kWh Savings**	275,450	261,624	95%
Total Sites Served by Energy Trust	N/A	65	N/A
Total Incentives	\$300,000	\$247,703	83%

*Other measures include HVAC controls, wall insulation, air/duct sealing, duct repair, etc. since these were not included in original goals. Savings and incentives from these other measures are included in the table totals.

**The reportable kWh savings are listed as determined by Energy Trust. The reportable kWh savings goal of 281,900 was set using 2019 “savings per unit” multipliers. The progress and extrapolated columns represent a blend of savings from 2019 and 2020 measure installs. 2020 measure installs may have different “savings per unit” multipliers.

Lessons Learned

- Program year and budget cycle differences
- Cost-effectiveness criteria differ, with additional flexibility available for agencies to provide health and safety improvements
- Data sharing and reporting coordination required between Energy Trust and OHCS staff
- Agencies require increased staffing and administrative support to serve additional customers
- Agency onboarding process and ongoing coordination necessary to facilitate requirements
- This new delivery model expands opportunity to work with CBOs and other community partners using the same set of incentives
- Most CAO contractors are trade allies

Next Steps

- Develop a proposal to continue co-funding projects with CAO for '21-'22 PY
- Expand weatherization and manufactured home replacement opportunities to interested CAP agencies
- Work with community-based organizations to serve income qualified customers using a similar set of incentives/measures
- Develop model to deliver funding for no-cost ductless heat pump installations in low-income homes

Together, these 2 examples illustrate our focus on community engagement

- Guided by 2020-2024 Strategic Plan, Annual Goals, DEI Plan
- See this as a regular topic at CAC to share approaches

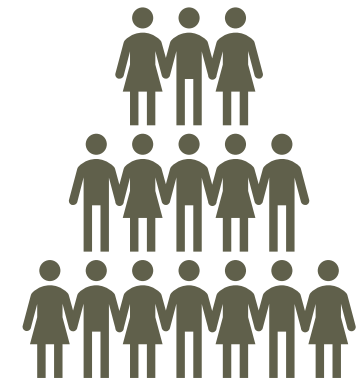
Listening and learning from experts

Serving customers & increasing awareness with CBO partners

Co-developing offers and approaches

Examining systems and structures to increase impact

Supporting staff with training and coordination



Open Discussion

- How do we continue to learn and adapt from these approaches?
- Other efforts we could explore to deliver on this focus area for the organization?
- Are there other funding sources or resources that we should explore as points of leverage



Thank You

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HB 3141 – Public Purpose Charge Modernization

Conservation Advisory Council

August 4, 2021

Enrolled
House Bill 3141

Sponsored by COMMITTEE ON ENERGY AND ENVIRONMENT (at the request of Representative Pam Marsh)

CHAPTER

AN ACT

Relating to energy; creating new provisions; amending ORS 297.300, 317A.100, 456.587, 757.054, 757.247, 757.365, 757.612, 757.613 and 757.617 and section 1, chapter 63, Oregon Laws 2016; repealing ORS 757.689; and prescribing an effective date.

Be It Enacted by the People of the State of Oregon:

PUBLIC PURPOSE CHARGE

SECTION 1. ORS 757.612 is amended to read:

757.612. (1)(a) There is established an annual public purpose expenditure standard for electric companies and Oregon Community Power to fund [*new cost-effective energy conservation, new market transformation efforts,*]:

Changes Made to the Public Purpose Charge

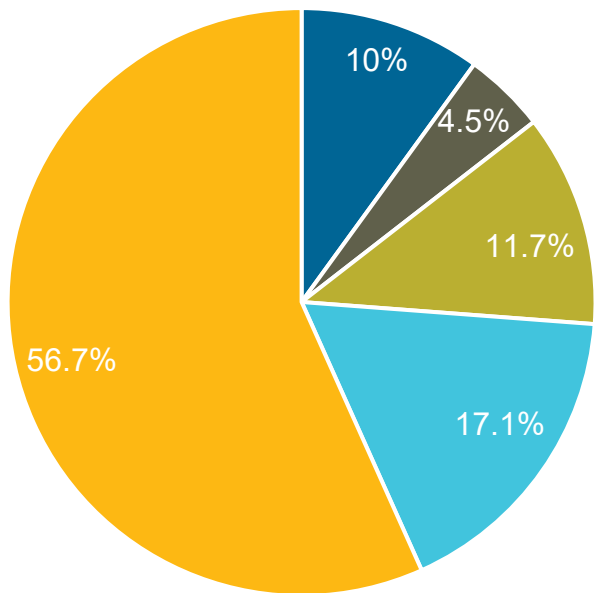
	2020	2021 (Changes are bolded)
Utilities	Portland General Electric	Portland General Electric
	Pacific Power	Pacific Power
Percentages	3% of annual utility revenue	1.5% of annual utility revenue
		Energy efficiency funding removed and now funded through OPUC ratemaking
Sunset	January 1, 2026	January 1, 2036
		Renewable funding extended. No sunset in statute for energy efficiency
Public Purpose Charge Administrators	Energy Trust (contracted with via OPUC)	Energy Trust (contracted with via OPUC)
	Oregon Department of Energy (ODOE)	Oregon Department of Energy (ODOE)
	Oregon Housing and Community Services (OHCS)	Oregon Housing and Community Services (OHCS)
Energy Efficiency	Cost-effective energy efficiency and market transformation (large customers can self-direct and limits on large customer funding)	Cost-effective energy efficiency funding no longer part of public purpose charge
	56.7% of fund	<i>Funding set in joint coordination with utilities through OPUC ratemaking process and administered by Energy Trust (large customers can self-direct and new tiered tariff payment caps for large customers through 2035)</i>
	Administered by Energy Trust	
Renewable Energy	Above-market costs of renewable energy 20 MW or less	Above-market costs of renewable energy 20 MW or less in capacity
	17.1 % of fund	Distribution system-connected technologies that support reliability, resilience and renewables integration
	Administered by Energy Trust	25% of funds dedicated to low- and moderate-income projects, not subject to above-market costs
		0.51% of fund; similar annual funding to previous allocation
		Administered by Energy Trust

Changes Made to the Public Purpose Charge

	2020	2021 (changes are bolded)
Low-income weatherization	Weatherization (ECHO, Energy Conservation Helping Oregonians) 11.7 % of fund Administered by OHCS	Weatherization (aka ECHO, Energy Conservation Helping Oregonians) Manufactured home replacement; bulk fuel switching to electric 0.55% of fund; increase in annual funding Administered by OHCS
Low-income housing	Housing development grant program (aka Housing Trust Fund) 4.5% of fund Administered by OHCS	Housing development grant program (aka Housing Trust Fund) 0.14% of fund; similar annual funding to previous allocation Administered by OHCS
School efficiency	Energy and fleet audits, efficiency upgrades in public K-12 instructional school facilities and electric school buses/infrastructure First 10% of fund Administered by ODOE and distributed to school districts	Energy and fleet audits, efficiency upgrades in public K-12 instructional school facilities and electric school buses/infrastructure 0.3% of fund; similar annual funding to previous allocation Administered by ODOE and distributed to school districts
Equity components	SB 1149 did not have specific Equity directives	Equity metrics must be set by end of 2022 through OPUC public process that includes representatives of environmental justice communities; revised every 4 years Metrics assess investment of all ratepayer funds paid to nongovernmental entity; entity must report on its performance in achieving the metrics

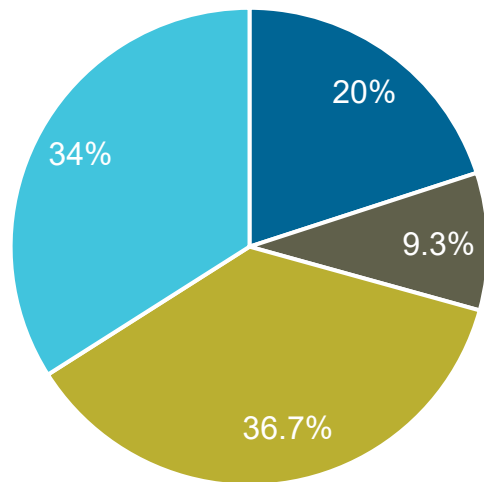
Changes to Public Purpose Charge

3% Public Purpose Charge (from SB 1149*)



- Energy conservation in schools (ODOE)
- Low-income affordable housing (OHCS)
- Low-income weatherization (OHCS)
- Renewable energy (Energy Trust)
- Energy efficiency (Energy Trust)

1.5% Public Purpose Charge (from HB 3141*)

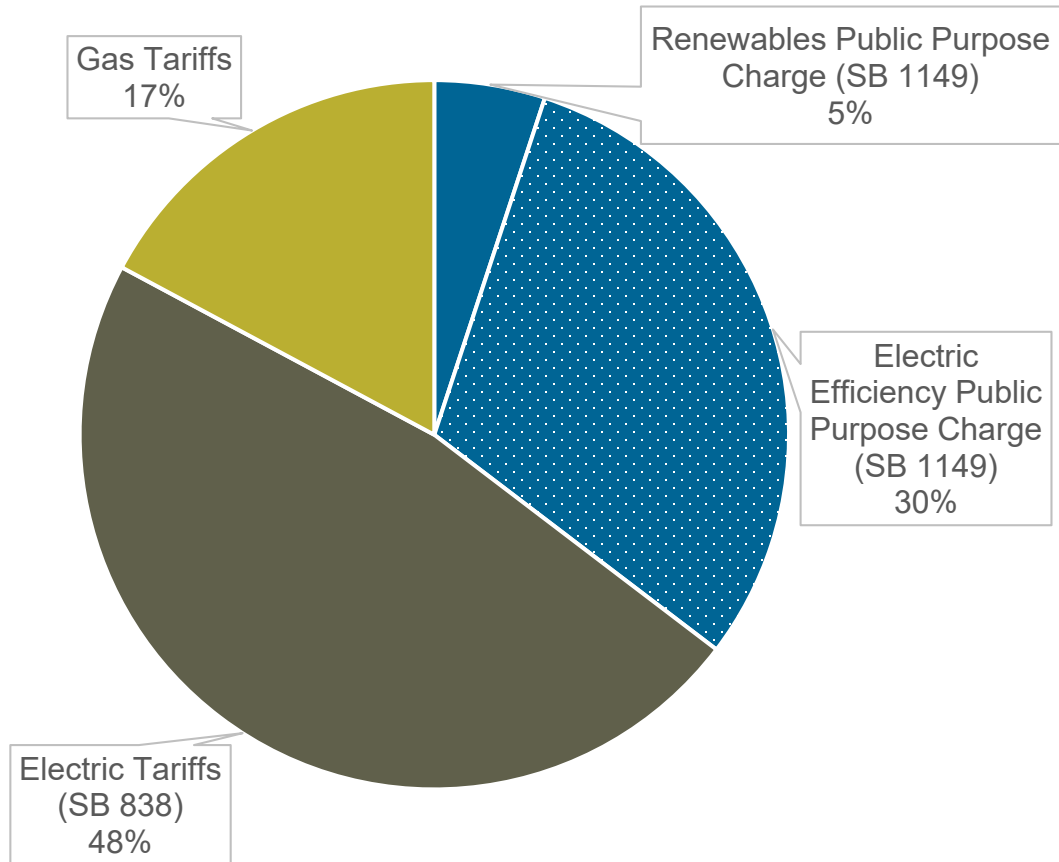


- Energy conservation in schools (ODOE)
- Low-income affordable housing (OHCS)
- Low-income weatherization (OHCS)
- Renewable energy (Energy Trust)

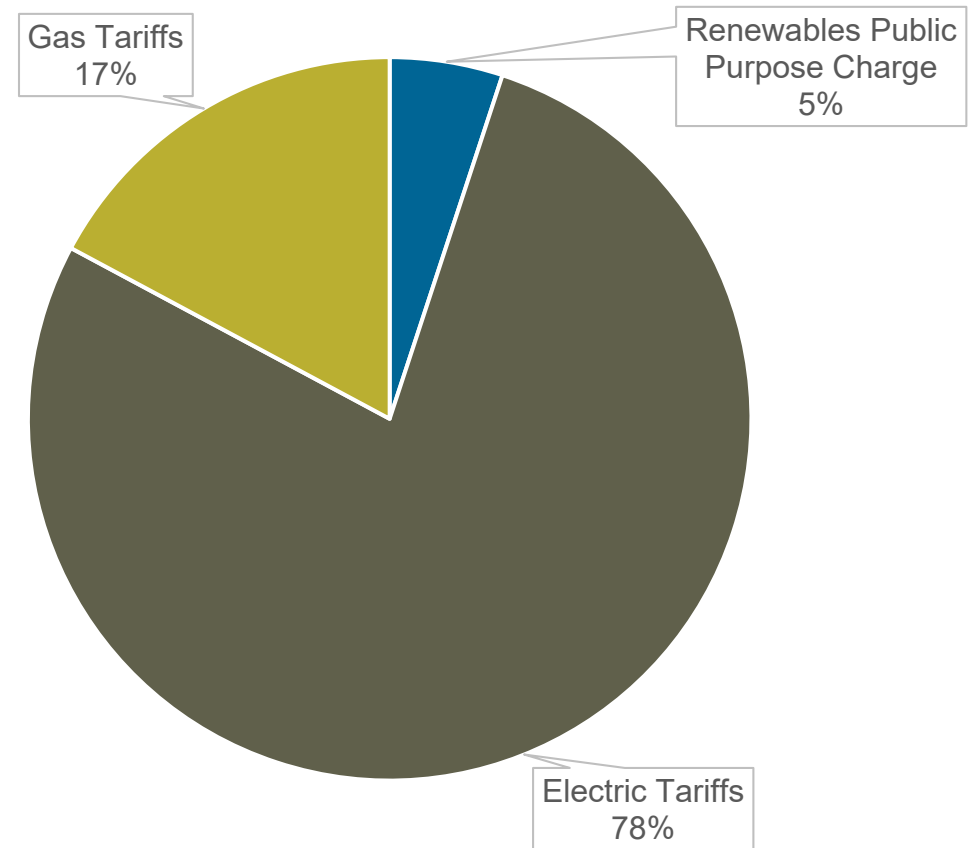
*Separate from the public purpose charge, all achievable cost-effective energy efficiency can be planned for, pursued and funded through utility-specific ratemaking processes

Visualizing Adjustments to Energy Trust's Oregon Ratepayer Funding Due to HB 3141

Actual 2020 Revenues (\$170.1M)



2020 Revenues If HB 3141 Was In Effect (\$170.1M)



NOTE: charts are for illustrative purposes only, make assumptions on electric funding levels that would have resulted from HB 3141 in 2020, use 2020 actual Oregon ratepayer revenues and exclude smaller contracts

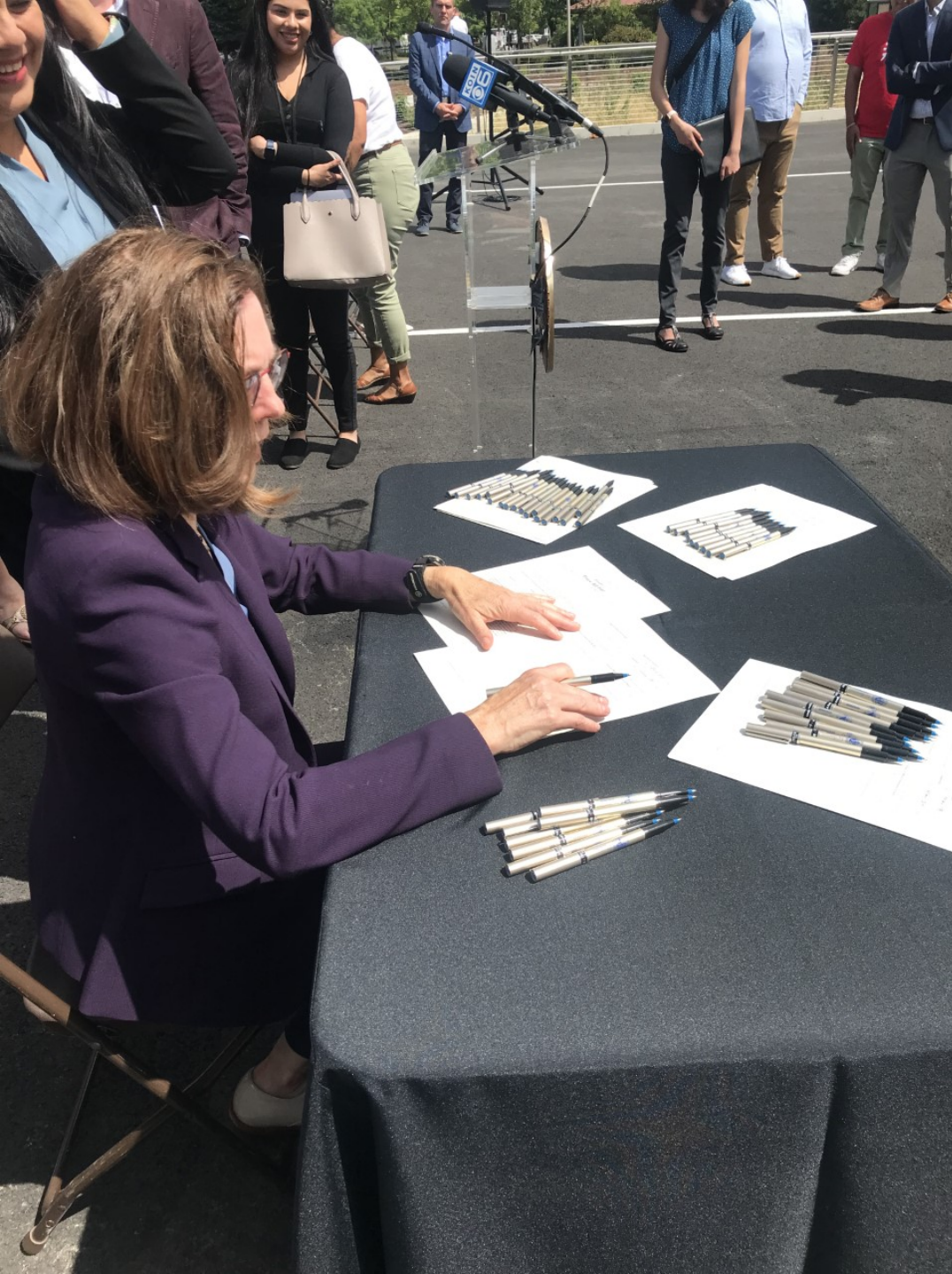
Implementing HB 3141

- Bill implemented through agency rulemaking
- OPUC has started assessing all 2021 legislation for implementation, including HB 3141
- Internal team formed to comprehensively review HB 3141 and other intersecting bills
 - Responsive to OPUC requests for information
 - Identify necessary changes, roles and engagement processes for 2021
 - Prepare for broader implementation in 2022

Other Relevant Laws Passed

- Established 100% clean electricity by 2040 (HB 2021)
- OPUC can consider differential energy burdens for low-income customers and other inequities when setting rates and designing energy burden reducing programs (HB 2475)
- Temporary increase to low-income electric bill pay assistance (HB 2739)
- Reset building code year for structures destroyed by the September 2020 wildfires (2005 for residential, 2007 for commercial) (HB 2289)
- Established a \$10 million Healthy Homes program through the Oregon Health Authority (HB 2842)
- Appropriated to ODOE \$10 million for the solar+storage rebate program and \$10 million for a post-fire energy-efficient rebuilding grant program (HB 5006)





Thank You

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P.S. check out this useful end-of-session report from ODOE

[https://www.oregon.gov/energy/Data-and-Reports/Documents/2021-Legislative-Session-Re\[...\]lwAR1TCnSPJF03S5_4ZmNHC19fBxRV8blvk40g6yVUwmHaRCa1do5dPp8GTGg](https://www.oregon.gov/energy/Data-and-Reports/Documents/2021-Legislative-Session-Re[...]lwAR1TCnSPJF03S5_4ZmNHC19fBxRV8blvk40g6yVUwmHaRCa1do5dPp8GTGg)