

Conservation Advisory Council Agenda

Virtual meeting

Wednesday, May 11, 2022

1:30 – 4:15 p.m.

To join the Zoom meeting, register at this link:

https://us06web.zoom.us/meeting/register/tZErcuyogT4sG9dcD_pvMnt-yaVSXy0zioPN.

After registering, you'll receive a confirmation email with information about joining the meeting.

1:30 Welcome and announcements

- Agenda review
- Introductions
- February and April meeting notes approval

1:40 Organizational updates *(inform)*

Staff will share updates on:

- Next steps after the April council discussion on strategic considerations and market insights for Energy Trust 2023 planning
- Reviewing and aligning customer-facing materials with Energy Trust's fuel neutrality policy
- Results and insights from first quarter activity

Presenters: Tracy Scott, Cameron Starr

2:10 Residential program updates *(inform and input)*

Program staff will update the council on Residential program and incentive changes, including new bonus offers and designing a no-cost ductless heat pump pilot. The 3-year pilot will work with community delivery partners to design the pilot and start delivering ductless heat pumps to low-income customers this summer.

Presenters: Marshall Johnson, Ryan Crews

2:45 Business program updates *(inform with Q&A)*

Program staff will update the council on business program and incentive changes, including:

- Business lighting – incentive increases and changes
- Production Efficiency – project cap changes and incentive increases
- Existing Buildings – gas bonuses

Presenters: Jessica Kramer, Kirstin Pinit, Wendy Gibson

3:15 Break

3:25 In-progress update on New Buildings code alignment *(inform with Q&A)*

Staff will recap the current cost-effectiveness exception for whole-building projects and update the council on the New Buildings program code alignment efforts, including market research and program design enhancements.

Presenters: Shelly Carlton, Alex Novie

3:55 Member spotlight: Oregon Department of Energy *(inform with Q&A)*

Council Member Andy Cameron and Government Relations Coordinator Christy Splitt will provide updates on Oregon Department of Energy activities, including implementation of SB 1536, the Right to Cooling bill passed during the 2022 state legislative session.

Presenters: Christy Splitt, Andy Cameron

4:10 Public comment

4:15 Adjourn

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

Next meeting is Wednesday, June 29, 1:30 p.m. – 4 p.m.

Conservation Advisory Council Meeting Notes

February 16, 2022

Attending from the council:

Jeff Bissonnette, NW Energy Coalition
Jake Wise, Portland General Electric
Kari Greer, Pacific Power
Rick Hodges, NW Natural
Tina Jayaweera, NW Power and Conservation Council
Alyn Spector, Cascade Natural Gas
Andy Cameron, Oregon Department of Energy
Lisa McGarity, Avista
Anna Kim, Oregon Public Utility Commission
Tyler Pepple, Alliance for Western Energy Consumers
Becky Walker, NEEA

Attending from Energy Trust:

Hannah Cruz	Jay Ward
Tracy Scott	Amanda Zuniga
Elizabeth Fox	Alexis Bright
Emily Findley	Amanda Potter
Debbie Menashe	Emma Clark
Cheryle Easton	Mia Deonate
Fred Gordon	Sue Fletcher
Elaine Dado	Cameron Starr
Shelly Carlton	MacKenzie Kurtner
Quinn Cherf	Tyrone Henry
Kate Wellington	Jessica Kramer
Steve Lacey	Andrew Shepard
Susan Jowaiszas	Ryan Crews
Amanda Thompson	Quinn Parker
Marshall Johnson	Alex Novie
Amber Cole	
Julianne Thacher	
Wendy Gibson	
Thad Roth	

Others attending:

John Molnar, Rogers Machinery	Wendy Cutts, Cascade Energy
Alan Meyer, Energy Trust board	Alecia Dodd, CLEAResult
Lindsey Hardy, Energy Trust Board of Directors	John Karasaki, Portland General Electric
Andi Rex, Small Business Utility Advocates	Clark Fisher, Energy350
Brooke Landon, CLEAResult	Jenny Sorich, CLEAResult
	Chris Smith, Energy350

1. Welcome and Announcements

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

Hannah opened with a summary of the agenda and led a round of introductions among the Conservation Advisory Council and board members present. Hannah introduced two new members joining the council. Andy Cameron is taking over for Roger Kainu and represents the Oregon Department of Energy. Andy has prior experience as an energy manager for Washington County, where he worked with facilities and parks. Jake Wise joins the council from Portland General Electric, taking over for former council member Jason Klotz. Jake has held several positions with Portland General Electric over the last three years, most recently as a community engagement manager in the diversity, equity and inclusion team.

2. Organizational updates

Topic summary

Tracy Scott, director of energy programs, shared Energy Trust's preliminary annual results from 2021, including progress to achieving energy-saving goals. The official annual report will be available on April 15. Tracy reviewed energy efficiency and renewable energy results by fuel type and utility. She provided context that 2021 posed challenges due to supply chain disruptions and labor shortages stemming from the ongoing pandemic. Tracy explained that some shortfalls were due to project completion timelines shifting into 2022, but those are still in progress and will contribute to a strong pipeline for 2022.

Discussion

The council asked when Energy Trust would present the final results to Oregon Public Utility Commission (Kari Greer). Energy Trust will submit its final annual report on April 15 and present the results to the commission in May.

Next steps

Energy Trust's annual report to the Oregon Public Utility Commission will be available on April 15 and will be posted to Energy Trust's website.

3. Program Updates

Topic summary

Program staff shared noteworthy program updates with the council.

Thad Roth, Residential sector lead, and Amanda Potter, Industry and Agriculture sector lead, provided an update on upcoming requests for proposal for program management contractors, which will be posted in the coming months. Both solicitations include a supplier diversity requirement, and the program management contractor needs to demonstrate how it will ensure at least 20% of the contract dollars are spent with firms that are certified by the Certification Office for Business Inclusion and Diversity (COBID). Both programs have also hosted informational webinars to help prospective bidders understand the programs, as well as a virtual networking event for prospective bidders and subcontractors to explore teaming opportunities.

Andrew Shepard, Residential senior project manager, gave an update on the development of on-bill financing for the Savings Within Reach offer in Avista territory. With on-bill financing, income-qualified customers can access low-interest financing through a participating lender and pay off the balance of their upgrade on their utility bill. For Avista customers, the lender is Puget Sound Credit Union. For the territories of other utilities that participate in this offer, Energy Trust will continue to work with lender Craft3.

Discussion

Council members asked for more detail on the contracting diversity requirement featured in the two proposal requests. Staff clarified they are looking for program management contractors to weave Energy Trust's diversity, equity and inclusion expectations into their overall proposal and delivery. This should focus on expanding participation of communities of color, customers experiencing lower incomes and rural customers. Staff added that industrial and agriculture programs have historically focused on increasing service to rural small businesses but are now exploring ways to expand the focus to include more minority- and women-owned businesses.

A council member asked how on-bill payments would be applied for a customer whose bill has gone into arrears (Tina Jayaweera). Council members representing utilities confirmed that the customer's payment would be applied to their bill and billing deposit before being put toward the loan. Utilities would also not disconnect a customer due to nonpayment of the loan balance; the loan would be referred back to the lender in that case (Lisa McGarity, Kari Greer).

Next steps

Staff will continue sharing updates with the council as the requests for proposals are released and the process moves forward. More information about on-bill repayment is available on Energy Trust's website.

4. Measure development updates and research priorities for 2022

Topic summary

Alex Novie, measure development manager, presented plans for measure development and related research happening in 2022 for 2023 program planning and budgeting. He reviewed the measure development process and its relationship to program design, explaining that measures may be designed to reach customers at different points in the decision-making process. Energy Trust typically finalizes new and updated measures each September and is inviting input from the council early in the process.

Existing measures being updated for homes and businesses include insulation, windows, heating, water heating and smart thermostats. New measures and offers being explored include residential direct install and no-cost measures, and enhanced offerings for affordable multifamily housing and small businesses. Energy Trust will explore topics like cooling appliances and extreme weather events in its research efforts.

Discussion

The council asked about how this process will be affected if there is a transition to a new program management contractor this year, which may bring interesting ideas to the table (Tina Jayaweera). Staff responded that Energy Trust will be as flexible as possible. While transition planning includes steps to consider this, it will need to remain adaptive.

A council member asked how grid-interactive efficient buildings are reflected in this year's development work (Jake Wise). Staff explained that it is part of the business plan for the Regional Technical Forum, which Energy Trust supports and participates in. In addition, Energy Trust is also working on studies related to system planning, but they are efficiency focused. Energy Trust is looking at energy efficiency benefits that may come with other demand response capabilities and learning from others. The council added that another Regional Technical Forum project is looking at how to develop methodology to value the role of energy efficiency to support flexibility to the grid (Tina Jayaweera).

A council member asked if measure and research prioritization are open to change in response to the public purpose charge modernization law (Rick Hodges). Staff noted that the law has specific language about creating utility-specific budgets, and Energy Trust is figuring out what

that means and how it will impact the budget process. Measure development isn't expected to play into that since budgeting is done at the program level.

The council added that the energy industry is moving in the direction of focusing on grid-interactive efficient buildings and asked how Energy Trust will adapt to these market changes as it starts seeing more overlap between efficiency and other benefits like demand response (Kerry Meade). Staff gave an example of how Energy Trust is working with Portland General Electric on its Smart Grid Test Bed project to test marketing approaches to promote combined efficiency, demand response and renewable energy. Energy Trust is also subcontracting with Portland General Electric to target measures that have intersections with other demand-related benefits.

Next steps

Council members are encouraged to contribute measure or research ideas for Energy Trust to consider. The new and updated measures will be announced in September.

5. Update on heat pump cost-effectiveness exception request

Topic summary

Alex Novie, measure development manager, presented an overview of a ductless heat pump cost-effectiveness exception granted by the Oregon Public Utility Commission for 2022-2024. This exception is for efforts in existing single-family, multifamily and manufactured homes to displace electric resistance heat and deliver multiple benefits to customers through trade allies and community partners. One application of the exception will be for Energy Trust to co-create a no-cost ductless heat pump pilot this year and work with community partners to lower energy burdens for customers experiencing lower incomes. One objective of the pilot is to deepen Energy Trust's knowledge about how to form relationships with other organizations to increase adoption of this technology by customers with higher energy burdens. The council was asked how it would like to be involved in these efforts.

Discussion

The council asked if the pilot is expected to have a cap on total installations (Kari Greer). Staff said there was a dollar cap of \$5 million over three years for the overall pilot. A council member expressed enthusiasm for the co-creation idea, noting that Pacific Power would like to be involved and supportive, as there is a large proportion of renter-occupied homes among their customers (Kari Greer). Staff stated ownership was not specified by the exception request.

The council noted that it is interesting that ductless heat pump measures struggle to achieve cost-effectiveness because savings can vary a lot based on the application. One member asked what nuances are being explored in this no-cost pilot (Tina Jayaweera). Staff said that there will be a focus on quality control and how to optimize savings performance. The ductless heat pump market is bigger than what Energy Trust has focused on specifically in the past. Through the pilot, it expects to gather information about how the conditions of where the technology is being installed can affect savings. Staff added that it's feasible for there to be other funding sources not related to energy efficiency, and Energy Trust is studying a pathway to find out how blended funding can be leveraged to do more. Staff noted savings could also end up being higher in these installation conditions, but Energy Trust can't claim that without knowing for sure through the pilot.

The council asked if the pilot would study savings from the cooling capacity of ductless heat pumps (Jake Wise). Staff explained that this is not a specific goal of the pilot, but staff does assume increased comfort from cooling as part of measure development. Energy Trust hopes to learn more about what is going on in these homes in terms of heating and cooling use and acknowledge some of its assumptions about cooling are likely to change quickly.

Next steps

Council members are invited to share ideas and input about these efforts. Staff will continue bringing updates to utility coordination meetings and to the council as the pilot planning evolves and launches.

6. CAC recruitment

Overview

Hannah Cruz, senior stakeholder relations and policy manager, introduced an update that Energy Trust is proposing to modify its recruitment approach for Conservation Advisory Council and Renewable Energy Advisory Council this year.

The new process would include engaging the council to identify existing skillsets and gaps in desired skillsets. Hannah explained Energy Trust is interested in the council's feedback in refining and implementing the process, which is outlined in full in a memo included with the meeting materials.

The Conservation Advisory Council currently has 14 members, but there's potential for membership to include up to 18 members. Historically, the council has used a more informal recruitment process, but the proposal would be more similar to how the Diversity Advisory Council handles recruitment by using a skillset matrix and a robust outreach, review and selection process. The Energy Trust Board of Directors recent recruitment efforts and nomination process had similar elements. Hannah pointed out there are specific perspectives that would benefit the Conservation Advisory Council, including experience with rural communities, communities of color and customers experiencing lower incomes.

Discussion

The council asked about the council's designated purpose (Becky Walker). Hannah explained the council is intended to advise the board to inform decisions about topics such as strategic planning and budgeting. For staff, the council provides a helpful perspective about experiences with customers in the market that informs proposals, pilots and research.

The council noted that geographic representation is valuable to ensure rural voices are considered. From a technical perspective, members with a climate-forward efficiency approach are desirable. Members stated the council should also seek members who can help view things through an environmental justice and community lens (Jake Wise). A council member added that including members who do not work in the energy efficiency industry could be helpful, but that may require extra work for staff to ensure understanding of the technical topics the council often discusses (Becky Walker).

An attendee said that this reframing of the recruitment process is important because it creates potential for Energy Trust to reach new communities or organizations it wouldn't typically engage with. The attendee added they have found council discussions valuable as they have helped shape their thinking (Lindsey Hardy).

The council stated that the council should look for members who have industry experience across sectors to ensure a balanced market perspective. A regular review cycle to assess skillsets is also worth considering (Tina Jayaweera).

A council member said that rural representation is desirable and expressed interest in broadcasting the opportunity. The member also shared they are supportive of stipends where appropriate (Andy Cameron).

Next Steps

In the next two weeks, Conservation Advisory Council members are asked to complete a skills matrix and are invited to help broadcast the opportunity to their networks to promote awareness among a wider group.

7. 2022 State legislative update

Overview

Jay Ward, senior manager stakeholder relations and policy, presented on energy-related bills that are being monitored during Oregon's 2022 state legislative session. He provided a reminder that pursuant to its grant agreement, Energy Trust does not advocate, lobby or take positions on legislation, and its involvement is limited to monitoring and offering expertise on energy topics when requested. Jay mentioned Energy Trust recently revised the lens used to determine which bills to monitor.

Jay noted that a foundational element of this session is a high degree of change, including in the makeup of legislature in both the house and senate. Due to resignations and retirements, at the end of next session almost half of legislators will be relatively new. Staff identified 25 bills to monitor this session, including three that have a core connection to the organization and programs. These bills relate to building codes, cooling and extreme weather events and equity in clean energy.

Discussion

The council asked about a bill that would create an environmental justice map (Jake Wise). Staff confirmed that bill is House Bill 4077.

Next steps

Staff will continue sharing relevant outcomes from the legislative session with the council.

8. Public comment

There was no additional public comment.

9. Adjournment

The meeting adjourned at 4:30 p.m. The next Conservation Advisory Council meeting was to be scheduled for Tuesday, April 12, from 10:30 a.m. – 2 p.m. as a joint meeting with the Diversity Advisory Council and the Renewable Energy Advisory Council on 2023 organizational goal setting. That joint meeting will be cancelled. The next Conservation Advisory Council meeting will be scheduled at a date TBD.

Conservation Advisory Council Meeting Notes

April 12, 2022

Attending from the council:

Jeff Bissonnette, NW Energy Coalition
Jake Wise, Portland General Electric
Kari Greer, Pacific Power
Monica Cowlshaw, Cascade Natural Gas
Andy Cameron, Oregon Department of Energy
Lisa McGarity, Avista
Anna Kim, Oregon Public Utility Commission
Becky Walker, Northwest Energy Efficiency Alliance
Laney Ralph, NW Natural
David Murphy, Bonneville Power Administration (for Margaret Lewis)

Attending from Energy Trust:

Hannah Cruz	Adam Bartini
Elizabeth Fox	Sue Fletcher
Elaine Dado	Michael Colgrove
Alex Novie	Bayoan Ware
Jay Ward	Jackie Goss
Steve Lacey	Amber Cole
Tom Beverly	Ryan Crews
Fred Gordon	Sarah Castor
Tracy Scott	Debbie Menashe
Amanda Potter	Cameron Starr
Cameron Matthews	Quinn Cherf
Greg Stokes	Emily Estrada
Kirstin Pinit	Shelly Carlton
Marshall Johnson	Renee Garrels
Melanie Bissonnette	
Julianne Thacher	
Thad Roth	
Wendy Gibson	

Others attending:

John Molnar, Rogers Machinery	Roger Kainu, Oregon Department of Energy
Peter Therkelsen, Energy Trust Board of Directors	Benedikt Springer, Community Action Partnership of Oregon
Charity Fain, Community Energy Project	Brooke Landon, CLEAResult
Haley Ellett, City of Hood River	

1. Welcome and announcements

Hannah Cruz, senior stakeholder relations and policy manager, convened the meeting at 1:00 p.m. via Zoom. The agenda, notes and presentation materials are available at www.energytrust.org/about/public-meetings/conservation-advisory-council-meetings.

Hannah opened with a summary of the agenda and led a round of introductions among the Conservation Advisory Council and board members present. Hannah introduced Renee Garrels as facilitator for the strategic direction conversation.

Hannah provided an update on the board of directors committees. Previously, the board had multiple committees. Over the last few months, it has reviewed the structure and purviews of the committees and decided to consolidate and restructure into three committees. In addition to these three standing board committees, an Evaluation Advisory Group will be created to replace the previous board Evaluation Committee. The Evaluation Advisory Group will have approximately eight members including staff. There will also be staff-led public webinars to go over the specifics of each evaluation. The first webinar will be this summer. Council members will be invited, and the webinars will be recorded.

2. Strategic considerations and market insights

Topic summary

Hannah Cruz stated that the process to gather Conservation Advisory Council input to annual planning and budgeting is slightly different this year, in part due to feedback from council members last summer. The change in process is intended to engage the council earlier in the planning process in ways that are relevant to council members' expertise.

There will be a three-part process, starting with this meeting, to gather council input and feedback on 2023 priorities and plans. The second engagement point will happen at the June 29 Conservation Advisory Council meeting. The third engagement point will occur in October.

Renee Garrels facilitated the discussion by asking for council input on a series of questions, listed below.

Discussion

Industry Trends: How are things changing from where Energy Trust, the industry or Oregon were two years ago?

- There are a lot of newcomers in the energy efficiency space who are in learning mode. It's providing more opportunities to think of new ways of doing things, especially in residential. (Lisa McGarity)
- Residential is important. Bonneville Power Administration is focused on reducing energy consumption during the peak morning and evening periods. For measures, as of April 2020 Bonneville Power Administration no longer has retail lighting and heat pump water heater units have seen \$400 – \$500 price increases, which has hindered their potential. (Dave Murphy)
- There's an increased focus on localized and demand side management. (Jake Wise)
- There are a lot of supply chain issues and costs increasing. The learning curve for new technology especially in underserved communities is slow and Community Energy Project spends a lot of time deploying new technology and making sure staff understand it so they can explain it to customers. Conferences are starting to roll back out bringing a larger focus on equity than in the past. Utilities and others co-creating with community-based organizations is an exciting shift. (Charity Fain)
- There is a focus on disaster recovery, with an emphasis on wildfires and proactive hardening of structures. (Andy Cameron)

- Northwest Energy Efficiency Alliance is finding that manufacturer conversations show an emphasis on making new technologies more foolproof and understandable. There's also a shift away from natural gas in new construction in Washington State. That's unique to the Washington code environment. Northwest Energy Efficiency Alliance also sees a focus on residential. (Becky Walker)
- There is more interest by city staff in local planning efforts to gain environmental justice and energy efficiency for residents. Some need support on how to put outreach efforts together to get what they want for residents. (Roger Kainu)
- For commercial there will be an increased focus on building performance based on local policies and companies having sustainability goals. There's also a focus on integrated approaches. (Becky Walker)
- How to redefine energy efficiency to support decarbonization is another trend. The American Council for an Energy-Efficient Economy is doing a lot of impressive work in this area with climate-forward efficiency. (Jake Wise)
- Energy Trust and all of us cannot afford to leave whole segments of customers behind anymore. (Charity Fain)
- It's important to think about supply chain disruptions that are happening for budgeting and forecasting. (Becky Walker)
- The housing unit must be in good enough repair to install energy efficiency technology, meaning there is prework. (Dave Murphy)
- There are prework needs in wildfire recovery, especially in the manufactured home space. Some people were buying used models and those units certainly required prework before energy efficiency measures could be pursued. (Andy Cameron)
- Cost-effectiveness testing primarily establishes a "go/no-go" criterion for energy efficiency programs or portfolios. This is distinct from the crucial task of establishing the objectives (equity, carbon) around which Portland General Electric seeks to optimize its portfolios. (Jake Wise)
- Finding more opportunities for co-funding. Also, there is a shortage of trades to do the work. (Lisa McGarity)

What are customer and community needs?

- Making information more accessible and relevant, meaning avoiding jargon and industry terms in talking to the public. (Monica Cowlshaw)
- Real time translation and interpretation in public meetings. (Andy Cameron)
- Community Energy Project has invested heavily in training staff in the technical information around distribution system planning and revamping workshops and materials. It's very labor intensive to translate things into languages that everyone can understand – moving away from engineering language. Bad language translations are an issue as well. People do care and start to get excited when they learn and start to understand new technology. Also, customers increasingly need cooling. It's a bigger and bigger issue. (Charity Fain)

- Agree with the need to develop cultural competency to hear all voices. Translating utility speak is one thing, but then making it relevant is the next step. That can also be challenging and a lot of work. (Jake Wise)
- There is a sense of confusion on behalf of customers to understand their choices, what they can do and what's best. There's an interest and willingness to do more, but they need help navigating to the right thing for them. (Jeff Bissonnette)
- Some customers must choose between energy efficiency or going to work, plus there are other barriers to completing energy efficiency. (Lisa McGarity)
- It cannot be assumed that people are connected or have access to Wi-Fi. Also, some people don't trust it and don't want it. Many smart thermostats installed aren't connected for both reasons. (Charity Fain)

What are some barriers in the market?

- Funding low-income multifamily developments. (Dave Murphy)
- Lack of money for upfront investments, and buildings with too much deferred maintenance. (Charity Fain)
- Inflation—this is a challenge across the board. When equipment costs double and triple, it effects all sectors. People can't afford to do efficiency to save money on their bills. (Lisa McGarity)
- Drought is a barrier in the market. Farmers aren't planting due to drought or are selling their farms or livestock. That has effects on commercial and residential consumption, but we don't know how much yet. (Dave Murphy)
- In the Klamath Basin drought is a very real-time issue with water predictions/availability and farmer anger/angst. Renters face barriers. They'd like to see changes to their home, but they don't have authority to make them. Property owners are reluctant and slow to move. (Kari Greer)
- Renters also have issues because rent costs often rise after energy-efficient upgrades are made. (Charity Fain)
- An opportunity exists to collectively show up as implementation stewards to municipalities. They go through the work of creating action plans but have little technical assistance to prioritize and put them into practice. Energy Trust does a good job of this but working together can help to support it. (Jake Wise)
- Consumers are looking at rental property options and asking for energy performance information on rental spaces. Cities are asking for rental property energy scoring programs to help their residents choose efficient rental spaces. Beyond energy scoring properties, both residents and cities are asking for incentives to help with upgrades (efficiency and cooling) to rental units. (Roger Kainu)
- About 50% of Pacific Power's service area are rentals. Some areas have higher rental density than others. (Kari Greer)

What programs or offers are out there to meet needs?

- Comfort Ready Homes. Northwest Energy Efficiency Alliance and Ryan Crews, from Energy Trust, helped with this. Installers are paid to come to people's homes and give performance spiffs to people who emphasize and install higher efficiency units. Twenty or so Bonneville Power Administration member utilities are signed up and there is a lot of money on the table to get the attention of customers. (Dave Murphy)
 - Energy Trust staff clarified this refers to a midstream program to help make market participation simpler and heat pump water heaters easier to sell.
- Midstream and working with the actors in that area is the right focus across the region. It's about overcoming the barriers discussed. Distributors and retailers may be better at speaking the customer's language. (Becky Walker)
- On-bill financing for rental properties would help, but program implementers like Energy Trust would need to be careful what that looks like. Energy savings won't necessarily offset the loan amounts. However, could incentives be set to encourage projects among property owners if they agree to cover a larger part of the project cost, and the renter could pay the remainder over time? (Kari Greer)
- Community Energy Project is smaller than a midstream program, but it completed about 20 deep retrofits in 2021 and is trying to double that each year. It is still doing a heat pump water heater replacement program and would like to expand more outside of Portland. It is involved in the SALMON Project with Energy Trust and Portland General Electric. It needs deeper energy efficiency work in homes. The needs in homes are way more than expected. (Charity Fain)
- There are a lot of opportunities around bill alerts and helping customers manage their energy use. Behavioral pilots are now more accurate about defining the loads that customers are using. Information is already available, but people don't sign up. Overcoming those barriers is important. (Lisa McGarity)

How are council members' organizations talking about serving their own customers?

- Portland General Electric recognizes that it has blind spots about how and when it seeks to engage with environmental justice communities. It needs to take advantage of opportunities to ensure it has nontraditional and nontechnical stakeholders in the discussion. It is increasingly recognizing that feedback needs to happen early and often. (Jake Wise)
- Pacific Power is listening to environmental justice communities, but the House Bill 2021 definition is very broad. It touches nearly the entire service. (Kari Greer)
- Urgency. There is a need for everything to move faster because the need is greater. I have less patience with structure and systems that are getting in the way. Things that were in place 20 years ago are getting in the way now. Part of the conversation is that there isn't enough being done. People need to be served face-to-face without losing hope. The political hills are hard but there is a need to keep pushing. (Charity Fain)

What are the biggest market opportunities on the horizon?

- Some opportunities come from things done in the past but that kind of went away. Examples are gas heat pumps, solar water heating with gas backups and even pool heaters—there are lots of natural gas pool heaters in Southern Oregon. There's a lead-time in reintroducing new or old technology into the market. (Lisa McGarity)

- Split system heat pump water heaters for multifamily buildings. This is still formulative. Bonneville Power Administration is part of a national group that just formed to help with this. It's not quite ready to go to market yet. (Dave Murphy)
- There are opportunities from stacking incentives and dual-fuel gas and electric space heating. (Becky Walker)
- Hybrid solutions and gas backups are resiliency items. There are opportunities with distribution system connected technologies, storage and others. There should be reconsideration of what's eligible when you discuss co-funding. (Jake Wise)
- Oregon Department of Energy continues to discuss opportunities to engage in rural and agriculture spaces, including small town Main Street revitalization efforts. Heat pumps/cooling are additional opportunities. There should also be some thinking about new ways to define and expand upon the definitions of energy efficiency, including quantification of non-energy benefits in cost-effectiveness models. (Andy Cameron)
- Communities want to do green tariffs and each community has a different idea of how that looks. There is increasing chatter about fuel switching to electric end-uses. Some of Pacific Power's more vocal communities are strong proponents of electrification (electric vehicles, home heating, etc.). (Kari Greer)
- Cost-effectiveness shouldn't be used anymore. How will this look when units will last a long time and costs are going up? If cost-effectiveness can't be removed, there should be low-income carve outs. What's the point of doing this work if the building envelope is really bad? Some of these repair costs need to be included. (Charity Fain)

What opportunities for collaborative partnerships with other organizations should Energy Trust pursue?

- United States Department of Agriculture or other federal mechanisms providing grants, incentives or loans. (Kari Greer)
- Establish relationships with Oregon Housing and Community Services Department and community action agencies. There's a unique opportunity in light of Senate Bill 1536 to expand the conversation and bring Oregon Housing and Community Services Department, Energy Trust, utilities and Oregon Department of Energy together to streamline weatherization and bill assistance. (Jake Wise)
- Look into how people enter the solar trade. It's not easy to move into that trade. The opportunities I found for BIPOC was in Portland. There are many training requirements to complete. The program for diverse communities includes a stipend, but it does not seem to be enough to support someone making that leap. (Lisa McGarity)
- There is a need for workforce development across a variety of sectors in many areas of the state, especially rural. (Andy Cameron)

What should Energy Trust's strategic priorities be?

- Reference the Climate-Forward Efficiency Roadmap (American Council for an Energy-Efficient Economy, February 2022). Redefine energy efficiency to support decarbonization and treat it as an intentional driver of greenhouse gas reduction. (Jake Wise)

- Collaboration driving innovation in rural, underserved and rental markets. (Andy Cameron)

Next steps

There will be an additional deeper dive into these topics at a Conservation Advisory Council meeting in June or July, followed by staff drafting program and support group action plans and budgets starting in late summer.

3. Public comment

There was no additional public comment.

4. Adjournment

The meeting adjourned at 2:30 p.m. Meeting materials (agendas, presentations and notes) are available [online](#). The next meeting is on Wednesday, May 11, 1:30 p.m. – 4 p.m.



Residential Program Updates

May 2022

Agenda

- 2020-2021 Furnace and Insulation Bonus Results
- 2022 Incentive Adjustments (Furnace / Insulation)
- 2018-2022 Ductless Heat Pump (DHP) Rental Results
- 2022 Incentive Adjustments (DHP)
- No-cost DHP Offer

Gas Furnace Bonus – 2020-2021 Results

Gas Furnace Bonus	Central Oregon	Eastern Oregon	North Coast	Portland Metro & Hood River	Southern Oregon	Southwest Washington	Willamette Valley	Grand Total
Bonus Period Participation	39	73	44	1,369	177	494	487	2,683
Comparison Period Participation	8	22	36	580	88	266	279	1,279
% Change	388%	232%	22%	136%	101%	86%	74%	109%

- Increased participation for renters and moderate-income customers
- Aided by existing strategies in Cascade Natural Gas territory to simplify participation

Ceiling Insulation – 2020-2021 Results

Insulation Bonus	Central Oregon	Eastern Oregon	North Coast	Portland Metro & Hood River	Southern Oregon	Southwest Washington	Willamette Valley	Grand Total
Bonus Period Participation	48	12	16	1,107	573	18	247	2,021
Comparison Period Participation	14	6	8	333	52	5	80	498
% Change	242%	100%	100%	232%	1001%	260%	208%	363%

- Increased participation for low- and moderate-income customers
- Incentives covered ~75% of installation costs in Metro area, between 88-100% across the territory
- Strong success in Southern Oregon driven by successful trade ally promotions

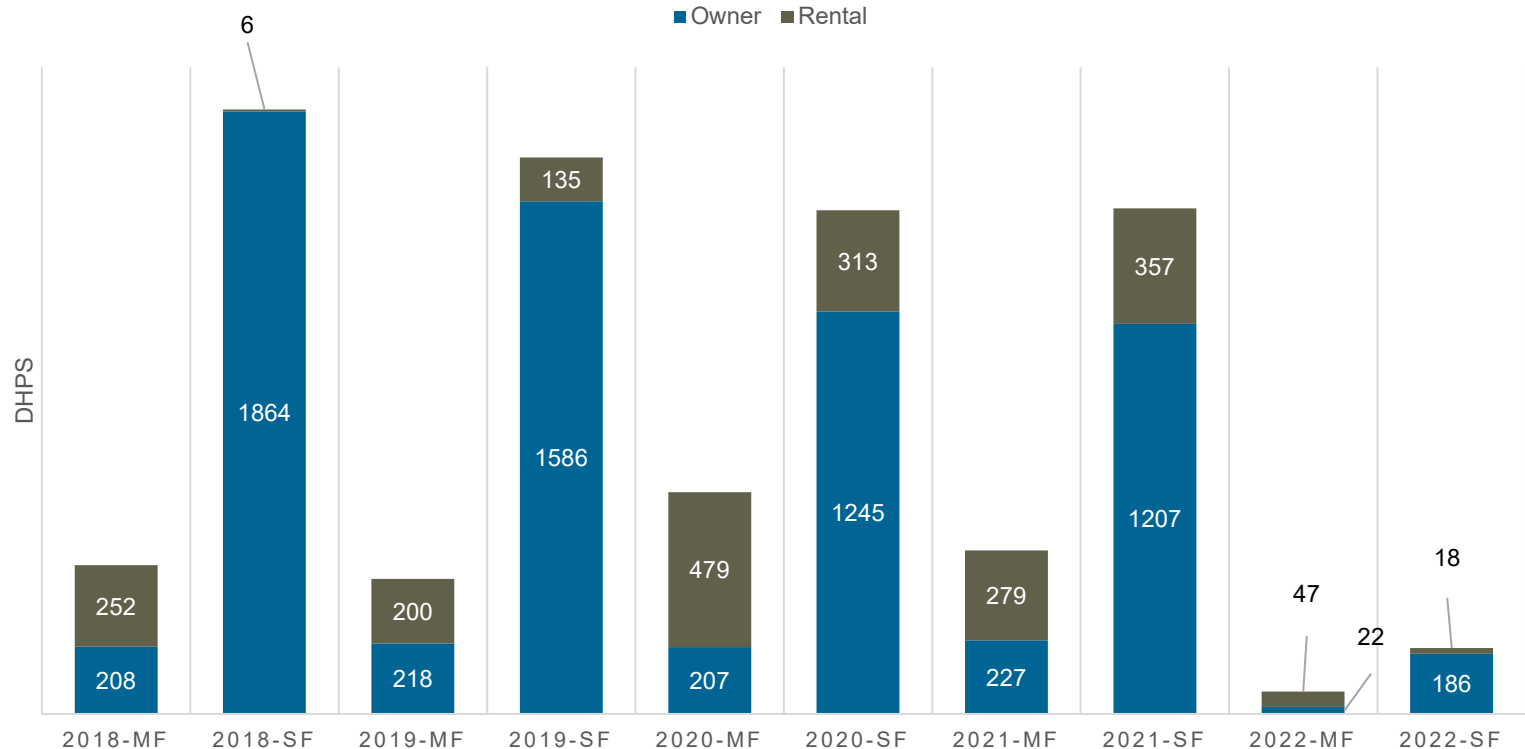
2022 Incentive Adjustments

Energy Upgrade	Current Incentive	Bonus Amount	Incentive Effective June 1- October 31
Gas Furnace (SWR / Rentals / SMF)	\$550	\$450	\$1000
Ceiling Insulation	\$.25/sq ft	\$1.00/sq ft	\$1.25/sq ft
Ceiling Insulation (SWR / Rentals)	\$.50/ sq ft	\$.75/sq ft	\$1.25/sq ft

- Available in single family and small multifamily properties
- Plans to manage strong demand

DHP Offer Performance 2018 – 2022 YTD

DHPS INSTALLED BY RENTAL STATUS SMALL MF & SF 2018-22



2022 Incentive Adjustments (DHP)

Energy Upgrade	Current Incentive	Bonus Amount	Incentive Effective July 1- October 31
DHP in Single Family Rentals	\$1000	\$500	\$1500
DHP in Small Multifamily	\$800	\$700	\$1500

- 1:1 DHP installation requirement
- Interior unit installed the main living space of home
- Trade Allies required to complete participation agreement around installation requirements

No-Cost DHP Offer

No-Cost DHP Program Overview

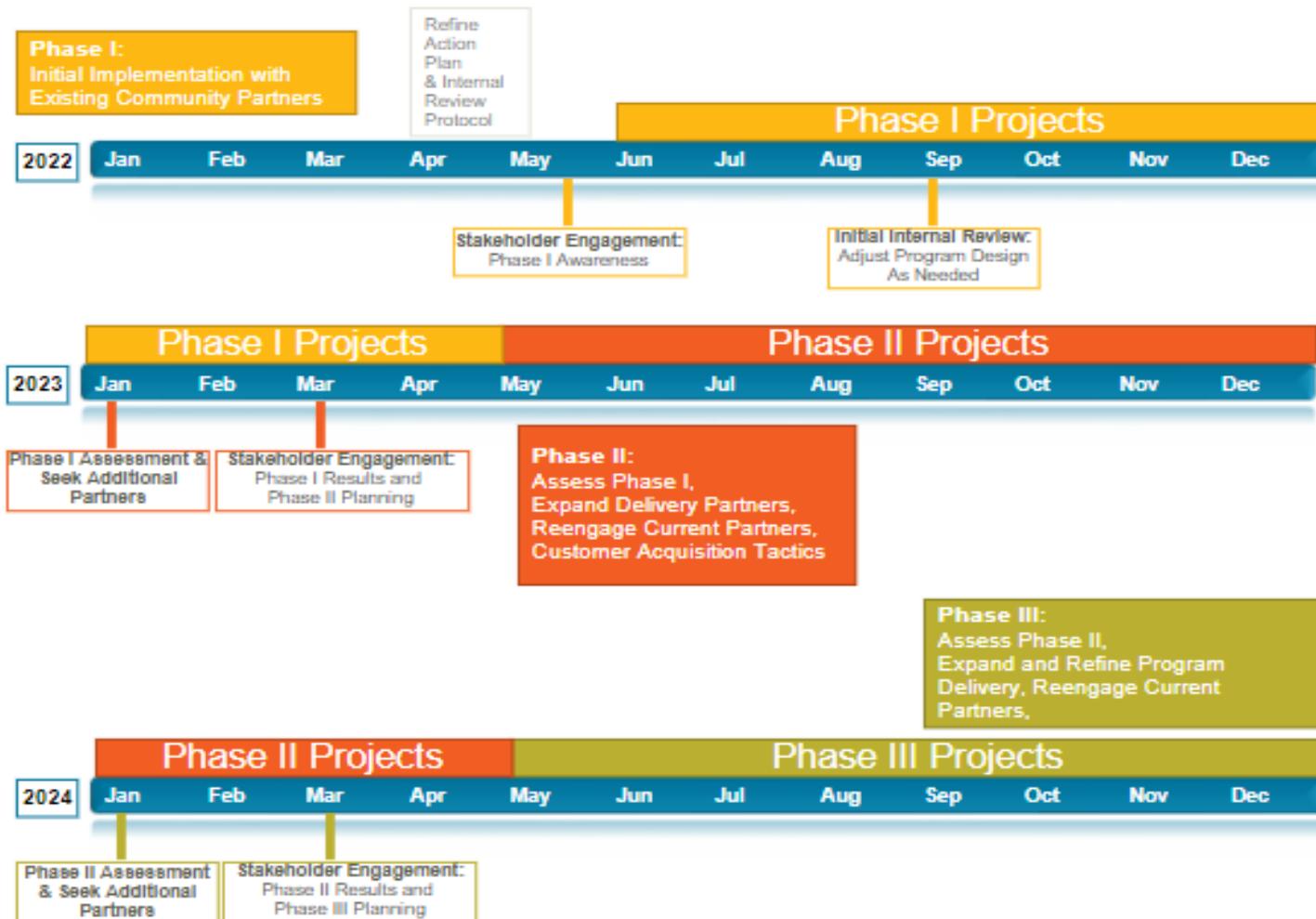
Goal:

- Explore how to best support low-income, energy-burdened customers through a no-cost ductless heat pump offer.

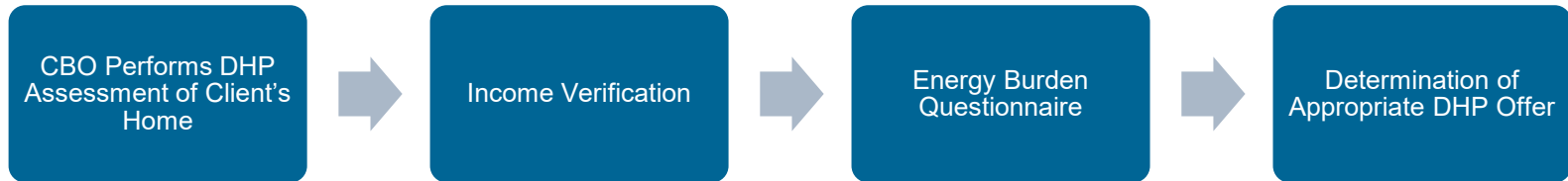
Details:

- Program design co-creation and collaboration with community-based organizations
- Available for people experiencing lower incomes and high energy burden
- Single-family, manufactured homes and small multifamily
- 1:1 or 2:1 systems displacing electric resistance heat
 - \$4,800 incentive for 1:1
 - \$7,200 incentive for 2:1
- Four initial CBO partners identified
- Three phases of implementation, evaluation, and adjustment
- Goal of installing 100 units in 2022

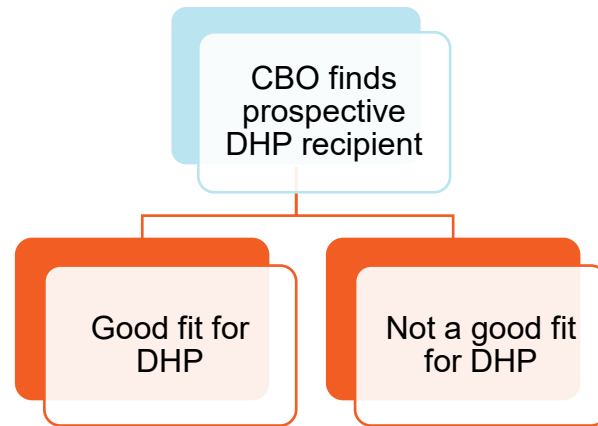
Implementation Timeline



Implementation: Key Qualification Steps



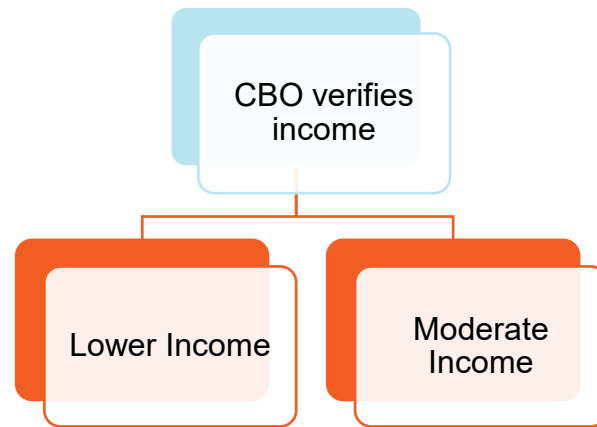
Qualification: Home Assessment



CPF In-home Energy Assessment: Organizations participating in Community Partner Funding are already performing in-home energy assessments.

- Identifying existing heating system details
- \$250 incentive for each home assessment
- Connecting customers with best suitable offers and contractors

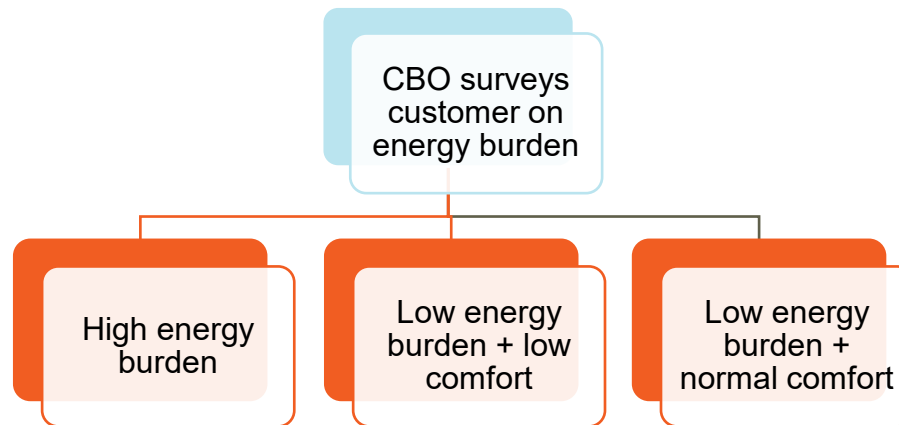
Qualification: Income Verification



Income Eligibility: Customer self-attestation that their household falls at or below 60% State Median Income based on household size.

- Aligns with other state income-qualified programs (SNAP, WAP, LIHEAP, etc)
- CBOs agreed on this threshold
- Customers who don't meet this threshold may still receive a CPF incentive

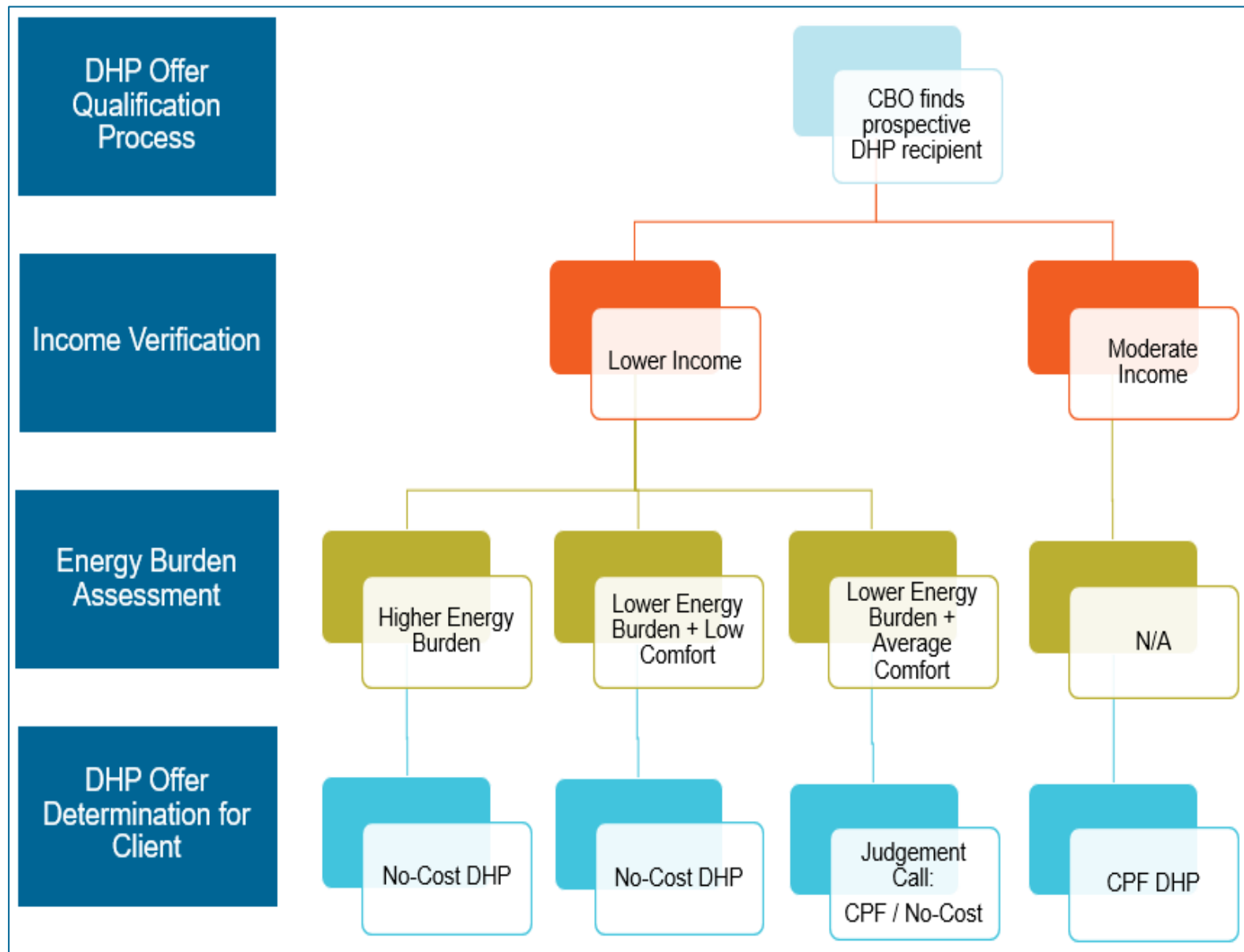
Assessing Energy Burden



Gauging Energy Burden: Energy burden does not determine eligibility

- Want to also reach customers who are living uncomfortably because they can't afford high bills
- CBO's input:
 - Customers are eager to talk about or even show their energy bills
 - Often easy to tell if customers are energy burdened
 - Need to account for the cost of bulk fuels
 - Recommended this not be an eligibility requirement

Determining Best Offer



Learning Objectives

- Learn how to better identify, qualify and support energy burdened customers with HVAC upgrades
- Increase program design co-creation and collaboration with community partners to serve low-income and energy-burdened customers
- Improve service to customers in markets not traditionally served by Energy Trust, gaining more insight into energy usage behaviors, and assess how to increase participation in programs
- Establish benefits and value propositions that inform the pursuit of non-ratepayer funding sources to support co-funded, no-cost offers long-term

Questions

- Thoughts on self-attested income eligibility?
- Opinion on learning about energy burden vs. establishing energy burden as an eligibility requirement?
- Do we have the right learning objectives?
- Any other feedback on the process/plan so far?

Thank You

Ryan Crews

Residential Sr. Program Manager

Ryan.Crews@energytrust.org

Household Size	Annual Gross Income*	Monthly Gross Income*
1	\$29,334	\$2,445.33
2	\$38,373	\$3,197.75
3	\$47,402	\$3,950.17
4	\$56,430	\$4,702.50
5	\$65,459	\$5,454.92
6	\$74,488	\$6,207.33
7	\$76,181	\$6,348.42
8	\$77,874	\$6,489.50
9	\$79,567	\$6,630.58
10	\$81,260	\$6,771.67
11	\$82,953	\$6,912.75
12	\$84,645	\$7,053.75
Each Additional Member	\$1,692	\$141.00

Business Lighting

Business Lighting Program Changes



Increased project/site caps to \$250,000/annual and removed trade ally company caps and active project caps



Increased incentives



Outreach to share updates

Measures	Increases
Street lighting, custom and horticulture projects	Allowable percentages of incentives to total project costs increase from 40% to 50%
Lighting measures with integrated LLLC	Allowable percentages of incentives to total project costs increase from 60% to 70%
Horticultural lighting and controls	Increase from \$0.15 per kWh saved to \$0.18 per kWh saved
LED high-bay/low-bay fixtures (with or without LLLCs)	<ul style="list-style-type: none"> • 0-90W – increase from \$75 to \$100 per fixture, and from \$130 to \$155 per fixture with LLLC • 91-140W – increase from \$115 to \$150 per fixture, and from \$180 to \$215 per fixture with LLLC • 141-299W – increase from \$125 to \$175 per fixture, and from \$200 to \$250 per fixture with LLLC • 300W or greater – increase from \$175 to \$250 per fixture, and from \$280 to \$355 per fixture with LLLC
Fixture mount occupancy controls	Increase from \$30 to \$40 per sensor
Interior fixtures with LLLC	<ul style="list-style-type: none"> • 26-57W – increase from \$75 to \$80 per fixture with LLLC • 58-100W – increase from \$80 to \$85 per fixture with LLLC
Midstream/"Instant Incentives"	Increases going live May 15th

Outreach about the news



Trade Allies

Email

Insider

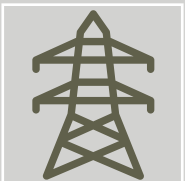
Personal call or in person meeting



Customers

Email

Industrial Custom PDCs and Commercial PMC



Utilities

PGE 838 & KCM Team

PAC KCM outreach by email

Production Efficiency: Standard Industrial

Standard Industrial Program Changes



Increased project/site limits to \$250,000/annual



Increased incentives for select electric and natural gas rebates



Trade Ally Outreach

Incentive Increases

<u>MESA/LESA/LEPA/PMDI</u>	Incentive before April 18, 2022	Incentive on April 18, 2022
High pressure to MESA (system with VFD)	\$25	\$35
High pressure to LESA/LEPA/PMDI (system with VFD)	\$25	\$35
MESA to LESA/LEPA/PMDI (system with VFD)	\$15	\$35
High pressure to MESA (system without VFD)	\$7	\$15
High pressure to LESA/LEPA/PMDI (system without VFD)	\$10	\$15
MESA to LESA/LEPA/PMDI (system without VFD)	\$7	\$15

<u>Indoor Grow Operations</u>	Incentive before April 18, 2022	Incentive on April 18, 2022
Indoor Ag Dehumidifiers*	\$7 per pint per day	\$12 per pint per day input

**Must be replacing existing, working equipment. Dehumidifiers must have a Minimum Energy Factor of 3.0 L/kWh.*

Incentive Increases

<u>Greenhouse & Nursery Upgrades</u>	Incentive before April 18, 2022	Incentive on April 18, 2022
Condensing unit heater for greenhouses	\$5.00 per kBtu input	\$7.50 per kBtu input
Infrared (IR) polyethylene greenhouse cover	\$0.02 per sq ft	\$0.10 per sq ft
Greenhouse controllers	\$0.10 per sq ft	\$0.20 per sq ft
Thermal curtain	\$0.30 per sq ft	\$0.45 per sq ft
Under-bench heating	\$1.05 per sq ft	\$1.55 per sq ft

Limited-time bonus incentive – 3/1-9/30/2022

<u>Building and Pipe Insulation</u>	Base Incentive	Bonus Incentive	Total Incentive
Pipe Insulation	\$4-12 per LF	\$3-11	\$15 per LF

Trade Ally / Vendor Outreach

- Email announcement
 - Personal calls and meetings
 - Insider announcements
-
- Also, updates to other implementation teams and utilities

Existing Buildings

Existing Building Program Changes



Maintaining site limit caps at \$250,000/annual



Bonused incentives



Customer and Trade Ally Outreach

Gas Incentive Bonuses

Standard Measure	Base Incentive	Bonus	Total Incentive
Stream Trap*	\$100/trap	\$200/trap	\$300/trap
Gas Steam Cooker*	\$2,000/cooker	\$1,000/cooker	\$3,000/cooker
Pipe Insulation	\$4-12/LF	\$9-3/LF	\$15/LF
Commercial Condensing Tank Water Heater*	\$3/kBtu/hr	\$0.35/kBtu/hr	\$3.35/kBtu/hr
Commercial Condensing HVAC Boiler	\$3.25/kBtu/hr	\$3.75/kBtu/hr	\$7/kBtu/hr
Thermostatic Radiator Valves	\$100/valve	\$100/valve	\$200/valve

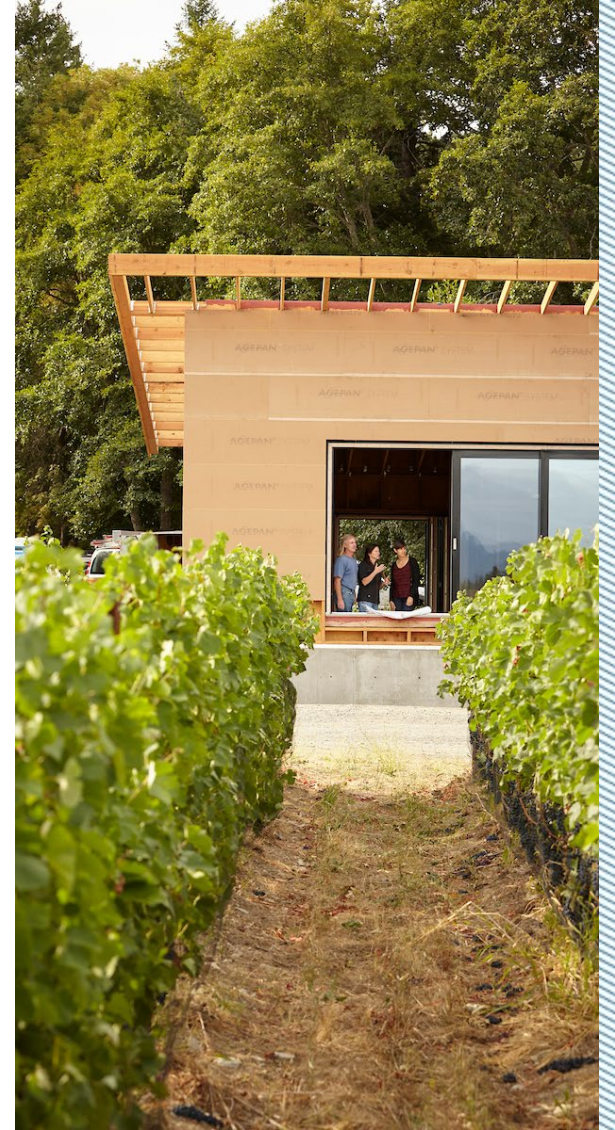
* Commercial and multifamily measure

Custom	Base Rate	Bonus Rate	Total Rate
Commercial Buildings Customer Rate	\$3/therm	\$1/therm	\$4/therm
Multifamily Custom Rate	\$2/therm	\$1/therm	\$3/therm

Energy Trust normally pays an incentive on 60-75 percent on base project cost for qualifying RCx projects. During the limited-time bonus incentive offering, Energy Trust will pay an incentive of up to 100% of eligible RCx project costs

Trade Ally / Customer Outreach

- Customer Outreach
 - Gas specific site assessments
 - Retro-commissioning focused conversations through SEM Coaches
 - Bonus specific call-downs
- Trade Ally Outreach:
 - Email announcement
 - Personal calls and meetings
 - Insider announcements



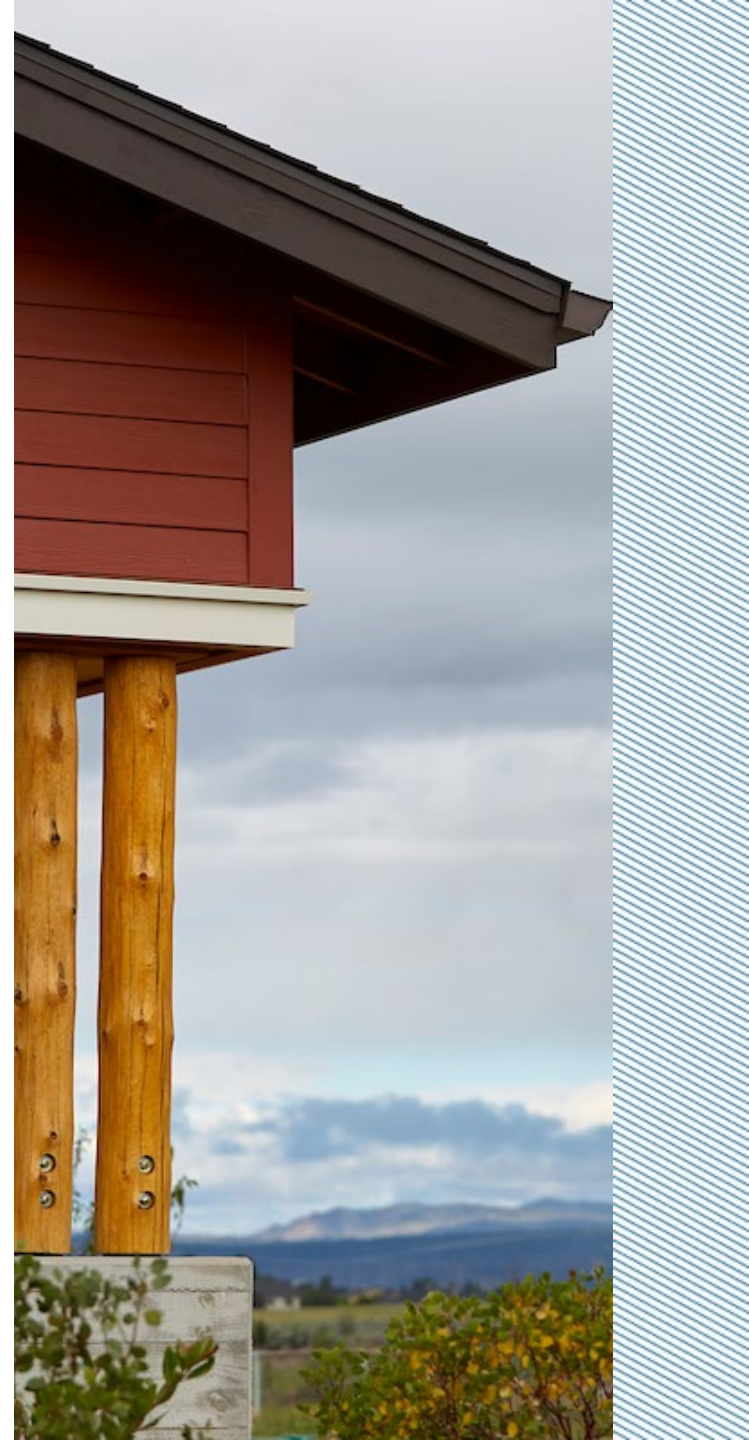
New Buildings: Whole Building Code Alignment Update

Conservation Advisory Council

May 11, 2022

Agenda

- Recap of program and challenges
- Past and current code alignment efforts
- Market overview and program design opportunities
- Discussion

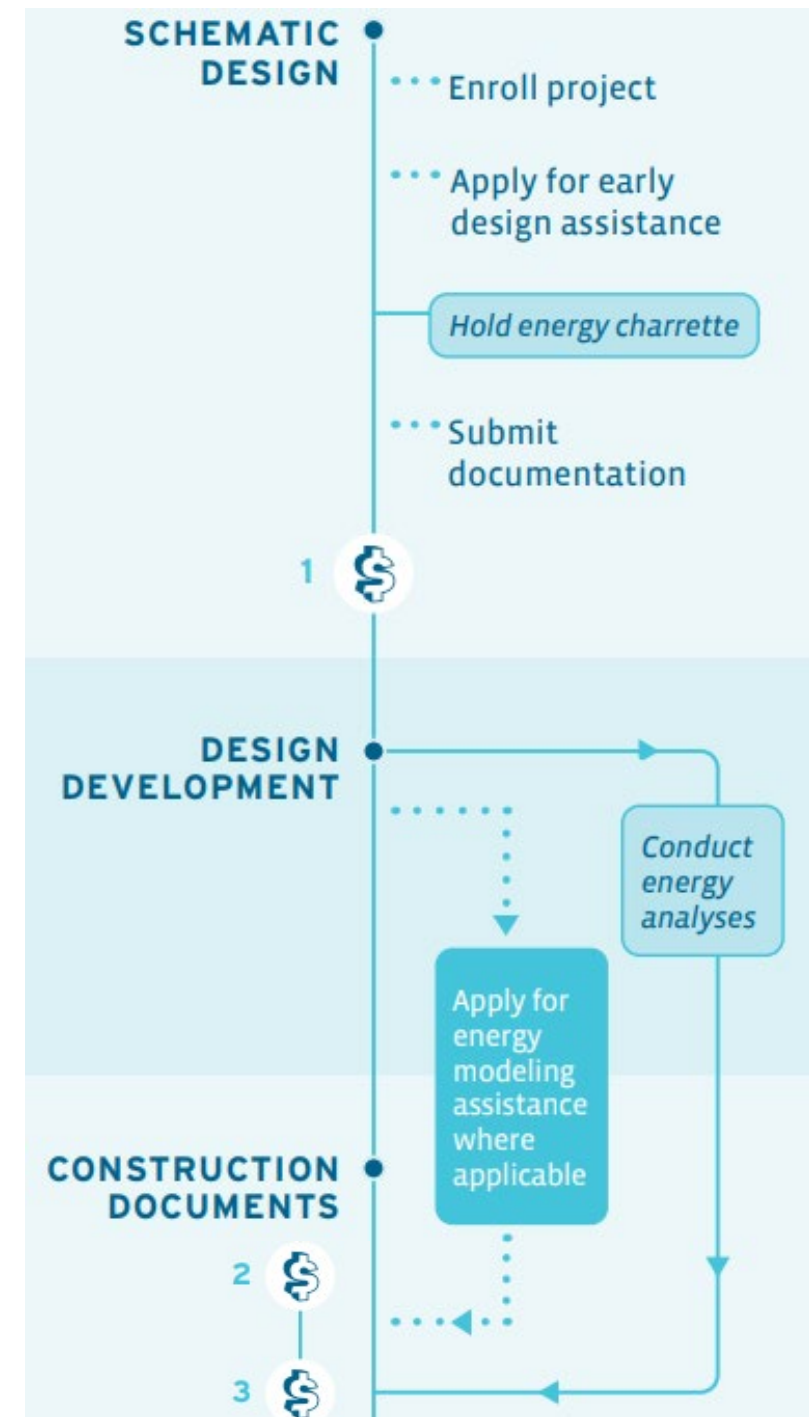
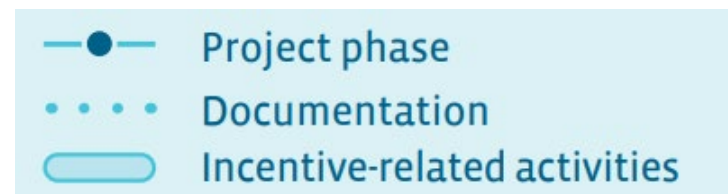


Recap:
New Buildings Program Tracks
and Regulatory Context

New Buildings Program Overview

Project Support:

1. Early design assistance incentive
2. Technical assistance incentive
3. Installation incentive





Ensuring Sound Investment of Ratepayer Funds

All Energy Trust efficiency programs use two cost-effectiveness tests at the measure and program level

Total Resource Cost (TRC) test

- Costs: Customer project costs beyond baseline
- *Pass/fail test dictates whether Energy Trust can offer a measure*

Utility Cost Test (UCT)

- Costs: Incentive costs to utility system/ratepayers
- *Sets upper bounds on max incentives for a measure*

New Buildings Program Tracks and Services

Prescriptive track

Whole building tracks

- *Market Solutions Offer:*
 - Menu of whole-building strategies encouraging customers to go beyond widgets
 - 5-30% above code
- *Custom Whole Building and Path To Net Zero:*
 - Whole building energy modeling for complex projects
 - 5-50% above code

Additional program services

- Early Design Assistance
- Energy Modeling Assistance
- Training & Education

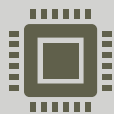
Commercial code change to ASHRAE 90.1



New framework for energy code, ASHRAE 90.1

Performance-based code compliance pathway for whole building design

Challenges for all customer types looking to meet and exceed code



New reality: for whole building projects, we can estimate savings beyond code but not costs compared to “counterfactual” code baseline



Convened agency workshops to explore challenges and possible solutions

OPUC, ODOE, NEEA, Energy Trust



Explored options to cost whole building projects and the project team determined results were inconclusive

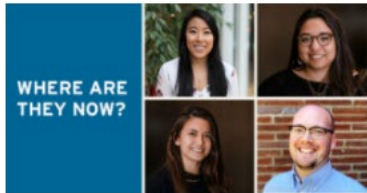
OPUC extended TRC exception for whole building projects through Q1 2024

Program design opportunities

Advancing Diversity, Equity and Inclusion in New Construction

August 10, 2021

Former Net Zero Emerging Leaders helping shape Oregon's future



November 1, 2021

Changemaker: Alison Kwok helps fill the gaps in architectural education



April 21, 2021

Changemaker: Nancy Yen-wen Cheng approaches sustainable design with a focus on resilience and adaptability



March 31, 2021

Changemaker: Anyeley Hallová re-envisions development through sustainability, equity lens



March 31, 2020

Meet the 2020 Net Zero Emerging Leaders



February 19, 2020

Uncovering barriers and benefits of net-zero schools



June 2, 2021

Changemaker: Karina Ruiz reimagines learning environments to create a more equitable future



May 5, 2021

Net Zero Fellow's research shows energy-saving opportunities for new multifamily buildings



July 12, 2021

Changemaker: Anna Mackay reframes what it means to be a real estate developer



Framework for program design changes

Enable customers to design high-performance buildings at a broader scale, and deliver benefits to the utility system, the community, and the built environment

- Increase understanding of customer benefits and costs
- Encourage project teams to go further – and achieve higher levels of energy savings
- Ensure sound investments in energy efficiency for the customer and to the utility system



The program vision for whole building projects

- Training and education that supports whole building and integrated designs for beyond code buildings
- Project-based information that helps customers design high performance buildings
- Resources for project teams that may not have resources for design and modeling
- Incentives for driving deeper savings

Code Alignment Project Work Streams



Amplify Training and Education

Promote cost-related content
Include cost in future training



Provide relevant examples

Produce Allies for Efficiency trainings
Develop case studies



Conduct Research

Complete Process Evaluation
Explore tools and strategies for energy modeling



Roll Out Offers

Incentivize greater WB efficiency
Expand access to training and modeling resources



Discussion and thank you!

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Shelly Carlton, Sr. Program Manager – Commercial
New Buildings
shelly.carlton@energytrust.org

For Discussion

- How do CAC members want to be involved?
- What other opportunities exist in the region or from CAC member perspectives?

