Conservation Advisory Council Agenda
Virtual meeting
Wednesday, June 16, 2021
1:30 – 4:30 p.m.

To join the Zoom meeting, register at this link: https://zoom.us/meeting/register/tJEtd-gqT4qHNws07-UJmGUL0AcLL17cEdbm. After registering, you will receive a confirmation email containing information about joining the meeting.

1:30 Welcome and announcements
- Introductions
- Agenda review
- May notes approval
- Organizational announcements

1:45 Update on business incentives management (inform)
Staff will provide an update on incentive availability and management strategies being used in the Production Efficiency program, Existing Buildings program and business lighting initiative.

Presenters: Oliver Kesting and Amanda Potter

2:10 Residential sector budget management update (inform)
Staff will provide an update on the impact of market trends on budgeted 2021 residential offers and discuss actions the Residential sector is considering and will take to manage to its annual budget.

Presenter: Thad Roth

2:40 Wildfire rebuilding support (inform with time for input)
Staff will provide an update on 2021 wildfire rebuilding support and solicit feedback on draft plans for 2022 offers in development.

Presenters: Karen Chase and Scott Leonard

3:10 Break

3:20 Commercial and Industrial Performance Tracking Tool Platform (inform with time for discussion)
Staff will present on a project to move the commercial and industrial sectors’ current Excel-based performance tracking tools used for Strategic Energy Management offerings to a web-based platform. The presentation will cover an overview of the tool, purpose, benefits, description of vendor and platform selected and timeline for the project.

Presenter: Kathleen Belkhayat

3:40 2022 Organizational Goals and Budget Development Schedule (inform)
Staff will share the final 2022 organizational goals, pointing out how advisory council input shaped the goals. Staff will also review the 2022 budget engagement schedule,
highlighting when the Conservation Advisory Council will be engaged and opportunities for you to provide feedback.

Presenter: Melanie Bissonnette

4:10  **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.

4:20  **Public comment**

4:30  **Adjourn**

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

**Next meeting:** Our next meeting is August 4, 2021.
Conservation Advisory Council Meeting Notes
May 14, 2021

Attending from the council:
Jeff Bissonnette, NW Energy Coalition
Roger Kainu, Oregon Department of Energy
Jess Kincaid, Bonneville Power Administration
Jason Klotz, PGE
Kari Greer, Pacific Power
Tim Hendricks, Building Owners and Managers Association
Rick Hodges, NW Natural
Tina Jayawewra, NW Power and Conservation Council
Anna Kim, Oregon Public Utility Commission
Kerry Meade, Northwest Energy Efficiency Council
Lisa McGarity, Avista
Becky Walker, Northwest Energy Efficiency Alliance

Attending from Energy Trust:
Hannah Cruz
Peter West
Mike Colgrove
Elizabeth Fox
Alex Novie
Thad Roth
Fred Gordon
Sue Fletcher
Oliver Kesting
Jay Olson
Jackie Goss
Juliana Hairston
Amanda Potter
Wendy Gibson
Adam Bartini
Tom Beverly
Jessica Kramer
Kenji Spielman
Alma Pinto
Amanda Thompson
Amanda Zuniga
Amber Cole
Cameron Starr
Dan Rubado
Eric Braddock
Jay Ward
MacKenzie Kurtzner
Mana Haeri
Mark Wyman
Marshall Johnson
Ryan Crews
Salvatore Militello
Sarah Castor
Scott Leonard
Spencer Moersfelder
Tracy Scott
Naomi Cole

Others attending:
Alan Meyer, Energy Trust board
Lindsey Hardy, Energy Trust board
Henry Lorenzen, Energy Trust board
Misti Nelmess, CLEAResult
Dave Backen, Backen Consulting
Josh Weissert, Energy350
Alan Munitz
Arthur Hamlin
Bayo Ware, Casa of Oregon
Bill Van Vliet, Noah Housing
Brady Peeks, NW Energy Works
Cassidy Bolger
Cassie Hibbert, Wenaha Group
Chelsea Catto
Desiree Sideroff, Craft3
Dolores Martinez, Euvalcree
Eric McDaniel, Sora Design Group
Eric Zechenelly, Willamette Home
Erica Mills, NW Umpqua
Ezell Watson
Forest Tanier-Gesner, PAE Engineers
Heather Moline, NW Energy Coalition
1. Welcome
Hannah Cruz, senior communications manager, convened the meeting at 9:30 a.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 welcomed Becky Walker as a new council member, replacing Julia Harper, who recently retired from NEEA. Hannah Cruz also introduced Tracy Scott, Energy Trust’s new energy programs director, and Energy Trust board member Eric Andersson, the new council liaison.

2. Measure development and in-progress cost effectiveness exceptions
Topic summary
Alex Novie summarized Energy Trust’s process for developing energy efficiency measures and key concepts in Oregon’s measure-level cost effectiveness framework. Measures are developed to fit program designs and start with an understanding of what would have happened without the intervention and customers’ options at the time. Different program designs reach customers at different positions in their decision-making timeline, and Energy Trust’s measures are designed to capture that influence. Staff looks at baselines, base incremental costs and energy savings as compared to the baseline condition for a measure to screen for cost effectiveness and determine savings and maximum incentives.

Cost effectiveness is a way of comparing the value and costs of energy efficiency to the avoided cost of the utility buying or generating more energy to send to a customer. Per OPUC guidelines, Energy Trust uses cost effectiveness tests for the value to the utility system (Utility Cost Test or UTC) and also for the value to all ratepayers and the participant (Total Resource Cost Test or TRC). These benefit/cost ratios are based on the avoided cost to the utility, not the customer. The TRC can include quantifiable non-energy benefits, for example, water and sewer costs, costs for purchasing non-utility fuels and out-of-territory savings and varies by measure. Cost effectiveness is evaluated at the measure level and program level; the program level incorporates Energy Trust administrative costs.

Exceptions to measure-level cost effectiveness are possible and there is an established OPUC request process and criteria. The process is different based on the type of exception and whether it is a minor or a major exception based upon the magnitude of savings and incentives under exception and the TRC benefit/cost ratio. For measures under an exception, the costs are higher than the benefits. Staff expects to request cost effectiveness exceptions for ductless heat pumps in single family and multifamily homes and for New Buildings commercial whole-building offers.
Discussion

Heather Moline of NW Energy Coalition asked who decides the meaning of significant for non-quantifiable non-energy benefits. Alex Nove said recommendations are made by staff based on working with customers and trade and community partners working on program delivery and decided by OPUC staff. Staff and/or commissioners review requests and may seek input from stakeholders and community members at council meetings and OPUC public meetings. Council members said there’s a greater cost for low-income populations for many measures, so staff needs to make reasonable attempts to quantify non-energy benefits within the OPUC cost effectiveness framework. Alex Nove stated that non-quantifiable benefits often include health considerations (e.g., replacing older manufactured homes) and air quality (e.g., DHPs replacing wood- or oil-burning stoves).

Heather Moline commented about hearing Energy Trust is reaching the maximum for incentive levels and asked how often is that a barrier for people to participate, such as low-income or community-based organizations, because they can’t afford the upfront investment required to participate. Alex Nove responded that as Energy Trust pays more within the maximum incentive that is cost effective at the measure level, there’s more of a burden on the overall program benefit/cost ratios. Staff is working with community-based organizations that often have other funding sources that can cover a portion of costs alongside our incentives.

3. Ductless heat pump measure cost effectiveness exception in the Residential program and existing multifamily initiative

Topic summary

Marshall Johnson and Jackie Goss provided an update on ductless heat pump (DHP) performance and cost effectiveness exceptions. DHPs provide an efficient heating and cooling solution for homes with existing zonal electric heat and electric forced-air furnaces. They represented over 8% of Residential and 9% of Multifamily electric savings in 2020. Energy Trust has provided incentives since 2008 for 22,000 units. They have been under a TRC cost effectiveness exception since 2014, and a UCT cost effectiveness exception for targeted applications in 2020 and 2021. Energy Trust supports this measure in the market to broaden acceptance of DHPs, which will lead to lower costs for everyone.

Changes were made to the program in 2020 to improve savings performance. Incentives levels were reduced and requirements were added to locate the equipment so that it more effectively heats the right portions of homes. There were also efforts to obtain better reporting from trades on supplemental heat sources.

Energy Trust has exceeded the number of projects under the UCT exception and plans to reduce incentives to limit the volume of measures under this exception. Staff will explore more targeted DHP offers for moderate and low-income communities and reanalyze the measure for use in 2022.

Discussion

Council members asked if the targeted offers for low-income customers would be through community action agencies. Marshall Johnson said they would be through community action agencies or community-based organizations, such as African American Alliance for Homeownership or Verde. Members asked about the total resource cost for the various DHP measures on slide 7. Marshall Johnson responded the total resource costs are higher than the total resource cost test for DHP measures in homes without supplemental fuel due to the value of avoiding wood burning wood or other supplemental fuel. Members noted one strategy is to reduce incentives and asked if that was only for standard offers, and not for Savings Within Reach. Marshall Johnson responded that staff created promotions for renters and aligned the
incentive structure of $2,000 between Multifamily and Residential. Staff will adjust the offer to deliver the highest incentive possible at a benefit cost ratio of 1.

**Next steps**
None.

4. Update on the New Buildings current cost effectiveness exception on whole building projects and a proposed extension of the exception

**Topic summary**
Jay Olson provided an update on New Buildings whole building projects. Oregon’s 2019 code moved from a measure-based code to a whole building approach that gives building owners greater flexibility in design options and systems selection. This created challenges in New Buildings, which receives 50% of its savings from whole building projects. This is a similar challenge for other program administrators across the country.

A collaborative process was launched with Oregon Department of Energy, Northwest Energy Efficiency Alliance and the Oregon Public Utility Commission over the past year to determine a path forward for the program. The program doesn’t face a utility cost test challenge, but the total resource cost is a concern. The incremental cost between a code building and going beyond, as required for the program, is a significant challenge to determine. A proxy approach was unable to produce incremental cost, thus we are unable to calculate the total resource cost (TRC).

The program has requested an extension of the TRC cost effectiveness exception for whole building projects. If granted, staff will propose a program design focusing on training, education and information consultation, some of which is already in place.

**Discussion**
Council members asked how much are the savings and what is the magnitude of the savings. Jay Olson responded that there are rough estimates from industry knowledge but not a baseline comparison or any models to rely on. The challenge is determining baseline costs, without which staff can’t measure the incremental cost effectiveness. Savings are no problem to measure. Members asked if staff is having problems determining costs of materials and installation. Jay Olson responded yes regarding baseline costs. It also involves all of the options developers have for reaching code. Staff has no way of comparing those alternatives with how much more Energy Trust’s approach costs. Rather than focusing on measure-level cost effectiveness, staff wants to shift to an informational and educational approach with the greater flexibility in code. Staff doesn’t want them to get stuck at our measure-level cost effectiveness since they are looking at the whole-building.

Members asked if this will be more of a design incentive where staff looks at the back-end savings and compares them for cost effectiveness. Jay Olson stated that it is about design, but Energy Trust will still pay for investments in energy efficiency.

Members commented the proposed approach seems reasonable given how much is changing in the building sector and the broader industry. They also stressed different building owners having different positions and returns on investment.

Casa of Oregon asked if there is any value when Energy Trust report on this showing the profile or type of developer used to determine the cost calculation. In emerging markets, smaller and low-income owners have different targets and tolerances. When we center the low-income owners who have the least amount of wiggle room, we improve the system overall. Market indicators show the more money you have, the more attention you get. The library approach will be helpful. Jay Olson responded that energy efficiency isn’t the primary driver behind those decisions. Staff intends to keep the information updated by evaluating what are the better
design decisions and what do different owners have in mind. Staff would like to keep a library of projects and information to track technology and to allow the next participants to have a history to see what works or review profiles that best serve different types of owners.

Members asked if staff will collaborate with organizations like the New Buildings Institute that Energy Trust would normally not have worked with and suggested it would be a great opportunity to bring in that perspective. Jay Olson responded staff is always interested in expanding knowledge to improve training and support for customers and improve building resilience.

Forest Tanier-Gesner from PAE stated his organization regularly works with Energy Trust to push projects further. The tools on the design and support side are tremendous in expanding their reach in energy efficiency. The performance-based pathway pushes projects further. It’s something they support in their designs but it does take more up-front effort. They are facing cost challenges in the market that mean they must do their due diligence up front. The carrot at the end of the road, incentives, are also still necessary.

Next steps
None.

5. Update on the Manufactured Home Replacement Pilot

Topic summary
Mark Wyman provided an update on concluding the Manufactured Home Replacement Pilot and transitioning it to a standard program offer. Staff has provided periodic updates on the pilot with OPUC direction and is seeking input on the proposed updates.

The pilot replaces inefficient manufactured homes in Energy Trust territory in partnership with housing, energy and community development organizations. The OPUC authorized a cost effectiveness exception allowing up to $500,000 for non-cost-effective projects. It enabled co-funding with Pendleton flood recovery funding. Staff have also interviewed and documented the experience and conditions of residents both before and after replacement and learned this leads to a transformational change in living circumstances.

Enrollment in the pilot ends July 1, 2021. New projects submitted prior to July 1 will receive funding commitments subject to budget availability. Projects after July 1 will go through the successor offer. Proposed changes involve income-based customer qualifications aligned with Savings Within Reach, inclusion of state-declared natural disaster impacted sites and dissolution of age of home tiers in favor of size of home and climate zone locations.

Staff will set up discrete fixed budgets for disaster recovery and all other customers with ways to move the budgets between the two based on experience. This is somewhat unique at Energy Trust. The state has taken leadership on this and there are many other organizations working to make this happen. Energy Trust’s role is to support the leaders and frontline providers in this space that have greater experience in helping people with financial decisions. The program will use an early retirement differential baseline. It will focus on homeowners with barriers to home replacement.

Discussion
Heather Moline of NW Energy Coalition commented that as this process went through OPUC approval, the pilot was a good fit for younger families with some kind of income that could make changes to their lifestyle, but wasn’t as good for older people with different planning horizons. Do these limitations still need to be taken into account? Mark Wyman said the limitations still exist, depending on the context. A rental home impacts different income levels and age groups. It’s different with an owner-occupant unit. HB 2896 and updates now provide significant
resources to support households. Energy Trust can’t be the sole entity, but it is available to support anyone who is interested in bringing this option forward.

A representative from Casa of Oregon asked how customers are engaged and whether the option of home replacement is present alongside other services. Mark Wyman responded that customers are presented with all of the available options from Energy Trust, community action agencies and any other resources. The “program navigator” role will work with customers to provide independent counsel from staff and organizations trained and experienced with homebuyer assistance and financial counseling services.

Other audience members asked if the amounts of incentives would change under the new program. Mark Wyman replied that it’s a too early to tell.

Other audience members commented that dealers could replace homes and wondered if that will still be an option going forward. Mark Wyman replied that it will be, but the household that would buy or rent the home must meet some income requirements.

Bayo Ware from Casa of Oregon commented that Casa helps purchase properties to help residents collectively own them. There are situations when homes should be abandoned but can’t always be because of county assessor methodologies. They will sometimes be sold and bought yet still not improved due to financial challenges.

Council members asked if Energy Trust will use its data to adjust the two periods. Principal savings come from shell, which is a 45-year life. Within that, the early retirement baseline establishes two periods of measurement: a baseline against the older home and a period of time baselines against a market baseline of a newly constructed home. Members asked if there is an implication around cost effectiveness or the level of incentives offered. Mark Wyman replied that it’s the savings that would influence the incentives offered. Staff is analyzing project costs now. At the end of the day, replacement is more expensive than the value of energy savings, but there are many non-energy benefits.

Next steps
Energy Trust is developing a brief survey instrument for organizations in the industry. Mark Wyman asked that people reach out to him with questions and insights. Timing of each step is hard to predict, but the next phase will include cost effectiveness exception proceedings. The goal is to launch the standard offer before the end of this year.

6. Updates commercial, industrial and business lighting program changes

Topic summary
Oliver Kesting, Wendy Gibson, Jessica Kramer and Adam Bartini provided updates on commercial, industrial and business lighting program changes. COVID-19 disrupted the market in early 2020. Energy Trust responded by looking for ways to stimulate the market and rolled out bonuses. Interest in projects, even with bonuses, was low until late fall, but then accelerated quickly, resulting in a large number of electric efficiency projects late in the year and early in 2021. Energy Trust ended bonuses in November and December 2020. Gas efficiency projects didn’t follow this trend.

Energy Trust ordinarily starts each year with a pipeline of projects, but this year’s pipelines were much larger than normal and left little room for new projects. Energy Trust can cover the projects it’s aware of but has less funding available for new projects. It has reduced electric incentive offers and capped them. Staff also discussed how to respond to this situation, including through possible budget increases, with the OPUC and electric utilities in order to maintain programs for the rest of the year. The OPUC, PGE and Pacific Power agreed to revise upward the individual electric utility budgets for these programs. In addition, operational
changes and spending in other parts of the organization were reduced. The amended budget will go to the board for review and adoption on May 19.

Adam Bartini provided industrial updates. For custom industrial, there are no changes to gas offerings or operations and maintenance. Energy Trust will honor existing commitments for electric projects. Going forward, it will start studies for future year projects. Custom projects already in the pipeline will be served on a first-come, first-served basis and capped at $250,000. It can’t do new custom projects in 2021. Standard calculated incentives will be capped at $40,000 for PGE and $10,000 for Pacific Power on less than 100,000 kWh and at $15,000 for 100,000 kWh or more. Standard will be $40,000 for PGE and $10,000 for Pacific Power.

Wendy Gibson presented Existing Buildings changes, which included similar caps. Energy Trust also reduced some Pacific Power incentives. Existing Buildings caps are now $12,000 for PGE and $6,000 for Pacific Power. These are per-site per year. Some specific Pacific Power measures were removed or reduced. Gas measures were not impacted.

Jessica Kramer discussed business lighting changes. Business lighting moved to a closed trade ally network. Custom and prescriptive incentives were changed, and completion timelines were reduced. Energy Trust capped lighting project incentives at $6,000 and implemented caps on the number of concurrent active projects. Trade ally companies are now capped at $250,000 in PGE territory and $75,000 in Pacific Power territory. Trade allies gave a mixed response. Some have continued working with us while others have mentioned negative business impacts from these changes. Some have maxed out the number of projects in the queue resulting in projects moving forward without Energy Trust. There are fewer industrial lighting projects than expected.

**Discussion**
Council members asked about trade ally feedback regarding the disparity in industrial incentives. Adam Bartini indicated that there has been minimal trade ally or customer issues. Most are happy that we’re moving again. Members asked why there is disparity between the electric utilities in incentive levels and caps and expressed concerns about the lack of time to discuss the disparity between utilities and stated that it will need further discussion.

**Next steps**
Staff will reach out to Pacific Power before the next board meeting, where the amended budget will be discussed. More feedback is welcome.

7. **Public comment**
There was no public comment.

8. **Adjournment**
The meeting adjourned at 12:05 p.m. The next meeting will be held on June 16, 2021.
Agenda

• Market trends

• Program Impacts

• Program Adjustments
Market Trends

• The trends that emerged in Q4 of 2020 have continued into 2021:
  • Customers spending more time at home are making improvements that support comfort and functionality;
  • The real estate market continues to drive investment, both in existing homes and new construction;
  • Continued need for income-based offers to support customers disproportionately impacted by the pandemic;
Program Impacts

• Early forecast indicates natural gas spending to exceed budgets:
  • Demand for market rate measures continues to be strong
    • Insulation and windows
    • Thermostats
    • New construction
  • Expanded focus on income qualified offers
    • SWR
    • No and low cost measures
    • Community partner funding
  • Wildfire recovery
    • Uneven pace of activity
    • Initial engagement is driving additional demand
Program Response to date

• Ended bonuses
  • Insulation
  • Gas furnaces

• Reduced incentives for smart thermostats;

• Engaged utilities
Program Adjustments

• Currently evaluating adjustments to measures to further reduce demand on budgets in 2021;

• Criteria includes:
  • Minimize market disruption
  • Impact on customers
  • Focus on market rate offers
Questions for CAC members

• Interested in feedback on criteria for measure adjustments.
  • Are the priorities for adjustments right?
  • What criteria is missing?
Thank You

Thad Roth, Residential Sector Lead
thad.roth@energytrust.org
Agenda

• **Purpose**
  • Early input, solicit feedback
  • Preview in development offers for budget cycle

• **Background**
  • 2020 fire damage
  • 2021 rebuild effort

• **Codes and legislation**
  • Fire rebuild measure concept
  • Legislation

• **New home wildfire resilience**
  • Strategies, energy and fire resilience
Background
2020 Labor Day fires

• "Unprecedented" concurrence of conditions
  • Hot, Dry, Windy
• More than 4,000 structures affected
• Several fatalities
• >10% of Oregonians under some level of evacuation
• Hazardous air quality
Detroit Lake/Santiam Cyn, Beachie Creek Fire (taken 2/2021)
North Umpqua River, Archie Creek Fire (taken 4/2021)
Phoenix, Almeda Fire (taken 5/2021)
Work with Communities

• Initial cleanup – mostly ahead of schedule
• Unhoused, displaced
• LTRGs
• Community partners – commercial and residential
• Building officials; City and county staff
• Various housing efforts
• Jackson Co./Almeda F.
  • R3V: Reimagine & Rebuild Rogue Valley
Current Energy Trust support

• New Homes
  • No cost verification in Jackson County
  • Program incentives
  • Early Design Assistance

• Manufactured Homes Replacement
  • Sites impacted by State declared disaster areas eligible
  • Uses the vintage of the home before destroyed
  • Moving from pilot to program (pending)
  • Direct support to Housing Authority of Jackson County

• New Buildings
  • Early Design Assistance
  • Program incentives
Code and legislation for rebuilding
• (4) Consistent with ORS 455.020 and the discretion granted to building officials, nothing in OAR Chapter 918 should be construed to limit the ability of building officials to employ flexible and creative solutions in service delivery, which may include but is not limited to:

• … (d) Waiving a code requirement, modifying a code requirement, or accepting an alternate method, so long as it would not create an unsafe or dangerous condition regarding fire and life safety;
2021 Legislation

• House Bills
  • 2289 – Passed, allows for 2008 building code
  • 3127-4 – Amendment in progress, OHCS and ODOE additional funding

• Senate Bill – 405
  • Passed and signed by Governor
  • Allows homes to be rebuilt to original standard
  • Extends permitting to 2025
Next steps to determine the offer(s)

1. **Baseline + improved conditions**
   A. Finalize “vintage code” baseline
   B. Projects must exceed the current code

2. **Determine max incentives and potential savings**

3. **Approve 2022/23 budget**

4. **Rollout in 2022**
Wildfire Resilience
Four definitions of fire resilience

- Wildfire codes use several terms interchangeably

<table>
<thead>
<tr>
<th>WILDFIRE RESISTANT</th>
<th>FIRE RESISTANT</th>
<th>IGNITION RESISTANT</th>
<th>NONCOMBUSTIBLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials or design features that can</td>
<td>Material that</td>
<td>Materials designated</td>
<td>Materials designated noncombustible</td>
</tr>
<tr>
<td>reduce the vulnerability of a building</td>
<td>resists the</td>
<td>ignition-resistant</td>
<td>noncombustible must pass a</td>
</tr>
<tr>
<td>to ignite</td>
<td>spread of fire</td>
<td>resistant must pass</td>
<td>standard test to confirm no part</td>
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<td></td>
<td>from the fire-</td>
<td>a standard test</td>
<td>will burn when exposed to fire/heat</td>
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<td></td>
<td>exposed to a</td>
<td>that evaluates</td>
<td>(e.g., fiber cement)</td>
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<tr>
<td></td>
<td>nonexposed</td>
<td>flame spread on</td>
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<td>side of an</td>
<td>the material (e.g.,</td>
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<td>assembly (e.g.,</td>
<td>treated siding</td>
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<td></td>
<td>wall or roof)</td>
<td>performs better</td>
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<td>than untreated)</td>
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### Wildfire resilience strategies

<table>
<thead>
<tr>
<th>MEASURE</th>
<th>SPECIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roofs</td>
<td>Class A + fire-resistant sheathing; simple design with fewer valleys; metal flashing</td>
</tr>
<tr>
<td>Attics</td>
<td>Sealed attic; enclosed overhangs</td>
</tr>
<tr>
<td>Windows</td>
<td>Low E with 2-3 panes and aluminum cladding</td>
</tr>
<tr>
<td>Exterior doors</td>
<td>Fire-rated with non-combustible trim and fire-resistant weather stripping</td>
</tr>
<tr>
<td>Insulation</td>
<td>Rockwool, cellulose or insulated concrete forms</td>
</tr>
<tr>
<td>Siding</td>
<td>Fiber cement, metal, masonry or treated wood siding, with additional 5/8” exterior gypsum board</td>
</tr>
<tr>
<td>Ventilation</td>
<td>High MERV rated filtration; controllable openings covered with noncombustible screens</td>
</tr>
</tbody>
</table>
## Savings potential from resilience measures

<table>
<thead>
<tr>
<th>MEASURE</th>
<th>EFFICIENCY IMPROVEMENT</th>
<th>RESILIENCE BENEFIT</th>
<th>ENERGY SAVINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roof</td>
<td>Modeled with concrete tile roof</td>
<td>Increases roof fire rating</td>
<td>0.10%</td>
</tr>
<tr>
<td>Sealed attic</td>
<td>Move insulation to the roof line</td>
<td>Prevents ember entry in attic</td>
<td>4.25%</td>
</tr>
<tr>
<td></td>
<td>Move 50% of the ducts to sealed attic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exterior rigid insulation</td>
<td>Add R-5 continuous</td>
<td>Increases wall fire rating</td>
<td>3.25%</td>
</tr>
<tr>
<td>Triple pane windows</td>
<td>U-factor 0.20, SHGC 0.25</td>
<td>Tempered glass, additional layer of protection</td>
<td>3.15%</td>
</tr>
</tbody>
</table>
Other considerations:

• **Smoke resilience**
  - Air sealing and air barriers
  - Design HVAC system to offer smoke resilience mode
  - Homeowner resources about air filtration and indoor air quality (MERV rated filters, disable outdoor air intake, minimize indoor air pollution)

• **Solar + storage**
  - Considerations for ignition vulnerability
    • Panels do not decrease the rating of the roof
    • Simple roof designs offer co-benefits between solar and fire resilience
  - Considerations for resiliency for homes in proximity to burn sites
    • Solar output drops, but doesn’t typically stop, in smoky conditions
    • Pair with battery storage for increased resilience
Questions?
Performance Tracking Tool Platform
Conservation Advisory Council
June 16, 2021

Expected Energy: 27,455 kWh
Actual Energy: 22,449 kWh
Total Avoided Energy Costs: 1,975,988 kWh
CUSTOMER

- Energy Performance Management (Strategic Energy Management or Pay for Performance) participant which includes commercial and industrial customers

PROBLEM

- Time consuming to update/maintain and retrieve information
- Growing volume of participants

SOLUTION

- A customized web-based platform that will contain an energy model, reporting dashboard and opportunity register
Background

• Strategic Energy Management history
  • Industrial SEM since 2009
  • Commercial SEM since 2011
• Performance Tracking Tool Platform Project history
  • Program operational need to improve efficiency
  • Desire from customers to reduce time needed to manage data/performance
• Value of tools
Problem

Current process
\((x120\ engagements)\)

Future state
Vendor and platform

• Vendor: Cascade Energy, Inc.
  • Delivering SEM since 2010
• Energy Sensei platform
  • Web-based platform
  • Energy management and collaboration
  • Been in the market for 10 years
• Contains:
  • Energy model
  • Opportunity register
  • Dashboard
Example chart

- Ideally a cusum and an opportunity register snapshot, and potentially a dashboard (executive view).

Example chart with data points and labels for energy usage and costs.
Benefits

• DEI goals: serve small-to-medium businesses, rural customers and those with capacity constraints with:
  • Easy access to information
  • Automation
  • Push notifications

• Reducing management and delivery costs:
  • Contractor cost developing models and maintain tools
  • Program review
  • Evaluation

• Redirect cost savings with value-add activities
• Improved data for forecasting savings/incentives
• Specifically built for SEM
• Improved user experience for customers and contractors
Project Timeline

Early 2022
- Refine requirements
- Map data

Late 2022
- Test tool
- Train users

2023
Use for program savings
Questions for the CAC

• Do you have advice for us from your experiences working with customers?

• Do you have any questions?

• How do you see this supporting utility customers?
Questions?

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2022 Organizational Goals
2022 Organizational Goals

- Achieve savings and renewable generation goals while addressing the needs of customers who experience significant energy burden or are impacted by natural disasters.
- Expand support for community-led approaches to increase access to clean energy.
- Advance development as a core function that enhances the value energy efficiency and renewable energy provide our customers and communities.
- Implement new work strategies to adapt and thrive in our changing environment and support staff while managing operating costs.
Goal 1: Achieve savings and renewable generation goals while addressing the needs of customers who experience significant energy burden or are impacted by natural disasters

We will meet the 2022 targets of XX aMW of electric savings with BB MW during periods of summer and CC MW of winter peak demand, YY million therms of natural gas savings and ZZ aMW of renewable generation, with a focus on:

- Creating program offers to better serve customers with high energy burden
- Implementing programs and initiatives to help utilities manage loads during high demand periods
- Supporting communities managing natural disasters with clean energy and resiliency offers in coordination with utilities
How did we create Goal #1

- Creating program offers to better serve customers with high energy burden
- Implementing programs and initiatives to help utilities manage loads during high demand periods
- Supporting communities managing natural disasters with clean energy and resilient offers in coordination with utilities
Goal 2: Expand support for community-led approaches to increase access to clean energy

We will expand community-led approaches to increase participation in energy efficiency and renewable energy programs and support community objectives, with a focus on:

• Identifying partnerships with communities or community-based organizations that represent and serve communities of color, customers with low incomes and rural communities
• Working with communities and community-based organizations to help shape our offers to meet their needs within our regulatory guidelines
• Leveraging additional funding sources and insights from communities to better serve customers
• Tracking and supporting community energy policy and planning efforts to identify opportunities for collaboration
• Applying Energy Trust's community engagement guidelines to evaluate opportunities for one or more community-led initiatives that could help us accomplish savings and generation goals
How did we create Goal #2

**Move relationships "up" the engagement continuum towards co-creation to really explore community-sourced solutions**

- Identifying partnerships with communities or community-based organizations that represent and serve communities of color, customers with low incomes and rural communities
- Working with communities and community-based organizations to help shape our offers to meet their needs within our regulatory guidelines
- Leveraging additional funding sources and insights from communities to better serve customers
- Tracking and supporting community energy policy and planning efforts to identify opportunities for collaboration
- Applying Energy Trust's community engagement guidelines to evaluate opportunities for one or more community-led initiatives that could help us accomplish savings and generation goals

**Establish dedicated offers and services for communities and customers in addressing climate and disaster challenges**

- Using the simplest way to approach and work with customers, esp when working through CBOs (includes simple messaging)
- Recognize and respect the role of CBO as trusted advisor in community

**Double investments in awareness-building activities for diverse customers**

- UPDATE current community/relationship goal, consider adding in increase our understanding of communities and deliver to community goals.

**Advisory Council Input**

- **Invest in relationships/collaborations**
  - CBOs as source of community-led solutions
  - Understand community needs and goals
  - Advance mutual goals and objectives

**Board Input**

- Effectively and cost-effectively leverage the strengths of CBOs
- Work with CBOs or others to reach customers who don't have tax liability
- Work to understand customer needs and tailor marketing and outreach to connect to them
- Use different techniques to engage customers in taking advantage of RE options
Goal 3: Advance development as a core function that enhances the value energy efficiency and renewable energy provide our customers and communities

We will develop the capabilities necessary to increase funding that furthers our ability to deliver on our core savings and generation goals and expands our ability to meet changing customer and utility system needs. We will do this with a focus on:

- Building systems, processes and structures to facilitate development activities
- Developing relationships with organizations where there is mutual opportunity to pursue complementary activities or access other sources of funds
- Enhancing grid value with the utilities
- Informing policy discussions that leverage our development efforts
- Pursuing opportunities that improve the cost-effectiveness of our savings and increase adoption of renewable generation
How did we create Goal #3

<table>
<thead>
<tr>
<th>Comments</th>
<th>Themes</th>
<th>Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Staff Input</strong></td>
<td><strong>Advisory Council Input</strong></td>
<td><strong>Board Input</strong></td>
</tr>
<tr>
<td>Leverage emerging federal, state and local resources focused on recovery and equity</td>
<td>Identify areas where increasing investments would enable us to accomplish strategic goals but where performance measures limit such investment.</td>
<td>Be adaptable given the increasing cost to get EE savings</td>
</tr>
<tr>
<td>Achieve other goals while minimizing risk of over-expenditures given constrained funding environment</td>
<td>Have some funding available for repair and maintenance that homeowner often can't afford</td>
<td>Given limited funds, need to find synergies with other orgs to be more efficient &amp; think outside the box (e.g., irrigation modernization)</td>
</tr>
<tr>
<td>At least one pilot initiative that generates additional revenue</td>
<td>Seek additional funding opportunities</td>
<td>Consider whether we can offer incentives to fix homes to get it ready for EE work</td>
</tr>
<tr>
<td>Be prepared to pursue opportunities around state policy</td>
<td>Expand cost-effectiveness test to include additional benefits (consumer, equity, etc.)</td>
<td>Look for other funding opportunities to offer customers (e.g., IDAs)</td>
</tr>
</tbody>
</table>

**Manage and reduce levelized costs**

- Building systems, processes and structures to facilitate development activities
- Developing relationships with organizations where there is mutual opportunity to pursue complementary activities or access other sources of funds
- Enhancing grid value with the utilities
- Informing policy discussions that leverage our development efforts
- Pursuing opportunities that improve the cost-effectiveness of our savings and increase adoption of renewable generation

**Leverage local, state and federal resources**

**Additional funding can support non-energy benefits**

**Creating a core function creates efficiencies and scale**

**Additional funding can support non-energy benefits**

- Additional funding opportunities can support non-energy benefits (e.g., consumer, equity, etc.)
Goal 4: Implement new work strategies to adapt and thrive in our changing environment and support staff while managing operating costs

New work strategies will need to evolve our work space, the way we work and our organizational culture, with a focus on:

• Creating a culture and environment that enables us to retain and compete for talent
• Ensuring an inclusive, flexible, accessible and supportive work culture
• Regularly prioritizing and scaling work for changing business conditions, utilizing business planning and other management tools while reserving time for innovation
• Managing our administrative costs
2022 Budget Engagement Opportunities
2022 budget schedule overview

**JUL**
- Staff identify significant changes and new activities for 2022
- Staff complete Q2 forecasting

**AUG**
- Early engagement meetings with 5 partner utilities
- Staff begin drafting program and support group action plans
- Staff develop and submit draft budgets

**SEP**
- Staff finalize draft action plans
- Share key activities and strategies with advisory councils
- Initial funding meetings with each utility individually

**OCT**
- Draft budget posted online for public review and comment
- Public presentations, including workshop with board of directors and all advisory councils

**NOV**
- Staff revise budget and action plans based on stakeholder feedback
- Present draft budget to Oregon Public Utility Commission
- Second round of funding meetings with each utility individually

**DEC**
- Final proposed budget posted online
- Presented to board for approval
CAC budget engagement opportunities

- **September**: Discuss and weigh in on key activities in draft program action plans
- **October**: Attend budget workshop to provide input on draft budget
- **November**: Discuss major revisions to draft budget and hear public comment summary
Budget schedule key dates

October & November

10/5: draft budget online
10/6: public comment opens
10/13: public budget workshop
10/20: public comments due
11/9: OPUC public meeting

December

12/9: final proposed budget online
12/17: board action on final proposed budget

www.energytrust.org/budget
Questions

• Do you have any reflections about the 2022 organizational goals?
• Do you see your input reflected in the goals?
• What advice would you like to give staff as they develop their action plans in the coming months?
• Do you have any suggestions for changes to how we gathered your input and developed these goals?
Thank You

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