Clean Energy Planning Engagement Series for Oregon Tribal Nations

July 21, 2023



Clean Energy Planning Engagement Series for Oregon Tribal Nations July 21, 2023, 9:00-11:00 a.m., PT

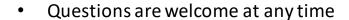
For a Better Meeting Experience



Use Gallery View (icon at top right) when in group discussion



For technical support, chat "Tag G-D / E Source" as recipient, and send your message





Please mute until speaking

 Speak by clicking the "Raise Hand" in the tool bar

AGENDA
Check In & Closing the Loop
Solutions & Support
CEP Update
Energy Trust of Oregon
BREAK (5 mins)
Engagement Exploration
Community-Based Renewable Energy
Distribution System Planning Update
Next Steps

Today's Presenters



Christina Medina Manager, Stakeholder Policy & Engagement



Stephanie MeeksRegulatory Manager



Caryn Appler
Sr Outreach Manager
Energy Trust of Oregon

Energy Trust



Ryan Harvey Community Renewables Program Manager



lan Hoogendam
Distribution System
Planning Manager



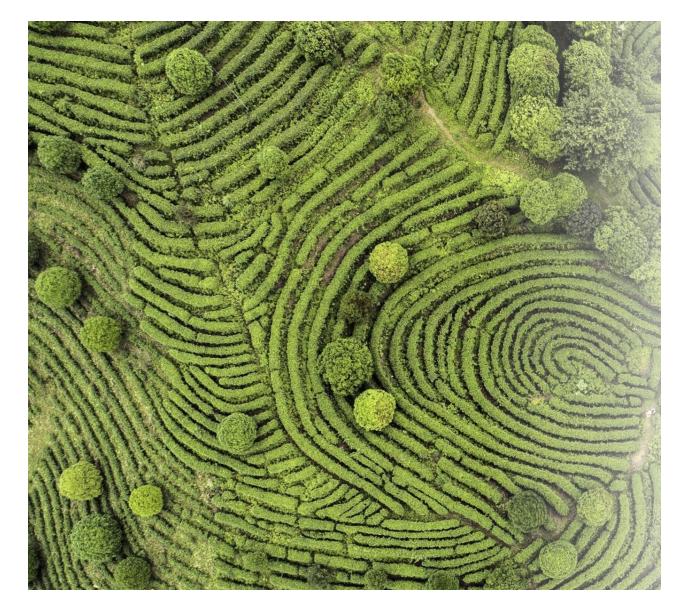
Source

Morgan Westberry E Source Facilitator

3 POWERING YOUR GREATNESS

Check In

What is a recent project or activity that you are excited about?



Closing the Loop from Last Meeting

Focus on action:

- Overview of the resources available and support programs offered, as well as how to access them
- Engagement opportunities for expanded impact of the Energy Efficiency Road Show
- Dialogue around Community Benefit Indicators and input on how to shape and measure community benefits

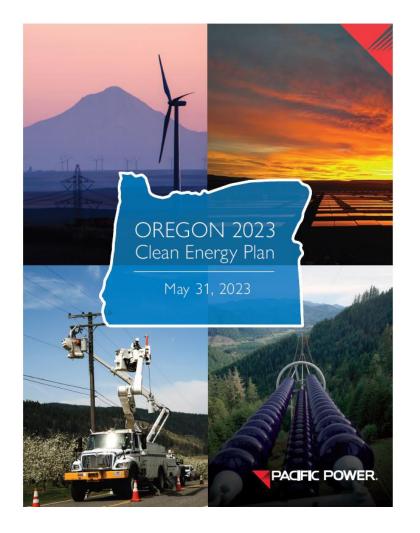
CEP Update



Clean Energy Plan Update

PacifiCorp's inaugural Clean Energy Plan (CEP) was filed on May 31, 2023.

Seven Components to PacifiCorp's
Oregon Clean Energy Plan (CEP)
Community Engagement
Community Benefit Indicators
Resiliency
Community-Based Renewable Energy
Resource Planning
Greenhouse Gas Emissions Analysis
Action Plan



Clean Energy Plan Engagement

We host a virtual and recorded public informational meeting, the Clean Energy Engagement Series. These are scheduled every other month through 2023 to further discuss our Clean Energy Plan with members of the commission and the public.

For more information on our previous and upcoming meetings you can access the <u>Clean Energy Plan</u> on Pacific Power's website. From there, you will find links to view previously recorded meetings and sign up for upcoming meetings.



Energy Trust of Oregon





Energy Trust of Oregon Overview and Discussion Pacific Power Tribal Nations July 21, 2023



Agenda

- About Energy Trust
- Tribal community engagement
- Discussion
- Thank you and questions

Energy Trust of Oregon

About Energy Trust



Who we are

Independent nonprofit

Providing access to affordable energy

Serving 2.4 million customers of Pacific Power, Portland General Electric, NW Natural, Cascade Natural Gas and Avista

Generating homegrown, renewable power

Building a stronger Oregon and SW Washington

Clean and affordable energy since 2002



Nearly 808,000 sites transformed into energy efficient, healthy, comfortable and productive homes

and businesses



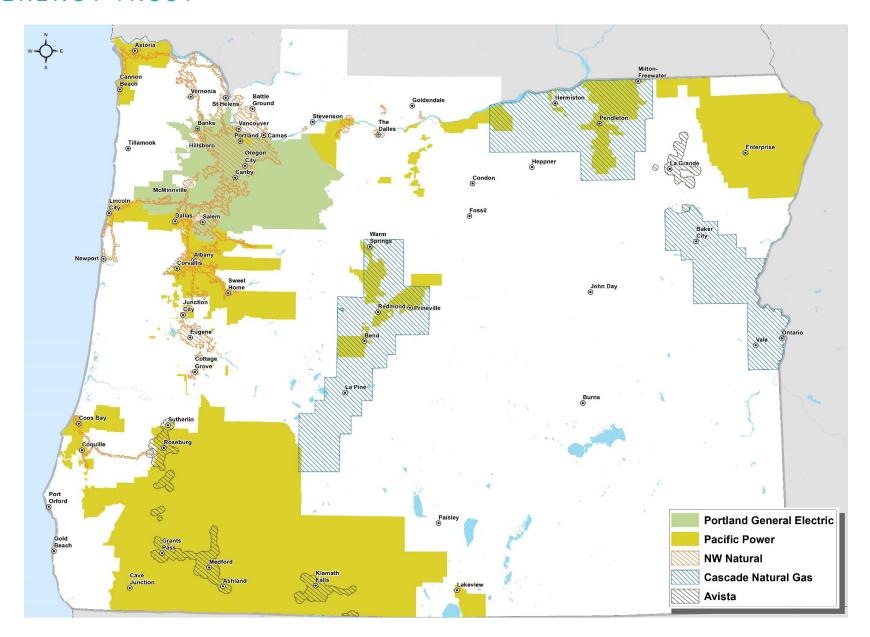
26,000 clean energy systems generating renewable power from the sun, wind, water, geothermal heat and biopower



\$10.6 billion in savings over time on participant utility bills from their energy-efficiency and solar investments



39.3 million tons
of carbon dioxide
emissions kept out of
our air, equal to
removing 9.2 million
cars from our roads for
a year







Our Purpose:

Help customers and communities reduce costs and realize additional benefits by saving energy and using renewable resources

Why Clean Energy?

- Lowers your utility bills
- Reduces overall costs for all utility customers
- Brings local jobs to your community
- Reduces our reliance on fossil fuel resources

Did you know?

For every \$1 invested in energy efficiency, customers save more than \$3?



Ways We Can Help

Serving Customers

- Energy-efficient upgrades
- Renewable energy systems

Information and technical services

- No- and low-cost strategies
- Expert guidance
- Walk-through services

Cash Incentives and Discounts

- Renters and homeowners
- Commercial and multifamily property owners
- Industrial and agricultural businesses



Programs for All Customers





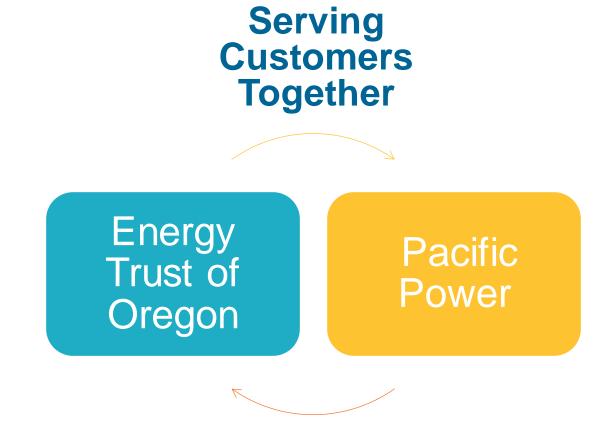








Serving Pacific Power Customers



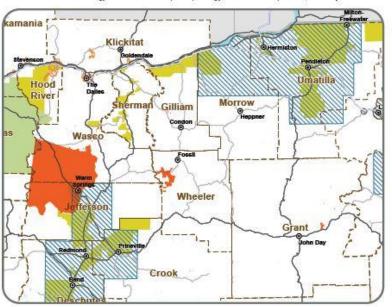
How we work in the field

Residential Commercial Agricultural Industrial Renewable



ENERGY TRUST OF OREGON OUTREACH

Energy Trust of Oregon is an independent nonprofit organization dedicated to helping utility customers benefit from saving energy and generating renewable power. Our services, cash incentives and energy solutions have helped participating customers of Portland General Electric, Pacific Power, NW Natural, Cascade Natural Gas and Avista save on energy bills. Our work helps keep energy costs as low as possible, creates jobs and builds a sustainable energy future.

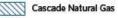




Caryn Appler All Programs caryn.appler@energytrust.org 541.561.1221 Pendleton







Avista



Commercial and Multifamily



Dan St. Germain Existing Buildings Commercial and Multifamily DStGermain@trccompanies.com 541,419,7907 Bend



ML Vidas New Buildings Commercial and Multifamily ml.vidas@clearesult.com 503.791.1807 Bend



Eric (EJ) Red Eagle Jordan Trade Ally Coordinator ejordan@burchenergy.com 206.910.6007 McMinnville

Industrial and Production Efficiency



Ryan Bowen Industrial, Ag and PE ryan@rhtenergy.com 541-613-9359 Redmond

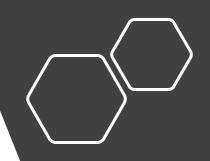
Residential



Nate Merrill **Existing Residential** nate.merrill@clearesult.com 541.760.5592 Bend



Jesse Holland **EPS New Homes** iholland@trccompanies.com 541-419-7640 Bend



Energy Trust of Oregon

Tribal community engagement



TRIBAL COMMUNITY ENGAGEMENT

Focus on Engagement

OPUC Equity Metrics adopted for 2023

Diversity, Equity & Inclusion plan centering community engagement:

- Increase representation and readiness
- Shift and share leadership and power
- Increase community capacity and investments
- Increase transparency and accountability
- Deepen engagement in communities of color, rural communities and customers with low incomes

Community Presence



Example Community Partnerships

- Community Partner Funding offers higher incentives delivered by qualifying community-based organizations
- Working Together Grants support community-led activities that increase awareness of and access to Energy Trust offers
- Support for RARE members to build capacity in rural communities
- Collaboration with community-based organizations and local partners to bring incentives for rebuilding to disaster impacted communities



TRIBAL COMMUNITY ENGAGEMENT

Tribal Working Group

- Formed in May 2022
 - Established monthly meeting series
 - Developed purpose statement and group agreements
- Participation
 - 5 tribal members, OPUC Tribal Liaison, Energy Trust staff
 - Recruitment of 9 federally recognized tribes in Oregon
- Work to date
 - Program informational sessions for feedback
 - Opportunities to increase engagement
 - Input in DEI Metrics
 - 2023 goal setting
 - Input on 2024 budget

TRIBAL COMMUNITY ENGAGEMENT

Klamath Tribes

Elder Housing Participation in nocost Ductless Heat Pump (DHP) program

- Worked with Tribal Housing and Turtle Cove Partnership
- Installation by local contractor Seasons Change
- Replaced baseboard heating with DHPs



Confederated Tribes of Warm Springs

Warm Springs Housing Authority

- Began with providing energy saving resources
- Enrolled in Community Partner Funding program in 2021
- Attic insulation incentive
- Completed 25 home energy assessments in 2022



Confederated Tribes of Grand Ronde

Elder Housing Development

- 38 unit rental development
 - Duplexes, triplexes and quadplexes
 - Focus on energy efficiency and resiliency
- Program support in 4 areas
 - Early Design Assistance
 - Energy Performance Score Program
 - Residential solar
 - Workforce development

TRIBAL COMMUNITY ENGAGEMENT

Confederated Tribes of the Umatilla Indian Reservation

Tímíne Way North Apartments

- Managed by Housing Authority
- 28 apartment units
- Participated in the new buildings multifamily program
- Offset power 175kW solar array
 - Blue Sky grant + \$75k incentive from Energy Trust



Energy Trust of Oregon

Discussion



DISCUSSION

What we are learning

- Power of storytelling to showcase what tribal communities have accomplished is a good way to build credibility and value around program resources
- It is important to find out who the proper team is to engage with and "overabundance of information is better than none at all."
- Federally recognized tribes have two things in common 1) are sovereign governments 2) most have housing departments
- All tribes are different and have different needs related to resources

DISCUSSION

Tribal Nations Clean Energy Series Participation

- What other information would you like to know about?
- What is the best way to update you on our work?
- What is the best way to connect with you?
- Is there anything you would like to connect on now?

THANK YOU

Questions?
Sue Fletcher sue.fletcher@energytrust.org
Caryn Appler caryn.appler@energytrust.org



BREAK



Engagement Exploration Poll



Community-Based Renewable Energy (CBRE)



What We Will Cover Today

- 1. CBREs in the Clean Energy Plan
 - a) Overview
 - b) Potential Study Results
 - c) Costs and Benefits of CBREs
 - d) Core Commitments
- 2. Initial Opportunity to advance PAC's Survey Strategy
- 3. What Comes Next

Community-Based Renewable Energy

Community-Based Renewable Energy (CBRE) projects are defined as one or more energy systems, and may be combined with microgrids, storage systems, demand response measures, or energy-related infrastructure that promotes climate resiliency

CBRE projects must:

- Directly benefit communities through community-benefit agreements or direct ownership by local government, nonprofit entities, or federally recognized Indian tribes; or
- Increase resiliency or community stability, local jobs, economic development, or direct energy cost savings to families and small businesses

CBREs in the 2023 Clean Energy Plan:

- 1. A study of potential future projects
- 2. An assessment of the costs and benefits
- 3. Modeling results from the Integrated Resource Plan
- 4. Core Commitments to advance CBRE development



Inventory-Informed "Potential Study"

PacifiCorp reviewed existing programs and projects and new channels to identify 95MW of future potential CBRE opportunities. The potential has been organized into Two Groups:

- 1) Group 1- Potential from Existing Programs: Total ~ 92 MWs
 - a. <u>Community Solar</u>: Customers participate in offsite solar for a monthly bill reduction. Total 65 MWs
 - b. <u>Blue Sky Program</u>: Long-running voluntary renewables add-on. Total 4.3 MWs
 - c. Energy Trust-Identified Opportunities: Small hydro + Community-focused solar. Total ~ 23 MWs
- 2) Group 2 Small Scale, Community-Based Solar + Storage projects: Total ~ 3.5 MWs
 - a. Based on experience from the PacifiCorp's <u>Community Battery Storage Pilot</u> program and <u>OR Dept.</u> <u>of Energy Community Renewable Energy Project</u> grant funding requests
 - b. This portion of the potential reflects the possibility for small-scale, community-based solar + storage opportunities
 - c. These may include opportunities like "resilience hubs", small solar connected micro-grids or other community-focused renewable opportunities

Costs and Benefits of CBRE Projects

"The key unique benefit for small-scale or community-based projects is local resilience."

"Costs of renewable energy projects, in general, decrease as the project gets larger."

"The workgroup agreed that future policy decisions should be based on a principle of equitable distribution of costs and benefits."

Source: ODOE Study of Small-Scale and Community Based Renewable Energy Projects, 2022

Summary of CBRE Commitments

- 1. Continued Assessment of Needs and Opportunities (Expand the CBRE Potential Study)
 - Continue to advance CBRE initiatives through community input and engagement groups
 - Develop and conduct a survey to further assess community interest in CBRE projects and initiatives
 - Update CBRE Action Plan based on continued learnings
- 2. Develop straw proposal for expansion of the Community Resilience Battery Storage Pilot focused on community resilience hubs
- 3. Explore opportunities to leverage public funding to advance CBRE opportunities
- **4. Build tools and awareness to assist communities and stakeholders** in connecting to CBRE processes, initiatives, and programs as they develop

Areas for Oregon Community Feedback/Input

We are expanding feedback channels for CBRE input, including launching this survey that has the following questions:



https://forms.office.com/r/sVcHxXKVLe

Please provide input by August 1, 2023

- 1. Can you recommend ways that PacifiCorp can more effectively assess community interest in CBRE projects over time?
- 2. Do you have suggestions on how PacifiCorp can increase input from *all* communities?
- 3. How would you like to engage and provide feedback in this process moving forward? Do you have any examples of successful engagement approaches?
- 4. Are there specific tools you recommend to use to solicit input (e.g., email, web surveys, direct engagement, etc.)?
- 5. Should anything else be included in this survey?

Next Steps for CBREs...

- Upcoming CEP Engagement Group meeting on 8/25
- Continue the development of a survey plan
- Initial discussion/rollout of grant pilot straw proposal
- Develop materials to support community engagement with CBREs

Distribution System Planning (DSP) Update



What We Will Cover Today



Distribution System Planning - Introduction

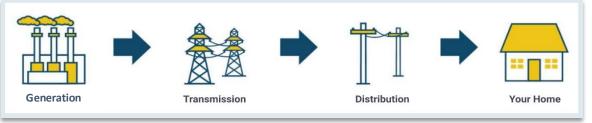
What is Oregon DSP?

- Advancements to traditional DSP based on guidelines proposed by Oregon PUC staff
- Increased transparency of DSP processes to meet the needs and leverage the capabilities of the modern grid

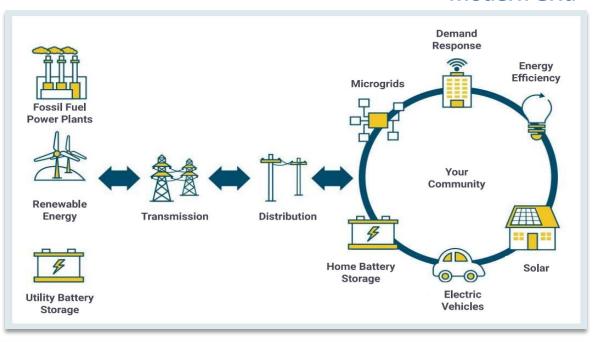
Key Changes to Traditional DSP

- Evaluation of *nontraditional solutions* to meet grid needs
- Increased *community engagement*
- Enhanced *forecasting*:
 - 24-hour load profiles
 - Inclusion of incremental electric vehicle (EV) and solar adoption rates

Past Grid



Modern Grid



Electric Grid Overview

Generation

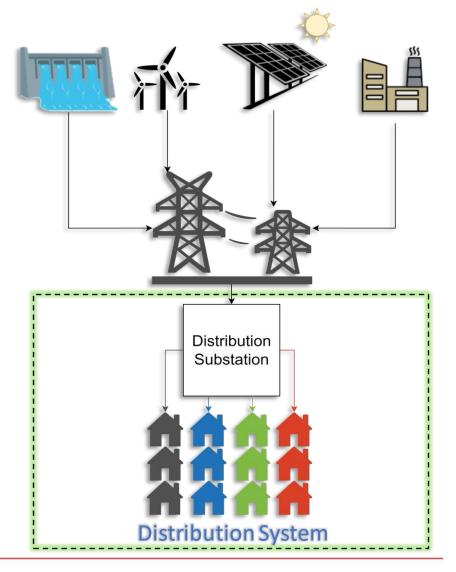
Produces power

Transmission System

- Transmits power from generation plants to distribution substations
- Interstate highway of the electric grid
- High voltage
- High redundancy

Distribution System

- Starts at distribution substation and ends at customer meter
- Distribution **substations**: interstate highway exits
- Distribution **circuits:** roads that connect the exit to the homes and businesses of the community
- Delivers power to consumers via poles and wires
- Medium voltage



Traditional Vs Nontraditional Solutions

Traditional Solutions

Address grid needs with poles, wires, equipment

- Equipment Upgrades
- New Equipment
- New Substation or Circuit
- Load Transfers

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- Phase Balancing
- Settings Changes







Nontraditional Solutions

Address grid needs through energy programs

- Accelerating solar adoption
- Accelerating energy efficiency improvements
- Managing behind the meter devices to lower peak demand:
 - Batteries
 - Smart Thermostats
 - Water Heaters
 - EV Charging Stations
- Collaboration with local accounts/partners







Upper Rogue Study Area

Distribution System

• Distribution substations: 6

• Circuits: 10

• Line miles (sum of pole-to-pole distance): 868

Customers Served

• Total: 13,285

• Residential: 11,856

• Commercial: 1,235

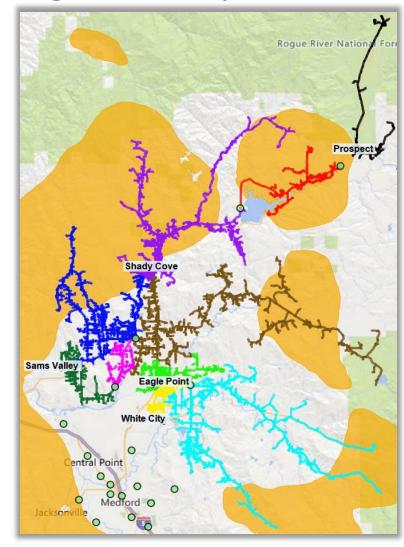
• Irrigation: 171

• Industrial: 11

• Other: 11

Other Characteristics

- 3 of the longest PAC circuits in Oregon
- 6 circuits in Fire High Consequence Areas (FHCA)



Prineville Study Area

Distribution System

• Circuits: 7

• Line miles: 347 (sum of pole-to-pole distance)

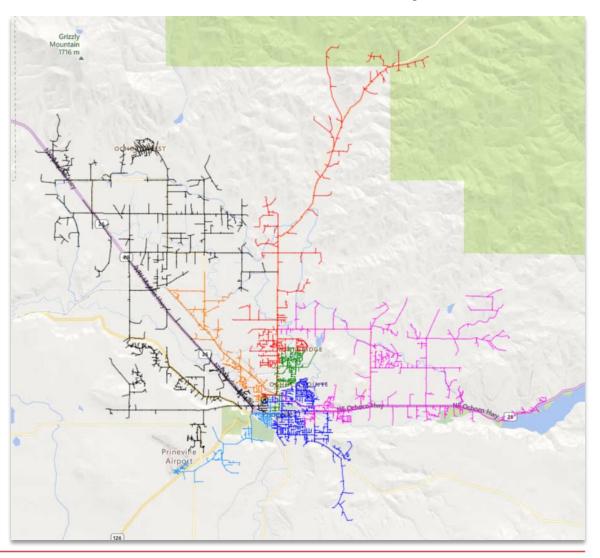
Customers

Residential: 7,490Commercial: 1,199Irrigation: 387

• Industrial: 37

Other Characteristics

- Limited SCADA history
- New substation transformer by Fall 2023
- Large datacenters served by transmission
- Higher loads in winter, but equipment closer to capacity in summer



2023 Study Process and Community Engagement

Establish criteria for selecting study areas

Collaborate and align with field engineering

Study Area Selection

Stakeholder feedback

Final selection

Introductions to DSP and team

Utility overview

Preliminary forecast results

Feedback on process and forecasts

Customer survey

Engagement series overview

Run load flow for seasonal peak and minimum load scenarios

Identify grid needs (loading and voltage constraints)

Identify potential traditional and Nontraditional solutions

Project proposals:

Description of work to be performed /alternatives considered

Purpose and necessity

Risk assessment

Preliminary cost estimate

Load Forecasting

Load Flow Model Updates and Verification

Second Stakeholder Workshop (8/7 & 8/9) Final Stakeholder Workshop (TBD)

Local Stakeholder Workshop

Identify and Determine Potential Solutions

Develop Proposal for Investment Delivery

Review historical circuit configuration

Load forecasting with weather normalization

Layer incremental EV and DER adoption forecast

Verify and update load flow model

Customer to transformer review and correction

Develop seasonal peak and minimum load scenarios based on AMI

Review potential solutions with stakeholders

Discuss benefits, complexity, risks, and feasibility

Listen to feedback

Conclusions and next steps

55 POWERING YOUR GREATNESS

Next Steps



Check Out

Final Thoughts...?

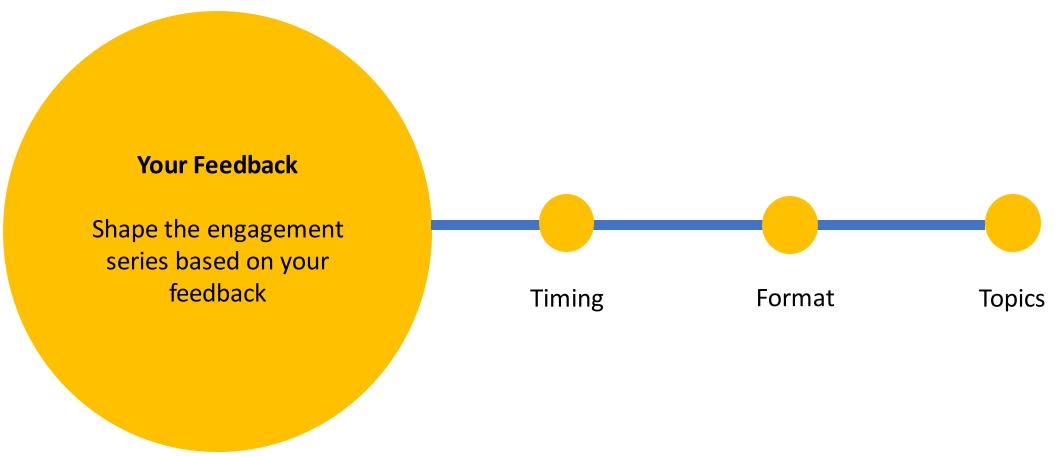
Proposed Upcoming Clean Energy Series Topics and Meetings

MAY	JULY (July 21, 2023)	AUG	ОСТ
 Engagement + HB2021 Community Benefit Indicators: Intro of Energy Equity + Energy Burden Overview of Low-Income Discount Program Energy Efficiency Roadshow Concept exploration 	 Clean Energy Plan Updates Clean Energy Benefits Survey Development Discussion Distribution System Planning 	Guest Presenter to the Economic Development and Community Services Cluster August 25th	Resilience and SSRP Small Scale Renewable Resource Procurement Oregon Department of Energy Community Based Renewable Energy Pilot Update

PacifiCorp Stakeholder Engagement

Oregon Tribal Nations Engagement Series Meeting	7/21/2023	9-11am PST	Oregon Tribal Nations Engagement Series Meeting July 2023
Clean Energy Plan Engagement Series	8/25/2023	1-4 pm PST	Clean Energy Plan Engagement Series
Oregon Community Benefits + Impacts Advisory Group	07/20/2023	1-4 pm PST	Oregon Community Benefits and Impacts Advisory Group

Next Steps



Resources

Email comments to: TribalRelations@PacifiCorp.com

For more information:

Oregon Clean Energy Plan Updated Engagement Strategy **Clean Energy Plan Engagement Series for Oregon Tribal Nations - 2023 Meeting**

Join Zoom Meeting





Thank You!

