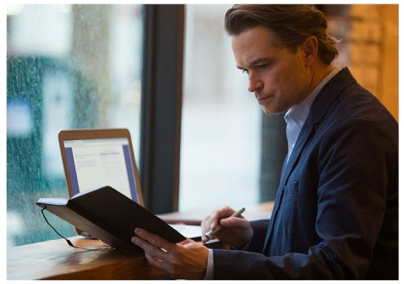
Clean Energy Plan Engagement Series

Kick Off Meeting

February 24, 2023





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This meeting will be recorded

Clean Energy Plan Engagement Series Kick Off

February 24, 2023, 1-4 p.m. PT

For a Better Meeting Experience

Spanish or ASL?

- Navigate to "Interpretation" at the bottom of Zoom
- Select "ASL" under Watch or "Spanish" under Audio
- If the interpretation icon is missing, try the "More" icon

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

- Questions are welcome at any time
- Please mute until speaking
- Speak by clicking the "Raise Hand" in the tool bar

Agenda

TIMING	TOPIC
1 p.m.	• Purpose & Today's Objectives • Today's Presenters
1:10 p.m.	2023 Stakeholder Engagement Clean Energy Plan Engagement Series
1:30 p.m.	Clean Energy Plan Basics Integrated Resource Planning + CEP
2:20 p.m.	Community Benefit Indicators (CBI)
2:50 p.m.	BREAK
3:00 p.m.	Community Based Renewable Energy
3:30 p.m.	Public Comment
3:45pm	Wrap up & next steps

Clean Energy Plan Engagement Series Purpose

Provide an integrated lens on clean energy planning with expanded learning opportunities to foster a deeper understanding of programs and outreach while gathering public input

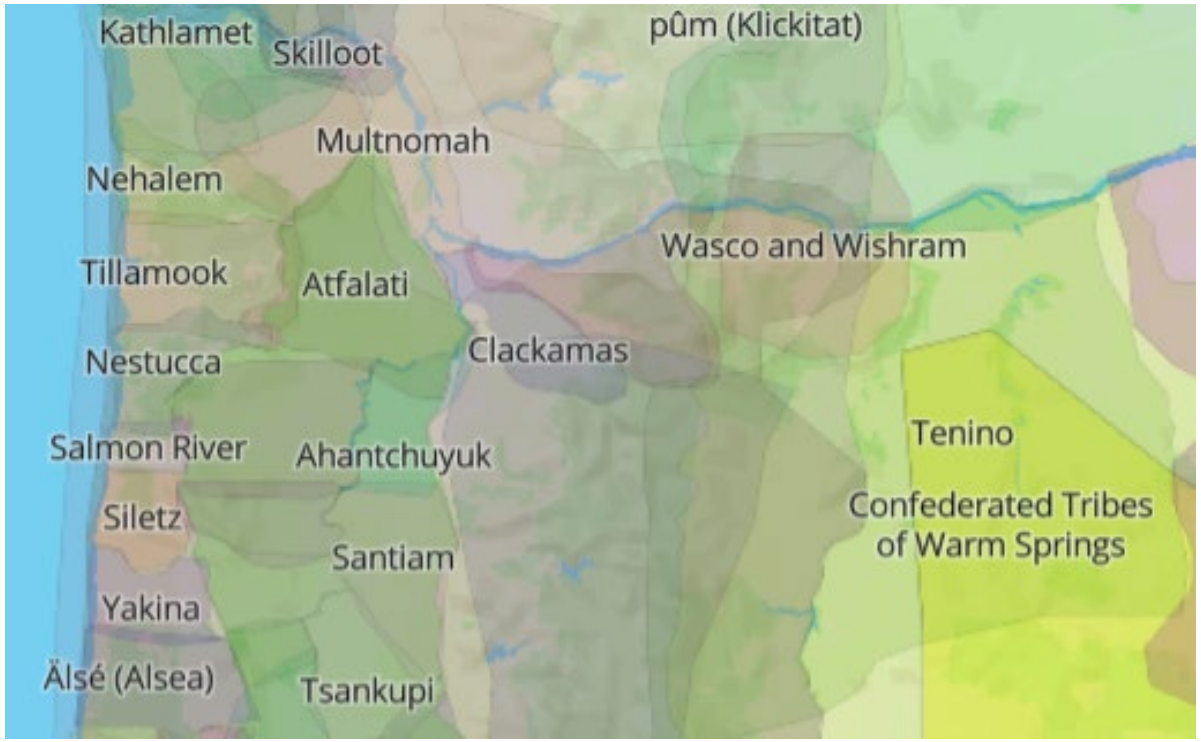
Today's Objectives

1. Create a shared understanding of the relationship between the Clean Energy Plan and Integrated Resource Planning
2. Achieve broader stakeholder engagement and a wide range of feedback on key elements
3. Use feedback to inform utility thinking, deliverables and actions

Land Acknowledgement

We are meeting online from various locations within the United States.

To find out original stewards of the land where you are now, check out:



Native Land Digital

https://native-land.ca

By acknowledging Indigenous peoples and tribes, their traditional homeland ties are renewed and reaffirmed

SOURCE: Native-Land.ca | Our home on native land

Today's Presenters

Stephanie Meeks
PacifiCorp
Regulatory Manager

Randy Baker
PacifiCorp
Director of Resource Planning

Lee Elder
PacifiCorp Load Forecasting Manager

John Rush
PacifiCorp SME
Community Based Renewable Energy

2023 Stakeholder Engagement

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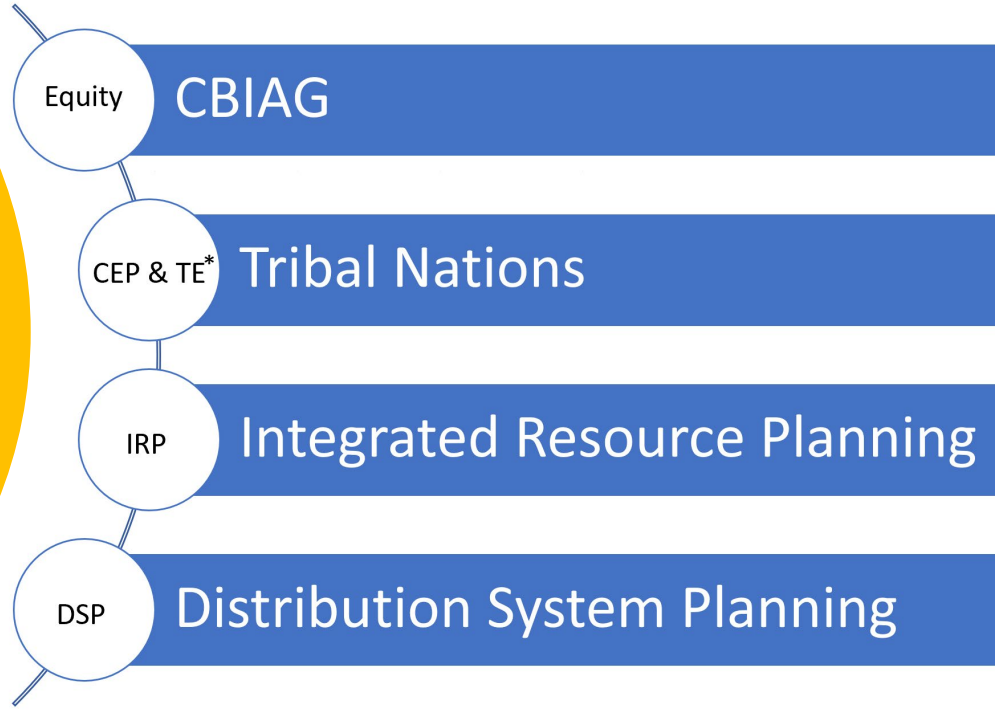
External Engagement 2023

Transitioning to a clean energy future benefits from diverse stakeholder input

Clean Energy Plan (CEP) Engagement Series

- Open to the public
- Deep diving into aspects of CEP

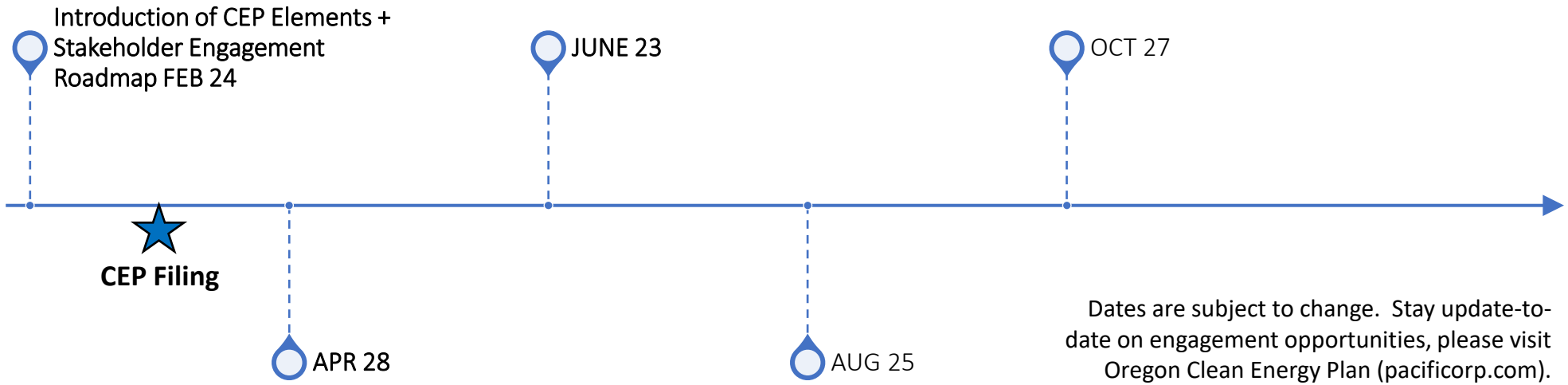


*Transportation Electrification

Clean Energy Plan Engagement Series

Five series focused deep diving into the details and intersectionality of clean energy planning with topics including:

- Clean Energy Plan
- Integrated Resource Plan (IRP)
- Community Based Renewable Energy (CBRE)
- Resiliency
- Distribution System Planning (DSP)
- Community Benefits + Impacts Advisory Group (CBIAG)



Dates are subject to change. Stay update-to-date on engagement opportunities, please visit Oregon Clean Energy Plan (pacificorp.com).

Clean Energy Plan Basics

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Clean Energy Plan: The Basics

In 2021, Oregon Governor Brown signed House Bill (HB) 2021 into law, which provides an emissions-based clean energy framework for electricity providers to develop Clean Energy Plans (CEP). The plan requires retail electricity providers to reduce greenhouse gas emissions associated with electricity sold to Oregon consumers by:

Outcomes:

- 80% below baseline emissions levels by 2030
- 90% below baseline emissions levels by 2035
- 100% below baseline emissions levels by 2040

(Baseline is average annual emission of greenhouse gases for the years 2010, 2011, and 2012 associated with the electricity sold to electricity customer.)

Timeline:

- July 2021 - HB 2021 signed into law
- January 2022 – Ongoing UM 2225 Staff's Investigation into CEP (guidance on implementation)
- March 2023 – PacifiCorp will file first Oregon Clean Energy Plan with IRP filing

Clean Energy Plan: The Basics (continued)

- The Oregon Clean Energy Plan (CEP) works in conjunction with PacifiCorp's system Integrated Resource Plan (IRP) and provides certainty to our target emissions reductions.

- The company will file its first CEP concurrently with its IRP in spring 2023.

- The CEP will include:
  - A clean energy strategy with milestones;
  - A path for additional stakeholder and community engagement; and
  - Discussion of how the company will comply with the requirements to provide 100% carbon free electricity to its Oregon retail customers by 2040.

Integrated Resource Planning + Clean Energy Plan

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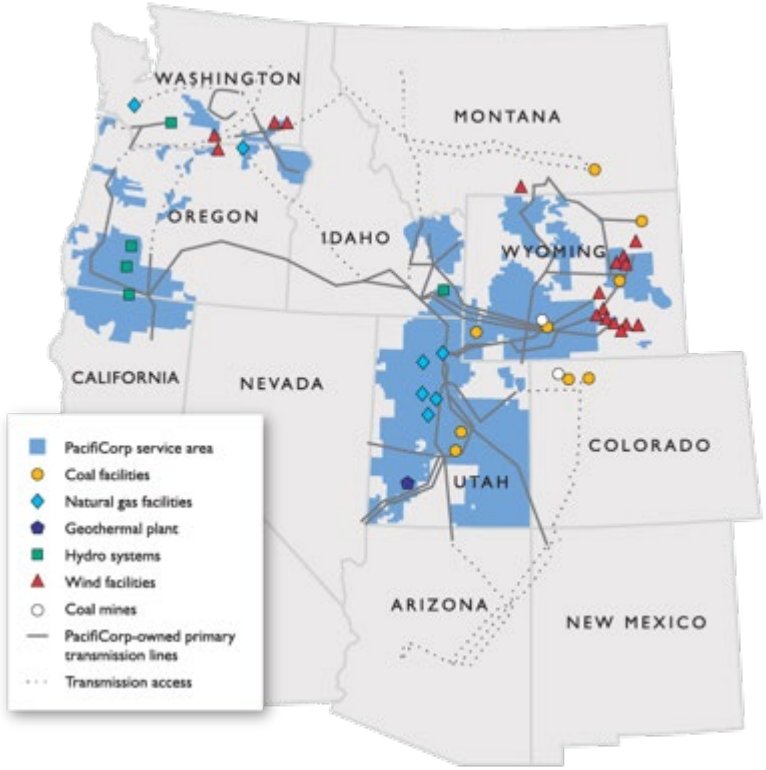
PacifiCorp - Meeting the Energy Needs of All Our Customers

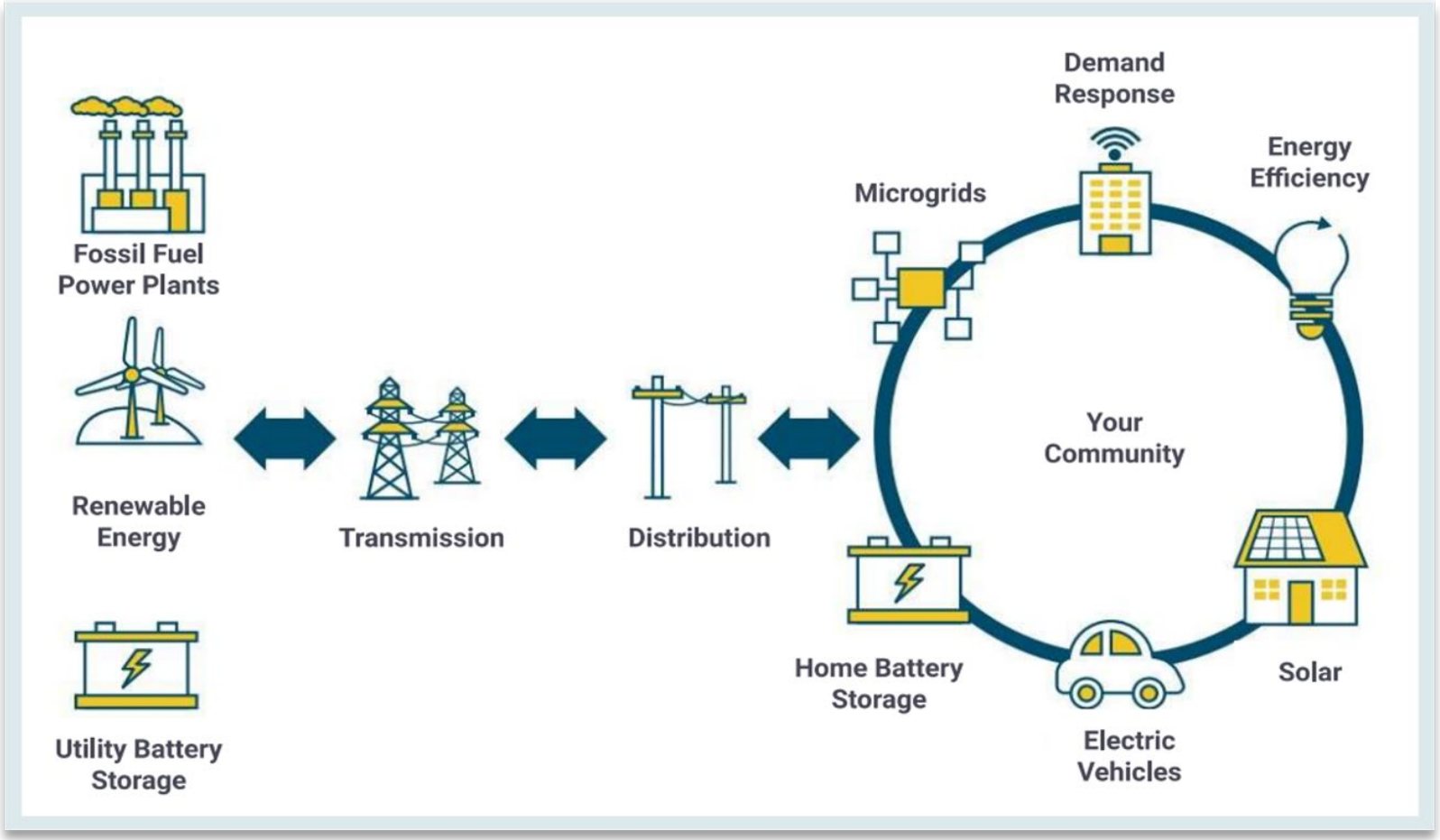
Our planning is designed to customers' energy needs across six states



- PacifiCorp serves approximately 2 million customers across six states
- PacifiCorp serves customers in Utah, Idaho and Wyoming as Rocky Mountain Power
- PacifiCorp serves customers in Oregon, Washington and California as Pacific Power
- Extensive generation, transmission and distribution infrastructure across the west
- Large decarbonization efforts underway for years
- Extensive energy efficiency portfolio
- Long-term resource planning occurs in PacifiCorp's Integrated Resource Plan on a two-year cycle

Orientation toward a Clean Energy Future

Integrated Resource Planning addresses and optimizes the entire system and is the basis for the Clean Energy Plan

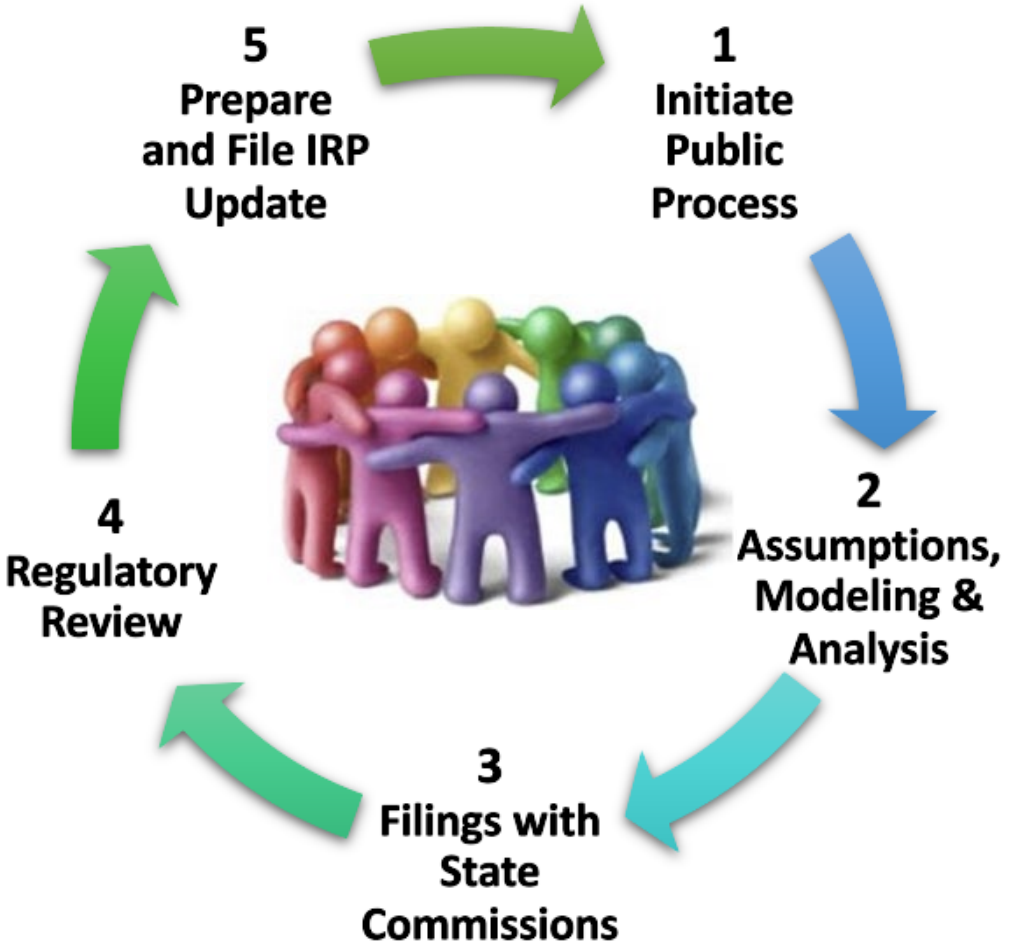


Graphics from Clean Energy Project DSM Presentation

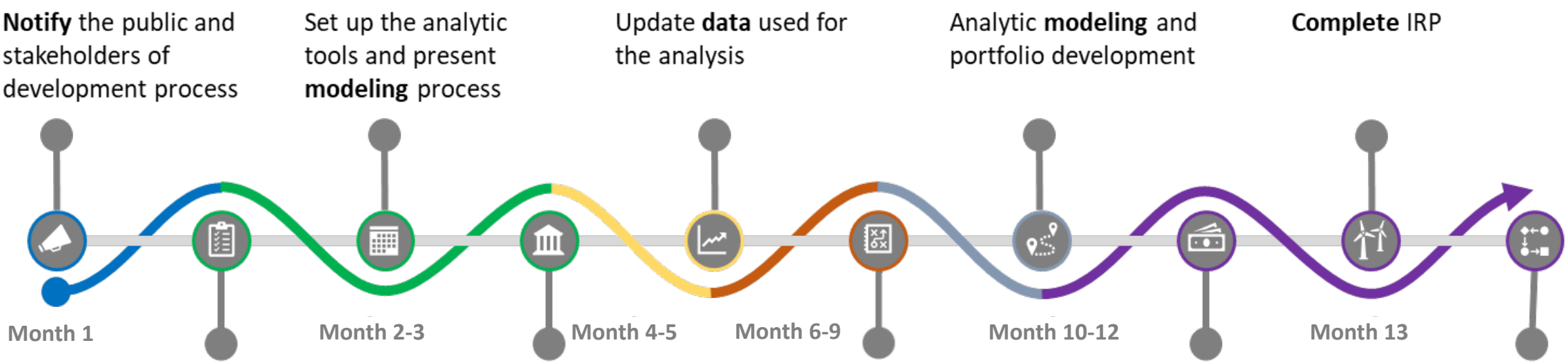
Resourcing the Right Mix

With the involvement of stakeholders and public, PacifiCorp has been on an independent trajectory to develop clean energy, powering jobs and innovation economically. Resource planning requires balancing system needs, regulatory requirements and stakeholder input:

- 20-year planning horizon for costs and risks from our customers' perspective (six states with retail load)
- Intensive data modeling and portfolio analysis
- One plan for all states that PacifiCorp serves customers, incorporating extensive stakeholder input and outreach efforts to socialize plan
- Two-year cycle with updates in off years to highlight how changes in the planning environment affect the plan



Overview of PacifiCorp's IRP Development Process



PacifiCorp seeks, receives, and incorporates public feedback throughout the IRP development cycle

Learn more about PacifiCorp's IRPs at: www.pacificorp.com/irp

Clean Energy Plan Portfolio Development Stages

2023 IRP Preferred Portfolio	Small Scale Renewable Portfolio	Oregon Clean Energy Plan Portfolio

The CEP begins with the 2023 IRP preferred portfolio
• Oregon customers share in the benefits of multi-state planning:
  • Flexibility
  • Reliability
  • Cost-effectiveness
	Small-scale renewables analysis determines the amount, type and location to add small resources (<20MW capacity) to meet Oregon's 10% capacity requirement	Oregon Clean Energy Plan Portfolio incorporates added resources to meet CEP targets in 2030, 2035 and 2040
		
		Consideration of pacing of GHG emissions reductions

Final CEP Portfolio includes:
- CBI measures (discussed in the CBI topic)
- CBRE impacts study (discussed in the CBRE topic)

Questions & Comments

Is there anything else we should consider?

Community Benefit Indicators

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Community Benefit Indicators

Community benefit indicators (CBIs) are one way we measure that communities are benefiting from the transition to a clean energy future

CBIs are the outcomes we seek to achieve

The Clean Energy Plan (CEP)* requires PacifiCorp to develop one metric for three CBI categories among these choices: resiliency, health and community well-being, environmental impacts, energy equity and economic impacts

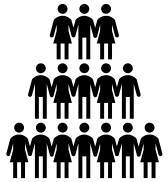
CBI examples include:

- Reduce energy burden
- Increase renewable energy resources
- Reduce disconnections

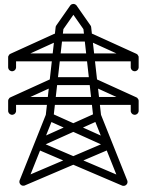
*Order No. 22-390

CBI Development Process

REGULATORY ALIGNMENT



IDENTIFY INTERIM CBIs AND METRICS



SCOPING FOR UTILITY

DEVELOP AND VALIDATE CBIs AND METRICS

STAKEHOLDER INPUT

Oregon Proposed Interim Community Benefit Indicators

Two interim CBIs are expected to be most directly affiliated with IRP outputs:

CBI Category	Interim CBIs	Interim CBI Metrics	Purpose
Rulemaking Language	**Outcomes**	**How we measure outcomes**	**Why**
Resiliency (System and Community)	Reduce frequency and duration of energy outages	SAIDI, SAIFI, and CAIDI at area level including major events Metric of Energy Not Served (ENS)* for IRP portfolios are included as an output from portfolio development	SAIDI, SAIFI and CAIDI scores show how reliable and resilient areas of PacifiCorp's system are. Producing these metrics for Census Tracts will demonstrate how reliable and resilient our system at the community level. By beginning to track these metrics, the Company can establish a detailed baseline to measure the impact of future investments.
Environmental Impacts	Increase energy from non-emitting resources and reduce CO2 emissions to meet HB 2021 targets	Oregon CO2 emission from Oregon allocated resources	Reduce fossil fuel resources and increase renewable and non-emitting resources that currently power Oregon's grid, thereby leading to increased environmental benefits, while maintaining system reliability and on-demand service to customers.

*ENS represents shortfalls when available resources fail to meet load obligations. IRP portfolios must meet required reliability targets, however lower ENS indicates a relatively more reliable portfolio. ENS is an output of all IRP portfolios.

Oregon Proposed Interim Community Benefit Indicators (continued)

CBI Category	Interim CBIs	Interim CBI Metrics	Purpose
Rulemaking Language	**Outcomes**	**How we measure outcomes**	**Why**
Energy Equity (Distributional and Intergenerational Equity)	Decrease proportion of households experiencing high energy burden	Energy burden by census tract Energy burden for low-income customers, bill assistance participants and Tribal members	Energy equity is concept that all members of society should be able to afford and have access to a necessary and basic amount of energy. Energy-burdened households spend a disproportionate amount of their income on home energy costs. Tracking energy burden by Census Tract indicates energy equity for communities in PacifiCorp's Oregon service area.
Economic Impacts	Increase community-focused efforts and investments	TBD	Working with stakeholders to identify opportunities
Health and Community Well-being	Decrease number of residential disconnections	Number of residential customer disconnections	Access to energy affects the provision and sustainability of basic human needs. Disconnections could be the result of a customer's decision whether to pay utility bills or pay for other basic needs like paying rent, buying food, or purchasing prescription drugs. Tracking disconnections by Census Tract provides an indicator of how communities may be struggling with their basic needs..

CBI relationship to IRP

Two interim CBIs are expected to be most directly affiliated with IRP outputs:

- "***Increase Energy from Non-emitting Resources and Reduce CO2 Emissions to meet HB 2021 targets***"
- ***"Reduce Frequency and Duration of Energy Outages"***

"***Increase Energy from Non-emitting Resources and Reduce CO2 Emissions to meet HB 2021 targets***" is measured through the metric of CO2 emissions

- CO2 emissions for IRP portfolios are included as an output from portfolio development
- Varying IRP portfolios will have differing levels of CO2 emissions, which will lead to some portfolios scoring better regarding this interim CBI

CBI relationship to IRP (continued)

"Reduce Frequency and Duration of Energy Outages" is measured through:

- Metric of energy not served (ENS)
- Improved reliability scores (SAIDI, SAIFI and CAIDI)

ENS for IRP portfolios are included as an output from portfolio development

- Varying IRP portfolios will have differing ENS scores, which will lead to some portfolios scoring better regarding this interim CBI

Varying IRP portfolios may generate differing resource configurations, which may affect SAIDI, SAIFI and CAIDI scores

CBI Summary and Next Steps

CEP will be filed concurrently with the PacifiCorp's 2023 Integrated Resource Plan in March 2023

Will include one interim CBI for each of the following topic areas

- Energy equity - Decrease proportion of households experiencing high energy burden
- Resiliency - Reduce frequency and duration of energy outages
- Health and community well-being - decreased number of residential disconnections
- Environmental impacts - Increase energy from non-emitting resources and reduce CO2 emissions to meet HB 2021 targets
- Economic impacts - Increase community-focused efforts and investments

PacifiCorp will continue to develop CBIs and metrics over the coming months

Questions & Comments

Is there anything else we should consider?

BREAK

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Community Based Renewable Energy

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What is Community-Based Renewable Energy (CBRE)?

Allows community ownership of a renewable energy source that promotes climate resiliency and broader benefits. In Oregon, CBREs have three components:

RENEWABLE ENERGY RESOURCE(S)

- Solar, wind, or other renewable energy
- Microgrids, storage systems
- Demand response

CONNECTS TO THE GRID

Interconnects to power company distribution or transmission assets

BENEFITS OR OWNED BY THE COMMUNITY

- Includes Community benefits agreements, ownership, or other form of direct benefit
- Benefits may include increased resilience, community stability, local jobs, economic development or direct energy cost savings to families and small businesses

Source: HB 2021 Legislation

Requirements HB 2021 and UM 2225

Utilities are required to:"(d) Examine the **costs** and **opportunities** of offsetting energy generated from fossil fuels with community-based renewable energy"

Source: HB 2021 Section 4.4(d)

Community Lens Acquisition Targets

The First CEP should include:

- A potential study that identifies opportunities for community-based renewable energy projects (CBREs) developed in coordination with communities … with input from stakeholders and Staff.
  The potential study should… identify acquisition targets (annual MW/MWh)… balance costs, risks and community impacts (using CBIs)… include action plan…
- Explanation of how utility's plan for future CBREs complies with the state's goal for community-based renewable energy projects provided in ORS 469A.210 and explain how the CBRE targets align with this strategy

Opportunities Considered within Community Lens Potential Studies

Opportunities for CBRE actions, including distributed resources and their resiliency benefits, should be developed in coordination with communities that are served by the utility, including environmental justice communities, and with input from stakeholders and Staff. (Need to reference other processes)

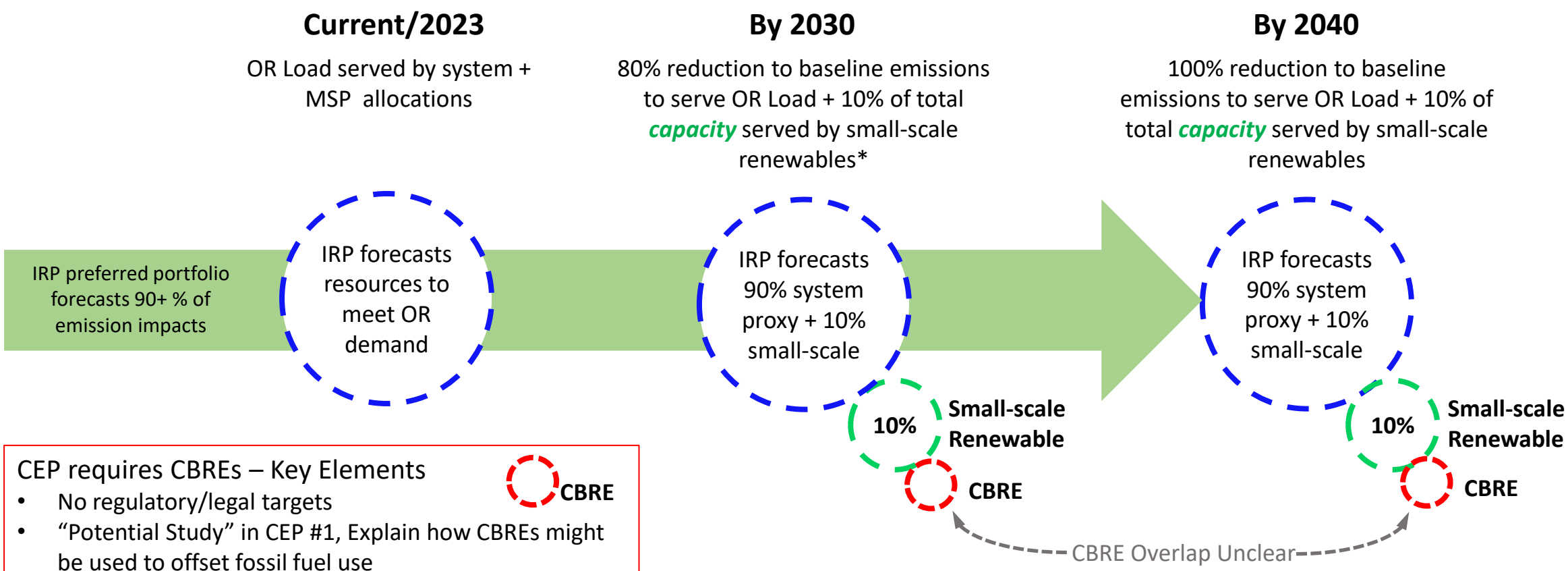
Off-setting Fossil Fuels with CBREs

For the first CEP

- The utility should incorporate the CBRE acquisition targets into IRP portfolio modeling…
- If system-wide benefits exist for a potential CBRE, the utility should quantify those benefits in a manner consistent with the IRP when evaluating the opportunity for inclusion in the first CEP.

Key Guidelines from UM 2225 for CBREs (Community Lens section of CEP proceedings - Order 22-390)

Community Based Renewable Energy in context of CEP



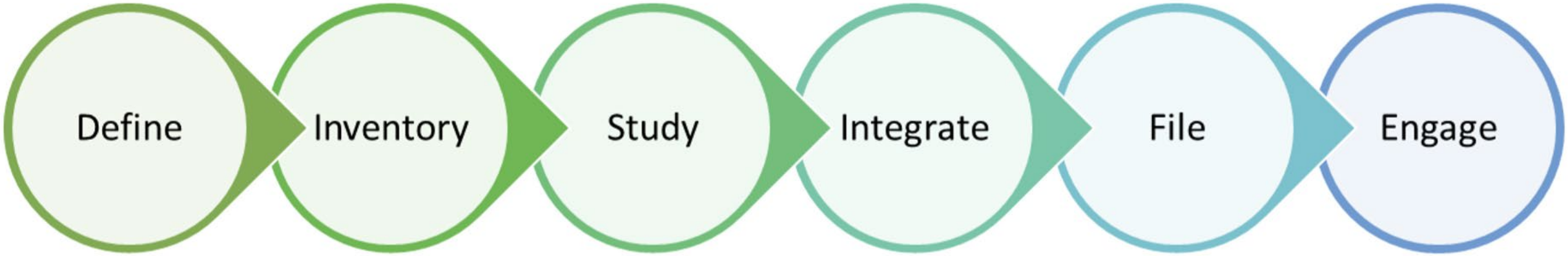
CEP requires CBREs – Key Elements

CBRE

- No regulatory/legal targets
- "Potential Study" in CEP #1, Explain how CBREs might be used to offset fossil fuel use
- Focus - Community participation, resilience, equity
- Open ended definitions – Utility to develop approach with input from communities/stakeholders

* Small-scale renewables must be RPS eligible

CBRE Development Plan



CBRE Requirements in CEP: *Outline requirements, interdependencies and sequence*

Inventory of current programs and projects and how they align with the CBRE requirements

CBRE "Potential Study" *Develop initial view of potential CBRE impact within PAC OR Service Area*

CBREs in the IRP Process: *Work with IRP modeling team to incorporate a "CBRE Portfolio" into the IRP model to meet the requirements in HB 2021 + UM 2225 to comply with requirements to "model offsetting fossil fuels with CBREs"*

Prepare CEP filing with interim CBRE Potential Study and Proposed Next Steps/Action Plan, including the plan for soliciting and incorporating feedback from communities and stakeholders

CBRE Content in CEP Engagement Series: Actively engage with CBIAG, Tribal and CEP Stakeholders throughout the CEP Engagement series to gather input on CBRE opportunities, approaches, potential measurements, etc. and update the Initial CBRE Action Plan as appropriate.

Inventory of Potential CBRE Projects

Type	Existing	Possible
Oregon Community Solar Program (OCSP) (53 total "pre-certified" projects, 4 are carveouts)	~ 0.5 MW Operational	65 MW Total (52 MW Pre-certified, 13 MW carveout available)
Community Resiliency Battery Storage Pilot (20 total projects)	2 projects approved	10 technical assessments
ODOE CREP Grant Applicants (17 total projects applied)	4 projects approved	15 additional applied
ETO-Identified Projects (11 existing hydro, 14 potential hydro , 2 potential biopower)	11 hydro QFs	4 in design; 10 conceptual
Additional Opportunities (TBD)		

CBRE “Potential Study” Discussion

DRAFT FOR DISCUSSION ONLY

Approach for CBRE “Potential Study” - Three primary tiers of projects to make up the initial potential:

1) **Community Solar** Potential includes existing and committed projects ~52MW and the potential for 13 MW of remaining “carve out”.

2) **Small Scale, Community-Based Solar + Storage projects**
   a. Based on experience from the PacifiCorp’s Community Battery Storage Pilot program, first and second round ODOE CREP grant funding requests and input from ETO.
   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.

3) **QF Projects** – Assume to follow current process from planning through implementation
   a. Forecast includes small list of potential Hydro & Biopower resources.

CBRE Next Steps

- Continue to refine the Initial CBRE “Potential Study”
- Work with IRP Modeling team to include CBRE Portfolio in IRP model to highlight potential costs/benefits and “(d) Examine the costs and opportunities of offsetting energy generated from fossil fuels with community-based renewable energy.”
- Prepare initial CBRE Action Plan items including key discussion topics for soliciting community and stakeholder input after filing of the Initial CEP in March.
- Prepare and file the Initial CEP on March 31, 2023.
- Actively engage with CBIAG and CEP Stakeholders throughout the CEP Engagement series to gather input on CBRE opportunities, approaches, potential measurements, etc. and update the Initial CBRE Action Plan as appropriate.

Questions & Comments

Is there anything else we should consider?

Public Comment

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External Engagement 2023

	Retro + Future Cadence		
CBIAG Group	Jan 19	Monthly	Third Thursday
Clean Energy Plan Engagement Series	Feb 24	Every other month	Fourth Friday
CEP Engagement for OR Tribal Nations	Mar 17	Every other month	Third Friday
Distribution System Planning Workshops	Feb 17	Qtr. 3	
Integrated Resource Planning Public Input Session	Feb 23	Post March 31 Filing (TBD)	

Next Clean Energy Plan Engagement Series Meeting is
April 28

Within two weeks, public notes will be available at: https://www.pacificorp.com/energy/oregon-clean-energy-plan.html

APPENDIX

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Clean Energy Plan Engagement Series

Purpose of the Series:

- Discuss the Clean Energy Plan and Integrated Resource Plan alignment
- Demystify intersectionality of the elements in these plans
- Compliments existing stakeholder engagement spaces

Vision for the Series:

- Five engagements in 2023
- Online and Recorded for flexibility and Accessibility
- Feedback will be tracked and shared online

Clean Energy Plan Engagement Series Topics:

- Integrated Resource Plan (IRP)
- Community Based Renewable Energy (CBRE)
- Community Benefit Indicators (CBI)
- Resiliency
- Distribution System Planning (DSP)
- Community Benefits + Impacts Advisory Group (CBIAG)

Oregon Background

Section 6 of HB 2021 calls for the development of a biennial report that, in consultation with the CBIAG, must include the assessment and description of the following:

- Energy burden for residential customers
- Disconnections for residential customers
- Opportunities for contracting with businesses owned by women, veterans, or Black, Indigenous or People of Color
- Actions within environmental justice communities intended to improve resiliency
- Grid investments in environmental justice communities that facilitate compliance with clean energy targets
- Social, economic or environment justice co-benefits
- Review of annual customer satisfaction surveys
- Actions to encourage customer engagement
- Other items as determined by the utility and the CBIAG

CBIAG will weigh in on these items:

- In Order 22-390, the Public Utility Commission of Oregon recommends utilities adopt one CBI for each of the following topic areas;
  - Resiliency
  - Health and community well-being
  - Environmental impacts
  - Energy Equity
  - Economic impacts
- Order 22-390 also recommends utilities include one metric for each of the following categories;
  - Informational CBIs
  - Community Based Renewable Energy (CBRE) focused CBIs
  - Portfolio CBIs
- CBIs for each of the five topic areas (i.e., resiliency, health and community well-being, environmental impacts, energy equity and economic impacts) will be characterized as one of the three CBI categories (informational, CBRE focused or portfolio)

Small Scale Renewable and CBRE Definition

SMALL SCALE RENEWABLES

Goal:

By 2029, obtain 10 percent of the aggregate electrical capacity of all electric companies that make sales of electricity to 25,000 or more retail electricity consumers in this state must be composed of electricity generated by one or both of the following sources:

Small-scale renewable energy projects with a generating capacity of 20 megawatts or less

Facilities that generate electricity using biomass that also generate thermal energy for a secondary purpose

Original goal - 8% by 2025

HB 2021 expanded the target to:

10% by December 31, 2029.

House Bill 2021 - Enrolled

COMMUNITY BASED RENEWABLE ENERGY

Goal:

May contribute to the Small Scale Renewable goal of by 2029, obtain 10 percent of the aggregate electrical capacity, if meets the small scare renewable eligibility requirements

Convene a workgroup to encourage development of small scale and community based renewable energy projects to contribute toward economic development and resiliency and submit a report by September 30, 2022 (see Reporting section below).

Community Based Renewable Energy (CBRE) is defined as:

One or more renewable energy systems that interconnect to utility distribution or transmission assets and may be combined with microgrids, storage systems or demand response measures, or energy-related infrastructure that promotes climate resiliency or other such measures, and that:

(a) Provide a direct benefit to a particular community through a community-benefits agreement or direct ownership by a local government, nonprofit community organization or federally recognized Tribe; or

(b) Result in increased resiliency or community stability, local jobs, economic development or direct energy cost savings to families and small businesses."

Community-benefits agreements are contracts between a community group(s) and a renewable energy project developer that require the developer to provide specific benefits to the local community. In exchange, the community group must agree to support the project.