

# HB 2021 Implementation

## Update to Senate Energy & Environment Committee

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# PGE at a glance

## Quick facts

- Vertically integrated electric utility encompassing generation, transmission and distribution
- Approximately 900,000 retail customers within a service area of 2 million residents
- Roughly half of Oregon's population lives within PGE service area, encompassing 51 incorporated cities entirely within the State of Oregon
- 75 percent of Oregon's commercial and industrial activity occurs in PGE service area

## 2021 Resource Mix

- |               |     |
|---------------|-----|
| • Coal        | 7%  |
| • Natural Gas | 40% |
| • Hydro       | 20% |
| • Wind        | 13% |
| • Solar       | 2%  |
| • Unspecified | 18% |

**In 2021: 35% of specified power served to customers came from non-emitting energy resources.**

## 3,300+ MWs of Generation



# HB 2021 puts PGE on path to 100% emissions free electricity



**Emissions targets**



**Clean energy resource planning**

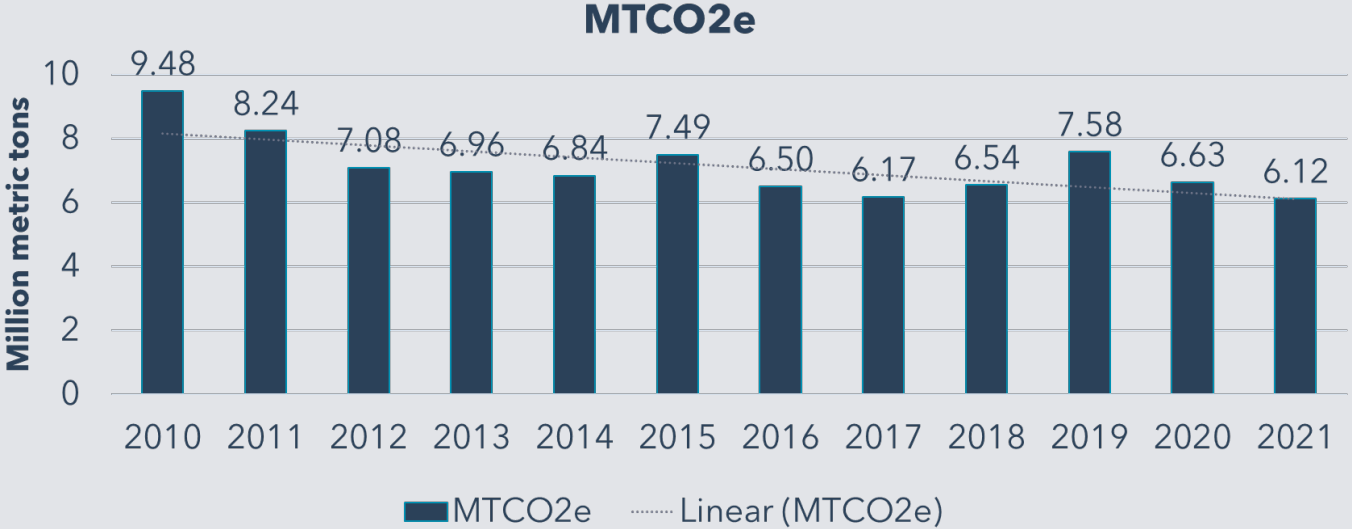


**Outreach & engagement**



**Community benefits & impacts advisory group (CBIAG)**

# PGE's annually reported emissions to DEQ\*



# Emissions targets

## HB 2021 requirements:

Baseline:

- 8.1 MMTCO2e per DEQ

2030 Target:

- 80% reduction to 1.62 MMTCO2e

2035 Target:

- 90% reduction to .81 MMTCO2e

2040 Target:

- 100% reduction to 0 MMTCO2e

\*Anthropogenic emissions from power generated and purchased to serve Oregon retail customers.

# 2030 clean energy planning

8.1  
MMTCO<sub>2</sub>e  
(2010-2012  
baseline)

## Already pursuing:

- ✓ Boardman Closure (-518 MW)
- ✓ 2021 RFP (+375-500 MW)
- ✓ Green Future Impact (+500 MW)
- ✓ Douglas PPA (+160 MW)
- ✓ Hydro Renewals (+224 MW)
- ✓ Energy Efficiency (+220 MW)

6.1  
MMTCO<sub>2</sub>e  
(2021 actuals)

## Enabling Strategies

- Transmission solutions
- Regional markets
- Partnerships
- Innovation & technology

## What we're anticipating:

- >3000 MW non-emitting resources
- >800 MW non-emitting capacity

- Utility scale wind & solar
- Energy storage
- Distributed generation & storage
- Community based renewables
- Energy efficiency
- Demand response
- Virtual power plant
- Colstrip ownership exit
- Contract renewals

1.62  
MMTCO<sub>2</sub>e

Baseline  
Emissions

Reduction of 80% by 2030

# Clean energy resource planning: CEP & IRP

HB 2021 requires a Clean Energy Plan (CEP) which builds off, expands on, and modifies the robust resource planning PGE is required to do for its Integrated Resource Plan (IRP).



PGE's CEP & IRP must **balance affordability, reliability and decarbonization**

# Community benefits & community based renewable energy (CBRE)

We anticipate CBREs to be smaller scale (~ <20 MW) resources, typically front-of-the-meter and distribution-connected, that can provide community benefits, including resiliency and bill savings.

## Community Lens Potential

- Analyzed potential for:
  - Standalone community-scale solar
  - Solar + storage microgrids
  - Small in-conduit hydropower
- Exploring community benefit indicators with community.

## Target Setting

- Identified CBRE potential of 155MW by 2030
- Intention to include a CBRE target in IRP Action Plan.

## Acquisition

- Exploring potential procurement paths with community:
- CBRE RFP
  - Federal and state incentives
  - Other potential future programs

# CEP & IRP engagement update

Our strategy for community engagement across PGE's long term planning process is informed by three goals:



Cultivate & maintain trusted and transparent relationships with historic IRP stakeholders and community-based organizations, community serving organizations, environmental justice, advocates and others.

- Monthly technical IRP workshops
- Started non-technical venue "Learning Labs" - conducted six 2hr/workshops
- Explored collaboration and partnerships with new organizations



Build awareness, inform and provide inclusive learning opportunities to communities

- Accessibility (e.g. closed caption, Zoom, Mural, material translation to Spanish)
- Established a dedicated IRP and CEP website and mailbox
- Published the archived meeting materials and information on website
- Taking Learning Lab materials to communities that were not able to attend



Collect feedback & evaluate progress

- Mural exercises
- Surveys
- Online feedback form
- Informal interviews

Stakeholder Meetings	# Meetings		
	To date	To filing	Total
IRP Roundtable	27	2	29
CEP Learning Lab	6	2	8



# Community Benefits and Impacts Advisory Group update

*Section 6 of HB 2021 requires the creation of a Community Benefits and Impacts Advisory Group (CBIAG) and sets forth expectations for scope and participation*

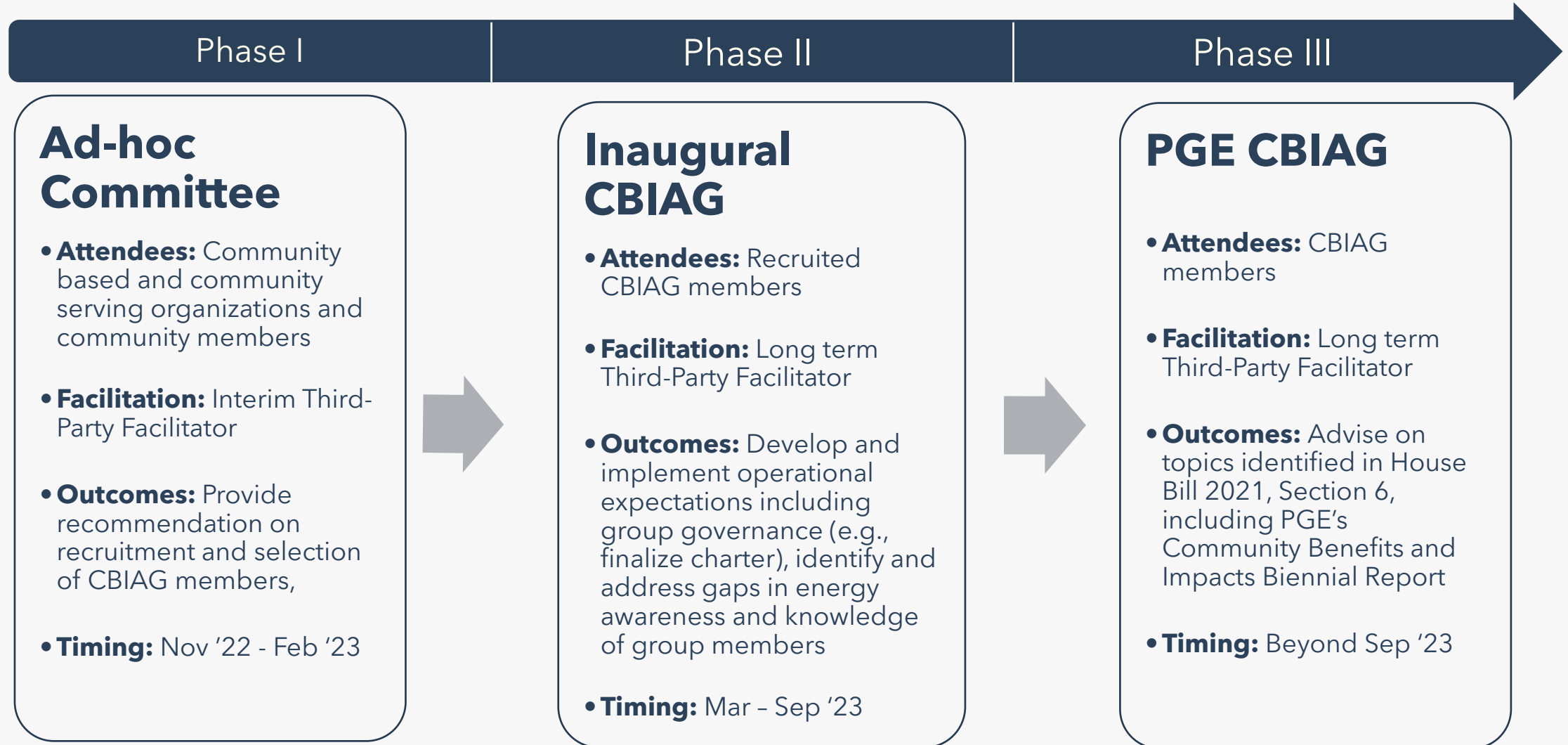
## PGE **must** engage CBIAG on

- Energy burden and disconnection
- Increase contracting
- Improve resilience
- Distribution infrastructure
- Community co-benefits
- Customer experience
- Customer engagement

## PGE **may** engage CBIAG on

- Clean Energy Plan
- Distributed System Planning
- Contracting practices
- Best practices

# PGE CBIAG engagement approach



# Conclusion

- UM2225 has generated **thorough guidelines** for PGE's inaugural combined CEP and IRP filing.
  - PGE is engaged in **robust planning**, analysis, stakeholder and community engagement to meet future energy & capacity needs while **balancing affordability and the reliability of the grid**.
  - To meet our emissions reduction targets, we will need to **add resources at an unprecedented pace and scale**. We will likely be in a ***near-continuous procurement cycle*** going forward.
  - We anticipate that **significant transmission constraints** will drive a **greater role for customer-sited resources** such as demand response, energy efficiency, and distributed solar/storage in this IRP/CEP compared to year's past. It also underscores the ***need for both on- and off-system transmission solutions***.
  - 2030 emissions reduction targets can be met by technologies and resources that are **currently known and commercially available**.
  - Pathways to 2040 will require **further development of non-emitting resources** to meet the region's energy and capacity needs.
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