



OREGON
DEPARTMENT OF
ENERGY

Oregon Energy Strategy

Project Launch Webinar

November 13, 2023



OREGON DEPARTMENT OF ENERGY

Leading Oregon to a safe, equitable, clean, and sustainable energy future.

Our Mission

The Oregon Department of Energy helps Oregonians make informed decisions and maintain a resilient and affordable energy system. We advance solutions to shape an equitable clean energy transition, protect the environment and public health, and responsibly balance energy needs and impacts for current and future generations.

What We Do

On behalf of Oregonians across the state, the Oregon Department of Energy achieves its mission by providing:

- A Central Repository of Energy Data, Information, and Analysis
- A Venue for Problem-Solving Oregon's Energy Challenges
- Energy Education and Technical Assistance
- Regulation and Oversight
- Energy Programs and Activities

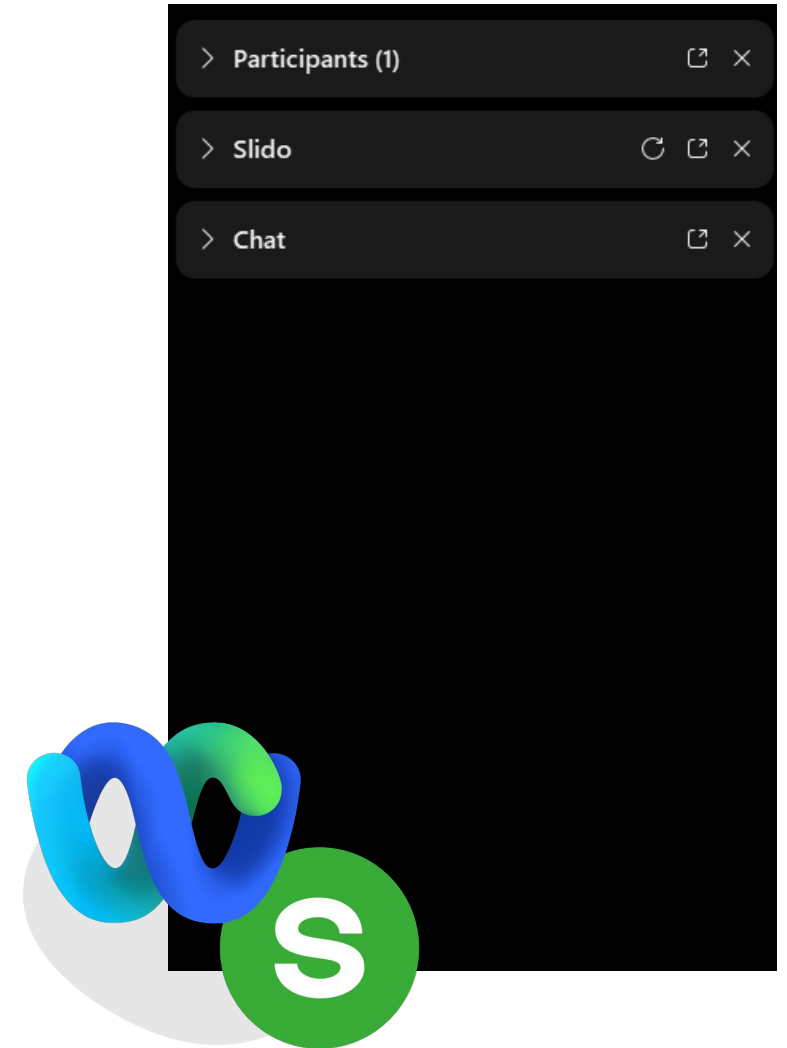
SLIDO POLLING

We will be using Slido to do live polling throughout the webinar.

Slido questions can be found on the right side of the screen, near the chat feature.

If the question is not appearing, refresh the Slido app.

Click "submit" to send your answers. (You may need to scroll down to see the button.)



AGENDA

10:30	Welcome	Janine Benner , Director, Oregon Department of Energy
10:40	Introduction to the Energy Strategy	Edith Bayer , Oregon Department of Energy
10:50	Agency Roles in Oregon's Climate and Energy Landscape	Amy Schlusser , Oregon Department of Energy Caroline Moore , Oregon Public Utility Commission Colin McConnaha , Oregon Department of Environmental Quality Alexis Hammer , Oregon Department of Land Conservation and Development Amanda Pietz , Oregon Department of Transportation Michael Held , Business Oregon
11:30	Stakeholder Engagement	Ruchi Sadhir , Oregon Department of Energy
11:40	Q&A	Jessica Reichers , Oregon Department of Energy
11:55	Next Steps	Edith Bayer , Oregon Department of Energy

Introduction to the Energy Strategy



Why an Energy Strategy?

2022 Biennial Energy Report

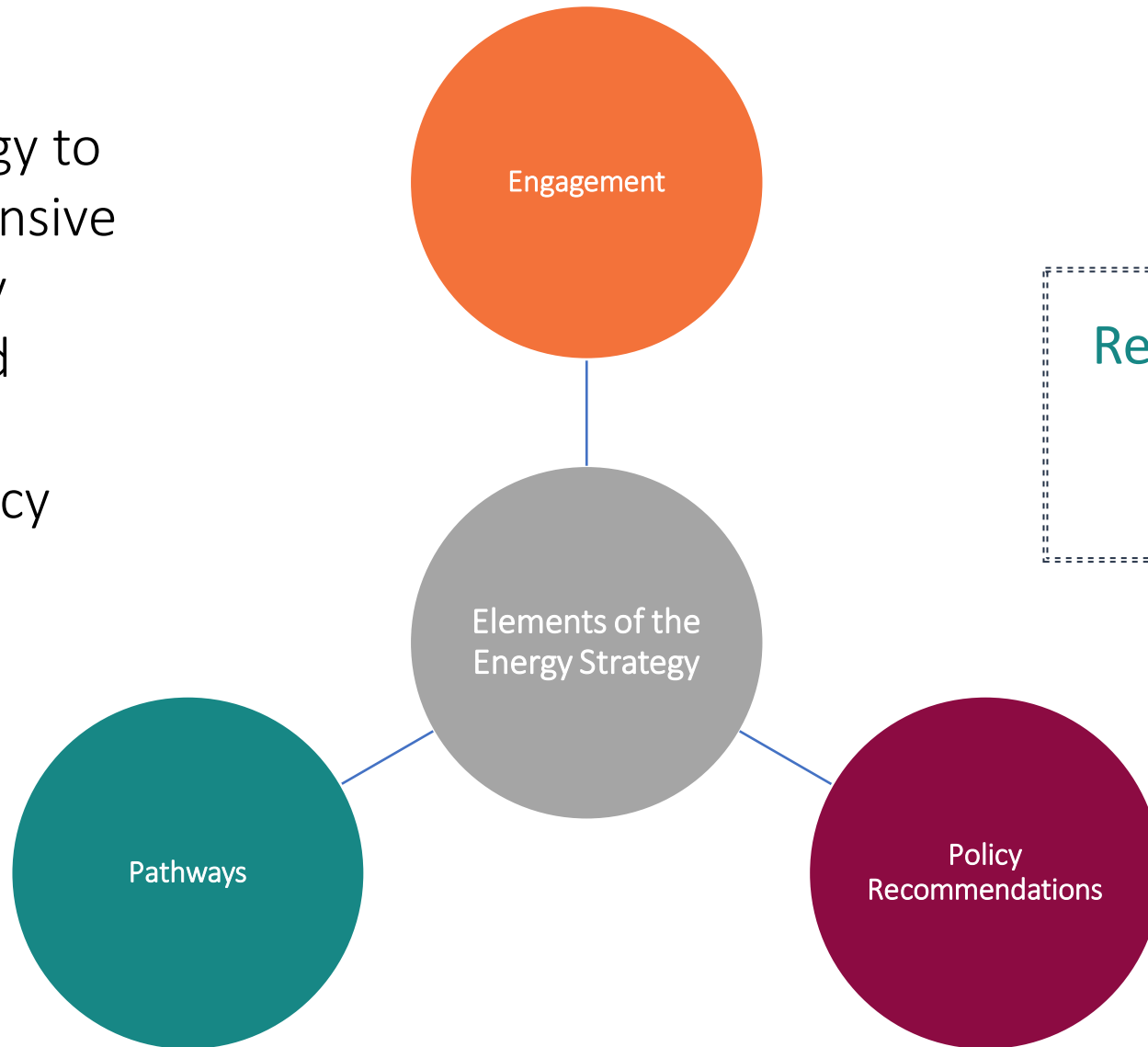
- Reviewed 20 technical studies from around the country
- Concluded that the state would benefit from a state Energy Strategy

An Energy Strategy can help

- Align policy development, regulation, investment, and technical assistance
- Identify pathways to meet the state's policy goals
- Maintain affordability, reliability
- Strengthen the economy
- Prioritize equity
- Maximize benefits and minimize harms

HB 3630, STATE ENERGY STRATEGY

Directs the Oregon Department of Energy to develop a comprehensive state energy strategy identifying optimized pathways to achieve Oregon's energy policy objectives.



Report to the Governor and Legislature by November 1, 2025

THE ENERGY STRATEGY IN A NUTSHELL

Must be informed by:

- Stakeholder perspectives
- State laws, policies, targets re: energy and GHG emissions
- Existing energy and IRPs
- Energy-related studies and data analysis
- State energy policy objectives

Take into account (at a minimum):

- State Energy demand and trends
- Energy resources and tech choices considering costs, EE, feasibility & availability
- Existing & potential incentives to support EE
- Energy generation, transmission, distribution infrastructure
- Emerging tech & investment opportunities
- Environmental justice
- Community benefits
- Land use considerations
- Energy burden & affordability
- Econ and employment impacts
- Energy security and impacts of broader markets
- Energy resilience
- Community Energy resilience

Engagement:

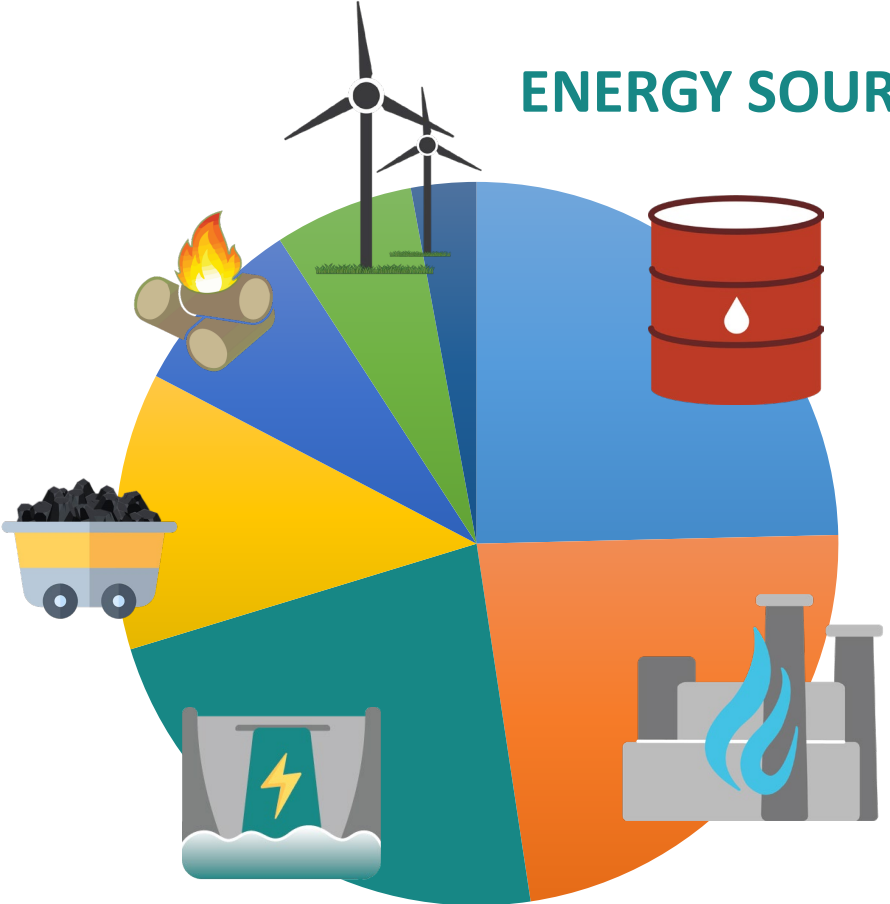
- State agencies, Tribes, stakeholders w/ diverse range of:
- Interests, perspectives, expertise, education
- Socioeconomic backgrounds
- Communities
- Geographic areas of the state

Reflects the best available info, data analyses and time horizons necessary to achieving the state's energy policy objectives

Periodically update the E Strategy to reflect current information, data analysis and state energy policy objectives

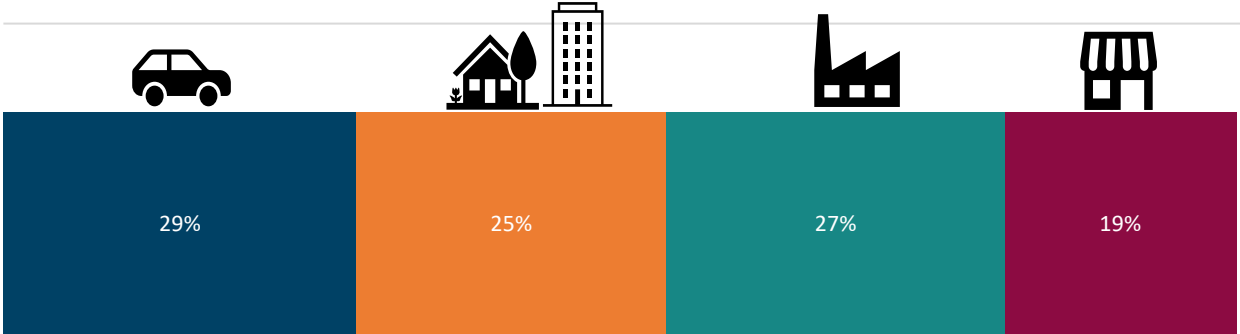
OREGON'S ENERGY LANDSCAPE

ENERGY SOURCES

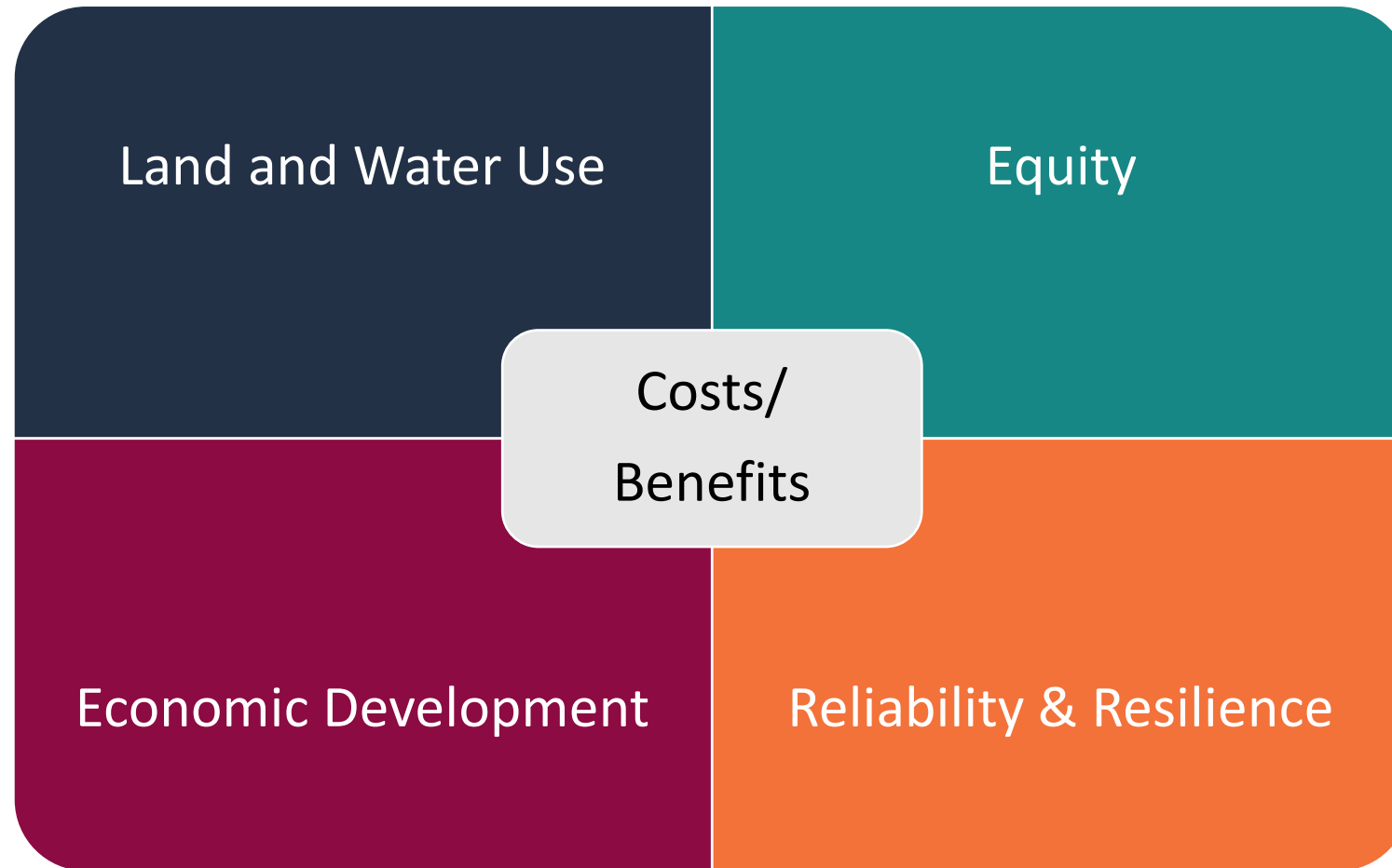


■ Petroleum ■ Natural Gas ■ Hydro ■ Coal ■ Biomass ■ Wind ■ Other

ENERGY USE



BALANCING TRADEOFFS

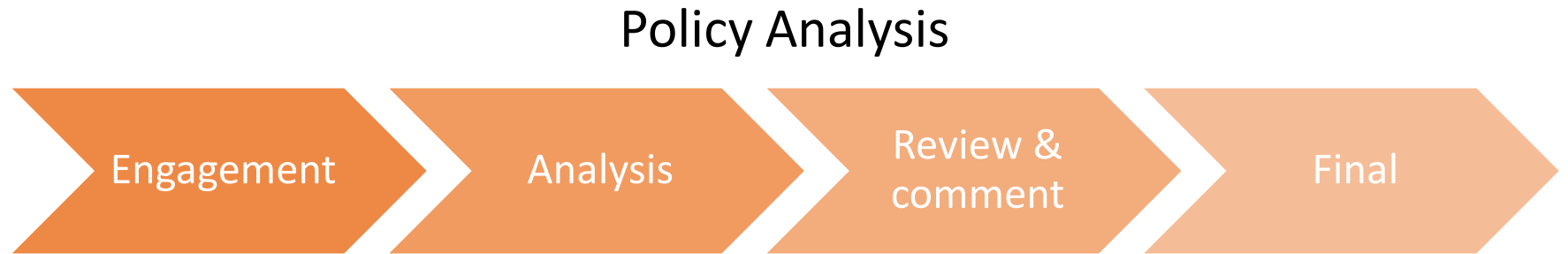


PROCESS

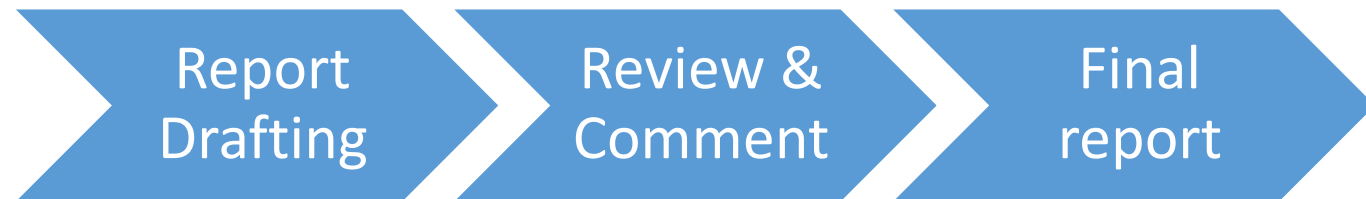
2024



2025



Report drafting & publication



Identifying Key Questions

For example...

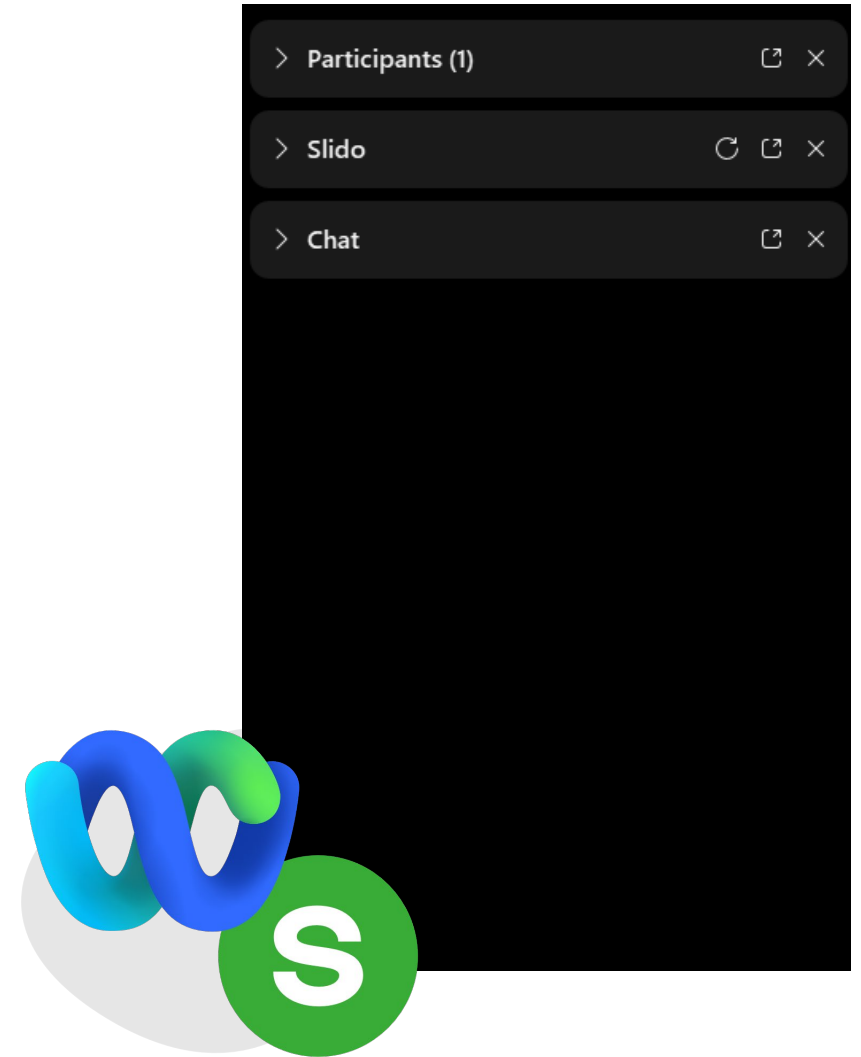
- What are the no- or low- regrets options to reaching our goals?
- How can the Strategy help address knowledge gaps to help us better weigh the benefits and tradeoffs of different pathways to achieve our climate and energy targets?
- What more is needed to help meet our existing statutory goals (policies, programs, engagement)?



SLIDO POLLING

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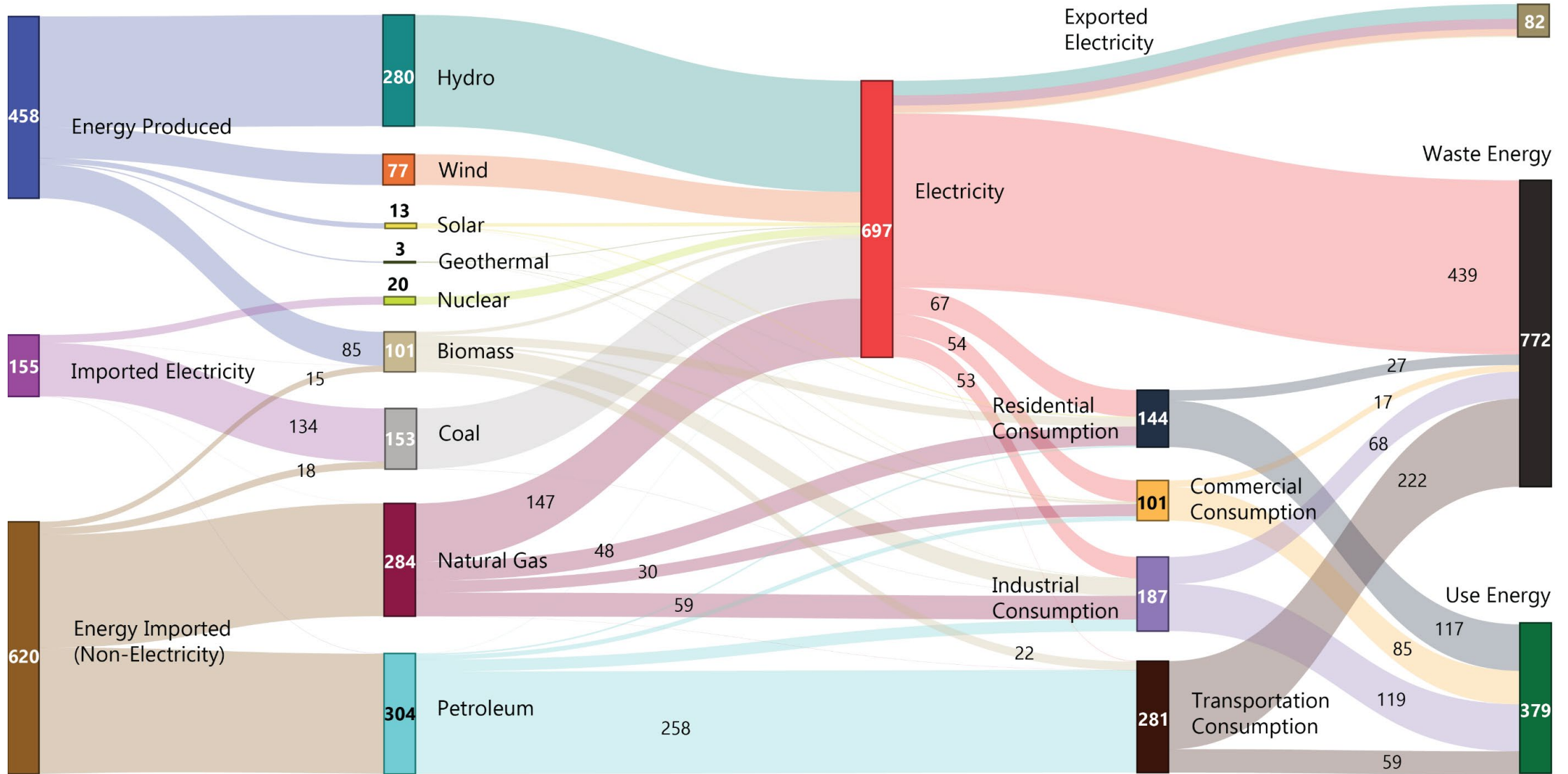
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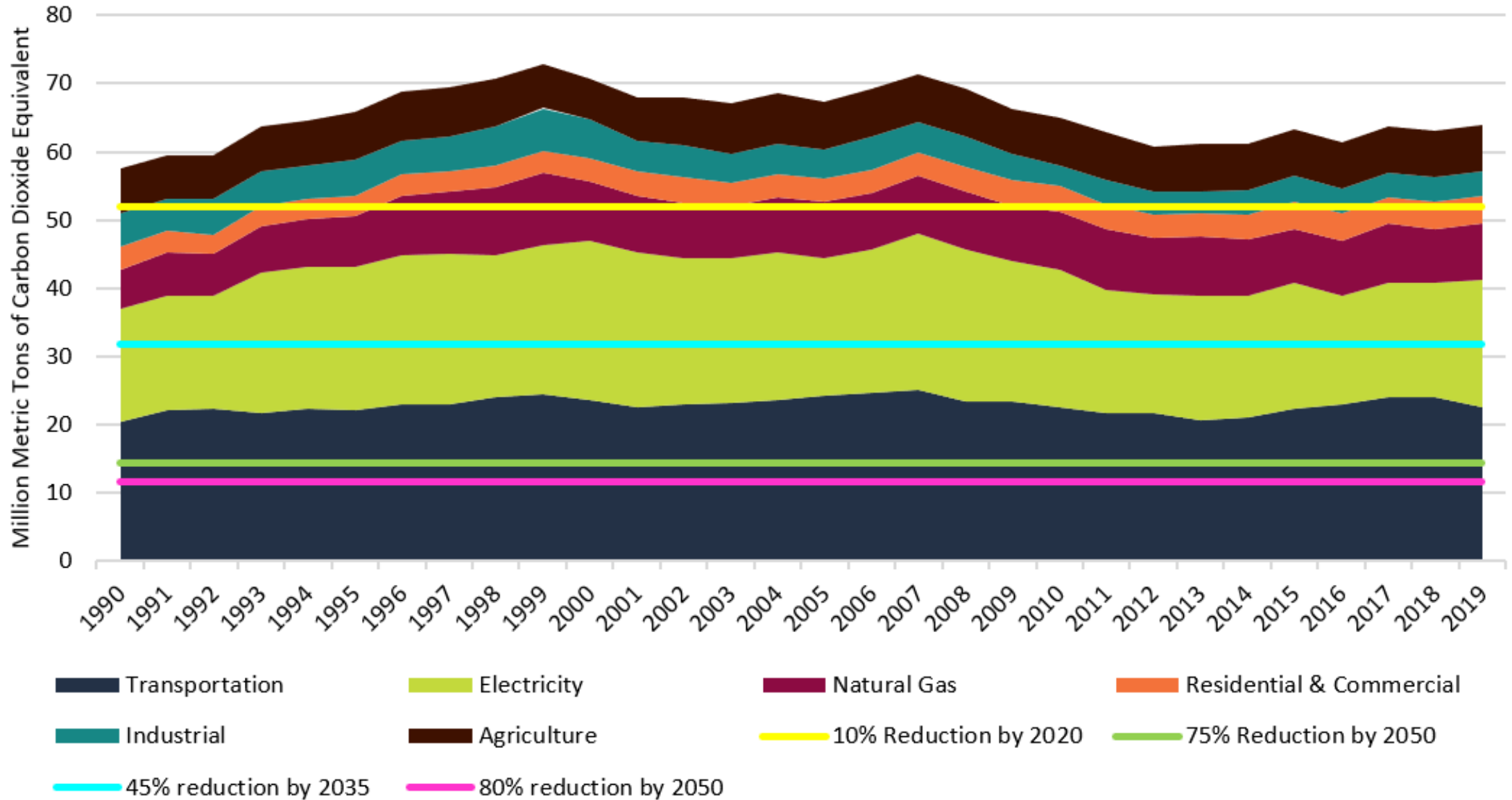
Agency Roles in Oregon's Climate and Energy Landscape

Oregon's Energy Flow 2020

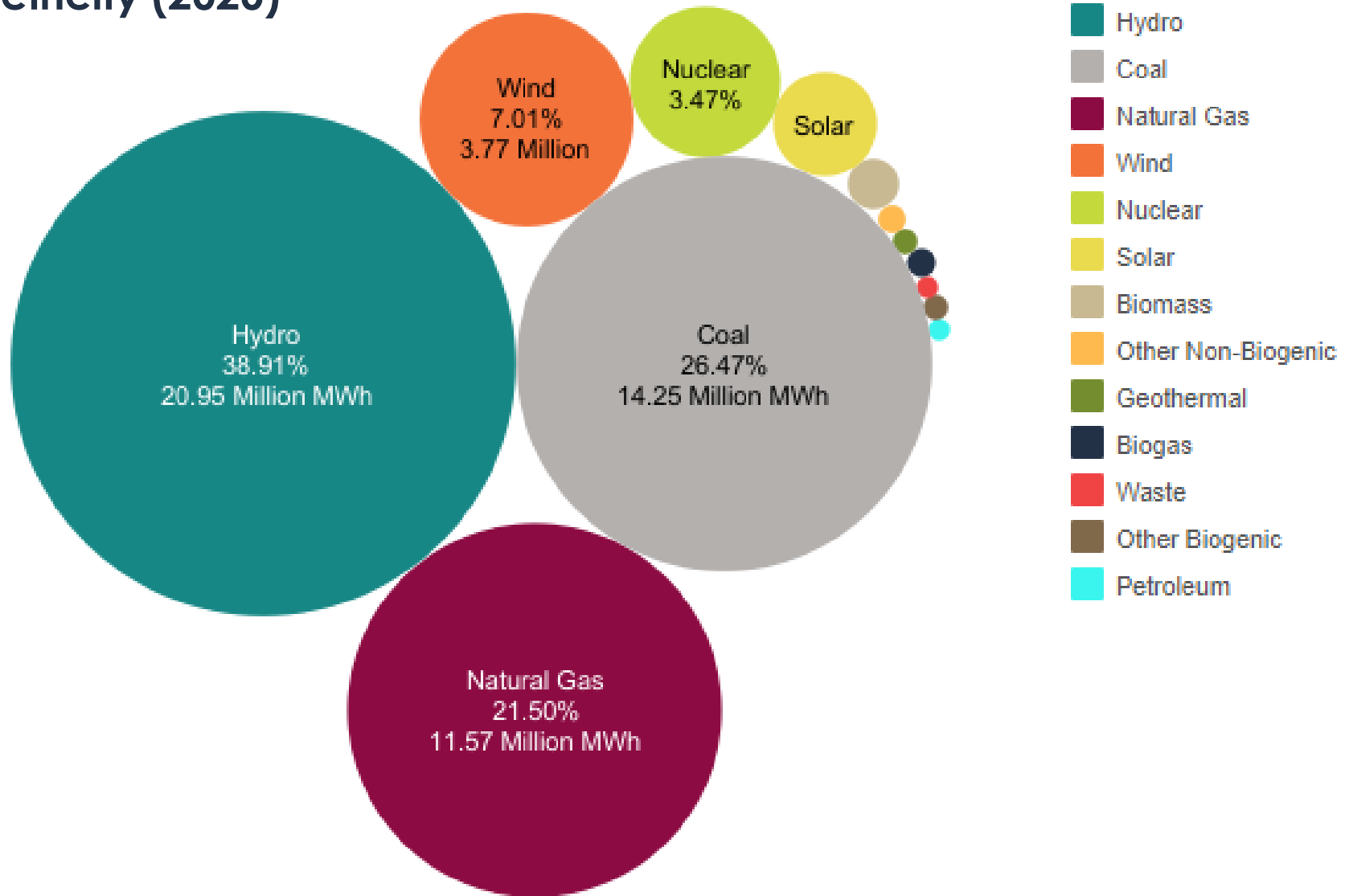


Numbers are in trillions of British thermal units (Btus)

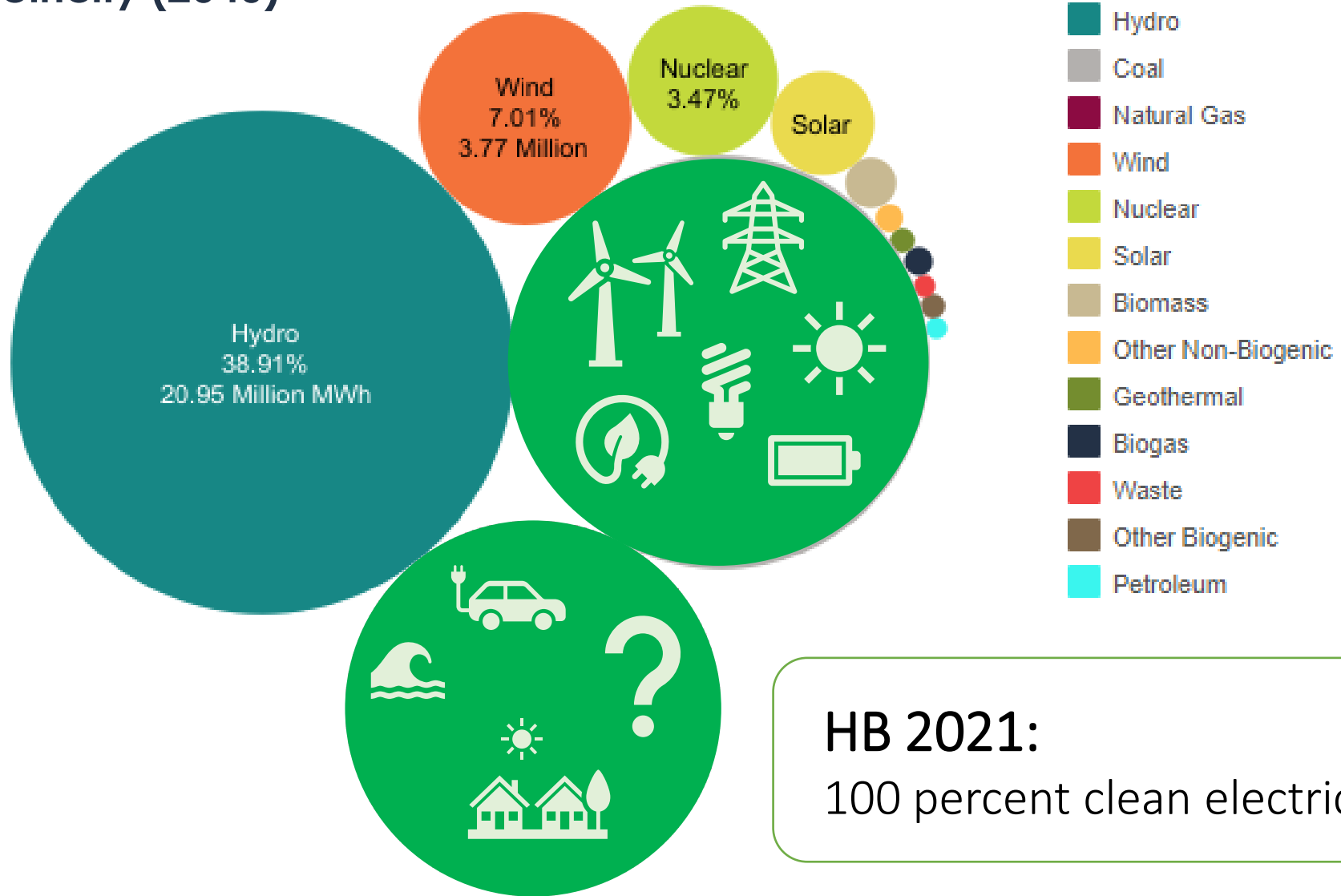
Oregon Greenhouse Gas Emissions Over Time



Resources Used to Generate Oregon's Electricity (2020)



Resources Used to Generate Oregon's Electricity (2040)

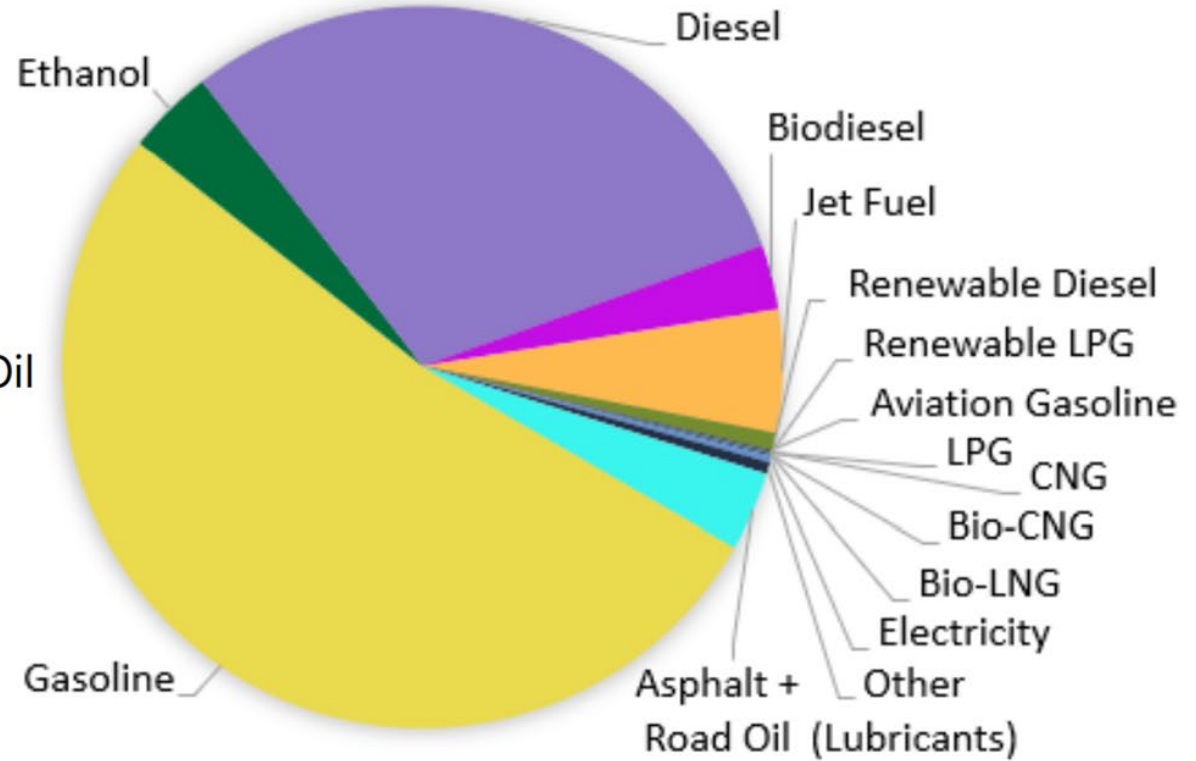


Transportation Fuels

28.6%

of Oregon's
2020
energy
consumption

52.3%	Gasoline
30.0%	Diesel
5.5%	Jet Fuel
3.9%	Ethanol
3.5%	Asphalt/Road Oil
2.9%	Biodiesel
0.5%	Lubricants
0.1%	Aviation Gas
0.3%	Electricity



The Climate Protection Program:

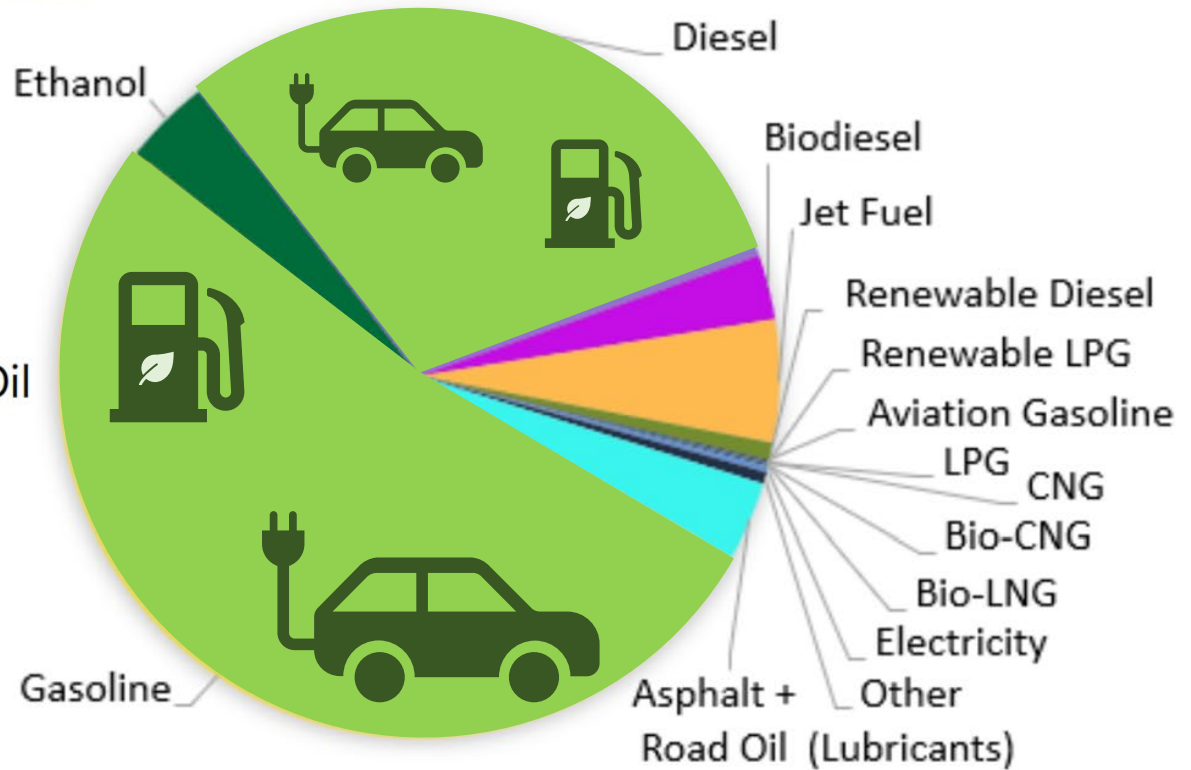
90 percent reduction in fossil fuel emissions by 2050

Transportation Fuels

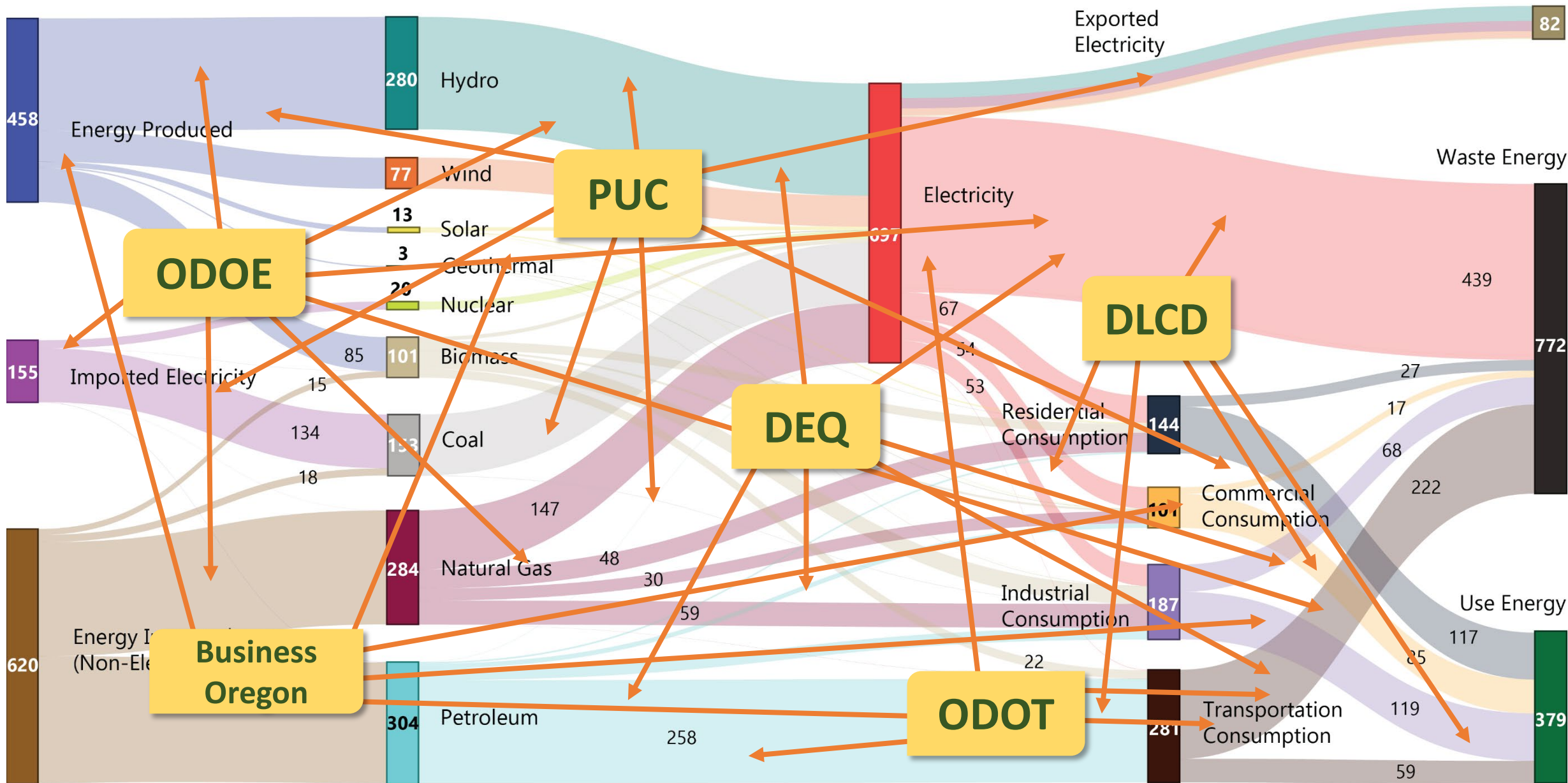
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Oregon's Energy Flow & Regulatory Overlay



2020 data. Numbers are in trillions of British thermal units (Btus)

OREGON PUBLIC UTILITY COMMISSION

Clean Energy Policy Evolution (*OPUC Lens*)

SB 838 (2007)

Renewable Portfolio Standards (RPS)

SB 324 (2015)

Clean Fuels Program Updates

SB 98 (2019)

Renewable Natural Gas

2021 Legislative Session

HB 2021 – Clean Energy Targets - Electric

HB 2475 – Energy Equity

HB 3141 – Energy Efficiency

HB 2165/HB 3055 – Transportation Electrification

SB 762 – Wildfire Protection Plans

Technology Focused

SB 1547 (2016)

Increased RPS

Coal out of rates

Community Solar

Transportation Electrification

Small-scale Community-based Renewables

Demand-side resource preference

Executive Order 20-04 (2020)

Rapid reductions of GHG emissions, at reasonable costs

Impacted Communities

Wildfire Prevention and Mitigation

Holistic + Just

Climate Protection Program (2021)

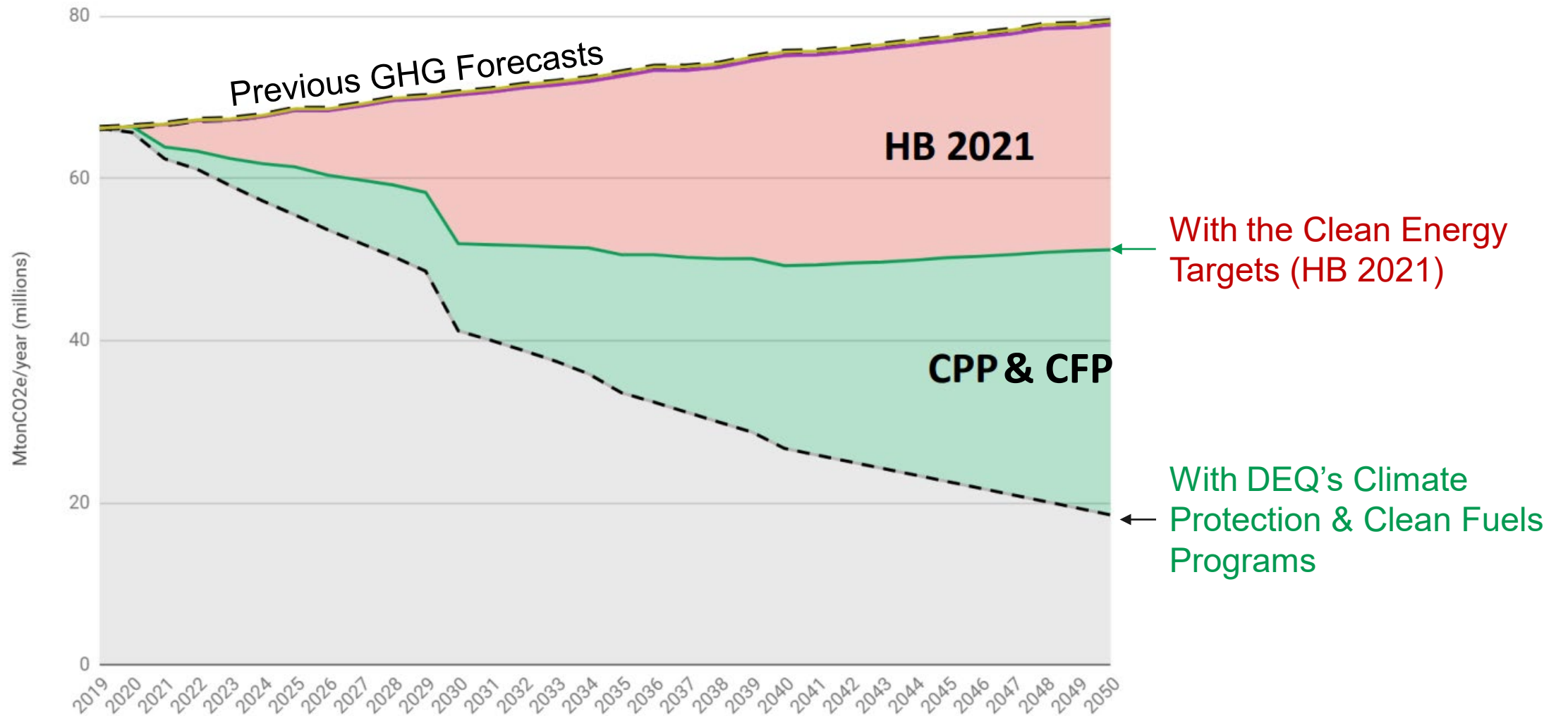
90% reduction in greenhouse gas emissions from “covered entities” in Oregon by 2050 (Natural Gas)

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY

DEQ's role in helping meet Oregon's climate and energy goals:

- Regulatory & non-regulatory programs at statewide scale
- Regulatory programs include:
 - Climate Protection Program
 - Clean Fuels Program
 - Clean Energy Targets (HB 2021) (GHG accounting portions)
 - Zero-emission vehicle mandates on light, medium and heavy duty classes
- Non-regulatory programs include:
 - EV Rebates
 - A variety of “Materials Management” programs

FORECAST OF OREGON GHG EMISSIONS



Source: Oregon Global Warming Commission

OREGON DEPARTMENT OF LAND CONSERVATION AND DEVELOPMENT

DLCD regulates land use statewide to conserve natural resources and foster economic development:

- Existing energy siting rules
- Currently undertaking rulemaking to streamline solar siting process in Eastern Oregon
- Oregon Coastal Management Program and federal consistency – Offshore wind
- Climate Friendly and Equitable Communities – reducing vehicle miles traveled through land use planning and building for EV infrastructure

OREGON DEPARTMENT OF TRANSPORTATION

ODOT's vision is to support all Oregonians by connecting people and goods to places in the most climate-friendly, equitable, and safe way. We are integrating climate into planning, investment decisions, funding, construction, and maintenance.

Reduce Passenger Vehicles Miles Traveled by 20% by 2050

- Transition to low and no emission modes: biking, walking, and public transportation
 - Make investment decisions that are accountable to climate impacts (reduce emissions and increase resiliency)
 - Secure additional funding (e.g. administer ~ \$330M/yr for multimodal programs and projects – a 5x increase over last 10 years)
 - Utilize Transportation Demand Management strategies (e.g. employer programs, parking management, etc.)
 - Restructure roadway pricing (e.g. vehicle miles traveled fee)
 - Support conducive land uses that enable trips to be made biking, walking and taking transit
- Need to identify opportunities to maximize the exiting use of the transportation system and energy efficiency per person

Transition to Cleaner Vehicles and Fuels by Reducing CO₂e Per Mile by 77% by 2050

- Add charging infrastructure for transportation electrification
- Enable hydrogen refueling for medium- and heavy-duty
- Need to understand the electrical grid capacity for transportation electrification in the context of overall demand, identify grid load management opportunities, and how to optimize other alternative fuels



BUSINESS OREGON

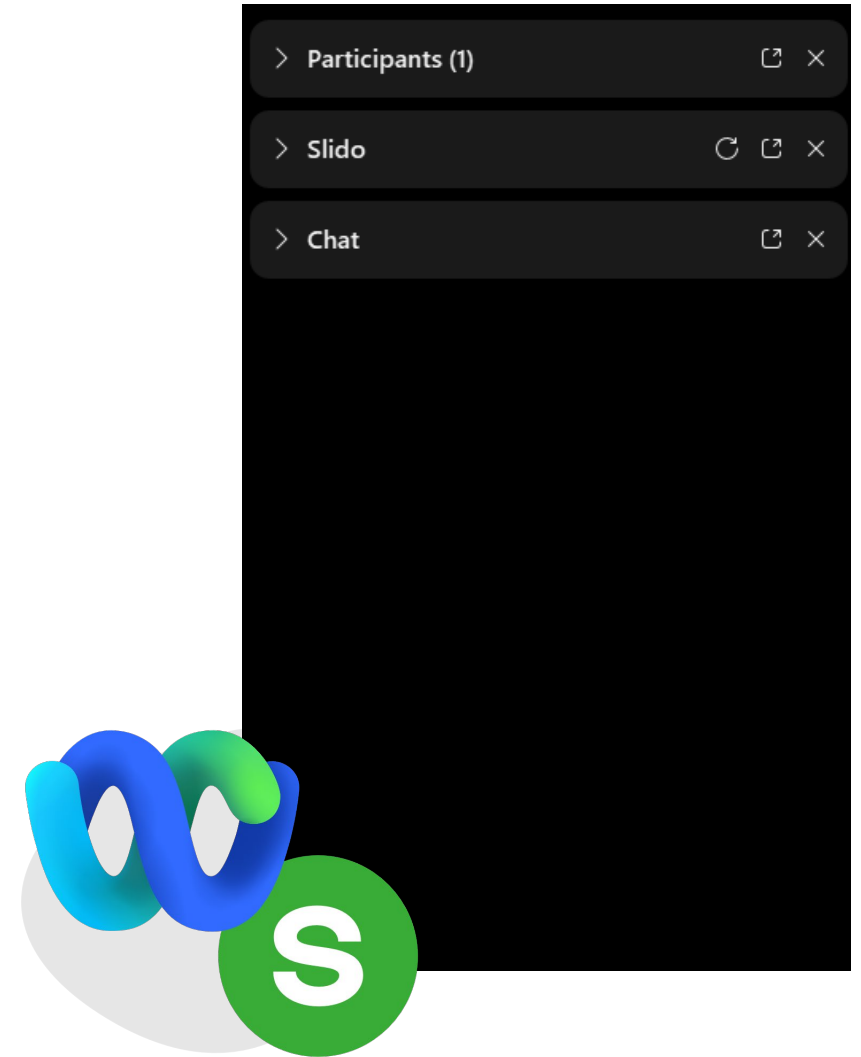
Role in helping meet Oregon's climate and energy goals

- Provide boots-on-the-ground connections to Oregon industry; leverage deep relationships
- Partner with and support partner initiatives; promote public/private partnership
- Provide direct and indirect support through technical assistance, capital, and incentives to help companies adopt and scale carbon reducing technologies, benefitting bottom-lines and the environment
- Support the Cleantech startup and business development ecosystem
- Support and incentivize smart infrastructure through existing programs, particularly for rural, disadvantaged, and under resourced communities (water, wastewater, brownfield redevelopment, broadband, etc.)
- Maintain and grow existing economic development assets to mature Oregon's economic competitiveness – e.g., locally administered property tax abatement programs
- Identify industry sector and supply chain gaps: help startups, grow and scale existing Oregon businesses, and recruit targeted companies

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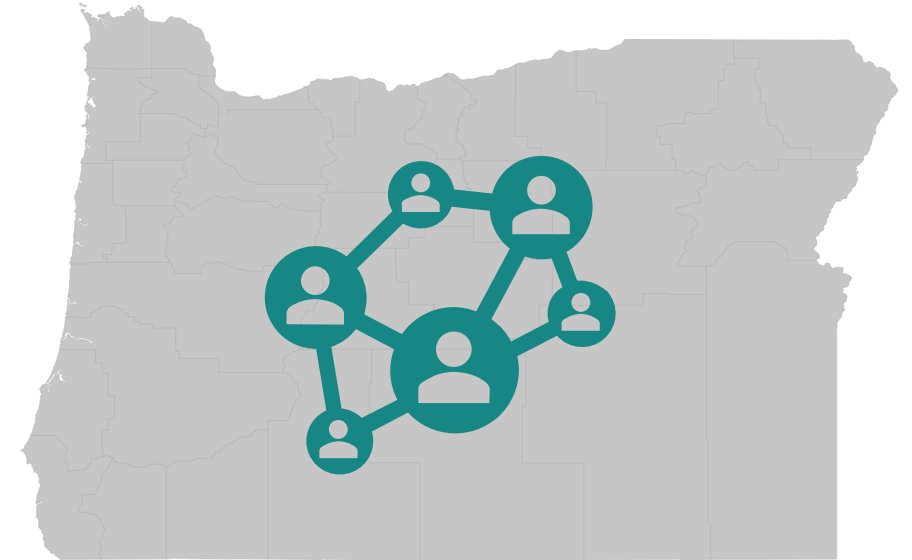
Outreach & Engagement

A scenic landscape at sunset or sunrise. The sky is filled with soft, orange and yellow light, with a prominent mountain peak in the background. In the middle ground, there is a green field and a chain-link fence. In the foreground, there are rows of solar panels. The text "Outreach & Engagement" is overlaid in white, bold font.

Outreach and Engagement

HB 3630 requires ODOE to engage with relevant state agencies, federally recognized Indian tribes, and stakeholders in developing the Strategy. At a minimum, the stakeholders must represent a diverse range of:

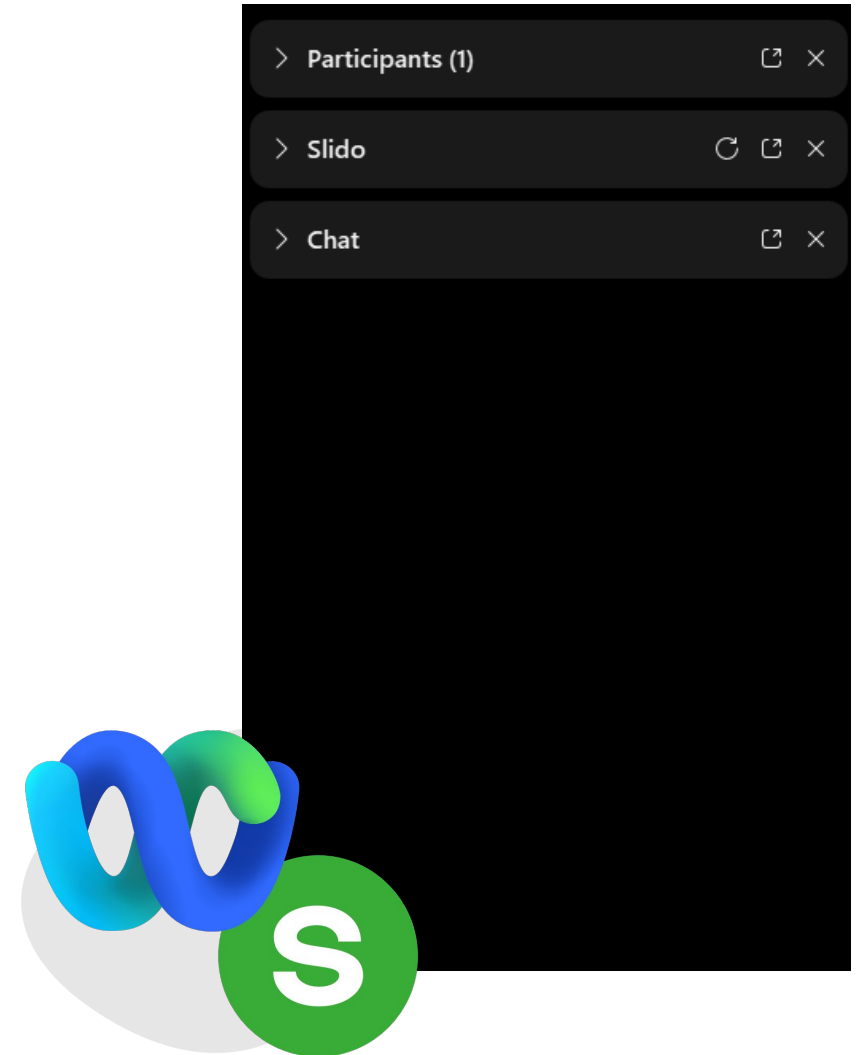
- (a) interests, perspectives, expertise, and education;
- (b) socioeconomic backgrounds;
- (c) communities; and
- (d) geographic areas of the state.



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Advisory Groups

- Interagency Steering Group
- Advisory Group
- Technical Working Group

Tribal G2G

- Early formal government-to-government notification and coordination
- Invitations for 1:1 tribal input and discussion in addition to general participation

Feedback on Drafts

- Draft modelling results
- Draft policy recommendations
- Draft report

Listening Sessions

- Facilitated small group discussions
- Hear priorities, discuss key questions and guiding principles for the Energy Strategy
- Identify difficult questions that have not yet been answered
- Feedback on the proposed data, assumptions, and modelling approach

Community Meetings

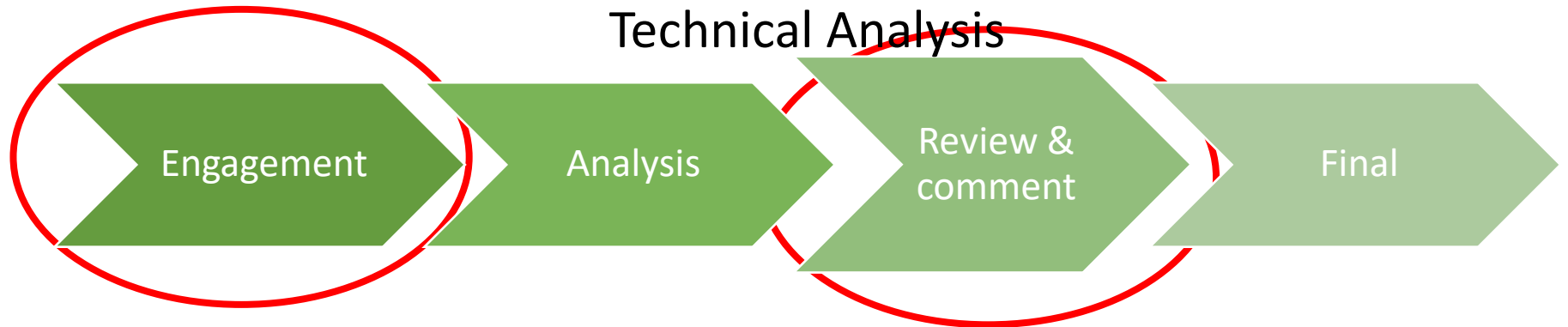
- In person in different parts of the state

Open to Options

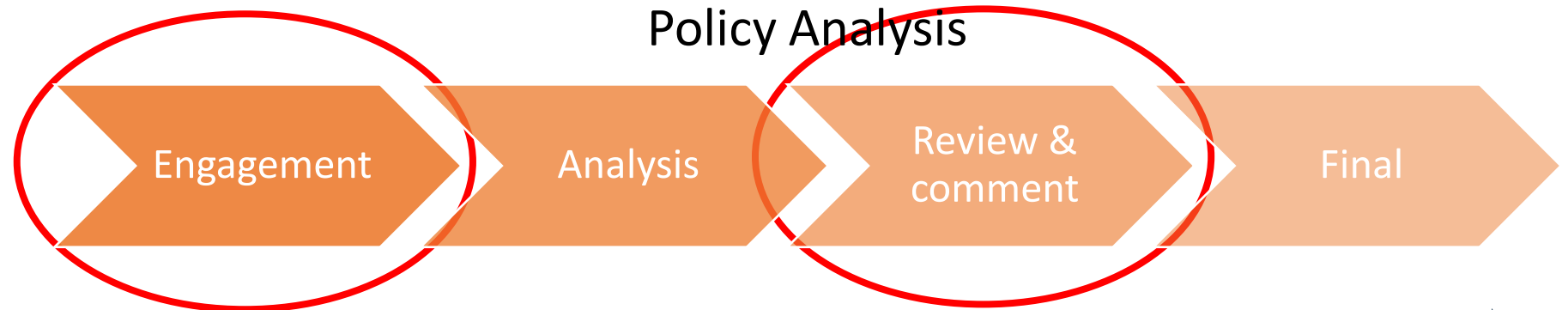
- Share other mechanisms of outreach or engagement that we should consider!
energy.strategy@energy.Oregon.gov

FEEDBACK THROUGHOUT THE PROCESS

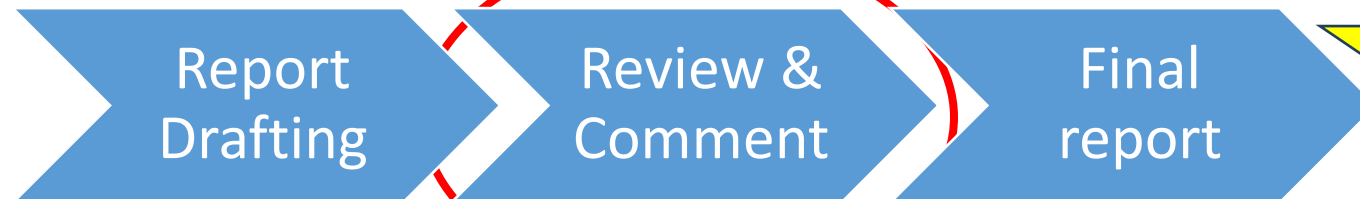
2024



2025



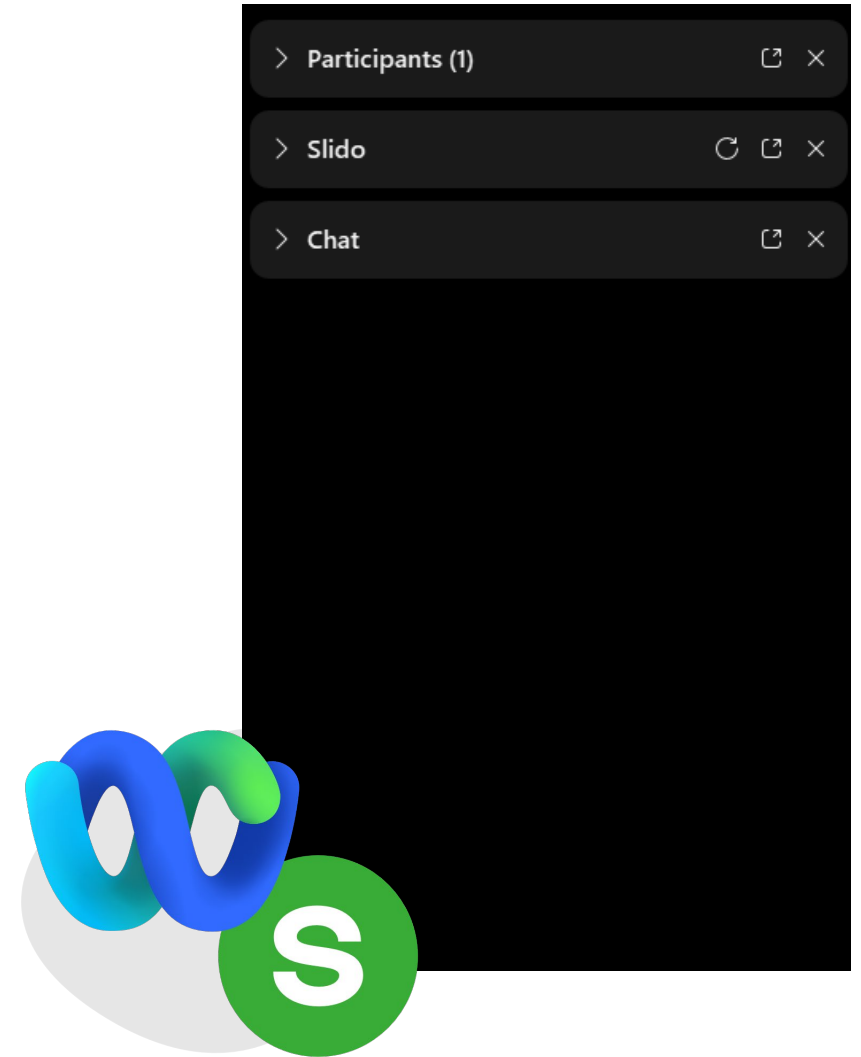
Report drafting & publication



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Q&A





RESOURCES:

Project page: <https://www.oregon.gov/energy/Data-and-Reports/Pages/Energy-Strategy.aspx>

ODOE's website: www.oregon.gov/energy

Contact us: energy.strategy@energy.Oregon.gov

Edith Bayer: edith.bayer@energy.Oregon.gov