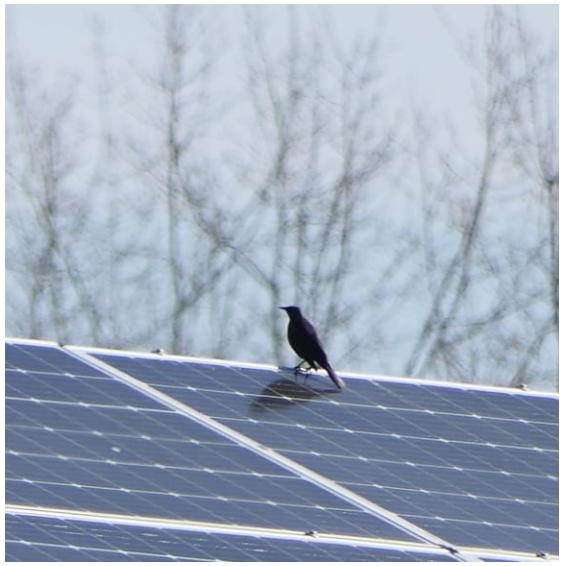
Oregon Department of **ENERGY**



Oregon Energy Strategy
Public Forum

Jessica Reichers
Edith Bayer
February 27, 2025

50 YEARS of SERVICE
OREGON DEPARTMENT OF ENERGY

OREGON DEPARTMENT OF ENERGY

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

Our Mission

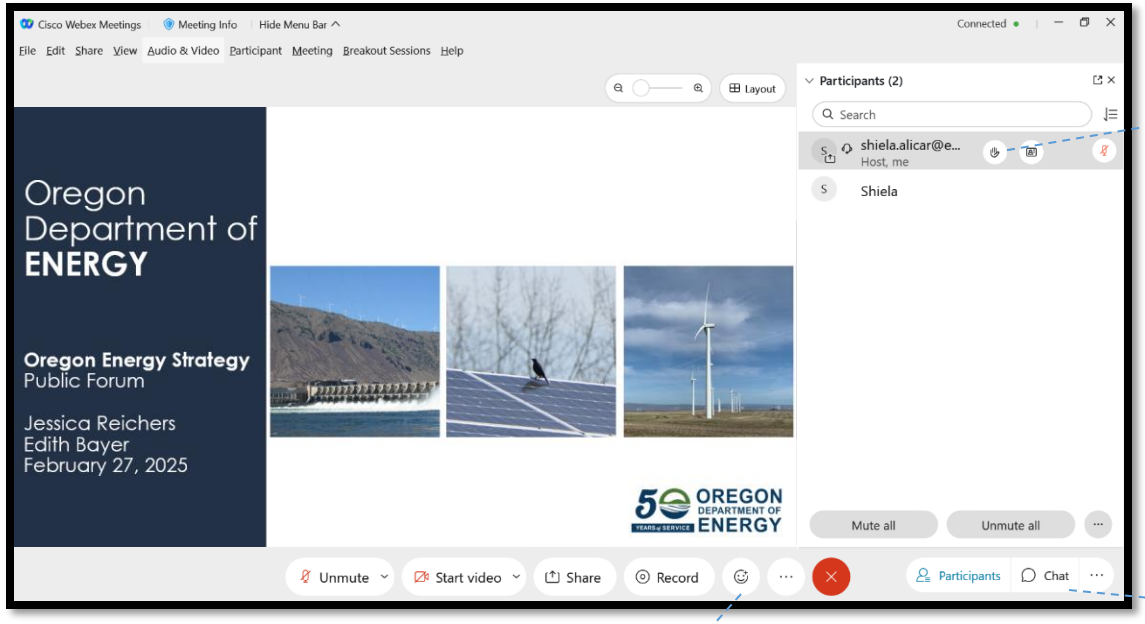
The Oregon Department of Energy helps Oregonians make informed decisions and maintain a resilient and affordable energy system. We advance solutions to shape an equitable clean energy transition, protect the environment and public health, and responsibly balance energy needs and impacts for current and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

What We Do

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

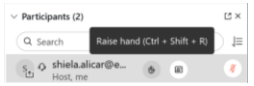
- A Central Repository of Energy Data, Information, and Analysis
- A Venue for Problem-Solving Oregon's Energy Challenges
- Energy Education and Technical Assistance
- Regulation and Oversight
- Energy Programs and Activities

USING WEBEX

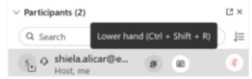


Second Raise Hand Option

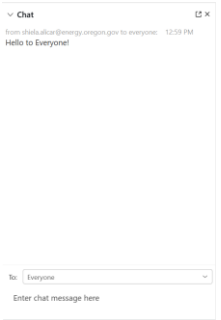
You can also click on the hand next to your name in the Participant list to raise your hand.



Click on Lower hand when you are done.

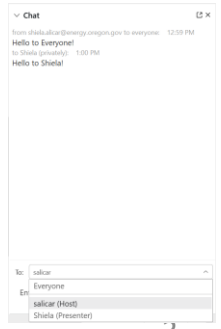


Chat

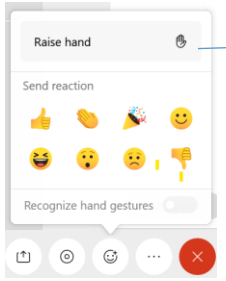


You can chat to Everyone in the meeting.

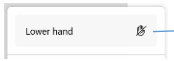
You can send a private message to the Host or Presenter (or all Panelists when there is a Panel).



Reactions



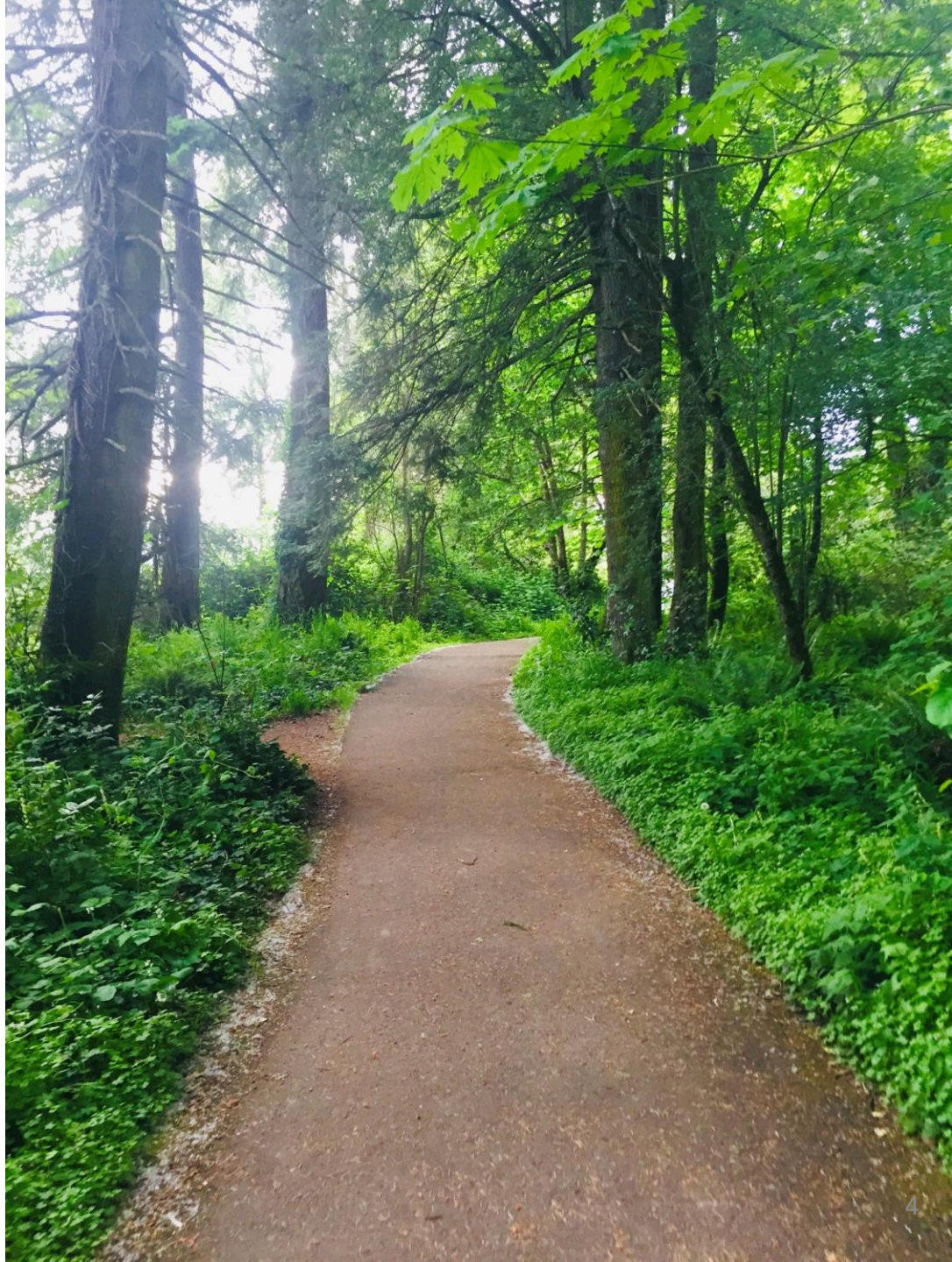
Click to Raise your hand.



Click on Lower hand when you are done.

Purpose of Today's Meeting

To hear your reflections, priorities, and experiences about energy to help inform policy recommendations for the Oregon Energy Strategy.



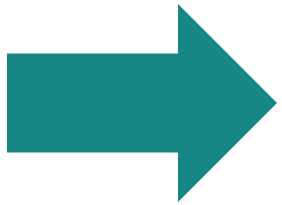
OREGON DEPARTMENT OF ENERGY
50 YEARS of SERVICE

OVERVIEW OF WHAT WE'LL BE COVERING TODAY

1. Background on Oregon's Energy Strategy

2. Key findings
   - Buildings
   - Transportation
   - Electricity
   - Fuels

3. Discussion after each key finding



Slides

Live Polling Questions

Chat / Discussion

OREGON DEPARTMENT OF ENERGY
50 YEARS of SERVICE

MENTI POLL

OREGON DEPARTMENT OF ENERGY
50 YEARS of SERVICE

WHAT IS AN ENERGY STRATEGY?

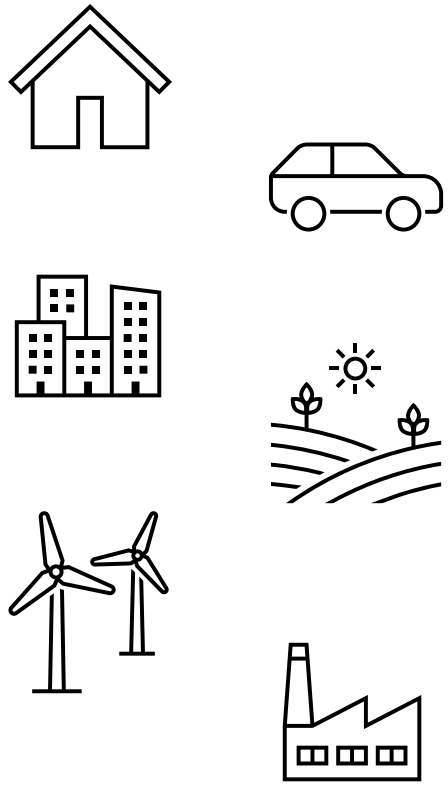
Vision for how to meet our state's energy goals

Across all sectors

- Homes, businesses, factories, cars, trucks
- Electricity, gasoline, diesel, natural gas, propane

Energy goals include:

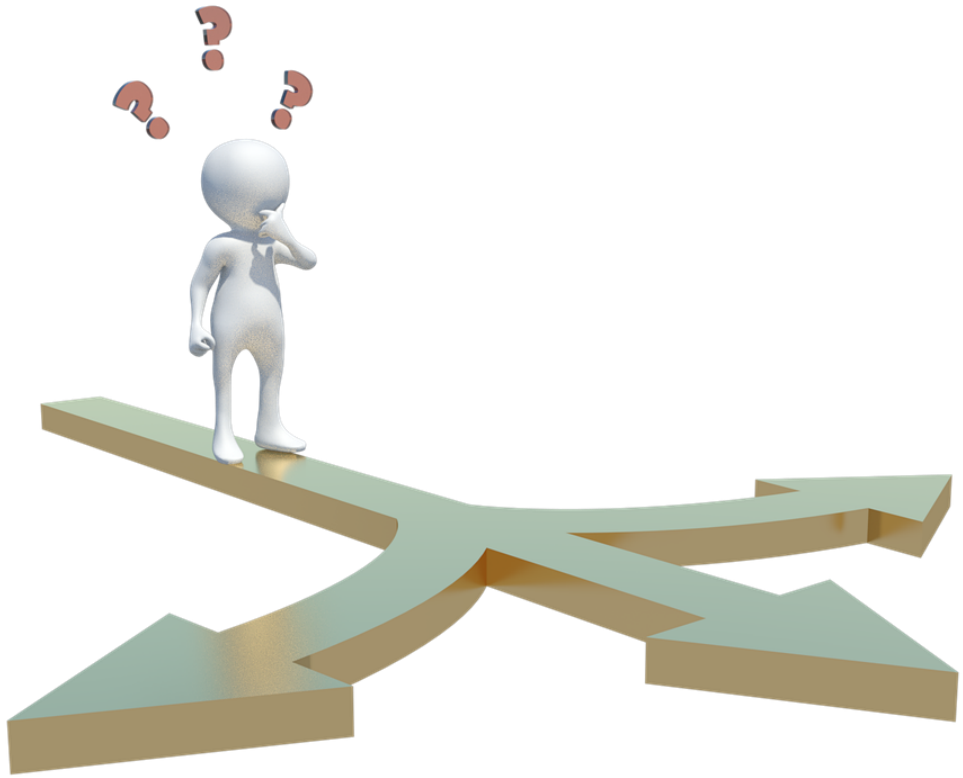
- Reliability
- Affordability
- Greenhouse gas emission reductions across these sectors



OREGON DEPARTMENT OF ENERGY
50 YEARS of SERVICE

STEP 1: MODELING

2024	2030 –2050
How do we use energy?	Expected changes over time (population, economy…)
How do we produce and deliver energy?	Available technologies & costs
	What if….?



FOUR KEY PILLARS

Energy Efficiency

Electrification

Clean Electricity

Low-Carbon Fuels

STEP 2: DEVELOP POLICY RECOMMENDATIONS

OREGON DEPARTMENT OF ENERGY
50 YEARS of SERVICE

Key Considerations

- ✓ Affordability
- ✓ Jobs and economy
- ✓ Land use and natural resources
- ✓ Environmental justice
- ✓ Equity
- ✓ Reliable energy systems
- ✓ Resilience

50 YEARS of SERVICE OREGON DEPARTMENT OF ENERGY

MENTI POLL

TRANSPORTATION ELECTRIFICATION

Four Key Takeaways

- Transportation electrification reduces system-wide energy demand and the cost of decarbonization, and the pace matters.
- Transportation electrification will significantly increase electricity demand but EVs can provide a net benefit to the grid if managed flexibly.
- Reducing vehicle miles traveled has a large impact on overall energy demand and therefore costs for maintaining and upgrading the electric grid
- Low carbon fuels play a role in decarbonizing transportation across all scenarios, and that role increases as the pace of transportation electrification slows.

OREGON DEPARTMENT OF ENERGY
50 YEARS of SERVICE

TRANSPORTATION ELECTRIFICATION

Light-, medium-, and heavy duty zero emission vehicles (battery electric and hydrogen fuel cell)

Charging and fueling infrastructure

Vehicle miles traveled reduction

MENTI POLL

OREGON DEPARTMENT OF ENERGY
50 YEARS of SERVICE

BUILDINGS

Four Key Takeaways

- Delayed energy efficiency and building electrification represents the highest cost of all the scenarios that were modeled.
- Building electrification results in system-wide reductions in energy demand.
- Rooftop solar in western Oregon reduces the need for grid-scale solar to be built in eastern Oregon.
- Demand response programs reduce future capacity and transmission needs.

BUILDINGS

Residential and commercial

Customer-side of the meter

OREGON DEPARTMENT OF ENERGY
50 YEARS of SERVICE

MENTI POLL

OREGON DEPARTMENT OF ENERGY
50 YEARS of SERVICE

ELECTRICITY

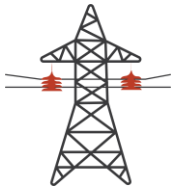
Four Key Takeaways

- The model shows significant near-term load growth.
- Both in-state and out-of-state resources contribute to a least-cost supply portfolio.
- Oregon does not have sufficient physical transmission capacity to meet the modeled electricity flow.
- The model consistently builds more generating capacity.

OREGON DEPARTMENT OF ENERGY
50 YEARS of SERVICE

ELECTRICITY

Electricity generation and storage in front of the meter



Transmission (poles, wires, substations)

Development needs and barriers/competing priorities

MENTI POLL

OREGON DEPARTMENT OF ENERGY
50 YEARS of SERVICE

LOW-CARBON FUELS

Four Key Takeaways

- Demand declines but fuels remain a significant component of Oregon's energy system across all scenarios.
- Low-carbon fuels are an increasing proportion of Oregon's energy supply across all scenarios.
- More capacity from low-carbon fuel gas plants is needed to support the growing electric grid
- Electrification is more cost-effective than adopting low-carbon fuels in many applications.

OREGON DEPARTMENT OF ENERGY
50 YEARS of SERVICE

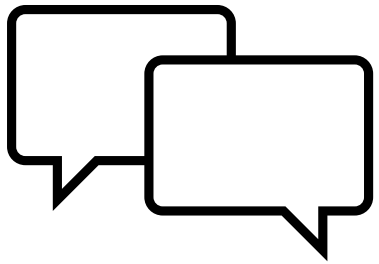
LOW-CARBON FUELS

- Opportunities for low carbon fuels in buildings, industry, and transportation
- Identification of barriers and potential solutions to production and distribution of fuels

OREGON DEPARTMENT OF ENERGY
50 YEARS of SERVICE

MENTI POLL

OPPORTUNITIES FOR PUBLIC COMMENT



Provide written public comment

https://odoe.powerappsportals.us/en-US/energy-strategy/

OREGON DEPARTMENT OF ENERGY
50 YEARS of SERVICE


50
YEARS of SERVICE
OREGON
DEPARTMENT OF
ENERGY
Thank You!
www.oregon.gov/energy/Data-and-Reports/Pages/Energy-Strategy.aspx