Oregon Department of ENERGY

Oregon Energy Strategy
Policy Working Group
Developing Clean
Electricity Generation
and Transmission
Breakout Session #3

Joni Sliger March 17, 2025











OREGON DEPARTMENT OF ENERGY

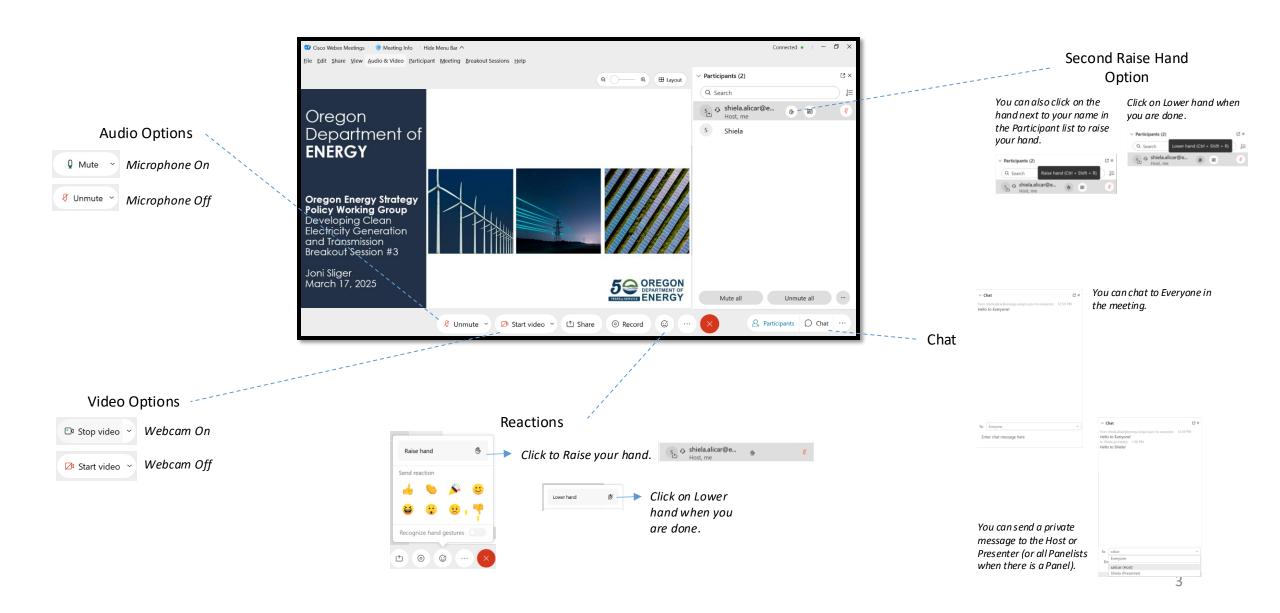
Leading Oregon to a safe, equitable, clean, and sustainable energy future.

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



OUR SCOPE

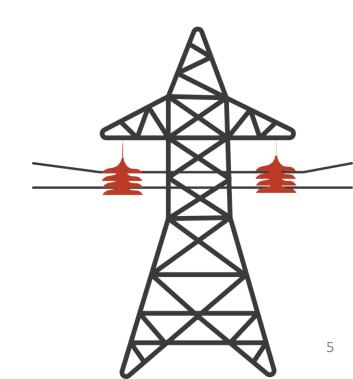
Environmental Justice and Equity	 Role in providing EJ and equity perspectives in the other working groups Evaluate analysis and develop recommendations related to EJ and equity
Building Efficiency, Electrification, and DERs	 Residential and commercial Customer-side of the meter
Developing Clean Electricity Generation and Transmission	 Electricity generation and storage in front of the meter Transmission Development needs and barriers/competing priorities
Low-carbon Fuels	 Best application of low carbon fuels used in buildings, industry, and transportation Identification of barriers and potential solutions to production and distribution of fuels
Transportation Electrification	 Light-, medium- and heavy-duty zero emission vehicles (battery electric and hydrogen fuel cell) Charging and fueling infrastructure Grid integration Vehicle miles traveled reduction



PURPOSE OF THIS WORKING GROUP

- Build understanding of learnings coming out of the model, specifically those related to developing clean electricity generation and transmission for Oregon loads.
- Consider Oregon's existing policy landscape.
- Provide feedback on electricity sector priorities, policy gaps and opportunities.
- Develop policy actions that could help advance progress toward further decarbonizing the electricity sector.





WORKING GROUP ROSTER

ORGANIZATION	NAME
Benton County	Petra Schuetz
Bonneville Power Administration	Hannah Dondy-Kaplan
Central Oregon LandWatch	Rory Isbell / Robin Hayakawa
	Justin DeMello
, , , ,	Joshua Basofin
Columbia River Inter-Tribal Fish Commission	Chris Golightly / Elijah Cetas
Confederated Tribes of Warm Springs	Edison Elizeh
DecisionWare Group; Mobilizing Climate Action Together	Pat DeLaquil
Eugene Water & Electric Board	Brian Booth / Jon Hart
Idaho Power Company	Jared Hansen
International Brotherhood of Electrical Workers, Local 659	Nick Carpenter / Johnny Walker
Morrow County	Tamra Mabbott
Northwest & Intermountain Power Producers Coalition	Sidney Villanueva
NW Energy Coalition	Fred Heutte
Oregon Citizens' Utility Board	Bob Jenks
Oregon Farm Bureau	Ryan Krabill
Oregon Municipal Electric Utilities Association	Jennifer Joly
Pacific Power	Scott Beyer / Patty Satkiewicz, Neil Jones

ORGANIZATION	NAME
Portland General Electric	Jacob Goodspeed
Renewable Northwest	Emily Griffith / Diane Brandt
Rogue Climate	Jess Grady-Benson
Rowan Digital Infrastructure	Shanna Brownstein
Sol Coast Consulting; Oregon Coast Energy	
Alliance Network; Oregon Solar + Storage	
Industries Association	Shannon Souza
The Nature Conservancy	Lauren Link / Laura Tabor
Tillamook People's Utility District, Oregon	
People's Utility District Association	Ryan Perry
Umatilla County	Dan Dorran / Robert Waldher
Umatilla Electric Cooperative	Alec Shebiel
Verde	Anahi Segovia Rodriguez
Wasco County	Kelly Howsley-Glover
Oregon Department of Fish and Wildlife	Jeremy Thompson
Oregon Department of Forestry	John Tokarczyk
Oregon Department of Geology and Mineral	
Industries	Ruarri Day-Stirrat
Oregon Health Authority	Gabriela Goldfarb
Oregon Department of Land Conservation and	
Development	Jeff Burright, Jon Jinnings
Oregon Department of State Lands	Nataliya Stranadko
Oregon Water Resources Department	Crystal Grinnell

INTRODUCTIONS

Please share the following with the group, in the chat:

- Name
- Affiliation
- Tell us about something interesting or fun you did this past weekend?





OUR MEETINGS

February 12, 2025

- Plenary session on modeling results and group process
- Breakout session on how modeling results provide direction

February 26, 9 a.m. - noon, Meeting 2

- Introduce existing policy landscape
- Identify barriers and competing priorities

March 7, 2025, 10 - 11 a.m., Optional office hours

- Q&A opportunity with Jeremy Hargreaves
- This is time and date focused on questions relevant to this group.

March 13, 1:30 - 3 p.m., April 9, 10 a.m. - 11:30 a.m., Webinar, please attend or review recording

- Webinar on complementary analysis results
- Energy Wallet, Air Quality, Geospatial Mapping
- (Jobs and workforce analyses will come later)

March 17, 9 a.m. - noon, Meeting 3 (TODAY)

- Review barriers
- Discuss complementary analysis learnings
- Discuss policy gaps
- Brainstorm policy concepts

April 30, 2 - 5 p.m., Meeting 4

- Discuss complementary analysis learnings
- Review policy gaps
- Further brainstorm policy concepts
- Develop proposed policy actions

May 21, 9 - 11 a.m., Meeting 5

- Plenary session
- Report out from all working groups



MEETING OBJECTIVES

- Identify policy gaps or opportunities
- Discuss strategies to address the barriers
- Determine if we need to change an existing policy, create a new policy, or better understand a potential solution
- Create an outline of potential policy solutions





GROUP AGREEMENTS

- Honor the agenda or modify by agreement.
- Listen carefully; seek to learn and understand each other's perspective.
- Encourage respectful, candid, and constructive conversation.
- Keep an open mind.
- Ask questions to clarify and understand why.
- Be open, transparent, inclusive, and accountable.
- Respect differing opinions.
- Seek to resolve differences and find common ground.
- Be conscious of speaking time; step back to allow space for others to contribute.
- Limit chat conversations.





AGENDA

9:00 a.m.	Welcome
9:05 a.m.	ODOE Reflections on What We're Hearing
9:30 a.m.	Group Activity Using Miro
10:25 a.m.	10-minute Break
10:35 a.m.	Group Activity Using Miro
11:55 a.m.	Next Steps
12:00 p.m.	Adjourn



Reflections from ODOE



LEGISLATIVE GUIDANCE

Identify different pathways to achieve the state's energy policy objectives and use this information to inform discussions on energy policies to achieve the goals.





ODOE CONTRACTED FOR ENERGY PATHWAYS MODELING

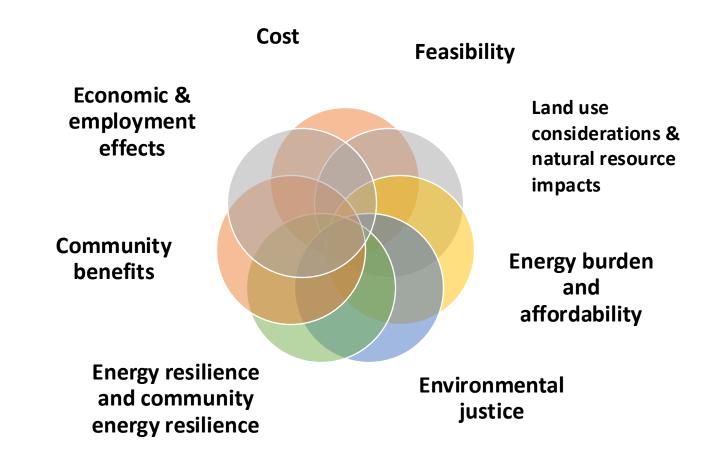
Modeled 10 Potential Futures

- Reference Case (not BAU!), 6 Alternative Scenarios, and 3 Sensitivities
- All explore potential future demand and supply from a statewide and economy-wide perspective, within constraints of meeting Oregon's energy and climate goals
- Some Alternative Scenarios tested questions especially relevant to this group:
 - What if there is limited utility-scale electricity generation in Oregon?
 - What if there are higher levels of rooftop solar and behind-the-meter storage and transmission is limited to reconductoring only (no new build)?
 - What might an alternative portfolio of flexible resources for electricity reliability look like?





THE MODELING DOES NOT CAPTURE EVERY KEY CONSIDERATION





WE BEGAN WITH THE ENERGY PATHWAYS MODELING RESULTS

Modeling Key Findings:

- 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 Flows
- The Model Consistently Builds More Generating Capacity
- Decarbonizing Oregon's Electricity May Require More Policy Action
- These are described further in <u>Key Model Findings on Developing Clean Electricity</u>
 <u>Generation and Transmission</u>



LEARN MORE ABOUT THE MODELING

Quick Links:

- Clean Energy Transition Institute <u>Technical Approach Document</u>
- <u>Archive of materials from Phase 1</u> (focused on informing the modeling inputs and assumptions) and <u>Phase 1</u>
 <u>Interim Comment Response Document</u>
- Modeling Assumptions and Sources
- January 31, 2025 Info Session: Launch of Modeling Results <u>ODOE Introductory Presentation</u>, <u>Technical Modeling Presentation</u>, <u>Meeting Recording</u>, <u>Meeting Notes</u>,
- February 12, 2025 All Working Groups Policy Foundational Meeting <u>ODOE Main Meeting Presentation</u>, <u>Evolved Energy Research Main Meeting Presentation</u>, <u>Main Meeting Recording</u>, <u>Main Meeting Notes</u>,
 Developing Clean Electricity Generation and Transmission <u>Breakout Presentation</u> and <u>Notes</u>
- Key Model Findings on Developing Clean Electricity Generation and Transmission
 - Key Model Findings also exist <u>for other working groups</u>
- Full Technical Report forthcoming



OUR TASK IS TO GO BEYOND THE MODEL RESULTS

The modeling results are not the Energy Strategy.

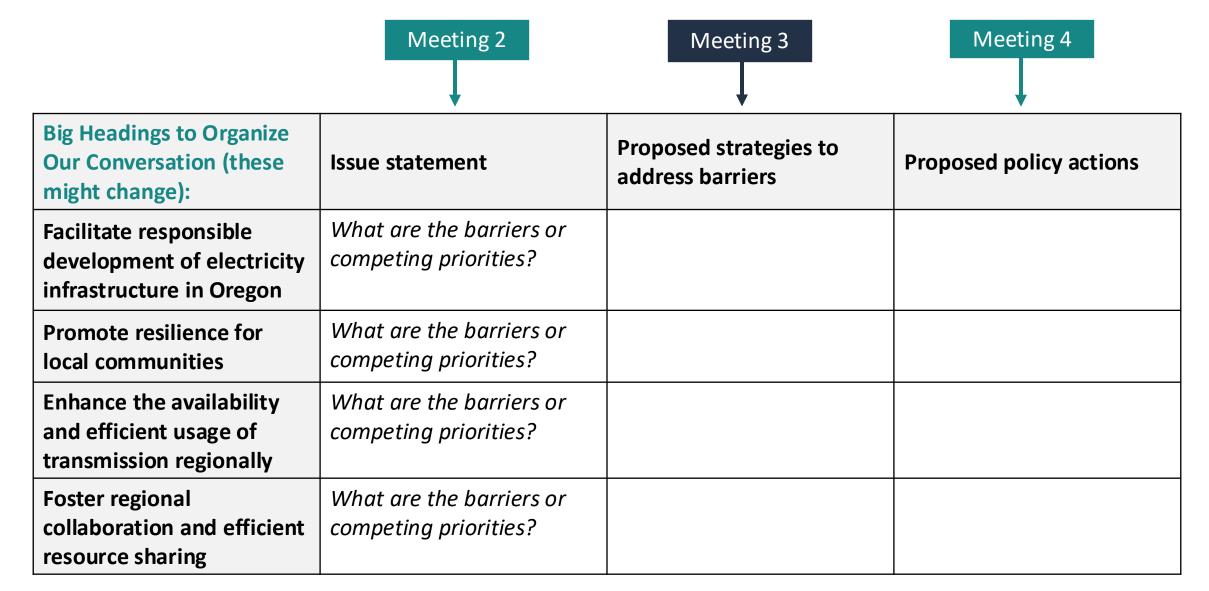
The modeling results provide a **foundation** and a **direction** for our conversations.

Direction from Modeling: Electricity is a key fuel for Oregon to meet its climate goals. There are different pathways for expanding our system, but in all scenarios the electricity sector must expand significantly.

With that direction on the "what," we are discussing the "how."



ODOE Set a Structure for Discussion



WHAT WE HEARD ON FEBRUARY 26TH

- ~200 sticky-notes on our Miro board
- Barriers in
 - The marketplace: cost/risk, supply chain, limited Information, decentralized structure
 - Capacity: trained workforce, government staff, local planners, education
 - Regulatory uncertainty: planning is siloed, processes are inefficient, mismatched incentives/responsibilities for varied purposes
 - Existing Oregon policies: "state engaged in marketplace", "prohibitions on resources by type", "Goal 5 and Goal 7 Protections conflict"
 - We'll see some of these pre-populated on today's Miro board
- We heard some things that may represent potential solutions:
 - Examples: "Need for comprehensive, coordinated planning", "Partnership agreements", "Integration of GETs into utility planning"
 - We'll see some of these pre-populated on our April 30th Miro board
- We acknowledge but will not focus in these meetings on...
 - Barriers embedded in federal policy: federal leasing uncertainty, federal funding uncertainty
 - Potential barriers that are the primary focus of other ongoing workstreams: Provider of Choice contracts, Direct Access limits, avoided cost models, interconnection

WHAT WE'RE HEARING IN OTHER WORKING GROUPS

Building Electrification, Efficiency, DERs

- Lack of coordinated gas-electric utility planning
- Existing utility interconnection, net metering and contracting policies are a barrier
- Battery storage costs are too high, and benefits cannot be monetized.

Environmental Justice & Equity

- There is a greater need for Tribal and rural communities to engage in the planning process.
- There is a lack of transmission reliability with battery storage, capacity, and substations to meet growth needs in coastal and rural areas.
- Low-income households and environmental justice communities bear an inequitable share of cost or regional development without net benefits directed to their communities.

Low-Carbon Fuels

- Role of fuels as an on-demand resource for electricity generation
- Electricity generation and transmission costs and availability
- Utility regulatory framework is designed to minimize risk and consumer rates

Transportation Electrification

- Lack of proactive planning and investment by electric utilities to prepare for EVs in their territories
- Technologies for demand response and V2G still in their nascency – advances needed in interoperability
- Lack of capacity for EV charging, esp. In rural areas, coupled with high costs and long lead times for interconnection

WHAT WE ARE SYNTHESIZING FOR THIS GROUP

Big Headings to Organize Our Conversation (these might change):	Issue statement (<u>Preliminary Draft Synthesis – Please share</u> written feedback by 5pm April 14, 2025)	Proposed strategies to address barriers	Proposed policy actions
Facilitate responsible development of electricity infrastructure in Oregon	Limited information and decentralized planning and procurement efforts hinder efficient development in Oregon that equitably considers and accounts for all those affected.		
Promote resilience for local communities	Utility obligations to customers systemwide may not align with meeting local resilience needs. There is inadequate funding, support and regulatory certainty for local governments and communities to fully meet these needs.		
Enhance the availability and efficient usage of transmission regionally	Decentralized regional planning complicates proactive planning, and inconsistencies across different jurisdictional processes impede efficient development that equitably considers and accounts for all those affected.		
Foster regional collaboration and efficient resource sharing	Oregon is part of a regional grid that lacks a formal, centralized structure to promote regional collaboration. This reality is a barrier to achieving efficiency benefits from more centralized regional planning and operations.		

TODAY'S FOCUS

Identifying policy gaps and proposing strategies to address barriers

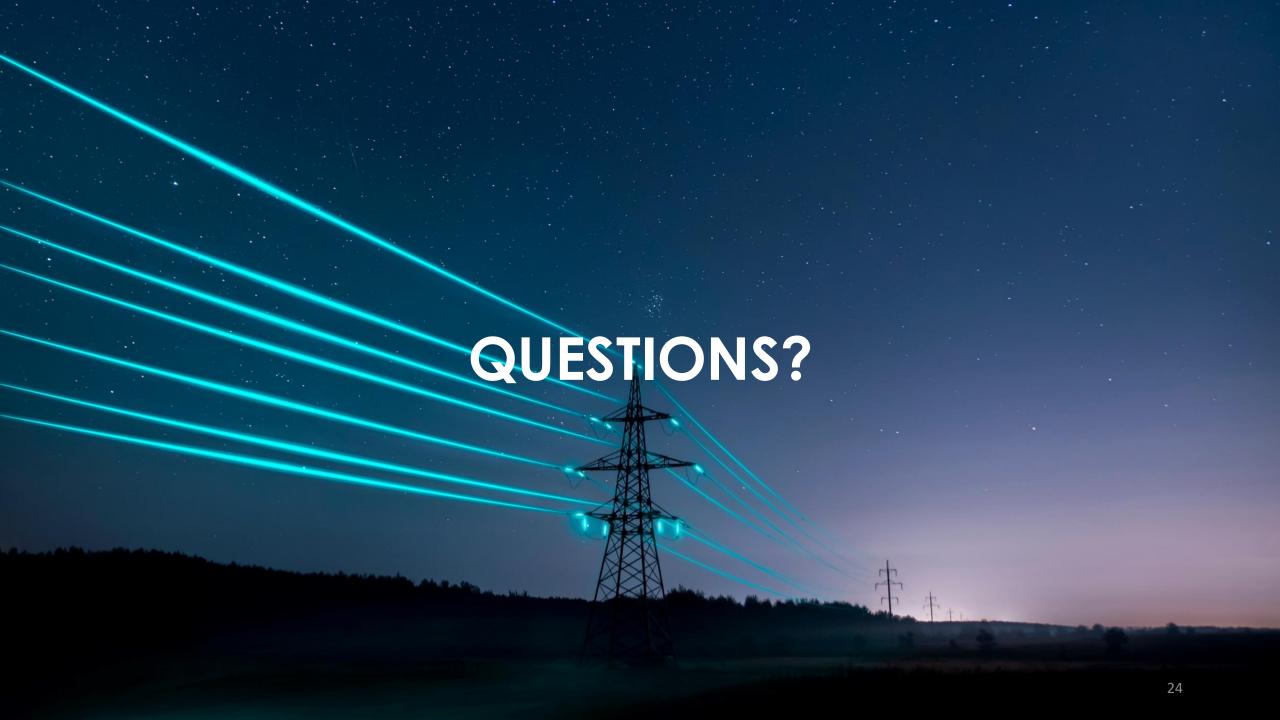
- What do we need to change in the current policy landscape? Gaps to fill?
- What do we need to better understand?

Remember from last time:

- The Energy Strategy's main focus is state-level policies
- Our recommendations will likely be aimed at the 2027 Legislative Session
- Policies do not have be universally applicable or one-size-fits-all solutions







Group Activity Using Miro



MINI-AGENDA

9:30 a.m.	 Group Activity Using Miro Set up and testing First board: Generation and Storage ~5 minutes quiet writing time ~40 minutes discussion
10:25 a.m.	10-minute Break
10:35 a.m.	 Group Activity Using Miro Second board: Transmission ~5 minutes quiet writing time ~35 minutes discussion Third board: Cross-cutting issues ~5 minutes quiet writing time ~35 minutes discussion
11:55 a.m.	Next Steps



PREVIEW OF OUR THREE MIRO BOARDS

First Board focused on Generation and Storage:

		<u> </u>				
Barriers from Last Time	POLICY GAPS AND PROPOSED STRATEGIES					
Examples from	Gaps and Proposed Strategies by Policy Type					
last time:	Gaps in Mandates	Gaps in Incentives	Gaps in Programs	Gaps in Other Policy Types		
 X Y						
• Z		Gaps	s by Actor			
	Gaps for State	Gaps for IOUs	Gaps for COUs	Gaps for Other Actors		
	Gaps by Policy Focus					
	Gaps Affecting Storage	Gaps Affecting Existing	Gaps Affecting Emerging	Other		
	Technologies	Generation Technologies (Solar,	Generation Technologies (Offshore			
		Onshore Wind, Hydro, etc.)	Wind, Enhanced Geothermal,			
			Nuclear SMRs, Clean Gas, etc.)			
Differer	nt 'Gaps by Policy Foo	cus' prompts for Board c	n Transmission and Board	on Cross-Cutting Issue	<u>2</u> S	
	Gaps for Enhancing	Gaps for Building New Intra-	Gaps for Building New Inter-State	Other		
	Existing Lines	State Lines	Lines			
	Gaps for Resilience	Gaps for Regional Coordination	Gaps for Utility-Utility Coordination	Other	27	

QUICK MIRO HOW-TO: NAVIGATING

If you use a mouse:

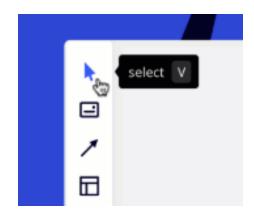
- To move around the board, press the right mouse button and drag
- To zoom, scroll the mouse wheel
- To create the selection field, switch to select tool, click and drag the canvas

If you use the trackpad:

- Slide two fingers to move around the board
- Pinch to zoom
- To select objects, switch to select tool, press and drag the canvas

If you use the touchscreen:

- Drag the canvas to move around
- Pinch to zoom
- Long press and drag to select objects

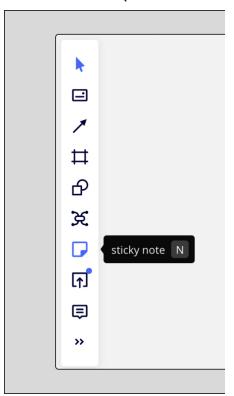


Switch between the 'select tool' and 'hand mode' in top left

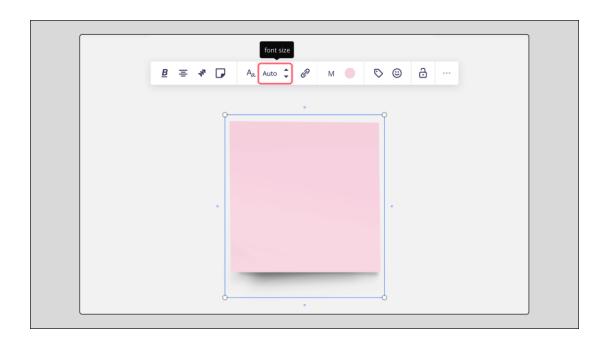


QUICK MIRO HOW-TO: STICKY NOTES

Step 1: "Click the sticky note icon on the toolbar" (left of screen)



Step 2: "To add text to your sticky note, select it and start typing."





10 MIN BREAK



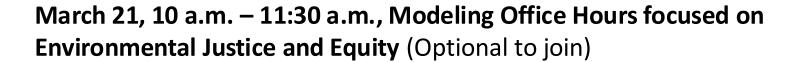
Group Activity Using Miro



Next Steps



Upcoming Meetings



April 9, 10 a.m. – 11:30 a.m. Complementary Analysis Info Session

- Energy Wallet, Air Quality, Geospatial Mapping
- (Jobs and workforce analyses will come later)
- Please attend or watch the recording before our next meeting

April 30, 2 - 5 p.m., Meeting 4

- Discuss complementary analysis learnings
- Review policy gaps
- Further brainstorm policy concepts
- Develop proposed policy actions

May 21, 9 - 11 a.m., Meeting 5

- Plenary session
- Report out from all working groups



CONSIDERATIONS

For our next meeting, please consider:

- What additional policy solutions are you interested in discussing with this group?
- What do we need to better understand?







THANK YOU!

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

Public Comment Portal:

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