Oregon Department of **ENERGY**

Oregon Energy Strategy Policy Working Group

Transportation Electrification
Breakout Session #4

Jillian DiMedio
April 30, 2025

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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

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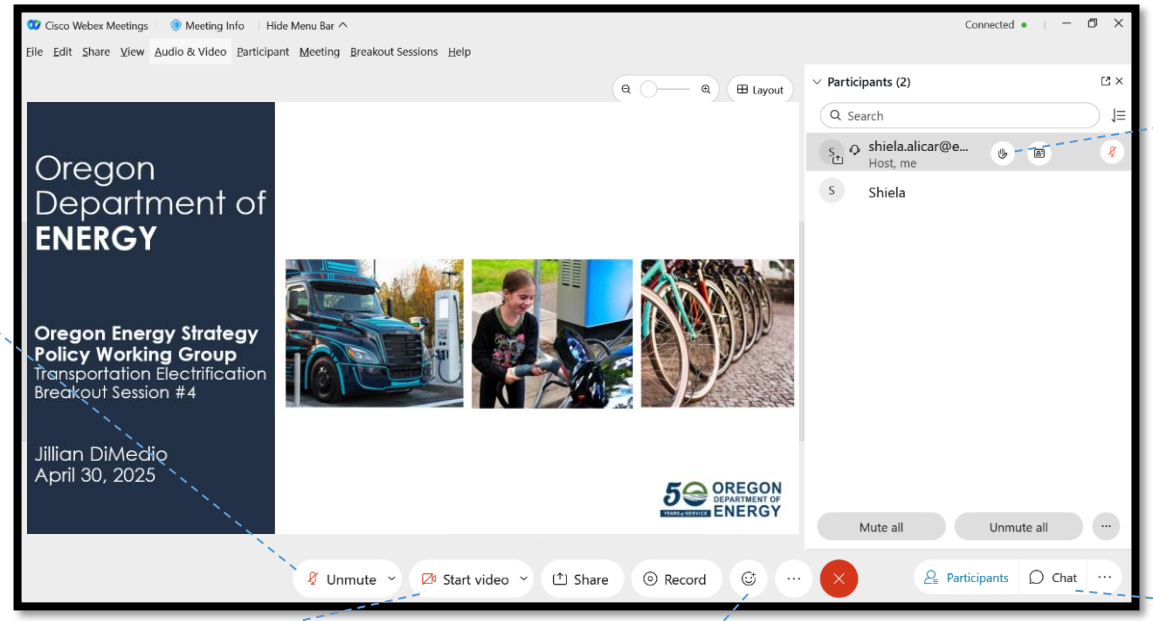

Audio Options

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Unmute — *Microphone Off*

Video Options

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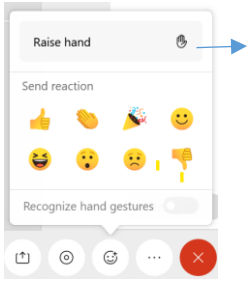
Reactions



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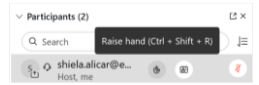
Click on Lower hand when you are done.

Second Raise Hand Option

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



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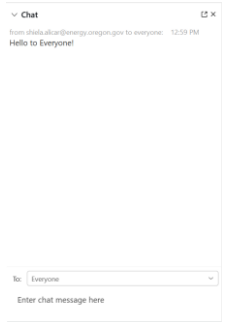
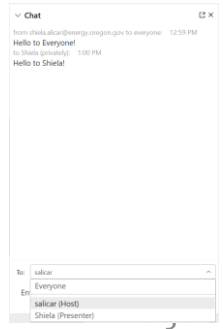
Chat



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).

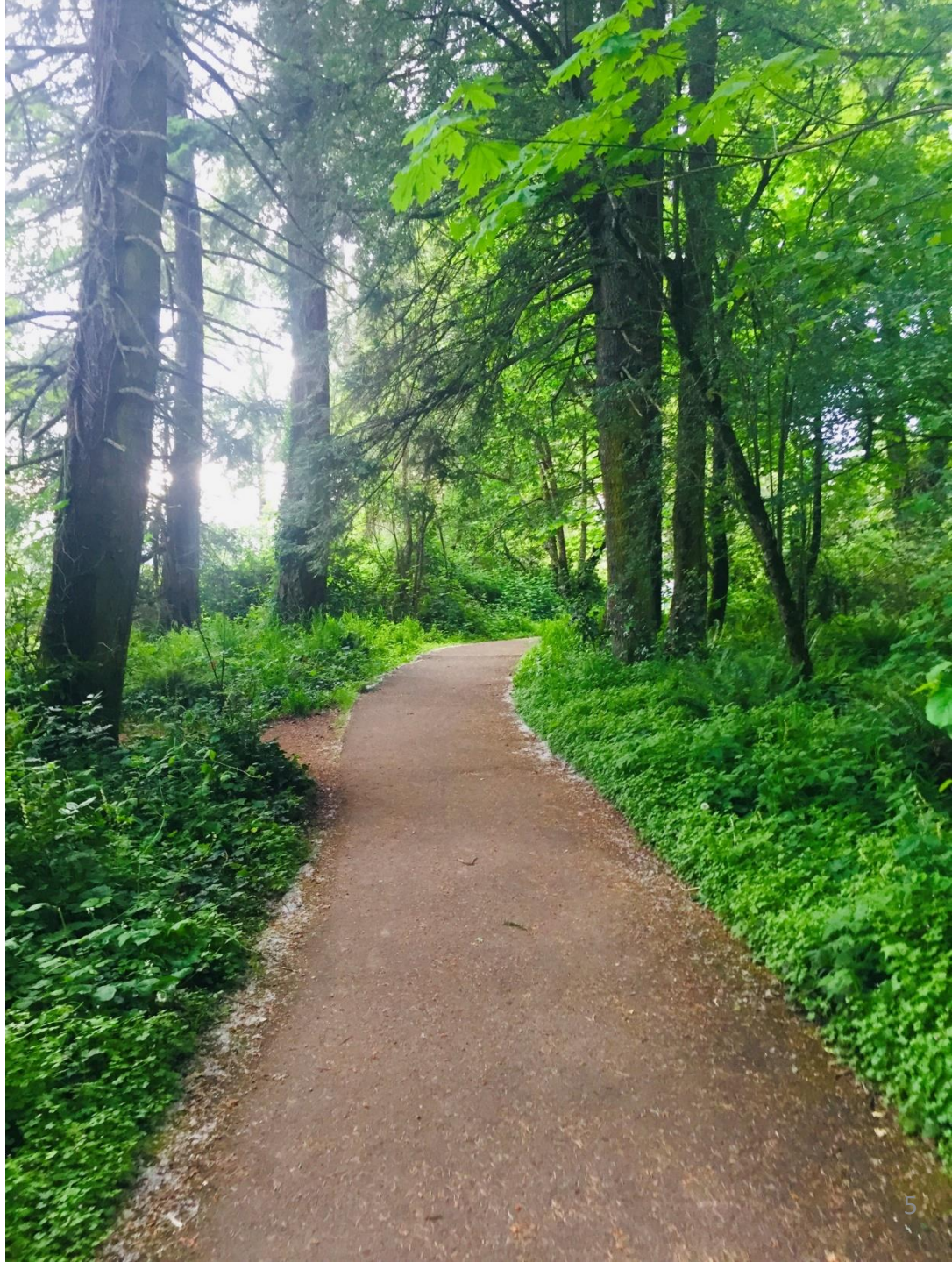


WORKING GROUP SCOPE

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

Working Group Purpose

To provide feedback on transportation priorities, policy gaps, and opportunities in Oregon, and support the development of policy recommendations related to our scope for the Oregon Energy Strategy.



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MEETING OBJECTIVES

- Discuss and evaluate draft policy actions.
- Review policy recommendation development process.
- Share insights from complementary analyses.

AGENDA

9:00 a.m.	Welcome, Agenda & Introductions
9:05 a.m.	Policy Recommendations/Actions Development Process
9:15 a.m.	Review Key Findings from Complementary Analyses
9:30 a.m.	Vehicle Electrification – Draft Policy Actions: Presentation & Discussion
10:20 a.m.	5-minute Break
10:25 a.m.	Grid Integration – Draft Policy Actions: Presentation & Discussion
11:15 a.m.	VMT Reduction – Draft Policy Actions: Presentation & Discussion
11:55 p.m.	Next Steps
12:00 p.m.	Adjourn

Comments and questions from observers can be submitted to: https://odoe.powerappsportals.us/en-US/energy-strategy/

TE WORKING GROUP ROSTER

ORGANIZATION	NAME
City of Portland	Ingrid Fish
Climate Solutions	Brett Morgan
Daimler	Bret Stevens
Eugene Water & Electric Board	Juan Serpa Munoz, Kelly Hoell
Forth	Stu Green
Green Energy Institute	Jamie Johnson
IBEW Local 48	Marshall McGrady
City of Eugene	Logan Telles
Oregon Trail Electric Coop	Charlie Tracy
Oregon Trucking Association	Jana Jarvis
Pacific Power	Kate Hawley
Port of Portland	Lewis Lem
Portland General Electric	Nancy Bennett
Portland State University	Jeff Hammarlund
Private Citizen	Michael Graham
Private Citizen	Tonia Moro
Renewable Hydrogen Alliance	Rebecca Smith
Titan Freight Systems	Jason Altamirano
TriMet	Kyle Whatley
Wy'East	Robert Wallace

INTRODUCTIONS

Please share the following with the group in the chat:

- Name
- Affiliation
- What do you love most about Spring?

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TE POLICY WORKING GROUP MEETING SCHEDULE

Wednesday, February 12 **9 a.m. – 12 p.m.**	Opening Plenary Meeting – All Working Groups
Tuesday, March 4 **9:30 a.m. – 12:30 p.m.**	First Break Out Meeting
Thursday, April 10 **9:30 a.m. – 12:30 p.m.**	Second Break Out Meeting
Wednesday, April 30 (Today) 9 a.m. – 12 p.m.	Third Break Out Meeting
Wednesday, May 21 **9 a.m. – 12 p.m.**	Closing Plenary Meeting – All Working Groups

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.

STEP BY STEP PROCESS

Today

PATHWAY	ISSUE STATEMENT/BARRIERS	STRATEGY TO ADDRESS BARRIERS	POLICY ACTION
VEHICLE ELECTRIFICATION	**1. Upfront Cost** *EVs have a higher purchase price than traditional internal combustion engine vehicles.*	"Expand EV market share through incentives"	"Continue funding the Oregon Clean Vehicle Rebate Program"
GRID INTEGRATION			
VMT REDUCTION			

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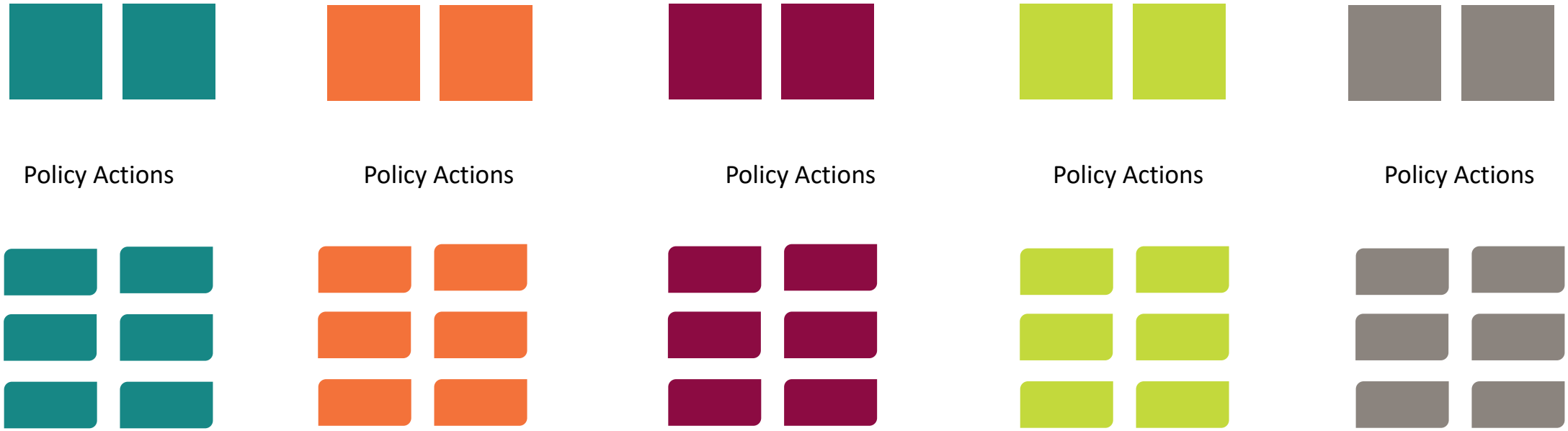
STRATEGIES

To meet its energy policy objectives, Oregon must advance along the following five pathways:

Strategy 1	Energy efficiency and electrification of buildings
Strategy 2	**Electrification of transportation and reducing vehicle miles traveled**
Strategy 3	Distributed energy resources, including solar PV, distributed batteries, and flexible electric loads
Strategy 4	Clean electricity
Strategy 5	Low-carbon fuels

POLICY FRAMING

Strategy 1	Strategy 2	Strategy 3	Strategy 4	Strategy 5
Policy recommendations (high level)	Policy recommendations (high level)	Policy recommendations (high level)	Policy recommendations (high level)	Policy recommendations (high level)
Policy Actions	Policy Actions	Policy Actions	Policy Actions	Policy Actions



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EXAMPLE

STRATEGY

- Transportation electrification & VMT reduction

POLICY RECOMMENDATION

- Reduce barriers to transportation electrification to ensure the state electrifies at the pace and scale needed to meet climate goals.

POLICY ACTION

- Establish a sustainable source of state funding to support the rapid deployment of charging and fueling infrastructure statewide.
- *FOR DISCUSSION TODAY: Actionable recommendations with 5-10 year outlook.*

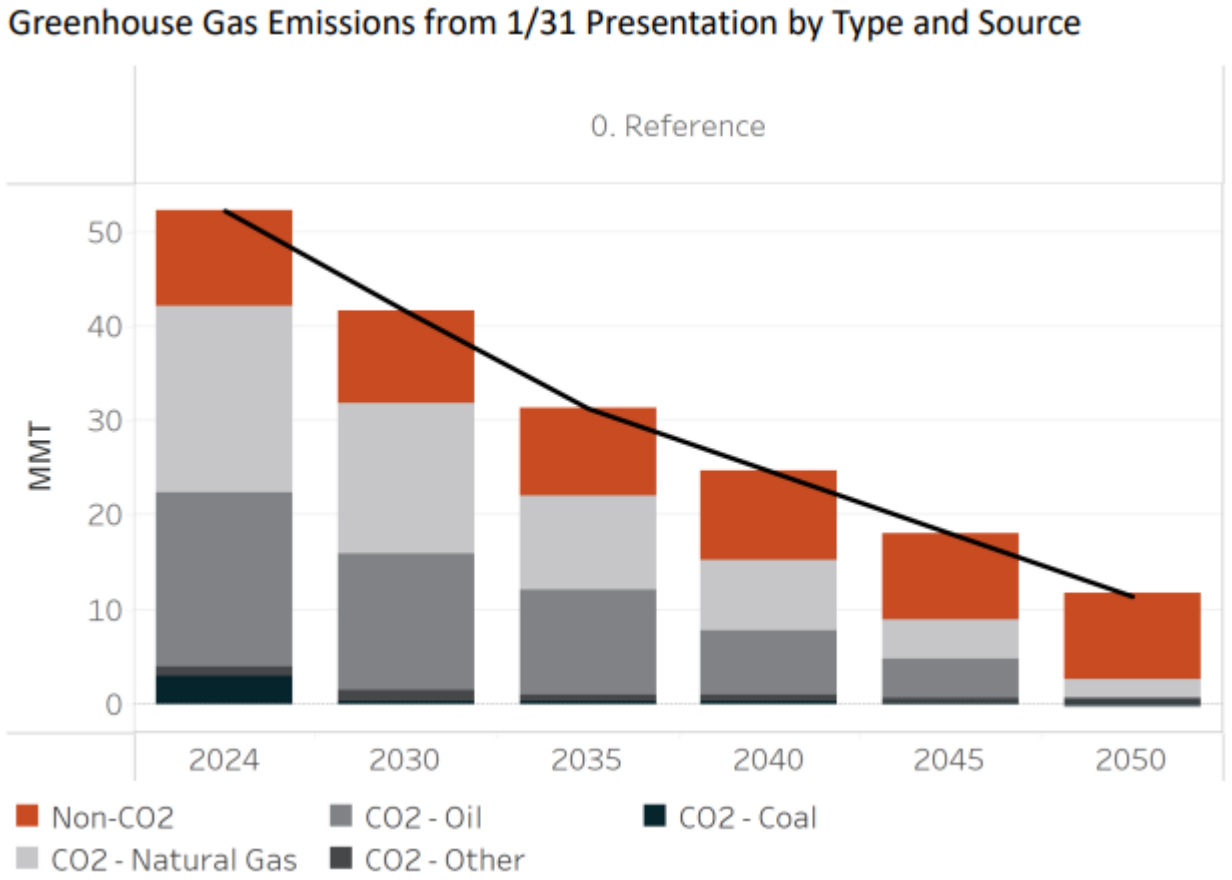
POLICY RECOMMENDATIONS

- Reduce barriers to transportation electrification to ensure the state electrifies at the pace and scale needed to meet state goals.
- Implement streamlined procedures for distribution system upgrades and EV charging infrastructure interconnection and prioritize the management of EVs as flexible loads to reduce delays, mitigate the potential impacts of increased EV adoption, and enhance grid efficiency.
- Prioritize policies and allocate funding to programs that expand access to multimodal transportation options – including public transit, biking, and walking infrastructure – and promote development patterns that make it easier and more appealing for people to live, work, and access services without relying on a personal vehicle.

COMPLEMENTARY ANALYSES

AIR QUALITY: REDUCING EMISSIONS BRINGS HEALTH BENEFITS

- In addition to the climate benefits of reducing GHG emissions, reducing pollutant emissions provides health benefits to Oregonians
- Air Quality analysis considers health impacts of changes in fine particulate matter (PM2.5) and secondary particulate matter such as nitrogen oxides (NOx) and sulfur oxides (SOx)



AIR QUALITY: KEY TAKEAWAYS

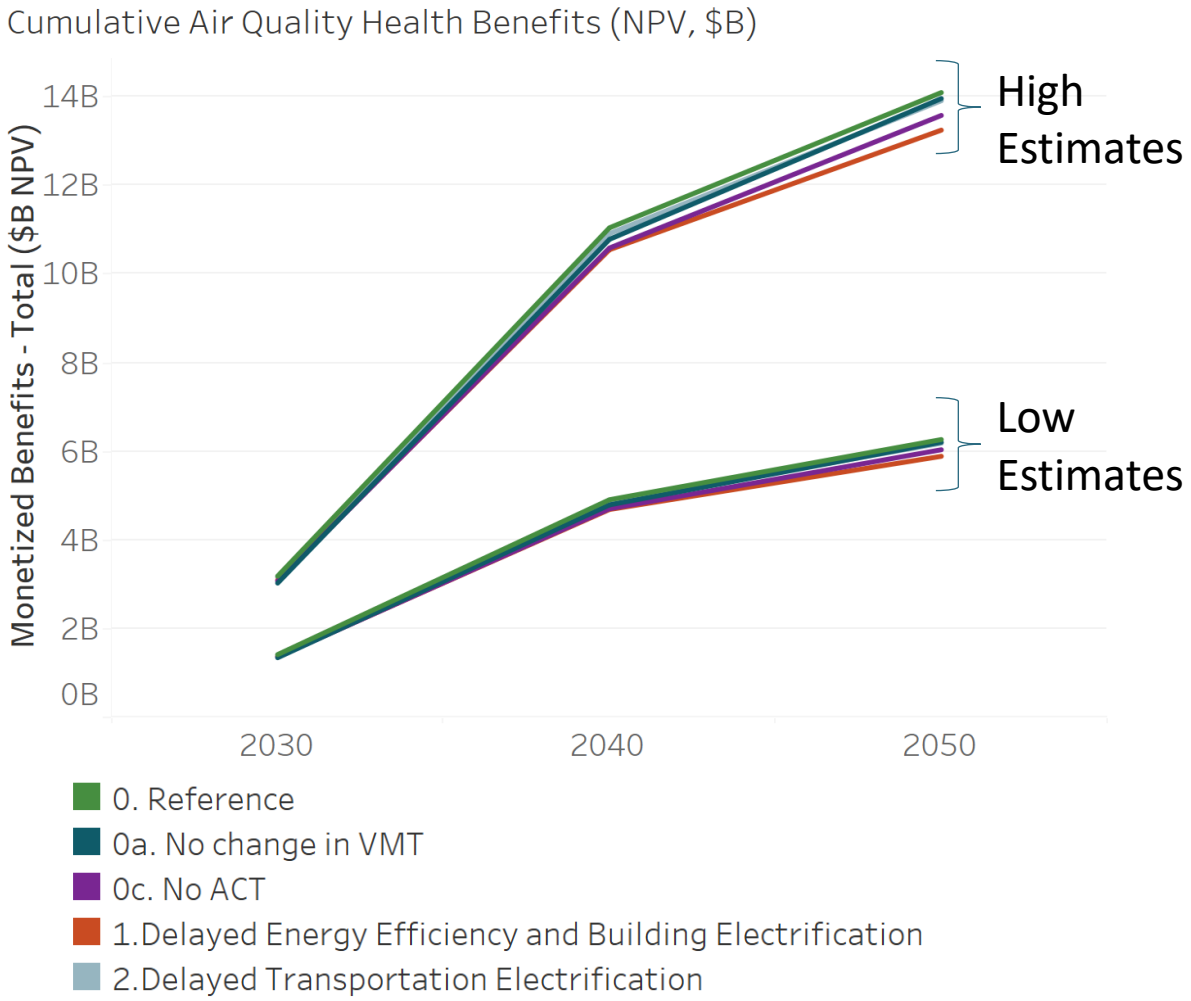
- COBRA analysis indicates significant health benefits associated with achieving Oregon emissions and clean energy targets
  - Between $205 M and $461 M monetized benefits in 2030
  - Between $538 M and $1.2 B monetized benefits in 2050
  - Cumulative present value benefits of $6.3 B to $14.1 B over the next 25 years
- Absolute benefits follow population by region, but per capita benefits are higher in southern regions of the state
- Most monetized dollar health benefits are attributed to mortality based on the high value of a statistical life

Cumulative Benefits

EVOLVED ENERGY RESEARCH

- Benefits are relatively similar across scenarios
  - All achieve emissions reduction goals
- Slightly lower benefits when greater amounts of fuels are burned in buildings and industry or in vehicles
  - Delays in efficiency and electrification have worse health outcomes
- Cumulative benefits range from $6.3B to $14.1B present value
- Benefits relative to air quality in 2023

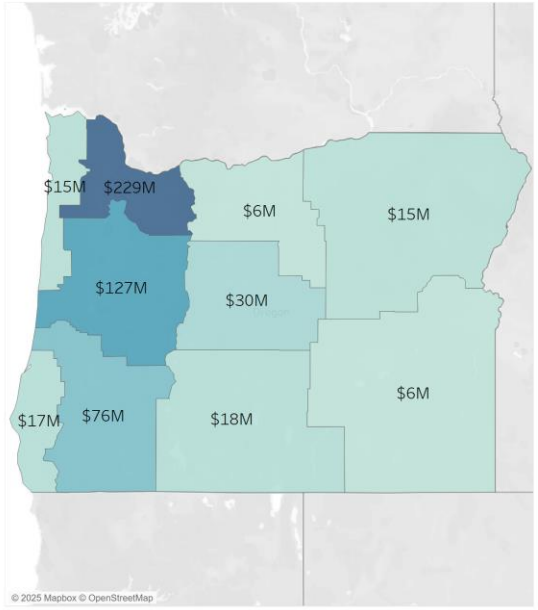
Present value calculated using a 2% societal discount rate



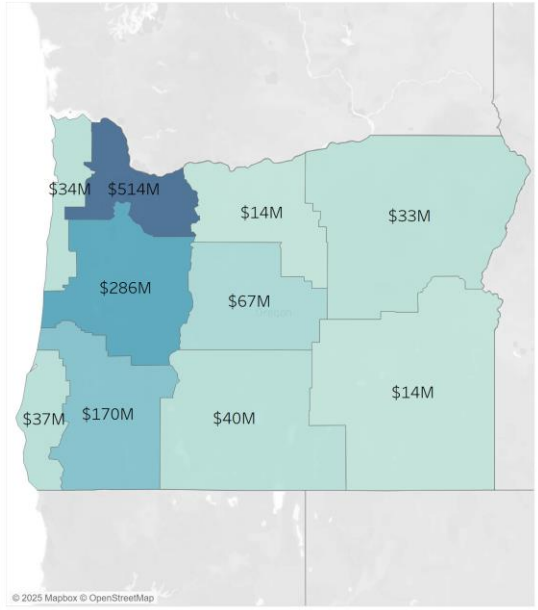
Total Health Benefits by Region and per Capita in 2050: Reference

EVOLVED ENERGY RESEARCH

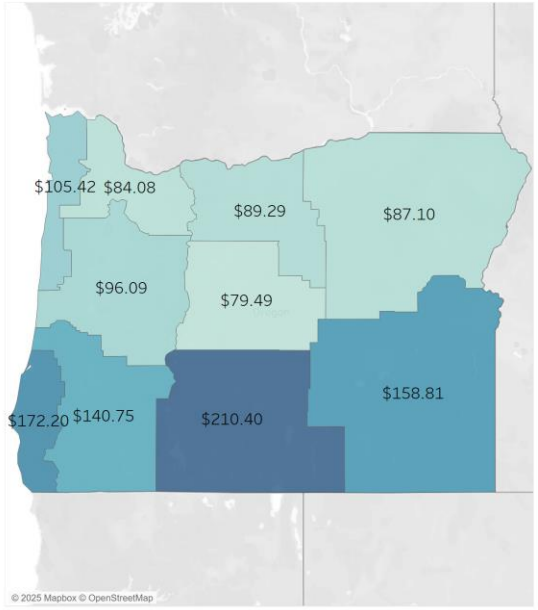
Total Health Benefits 2050 (Low)



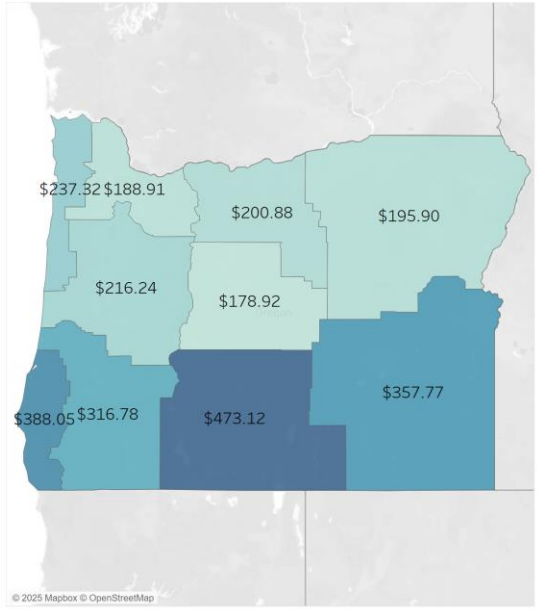
Total Health Benefits 2050 (High)



Total Health Benefits per Capita 2050 (Low)



Total Health Benefits per Capita 2050 (High)



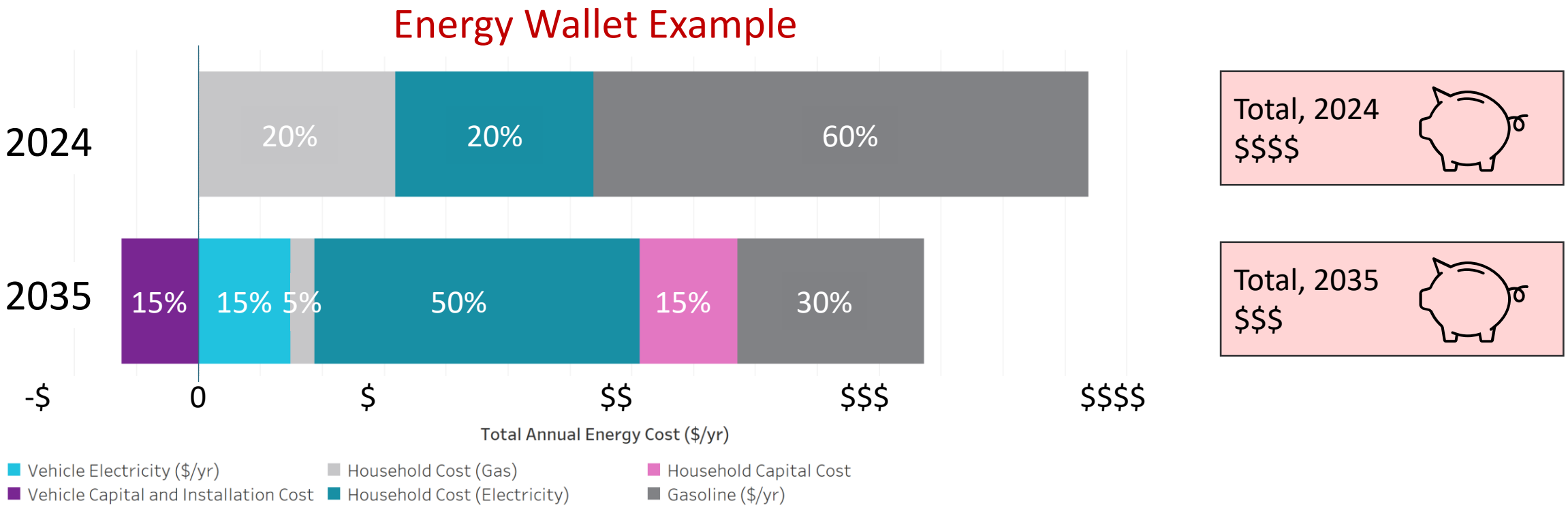
- Distribution of health benefits follows population
- Largest benefits in Portland metropolitan area

- Per capita benefits greater in the southern regions of the state
- Benefits relative to health impacts of particulate matter exposure in 2023

Energy Wallet Illustrates How Technology Adoption Affects Household Energy Costs

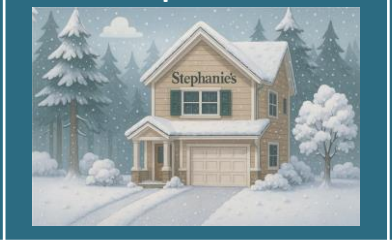
EVOLVED ENERGY RESEARCH

- Example household buys an EV and a heat pump in 2035. This changes their energy consumption and therefore costs. They must also pay the difference between EVs/heat pumps and conventional technologies



Meet the Five Sample Households

EVOLVED ENERGY RESEARCH

Household Characteristic	Jessica's	Stephanie's	Ruchi's	Alan's	Hugh's
					
Building Category	Single Family Detached	Single Family Detached	Single Family Detached	Single Family Manufactured	Multi-family
Region	Urban	Rural Cold Climate	High Priority Area	Rural	Urban
Ownership	Own	Own	Own	Rent	Rent, Below county AMI
Primary Heating Fuel Type	Natural gas	Natural gas	Electricity	Electricity	Electricity
Primary Heating System	Furnace	Furnace	Furnace	Furnace	Baseboard
Primary Cooling System	Central AC	None	Portable AC	Window AC	None
Water Heater Technology	Fossil Fuel Non-Condensing	Fossil Fuel Non-Condensing	Electric Resistance	Electric Resistance	Electric Resistance
Water Heater Fuel	Natural gas	Natural gas	Electricity	Electricity	Electricity
Area (sq ft)	3100	1855	1400	1520	-
Year	2012	2006	2007	1986	1977
Stove/Oven	Natural gas	Natural gas	Electric	Electric	Electric
Occupants	6	4	2	2	2
Vehicles	2 SUVs	2 SUVs	2 SUVs	2 Cars	1 Car

ENERGY WALLET: VEHICLE ELECTRIFICATION KEY FINDINGS

Transportation electrification is the biggest opportunity for energy wallet savings

- Purchasing an electric vehicle saves money in almost all cases
  - Even if electricity costs are $0.40/kWh
  - Customers better off purchasing an EV earlier vs later, starting in 2030, even without IRA tax credit
- Upfront costs must be addressed to ensure equal access to the savings from electrification
  - Many buy used vehicles or stretch the lifetime of older vehicles
- Charging infrastructure is needed to make large scale adoption viable
  - Rate of deployment has been slower than anticipated
- Policies are important to enable access to cost savings
  - Reduce upfront cost, expand access equitably, support infrastructure deployment, promote awareness, workforce development

DRAFT POLICY ACTIONS

VEHICLE ELECTRIFICATION

Reduce barriers to transportation electrification to ensure the state electrifies at the pace and scale needed to meet state goals.

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POLICY ACTION 1

Establish a sustainable source of state funding to support the rapid deployment of charging and fueling infrastructure statewide.

Lack of available MDHD public infrastructure

BUILD THE CHARGERS FIRST!!! The vehicles will come when the tech matures and the costs come down. Focusing funding/permitting streamlining/policy on getting the networks out there will create the greatest benefit.

Create more state-funded ZEV infrastructure opportunities, especially for MHD

Lack of funds for existing (and successful) electrification programs

👍 1

Need more state funding to support infrastructure

👍 1

There is virtually no infrastructure available for commercial ZEV fleets

Only 1 public charging station in all of Oregon for heavy-duty trucks

👍 1

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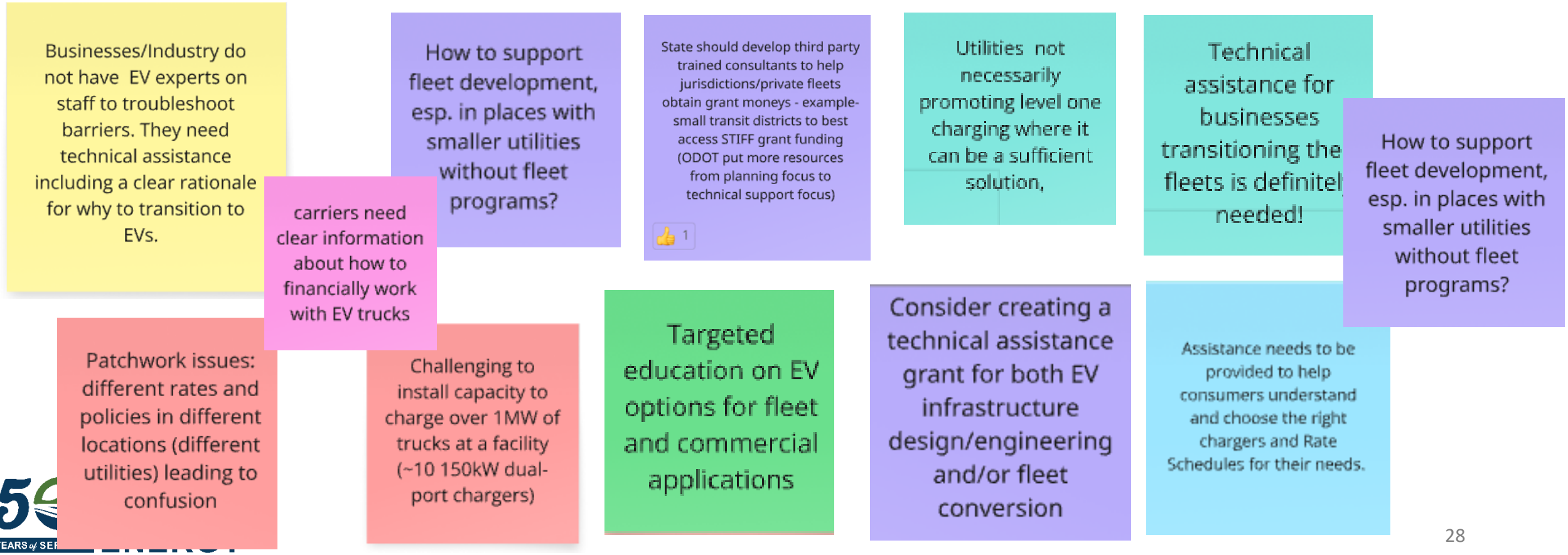
POLICY ACTION 2

Establish a statewide technical assistance program for fleets to support their transition to ZEVs, including development of a fleet transition plan, infrastructure assessment, and electricity rate analysis.



POLICY ACTION 3

Develop a revolving loan fund to provide low- or no-interest loans for public or private fleets and middle-income households to purchase ZEVs and infrastructure.

Upfront cost for Zero emission transit Bus -45% - 50% more expensive

State should offer guaranteed loan program for class 2c and up

ZEV trucks cost 3 times as much as ICE and present opperational inefficiencies

There is very little public money available for subsidizing a transition to ZEV for commercial vehicles

State should address lack of rebates for 2b class - should start a class 2b vehicle share program

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POLICY ACTION 4

Establish a working group of state entities and others to develop regulations and standards for hydrogen refueling infrastructure, including station certification and testing protocols and safety, fuel quality, and consumer protection standards.

Hydrogen permitting and standarization (ex. NFPA 2 has multiple versions being used)

Need to develop regs and standards for H2 fueling infrastructure, including alignment with standards for safety, H2 purity and testing protocols, and operability. Likely need an inter-agency working group to address this with Weights and Measures, ODOE, ODOT, DEQ, etc. (RHA)

Lack of hydrogen fueling infrastructure in Oregon is a barrier for both MDH and light-duty hydrogen fuel cell adoption

POLICY ACTION 5

Complete a MHD ZEV Technology Readiness and Feasibility Assessment to evaluate ZEVs that can be deployed in the near, mid, and long term based on availability, range, payload, and operational capabilities, including a deployment strategy for Oregon policymakers.

Focus strategies on the ZEVs that are available and create incentives or those that are less available

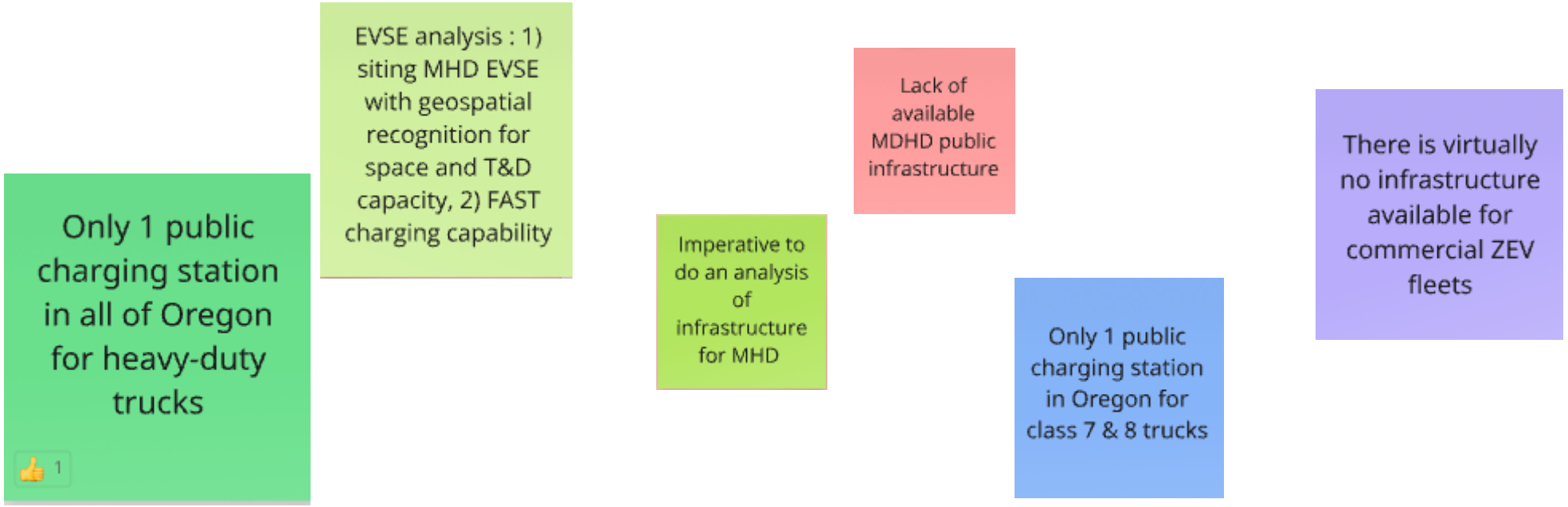
The Oregon market alone cannot drive costs down for ZEV MHD's. Once the vehicles achieve cost parity with ICE, there will be a wholesale shift.Policy should focus on EVSE readiness and availability

ZEV technology is not mature for commercial vehicles and while hydrogen looks feasible there are currently no commercially available calss 8 truckss ababilable in the market

A consistent ZEV technology assessment is needed, as the technology for medium- and heavy-duty (MHD) vehicles is still evolving. Depending on operating characteristics and demand, these vehicles face significant limitations—including restricted range, charging time and infrastructure challenges, reliability and availability concerns, hydrogen supply constraints, emergency planning for thermal events, and limited redundancy in operations.

POLICY ACTION 6

Complete a statewide assessment of MHD charging and fueling infrastructure needs (public and depot) to meet the targets established by Advanced Clean Trucks.



POLICY ACTION 7

Launch a public information campaign to educate consumers and dealers about the benefits of electric vehicles, including grid benefits such as the cost savings potential of participation in managed charging and demand response programs.

Getting consumer buy in for active charge management / and time-of-use programs

Create a state-funded dealership awareness program and/or incentive program for ZEVs

In some parts of Oregon, there may be an issue with a lack of EV knowledge among dealership staff

State should be actively campaigning/selling EVs and fuel efficient vehicles to the public via radio/tv/social media, etc. Educate about benefits and why people should care. Either the State does this themselves or coordinates with partners to do this.

Consider a statewide webpage/education video - potentially similar to how Oregon Friendly Driver program works but with EV information

Many consumers are not aware of existing incentives for EVs and EVSE

More awareness about customer actions to support grid. Incentives from utilities + trusted voices on this topic

There are still a lot of myths and misinformation about vehicle electrification

Need state - ODOEs OCVRP program -- sponsored, developed communications and requirement that dealers post them on electronic spaces and physical spaces

Consumers - hesitant to sign on to corporations controling/commandeering assets the land owner uses or contributes

Perceptions / mistrust around managed load, e.g. fear of not having your vehicle available, data privacy

Need trusted organizations to promote.

There is a huge gap in education and awareness, especially among low-income and BIPOC communities. People need to understand why it benefits them to consider using electric vehicles (including buses, bikes and scooters) and those benefits need to be no brainers such as it is faster, cheaper and more enjoyable. IF

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ACKNOWLEDGE THIS IS NOT EXHAUSTIVE!

We have gotten input on other potential policy actions and welcome further input!

More examples:

Station vandalism is an issue with cords getting cut. Standards should be created and required for EVSE manufacturers to make their stations able to easily replace the cord component when damaged, or to implement solutions that protect the cords such as being retractable.

OR needs to add capacity crediting to CFP for H2, similar to what CA and WA allow for.

Remove requirement that electricians have additional training for federal funds

No one is going to like this, but provide direct funding to the OEM's to design and build the vehicles. Taking $200m off the funding required to develop the trucks will have a cost reduction impact far greater than subsidizing the customer at time of sale.

State should use state and transit fleets to create market for manufacturers

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Introduce interoperability requirements for state funded EV infrastructure projects

Develop a ZEV Action Plan (like Oregon's 2021 ZEV Action Plan — now ready for an update with clearer accountability).

From EJ & Equity group:

adding educational content re: the impacts of pollution, electrification, etc in school curriculum?

EV incentive programs specifically for small businesses w/ high VMT - ex contractors

Greater access to low-cost fast charging at gov or other buildings for good network so no concern about range anxiety.

PLAN FOR SOLICITING GROUP INPUT

- We have ~40 min for activities and discussion.
- First, we will do a **"Fist to Five" exercise** using a Menti poll on the potential policy actions for Vehicle Electrification.
  - To gauge interest in discussion of those vs. additional or alternative ideas.
- Next, we'll **focus discussion** based on results of the Fist to Five
- Last, we will move to Miro for a 5 min **Impact vs. Effort Matrix exercise**
- *We welcome written comments as well!*

MENTI POLL: FIST TO FIVE

For each item, working group members will be asked to indicate

- 0: This idea does not work for me, and we should discuss
- 1: I see MAJOR issues with this idea, and we should discuss
- 2: I see MINOR issues with this idea, and we should discuss
- 3: I see minor issues we can address in written comments
- 4: I do not have any concerns that I want to discuss today
- 5: I like this idea as drafted

We will prioritize discussion on any item that receives one or more of these scores (0, 1, 2).

Go to

www.menti.com

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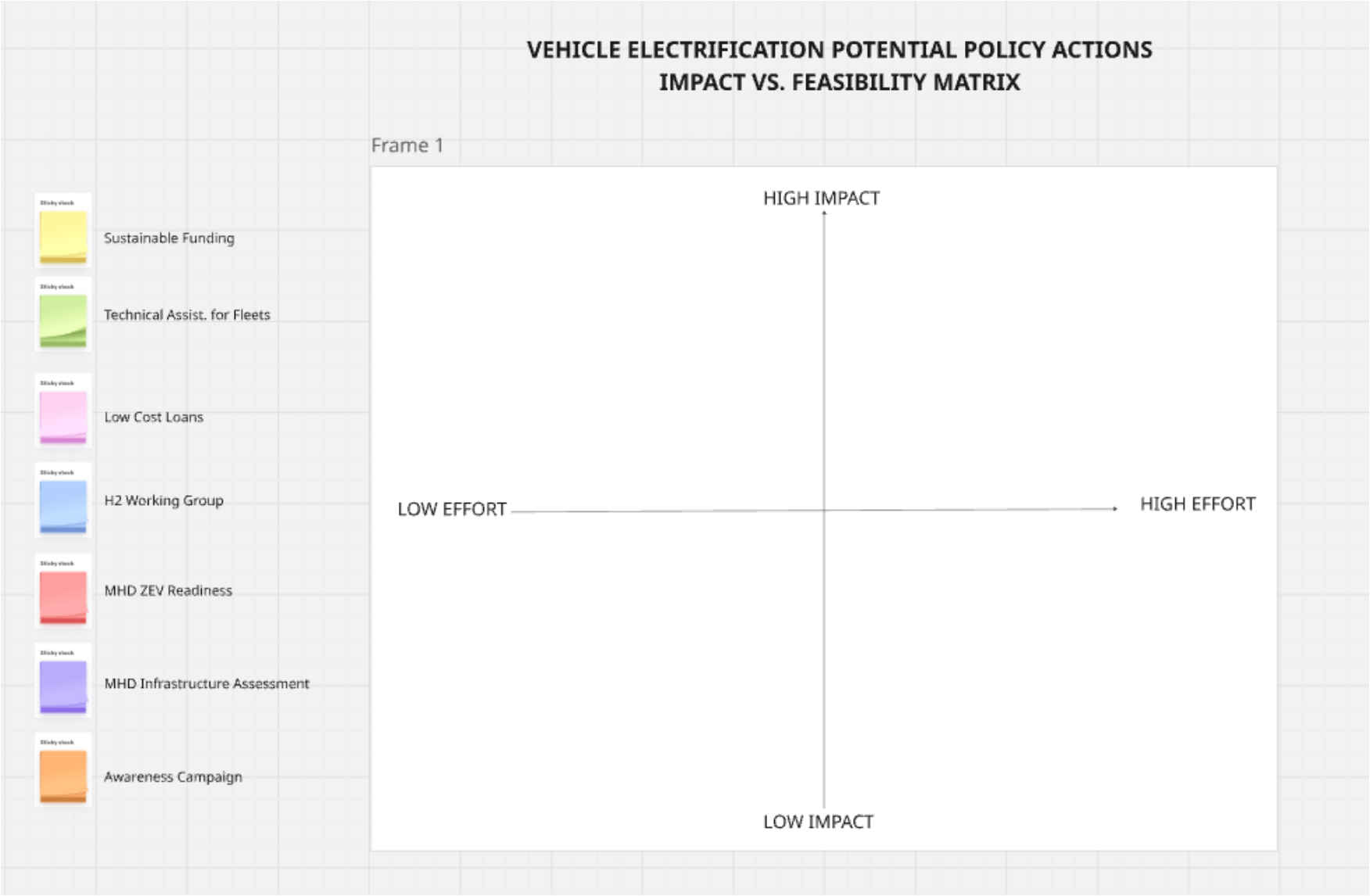
TODAY'S 5 MIN MIRO EXERCISE



5 MIN BREAK

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GRID INTEGRATION

Implement streamlined procedures for distribution system upgrades and EV charging infrastructure interconnection and prioritize the management of EVs as flexible loads to reduce delays, mitigate the potential impacts of increased EV adoption, and enhance grid efficiency.

POLICY ACTION 8

Require IOUs to publish and maintain interactive, circuit-level Hosting Capacity Maps (HCMs) showing available capacity for EV charging infrastructure, building electrification, distributed generation, and battery storage. OPUC should establish uniform standards for data formats and granularity, visualizations tools, and public access protocols.

Lack of utility capacity for interconnection at scale

Limited resources to have a proactive approach to capacity mapping for response to new load inquiries

Add Chargers to areas with excess capacity by coordinating with utilities

we need a real-time EV Hosting capacity GIS system to identify placements for chargers

POLICY ACTION 9

Open an investigation into how electric utilities can best engage in proactive planning and investment in anticipation of load growth.

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POLICY ACTION 10

Provide technical assistance to help publicly owned utilities assess load growth, DER, conservation, and demand response potential and determine hosting capacity, distribution system needs, and strategies for handling load growth.

Outside of Portland IOUs and select COU/PUD, lack of expertise in TE-related project interconnection proposals

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Utilities need to complete service territory-specific demand response and electrification potential assessments to understand the value of load management and timelines for programs to be implemented that provide a clear price signal for customers to participate and for the utility to implement.

Not all utilities are able to implement TOU rates (especially smaller ones)

👍 1

Lack of EV-specific rates outside of IOUs

Smaller utilities could use additional resources to help customers electrify

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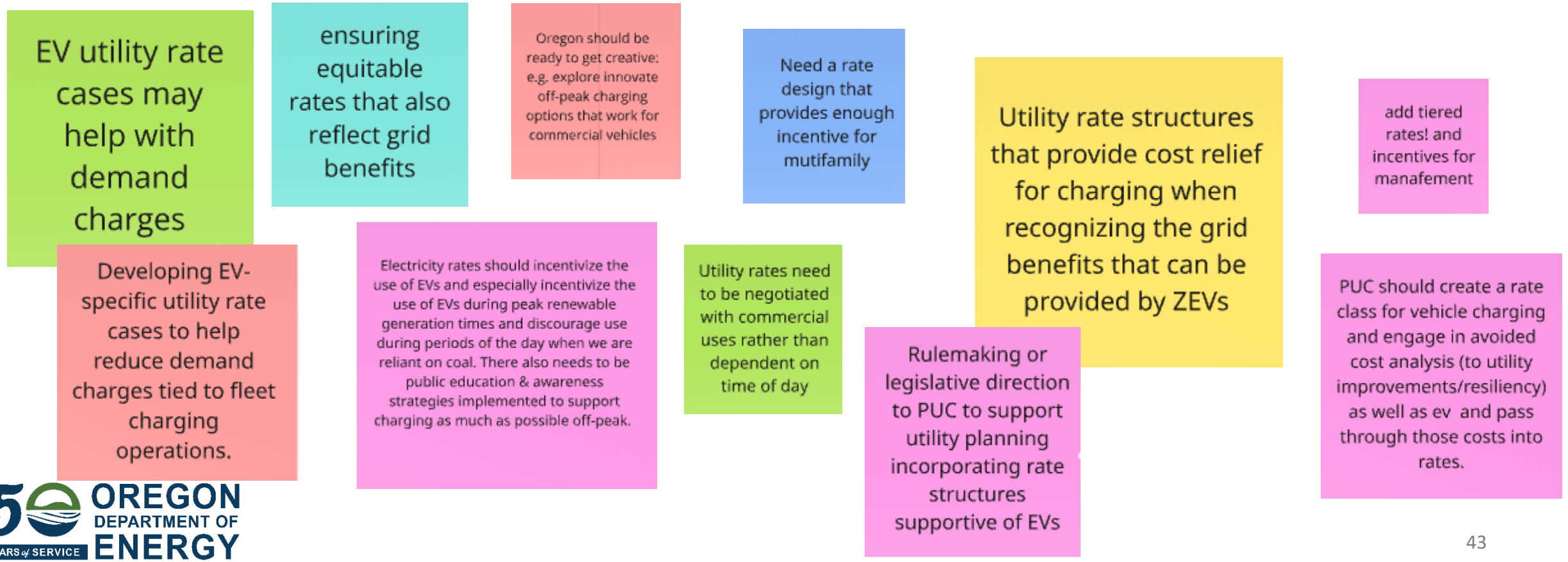
POLICY ACTION 11

Require IOUs to develop EV-specific rates for residential and commercial customers that better align the cost of EV charging with grid conditions. Commercial rates should be designed to reduce or replace traditional demand charges.



POLICY ACTION 12

Establish average and maximum energization timelines for connecting new or upgraded electrical services, ensuring timely access to electricity for EV charging and clean energy projects.

Utility upgrades required for site electrification and supply for hydrogen limited in northwest

Utility upgrades required at each Transit site - not enough capacity and requires significant cost to upgrade

Competing grid priorities from, e.g., incoming data centers influencing grid and transmission needs

utilities grid planning processes are not set up for increase of demand growth

Small utility projects take at least 3-6 months to complete in the best of circumstances but they can take a year or more in other circumstance. Large utility projects can take 2 to 3 years, depending on the utility's schedule.

1

interconnection duration of DCFC service request too long

Energization targets for New TE infrastructure to expedite delivery of charging and system improvements needed to support

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POLICY ACTION 13

Complete a comprehensive review of charge management systems and their integration.

Need for power electronics to interface bn consumers and grid (TOU pricing or day-ahead pricing) with goal of charge mgmt

lack of interoperability from DERMS to EVs

load management technology/ on-site controllers still relatively nascent

Charger Control limited and expensive

analysis to optimize charging management to correspond with supply constraints, costs, and emissions

Charge management system in early development - requires integration with existing systems to optimize charges sessions - ex. scheduling software, vehicle/charger telematics & utility rate case

EV grid integration and Home Energy storage grid integration should be complementary / similar policies

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ACKNOWLEDGE THIS IS NOT EXHAUSTIVE!

We have gotten input on other potential policy actions and welcome further input!

More examples:

PUC should open an investigation into the load management issues.

BPA EE program needs to prioritize EV infrastructure

PUC should adopt rules to require more non-utility owned (get the IOU ROI drag out of the process) distributed resources and provide financing guarantees for projects;

Jurisdictions/state should develop electricity source (micro grid) for fleets to reduce load pressure

State subsidies for BESS and Stationary. Or Utility subsidies for BESS/Stationary. Could be coupled with requirements for TOU enrollment with networked equipment

Explore opportunities to utilize and build out and scale level one charging infrastructure for light duty vehicles. This is a cheaper more efficient use and most people do not travel enough per day to need level 2 charging. Education and awareness campaigns should support this effort.

Studies on load management in winter-peaking areas. much of the work on load management, rate structures etc. is for areas with summer peaking electricity demand. More work looking at how these work in winter peaking months would help better inform work.

Direct clean fuels $$ to rural areas

From EJ & Equity group:

investment in transmission upgrades allowing for more energy reliability in rural communities

EV charging stations coupled with transmission upgrades?

promote upskilling for existing workforce in electrical work.

Agree with the above sticky note about multifamily charging. this should be a retail rates, as that is what single family home residents can access.

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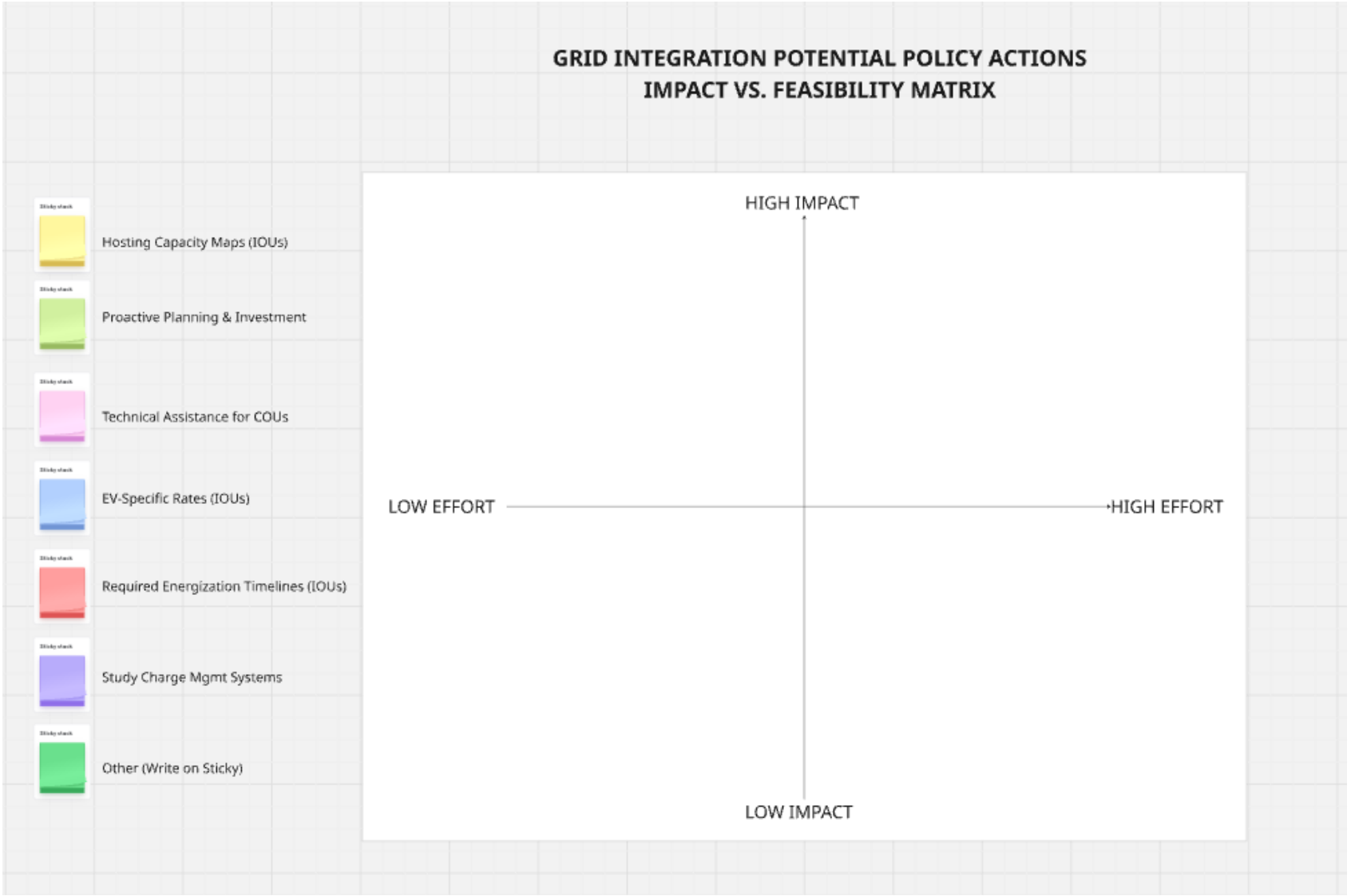
TODAY'S 5 MIN MIRO EXERCISE



VMT REDUCTION

Prioritize policies and allocate funding to programs that expand access to multimodal transportation options – including public transit, biking, and walking infrastructure – and promote development patterns that make it easier and more appealing for people to live, work, and access services without relying on a personal vehicle.

POLICY ACTION 14

Study true cost pricing strategies to better align Oregon's transportation funding mechanisms with state climate goals and the full societal cost of transportation system use.

The current transportation funding model does not incentivize driving efficient vehicles. If we want people and the market to move towards EVs we need to embed that value in our transportation system funding model. This is not rocket science. Vehicles should be charged per mile driven based on a formula of weight and efficiency. Meaning that lighter and more efficient vehicles that cause the least amount of harm should pay the least and vehicles that are heavy and cause more wear and tear on the roads and more environmental harm should pay more. •Road Usage Charge (RUC) formula: weight + efficiency = per mile fee. This should apply to every vehicle, not just the most fuel efficinet vehicles.

👍 1

A thoughtful Road User Charge could do a lot to reduce VMT, reward efficiency, and provide incentives.

road funding comes from fuel taxes and WM taxes and is dependent on usage - other modes do not contribute sufficiently to support additional funding when road maintenance ifunding sn't adeqquate - would require general fund dollars

We currently do not have a sustainable (fossil-fuel free would be ideal) funding model to support our transportation system. Therefore we can not invest in what we need to invest in to support reducing VMT.

Long term alignment of EV adoption goals and RUC that scales revenues more directly with VMT

Funding models for alternative transportation measures need to be divorced from vehicle funding sources. Gas taxes, registration fees, weigh/miles for commercial, etc. are already spread too thin and are desperately needed for the existing roadways that promote economic growth. This is also an Oregon Constitutional matter.

Long shot: consider revisions to Oregon's consitutional requirement for proportionality of road use and funding for maintenance

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POLICY ACTION 15

Increase funding for Oregon's Safe Routes to School and Great Streets programs through increased allocations from the State Highway Fund.

Improve safety for non-driving modes.

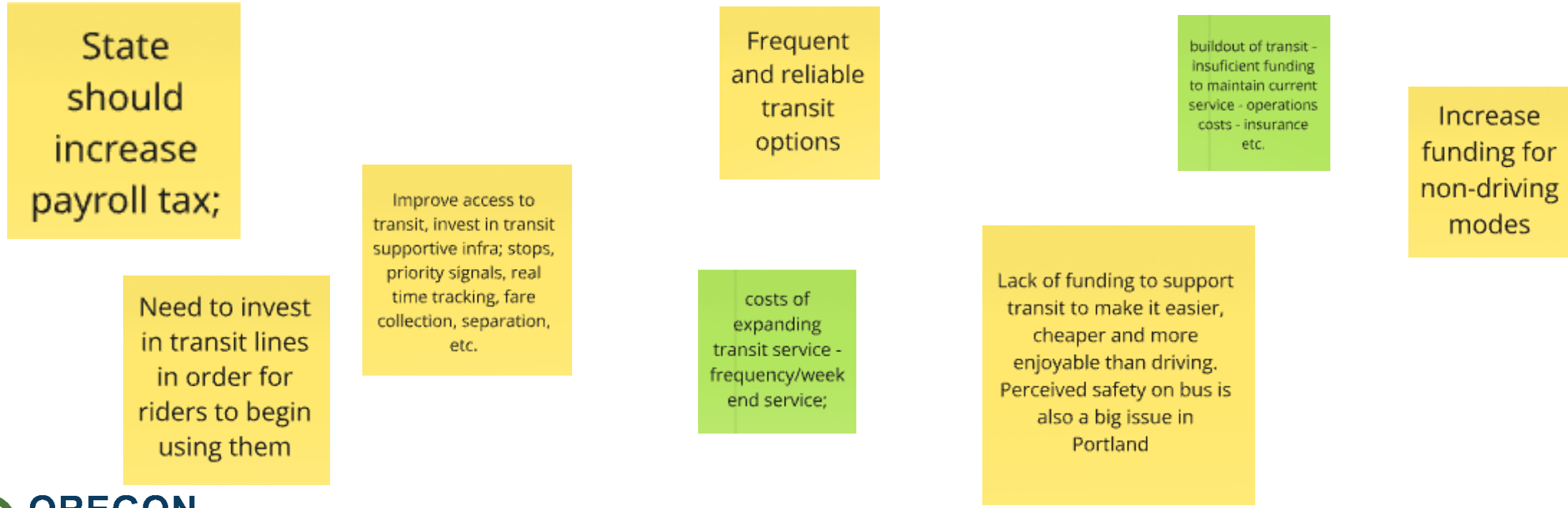
Increase funding for non-driving modes

Perceptions & safety concerns associated with alternative transportation (bikes, transit, walking)

Transit resources are not available in many areas, especially distant rural ones

POLICY ACTION 16

Increase the Statewide Transit Tax commensurate with need to support additional transit funding.



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POLICY ACTION 17

Develop a revolving loan program to provide low- or no-interest loans for the development of housing, or infrastructure that supports housing, in Climate Friendly Areas, close to higher density transit, or areas designated for residential in-fill.

Missing middle housing is coming rapidly online from HB 2001, but it takes time for infill to happen

Gentrification and suburbanization trends impacting density and access to multimodal transportation options

Supportive Land Use for reduced trip distances

Support mixed use development in urban areas

Is there an opportunity to leverage state funding to promote affordable housing development in close proximity to transit. Perhaps proximity to transit could be a criteria for how funding is prioritized. TOD style affordable housing could be helpful

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POLICY ACTION 18

Establish a statewide e-bike incentive that includes prioritization of and higher incentive levels for income-qualifying Oregonians.

Costs of electric bikes and education around their use

first and last mile mobility to get to transit

Electric micromobility devices like e-bikes and e-scooters are a huge opportunity for VMT reduction. Reaching many new riders who historically haven't biked

E bike and scooters in rural areas could be supported in small towns

Consider statewide e-bike incentive or bike purchase incentive for low income residents

increasing e-bike subsidies especially for income-qualifying Oregonians

POLICY ACTION 19

Amend ORS 267 to grant Transportation Districts the same tax authority as Mass Transit Districts, specifically the ability to enact or increase payroll/self-employment taxes within specified limits by board ordinance rather than through voter approval.

Lack of funding to support transit to make it easier, cheaper and more enjoyable than driving. Perceived safety on bus is also a big issue in Portland

Transit resources are not available in many areas, especially distant rural ones

1

state should allow districts to utilize other funding tools by ordinance not ballot measure

buildout of transit - insuficient funding to maintain current service - operations costs - insurance etc.

POLICY ACTION 20

Create a statewide safety framework for public transit that includes standards for community-based unarmed personnel, data reporting, safe infrastructure, and safety in design.

Perceptions & safety concerns associated with alternative transportation (bikes, transit, walking)

Improve safety for non-driving modes.

Low ridership inhibits more people from riding and feeling safe on transit. It's the chicken and the egg problem. Less people want to ride if few people are riding and it becomes a cycle.

Transit needs to invest in ridership safety to encourage participation

VMT transition to Public Transit will NOT occur until members of the public feel safe. Zero tolerance policies, proactive enforcement during times of high use, increased safety and security park and ride.

Transit needs to be more affordable, enjoyable, efficient and reliable than SOVs. If this happens, people will make the easy choice to switch to transit.

ACKNOWLEDGE THIS IS NOT EXHAUSTIVE!

We have gotten input on other potential policy actions and welcome further input!

More examples:

Create better accessibility for pets and equipment (e.g. bikes, skis) on transit

On the subject of speed reduction - MassDOT did an interesting data project with Kittelson to evaluate speed limits on a (I believe) statewide level and recommend roadways for speed limit reduction. They also have a very context based speed limit setting methodology. They were able to map their contexts and pair it with cell/connected vehicle data to do this. A larger scale GIS analysis like this could help given limited staff time to put into the speed zone investigations

Harsher penalties when drivers hit ped/bk

State should develop and provide technical services to enable jurisdictions to use limited improvement districts

More regional and interregional active transportation facilities?

1

Better access to affordable, clean car sharing. See HourCar in Minnesota as an example. E.g. they have vehicles that come with free passes to state parks

State assistance starting and expanding automated enforcement programs. The legislative changes have been great, but police staff time and court staff time continue to be barriers to implementation

From EJ & Equity group:

In rural areas, consider the needs of different groups (e.g. farmworking communities often organize own carpools due to hours for picking - how could investments/programs/transit support these group's needs?)

grants for public transit extension to un-serviced areas (done w/community input)

invest in rural bike infrastructure + safety

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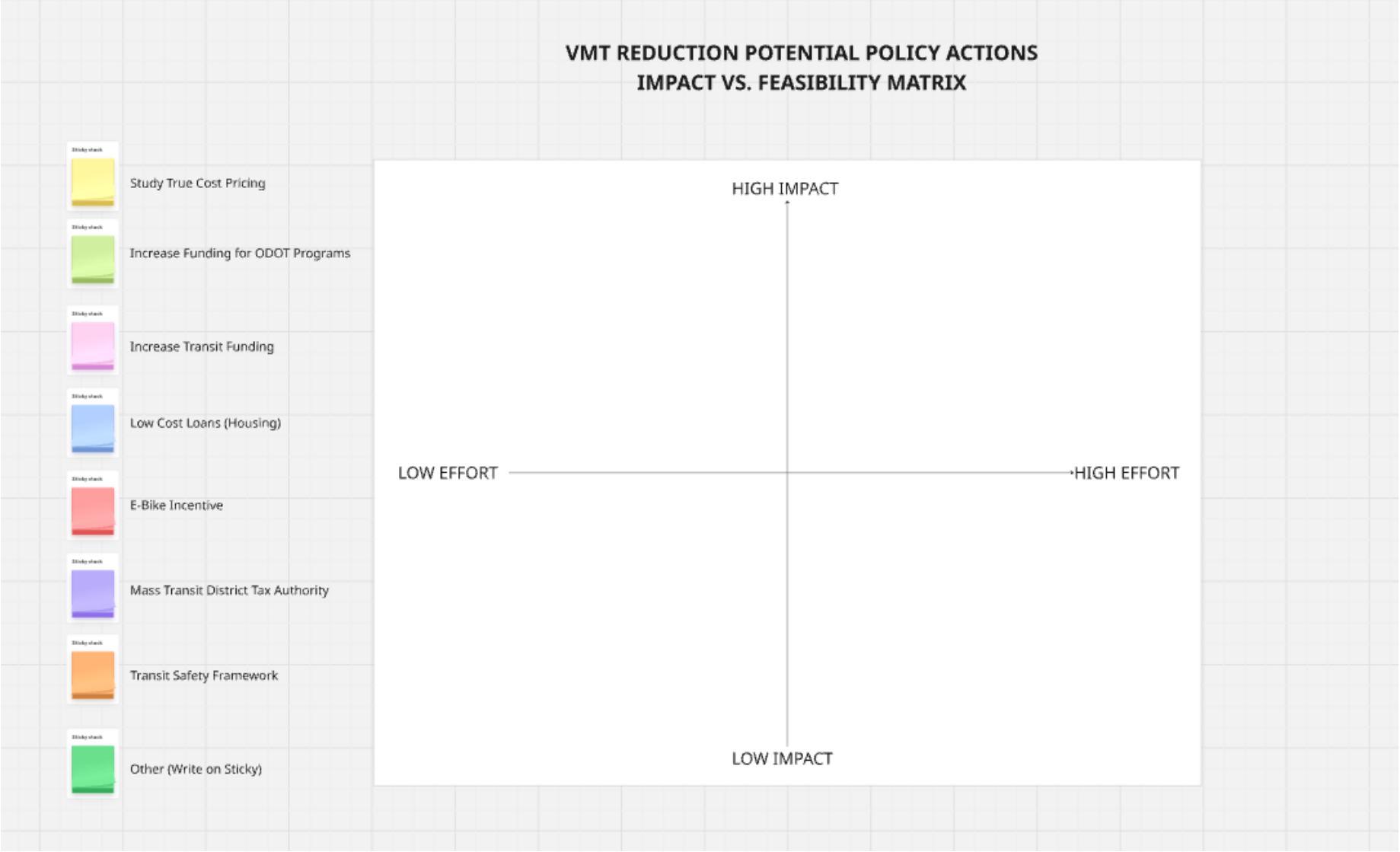


NEXT STEPS

NEXT MEETING

Transportation Electrification Policy Working Group

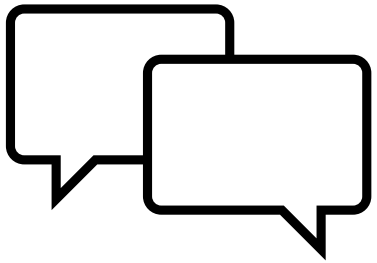
- May 21, 2025 | 9 a.m. - 12 p.m.
  - Final Plenary Meeting
  - Report Out from all Working Groups

MAY 9, 2025 | 5 P.M.

Deadline for additional comments related to today's meeting

- What additional suggestions (if any) do you have on the policy actions discussed today?
- What policy actions were NOT discussed today that should be surfaced in our list?
- What benefits or risks exist for policy action (or inaction) on the following areas: cost, feasibility, energy burden, environment justice, land use and natural resources, resilience, community benefits, economic effects, and employment?
- If any, what additional suggestions to those action or additional policy actions would you suggest to mitigate risks or leverage benefits?
- Do you have any supplemental information (reports, analysis, testimonials, etc.) related to these policy actions that you could share?

COMMENT PORTAL



Provide written public comment

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

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Thank You!
https://www.oregon.gov/energy/Data-and-Reports/Pages/Energy-Strategy.aspx

Vehicle Electrification	• Establish a sustainable source of state funding to support the rapid deployment of charging and fueling infrastructure statewide. • Establish and fund a statewide technical assistance program for public and private fleets to support their transition to zero emission vehicles, including development of a fleet transition plan, an infrastructure assessment, and an electricity rate analysis. • Develop a revolving loan fund to provide low- or no-interest loans for public and private fleets and middle-income households to purchase ZEVs and infrastructure. • Establish a working group of state entities and others to develop regulations and standards for hydrogen refueling infrastructure, including station certification and testing protocols as well as safety, fuel quality, and consumer protection standards. • Complete a MHD ZEV Technology Readiness and Feasibility Assessment to evaluate ZEVs that can be deployed in the near, mid, and long term based on cost, availability, range, payload, and operational capabilities, including a deployment strategy with a MHD ZEV roadmap for Oregon policymakers. • Complete a statewide assessment of MHD charging and fueling infrastructure needs (public and depot) to meet the targets established by Advance Clean Trucks. • Launch a public information campaign (including an updated webpage, educational video, and radio, TV and social media spots) to educate consumers and dealers about the benefits of EVs, including grid benefits such as potential cost-savings from participation in demand response programs.
Grid Integration / Cross-Cutting	• Require IOUs to publish and maintain interactive, circuit-level Hosting Capacity Maps (HCMs) showing available capacity for EV charging infrastructure, building electrification, distributed generation, and battery storage. The state should establish uniform standards for data formats and granularity, visualizations tools, and public access protocols. • Open an investigation into how electric utilities can best engage in proactive planning and investment in anticipation of load growth (i.e., prior to load materializing) while minimizing the risk to ratepayers. • Provide technical assistance to help publicly owned utilities assess the load growth, DER, conservation, and demand response potential in their service territory and determine hosting capacity, distribution system needs, and strategies for handling load increases. • Require IOUs to develop EV-specific rates for residential and commercial customers that better align the cost of EV charging with grid conditions. Commercial rates should be designed to reduce or replace traditional demand charges. • Establish avg. and max. energization timelines for connecting new or upgraded electrical services, ensuring timely access to electricity for EV charging and clean energy projects. • Complete a comprehensive review of charge management systems and their integration.
VMT Reduction	• Study true cost pricing strategies to better align OR's transportation funding mechanisms with state climate goals and the full societal cost of transportation system use. • Increase funding for Oregon's Safe Routes to School and Great Streets programs commensurate with need through increased allocations from the State Highway Fund. • Increase the Statewide Transit Tax commensurate with need to support additional transit funding. • Establish a revolving loan program to provide low- or no-interest loans for the development of housing, or infrastructure projects that supports the development of housing, in Climate Friendly Areas, close to higher density transit, or areas designated for residential in-fill, with preference given to affordable housing projects. • Establish a statewide e-bike incentive that includes prioritization of and higher incentive levels for income-qualifying Oregonians. • Amend ORS 267 to grant Transportation Districts the same tax authority as Mass Transit Districts, specifically the ability to enact or increase payroll/self-employment taxes within specified limits by board ordinance rather than through voter approval. • Create a statewide safety framework for public transit that includes standards for community-based unarmed personnel, data reporting, infrastructure, and safety in design.

SAMPLE POLICY: SUSTAINABLE FUNDING

- Low-cost loans
  - CA's Clean Vehicle Assistance Program – financing for low-income families to purchase or lease or Zero-Emission Truck Loan Pilot Project – financing for heavy-duty ZEVs and infrastructure
  - CT's Green Bank Smart E-Loans – Commercial property assessed clean energy (C-PACE) financing for EV charging infrastructure
- Earmarking taxes
- Riders (%) on electricity sales
- Retail Delivery or Ride-hailing Fee
  - CO's SB 21-260 imposed fee on delivery vehicles and Uber/Lyft trips
- Fee-bate programs
  - Revenue-neutral policy tool combining fees and rebates to encourage environmentally friendly behavior
  - E.g., a program that levied fees on high-emission vehicles and offered rebates to low-emission vehicles
  - No state has fully enacted

SAMPLE POLICY: FLEET TECHNICAL ASSISTANCE

- Mass Fleet Advisor
- Cal Fleet Advisor
- NJ Fleet Advisor

- Provide personalized technical expertise to help fleet managers understand and plan for deployment of ZEVs and infrastructure
- All programs offered at no financial cost to fleets
- All programs run by third party

SAMPLE POLICY: HOSTING CAPACITY MAPS

- Provide greater transparency into ability of a distribution grid to host additional distributed energy resources, including EV charging
- Can help identify where DERs can alleviate or aggravate grid constraints
- Used by many stakeholders for better planning and siting
- See Hosting Capacity Maps for EV Charging by Atlas Public Policy (December 2024)
- See U.S. Atlas of Electric Distribution System Hosting Capacity Maps
- CA ICA maps

SAMPLE POLICY: EV-SPECIFIC RATES

- Often go beyond standard time-of-use rates and incentivize low-cost charging windows beyond just off-peak hours
  - Peak, Off-peak, Super-Off-Peak
- Commercial rates often designed to reduce or eliminate demand charges
  - Subscription Model – fleets pay a flat monthly fee per kW of charging, providing certainty and avoiding the surprise of demand charges
  - Demand charge holidays – phasing demand charges in over time (e.g., PG&E's Business EV rate has no demand charges through 2025)
- Supports Vehicle-to-grid and Smart charging
  - Many EV-specific rates require separate meter, which better enables vehicle-to-grid (V2G) technology

Example: See CPUC's "Electric Rates for EV Drivers"

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SAMPLE POLICY: PROACTIVE PLANNING AND INVESTMENT

- Goal is to ensure transmission and distribution grid is capable of handling electrification-driven demand growth
- May establish a framework for to preauthorize cost recovery for T&D upgrades before demand has materialized
- May allow “no regrets” investments if there is credible evidence that load is coming
- Steps should be taken to protect ratepayers from stranded assets or overbuilding
- See NY Public Service Commission’s Case 24-E-0364

ENERGIZATION TIMELINES

- Meant to speed up connecting new or upgrade electrical services
- Establish timelines for energization tasks for investor-owned utilities
- Some policies initiate data collection to inform future energization timelines
- See CA SB 410 (2023) and CO SB 24-218 (2024)

SAMPLE POLICY: TRUE COST PRICING

- No state has a fully comprehensive true cost pricing system
- Many states have adopted elements of true cost pricing, such as:
  - Congestion pricing – charging drivers more to use roads during peak times
  - Carbon pricing or fuel taxes – reflecting environmental impact of pollution
  - Road usage charge / VMT fee – charging drivers based on how much they drive
  - Toll roads with dynamic pricing – changing fees based on demand, time of day, or vehicle type
- See ODOT's Statewide Transportation Strategy

SAMPLE POLICY: E-BIKE REBATE

See TREC's E-Bike Incentive Program Tracker, which tracks e-bike purchase incentive programs in North America and details key elements of policy design

Examples:

- California– up to $1,000 for regular e-bike, $1,750 for cargo e-bike
- Washington – up to $300; $1,200 for income-qualified
- Colorado - $450 toward qualifying e-bike; $1,100 for income-qualified
- Connecticut – up to $500; $1,500 for income-qualified
- Minnesota – up to $1,500 toward qualifying e-bike