

Oregon Department of **ENERGY**

Oregon Energy Strategy Complementary Analyses

April 16, 2025





OREGON DEPARTMENT OF ENERGY

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

Our Mission

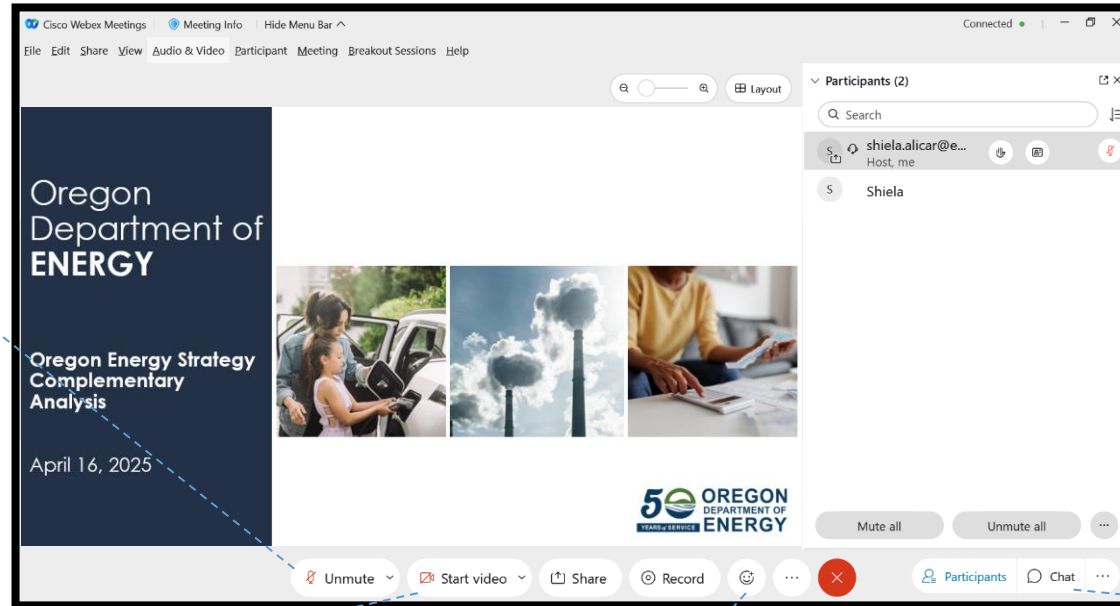
The Oregon Department of Energy helps Oregonians make informed decisions and maintain a resilient and affordable energy system. We advance solutions to shape an equitable clean energy transition, protect the environment and public health, and responsibly balance energy needs and impacts for current and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



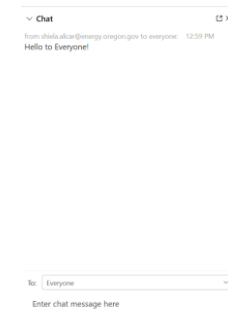
Audio Options

-  Mute *Microphone On*
-  Unmute *Microphone Off*

Video Options

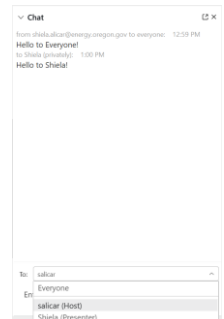
-  Stop video *Webcam On*
-  Start video *Webcam Off*

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).



UNDERSTANDING AND BUILDING ON THE ENERGY PATHWAYS MODELING RESULTS

Energy Pathways Modeling Results

Model calculates energy needed to power Oregon's economy, and least-cost way to provide that energy under clean electricity and emissions goals.

Air Quality

Model calculates how changes in air quality affect health outcomes and estimates economic value of those benefits

Energy Wallet

Changes in energy spending for different sample households, impact of timing of investing in efficient, electric technologies

Jobs Analysis

Evaluation of the effects of the pathways analysis on direct, indirect, and induced energy sector employment

Geospatial Mapping

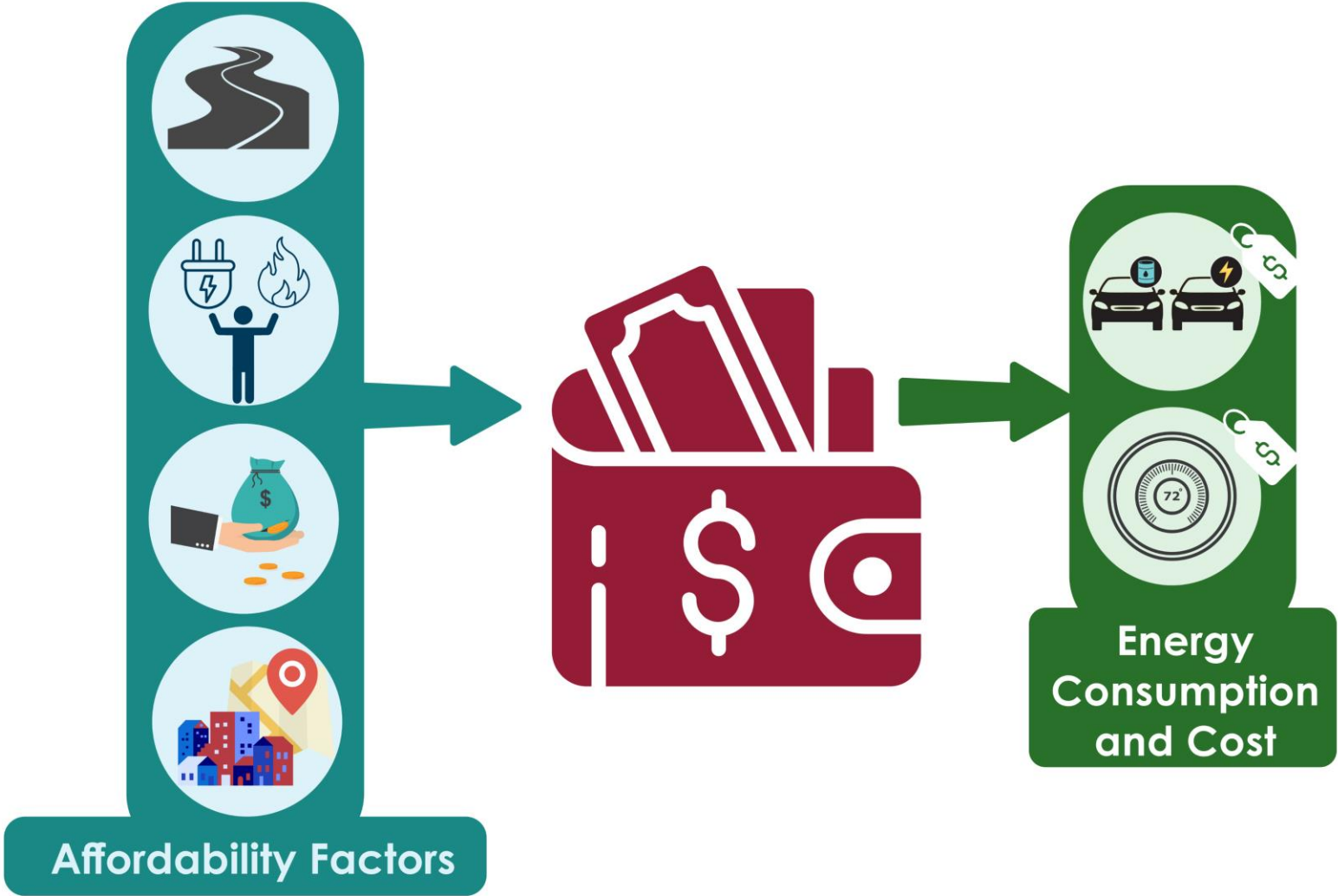
Maps explore community-level energy inequities and relationship to socioeconomic disparities – to help interpret energy modeling results, energy wallet analysis, air quality modeling, and employment effects

AIR QUALITY MODELING

- Serves to understand effects of changes in energy mix on air quality-related public health, which our model is not built to quantify
- Applies our model results to the US Environmental Protection Agency's COBRA model (Co-Benefits Risk Assessment)
- Measures effects on harmful pollutants from energy-related activities, including transportation emissions and emissions from electricity generation
- Does not measure effects from wildfire smoke or changes in indoor air quality
- Engagement with working groups informed geographies for analysis



ENERGY WALLET



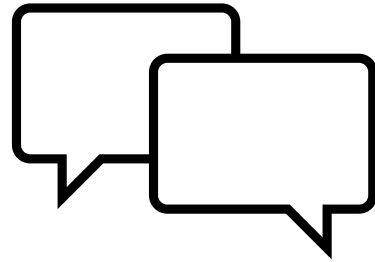
PURPOSE OF THE ENERGY WALLET

- The model gives us a sense of the least-cost economy-wide pathways to decarbonize.
- Electrification of vehicles and buildings are key elements of a least-cost pathway, but model does not provide insights to inform potential costs, benefits, and barriers at household level.
- Serves to bridge the gap between economy-wide insights to household-level insights by answering questions such as:
 - How might household bills change with changes in technology?
 - How does this compare to keeping technologies consistent?
 - Does the year of adoption matter?
 - Is there a difference between different household characteristics?
 - How does the cost of electricity and natural gas affect cost of technology change?
- Focus on biggest household loads: cars and space heating/cooling

WHAT THE ENERGY WALLET IS NOT

- Does not represent any specific home. Rather, is based on public comments and review of household profiles to come up with five realistic sample homes.
- Does not represent any particular utility service territory or rate structure. Sensitivity range provides a view of the implications of lower or higher electricity rates.
- Does not represent all potential shifts that may increase/decrease the upfront and operating costs of different technologies.
- Does not take into account differences in local distribution system costs resulting from technology change (analysis is subject to all constraints and limitations of energy pathways modeling).

OPPORTUNITIES FOR PUBLIC COMMENT



Provide written public comment

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

Thank You!

www.oregon.gov/energy/Data-and-Reports/Pages/Energy-Strategy.aspx