Oregon Department of **ENERGY**

Oregon Energy Strategy
December 17, 2025

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50 YEARS of SERVICE
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Leading Oregon to a safe, equitable, clean, and sustainable energy future.

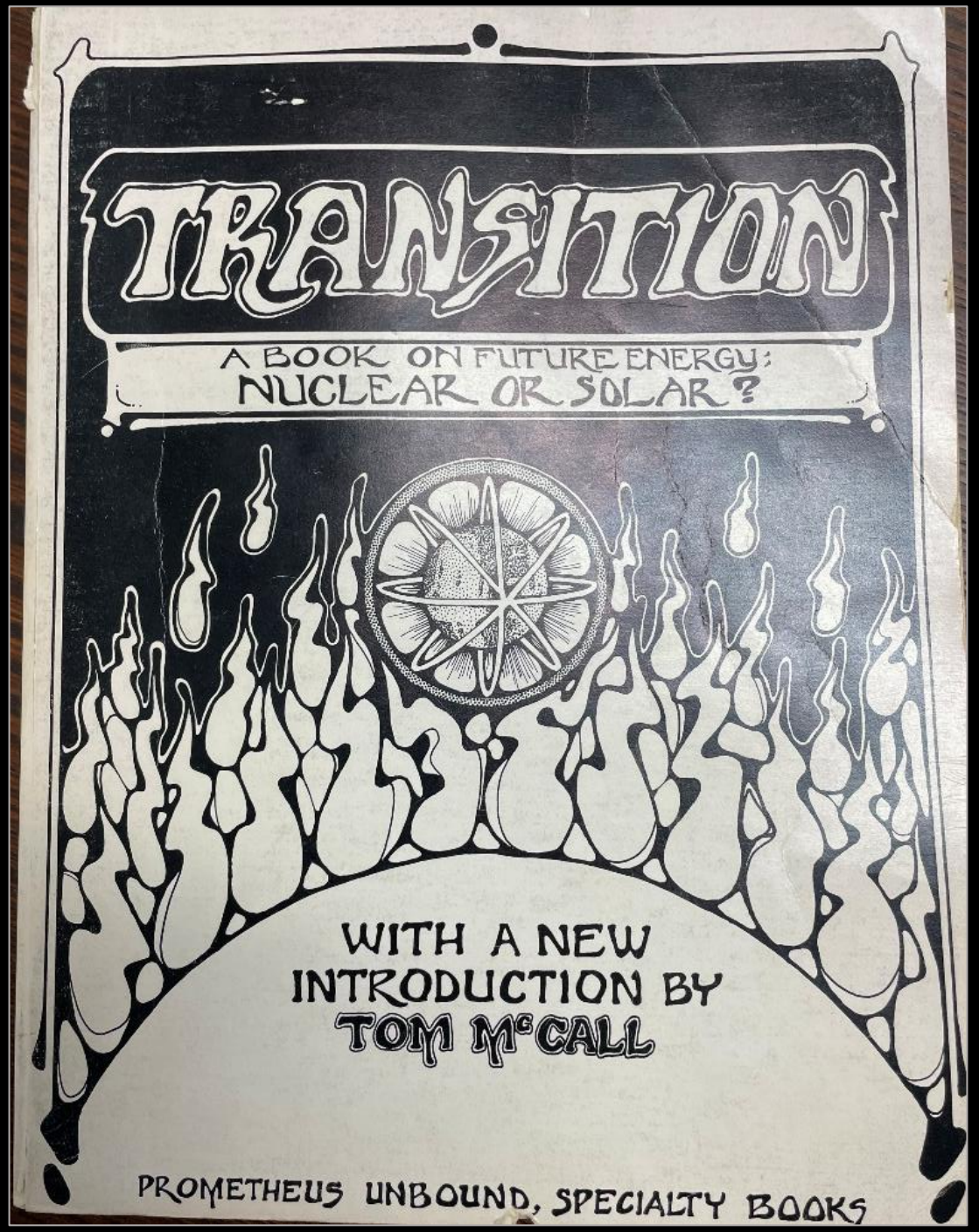
Our Mission

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


TRANSITION
A BOOK ON FUTURE ENERGY:
NUCLEAR OR SOLAR?
WITH A NEW
INTRODUCTION BY
TOM McCALL
PROMETHEUS UNBOUND, SPECIALTY BOOKS

Agenda

1. The context
2. The strategy
3. Implementation

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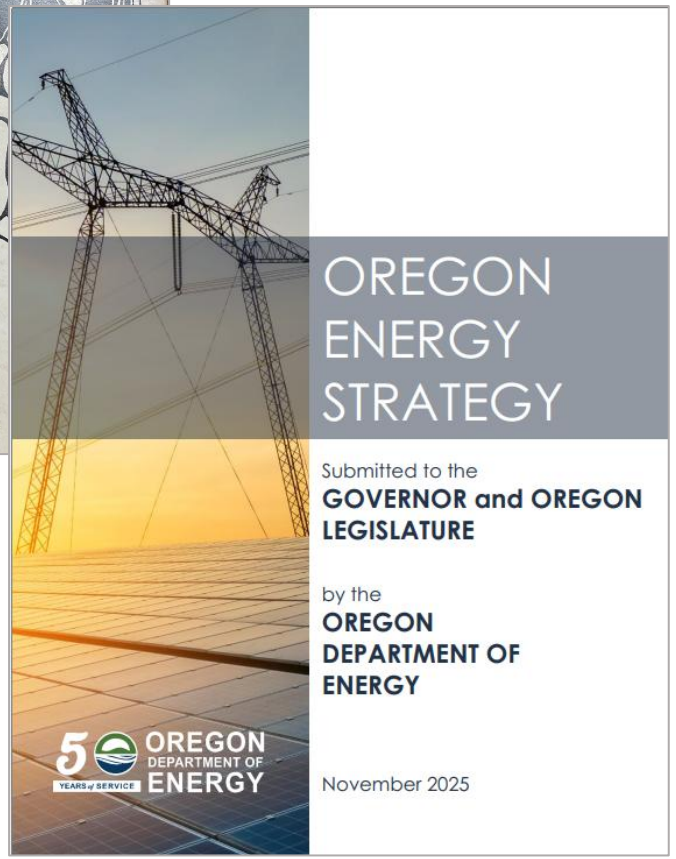

2025

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LIVE MENTI POLL #1

What is the significance of energy to you?

- Directly work on energy-related issues.
- Some of my work relates to energy indirectly.
- Read about energy issues in the news and am interested.
- I’m just glad the lights are on!

LIVE MENTI POLL #2

What areas are you most interested in or focused on?

- Electricity
- Fuels
- Transportation
- Households
- Economic development
- Affordability
- Environmental issues
- Other

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LEGISLATIVE GUIDANCE – HB 3630

Develop a comprehensive, economy-wide, and statewide energy strategy that:

- Identifies pathways to achieve the state's energy policy objectives
- Recommends legislation or changes to policy
- Is developed through robust engagement

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Why an Energy Strategy?

- Diverse policy landscape
- Demand growth driving historical investment cycle
- Growing risk from wildfires and extreme weather
- Capturing opportunity of new technologies

An energy strategy can help:

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

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MODELING THE ENERGY SYSTEM

- Economywide model comprising electricity, transportation fuels, and direct use fuels sectors.
- Created a least-cost portfolio of energy resources to achieve objectives and goals.
- Generated scenarios (pathways) based on different assumptions.
- Produced insights into the interactions between sectors and tradeoffs of different pathways.

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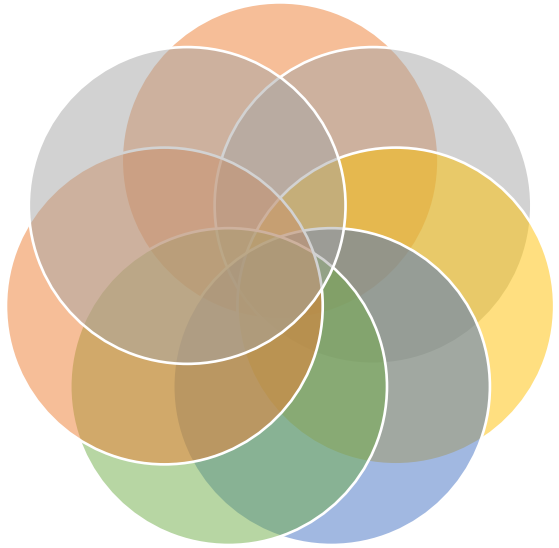
KEY CONSIDERATIONS



Cost

Feasibility (including reliability)

Economic and employment effects

Land use considerations and natural resource impacts

Community benefits

Energy burden and affordability

Energy resilience and community energy resilience

Environmental justice

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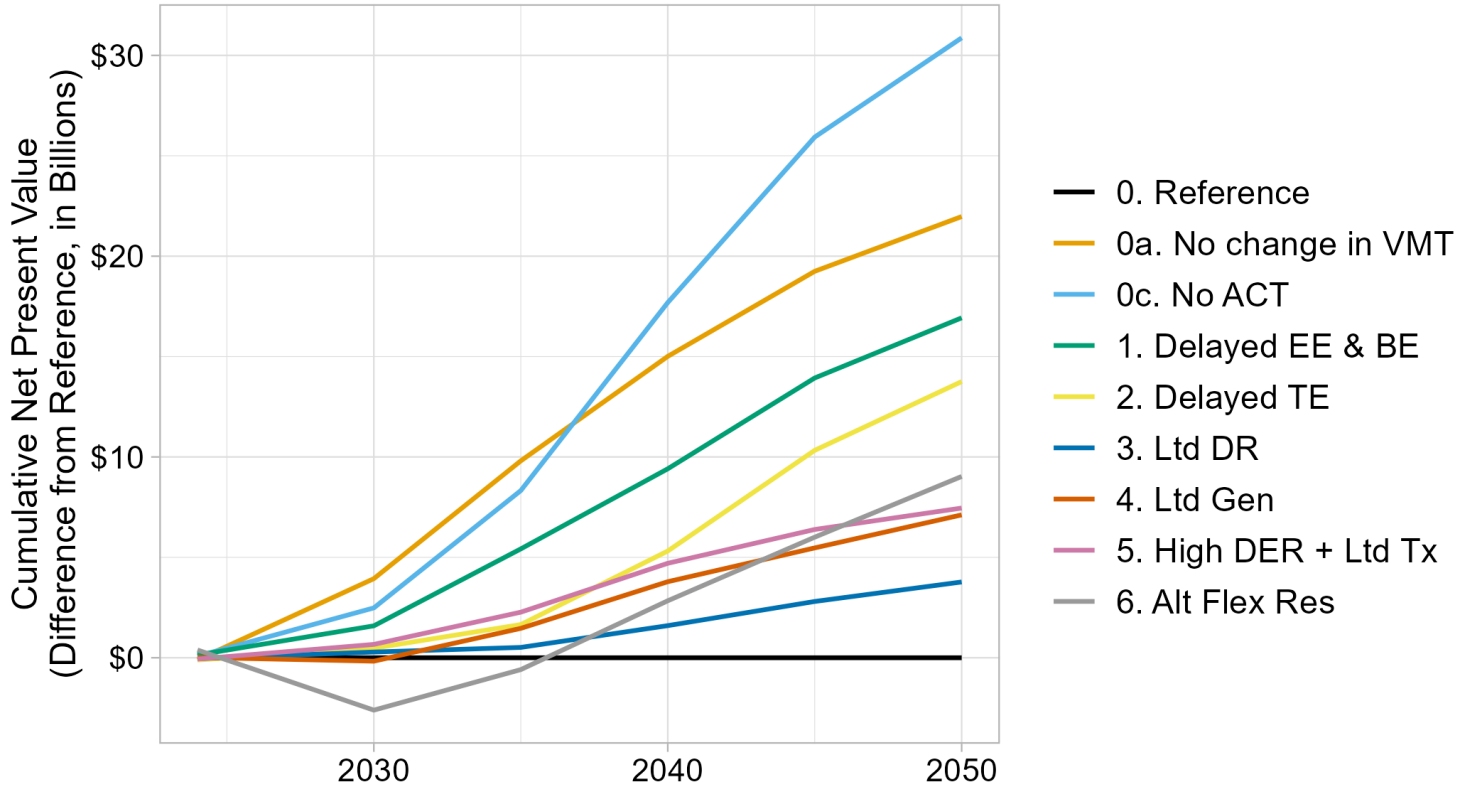
LEAST-COST PATHWAY

- The Reference Scenario from the model was the least-cost pathway to meet our energy and climate objectives
- Other pathways modeled cost more



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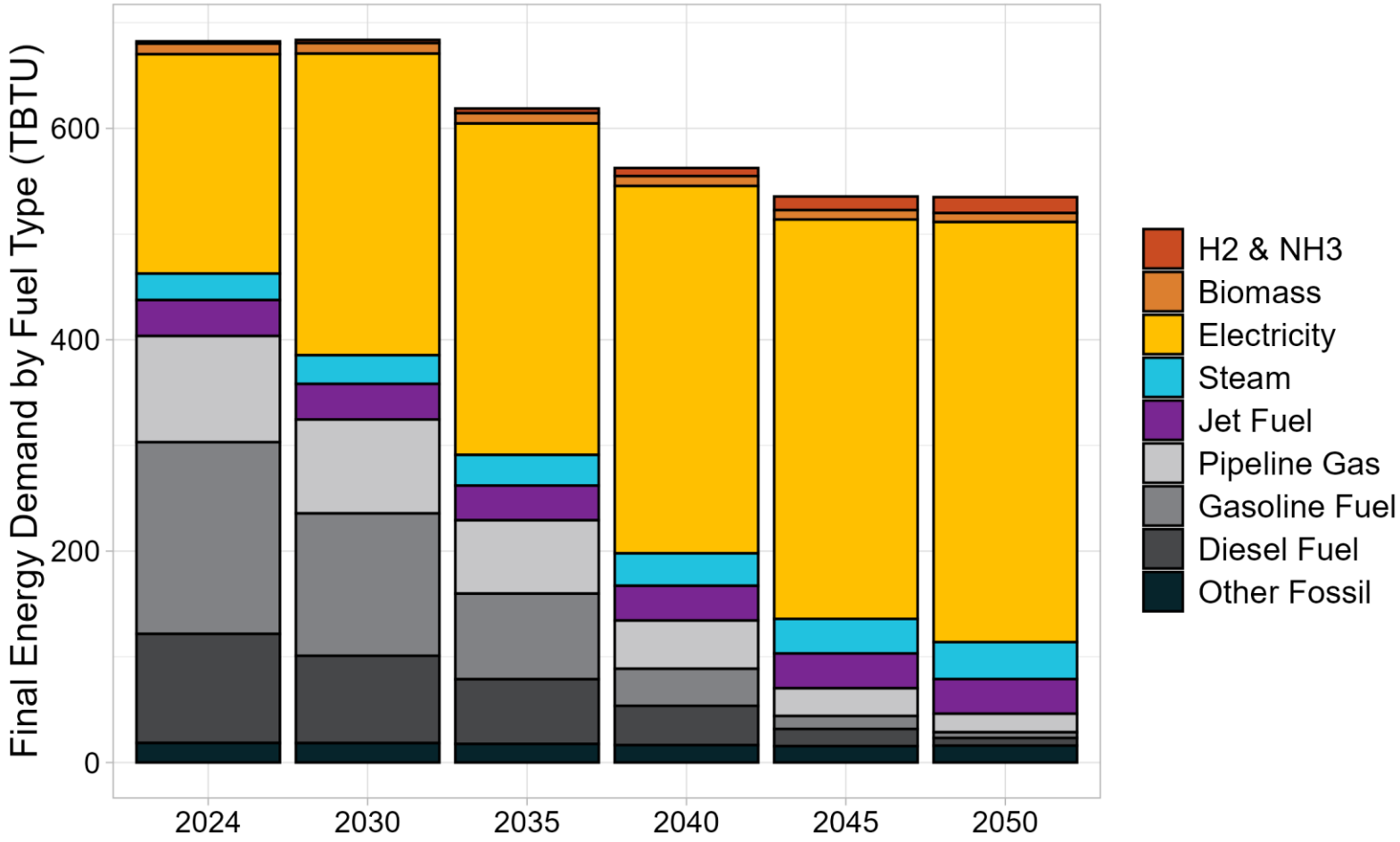
ENERGY DEMAND BY FUEL IN OREGON



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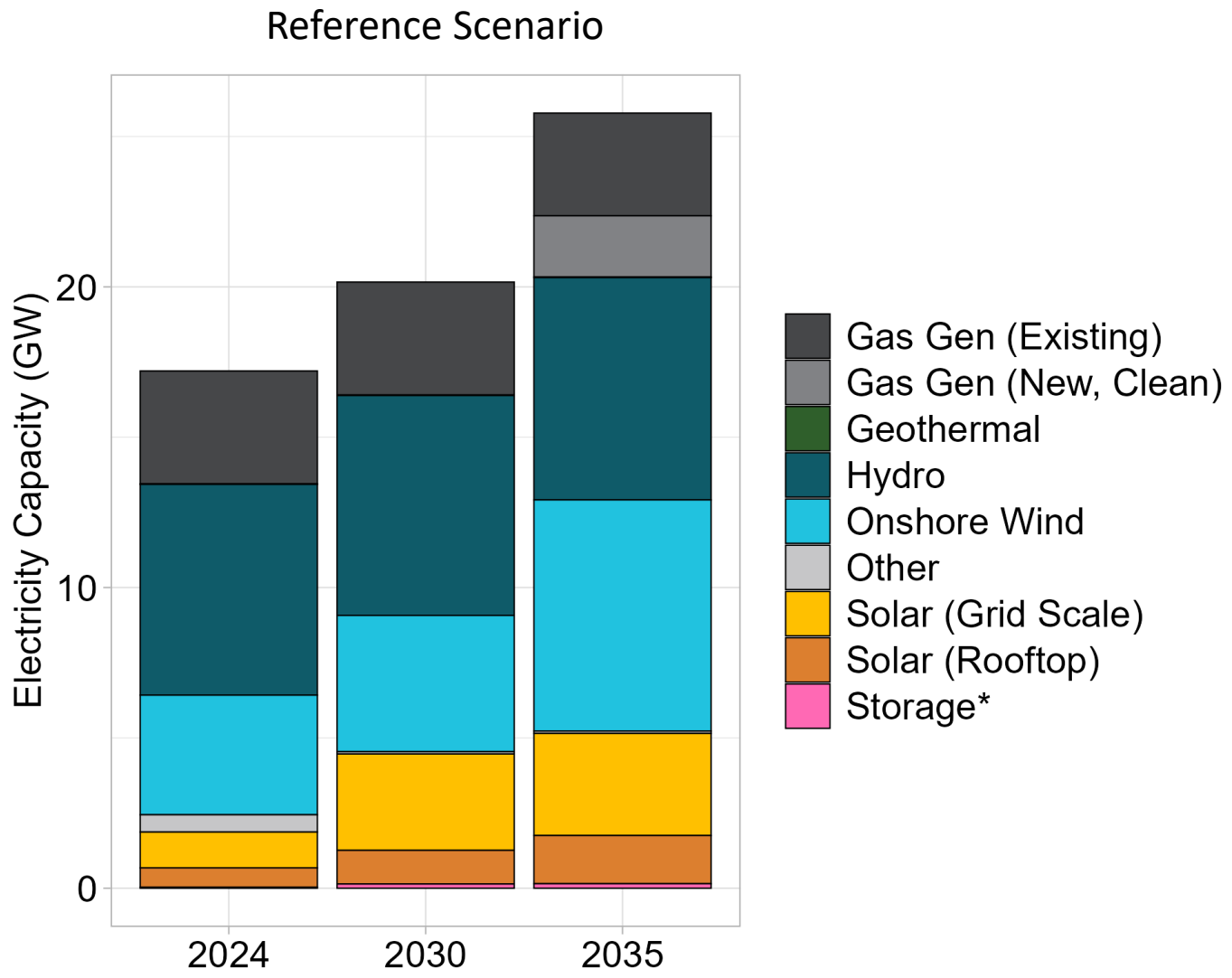
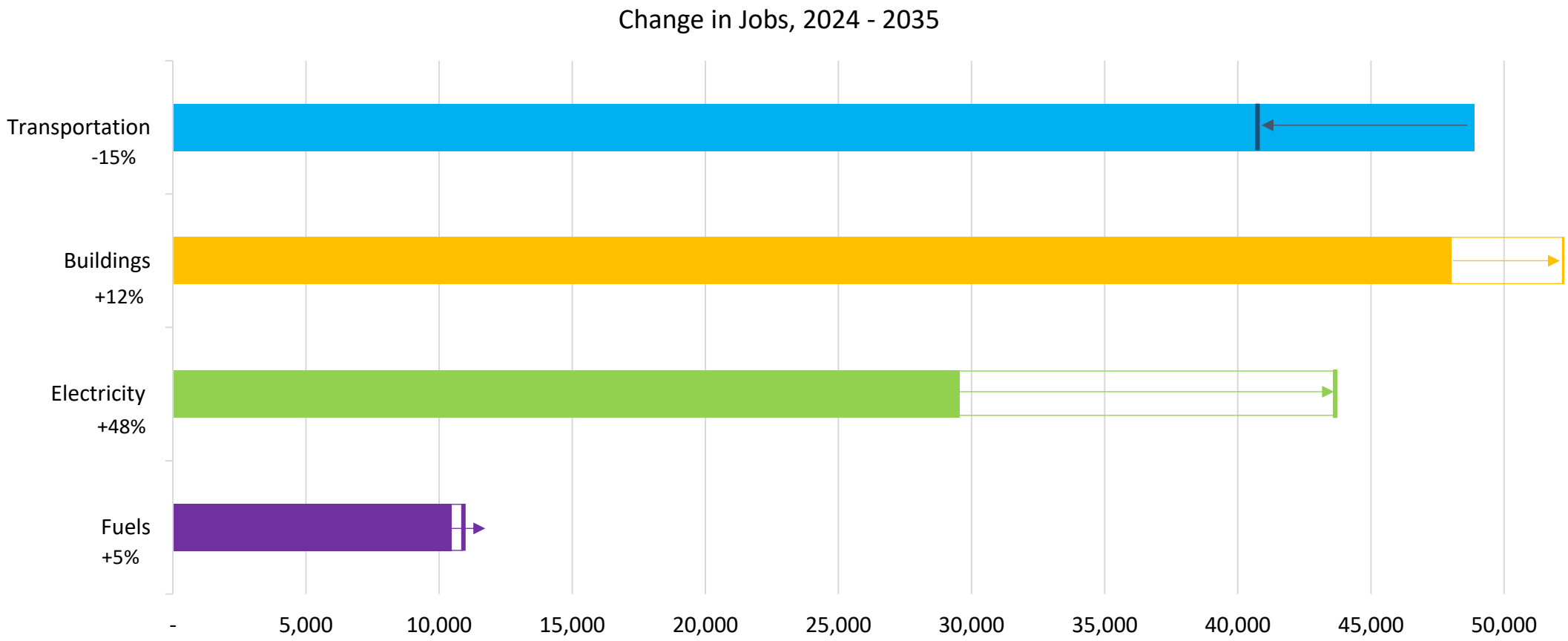
ELECTRIC GENERATION CAPACITY



** Represents less than 1 GW*

JOBS STUDY



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ENERGY WALLET ANALYSIS
electric cars and heat pumps

Key Findings:

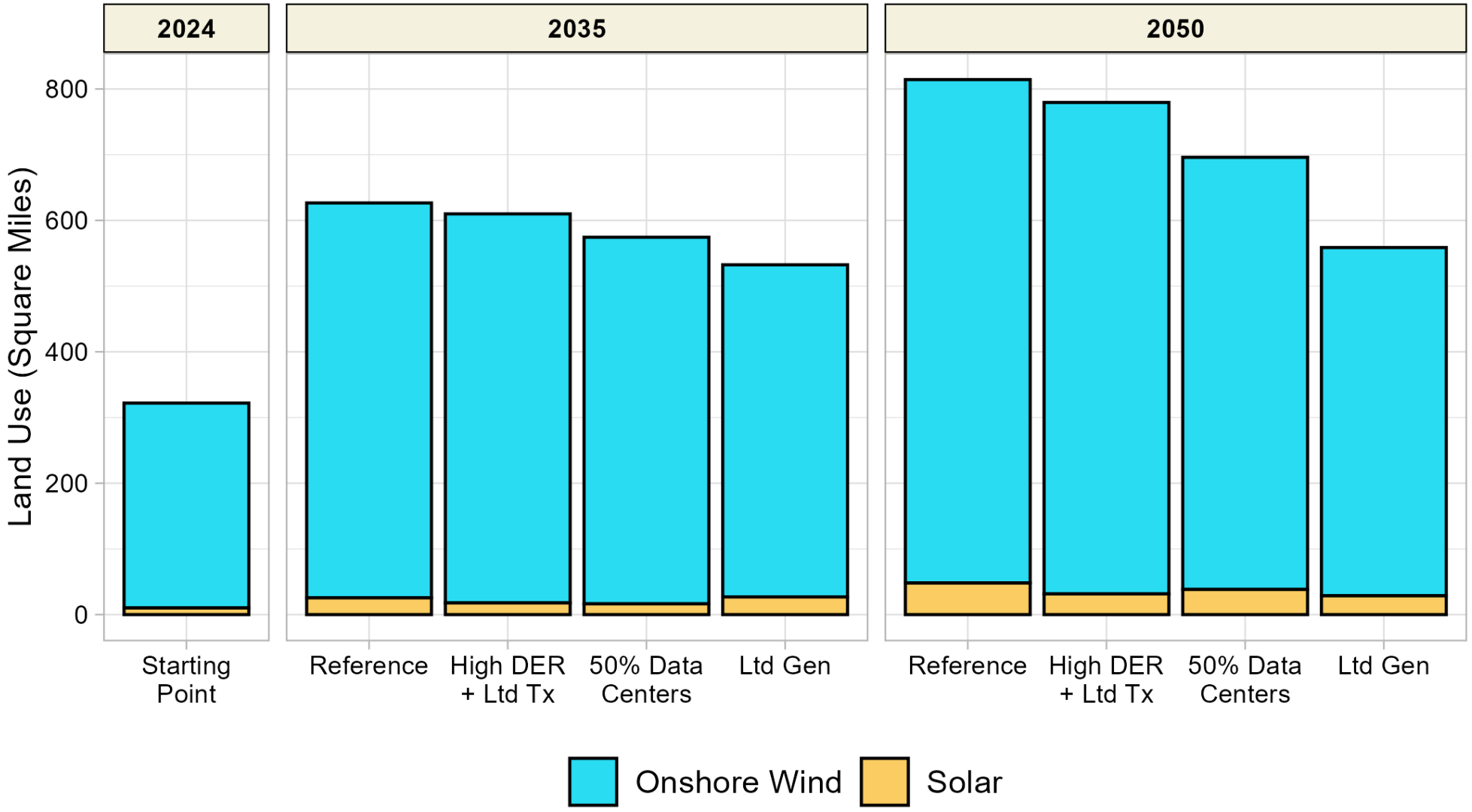
- **Energy savings.** All household types reduced energy use for transportation, heating, and cooling by switching to an electric car or heat pump, regardless of starting technology.
- **Electric cars.** In most cases, adopting an electric car saved money, even without federal incentives.
- **Heat pumps.** Many homes can be expected to save money when adopting a heat pump. But some faced higher costs. Key factors included:
  - Whether replacing electric resistance or other fuel
  - Need for AC
  - Electric vs. gas prices
  - Single- vs. multi-family homes

LAND AREA USED FOR WIND AND SOLAR POWER, SELECT SCENARIOS

23,437 sq miles – total farmland in use

46,000 sq miles – total forest area

Reference 2050 – less than 1% of Oregon lands



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REFERENCE SCENARIO LAND AREA USED FOR WIND AND SOLAR POWER IN 2050

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KEY INSIGHTS FROM MODELING

1. Growing electricity sector
2. Tech loads
3. Transmission expansion
4. Need for a diversity of resources
5. Electrification and efficiency
6. Low-carbon fuels

LIVE MENTI POLL #3

From the key insights, rank which are most applicable to your work:

- Growing electricity sector
- Tech loads
- Transmission expansion
- Need for a diversity of resources
- Electrification and efficiency
- Low carbon fuels

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ENGAGEMENT

- Tribal engagement
- Inter-Agency Steering Group
- Advisory Group
- Technical working groups
- Policy working groups
- Webinar info sessions
- Listening sessions
- Written comment periods & open portal

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SNAPSHOT FROM PUBLIC INPUT AND ENGAGEMENT

Concerns

- Affordability
- Incorporating equity framework in strategy
- Resource adequacy
- Lack of federal policy support
- Potential additional regulatory costs
- Wildfire liability and risk mitigation
- Electrification: effect on power system; access to technologies
- Supply chain and technology availability; role of different generation technologies

Priorities

- Energy efficiency
- Electric transmission and generation – enabling faster buildout
- Need to reform transportation funding
- Realizing job potential of energy infrastructure development
- Access to energy crucial for economic development and growth
- Leveraging opportunity to develop a clean technology sector
- Request for more direct actions, not more studies, and to prioritize actions

FEEDBACK AND THEMES FROM TRIBAL ENGAGEMENT

Energy independence and sovereignty. Advance Tribal energy sovereignty and self-determination by investing in Tribal-led energy programs and infrastructure development.

Affordable energy options. Ensure more energy affordability in Tribal communities through targeted, sustainable investments and policy reforms.

Access to decision making. Embed Tribal sovereignty and Tribal voices in decision making processes and practices relating to energy planning, policymaking, regulatory design, and program design.

Stabilization of funding cycles. Secure stable and culturally responsive funding mechanisms, including dedicated Tribal set-asides in state funding programs.

Consultation, cultural, and natural resource values. Ensure consultation is well-defined for each Tribe and consultation requirements are consistent across agencies so that Traditional Ecological Knowledge and resource values are incorporated into decision making about programs, policies and projects.

THE OREGON ENERGY STRATEGY

Pathways

Policies

Actions

https://energystrategy.oregon.gov

FIVE PATHWAYS TO GUIDE OREGON

1. Energy Efficiency. Advance energy efficiency across buildings, industry, and transportation sectors, including by expanding access to and appeal of multimodal transportation options, to deliver the benefits of a more efficient energy system.

2. Clean Electricity. Secure reliable, affordable, and clean electricity by expanding the electricity system and incorporating load flexibility.

3. Electrification. Increase electrification of end uses across transportation, buildings, and industry, while safeguarding reliability, promoting affordability, and maximizing opportunities to use load flexibility as a resource.

4. Low-Carbon Fuels. Advance the use of low-carbon fuels in the hardest-to-electrify end uses and to maintain a reliable electric grid.

5. Resilience. Strengthen resilience across all levels of the energy system, including utilities, communities, and customers, enhancing Oregon's ability to adapt to climate change and mitigate other risks.

Implementation of each pathway must consider burdens and benefits to environmental justice communities and apply an equity lens to prevent further disproportionate impacts to historically and currently marginalized communities.

BALANCING BENEFITS & RISKS

Ex. Strategic Electrification

BENEFITS

- Significantly smaller overall energy system – economywide savings
- Lower fueling costs for households (EVs)
- Access to efficient AC and heating
- Improved air quality
- Lower greenhouse gas emissions
- Financial savings for most

RISKS & BARRIERS

- Constrained electricity system
- Heat pumps are more expensive for some households
- May require additional measures like weatherization to work well
- Technology limitations in commercial/industrial
- Repurposing and disinvestment in pipeline infrastructure

ENERGY STRATEGY POLICIES

Pathways

Policies

Actions

ENERGY EFFICIENCY POLICIES

- Deliver energy efficiency and conservation improvements in existing and new residential and small commercial buildings
- Evaluate, promote, and allocate funding to improve energy efficiency in large commercial and industrial sectors
- Prioritize policies and increase support to expand access to multimodal transportation options (e.g. public transit, biking, walking)

CLEAN ELECTRICITY POLICIES

- Facilitate **energy infrastructure** enhancement and expansion while avoiding, minimizing, mitigating negative impacts
- Enable consumers to support grid needs by shifting the **timing of electricity consumption**
- Consult and **engage with Tribes** regarding energy development to understand their concerns and identify opportunities to support Tribal priorities while minimizing impacts
- **Collaborate with others in the region** (BPA, states, regional entities) to address Oregon's needs as part of a regional grid

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ELECTRIFICATION POLICIES

- Advance and expand efforts to electrify transportation
- Facilitate and accelerate interconnection of electric vehicle charging infrastructure
- Promote strategic electrification across residential, commercial, and industrial sectors to deliver affordable, reliable, and clean energy

LOW-CARBON FUELS POLICIES

- Foster development and expansion of low-carbon fuels and fuel infrastructure while mitigating environmental and community impacts
- Support low-carbon fuel adoption in the hardest-to-electrify sectors (aviation, rail, marine transport, long-haul trucking, others)
- Support a managed fuels transition that minimizes stranded assets and leverages existing infrastructure and expertise to support clean fuel alternatives and technological innovation

RESILIENCE POLICIES

- Evaluate cross-fuel interdependencies and vulnerabilities to better ensure long-term reliability of the electric grid, including through coordination between electricity and gas planning.
- Fund resilience measures across the energy system, including at utility scale and in homes, businesses, and communities
- Maintain emergency response capabilities, including readiness of vehicles, supply of fuels, and fuel storage needs during the energy transition

ENERGY STRATEGY ACTIONS

Pathways

Policies

Actions

LEGISLATIVE & POLICY ACTIONS

The energy strategy presents 42 near-term actions for consideration by the Governor's office, legislators, and state agencies.

Actions are presented by sector:

- Cross-cutting
- Transportation
- Buildings
- Industry
- Electricity
- Fuels

Some actions will involve agencies advancing actions that are **within their authority and resources**. In others, implementation **may require legislation** to support agency resources or to create new programs, policies, or authorities.

IMPLEMENTING THE ENERGY STRATEGY

Near-term Priority Areas

- Reliability and resilience
- Affordability and access to clean technologies
- First steps that can be taken with minimal impact on state budget

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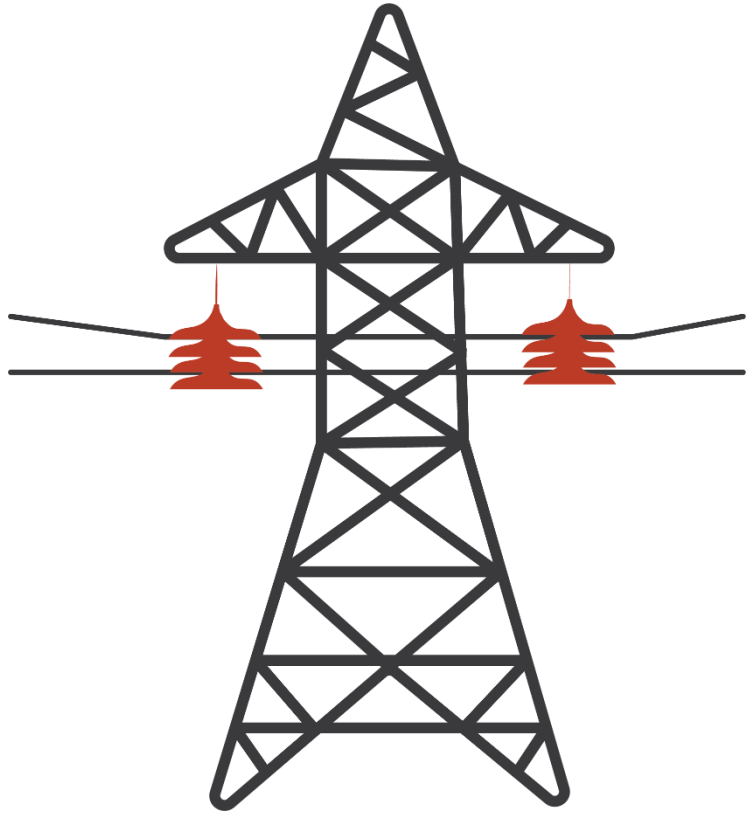
RELIABILITY AND RESILIENCE

- ✓ Review of balanced **wildfire utility liability** solutions to enable utility accountability and customer cost containment
- ✓ Review near-term **transmission** needs, identify opportunities for state to support transmission, inform transmission entity.
- ✓ Prioritize measures that **reduce strain** on the grid (EE, PV, demand flexibility)
- ✓ Expand **energy infrastructure resilience** programs
- ✓ Facilitate **sharing of data and joint planning** – electricity and gas.



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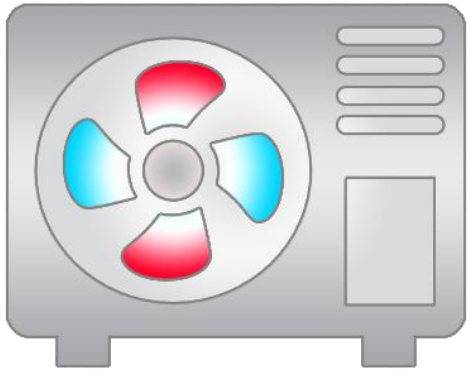
AFFORDABILITY AND ACCESS

- ✓ Establish and identify funding for a revolving loan fund for low- and no-cost loans
- ✓ Prioritize existing incentive programs – essential energy efficiency and weatherization in low- and moderate- income households
- ✓ Earmark flexible funding for structural maintenance (roof, walls, electrical) to enable weatherization improvements.
- ✓ Update energy efficiency and demand response programs to promote strategic electrification.



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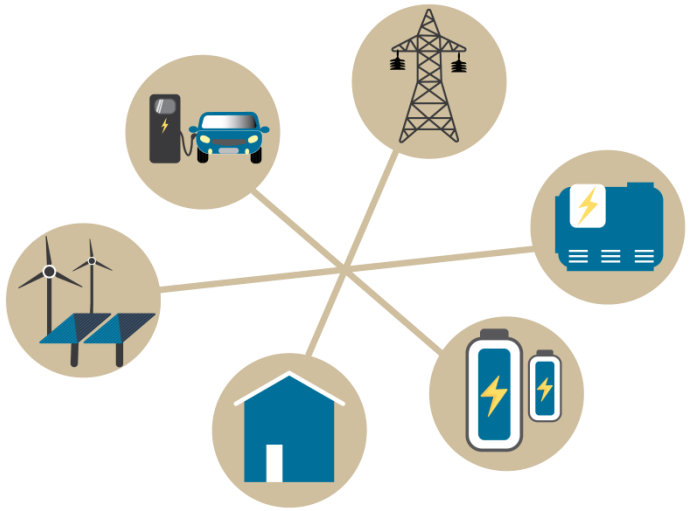
MINIMAL BUDGET ALLOCATION TO GET STARTED

- ✓ Review **transportation funding** mechanisms and identify new revenue sources to support ZEVs and ZEV infrastructure with a Transportation Funding Task Force.
- ✓ Expand local governments' authority to **generate and direct transportation revenues** toward climate-aligned transportation infrastructure that meets local needs and priorities.
- ✓ Align **Oregon Economic Development Strategy** with the Energy Strategy.
- ✓ Require investor-owned utilities to publish and maintain **maps of available capacity** for EV charging infrastructure, building electrification, distributed generation, and battery storage.



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EQUITY AND JUSTICE FRAMEWORK

Six approaches for decisionmakers to consider that advance meaningful involvement and equity when crafting and implementing energy policy:

1. Provide equitable access to decision-making processes
2. Ensure equitable access to infrastructure development processes
3. Invest in long term incentive programs for environmental justice communities
4. Promote holistic workforce development in environmental justice communities
5. Develop partnerships and resources in environmental justice communities
6. Consider the effects of energy policies on natural and working lands, cultural resources, and the broader environment

https://energystrategy.oregon.gov

Questions?

https://energystrategy.oregon.gov/

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