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OREGON ENERGY STRATEGY

POLICY DISCUSSION AND WRITTEN COMMENT SUMMARIES

This Comment Summaries document compiles and summarizes public feedback received on the <u>Oregon Energy Strategy</u> between February 1, 2024 and September 25, 2025. The scope of this feedback includes Phase 2 policy discussions, written feedback received throughout Phase 2, and comments received on the August 2025 Draft Energy Strategy through written submissions.

Phase 2 focused on discussing findings from the energy strategy modeling as well as complementary analyses of air quality impacts, an Energy Wallet analysis, and geospatial mapping. Policy discussions sought to provide partner insight on the key findings from the technical analysis, identify barriers to least-cost pathways for realizing Oregon energy policy objectives, and gather information on potential policies and actions to address these barriers. After Phase 2 policy discussions, ODOE reviewed partner input and, on August 14, 2025, released a draft Oregon Energy Strategy report for public comment through September 22, 2025.

These Comment Summaries reflect both the Phase 2 input that contributed to the draft energy strategy and public comments in response to the draft energy strategy, as input from both periods contribute to the final report's substance and structure. The organization of this document includes headings for comments of general applicability as well as headings that reflect major themes and cross-cutting issues raised in public input. Additionally, this document includes sections that match the structure of the <u>draft Oregon Energy Strategy</u> to help track references commenters made to the draft. In the <u>final report</u>, these sections have been slightly reorganized. In general, comments are organized into the sections they most directly address; if a comment was not specifically directed at a section of the draft report, then it is generally organized according to its subject matter and included the most-specific applicable section. Summaries attempt to group related comments together; however, some comments that intuitively relate to more than one grouping will appear in multiple sections of this document.

For example, comments on VMT efficiency or reduction may appear in sections for draft Energy Efficiency policy 1.c and for draft Transportation action 5. However, if a comment expressly focused on responding to draft policy 1.c or on the longer-term policy goal of improving multimodal transportation options, it will likely be summarized in that policy section; whereas if the comment focuses on draft Transportation action 5 expressly or specifically discusses near-term funding needs for the Safe Routes to School Program, it will likely be summarized in the action section.

This document is intended to help readers review a compiled summary of the input ODOE received over the course of developing the Oregon Energy Strategy and how that input relates to the draft energy

strategy and, by extension, the final strategy report. The document also serves as a reference for reviewing original input, as comment summaries are supported with footnotes directing the reader to the original sources of input. The original written submissions are available on ODOE's website, as are the public meeting notes related to the summaries provided below. Overall, the summaries are intended to provide transparency as to how public input informed the energy strategy and to serve as a reference in support of future efforts to implement and update Oregon's Energy Strategy. ODOE does not endorse the comments summarized below nor does it verify the accuracy of the assertions contained in these comments. The comment summaries are intended to reflect the positions and arguments raised in public input and not ODOE's position on these statements.

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TABLE 1: ACRONYMS AND ABBREVIATIONS

Abbreviation	Term
ACC, ACC II	Advanced Clean Cars; Advanced Clean Cars II
ACT	Advanced Clean Trucks
AG	Advisory Group
API	Application programming interface
AQ	Air quality
BCD	Oregon Building Codes Division
BER	ODOE Biennial Energy Report
BESS	Battery energy storage systems
BEV	Battery electric vehicle
Bi-ZEV	ODOE Biennial Zero-Emission Vehicle Report
BPA	Bonneville Power Administration
BPA GAT	BPA Grid Access Transformation project
BPS	Building Performance Standards
CAP agencies	Community Action Program / Community Action Agencies
CARB	California Air Resources Board
CBRI	Columbia Basin Restoration Initiative
CC	Carbon capture
CCS	Carbon capture and sequestration
CEC	California Energy Commission
CEI	Critical Energy Infrastructure (Hub)
CFP	Clean Fuels Program (Oregon)
CFS	Clean Fuel Standard(s)
CHIPS Act	CHIPS and Science Act of 2022
CMAQ	Congestion Mitigation and Air Quality Improvement Program
CMS	Charging Management System / Software
CO ₂	Carbon dioxide
COU	Consumer-owned utility
СРР	Climate Protection Program (Oregon)
CREPC	Committee on Regional Electric Power Cooperation
CREPC-TC	CREPC Transmission Collaborative
CRITFC	Columbia River Inter-Tribal Fish Commission
DCFC	Direct current fast charging
DER	Distributed energy resource
DR	Demand response
EFSC	Energy Facility Siting Council (Oregon)
EGS	Enhanced geothermal systems
ETO	Energy Trust of Oregon
EV	Electric vehicle
EVSE	Electric vehicle supply equipment
EWEB	Eugene Water & Electric Board
FCEV	Fuel cell electric vehicle
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
GET	Grid-enhancing technology

GETs	Grid-enhancing technologies
GHG	Greenhouse gas
GTN XPress Pipeline	GTN XPress natural gas pipeline expansion (TC Energy)
GW	Gigawatt
НВ	House Bill
HCM	Hosting Capacity Map(s)
HD	Heavy-duty
HDVs	Heavy-duty vehicles
HVAC	Heating, ventilation, and air conditioning
ICE	Internal combustion engine
IOU	Investor-owned utility
IPCC	Intergovernmental Panel on Climate Change
IRP	Integrated Resource Plan
ISR	Indirect Source Rule
ITC	Investment Tax Credit
LDVs	Light-duty vehicles
LI-PSH	Low-Impact Pumped Storage Hydropower
LSRD	Lower Snake River dams
MD	Medium-duty
MDVs	Medium-duty vehicles
MHD	Medium- and heavy-duty
MW	Megawatt
NOx	Oxides of nitrogen
NRC	Nuclear Regulatory Commission
NREL	National Renewable Energy Laboratory
NWPCC	Northwest Power and Conservation Council
ODA	Oregon Department of Agriculture
DEQ	Oregon Department of Agriculture Oregon Department of Environmental Quality
ODF	Oregon Department of Environmental Quality Oregon Department of Forestry
ODFW	Oregon Department of Fish and Wildlife
ODOE	Oregon Department of Fish and Whalife Oregon Department of Energy
OEM	Original Equipment Manufacturer
OHCS	Oregon Housing and Community Services
OPB	Oregon Public Broadcasting
OPUC	Oregon Public Broadcasting Oregon Public Utility Commission
OReGO	
ORESA	Oregon's Road Usage Charge program Oregon Ponowable Energy Siting Assessment
	Oregon Renewable Energy Siting Assessment
ORS ORSC	Oregon Revised Statutes Oregon Revised Statutes Oregon Revised Statutes
	Oregon Residential Specialty Code (building code)
OSW	Oregon State University
OSW	Offshore wind
PHMSA	Pipeline and Hazardous Materials Safety Administration
PNUCC	Pacific Northwest Utilities Conference Committee
PPC	Public Purpose Charge
PUD	People's Utility District
PURPA	Public Utility Regulatory Policies Act (1978)

PWG	Policy Working Group
RCBA	Resilient Columbia Basin Agreement
RNG	Renewable natural gas
RUC	Road Usage Charge
SAF	Sustainable aviation fuel
SMR	Small modular reactor (nuclear)
TEINA	Transportation Electrification Infrastructure Needs Analysis
TENs	Thermal Energy Networks
The Energy Strategy; the Strategy	Oregon Energy Strategy
TIGHGER	Transformational Integrated Greenhouse Gas Emissions Reduction
ToU	Time-of-use
U.S. DOE / US DOE	United States Department of Energy
USDA	United States Department of Agriculture
V2G	Vehicle-to-grid
VMT	Vehicle miles traveled
VPP	Virtual power plant
ZEV	Zero-emission vehicle

TABLE 2: GLOSSARY

Term	Definition
Actions	Near-term legislative and policy recommendations intended to build on policy frameworks, overcome barriers, and lay a foundation for continued progress toward state energy policy objectives over time.
Advanced Clean Cars II	A regulation adopted by Oregon Department of Environmental Quality in continuation of the first Advanced Clean Cars regulation, governing the sales of passenger cars, SUVs, and light duty trucks in Oregon. Advanced Clean Cars II applies to the 2026-2035 model year; will require auto manufacturers to deliver 100 percent new zero emission battery electric and plug-in hybrid electric vehicles by 2035; and ensures new gasoline and diesel vehicles sold through 2024 have the cleanest emissions possible. Language from Oregon Department of Environmental Quality's Oregon's Clean Car Standards Additional information in 2025 Biennial Zero-Emission Vehicle Report
Advanced Clean Trucks	A regulation adopted by Oregon Department of Environmental Quality to reduce tailpipe and greenhouse gas emissions through advanced clean technology. The rule requires manufacturers of medium- and heavy-duty vehicles (Class 2b – 8) to sell zero-emission trucks as an increasing percentage of their overall sales from vehicle model year 2025 through 2035. Language from Oregon Department of Environmental Quality's Advanced Clean Trucks Reporting Additional information in 2025 Biennial Zero-Emission Vehicle Report
Advisory Group	A group of subject matter experts and interested parties convened by the Oregon Department of Energy to provide a diverse range of perspectives for the development of a comprehensive and well-informed Oregon Energy Strategy. Language from Terminology Guide Additional information in AG Charter.
Agrivoltaics	Agrivoltaics, sometimes called dual-use solar or agrisolar, refers to the practice of producing both agricultural crops and electricity using solar panels on the same parcel of land. Language from and additional information in the Agrivoltaics in Oregon section of the 2024 Biennial Energy Report
Air quality modeling	For Oregon's Energy Strategy, the air quality modeling interfaced with EPA's COBRA model and the energy pathways modeling results to provide insights on the benefits of reduced pollutant emissions on public health outcomes associated with several scenarios. Language from Energy Wallet, Air Quality, and Geospatial Mapping Complementary Analyses Additional information in Environmental Protection Agencies COBRA Tool
Ammonia	A colorless gas compound with a characteristic pungent smell, made from hydrogen and nitrogen. Today, ammonia is mainly used to make

Biomass	fertilizer, cleaning products, and plastics, but is also seen as a promising carbon-free resource to power maritime or other heavy transport, generate electricity, and store and distribute hydrogen. Language from NZNW Glossary Additional information in Renewable Hydrogen Report and US Department of Energy's Potential Roles of Ammonia in a Hydrogen Economy Any organic matter that is available on a renewable or recurring basis, including agricultural crops and trees, wood and wood residues, plants, algae, grasses, animal manure, municipal residues, and other residue materials, especially when this matter is used for or space heating, cooking, electricity generation, and transportation. Biomass can be
	cooking, electricity generation, and transportation. Biomass can be burned directly for heat or converted to liquid and gaseous fuels through various processes. Wood and wood waste is Oregon's largest source of biomass. Oregon used biomass to produce renewable natural gas, a biogas that has been purified to be a substitute for fossil natural gas, often to meet specifications required for injection into a natural gas distribution pipeline. Oregon also produces plant-derived ethanol fuel and biodiesel from used cooking oil to be used as transportation fuels. Language from U.S. Department of Energy's 2023 Billion-Ton Report Glossary
	Additional information in the 2023 Billion-Ton Report and Energy by the Numbers section of the 2024 Biennial Energy Report
Bonneville Power Administration	A federal agency that markets the power produced by Federal Columbia River Power System resources and other resources acquired under the provisions of the Northwest Power Act of 1980. Bonneville sells power to public and private utilities, direct-service industrial customers and various public agencies. The Northwest Power Act charges Bonneville with other duties, including pursuing conservation, acquiring sufficient resources to meet its contract obligations, funding certain fish and wildlife recovery efforts, and implementing the Northwest Power and Conservation Council's Power Plan and Fish and Wildlife Program. Language from Northwest Power and Conservation Council's 2021 Power Plan Glossary Additional information in Our History - Bonneville Power Administration and Northwest Power Act (USC numbered)
Building Performance Standard (BPS)	Oregon's policy addressing energy use and emissions from existing commercial buildings, which account for nearly 20 percent of energy use in Oregon, based on ASHRAE Standard 100-2024 and Oregon-specific amendments. Building performance standards differ from building codes (which apply to the construction or renovation of buildings) as they regulate buildings' operational energy use. Language from and additional information on the Building Energy Performance Standards site
Clean Electricity	Clean electricity is not a defined term in Oregon law. Here, the Oregon Department of Energy uses the term to mean electricity that produces

	zoro ar voru fow groophouse assemissions under the Oregon
	zero or very few greenhouse gas emissions under the Oregon
	Department of Environmental Quality's Greenhouse Gas Emissions
	Reporting Program and which comes from a facility that is operated in
	accordance with all applicable legal requirements.
	Language from and additional information in Oregon House Bill 2021,
	2024 Biennial Energy Report and US Department of Energy's On The
	Path to 100% Clean Electricity
Climate Protection Program	A program administered by Oregon Department of Environmental
	Quality that establishes a declining cap, or limit, on greenhouse gas
	emissions from fossil fuels used throughout Oregon, including diesel,
	gasoline, and natural gas. The program is designed to reduce these
	emissions 50 percent by 2035 and 90 percent by 2050.
	Language from and additional information on Oregon Department of
	Environmental Quality's Climate Protection Program site
Community energy	The ability of a specific community to maintain the availability of
resilience	energy needed to support the provision of energy-dependent critical
	public services to the community following nonroutine disruptions of
	severe impact or duration to the state's broader energy systems.
	Language from Oregon House Bill 2021
Community Renewable	A grant program established by House Bill 2021 and administered by
Energy Grant Program	the Oregon Department of Energy to offset the cost of planning and
	developing community renewable energy and energy resilience
	projects; make community renewable energy projects economically
	feasible for qualifying communities; promote small-scale renewable
	energy projects; and provide direct benefits to communities across the
	state in the form of increased community energy resilience, local jobs,
	economic development or direct energy cost savings to families and
	small businesses.
	Language from and additional information on Community Renewable
	Energy Grant Program site
Complementary analyses	Analytical efforts that followed on the energy pathways modeling to
complementary unaryses	further inform the energy strategy. The complementary analyses
	included a Household Energy Wallet analysis, air quality modeling,
	geospatial mapping, and a study on employment effects.
	Language from and additional information in Energy Wallet, Air Quality,
	and Geospatial Mapping Complementary Analyses
Consumer-owned utility	A not-for-profit utility governed by a local, elected board. Oregon COUs
(COU)	have a long history of contracting with BPA for significant amounts of
(600)	their power supply.
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	Language from 2022 Biennial Energy Report Additional Information in 2024 Orogan Utility Statistics and 2024
	Additional Information in 2024 Oregon Utility Statistics and 2024 Richard Formy Poport
Day shood madest	Biennial Energy Report A regional transmission erganization or independent system energias
Day-ahead market	A regional transmission organization or independent system operator-
	administered market where the RTO or ISO schedules electricity
	production to meet forecasted demand one day in advance, based on
	factors, including weather, the day of the week, and planned power
	plant outages. Day-ahead markets function as auction markets for next-
	day electricity service. Entities that would like to buy or sell electricity

	for the next day can enter bids with the market operator. These bids indicate the price at which an entity is willing to buy or sell a quantity of electricity for a given time period, often a specific hour(s) of the next day. The market operator takes the bids it receives, and for each time period of the next day, creates supply and demand curves. The market operator creates the supply curve by ordering each of the sell bids from lowest to highest price and creates the demand curve by ordering each of the buy bids from highest to lowest price. Examples of forthcoming day-ahead markets include Southwest Power Pool's Markets+ and California Independent System Operator's (CAISO's) Energy Day Ahead Market. Language from and additional information in Federal Energy Regulatory Commission's Introductory Guide to Electricity Markets and 2024
Demand response	Biennial Energy Report A deliberate change in a customer's normal electricity usage pattern in response to a change in price, contract, or request from a utility or grid operator. Language from 2020 Biennial Energy Report Technology Review: Demand Response
Distributed energy resources	Small, modular, energy generation and storage technologies that provide electric capacity or energy near sites of use. Examples include rooftop solar panels and customer-sited battery storage. An electric vehicle may be a distributed energy resource if it has the ability to provide vehicle-to-grid power; otherwise, it is a flexible load. Language from NZNW glossary Additional information in 2025 Oregon Energy Security Plan
Distribution infrastructure	For electricity, the physical equipment used to distribute electric power at voltages below 38,000 volts, including but not limited to poles, primary lines, secondary lines, service drops, transformers, and meters. For natural gas and liquid fuels, the infrastructure that stores and distributes fuels to consumers including transmission pipelines, compressor and pumping stations, storage tanks and terminals, marine, rail, and trucking transportation, and retail outlets. Language from NZNW glossary Additional information in 2025 Oregon Energy Security Plan, Transmission and Distribution, Fuel Supply and Distribution System
Electric vehicle	A vehicle that uses one or more electric motors for propulsion. The electricity that powers the motor may come from a battery, as in a battery electric vehicle, or from a hydrogen fuel cell, as in a hydrogen fuel cell electric vehicle. Language from NZNW glossary Additional information in 2025 Biennial Zero-Emission Vehicle Report
Electricity load	The amount of electricity drawn from the electrical grid. Load may also refer to a specific use of electricity, such as heating load. Language from NZNW glossary. Additional information in 2024 Biennial Energy Report's Energy 101 Peak Electricity Demand

Electric resistance heating	An electric resistance heater produces heat when an electric current
Liectric resistance neating	passes through the resistance of a conductor. Electric resistance
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	heating equipment can include baseboard heaters, electric furnaces,
	and electric wall heaters.
	Language from <u>NZNW glossary</u>
	Additional information in <u>US Department of Energy's Electric</u>
	Resistance Heating
Energy	The capacity for doing work as measured by the capability of doing
	work (potential energy) or the conversion of this capability to motion
	(kinetic energy). Energy has several forms, some of which are easily
	convertible and can be changed to another form useful for work.
	Electrical energy is often measured in kilowatt hours (kWh), while heat
	energy is usually measured in British thermal units (Btu).
	In the electricity context, energy may refer to electricity available in a
	given moment, as distinct from capacity that represents the ability to
	produce electricity in a specific future moment. Energy capacity is
	further defined below.
	Language from U.S. Energy Information Administration Glossary and
	Northwest Power and Conservation Council's 2021 Power Plan Glossary
Energy burden	Home energy burden is the percent of household income spent on
Life 184 barden	home energy bills. Energy bills include electricity, natural gas, and other
	home heating fuels, and are compared to the total income of the
	people in that household. If a household is spending more than 6
	percent of its income on home energy costs, it is considered burdened.
	Language from American Council for an Energy-Efficient Economy's
	Understanding Energy Affordability
5	Additional information in 2024 Biennial Energy Report
Energy capacity	The maximum power that a machine or system can produce or carry
	under specified conditions. The capacity of generating equipment is
	generally expressed in kilowatts or megawatts. In terms of transmission
	lines, capacity refers to the maximum load a line is capable of carrying
	under specified conditions.
	Language from Northwest Power and Conservation Council's 2021
	Power Plan Glossary
	Additional information in 2024 Biennial Energy Report's Energy 101
	Peak Electricity Demand
Energy efficiency	Using less energy to perform the same task or produce the same result.
	Language from and additional information in 2024 Biennial Energy
	Report and 2022 Biennial Energy Report
Energy justice	The goal of achieving equity in both the social and economic
	participation in the energy system, while also remediating social,
	economic, and health burdens on those historically harmed by the
	energy system ("frontline communities"). Energy justice explicitly
	centers the concerns of marginalized communities and aims to make
	energy more accessible, affordable, clean, and democratically managed
	for all communities. The practitioner and academic approaches to
	energy justice emphasize these process-related and distributive justice
	concerns.
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	Language from Initiative for Energy Justice's Defining Energy Justice:
	Connections to Environmental Justice, Climate Justice, and the Just
	Transition
	Additional information in Environmental Justice Council Annual Report
	2024
Energy pathways modeling	A planning tool that calculates energy needed to power an economy
(the modeling)	while meeting policy targets, such as a greenhouse gas emissions
	target, and the economy-wide least-cost way to meet those energy
	needs with efficiency, clean electricity, electrification, clean fuels, and
	carbon sequestration. For the Oregon Energy Strategy, Evolved Energy
	Research used their EnergyPATHWAYS and RIO modeling tools, which
	use a "backcasting" approach that, based on current circumstances,
	optimizes ways to achieve given policy targets rather than forecasting a
	future based on current information and trends.
	Additional information in OES-CETI-EER-Technical-Approach-to-
	Modeling.pdf
Energy reliability	The degree to which the performance of the elements of the electrical
Lifeigy reliability	system results in power being delivered to consumers within accepted
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	standards and in the amount desired. Reliability encompasses two
	concepts, adequacy and security. Adequacy implies that there are
	sufficient generation and transmission resources installed and available
	to meet projected electrical demand plus reserves for contingencies.
	Security implies that the system will remain intact operationally (i.e.,
	will have sufficient available operating capacity) even after outages or
	other equipment failure. The degree of reliability may be measured by
	the frequency, duration, and magnitude of adverse effects on
	consumer service.
	Language from <u>U.S. Energy Information Administration's Glossary</u>
	Additional information in 2024 Biennial Energy Report's Energy 101
	Peak Electricity Demand, 2022 Biennial Energy Report Energy 101:
	Electric Sector Resource Planning and Acquisition, 2020 Biennial Energy
	Report Energy 101: Resource Adequacy
Energy resilience	The ability of energy systems, from production through delivery to end-
zneigy resilience	users, to withstand and restore energy delivery rapidly following
	nonroutine disruptions of severe impact or duration.
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	Language from Oregon House Bill 2021 Additional information in Energy System Resiliance and 2024 Biomisis
	Additional information in Energy System Resilience and 2024 Biennial
Fundamental institut	Energy Report Energy 101 Energy Resilience
Environmental justice	The equal protection from environmental and health risks, fair
	treatment and meaningful involvement in decision making of all people
	regardless of race, color, national origin, immigration status, income or
	other identities with respect to the development, implementation and
	enforcement of environmental laws, regulations and policies that affect
	the environment in which people live, work, learn and practice
	spirituality and culture.
	Language from Oregon House Bill 4077
	Additional information Environmental Justice Council and
	Environmental Justice Council Annual Report 2024
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nation in <u>2020 Biennial Energy</u>
Efficient Buildings
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	fossil fuels, or biomass and used as a source of energy/fuel that has a
	high energy content per unit of weight.
	Language from <u>NZNW Glossary</u>
	Additional information in Renewable Hydrogen in Oregon:
	Opportunities and Challenges
Industrial symbiosis	Voluntary collaboration among businesses or organizations to share
	and exchange materials, energy, water, and by-products to optimize
	resource use, reduce waste, and enhance economic and environmental
	outcomes.
	Language from Oregon House Bill 3246
Interagency Steering Group	A group of Oregon state agency and government representatives, from
	the Oregon Departments of Energy, Land Conservation and
	Development, Transportation, Environmental Quality, and State Lands;
	Oregon Public Utility Commission; Business Oregon; the Governor's
	office; and other agencies provided agency perspectives and guidance
	to develop a statewide energy strategy.
Integrated resource	Planning by utilities to meet the future energy and capacity needs of
planning	their customers through a "least-cost, least-risk" combination of energy
	generation and demand reduction. IRPs include estimates of future
	energy needs, analysis of the resources available to meet those needs,
	and the activities required to secure those resources. IRP drafting is a
	large, stakeholder-driven process that results in a comprehensive and
	strategic document that drives utility investments, programs, and
	activities.
	Language from and additional information in Oregon Public Utility
	Commission's Energy - Planning and 2022 Biennial Energy Report
	Electric Resource Planning
Internal combustion engine	Vehicles that are powered by combustion of fuel, such as gasoline,
vehicle	diesel, biofuels, or compressed natural gas.
	Language from <u>NZNW glossary</u> .
Investor-owned utility (IOU)	A for-profit corporation that provides a utility service like electricity or
	natural gas and which is overseen by Oregon's Public Utility
	Commission.
	Language from and additional information in 2022 Biennial Energy
	Report Electric Resource Planning and Public Utility Commission :
	Energy - Who We Regulate : Utility Regulation : State of Oregon
Low-carbon fuels	Fuels that when combusted provide thermal energy with fewer
Low-carbon rueis	greenhouse gas emissions than petroleum based or traditional fuels.
	These fuels are used to heat buildings, cook, generate electricity, fuel
	transportation, and power industrial processes. Examples include
	gaseous fuels like renewable hydrogen, ammonia, renewable propane,
	or renewable natural gas or liquid fuels like biodiesel, renewable diesel,
	or ethanol.
	Language from and additional information in <u>US Department of</u>
	Energy's Low Carbon Fuels and Energy Sources Basics
Managed charging	Adapting the charging cycle of electric vehicles or other battery-
	powered devices to both the conditions of the power system and the
	needs of users.
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	Language from NZNIW glossgru
	Language from <u>NZNW glossary</u>
Bassingful involvement	Additional information in 2025 Biennial Zero-Emission Vehicle Report
Meaningful involvement	An element of environmental justice in policymaking where (a)
	members of vulnerable populations have appropriate opportunities to
	participate in decisions about a proposed activity that will affect their
	environment or health; (b) public involvement can influence a decision
	maker's decision; (c) the concerns of all participants involved are
	considered in the decision-making process; and (d) decision makers
	seek out and facilitate the involvement of members of vulnerable
	populations.
	Language from Oregon House Bill 4077
	Additional information Environmental Justice Council Annual Report
	<u>2024</u>
Microgrid	A group of interconnected loads and distributed energy resources
	within clearly defined electrical boundaries that functions as a single
	controllable system, irrespective of whether the microgrid is operating
	independently of or in conjunction with an electric grid.
	Language from Oregon House Bill 2066
	Additional information in 2024 Biennial Energy Report
Multimodal transportation	Multiple modes of transportation, including but not limited to
	pedestrians, bicyclists, transit, personal vehicles, freight, and
	micromobility, such as scooters, skateboards, or services that enable
	sharing and rental of these devices.
	Language from and additional information in Oregon Transportation
	Plan
Oregon's Energy Security	An Oregon Department of Energy report developed in collaboration
Plan	with the Oregon Public Utility Commission, Tribal Nations, and
	interested parties that provides an overview of the state's energy
	infrastructure, quantifies the threats and hazards that could cause
	energy insecurity, and proposes mitigation measures that the state and
	its partners can implement to reduce risk.
	its partners can implement to reduce risk. Language from and additional information in Oregon Energy Security
	Language from and additional information in Oregon Energy Security
Pathways	Language from and additional information in Oregon Energy Security Plan
Pathways	Language from and additional information in Oregon Energy Security Plan The Pathways are guidance meant to inform and align policies and
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Pathways	Language from and additional information in Oregon Energy Security Plan The Pathways are guidance meant to inform and align policies and actions to meet Oregon's energy policy objectives of clean, reliable, and affordable energy. They are intended to represent a stable, long-
,	Language from and additional information in Oregon Energy Security Plan The Pathways are guidance meant to inform and align policies and actions to meet Oregon's energy policy objectives of clean, reliable, and affordable energy. They are intended to represent a stable, long-term framework for action out to 2050.
Pathways Peak loads	Language from and additional information in Oregon Energy Security Plan The Pathways are guidance meant to inform and align policies and actions to meet Oregon's energy policy objectives of clean, reliable, and affordable energy. They are intended to represent a stable, long-term framework for action out to 2050. Peak electricity demand, or peak load, is the highest demand for
,	Language from and additional information in Oregon Energy Security Plan The Pathways are guidance meant to inform and align policies and actions to meet Oregon's energy policy objectives of clean, reliable, and affordable energy. They are intended to represent a stable, long-term framework for action out to 2050. Peak electricity demand, or peak load, is the highest demand for electricity from all customers across a specific service area during a
,	Language from and additional information in Oregon Energy Security Plan The Pathways are guidance meant to inform and align policies and actions to meet Oregon's energy policy objectives of clean, reliable, and affordable energy. They are intended to represent a stable, long-term framework for action out to 2050. Peak electricity demand, or peak load, is the highest demand for electricity from all customers across a specific service area during a specified period of time (such as an hour, a month, or a year). It is one
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,	Language from and additional information in Oregon Energy Security Plan The Pathways are guidance meant to inform and align policies and actions to meet Oregon's energy policy objectives of clean, reliable, and affordable energy. They are intended to represent a stable, long-term framework for action out to 2050. Peak electricity demand, or peak load, is the highest demand for electricity from all customers across a specific service area during a specified period of time (such as an hour, a month, or a year). It is one of the key metrics utilities and transmission providers track and forecast to assess future electricity demand — and plan for adequate levels of generating resources needed to keep the lights on. Language from 2024 Biennial Energy Report's Energy 101 Peak Electricity Demand.
,	Language from and additional information in Oregon Energy Security Plan The Pathways are guidance meant to inform and align policies and actions to meet Oregon's energy policy objectives of clean, reliable, and affordable energy. They are intended to represent a stable, long-term framework for action out to 2050. Peak electricity demand, or peak load, is the highest demand for electricity from all customers across a specific service area during a specified period of time (such as an hour, a month, or a year). It is one of the key metrics utilities and transmission providers track and forecast to assess future electricity demand — and plan for adequate levels of generating resources needed to keep the lights on. Language from 2024 Biennial Energy Report's Energy 101 Peak Electricity Demand. Additional information in 2022 Biennial Energy Report Energy 101:
,	Language from and additional information in Oregon Energy Security Plan The Pathways are guidance meant to inform and align policies and actions to meet Oregon's energy policy objectives of clean, reliable, and affordable energy. They are intended to represent a stable, long-term framework for action out to 2050. Peak electricity demand, or peak load, is the highest demand for electricity from all customers across a specific service area during a specified period of time (such as an hour, a month, or a year). It is one of the key metrics utilities and transmission providers track and forecast to assess future electricity demand — and plan for adequate levels of generating resources needed to keep the lights on. Language from 2024 Biennial Energy Report's Energy 101 Peak Electricity Demand.

Phase 1	The period of Oregon Energy Strategy development focused on
	technical analyses and fact-finding to support and inform exploration of
	pathways to achieving the state's energy policy objectives.
	Language from Terminology Guide
Phase 2	The period of Oregon Energy Strategy development focused on
111050 2	discussing policy gaps and opportunities to inform policy
	recommendations.
Delicies	Language from Terminology Guide
Policies	More detailed directives that advance the high-level pathways and
	provide a long-term framework for the development of more specific,
	near-term actions.
Policy Working Groups	Topic-focused groups convened by Oregon Department of Energy in
	Phase 2 to discuss policy gaps and opportunities to inform Oregon
	Energy Strategy policy recommendations.
	Language from <u>Terminology Guide</u>
Ratepayer-funded	Collections added to utility bills — often labeled as system benefits
	charges, public purpose charges, or similar — that go directly into
	energy programs and may be used to support low-income energy
	assistance, energy efficiency upgrades, renewable energy projects,
	utility bill discounts, weatherization efforts, or other initiatives. Also
	referred to as "customer-funded" programs.
	Additional information in State of Oregon: Energy in Oregon - Public
	Purpose Charge and Utility Customer-Funded Programs Energy
	Markets & Policy
Reference Scenario	The core set of assumptions and data that the energy pathways
	modeling uses to inform and constrain the model's selection of a least-
	cost pathway to achieving Oregon energy policy objectives. This
	pathway was selected to strike a balance of "aggressive but achievable"
	assumptions that, based on numerous sources, are likely to yield the
	lowest-cost pathway to meet our objectives. However, many risks and
	uncertainties remain, and there is no one "correct" solution for the full
	combination of technologies and measures needed to meet our goals.
	To more fully inform the evaluation of pathways and policies, the
	Reference Scenario is compared to several Alternative Scenarios.
	Language from Terminology Guide
Regional transmission	An RTO is an independent, nonprofit organization that operates and
organization	ensures reliability of the bulk power system and optimizes supply and
	demand for wholesale electricity. One of the primary functions of an
	RTO is operation of the electric transmission grid across a large, multi-
	state geographic region.
	Language from and additional information in Regional Transmission
	Organization Study: Oregon Perspectives
Resource adequacy	The ability of the electricity system to meet demand for electricity
	under a broad range of conditions, subject to an acceptable standard of
	reliability, as well as plan to meet future demand with sufficient supply-
	side and demand side resources.

	Language from and additional information in Oregon Public Utility
	Commission's Resource Adequacy and 2020 Biennial Energy Report:
	Resource Adequacy
Strategic electrification	Strategic electrification – also referred to as beneficial electrification –
	is a guiding framework for advancing electrification while supporting
	affordability and reliability. For electrification to be considered
	"strategic" it must advance one of the following areas without
	adversely affecting the others: (1) benefits consumers over the long
	run; (2) enables better grid management; and (3) reduces negative
	environmental impacts. Language from and additional information in
	Strategic Electrification Northeast Energy Efficiency Partnerships and
**************************************	Beneficial Electrification - Regulatory Assistance Project
Targeted universalism	An approach to policymaking that establishes a common goal for all
	groups concerned and then tailors solutions and approaches to achieve
	those goals based on different groups' structure, culture, and
	geographies. Targeted universalism recognizes that while policy goals
	may be shared universally, achieving those goals requires approaches
	tailored to the specific needs and circumstances of different
	communities. The approach incorporates the idea that conversations,
	policies, and programs must be informed by the needs of different
	communities, and that decisionmakers must engage with communities
	to understand and co-create solutions. With this approach, we can
	better understand burdens, benefits, and barriers for communities
	across the state to help ensure an equitable energy transition.
	Language from and additional information in <u>University of California</u>
	Berkley's Othering and Belonging Institute
Traditional ecological	Traditional ecological knowledge is the evolving knowledge, practice,
knowledge	and belief about the relationships that exist between humans and the
	natural environment over hundreds or thousands of years through
	direct contact with the environment. Rooted in a familial relationship
	with the plants, animals, and the environment, traditional ecological
	knowledge is passed down the generations through oral traditions,
	such as storytelling, songs, and ceremonies. It encompasses the world
	view of indigenous people which includes ecology, spirituality, human
	and animal relationships, and more.
	Language from and additional information in Wy-Kan-Ush-Mi Wa-Kish-
	Wit (Spirit of the Salmon): The Columbia River Anadromous Fish
	Restoration Plan and Oregon State University's Traditional Ecological
Tuenemiesieseline	Knowledge Lab
Transmission lines	Conductors, insulators, supporting structures, and associated
	equipment used by electrical power systems to transfer electric power
	at voltages at or above 38,000 volts from one point to another.
	Language from <u>NZNW Glossary</u>
	Additional information in 2024 Biennial Energy Report and Oregon
	Energy Security Plan
Transportation	Investor-owned utilities are required to submit transportation
electrification plans	electrification plans for Oregon Public Utility Commission approval
	covering the electric company's portfolio of near term, long-term,
	terms are electric company a portions of ficult term, long term,

	future, and other transportation electrification actions. Transportation		
	electrification plans should seek to address areas most affected by		
	market barriers in the electric company's service territory and to		
	provide benefits for traditionally underserved communities.		
	Language from Oregon Public Utility Commission Order number 19-134		
	Additional information in 2025 Biennial Zero Emission Vehicle Report		
Variable energy resource	An electric generating resource that is non-dispatchable due to the		
	fluctuating nature of its energy production. For example, wind and		
	solar PV.		
	Language from Northwest Power and Conservation Council 2021 Power		
	Plan Glossary		
Virtual power plant	Grid-integrated aggregations of distributed energy resources such as		
	batteries, electric vehicles, smart thermostats, water heaters, and		
	other connected devices. Also referred to as distributed power plants.		
	Language from and additional information in 2024 Biennial Energy		
	Report		
Western Resource	A Western regional reliability planning and compliance program to		
Adequacy Program	deliver a region-wide approach for assessing and addressing resource		
	adequacy. The WRAP coordinates participating utilities to set a regional		
	reliability metric and use a consistent approach for counting resources.		
	WRAP also allows participants to pool and share resources during tight		
	grid operating conditions. The WRAP is composed of voluntary		
	participating utilities and is governed by a fully independent board of		
	directors at the Western Power Pool. The Southwest Power Pool serves		
	as the Program Operator for the WRAP.		
	Language from and additional information in Western Power Pool		
	Western Resource Adequacy Program		
Western Transmission	An industry-led, West-wide effort to develop an actionable, West-wide		
Expansion Coalition	transmission needs study looking out over 10- and 20-year periods to		
(WestTEC)	support the needs of the future energy grid.		
	Language from and additional information in Western Power Pool		
	Western Transmission Expansion Coalition		
Zero-emission vehicle (ZEV)	Any vehicle with zero tailpipe emissions, including battery electric		
	vehicles and fuel-cell electric vehicles.		
	Language from NZNW Glossary		
	Additional information in 2025 Biennial Zero Emission Vehicle Report		

TABLE 3: LIST OF PUBLIC COMMENTERS¹

Commenter	Footnote Name
AmeriGas	AmeriGas 9.22.25
Andra Hollenbeck	Andra Hollenbeck 9.19.25
Andreas Moran	Andreas Moran 9.22.25
Alliance of Western Energy Consumers	AWEC 9.22.25
Better Energy LLC	Better Energy LLC 1.31.25;
3,7	Better Energy LLC 12.3.24;
	Better Energy LLC 2.4.25 Submission;
	Better Energy LLC 4.3.25;
	Better Energy LLC 5.23.25
BlueGreen Alliance,	9.
Ranfis Villatoro	BGA 9.22.25
Bob Wright	Bob Wright 1.7.25
Brooke Nuckles	Brooke Nuckles 8.29.25; Brooke Nuckles 9.22.25
Building Potential	Building Potential 9.22.25
CalWave Inc.	CalWave 9.22.25
Jeff Marsh, Canby Transmission	Canby Transmission 4.2.25
*See below	CCC MultCo OS, CEP KLCAS 5.9.25 Joint
	Submission
Central Lincoln PUD	Central Lincoln PUD 9.17.25
Community Energy Project, Charity Fain	CEP EJ Framework Comments 06.18.25
Clean Fuels Alliance America	CFAA 5.9.25
City of Hillsboro, Justin DeMello	City of Hillsboro 9.19.25
	City of Hillsboro 4.9.25
	City of Hillsboro 5.9.25
City of Wilsonville/South Metro Area	City of Wilsonville, South Metro Area Regional
Regional Transit	Transit 8.18.25
*See cell below	Coalition Comments 9.22.25
Umatilla County Commissioner Dan Dorran	Comm Dan Dorran 9.22.25
Cory Little	Cory Little, Pneubike 8.15.25
Community Renewable Energy Association	CREA 9.22.25
Columbia River Inter-Tribal Fish Commission,	
Christine Golightly	CRITFC 9.22.25
Confederated Tribes of the Umatilla Indian	
Reservation	CTUIR 9.22.25
Confederated Tribes of the Warm Springs	
Reservation of Oregon	CTWS 9.17.25
Oregon Citizens' Utilities Board, Jennifer Hill-	CUB 9.23.25
Hart	CUB 5.14.25
Dan Tedrow, Pacific ECS	Dan Tedrow, Pacific ECS, 9.8.25
Dave Peticolas	Dave Peticolas 2.22.25
Dave Van't Hof	Dave Vanthof 3.21.25;
	Dave Vanthof 4.14.25

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¹ Commenters are generally referred to as AG members or WG participants if their input was received in either of those forums; other commenter types are used for feedback received through written submissions.

Data Center Coalition	DCC 9.22.25
Debra Higbee	Debra Higbee 9.22.25
Donna Bonetti	Donna Bonetti 8.28.25; Donna Bonetti 9.19.25
Earth Advantage, David Heslam	Earth Advantage 5.9.25
Elayna Trucker	Elayna Trucker 9.19.25
Ecumenical Ministries of Oregon	EMO 9.22.25
Estelle Voeller	Estelle Voeller 9.22.25
Energy Trust of Oregon, Elaine Prause	ETO 9.22.25;
Liver by Trust of Gregori, Liame Frause	ETO 5.9.25
Eugene Water & Electric Board, Aaron	EWEB 9.22.25;
Orlowski, Jason Heuser	EWEB 3.25.25
Green Energy Institute at Lewis & Clark Law	GEI 5.9.25
School, Jamie Johnson	
Generation Atomic	Generation Atomic 9.22.25
Greeley Wells	Greeley Wells 9.19.25
Helena Birecki	Helena Birecki 9.22.25
Ironworkers Local 29	IW 29 9.22.25
James Miller	James Miller 9.7.25; James Miller, LPP Resources
James Willer	8.8.25
	Jeff Hagedorn 8.16.25
Jeff Hammarlund	Jeff Hammarlund 3.19.25
Jim Edelson	Jim Edelson 9.22.25;
Jiii Lueisoii	Jim Edelson 4.29.25;
	Jim Edelson 5.9.25
Joanne Bigman	Joanne Bigman 8.25.25
John Charles, Cascade Policy Institute	John Charles, Cascade Policy Institute 9.22.25
John Livingston	John Livingtston 8.30.25
John Seng, Spark NW	John Seng, Spark NW 9.8.25
See below	Joint COU Comments 9.22.25
Kathaleen Parker	Kathaleen Parker 9.19.25
Kelley Albrecht	Kelley Albrecht 1.22.25
Ken Bonetti	Ken Bonetti (2) 9.22.25; Ken Bonetti 9.19.25
Klamath & Lake Community Action Services,	KLCAS EJ Framework Comments 06.10.25
Christina Zamora	RECAS ES Tramework Comments 00.10.25
Leslie Lowe	Leslie Lowe 9.20.25
Low Impact Hydropower Institute	LIHI 9.18.25
Lucas Young Luke Grossmiller	Lucas Young 9.22.25 Luke Grossmiller 9.6.25
Maleek McKenzie	Maleek McKenzie
Mark Hooly	Marion County Cmmrs 9.22.25
Marshall Sandars	Mark Healy 8.15.25
Marshall Sanders	Marshall Sanders 9.19.25
Meredith Howell, NeighborWorks Umpqua	Meredith Howell, NeighborWorks Umpqua 8.29.25
Dr. Mike Badzmierowski	Mike Badzmierowski 9.22.25
Mothers for Nuclear	Mothers for Nuclear 9.22.25

Multnomah County Office of Sustainability,	
Silvia Tanner	Multnomah County 9.22.25
*See below	NEDCGEINCA 9.22.25
*See below	Newlab Recruitment Coalition 9.22.25
National Hydropower Association, Inc	NHA 9.22.25
Nikki Mandell, CEI Task Force	Nikki Mandell, CEI Task Force 9.22.25
Nikki VanRy	Nikki VanRy 9.18.25
Nikole Young	Nikole Young 9.16.25
Northwest & Intermountain Power Producers	Nikole foulig 9.10.23
Coalition	NIPPC 9.22.25
NewSun Energy	NSE 9.22.25
	NW Alliance for Clean Transportation, 9.5.25
NW Alliance for Clean Transportation	
Northwest Energy NW Natural, Mary Moerlins, Kellye Dundon	NW Energy EJ Framework Comments 06.20.25 NW Natural 9.22.25
NW Natural, Mary Moerlins, Kellye Dundon	
	NW Natural Mary Budalah Kachha 05 00 35
	NW Natural Mary Rudolph-Knobbe 05.09.25 Comment;
	·
NIM Natural Advisory Croup	NW Natural AC 05 21 25 Comment
NW Natural Advisory Group	NW Natural AG 05.21.25 Comment
Northwest Gas Association	NWGA 9.22.25
Nowthwest Cos Association, Posific Nowthwest	NWGA 05.07.25 Comment
Northwest Gas Association; Pacific Northwest	NWGA PNUCC 04.23.25 Comment
Utilities Conference Committee	0.400.0.17.35
Oregon Association of Conservation Districts	OACD 9.17.25
Oregon Conservation Foundation	OCF 9.22.25
Oregon Clean Grid Collaborative	OCGC 9.22.25
Oregon Fuels Association	OFA 9.22.25
One can Humbour Association	OFA 4.8.25
Oregon Hunters Association	OHA 9.16.25
Oregon People's Utility Districts Association,	ODUDA 0 24 25
Ryan Perry	OPUDA 9.21.25
Oregon Rural Electric Cooperatives	ORECA 5.9.25
Association, Tucker Billman	0
Oregon Physicians for Social Responsibility	Oregon PSR 9.22.25
Offshore Renewable Energy International	OREi 6.19.25
Oregon Solar + Storage Industries	05514 0 22 25
Association, Patrick Sterns	OSSIA 9.22.25
Oregon Trucking Association	OTA 5.9.25
Pacific Power, Cory Scott, Scott Beyer	Pacific Power 9.22.25
Mobilizing Climate Action Together, Pat	Pat DeLaquil, MCAT 9.22.25;
DeLaquil	Pat DeLaquil DecisionWare 5.9.25;
	Pat DeLaquil DecisionWare 2.25.25
Peter Bergel	Peter Bergel 9.22.25
Portland General Electric, Jimmy Lindsay,	PGE 9.22.25;
Jacob Goodspeed, Nancy Bennett, Jacob	PGE 5.9.25 Buildings Comments;
Wise	PGE 5.9.25 TE Comments;
	Sarah Buchwalter 5.9.25

Pacific Marine Energy Center	PMEC 9.22.25
Port of Portland, Jennifer Bies, Lewis Lem,	Port of Portland 9.22.25
Cassandra Jackson	Port of Portland 3.25.25
Portland Bureau of Planning and	Portland BPS 9.22.25
Sustainability	City of Portland 4.16.25
Public Power Council, Scott Simms	PPC 9.22.25
See below*	PPC, OMEU, ORECA, OPUDA 5.9.25 Joint
	Submission
Pacific Propane Gas Association	PPGA 9.16.25
Randal O'Toole, Thoreau Institute	Randal O'Toole, Thoreau Institute 9.12.25
Renewable Hydrogen Alliance	RHA 9.23.25
Coalition for Renewable Natural Gas	RNGC 9.22.25
Renewable Northwest	RNW 9.22.25
Robert Weeks, OCES	Robert Weeks OCES, 9.3.25;
	Oregon Citizens for Energy Security 2.25.25
Roberta Richardson	Roberta Richardson 9.7.25
Roger Gray	Roger Gray 9.22.25
Roger Knudson	Roger Knudson, 9.9.25
Rogue Climate, Jess	Rogue Climate 9.22.25;
	Rogue Climate 5.9.25;
	Rogue Climate EJ Framework Comments 06.19.25
Southern Oregon Climate Action Now	SOCAN 9.22.25
Sol Coast Companies, LLC; Shannon Souza	Sol Coast 9.22.25
Sophi Beym	Sophi Beym, OEM, 9.17.25
State Representative Mark Gamba	State Rep Mark Gamba 9.22.25
Steve Wright	Steve Wright 9.19.25
Stop NW Gas Expansion Coalition 9.22.25	Stop NW Gas Expansion Coalition 9.22.25
Sustainable Northwest	Sustainable NW 9.22.25
Technology Association of Oregon	TAO 9.22.25
TechNet	TechNet 9.19.25
The Nature Conservancy, Lauren Link	TNC 9.22.25;
	TNC 5.9.25
Toby Kinkaid	Toby Kinkaid 9.22.25
Tom Pardee	Tom Pardee 4.14.25
Tonia Moro	Tonia Moro 9.22.25
TriMet, Kyle Whatley	TriMet 5.21.25
Twila Jacobsen	Twila Jacobsen 9.19.25
UA Local 290	UA 290 9.22.25
Wasco County, Kelly Howsley-Glover	Wasco County, 4.30.25
Western States Petroleum Association,	
Antonio Machado	WSPA 9.22.25
ZERO Coalition	ZERO Coalition 9.22.25

COMMENT SUMMARIES

I. General OES Comments

General OES Comments

General feedback

Multiple commenters wrote in general support of elements of the energy transition and Strategy, including:

- A move towards 100 percent renewable or clean energy;²
- Addressing Oregon's share of climate change;³
- Solar and other renewables;⁴
- Geothermal energy,⁵ especially based on and beyond the Newberry Crater's potential and shortcomings in wind, solar, and nuclear;⁶
- distributed energy resources and microgrids;⁷
- Home weatherization;⁸
- Energy efficiency, VMT efficiency, and electrification;⁹
- Addressing household and small business affordability challenges via distributed energy resources and energy efficiency;¹⁰
- Resilience, especially in the face of increasing extreme weather;¹¹
- Prioritize actions to benefit environmental justice communities;¹²
- Affordability, especially on an equitable basis;¹³
- Avoiding advancing "false solutions" with little promise of realizing state energy objectives;¹⁴
- The need to preserve Oregon's natural environment, human health, and community,¹⁵ especially because Oregon is not a petroleum-producing state;¹⁶
- A speedy transition, so as to avoid costs of delay¹⁷ and ensure progress is made towards Oregon energy and climate commitments.¹⁸

² Andra Hollenbeck, 9.19.25; Elayna Trucker, 9.19.2025; Estelle Voeller 9.22.25; Greeley Wells 9.19.2025; Ken Bonetti 9.19.25; Leslie Lowe 9.20.25; Luke Grossmiller 9.6.25; Pete Bergel 9.20.25; Roger Knudson 9.9.25; Rogue Climate 9.22.25; Twila Jacobsen 9.19.22.

³ MCAT 9.22.25.

⁴ Brooke Nuckles 8.29.25; Donna Bonetti 8.28.25.

⁵ James Miller 9.7.25.

⁶ James Miller 8.8.25; 3_20_2025_Advisory Group #8 Summary.

⁷ Marshall Sanders 9.19.25; Estelle Voeller 9.22.25; Pete Bergel 9.20.25.

⁸ Brooke Nuckles 8.29.25.

⁹ Donna Bonetti 8.28.25; Estelle Voeller 9.22.25; Ken Bonetti 9.19.25; Twila Jacobsen 9.19.25.

¹⁰ Donna Bonetti 9.19.25.

¹¹ Brooke Nuckles 8.29.25; Roberta Richardson 9.7.25.

¹² Twila Jacobsen 9.19.25.

¹³ Brooke Nuckles 9.22.25; EMO 9.22.25; Ken Bonetti 9.19.25; Roberta Richardson 9.7.25; Twila Jacobsen 9.19.25.

¹⁴ Rogue Climate 9.22.25.

¹⁵ 4 23 2025 Advisory Group #9 Summary.

¹⁶ ETO 9.22.25; Estelle Voeller 9.22.25; Multnomah County 9.22.25; Roger Knudson 9.9.25.

¹⁷ Brooke Nuckles 8.29.25; Estelle Voeller 9.22.25; Ken Bonetti 9.19.25; Rogue Climate 9.22.25.

¹⁸ John Livingston 8.30.25.

Commenters also provided general input on challenges the Strategy needs to address or how the Strategy should prioritize addressing challenges in the energy transition. An individual commenter stated that the Strategy needs to address homeowners' inability to procure home insurance in places threatened by increased extreme weather events and advance an entity like FEMA in Oregon to repair damage to homes unable to afford insurance.¹⁹

A couple of individual commenters advocated that the Strategy focus on benefits to Oregonians rather than corporations or big businesses.²⁰ One of the commenters recommended limiting data center and cryptocurrency mining activities in Oregon if necessary to maintain affordability and progress towards decarbonization goals.²¹ An individual commenter stated that the Strategy should more directly address data center-based load growth and the challenges that would pose to Oregon energy resilience.²² Another commenter advocated that energy generation be publicly owned as a public good.²³ A climate advocacy organization emphasized a need to prevent further fossil fuel infrastructure expansion in Oregon, especially in the GTN Xpress Pipeline.²⁴

A few commenters generally addressed rural and urban distinctions in the Energy Strategy. An individual commenter requested that the Strategy describe urban and rural Oregon contributions to the energy economy and where clean generating resources are available.²⁵ Another individual commenter stated that the Strategy needs to meet rural Oregonians where they're at, asking how rural communities were defined, how rural Oregonians were engaged in the Strategy development process, commenting that multimodal transportation policy is urban-centric, that more support is needed for VMT adoption in rural areas, and that programs like the Healthy Homes Grant Program need to be more easily accessible to COUs and their customers.²⁶

Other commenters expressed general opposition to elements of the Energy Strategy. An individual commenter opposed equity and justice rules generally and another commenter generally stated that the Strategy advances "useless...impractical and odd methods" of generating energy, advocating instead that the Strategy advance nuclear power sited in Portland. Another individual commenter generally stated that the energy transition is not happening and that technologies have not sufficiently advanced to provide clean energy; the commenter advocated rolling back RPS and HB 2021 on this basis and the overlap of the two laws. 9

Federal and state developments

Many AG members, PWG members, and other commenters expressed concern regarding the federal policy climate, tariffs, and uncertainty in developing the Energy Strategy.³⁰ An AG member emphasized that the Strategy and its development process should clearly and realistically address the funding needs and sources for Strategy priorities because of their likely cost and the need to communicate those clearly. The AG member also wanted to ensure that ODOE engaged with other stakeholders, such as

¹⁹ Andreas Moran, 9.22.25.

²⁰ Ken Bonetti 9.19.25; Marshall Sanders, 9.19.25.

²¹ Marshall Sanders, 9.19.25.

²² Mark Healy 8.15.25.

²³ Ken Bonetti 9.19.25.

²⁴ Rogue Climate 9.22.25.

²⁵ Meredith Howell, NeighborWorks Umpqua, 8.29.2025

²⁶ Nikole Young 9.16.25.

²⁷ Jeff Hagedorn 8.16.25.

²⁸ Joanne Bigman 8.25.25.

²⁹ John Charles 9.22.25.

³⁰ 4_23_2025_Advisory Group #9 Summary; 4_23_2025_Advisory Group #9 Summary; Coalition Comments 9.22.25; OES PWG TE 3-4-25 Notes.

BPA, to discuss Strategy recommendations in detail.³¹ Another AG member agreed that considering BPA perspectives and developments will be important to a successful Strategy, asking that BPA issues be more fully discussed in the final Report.³² An AG member also stated that the Strategy should focus on near-term, achievable actions in light of federal constraints.³³ A renewable energy organization stated that, because many federal developments took place subsequent to the modeling effort, these developments were not considered in policy discussions or stakeholder input. The commenter recommended that the Strategy acknowledge potential gaps from these federal developments and consider whether edits to the Strategy are necessary to fulfill HB 3630's mandate.³⁴ An energy developer commented that the Strategy must explicitly address the impacts of the federal One Big Beautiful Bill's phase out of investment tax credits for clean energy, especially with respect to affordability³⁵ and a natural gas trade association agreed the Strategy should account for federal developments as they impact energy system development and affordability.³⁶

Conversely, an AG member cautioned that the Strategy should not self-censor or avoid discussing means to realize Oregon's emissions reductions objectives because of cost- or litigation-related fears, stating that if the Strategy does not set Oregon on a path to reach its decarbonization objectives, they will grow out of reach. The AG member also stated that the Strategy should be critical of arguments that energy investments are infeasible because less urgent investments, such as funding a professional sport, were being discussed by the legislature. The commenter stated that specific or particularized barriers to needed policy may be better discussed in legislative or rulemaking processes.³⁷ Other commenters agreed that the Strategy should remain ambitious and not preemptively limit itself based on supposed political feasibility concerns, 38 with an energy and environmental organization commenting that HB 3630 did not include litigation risk or political will in its statutory factors. 39 Several AG members agreed that short-term challenges should not unduly restrict the Energy Strategy's vision and that, when framing the Strategy, we should consider what we want Oregon to look like for the next generation.⁴⁰ A joint submission from numerous organizations recommended that, in light of federal challenges, the Strategy reflect a need to act boldly and urgently⁴¹ and an environmental coalition provided a description of federal rollbacks of environmental protections in urging that Oregon work to minimize the impact of these federal shifts in policy. 42 A State legislator likewise recommended that the Strategy consider national policy shifts towards nuclear, carbon capture, geothermal, and fossil fuels and how to take advantage of any positive momentum available from these shifts.⁴³

Energy Strategy and other state processes generally

An IOU stated that OPUC has several dockets, investigations, rulemakings, and contested cases that overlap with the Energy Strategy. Additionally, the commenter stated that new statutes from Oregon's 2025 session also apply to elements of the Strategy relating to affordability, energy efficiency, and clean electricity. The commenter recommended that ODOE allow these OPUC and legislatively-directed

³¹ AG Meeting #6 01.15.2025.

³² 9_18_2025_Advisory Group #11.

³³ 4 23 2025 Advisory Group #9 Summary.

³⁴ CREA 9.22.25.

³⁵ NSE 9.22.25.

³⁶ NWGA 9.22.25.

³⁷ 5_15_2025_Advisory Group #10 Summary.

³⁸ OES PWG BE EE and DERs 5-7-25 Notes.

³⁹ GEI 5.9.25.

⁴⁰ 5 15 2025 Advisory Group #10 Summary.

⁴¹ Coalition Comments 9.22.25.

⁴² Stop NW Gas Expansion Coalition 9.22.25.

⁴³ State Rep Mark Gamba 9.22.25.

processes to conclude in order to better streamline efforts and avoid inconsistencies in implementing the Strategy.⁴⁴ An AG member urged the Strategy to align recommendations such that administrative burdens with navigating local, state, and federal systems are not made more onerous.⁴⁵ Another AG member similarly expressed interest that the Strategy consider and explore ways to reduce bureaucracy and administrative burdens generally.⁴⁶

IOUs and COUs in the Energy Strategy

An AG member emphasized that the Strategy should clearly address distinctions between IOUs, COUs, and associated state policies throughout the Report.⁴⁷ Another AG member asked how, in addition for accounting for COU and IOU distinctions, the Strategy would address federal ownership of three-fourths of transmission capacity in Oregon.⁴⁸ A member PWG expressed concern that the Strategy recognize that COUs are accountable to their members and distinguish between how policies should apply to IOUs and COUs.⁴⁹ An AG member commented that COUs already predominantly procure clean energy from hydroelectric generation and so should not be subject to the same policies as IOU territories, though the commenter stated that COU territories face other challenges, such as a lack of charger infrastructure.⁵⁰

Criticism of reliance on studies as a next step

Many commenters generally opposed advancing studies as recommendations or generally advocated that the Strategy advance more urgent, concrete actions.⁵¹ An energy advocacy organization urged that the Strategy must identify concrete policy suggestions to directly address structural barriers to meeting state emission objectives, stating that proposed studies and funding actions are insufficient to doing so. In particular, the commenter cited Article IX, Section 3a of Oregon's Constitution as a barrier to transportation electrification funding and expressed a need to hold ODOT accountable for decisions counterproductive to state emissions objectives. The commenter quoted a 2013 ODOT Statewide Transportation Strategy as recommending implementing a sustainable funding source that accounts for the true cost of travel, stating that providing further recommendations to study true cost of travel in the Energy Strategy would be counterproductive and recommending instead that agency funding be contingent on successful GHG emission reduction efforts.⁵² Likewise, a joint submission from numerous organizations generally expressed disappointment that the draft Strategy recommended multiple studies – especially regarding Oregon's Highway Trust Fund, land use policies as hampering clean energy development, and policy barriers to fuel-switching. The submission identified and recommended deprioritizing actions calling for a study and limiting actions for a study to areas where the desired outcome or pathway is not already sufficiently clear.⁵³ A joint submission from COU representatives urged that no ODOE work on strategy updates, surveys, studies, or reports be funded by the ESA.⁵⁴ An energy developer commented that studies will not address development barriers facing energy infrastructure; that challenges are already well-understood and that legal reform on tax credits, permitting, and interconnection are urgently needed to meet Oregon's upcoming 2030 clean energy

⁴⁴ PGE 9.22.25.

⁴⁵ Cassandra, Port of Portland, 4_23_2025_Advisory Group #9 Summary.

⁴⁶ 9_18_2025_Advisory Group #11.

⁴⁷ 1 16 2025 Advisory Group #6 Summary; 4 23 2025 Advisory Group #9 Summary.

⁴⁸3_20_2025_Advisory Group #8 Summary

⁴⁹ OES PWG DCEGT 2-26-25 Notes.

⁵⁰ 9_18_2025_Advisory Group #11.

⁵¹ CREA 9.22.25; NSE 9.22.25; OACD 9.17.25; BPS 9.22.25; RHA 9.23.25; Rogue Climate 9.22.25; Sol Coast 9.22.25; State Rep Mark Gamba 9.22.25.

⁵² GEI 5.9.25.

⁵³ Coalition Comments, 9.22.25.

⁵⁴ Joint COU submission 9.22.25.

targets;⁵⁵ a clean energy trade association agreed that there is urgent need to expedite action for clean energy development in order to meet HB 2021 goals and avoid costs of delay.⁵⁶ A conservation organization stated that the proposed studies only kick the can down the road and should, at minimum, be revised to "identify and implement" actions.⁵⁷ A State legislator stated that, where additional information is genuinely needed, actions balance information gathering with concrete movement forward and that the Strategy consider more nimble processes like legislative work groups. Overall, the representative stated that lengthy and cumbersome processes, as well as studying issues when problems are already essentially understood, are responsible for Oregon being behind in areas like energy development, mode shifting, and climate goals.⁵⁸ A clean energy organization stated that, instead of studies, the Strategy should recommend flexibility in current policies and allow for discretionary decision making in conjunction with local governments – especially for industrial initiatives to comply with the Climate Protection Program.⁵⁹ An individual commenter faulted the draft Report's reliance on studies as self-serving and calling for additional agency funding. The commenter stated that HB 3630 declares an emergency and that a 2.5 year development process for the Energy Strategy's and recommendations for studies provides an inadequate response to this emergency declaration.⁶⁰

A clean energy developer commented that the Draft Energy Strategy falls short of HB 3630's mandate by relying too much on additional studies, reports, and emerging technologies while, the commenter wrote, under-evaluating load growth challenges and permitting reform needs as well as affordability and reliability considerations. Likewise, an energy and environmental organization commented that HB 3630 directed ODOE to rely on the "best available information" and update the Strategy periodically on that basis; the commenter stated that flagged areas for further research should only be included as an appendix to the Strategy. 62

Conversely, a non-profit organization supported a need for robust data and studies to support the energy transition and expressed willingness to support the building decarbonization roadmap, a workforce needs assessment and a study on barriers to building and interconnecting renewable projects.⁶³

Other comments

A renewable energy organization generally commented that the Strategy should provide more historical context as to Oregon energy policies and lessons.⁶⁴ An individual commenter urged that the Strategy address how to clean up past pollution or "legacy emissions".⁶⁵ Another individual commenter generally requested that the Strategy provide captions indicating where photographs and illustrations in the Report are sourced from. The commenter expressed general criticism of some of the photographs used.⁶⁶ An individual commenter faulted the draft Strategy for referring to itself as an "inaugural"

⁵⁵ NSE 9.22.25.

⁵⁶ OSSIA 9.22.25.

⁵⁷ OACD 9.17.25.

⁵⁸ State Rep Mark Gamba 9.22.25.

⁵⁹ CREA 9.22.25.

⁶⁰ Toby Kinkaid 9.22.25.

⁶¹ NSE 9.22.25.

⁶² GEI 5.9.25.

⁶³ ETO 9.22.25.

⁶⁴ CREA 9.22.25.

⁶⁵ Bob Wright 1.7.2025.

⁶⁶ Nikole Young 9.16.25.

Energy Strategy; the commenter stated that the Oregon Energy Strategy of 2015 and Sustainable Oregon Act of 2001 precede this effort.⁶⁷

OES Engagement and Strategy Development Process

Several commenters criticized elements of the Energy Strategy's development and process. A PUD criticized the draft Energy Strategy report as appearing to reflect special interests and advocacy organizations rather than input from electricity providers; the commenter especially noted an absence of discussion of lower Snake River dam electricity as a vital omission.⁶⁸ A joint submission of organizations representing COUs indicated that COUs should have had more than two seats in the Energy Strategy Advisory Group on the basis of COUs' responsibility for serving the geographic majority of Oregon; the commenters also stated that they provided feedback diligently throughout the Strategy's development process but that they felt their concerns and suggestions have been largely ignored. In particular, the commenter stated that they have repeatedly insisted that hydropower's role in Oregon be more strongly acknowledged than was provided in the draft Energy Strategy report. 69 An earlier submission from COU organizations stated that ODOE designed the PWG discussion process without any input and that the actions presented for consideration in the final PWG meeting were too narrow. 70 A natural gas utility expressed appreciation for ODOE's process and work to amplify diverse voices and perspectives, but stated that they could not endorse the draft Strategy based on several issues including its discussion of resource adequacy, affordability, and electrification. ⁷¹ A COU organization commented that they read potential policy actions discussed in a PWG meeting as originating in a PNNL rather than from industry experts, local elected officials, or land-use professionals. The commenter stated that the study should only be a point of information to supplement professional expertise. 72 A conservation organization said that, based on the tone of the report, the Strategy reflects ODOE's recommended policies and actions rather than Advisory Group-supported actions.⁷³ A hydrogen trade association commented that they requested additional information on how hydrogen would be treated by the modeling but did not receive that information and were unable to provide comment on those details.⁷⁴ An AG member expressed frustration at a meeting where members presented "talking points from what people will be submitting in writing;" the member stated that many meetings were duplicative with one another or other processes. Conversely, other AG members expressed that the meeting was helpful and constructive.75

Other commenters expressed appreciation or overall support for the Energy Strategy development process along with specific areas of criticism or for improvement. A joint submission from numerous organizations appreciated the time spent on the modeling as providing opportunity for partners with differing expertise to engage with the Strategy's development. The commenter also expressed appreciation for ODOE's work with environmental justice advocates in developing the equity and justice framework. However, the commenter stated that regret that more time was not available to refine policy actions and to ensure environmental justice concerns were reflected in the policies and actions — in particular, in better facilitating electrification for low-income Oregonians. The commenters also supported the proposal to update the Strategy regularly. The submission recommended updates be

⁶⁷ Toby Kinkaid 9.22.25.

⁶⁸ Central Lincoln PUD 9.17.25.

⁶⁹ Joint COU Comments 9.22.25; 9 18 2025 Advisory Group #11 Summary.

⁷⁰ PPC, OMEU, ORECA, OPUDA 5.9.25.

⁷¹ NW Natural 9.22.25.

⁷² ORECA 5.9.25.

⁷³ OACD 9.17.25.

⁷⁴ RHA 9.22.25.

⁷⁵ 9 18 2025 Advisory Group #11.

provided every two years to mirror Washington's process and track the BER.⁷⁶ Similarly, a climate advocacy organization expressed support for the overall process of the Energy Strategy and, in particular, the technical analysis; however, the commenter recommended that future efforts provide more time to discuss policy actions.⁷⁷ A coalition comment provided at the end of policy discussions similarly expressed that more time to coordinate and provide comments would have been beneficial.⁷⁸ A renewable energy organization supported the notional four-year update period for the Strategy, adding that updates should examine emerging energy technologies like OSW or SMRs.⁷⁹

A couple of commenters also addressed the Strategy's treatment of standing law in its development. A COU stated that the inaugural Energy Strategy was focused on existing policies but that future updates should consider revising or improving extant policies and laws in Oregon to more cost-effectively accomplish state goals. A local government expressed general support for the Strategy's scope under HB 3630 as reflecting existing state energy policy objectives and compliance with existing law.

Commenters also expressed overall appreciation or support for ODOE's engagement process. ⁸² A city government representative recognized the challenge in reflecting input received throughout the engagement process and appreciated ODOE's work in soliciting feedback and reflecting it in the draft Report⁸³ and a clean energy organization welcomed the draft report as pulling together work from throughout the Energy Strategy development process. ⁸⁴ A consultancy expressed appreciation for professionalism, equity, and inclusion in the Energy Strategy development process ⁸⁵ and a local government representative expressed appreciation for ODOE's engagement with the nine federally recognized Tribes in Oregon and efforts to incorporate jobs and economic development into the Strategy. ⁸⁶ A Tribal organization likewise expressed appreciation for ODOE's engagement with Tribes in the development process ⁸⁷ and another Tribal organization expressed appreciation that Tribal staff comments were fully captured in the Tribal section. ⁸⁸

An AG member commented, that, to the extent the Strategy excluded actions or policies on the basis of their feasibility, these determinations should be transparently disclosed. The commenter stated that this information is important when considering more near-term, tactical planning versus longer-term Strategic formulation.⁸⁹

Several AG members reiterated and emphasized their interest that the Strategy accurately and fully reflect challenges, barriers, and tradeoffs related to its recommendations, minority viewpoints, and expressions of opposition, criticism, or concern provided by partners or the public on the Strategy or its recommendations. Members also reflected interest that their original submissions and input be published in unaltered form. One of the AG members stated that they did not see input they provided on the importance of hydroelectric generation reflected in the Phase 1 Comment Response Document.⁹⁰

⁷⁶ Coalition Comments 9.22.25.

⁷⁷ MCAT 9.22.25.

⁷⁸ CCC MultCo OS CEP KLCAS 5.9.25 Joint Submission.

⁷⁹ CREA 9.22.25.

⁸⁰ EWEB 9.22.25.

⁸¹ Multnomah County 9.22.25.

⁸² ETO 9.22.25.

⁸³ City of Hillsboro 9.19.25.

⁸⁴ RNW 9.22.25.

⁸⁵ Sol Coast 9.22.25.

⁸⁶ Comm Dan Dorran 9.22.25.

⁸⁷ CRITFC 9.22.25.

⁸⁸ CTUIR 9.22.25.

⁸⁹ 9 18 2025 Advisory Group #11 Summary.

⁹⁰ 9 18 2025 Advisory Group #11.

Strategy Level of Detail

Several PWG members and other commenters urged that the Strategy speak to actions in detail or generally stated that addressing detailed elements of recommendations will be vital to successfully implementing actions. 91 A climate advocacy organization generally commented that many Strategy recommendations should be strengthened and clarified to be more actionable. 92 A renewable energy organization commented that they want the Energy Strategy to present a more concrete plan based on numbers, a multi-path roadmap for where, when, and how to develop energy infrastructure, and identification of where market activity will be sufficient to deliver needed investments. 93 Relatedly, a local government stated that Oregon needs a clear roadmap to achieving state decarbonization goals and that the Strategy provides a foundation for such a roadmap. 94 A Tribal organization and hydrogen trade association requested that the Strategy identify which agencies would be implicated by or responsible for actions detailed in the Report, 95 with the Tribal organization stating that their experience was that coordinating agencies for the Integrated Water Resources Strategy was a delayed process that ultimately required input from the Governor to move forward. 96 AG members also expressed interest in a more tactical, detailed plan to implement the Strategy. One of the AG members asked what a plan to implement the Strategy would look like. In particular, the commenter expressed disappointment that the Strategy did not provide numbers or direction in assessing land-use tradeoffs, stating that ODOE is better-positioned to inform these questions than other state agencies, utilities, or BPA.⁹⁷

A hydrogen trade association requested that the Strategy identify specific funding streams to support its recommended actions, expressing a preference for relying on market-based funding mechanisms; likewise, a coalition comment stated that indicating funding sources would support in evaluating recommendations. A PWG member wrote that expressing the intent of recommendations would be helpful in assessing them. To better inform legislative action, an AG member recommended that Strategy actions include timelines for implementation and clearer statements on balancing interests and trade-offs. An AG member also agreed that discussing funding sources for the Strategy's recommendations would be valuable.

Prioritizing and Presenting Pathways, Policies, and Actions

Several commenters recommended that the Strategy clearly prioritize actions and initiatives to effectuate the energy transition. A city government representative advocated prioritizing short- and medium-term demands from Oregon industries to support the state economy; the commenter recommended therefore prioritizing draft clean electricity actions 1 through 4 and transportation action 7.103 Similarly, a joint submission from numerous organizations recommended prioritizing actions based on impact and urgency according the following framework:

⁹¹ 4_23_2025_Advisory Group #9 Summary; OES PWG DCEGT 4-30-25 Notes; Toby Kinkaid 9.22.25.

⁹² MCAT 9.22.25.

⁹³ CREA 9.22.25.

⁹⁴ Multnomah County 9.22.25.

⁹⁵ RHA 9.23.25; CTUIR 9.22.25.

⁹⁶ CTUIR 9.22.25.

⁹⁷ 9 18 2025 Advisory Group #11.

⁹⁸ RHA 9.23.25.

⁹⁹ CCC MultCo OS CEP KLCAS 5.9.25 Joint Submission.

¹⁰⁰ OES PWG DCEGT 4-30-25 Notes.

¹⁰¹ 9 18 2025 Advisory Group #11.

¹⁰² CRITFC 9.22.25; ETO 9.22.25; OACD 9.17.25; MCAT 9.22.25; PGE 9.22.25; RHA 9.22.25.

¹⁰³ City of Hillsboro 9.19.25.

- 1. Does the action address a critical near-term barrier to achieving one of the five strategies and related policies?
- 2. Might the action support longer-term needs to achieving the strategies and policies?
- 3. What are the benefits and risks of the action, accounting for both energy and non-energy considerations?
- 4. Does the action improve, worsen, or make no change to existing disparities? How can we address benefits and/or unintended consequences for environmental justice communities?
- 5. How would the action affect affordability and reliability in the state?¹⁰⁴

The commenter discussed the draft Strategy's actions and assigned them priority on the basis of these factors. ¹⁰⁵

Relatedly, a COU recommended that ODOE use a least-cost methodology analogous to IRPs to structure the Strategy, possibly with a cost-curve to evaluate the policy actions with respect to the objectives of the Strategy. ¹⁰⁶ A hydrogen trade association recommended prioritizing Strategy actions based on timing, stating that urgent, near-term emissions reductions are needed – in particular, for developers to meet the 2027 deadline to qualify for 45V tax credits. ¹⁰⁷ A climate advocacy organization commented that the Strategy should prioritize actions to serve environmental justice communities. ¹⁰⁸ A joint submission from commenters representing COUs recommended that ODOE prioritize three top proposals and indicate relative costs for the proposed actions. ¹⁰⁹

A Tribal organization requested that ODOE "separat[e] opposing ideas and committing to clear policy directions with identified priorities", reasoning that policies that attempt to balance multiple competing ideas and interests are difficult to implement because stakeholders will debate on action "framing" rather than "approach." Conversely, a COU commented that, per the intent of HB 3630, the Strategy should provide more robust assessment of tradeoffs facing each pathway and policy; have a hydrogen trade association generally agreed that the Strategy should improve its description of balancing interests and trade-offs. In an AG meeting, a commenter stated that clearly describing how statutory considerations depicted in a flower diagram used during meetings were generally balanced. Several PWG members expressed interest that the Strategy should clearly examine trade-offs in energy policy. A State legislator likewise recommended that the full list of recommended actions be provided at the beginning of the document for policymakers' and energy advocates' readability. The commenter also generally recommended combining or abbreviating actions for quick readability.

An individual commenter recommended clarifying that the Strategy seeks "least regrets solutions" always – not simply "wherever possible," reasoning that the question of where "additional regrets" are permissible is problematic. 116 An AG member recognized the value in identifying "no regrets" near-term

¹⁰⁴ Coalition Comments 9.22.25.

¹⁰⁵ Coalition Comments 9.22.25.

¹⁰⁶ EWEB 9.22.25.

¹⁰⁷ RHA 9.23.25.

¹⁰⁸ Rogue Climate 9.22.25.

¹⁰⁹ Joint COU Comments 9.22.25.

¹¹⁰ CRITFC 9.22.25.

¹¹¹ EWEB 9.22.25.

¹¹² RHA 9.23.25.

¹¹³ 9 18 2025 Advisory Group #11.

¹¹⁴ OES PWG DCEGT 2-26-25 Notes; OES PWG EJ and Equity 4-30-25 Notes.

¹¹⁵ State Rep Mark Gamba 9.22.25.

¹¹⁶ Helena Birecki, 9.22.25.

priorities but added that the Strategy and policy discussions should also address a need to prepare Oregon for longer arc transitions such as those needed for low-carbon fuels development and by industry for support strategic planning;¹¹⁷ however, the AG member also stated that Strategy recommendations should be flexible enough to accommodate long-term uncertainties around factors such as hydrogen production technologies and the impacts of extreme weather on communities.¹¹⁸ Another AG member stated that providing a framework for prioritizing recommendations would help the Strategy prioritize near- and long-term actions.¹¹⁹

An environmental organization expressed support and appreciation for the organization of the draft Report but added that providing a visual illustration of the connection of pathways to policies and actions would support sequencing policy actions. The commenter also recommended incorporating Cross-cutting actions into main pathways to ensure they are considered equally. Finally, the commenter recommended that the Report structure actions into a roadmap to clearly illustrate how actions respond to barriers, as well as a matrix that would highlight action impact, urgency, and whether an action is foundational or more targeted in scope. The commenter also recommended during policy discussions that ODOE provide a matrix illustrating political, financial, and agency capacity constraints relevant to recommended policy actions. A Tribal organization also recommended that ODOE provide a crosswalk between policies and actions to assist readers in tracking actions to policies.

Definitions and Terminology

A Tribal organization commented that "Tribal" and "Tribe" should be capitalized when the term is meant to be used to refer to a class of entities with defined legal and sovereign rights. 123

A community energy organization recommended the Strategy use the term "residential batteries" instead of "virtual power plant" for clarity and consistency with other policy discussions in Oregon. 124

An energy advocacy organization recommended using the statutorily-defined term "environmental justice communities" in the Strategy rather than various similar, undefined terms. ¹²⁵ Several PWG members supported an Initiative for Energy Justice definition for energy justice offered in discussions. ¹²⁶ A PWG member recommended defining "parties", as the term is used in "recognition justice"; the commenter stated that parties should be defined based on interests rather than simple affiliation or demographics. ¹²⁷

Other commenters, including a housing and energy organization, recommended the Strategy define the following terms as used in the Report:

- Energy burden;¹²⁸
- Climate vulnerability score; 129

¹¹⁷ 3_20_2025_Advisory Group #8.

¹¹⁸ 5_15_2025_Advisory Group #10 Summary.

¹¹⁹ Mary Moerlins, NW Natural, 3_20_2025_Advisory Group #8 Summary.

¹²⁰ TNC 9.22.25.

¹²¹ TNC 5.9.25.

¹²² CRITFC 9.22.25.

¹²³ CTUIR 9.22.25.

¹²⁴ John Seng, Spark NW 9.8.25.

¹²⁵ NW Energy EJ Framework Comments 06.20.25.

¹²⁶ OES PWG EJ and Equity 4-30-25 Notes.

¹²⁷ OES PWG EJ and Equity 4-30-25 Notes.

¹²⁸ CEP EJ Framework Comments 06.18.25.

¹²⁹ CEP EJ Framework Comments 06.18.25.

- Environmental justice community members;¹³⁰
- Plain language;¹³¹
- Wraparound services;¹³²
- Low income, for the purposes of buildings policy actions; 133 and
- distributed energy resources.¹³⁴

II. Technical Analysis

General Technical Analysis Comments

A renewable energy organization generally stated that the Draft Report lacks "robust and realistic assessment of the current energy landscape" in Oregon, saying that presenting information from the technical modeling and BER on policies that led to Oregon's current energy situation and projected energy demand would be helpful. The commenter also requested more detailed and transparent data from the technical analysis. A marine energy organization generally requested more information on the technical analysis than is provided in the Energy Strategy Report directly. 136

Energy Pathways Modeling Comments

A local government generally supported the Energy Strategy modeling and stated that it should be relied upon to inform energy policymaking in Oregon beyond the Strategy's development. A petroleum trade association recommended that the pathways modeling be paired with feasibility assessments to more realistically reflect deployment timelines and constraints from permitting delays, land use constraints, and supply chain and workforce issues. 138

Complementary Analyses Comments

Criticism of the Energy Wallet analysis

A local government generally recommended expanding the Energy Wallet analysis to provide more "household-level analysis necessary to show real impacts on families." A natural gas utility commented that the Energy Wallet analysis is out of date because of federal changes and generally questioned the accuracy and reliability of the data used in the Energy Wallet analysis as well as its ability to appreciate the impact of emerging technologies and market dynamics. The commenter recommended that the Energy Wallet use more granular, region- and demographic-specific data, model rebound effects, include lifecycle and maintenance costs of equipment, model climate and weather sensitivity to inform energy demand and costs, include access metrics to consider low-income and historically underserved community access to incentives, and validate findings based on real-world billing data. The utility stated that updated Energy Wallet analysis should be used to reassess the resilience pathway drafting. A petroleum trade association recommended that ODOE further analyze cost risks identified in the Energy Wallet analysis and ensure that liquid fuel options remain available.

¹³⁰ CEP EJ Framework Comments 06.18.25.

¹³¹ CEP EJ Framework Comments 06.18.25.

¹³² CEP EJ Framework Comments 06.18.25.

¹³³ CCC MultCo OS CEP KLCAS 5.9.25 Joint Submission.

¹³⁴ 4 23 2025 Advisory Group #9 Summary.

¹³⁵ CREA 9.22.25.

¹³⁶ PMEC 9.22.25.

¹³⁷ Multnomah County 9.22.25.

¹³⁸ WSPA 9.22.25.

¹³⁹ Marion County Cmmrs 9.22.25.

¹⁴⁰ NW Natural 9.22.25.

The commenter urged that the Strategy consider electricity rates and housing retrofit costs in its analysis. 141

In response to discussions on Energy Wallet findings, an AG member stated that they have data showing that properly sized heat pumps lower household costs.¹⁴²

Support for the complementary analyses

A local government expressed appreciation for the complementary analyses' effort to understanding how modeled economy-wide benefits would translate into household-level experiences and, in particular, air quality benefits.¹⁴³

III. Energy Strategy Considerations and Factors

Equity and Justice Framework and Related Comments

Many commenters urged that the environmental justice and equity considerations be clearly highlighted throughout the entirety of the Report. 144 A local government generally supported the inclusion of the Equity and Justice Framework and expressed appreciation for ODOE's environmental justice staff in balancing a tight timeline and partner resource constraints to develop and integrate this framework. The commenter expressed concern that the Framework may be overlooked by readers looking to specific sections of the Report, but also appreciation that environmental justice and equity elements were interwoven throughout the document. 145 A climate advocacy group and environmental organization agreed in appreciating the Framework, concern that the Framework may be ignored in Strategy implementation, and asking that more concrete effectuation of the Framework be included in Strategy actions¹⁴⁶ – with one of the commenters highlighting addressing ETO's fuel-switching policy as an example. The commenter asked that each policy be reviewed through the filter of the Framework¹⁴⁷ and also recommended providing a visualization of the Framework to facilitate its use. 148 A coalition comment also supported the Framework and urged that it be more fully integrated into the Strategy by prioritizing no-cost assistance over loans for low-income households; resourcing community-based organizations to better provide services; and embedding equity metrics into every building-related policy recommendation. 149 A clean energy trade association also supported the Framework, stating that fossil-fuel infrastructure has historically harmed communities and that the Strategy should ensure the energy transition instead benefits these communities. 150

A joint submission from numerous organizations supported the environmental justice and equity framework but stated that, as drafted, the Strategy risks ignoring the framework going forward. The commenters stated that the Strategy should further integrate environmental justice and equity into the pathways and policies by incorporating more strategic and concrete actions rather than simply additional involvement. The commenter added that the Strategy should recognize a need to better support community-based organizations and community action agencies and a need to fund wholehome repairs and necessary repairs to support energy efficiency investments. ¹⁵¹ Similarly, a clean energy

¹⁴¹ WSPA 9.22.25.

¹⁴² 5_15_2025_Advisory Group #10 Summary.

¹⁴³ Multnomah County 9.22.25.

¹⁴⁴ 5 15 2025 Advisory Group #10 Summary.

¹⁴⁵ Multnomah County 9.22.25.

¹⁴⁶ TNC 9.22.25; Rogue Climate 9.22.25.

¹⁴⁷ Rogue Climate 9.22.25.

¹⁴⁸ Rogue Climate EJ Framework Comments 06.25.25.

¹⁴⁹ ZERO Coalition 9.22.25.

¹⁵⁰ OSSIA 9.22.25.

¹⁵¹ Coalition Comments 9.22.25.

advocacy stated that the Strategy should more thoroughly address low-income household needs in concrete actions, stating that low-income is only used 11 times in the Draft report.¹⁵²

A joint environmental justice and equity submission recommended that, to better reflect environmental justice considerations throughout the document, all policy areas include language "all with a responsibility to explicitly utilize an environmental justice and energy justice lens and equitable processes through meaningful community engagement to prioritize environmental justice and impacted communities." PWG members likewise advocated that the additional environmental justice language be extended to all other policy actions. Relatedly, a local governmental representative commented on draft language regarding a transmission entity and its responsibility towards environmental justice; the commenter stated that environmental justice considerations are applicable to all elements of the Energy Strategy, and thus that calling out these considerations in a specific place rather than discussing the specific purpose of a given action is confusing. 155

Several PWG members emphasized that the Framework should advance public participation processes to include "meaningful" participation where engagement is better supported and sought. An energy advocacy organization commented that the Framework's scope should include the implementation of policies and actions as well as their design. A hydroelectric environmental organization emphasized that community consultation should take place throughout the life of a project rather than on an ad-hoc or outset-only basis; additionally, the commenter stated that the Framework should elevate a need to obtain Tribal consent for projects on Tribal lands. Several PWG members noted that communities need authority to firmly deny some infrastructure siting when environmental or other impacts cannot be sufficiently avoided or mitigated to make development agreeable; a PWG member cited hydrogen facilities in California as an example of a project a community should have authority to accept or reject.

A community energy organization appreciated the draft Equity and Justice Framework but recommended trying to streamline the tool to minimize overlap and promote usability. ¹⁶⁰ A PWG whiteboard note urged that a forthcoming Oregon environmental justice mapping tool be used to inform policy and infrastructure decisions. ¹⁶¹

A climate advocacy organization recommended the Framework consider environmental justice impacts outside of Oregon. 162

Mitigation framework

Several commenters wrote that the Framework should provide for avoiding or mitigating negative impacts. Multiple PWG member agreed that, beyond recognizing them, mitigating harms and minimizing burdens should be included in restorative justice and the Framework. An individual commenter stated that the Strategy deviates from equity and justice principles in Multnomah County's

¹⁵² CUB 9.23.25.

¹⁵³ CCC MultCo OS CEP KLCAS 5.9.25 Joint Submission.

¹⁵⁴ OES PWG EJ and Equity 4-30-25 Notes.

¹⁵⁵ City of Hillsboro 5.9.25.

¹⁵⁶ OES PWG EJ and Equity 4-30-25 Notes.

¹⁵⁷ NW Energy EJ Framework Comments 06.20.25.

¹⁵⁸ LIHI 9.18.25.

¹⁵⁹ OES PWG EJ and Equity 4-14-25 Notes.

¹⁶⁰ John Seng, Spark NW 9.8.25.

¹⁶¹ OES PWG EJ and Equity 4-14-25 Notes.

¹⁶² Rogue Climate EJ Framework Comments 06.25.25.

 $^{^{\}rm 163}$ NW Energy EJ Framework Comments 06.20.25.

¹⁶⁴ OES PWG EJ and Equity 4-30-25 Notes.

Climate Justice Plan and appears to prioritize industry interests over marginalized communities. The commenter said that the Strategy lacks an "overarching equity framework" and should include a mitigation hierarchy of avoidance, minimization, and mitigation in that order. Conversely, a local government commented that the Strategy places too much emphasis on social "frameworks" and policy and should instead focus on affordability, reliability, and security.

Specific recommendations

An energy advocacy organization recommended that Framework metrics include qualitative measures of Oregonians' personal experiences with processes and programs.¹⁶⁷

A local government provided the following input on the Framework:

- For Approach 1: add policies and programs that allocate funding for energy purposes, clarify that this approach includes measures like energy efficiency or programs to deploy heat pumps by revising to add "allocate funding for energy measures"; supports recognition of technical and non-technical expertise;
- For Approach 2: add "percentage of participants that see a reduction in energy burden" and "reduction in the number of disconnections among participating communities" to the potential metrics;
- For Approach 3: supported the draft approach, recommended prioritizing grants and no-cost support, as well as zero-interest loans with forbearance options and a direction against exploitative practices based on *Seeds for the Sol* model. The commenter recommended that the metric for this approach focus on funding allocation in dollars rather than number of programs;
- Approach 4: suggested adding funding dedicated to apprenticeship programs;
- Approach 5: recommended adding the following bullet point: "Partner with community
- organizations who are trained and compensated appropriately to design community outreach materials and information opportunities" and adding to the potential metrics: "Number of interactions with engagement materials";
- Approach 6: recommended adding a potential metric that quantifies responsible development of energy infrastructure/engagement with impacted communities. The commenter emphasized the importance of direct engagement with likely host communities to inform this metric.¹⁶⁸

Tribal Consultation and Coordination Generally

A Tribe commented that they are developing their own energy strategy and urged that Oregon ensure the state's Energy Strategy remains adaptive to the planning and policymaking of its nine federally recognized Tribes; based on the draft Report's Nine Federally Recognized Tribes section, the commenter encouraged ODOE to seek formal consultation with the Confederated Tribes of Warm Springs Tribal Council. A Tribal organization asked that ODOE continue to engage in Tribal consultation in the implementation of the Energy Strategy. The Tribal organization also generally requested that there be meaningful engagement on the Strategy's implementation going forward, especially where emerging technologies could impact cultural resources, First foods, or access to sacred sites in ceded, usual, or accustomed lands. A climate advocacy organization agreed with highlighting Tribal cultural resources in the Strategy. An energy non-profit organization agreed that continued and early engagement with

¹⁶⁵ Maleek McKenzie 9.22.25.

¹⁶⁶ Marion County Cmmrs 9.22.25.

¹⁶⁷ NW Energy EJ Framework Comments 06.20.25.

¹⁶⁸ Multnomah County 9.22.25.

¹⁶⁹ CTWS 9.17.25.

¹⁷⁰ CTUIR 9.22.25.

¹⁷¹ Rogue Climate EJ Framework Comments 06.25.25.

Tribal governments and communities is a vital consideration for the implementation of the Strategy. ¹⁷² A hydroelectric environmental organization emphasized that Tribal consultation should take place throughout the life of a project rather than on an ad-hoc or outset-only basis. ¹⁷³ An environmental organization generally supported early and consistent Tribal engagement under the Strategy and added that agencies should coordinate engagement so as to minimize duplicative efforts and draws on Tribes' time and capacity. ¹⁷⁴

Fisheries and resources protection

An AG member urged that the Strategy must acknowledge Oregon responsibilities under salmon restoration initiatives.¹⁷⁵ A Tribal organization generally stated that Oregon's energy transition must safeguard Columbia River fisheries and Tribal sovereignty while avoiding perpetuating historical practices of disproportionately burdening Tribes with the costs and burdens of energy development. The commenter recommended that the Strategy set a clear policy to support Columbia River resiliency consistent with Columbia Basin Restoration Initiative and Tribal input. The commenter expressed concern that Tribal concerns may be omitted in the implementation of Strategy actions and, in particular, emphasized that the Yakama Nation and the Nez Perce Tribe should be included in the Strategy based on their sovereign authority and historical territory overlaps with Oregon, as well as Nez Perce management of territories in Oregon for fish, wildlife and cultural resources. The commenter recommended that the Strategy:

- "Recognize the Tribes have shouldered the burden of energy development in the Pacific Northwest.
- Explicitly name Tribes as key partners and beneficiaries in the framework.
- Require meaningful Tribal consultation before major energy decisions.
- Require funding mechanisms for Tribal energy programs and community-scale renewable energy and microgrid investments for Tribal energy sovereignty.
- Rather than just ensuring 'that Tribes are compensated for their time and expertise,' develop full-time capacity at the Tribes to engage in Strategy implementation, energy development, and project implementation coordination."¹⁷⁶

For more comments on coordinating specific pathways, policies, and actions with Tribes, refer to <u>IV.</u> Energy Strategy Pathways and Policies and V. Legislative and Policy Actions.

Workforce Comments

Workforce needs and barriers generally

A PWG member generally stated that workforce needs are a barrier to installing EV and transmission infrastructure in Tribal communities. The PWG member stated that support for distributed energy resources should be considered as a means of addressing workforce challenges to maintaining utility-scale infrastructure in Tribal areas. The commenter added that supporting local economies in distributed energy resource installation would be valuable. The PWG member later added that more comprehensive programs are needed for positive, transformative effects in communities because funding and grants to community-based or training organizations often have gaps between training funding and project or installation funding that prevent projects from being completed or jobs reaching

¹⁷² ETO 9.22.25.

¹⁷³ LIHI 9.18.25.

¹⁷⁴ TNC 9.22.25.

¹⁷⁵ 9 18 2025 Advisory Group #11.

¹⁷⁶ CRITFC 9.22.25.

¹⁷⁷ OES PWG EJ and Equity 2-24-25 Notes.

communities.¹⁷⁸ A climate advocacy organization recommended that the Environmental Justice Framework's metrics for workforce development include something to address the percentage of a workforce that lives in the community where a project is being built, stating that projects in coastal and rural Oregon often do not deliver benefits to the local job market.¹⁷⁹

A PWG whiteboard note named workforce shortages as a barrier to building retrofit efficiency projects. ¹⁸⁰ A PWG member described several workforce-related barriers to BE, including workforce shortages and contractor experience in the region; ¹⁸¹ another PWG member stated that workforce needs are a barrier to all elements of the energy transition, especially in Eastern Oregon. ¹⁸² A couple of PWG whiteboard responses described discomfort residents may feel with installers or inspectors entering their homes as a barrier to improving residential building efficiency. Notes from the PWG whiteboard also mentioned that there's an opportunity to collaborate with affordable housing developers in BE and energy efficiency and a barrier in contractors being unaware of BE and energy efficiency incentives. ¹⁸³ A PWG member stated that cultural sensitivity training could help facilitate building efficiency and electrification installations as well as provide benefits for community education on the benefits and maintenance of efficient appliances. ¹⁸⁴ Another PWG member stated that a workforce-related barrier that particularly affects rural Oregon is the need for a right-to-repair equipment; rural communities may have less access to centralized, specialized repair shops, and so allowing local mechanics to work on a variety of equipment is especially important. ¹⁸⁵

A PWG whiteboard note named workforce training as a need for distributed batteries, stating that local prices for a project can be \$5,000 for materials and \$15,000 for labor. 186

PWG whiteboard notes named several workforce barriers related to expanding grid-scale electricity infrastructure, including a general lack of local expertise, a lack of transmission engineers and planners, obstacles to labor group training and membership, and that, because of an undeveloped "cluster industry/niche", workforce availability is limited.¹⁸⁷

Strategies and solutions

A PWG member advocated expanding apprenticeship program utilization to address long-term workforce shortage issues; in particular, they advocated setting an apprenticeship utilization goal as a means to address a current market labor training shortfall and build on the success of apprenticeship as a proven program. Several whiteboard notes also named apprenticeship as a solution to workforce challenges. A labor group emphasized that workforce concerns need to be a key consideration in the Energy Strategy. The commenter emphasized that proven workforce training programs and standards be adhered to in developing new energy policy to ensure safe and quality projects and avoid building deadend jobs by training for low-cost, narrowly skilled workers. 190

¹⁷⁸ OES PWG EJ and Equity 4-14-25 Notes.

¹⁷⁹ Rogue Climate EJ Framework Comments, 06.25.25

¹⁸⁰ OES PWG BE EE and DERs 3-19-25 Notes.

¹⁸¹ OES PWG BE EE and DERs 3-19-25 Notes.

¹⁸² OES PWG LCFs 2-19-25 Notes.

¹⁸³ OES PWG EJ and Equity 2-24-25 Notes.

¹⁸⁴ OES PWG EJ and Equity 2-24-25 Notes

¹⁸⁵ OES PWG LCFs 2-19-25 Notes.

¹⁸⁶ OES PWG BE energy efficiency DERs 3-5-25 Notes.

¹⁸⁷ OES PWG DCEGT 2-26-25 Notes; OES PWG TE 3-4-25 Notes; OES PWG LCFs 2-19-25 Notes.

¹⁸⁸ OES PWG EJ and Equity 4-14-25 Notes.

¹⁸⁹ OES PWG EJ and Equity 4-14-25 Notes.

¹⁹⁰ UA 290 9.22.25.

Several PWG whiteboard notes advocated strategies to address workforce shortages, including:

- Targeting workforce development programs to rural areas;
- Partnering with existing community college programs, and aligning community college and apprenticeship programs; ensure these programs direct jobs to local communities;
- Better training and long-term funding for community organizations on navigation services;
- Promoting upskilling training for current electrical workers;
- Supporting wraparound services like family health and retirement; state taking a role in guaranteeing workplace safety and wages; ensuring high wages to address affordability challenges and better support workers affording upgrades to their own homes;
- Supporting and updating HB 2021 and HB 4059 responsible contractor and labor standards;
- Promoting community workforce agreements;
- Training salespeople and contractors on available incentives; and
- Setting diverse workforce goals to hire women, and BIOPC, disadvantaged communities.¹⁹¹

Affordability Comments and Energy Policy Objectives

Defining costs

A joint submission from numerous organizations requested that the Strategy clearly recognize that costs include both ratepayer bills and frontline community impacts, such as risks of being stranded on a gas system if electrification is not pursued equitably and siting and infrastructure-related hosting costs. The commenter recommended procedural justice and participation be emphasized to ensure that cost-based decisions accurately reflect opportunities and benefits from bottom-up basis.¹⁹²

General affordability caution and criticisms

Many commenters expressed a need for the Strategy to account for affordability issues, ¹⁹³ with a commenter stating that affordability needed to be addressed more specifically in clean electricity policy discussions. ¹⁹⁴ An AG member stated that they saw affordability considered in the draft Strategy but asked if ODOE had or would be reviewing all actions through an affordability lens. ¹⁹⁵ A natural gas utility's advisory group emphasized that rate impacts must be assessed in the context of all drivers of rate increases, including wildfire mitigation, grid modernization, and capital investment needs. ¹⁹⁶ A city government representative stated that recommended actions that would entail funding needs and earmarking spending should consider Oregon's statewide tax environment and competitiveness in attracting corporate investment. ¹⁹⁷ A local governmental agency commented that the Strategy makes clear that, despite present funding limitations and high upfront costs, the cost of delaying the energy transition would be great and should be avoided. ¹⁹⁸

¹⁹¹ OES PWG EJ and Equity 4-14-25 Notes.

¹⁹² Coalition Comments 9.22.25.

¹⁹³ Joint COU Comments 9.22.25; CUB 9.23.25; NWGA 9.22.25; OFA 9.22.25; Pacific Power 9.22.25; PGE 9.22.25; WSPA 9.22.25; OES PWG EJ and Equity 2-24-25 Notes; CUB 5.14.25; 3_20_2025_Advisory Group #8 Summary; 4_23_2025_Advisory Group #9 Summary; OES PWG BE EE and DERs 3-19-25 Notes; OES PWG BE EE and DERs 5-7-25 Notes.

¹⁹⁴ OES PWG DCEGT 4-30-25 Notes.

¹⁹⁵ 9 18 2025 Advisory Group #11.

¹⁹⁶ NW Nat AG 04.02.25 Statement.

¹⁹⁷ City of Hillsboro, 9.19.25.

¹⁹⁸ BPS 9.22.25.

An industry advocacy organization commented in general opposition to the draft Energy Strategy; the commenter expressed concern that businesses already face numerous regulations and requirements to subsidize low-income customers and argued that the Strategy would only impose further requirements while failing to coordinate policies between state agencies, provide a cost-benefit analysis for the recommendations, identify funding sources for actions, or provide oversight for state programs. The commenter stated that the Strategy should avoid recommending studies or subsidies and instead provide more direct action to expand reliable and affordable generation capacity while prioritizing the competitiveness of Oregon businesses in a global context.¹⁹⁹

Allocating costs

A joint submission recommended that the Energy Strategy discussion whether ratepayers should bear responsibility for funding many of the recommendations under consideration, especially in the context of rising electricity rates.²⁰⁰ An individual commenter stated that the financial burden for the energy transition should not fall on individual taxpayers or ratepayers but instead on corporations, reasoning that corporations are primary drivers of GHG emissions.²⁰¹ An energy advocacy organization recommended that the Strategy consider utility-funded programs and alternative financing mechanisms to avoid increasing residential customer costs.²⁰² An IOU recommended that Energy Strategy actions be funded in a "direct and rational way" and not rely exclusively on ratepayer funding.²⁰³

A PUD association cited the Legislative Policy and Research Office, Economic and Revenue Forecast, and a news article to highlight reduced federal funding, statewide economic conditions, and high and increasing costs of living in support of their position that the state and ratepayers cannot afford actions proposed in the draft Energy Strategy report. The organization urged that the Strategy consolidate and eliminate 'wasteful administrative programs and barriers.' Similarly, a joint submission from commenters representing COUs expressed surprise at the number of recommended actions that may require taxpayer or ratepayer funding; the commenters recommended that ODOE prioritize three top proposals and indicate relative costs for the proposed actions. Similarly, a location of the proposed actions.

Hydro, gas, resource adequacy, and affordability

A PUD commented that affordability challenges faced by their ratepayers underline the importance of firm baseload capacity, preserving the LSRDs and hydroelectric generation, and concerns regarding recommended actions, such as the proposed transmission entity, that may add bureaucratic and administrative costs via the Energy Supplier Assessment. The commenter stated that they estimate LSRD removal would increase electricity rates in their territory by 20 to 40 percent while increasing emissions and reliance on natural gas.²⁰⁶ A PUD association agreed that preserving hydroelectric resources and limiting Energy Strategy actions are important to responding to affordability and budget restraints in Oregon, citing sources on funding challenges in the State.²⁰⁷

Economic development

A joint submission focused on clean tech innovation commented that the Strategy does not address a key form of economic development, stimulating the establishment of a new clean energy technology

¹⁹⁹ AWEC 9.22.25

²⁰⁰ CCC MultCo OS CEP KLCAS 5.9.25 Joint Submission.

²⁰¹ Maleek McKenzie 9.22.25.

²⁰² CUB 5.14.25.

²⁰³ 4_23_2025_Advisory Group #9 Summary.

²⁰⁴ OPUDA 9.21.25.

²⁰⁵ Joint COU Comments 9.22.25.

²⁰⁶ Central Lincoln PUD 9.17.25.

²⁰⁷ OPUDA 9.21.25.

industry in Oregon. The submission reasoned that the CPP already provides market pull for businesses to locate in Oregon to meet clean energy demand here but stated that this pull has failed to realize new business in Oregon so far. The commenters cited Oregon's Clean Tech Task Force as naming "insufficient supply of large, development ready industrial sites, an under-developed workforce system for forms of clean tech innovation and manufacturing, and an immature research, innovation and entrepreneurship ecosystem for various forms of clean energy tech" as factors for this shortcoming and urged that the Final Report address these barriers. The submission provided a chart with numerous policy tools designed to de-risk demand and attract startups to Oregon and further recommended that Oregon establish a role or office dedicated to the market development of clean energy technologies – similar to roles served by ODF and ODA in Oregon and offices established in New York and Michigan.²⁰⁸ An IOU generally agreed that the Strategy should explore how energy innovation could drive economic growth in Oregon²⁰⁹ and a consultancy recommended that the Strategy embrace industrial symbiosis hub planning for Oregon's port and other economic hubs to support economic development consistent with state energy objectives.²¹⁰

A local government representative commented that the Strategy should work towards providing Oregon with a robust and responsive grid quickly, stating that leading-edge industries the state relies on are power-intensive and location-specific.²¹¹ Similarly, an individual commenter recommended that the Strategy be framed around "energy abundance," stating that abundant energy supplies would make goals of affordability and equity easier to achieve.²¹²

Energy policy objectives and affordability

An energy advocacy organization supported the Strategy's inclusion of HB 2021, the CPP, and EO 20-04 as the law of Oregon; the commenter recommended adding HB 2475, the Energy Affordability Act, adding that the spirit of this law was reflected in the Draft Energy Strategy. 213 Conversely, a natural gas utility stated that ODOE should perform a cost-benefit analysis of state energy policy objectives to determine what is achievable in the state and that, because HB 3630 does not define energy policy objectives, ODOE should conduct an analysis to support what the state's objectives should be in light of affordability, resilience, and reliability concerns. The commenter faulted ODOE's approach of modeling compliance with state decarbonization policies and laws, stating that, instead, ODOE should have evaluated whether these goals are feasible. In particular, the utility stated that the affordability component of this analysis is needed in light of reduced federal funding and state budgetary constraints, that the cost impacts of recommended actions should be examined in the Strategy, and that ODOE should review the technical modeling to see how federal and state changes might impact the analysis.²¹⁴ The commenter also stated that HB 2021 included a cost and reliability off-ramp, urging that the Strategy must prioritize these factors alongside decarbonization goals in the Strategy. ²¹⁵ An AG member similarly stated state decarbonization objectives should not be advanced "at all costs" and should be balanced based on affordability and legislative intent towards the same.²¹⁶ An IOU agreed with elevating conflicts between affordability, federal changes, and state goals, stating that they will forecast a need for 11,837 GWs of additional clean energy to comply with Oregon policies by 2040.²¹⁷ Another IOU

²⁰⁸ Newlab Recruitment Coalition 9.22.25.

²⁰⁹ PGE 9.22.25.

²¹⁰ Sol Coast 9.22.25.

²¹¹ City of Hillsboro, 5.9.25.

²¹² Dave Peticolas 4.22.25.

²¹³ CUB 9.23.25.

²¹⁴ NW Natural 9.22.25.

²¹⁵ NW Nat 04.02.25 Comment.

²¹⁶ 5 15_2025_Advisory Group #10 Summary.

²¹⁷ Pacific Power 9.22.25.

stated that Strategy actions should avoid duplication with other workstreams at OPUC, ETO, or legislature to avoid exacerbating state affordability challenges. The commenter added that proposed studies are also likely to exacerbate affordability challenges without immediate benefit.²¹⁸

An individual commenter stated that Oregon has clear energy objectives in the form of "a sustainable Oregon economy", citing the Sustainable Oregon Act of 2001; the commenter also recommended that the objective of the Strategy be fostering a "Zero Emission Economy." The commenter wrote that the draft Energy Strategy reflects mission drift from ODOE and that Oregon should focus on shifting peak loads by supporting battery adoption and reducing reliance on importing fuels by promoting BEV and FCEV adoption supported by solar generation and clean hydrogen production.²¹⁹

An AG member commented that the Strategy should be mindful of affordability and cost impacts when considering Oregon's role in climate change and decarbonization, stating that Oregon contributes to only a small portion of global GHG emissions.²²⁰

Reliability and Resource Adequacy

Many commenters expressed a need for the Strategy to account for system adequacy and reliability issues, especially to respond to climate change and extreme weather events, Oregon becoming a dualpeaking state with increased summer cooling demand, and load growth from electrification and data centers.²²¹ A PUD organization and COU commented that the draft Energy Strategy report inadequately addressed a need for increased baseload generating capacity to affordably and reliably meet load growth needs.²²² In particular, the PUD stated that the Strategy should recognize the importance of natural gas as a transition fuel and hydroelectric power's contributions to clean, affordable, and renewable electricity.²²³ A labor group and nuclear advocacy organization agreed the draft should discuss the need for firm power more in the context of reduced coal-based generation and threats to hydro generation.²²⁴ An AG member stated the draft Strategy lacks "seriousness" in assessing impacts to Oregonians resulting from expecting electricity demand increases. The AG member stated that the Strategy needs to assess new technologies, increase pace of development, and preserve hydroelectric generation to meet firm, baseload power needs. In particular, the commenter expressed that State expenditures to litigate hydroelectric dam issues would be a poor use of resources and counterproductive to energy policy objectives. To urgently meet energy needs, the commenter stated that more direct action is needed to address transmission needs and remove barriers to nuclear in the state.²²⁵ A labor group, a renewable energy organization, a local government representative, individual commenter, and nuclear advocacy organization likewise recommended that the clean electricity pathway should further acknowledge a need for clean, firm power and address a potential role for nuclear generation in complimenting variable renewables and storage and in meeting modeled load growth.²²⁶ A labor group advocated an "all of the above" approach that supports emerging energy technologies to this end.²²⁷ The nuclear advocacy organization added that the analysis should consider supply chain security, stating that solar panels and wind turbines rely comparatively more on

²¹⁸ PGE 9.22.25.

²¹⁹ Toby Kinkaid 9.22.25.

²²⁰ 9 18 2025 Advisory Group #11.

²²¹ Joint COU Comments 9.22.25; NSE 9.22.25; OFA 9.22.25; PGE 9.22.25; UA 290.9.22.25; 4_23_2025_Advisory Group #9 Summary; NW Nat AG 05.21.25 Comment; 9_18_2025_Advisory Group #11; PPC, OMEU, ORECA, OPUDA 5.9.25..

²²² OPUDA 9.21.25; EWEB 9.22.25.

²²³ OPUDA 9.21.25.

²²⁴ IW 29 9.22.25; Mothers for Nuclear.

²²⁵ 9 18 2025 Advisory Group #11.

²²⁶ IW 29 9.22.25; CREA 9.22.25; Comm Dan Dorran, 9.22.25; Generation Atomic 9.22.25.

²²⁷ UA 290 9.22.25.

international supply chains than does nuclear fuel.²²⁸ A COU agreed that the Strategy should consider firm resources with benefits regarding siting requirements in this context.²²⁹ A Tribal organization recommended that the Strategy recognize siting and permitting barriers and commercial immaturity of distributed energy resources, stating that the Strategy should therefore acknowledge a continued role for fuel-based infrastructure and generation to meet peak energy needs.²³⁰

A joint submission from commenters representing COUs and an AG member urged that the pathway framework be supplemented with an additional pathway for reliability.²³¹ The joint submission reasoned that reliability is of central importance to the Strategy because of developing risks in load growth and extreme weather. The commenters stated that firm baseload generating capacity, in technology such as SMRs and policies such as California's Strategic Reliability Reserve's construction of hydrogen-ready gas and diesel plants, should be directly advanced by the Strategy. The commenter stated that California's example shows that near- and longer-term steps to ensure system reliability while advancing clean energy goals should be taken in tandem.²³²

A renewable energy organization commented that, while the draft Strategy acknowledges projected load growth, it fails to offer adequate proposals to address this issue; the commenter recommended that natural gas and low-carbon fuels not be discounted as means of making up for delayed renewable generation and transmission capacity. The commenter recommended projecting generation capacity targets for each technology over 10, 25, and 50 years and associated transmission needs.²³³

A natural gas utility stated that the Strategy "ignores the regional adequacy crisis", citing a PNUCC report on projected demand growth in the region and work from their own Advisory Group for their IRP. The commenter stated that their AG found that modeling performed by the utility's consultant for their resource planning modeling was overly optimistic with respect to electrification and the ability of the electric system to meet demand even without electrifying the natural gas system. The utility cited an Oregon Public Broadcasting article as highlighting the demand challenges in the 2024 winter storm. In conclusion, the commenter urged that the Strategy recognize "the capacity value of the existing natural gas distribution that cannot be replaced with electricity", the Strategy recognize value in the natural gas system for meeting winter energy demand, and risks of electrification shifting natural gas emissions to the electric system rather than reducing them. The utility advocated reassessing the Strategy through a regional adequacy lens.²³⁴ A natural gas trade association agreed, similarly citing a NW Natural Advisory Group in stating that projecting rapid electrification should be met skeptically in light of resource adequacy and resource development constraints. The commenter also cited a study they and PNUCC commissioned as showing that the Pacific Northwest currently risks blackouts during peak demand events and increasing extreme weather events. The commenter stated that this risk is likely to be exacerbated by load growth caused by data centers, manufacturing, and electrification, and that growing energy demand is likely to increase natural gas demand – and needs for expanded natural gas infrastructure. The commenter stated that energy system failures pose public health risks and increase consumer costs via increased wholesale energy pricing during peak events.²³⁵

An AG member emphasized that system-reliability has significant environmental justice and equity components; they described that home generator purchases are increasing in response to system

²²⁸ Generation Atomic 9.22.25.

²²⁹ EWEB 9.22.25.

²³⁰ WSPA 9.22.25.

²³¹ 5_15_2025_Advisory Group #10 Summary.

²³² Joint COU Comments 9.22.25.

²³³ CREA 9.22.25.

²³⁴ NW Natural 9.22.25.

²³⁵ NWGA 05.07.25 OES Comment; NWGA 9.22.25.

reliability risks, but that low-income and environmental justice communities are less able to procure personal, backup generators.²³⁶

In response to discussions of a need for firm, baseload generating resources to respond to peak demand, an AG member stated that there is a consistent pattern of a wind-surge before arctic wind-snaps, followed by reduced wind. The commenter stated that hydro resources can help balance energy supply and demand around these patterns and that importing clean energy from other regions can similarly offer solutions. The AG member stated that these facts support a need for a diversified energy system.²³⁷

IV. Energy Strategy Pathways and Policies

General Comments on Pathways and Policies

A city government representative expressed general agreement with the high level pathway and policy drafting in the Strategy, but stated that difficulty might arise in more concrete decision-making.²³⁸ Similarly, a joint submission from numerous organizations supported the pathway drafting as reflecting a reality that the status quo of energy comes at great costs to Oregonians and that equitable strategies are needed to meet state energy objectives; however, the submission urged that actions be strengthened, prioritized, and clarified so as to be more actionable for policymakers.²³⁹ Another coalition comment agreed that the status quo of energy in Oregon is not an option, stating that equitable progress to climate goals that considers resilience, health, and economic opportunity is essential.²⁴⁰ A community energy organization and conservation organization also generally supported the pathway drafting²⁴¹ as did a local government, which stated that the drafting aligns with City of Portland's Climate Emergency Workplan.²⁴²

An energy non-profit stated that the Energy Strategy generally aligns with their Strategic and Multiyear Plans, especially in its support for distributed energy resources, prioritization of cost-effective energy efficiency, and call for a managed transition to electrification.²⁴³

Pathway 1: Energy Efficiency

Policy 1a. Buildings Efficiency

Energy efficiency and electrification

A joint submission from numerous organizations generally supported the drafting of policy 1a and, in particular, the important overlap between energy efficiency and electrification; however, the submission urged that the policy explicitly address policy barriers to fuel switching in ETO's incentive programs.²⁴⁴ A coalition comment agreed that the Strategy should further link energy efficiency and electrification and address fuel-switching barriers.²⁴⁵ A local government supported drafting in Policy 1a and requested that the Strategy emphasize opportunities in advancing building codes while supporting decarbonizing initiatives for existing buildings – especially via electrification and load flexibility.²⁴⁶ A climate advocacy

²³⁶ 9 18 2025 Advisory Group #11.

²³⁷ 9_18_2025_Advisory Group #11.

²³⁸ City of Hillsboro, 9.19.25.

²³⁹ Coalition Comments 9.22.25.

²⁴⁰ ZERO Coalition 9.22.25.

²⁴¹ John Seng, Spark NW 9.8.25; OACD 9.17.25.

²⁴² BPS 9.22.25.

²⁴³ ETO 9.22.25.

²⁴⁴ Coalition Comments 9.22.25.

²⁴⁵ ZERO Coalition 9.22.25.

²⁴⁶ Multnomah County 9.22.25.

organization emphasized the importance of strong standards for new constructions to lock-in efficient, electrified housing stock as municipalities are undergoing significant housing expansions.²⁴⁷ A PWG member generally commented that the Strategy's framing around efficiency and electrification obscures the importance of housing justice, stating that a housing justice framing would address both these issues and others, like home health for renters and mold.²⁴⁸ A PWG whiteboard note urged that the Strategy appreciate co-benefits of energy efficiency.²⁴⁹

Conversely, a natural gas utility supported treating energy efficiency and electrification as distinct policy areas and generally expressed support for energy efficiency efforts, especially in replacing electric resistance heating.²⁵⁰ The commenter requested revisions on the drafting that energy efficiency should prioritize electrification and load flexibility, stating that they support hybrid or dual-fuel heating systems to address peak demand winter events where renewable generation capacity may be strained. The commenter provided data showing increased reliance on coal and natural gas generation to meet regional demand during a recent 2024 cold snap and 55 percent more energy delivery from NW Natural to Oregon customers than PGE and PacifiCorp delivery combined. The utility stated that, during such events, shifting loads to off-peak times is not a sufficient response to address energy demand. The commenter added that reliance on gas energy is necessary throughout the winter, citing statements from an electricity IOU's 2023 IRP projections for 2030. Citing sources, the utility concluded that hybrid heating systems help address winter energy demand conditions while also operating more efficiently during colder weather than electric-only heat pumps – and especially electric heat pumps that have not been perfectly maintained. The utility advocated reviewing gas-electric utility partnerships in Canada. 251 A natural gas trade association similarly supported advancing dual-fuel heating systems as means to improve energy affordability²⁵² and several PWG members agreed that dual-fuel systems have resilience benefits.²⁵³ Conversely, certain PWG members stated that dual-fuel systems may exacerbate affordability or cost challenges because dual-fuel systems require both gas and electric infrastructure that require maintenance and replacement efforts.²⁵⁴

Funding and energy efficiency program administration

An energy advocacy organization recommended that draft policy 1a address an ability to braid ratepayer funds with state and federal funds to support Community Action Agencies, address the lack of contractors in rural and frontier areas, and furthering home repairs. The commenter also recommended calling for seamless pathways for qualifying households to benefit from programs from various entities in Oregon, such as ETO, OHCS, and Community Action Agencies.²⁵⁵ Similarly, an energy non-profit organization stated that the Strategy should consider multiple, complementary funding strategies to effectively serve diverse needs of Oregon customers.²⁵⁶

A PWG whiteboard note stated that energy efficiency retrofit programs are often contradictory and inconsistent.²⁵⁷

Prioritizing households

²⁴⁷ Rogue Climate 5.9.25.

²⁴⁸ John Seng, Spark NW, OES PWG EJ and Equity 2-24-25 Notes.

²⁴⁹ OES PWG EJ and Equity 2-24-25 Notes.

²⁵⁰ NW Natural 9.22.25.

²⁵¹ NW Natural 9.22.25.

²⁵² NWGA 9.22.25.

²⁵³ OES PWG BE EE and DERs 3-19-25 Notes.

²⁵⁴ OES PWG BE EE and DERs 3-19-25 Notes.

²⁵⁵ CUB 9.23.25.

²⁵⁶ ETO 9.22.25.

²⁵⁷ OES PWG EJ and Equity 2-24-25 Notes.

A joint submission from environmental organizations generally supported the Strategy's focus on lowand moderate-income households, adding that it should strengthen this focus by advancing dedicated funding, accessible program design, community engagement – especially in rent improvement program development – equitable training opportunities for contractors, renters, Tribes, and landlords, and market interventions, similar to California appliance standards, to support efficient appliance adoption.²⁵⁸ Several PWG whiteboard notes identified financing and upfront costs as barriers to building electrification and energy efficiency, especially for low-income households.²⁵⁹ For more discussion of financing for building upgrades, refer to Revolving Loan Fund.

Information, awareness, and education

An AG member stated that real-estate agents and loans failing to account for energy efficiency and home maintenance costs is a barrier and should be addressed by providing education to building appraisers and inspectors²⁶⁰ and PWG whiteboard notes agreed that deeper home energy assessments are needed.²⁶¹ A PWG member similarly stated that advocates are needed to support consumer energy efficiency decisions generally.²⁶² Several PWG members stated that contractor experience and buyer or renter information of available technologies also impacts building electrification and energy efficiency adoption.²⁶³ A couple of PWG members recommended that extant IOU programs for cost-recovery be used for community outreach and especially targeted towards low-income communities.²⁶⁴

Renters and environmental justice

Several commenters and PWG whiteboard notes raised discussed barriers facing renters and related to multifamily homes for building electrification and energy efficiency. A PWG member stated that renters are both generally focused on short-term needs and do not have agency regarding energy efficiency or building quality needs; similarly, another member explained that landlords are responsible to invest in efficiency improvements but that the cost-savings for those investments accrue instead to renters, leading to an incentive gap. The commenter recommended minimum standards as means of addressing this gap. 267

Workforce

A PWG member and whiteboard entry identified workforce and qualified contractor availability as barriers to building electrification and energy efficiency adoption.²⁶⁸ Other PWG members emphasized a need for cultural competence training is needed for contractors and installers going into people's homes,²⁶⁹ further reasoning such training could help contractors educate residents on equipment.²⁷⁰ A PWG whiteboard note identified an opportunity to collaborate with affordable housing developers like the Housing Authority of Jackson County (HAJC).²⁷¹

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<sup>258</sup> NEDCGEINCA 9.22.25.
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²⁵⁹ OES PWG EJ and Equity 2-24-25 Notes.

²⁶⁰ 3 20_2025_Advisory Group #8 Summary.

²⁶¹ OES PWG EJ and Equity 2-24-25 Notes.

²⁶² OES PWG EJ and Equity 2-24-25 Notes.

²⁶³ PWG BE EE and DERs 3-19-25 Notes; OES PWG EJ and Equity 2-24-25 Notes.

²⁶⁴ PWG EJ and Equity 2-24-25 Notes.

²⁶⁵ OES PWG BE EE and DERs 3-19-25 Notes; OES PWG EJ and Equity 2-24-25 Notes.

²⁶⁶ OES PWG EJ and Equity 2-24-25 Notes.

²⁶⁷ OES PWG EJ and Equity 2-24-25 Notes.

²⁶⁸ PWG BE EE and DERs 3-19-25 Notes; OES PWG EJ and Equity 2-24-25 Notes.

²⁶⁹ OES PWG EJ and Equity 2-24-25 Notes.

²⁷⁰ OES PWG EJ and Equity 2-24-25 Notes.

²⁷¹ OES PWG EJ and Equity 2-24-25 Notes.

Other comments

An AG member recommended framing energy efficiency and DR investments by individuals as forms of responsible citizenship within the electrical grid.²⁷²

An AG member commented that an early draft strategy for building electrification and energy efficiency was too timid and should instead more clearly address how building electrification and energy efficiency can improve building quality and more directly specify whether the Energy Strategy is promoting electrification as a goal or simply improved appliance efficiency. The AG member stated that improvement-oriented goals are insufficient to realize Oregon's energy policy objectives. For more comments on building electrification policy, refer to Strategic Electrification.

Policy 1b. Large Commercial and Industrial Efficiency

A local government generally supported Policy 1b drafting but recommended that it recognize the potential of financial tools like Commercial Property Assessed Clean Energy Programs.²⁷³

A PWG member also stated that many industrial buildings are constructed around existing, unique systems that can be difficult to upgrade or replace – for example, old industrial boilers.²⁷⁴ A local government representative recommended addressing Oregon's nuclear siting ban as a barrier in the context of draft policy 1b, stating that onsite nuclear generation could alleviate energy needs for some energy-intensive industries.²⁷⁵

PWG members provided several notes on barriers to industrial decarbonization including:

- Net metering;
- Relatively small energy costs and thus business incentives to reduce energy expenditures;
- Lack of clear energy efficiency or electrification options;
- Up front or capital cost barriers;
- Short-term financial goal planning; and
- Workforce shortages.²⁷⁶

Opposition to draft policy

A data center trade organization generally expressed opposition to policy 1b as imposing burdensome additional regulation.²⁷⁷

Policy 1c. Expand Access to and Appeal of Multimodal Transportation Options

Support for VMT reduction as policy; means for successfully achieving VMT reduction

Multiple commenters broadly supported prioritizing policies that reduce Vehicle Miles Traveled (VMT) and increase transportation options and efficiency.²⁷⁸ Several commenters emphasized that transitioning to EVs is not enough; the state must also focus on reducing the overall need to drive.²⁷⁹ A local government emphasized the cost-saving and air quality benefits modeled for VMT reduction for

²⁷² 3 20 2025 Advisory Group #8 Summary.

²⁷³ Multnomah County 9.22.25.

²⁷⁴ OES PWG BE EE DERs 3-5-25 Notes.

²⁷⁵ Comm Dan Dorran 9.22.25.

²⁷⁶ OES PWG BE energy efficiency DERs 3-5-25 Notes.

²⁷⁷ DCC 9.22.25.

²⁷⁸ 4 23 2025 Advisory Group #9 Summary; OES PWG EJ and Equity 4-14-25 Notes; Multnomah County 9.22.25.

²⁷⁹ 4_23_2025_Advisory Group #9 Summary; OES PWG TE 4-10-25 Notes

the Strategy.²⁸⁰ Several commenters suggested framing the goal as VMT "efficiency" rather than "reduction" to avoid sensitivities.²⁸¹

A primary strategy recommended by PWG and AG members is to reduce the need to drive at all, ²⁸² even over vehicle electrification. ²⁸³ Comments reflected that VMT efficiency reduces household transportation costs in mileage and vehicle expenditures, ²⁸⁴ lowers the need for electricity and transmission infrastructure, ²⁸⁵ reduces road maintenance expenditures, ²⁸⁶ provides more reliable transportation and resilience, ²⁸⁷ decreases impervious surfaces that create heat islands, ²⁸⁸ and reduces the negative environmental impacts of EVs, such as mining for battery materials. ²⁸⁹ A PWG member agreed that finding alternatives to reduce EV impacts in lithium mining is important. ²⁹⁰ A PWG member stated that frequent exceptions to land-use regulation have eroded the power of these policies to foster VMT reduction. ²⁹¹

Multiple AG and PWG members urged the state to rethink city planning and update development codes to be less oriented around single-occupancy vehicles and more friendly to public transit, bicycles, and pedestrians.²⁹² This includes supporting mixed-use development²⁹³, minimizing cul-de-sacs²⁹⁴, and implementing Climate Friendly Area zoning requirements.²⁹⁵ A PWG whiteboard note suggested building in disincentives for driving, such as reducing parking availability and implementing congestion fees.²⁹⁶ A PWG member stated that smart planning is hampered by approaches that only assess, for cost-benefit purposes, traffic collision risks after they occur.²⁹⁷ Another PWG member noted shortcomings of single-occupancy-vehicle- and car-focused city planning, especially in urban "stroads" - arterial road for through traffic while also providing access to businesses like strip malls and drive-throughs - and urged that these be considered in assessing approaches to vehicle electrification and VMT reduction.²⁹⁸

There was strong sentiment that investments in public and active transportation should be prioritized, with some suggesting this should come before incentives for individual EVs.²⁹⁹ Regarding public transit, PWG members stated that, to increase ridership, transit needs to be more reliable, frequent, affordable, convenient, and safe.³⁰⁰ Safety and safety enforcement on public transit was identified as a significant barrier for potential riders,³⁰¹ and construction and labor costs as a barrier to infrastructure

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<sup>280</sup> Multnomah County 9.22.25.
<sup>281</sup> 4 23 2025 Advisory Group #9 Summary; OES PWG TE 3-4-25 Notes
<sup>282</sup> 4_23_2025_Advisory Group #9 Summary; OES PWG EJ and Equity 2-24-25 Notes.
<sup>283</sup> OES PWG EJ and Equity 4-14-25 Notes.
<sup>284</sup> 4 23 2025 Advisory Group #9 Summary
<sup>285</sup> 4 23 2025 Advisory Group #9 Summary
<sup>286</sup> 4 23 2025 Advisory Group #9 Summary
<sup>287</sup> 4 23 2025 Advisory Group #9 Summary
<sup>288</sup> 4 23 2025 Advisory Group #9 Summary; OES PWG EJ and Equity 4-14-25 Notes
<sup>289</sup> 4 23 2025 Advisory Group #9 Summary
<sup>290</sup> OES PWG EJ and Equity 4-14-25 Notes.
<sup>291</sup> OES PWG TE 3-4-25 Notes.
<sup>292</sup> 3_20_2025_Advisory Group #8 Summary; 4_23_2025_Advisory Group #9 Summary; OES PWG TE 4-10-25 Notes.
<sup>293</sup> OES PWG TE 4-10-25 Notes.
<sup>294</sup> OES PWG TE 4-10-25 Notes.
<sup>295</sup> OES PWG TE 4-10-25 Notes.
<sup>296</sup> OES PWG TE 4-10-25 Notes
<sup>297</sup> OES PWG TE 4-10-25 Notes.
<sup>298</sup> OES PWG EJ and Equity 4-14-25 Notes.
<sup>299</sup> OES PWG EJ and Equity 2-24-25 Notes; OES PWG EJ and Equity 4-14-25 Notes
300 OES PWG LCFs 2-19-25 Notes; OES PWG TE 4-10-25 Notes
<sup>301</sup> OES PWG TE 4-10-25 Notes; OES PWG TE 3-4-25 Notes
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expansion.³⁰² The state was encouraged to collaborate with Amtrak to expand service³⁰³ and to assist medium-sized cities with feasibility studies for light rail or electric trolleys.³⁰⁴ A commenter also stated that the Pioneer Line along I-84 could be "transformational" for VMT reduction; they and another PWG member recommended calling out rail specifically in the Strategy.³⁰⁵

Several commenters also addressed bicycle and pedestrian infrastructure. PWG members repeatedly called for more and safer infrastructure for biking and walking,³⁰⁶ particularly dedicated bike lanes that are physically separated from automobile traffic and parking³⁰⁷ and reduced speed limits for residential streets.³⁰⁸ PWG members expressed concern that slowing traffic can reduce efficiency when it leads to idling or congestion³⁰⁹ and that closing gaps in active transportation networks is a priority.³¹⁰ A PWG whiteboard note also recommended harsher penalties for drivers who strike pedestrians or cyclists; another recommended studying solutions to unhoused community member traffic exposure, risks, and crash-related fatalities.³¹¹Electric micromobility options like e-bikes and e-scooters were seen as a major opportunity to reduce VMT, as they attract new riders who would not otherwise bike.³¹² Suggestions included creating statewide e-bike purchase incentives, especially for low-income residents.³¹³

Funding multimodal transportation

A major barrier identified is the lack of a sustainable funding model to support a modern, multimodal transportation system³¹⁴ and threats to federal funding.³¹⁵ PWG members noted that current funding models that rely on gas taxes and parking revenue are seen as inadequate and misaligned with climate goals.³¹⁶ A PWG member stated that dependence on parking revenue is a barrier and should be replaced with a sustainable, non-regressive funding mechanism. The commenter stated that there is no question or confusion regarding the "right" way to raise transit funding; need a road usage charge and formula for weight and efficiency of vehicle to assess charge. The PWG member recommended retaining gasoline taxes as an expected, already built-in carbon tax that should be tied to inflation and ensuring that funding models assess air quality impacts from diesel trucks.³¹⁷ Another PWG member identified programs in Minnesota, Colorado, and Virginia as examples of improved transportation funding.³¹⁸ Other suggestions included increasing the statewide payroll tax to fund transit operations³¹⁹ and giving local transit districts – especially for small and medium-sized districts – more flexibility to raise their own revenue.³²⁰ Conversely, a PWG whiteboard note stated that ODOT and governmental accountability, specifically for 2017, needs to precede any funding asks.³²¹

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<sup>302</sup> OES PWG TE 3-4-25 Notes.
<sup>303</sup> OES PWG TE 4-10-25 Notes
<sup>304</sup> OES PWG TE 4-10-25 Notes
<sup>305</sup> OES PWG TE 3-4-25 Notes.
<sup>306</sup> OES PWG EJ and Equity 4-14-25 Notes
<sup>307</sup> OES PWG TE 4-10-25 Notes.
<sup>308</sup> PWG TE 4-10-25 Notes.
<sup>309</sup> OES PWG TE 4-10-25 Notes.
<sup>310</sup> OES PWG TE 4-10-25 Notes; OES PWG TE 3-4-25 Notes
311 OES PWG TE 4-10-25 Notes; OES PWG TE 3-4-25 Notes
<sup>312</sup> 4 23 2025 Advisory Group #9 Summary; OES PWG TE 3-4-25 Notes
313 OES PWG TE 4-10-25 Notes
314 OES PWG TE 4-10-25 Notes; OES PWG TE 3-4-25 Notes
<sup>315</sup> OES PWG TE 3-4-25 Notes.
316 OES PWG TE 4-10-25 Notes
<sup>317</sup> OES PWG TE 4-10-25 Notes.
318 OES PWG TE 4-10-25 Notes.
<sup>319</sup> OES PWG TE 4-10-25 Notes
<sup>320</sup> Tonia Moro, OES PWG TE 4-10-25 Notes
321 OES PWG TE 4-10-25 Notes.
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Several commenters also discussed allocating funding. A PWG whiteboard note suggested that discretionary state funds, such as Congestion Mitigation and Air Quality money, should be restricted to transit projects. PWG whiteboard notes also recommended that gas tax revenue be restricted to road maintenance and that other sources, such as system development charges, be relied upon for new road development.³²²

Opposite to or criticism of VMT reduction as a policy

Conversely, a policy advocacy organization provided citations in arguing that VMT reduction policies have historically been unsuccessful in the United States, stating that efforts have harmed some businesses and that the COVID-19 pandemic reduced transit ridership rates that have yet to recover. The commenter also stated that multimodal development patterns do not reduce VMT related emissions because resident self-selection accounts for the majority of localized VMT reductions from urban design. The commenter stated that personal vehicles provide mobility benefits and recommended that the Strategy promote fuel-efficient vehicles rather than EVs to advance Oregon energy objectives. A petroleum trade association similarly commented that VMT reductions in Oregon are inadvisable because of asserted consumer preference for driving, lack of density and transit infrastructure. A PWG whiteboard note generally stated that it is more efficient, affordable, and enjoyable to drive rather than walk, bike, or use public transit.

A PWG member commented that VMT reductions should be focused on passenger, rather than freight, travel, reasoning that reductions in freight VMT would incur negative economic impacts. The commenter also stated that transit is already subsidized and that ridership has declined since the COVID-19 pandemic. Another PWG member generally agreed but stated that there are last-mile freight efficiency opportunities, like directing large vehicles to hubs. 328

A PWG member expressed concern that Oregon does not have major cities with pedestrian-friendly planning, like Paris or Copenhagen;³²⁹ conversely though, another AG member responded that there are still many small- and medium-sized cities that are pedestrian friendly.³³⁰

A PWG whiteboard note identified business return-to-work policies as a risk for VMT reduction.³³¹

Rural and Urban Considerations

Commenters noted that transportation solutions must be tailored to different regions and not take a "one-size-fits-all" approach.³³² PWG and AG members stated that reducing VMT is more difficult in rural areas³³³, and an AG whiteboard note indicated that driving is often tied to independence, jobs, and family connections.³³⁴

³²² OES PWG TE 3-4-25 Notes.

³²³ Randal O'Toole, Thoreau Institute 9.12.25.

³²⁴ WSPA 9.22.25.

³²⁵ OES PWG TE 3-4-25 Notes.

³²⁶ OES PWG TE 4-10-25 Notes.

³²⁷ OES PWG TE 4-10-25 Notes.

³²⁸ OES PWG TE 4-10-25 Notes.

³²⁹ OES PWG TE 4-10-25 Notes.

³³⁰ OES PWG TE 4-10-25 Notes.

³³¹ OES PWG TE 3-4-25 Notes.

^{332 4 23 2025} Advisory Group #9 Summary; OES PWG EJ and Equity 4-14-25 Notes

³³³ 4 23 2025 Advisory Group #9 Summary; OES PWG TE 3-4-25 Notes

³³⁴ 4_23_2025_Advisory Group #9 Summary

PWG members provided suggestions included improving transit connections between rural towns and larger urban areas³³⁵, and supporting e-bikes in small towns and on the coast³³⁶, and providing better public transit access to recreational areas like the coast and mountains, which is a major reason many Oregonians – urban and rural – own a personal vehicle.³³⁷ A PWG whiteboard note recommended providing resources for workplace and employee based transportation demand management programs outside the Portland Metro area.³³⁸

Transportation Electrification

Commenters also addressed VMT goals in the context of the electrification of vehicles. Some PWG members stated that they do not see EV adoption and VMT reduction as contradictory goals, but rather as complementary strategies that can be targeted to different populations and areas. Another PWG member expressed concern that VMT may increase as a result of vehicle electrification.

General and Other Energy Efficiency Comments

Energy Efficiency as a High-Priority Policy

Many commenters, including joint submission from numerous organizations, climate advocacy organizations, and an individual commenter, generally supported the Strategy prioritizing energy efficiency as part of Oregon's history and a way to avoid costly energy infrastructure development.³⁴¹ An AG member agreed, including VMT reduction as a form of energy efficiency. 342 Relatedly, a PWG member emphasized that the Strategy should avoid setting energy efficiency goals that are too low.³⁴³ A local government agreed, adding that energy efficiency benefits residential customers, improves local economies, and aligns with CRITFC's 2022 Energy Vision in its environmental benefits.³⁴⁴ A Tribal organization supported prioritizing energy efficiency measures as the most fish-friendly tool in meeting energy demand.³⁴⁵ The joint submission appreciated the expansion of energy efficiency from the building and utility sectors to industry and transportation, especially in light of prospective co-benefits and avoided investments in roads and other costs. The commenter advocated that energy efficiency measures be conceptualized differently for different communities and contexts, such as low-income communities and weatherization needs; the increased energy efficiency benefits from large energy consumers; and the need to invest in new, resilience-focused energy-efficient infrastructure such as heat pumps for cooling.³⁴⁶ An energy advocacy organization stated that energy efficiency is a top priority for the Energy Strategy as a means to advance affordability and decarbonization; the commenter emphasized that ORS 757.054(3) requires IOUs to advance energy efficiency and DR measures, and that the Strategy should address barriers to realizing energy efficiency improvements for low-income families.347

energy efficiency measures' cost-effectiveness when energy is inexpensive

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    335 OES PWG TE 4-10-25 Notes
    336 OES PWG TE 4-10-25 Notes.
    337 OES PWG TE 4-10-25 Notes; Ingrid Fish, City of Portland, OES PWG TE 3-4-25 Notes
    338 OES PWG TE 4-10-25 Notes.
    339 OES PWG TE 3-4-25 Notes.
    340 OES PWG TE 3-4-25 Notes.
    341 Coalition Comments 9.22.25; Rogue Climate 9.22.25; Steve Wright 9.22.25; 4_23_2025_Advisory Group #9 Summary.
    342 4_23_2025_Advisory Group #9 Summary.
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³⁴³ OES PWG BE EE and DERs 3-19-25 Notes.

³⁴⁴ Multnomah County 9.22.25.

³⁴⁵ CRITFC 9.22.25.

³⁴⁶ Coalition Comments 9.22.25.

³⁴⁷ CUB 9.23.25.

A couple of PWG members commented that energy efficiency measures often are not cost-effective for COUs because of low electricity costs, adding that early investment in energy efficiency could help avoid reaching a point where cost pressures make these investments necessary.³⁴⁸

energy efficiency, VMT reduction, and electrification

A trade association recommended further integrating the Buildings and Clean Electricity sections by explicitly recognizing smart building technologies and Grid-Interactive Efficient Buildings and the role buildings may serve in grid flexibility and resilience. A joint submission from environmental organizations recommended that the Strategy generally consider Washington's energy strategy and recent history of electrifying buildings and industrial sectors, stating that the state's clear standards and focus has produced valuable results. A local government supported framing energy efficiency to include multimodal transportation options and electrification of end-uses, recommending that the Strategy expand on how these approaches overlap with and support one-another.

Pathway 2: Electrification³⁵²

Policy 2a. Electrify Transportation

FCEVs and low-carbon fuel options for reducing transportation emissions

Several commenters generally recommended expanding the discussion and definitions around electrifying transportation to be inclusive of FCEVs, with an individual commenter noting development of hydrogen engines and vehicles as promising for the FECVs' future. The commenter added that EV uptake has slowed globally and would be difficult to scale across Oregon's rural regions. A Tribal organization agreed, adding that focusing exclusively on BEVs would add to electricity grid burdens and increase resilience risks in the event of power shutoffs. The commenter also recommended that the Strategy address a need that fueling stations be able to distribute low-carbon fuels. 354

Opportunities and need for policy

PWG members emphasized the prospective grid-resilience benefits of EVs and V2G charging.³⁵⁵ Commenting on draft policy 2a, a local government advocated including a role for the state in providing EV charging to low-and-moderate income households when market dynamics alone are insufficient to do so.³⁵⁶ A climate advocacy organization generally supported transportation policy drafting in draft policies 2a, 2b, and 4b.³⁵⁷

A PWG whiteboard note asked that the Strategy consider the impacts of further incentivizing driving, via EVs, and associated land-use, air pollution, and heat island impacts – especially insofar as these impacts affect communities who cannot afford vehicles in the first place.³⁵⁸

Barriers

³⁴⁸ OES PWG BE energy efficiency DERs 3-5-25 Notes; OES PWG BE EE and DERs 3-19-25 Notes.

³⁴⁹ Building Potential 9.22.25.

³⁵⁰ NEDCGEINCA 9.22.25.

³⁵¹ Multnomah County 9.22.25.

³⁵² Note: in the final Oregon Energy Strategy, Electrification is Pathway 3.

³⁵³ Robert Weeks OCES, 9.2.25.

³⁵⁴ CTUIR 9.22.25.

³⁵⁵ OES PWG BE EE and DERs 3-19-25 Notes.

³⁵⁶ Multnomah County 9.22.25.

³⁵⁷ MCAT 9.22.25.

³⁵⁸ OES PWG EJ and Equity 4-14-25 Notes.

Several commenters described financing and costs the foremost challenge to transportation electrification, noting, in particular, the early exhaustion of prior Oregon EV incentives³⁵⁹ and difficulties buyers have with navigating incentive availability.³⁶⁰ A petroleum trade association commented that the Strategy's discussion of transportation needs to reflect real-world adoption rates, address rural and freight-dependent community needs, consumer preferences, and charging infrastructure needs.³⁶¹ An AG member commented that cost of ownership and infrastructure-readiness are particularly significant barriers to EV adoption in medium- and heavy-duty fleets, as well as a need for consistency in policy on a national and global scale to support fleet electrification.³⁶²

Policy 2b. Distribution System Readiness for EVs

Commenters on distribution system readiness for EVs identified several barriers and solutions related to utility planning, rates, and technology. A primary concern is that a fully electrified transportation system would necessitate expensive grid upgrades, ³⁶³ though others emphasized that the pathways modeling indicated that this challenge is manageable ³⁶⁴ and that grid-integration that harnesses the flexible load of EVs and off-peak fleet charging could provide a resource to the grid. ³⁶⁵ However, a few whiteboard notes also expressed that commercial charging needs are distinct from consumer charging needs and, in the case of freight, need 24 hour-a-day charging. ³⁶⁶ Other PWG members generally highlighted a need for policy to address EV infrastructure needs. ³⁶⁷ A local government urged that time-of-use rates, vehicle-to-home connections, and V2G policies be designed to be equitable. The commenter recommended advancing these approaches through standardized codes, rules, and contracts across jurisdictions. ³⁶⁸

Barriers

Commenters raised multiple concerns regarding the grid's capacity and readiness for widespread EV adoption.

The cost of needed infrastructure upgrades and expansion to meet increased EV loads was raised as a barrier, especially when balanced with affordability, the carbon-intensity of grid-scale electricity generation, and clean energy standards needs³⁶⁹ and considered in the context of increasing extreme weather risks, supply chain issues, possible federal privatization of BPA, and competing load growth, data center, and electrification demand.³⁷⁰ A PWG whiteboard note stated that the question of who pays for infrastructure improvements is an important one.³⁷¹ High cost barriers include transformer upgrades for neighborhoods with increased electrification and upgrades for multifamily-homes and other residences, which also raise questions about who will bear the costs.³⁷² Several PWG members noted that low-income communities may also be inequitably burdened by only having access to public

³⁵⁹ Zach Mulholland, Beyond Toxics OES PWG EJ and Equity 2-24-25 Notes.

³⁶⁰ OES PWG EJ and Equity 2-24-25 Notes.

³⁶¹ WSPA 9.22.25.

³⁶² 3 20 2025 Advisory Group #8 Summary, 4 23 2025 Advisory Group #9 Summary.

³⁶³ OES PWG BE EE DERs 3-5-25 Notes.

³⁶⁴ OES PWG BE EE DERs 3-5-25 Notes.

³⁶⁵ OES PWG BE EE DERs 3-5-25 Notes.

³⁶⁶ OES PWG TE 4-10-25 Notes.

³⁶⁷ OES PWG EJ and Equity 2-24-25 Notes.

³⁶⁸ Multnomah County 9.22.25.

³⁶⁹ OES PWG TE 3-4-25 Notes; OES PWG TE 4-10-25 Notes.

³⁷⁰ OES PWG TE 3-4-25 Notes.

³⁷¹ OES PWG TE 3-4-25 Notes.

³⁷² OES PWG TE 3-4-25 Notes; OES PWG BE EE DERs 3-5-25 Notes

charging stations that demand higher rates.³⁷³ PWG members also noted that there is a lack of proactive investment,³⁷⁴ and distribution system planning needs to be done over a longer time horizon to avoid multiple, costly incremental upgrades.³⁷⁵ The cost of interconnection for large-scale projects is also a substantial issue, with make-ready infrastructure costs that can be more than the chargers themselves.³⁷⁶ Another PWG member stated that, for transit fleet electrification in California, exemptions were commonly required because infrastructure buildout was insufficient to support MHD EV adoption;³⁷⁷ a PWG whiteboard note recommended that exemptions from any state purchase mandate be provided in case of utility upgrade delays.³⁷⁸ A PWG member emphasized this point by adding that Oregon has not matched the millions of dollars California spent to support an EV transition,³⁷⁹ and there was also a note that rural areas may have insufficient power capacity to support Level III charging.³⁸⁰

Regarding utility processes and planning, PWG members stated that the key barrier is the long lead time for system upgrades, which can take several years for large projects, and, in particular, transmission siting and permitting as well as system upgrades for fleet charging and grid system impact studies. Utilities need certainty in policy to avoid overbuilding, but constant changes make forecasting and planning difficult. PWG whiteboard note indicated that OPUC prudency requirements can hamper IOU distributed energy resource and transportation electrification grid integration investments. A PWG member noted that there are also limited resources and expertise for EV-related projects in smaller utilities, particularly outside of the Portland area.

Commenters raised current rate structures as a barrier to transportation electrification.³⁸⁸ PWG whiteboard notes said the rates for charging can make it comparable to fueling a gasoline-powered car, which erodes the economic case for electrification – especially for users dependent on public charging.³⁸⁹ Additionally, some utilities, especially those supplied by BPA, do not have strong price signals that would justify robust demand-response or time-of-use (TOU) programs that might otherwise support EV adoption.³⁹⁰

Commenters also raised issues regarding charging and grid technology. PWG members noted a lack of interoperability between different charging technologies and need for standardization, charging technology software reliability issues,³⁹¹ and the early stage of load management technology, as well as high number of pilots, as barriers.³⁹² A PWG whiteboard note stated that carriers need clear information

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<sup>373</sup> OES PWG TE 3-4-25 Notes; OES PWG EJ and Equity 2-24-25 Notes.
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³⁷⁴ OES PWG TE 3-4-25 Notes

³⁷⁵ OES PWG TE 3-4-25 Notes

³⁷⁶ OES PWG TE 3-4-25 Notes.

³⁷⁷ OES PWG TE 4-10-25 Notes.

³⁷⁸ OES PWG TE 4-10-25 Notes.

³⁷⁹ OES PWG TE 4-10-25 Notes.

³⁸⁰ OES PWG TE 3-4-25 Notes. ³⁸¹ OES PWG TE 3-4-25 Notes.

³⁸² OES PWG TE 4-10-25 Notes.

OES PANGLE 4-10-25 NOTES

³⁸³ OES PWG TE 3-4-25 Notes. ³⁸⁴ OES PWG TE 3-4-25 Notes.

³⁸⁵ OES PWG TE 3-4-25 Notes.

³⁸⁶ OES PWG TE 4-10-25 Notes.

³⁸⁷ OES PWG TE 3-4-25 Notes

³⁸⁸ OES PWG TE 3-4-25 Notes

³⁸⁹ OES PWG TE 3-4-25 Notes

³⁹⁰ OES PWG TE 3-4-25 Notes

³⁹¹ OES PWG TE 3-4-25 Notes.

³⁹² OES PWG TE 3-4-25 Notes

about how to financially work with EV trucks³⁹³ and a PWG member noted a need for larger EV vehicles for larger families.³⁹⁴ From a consumer perspective, there is a perception of mistrust around managed charging programs, control of energy resources, and information security³⁹⁵, as well as limited options for those in multi-family housing or rentals to install or manage their charging.³⁹⁶ Similarly, a Tribal organization commented that the Strategy should address smart appliance and virtual power plant cyber security risks³⁹⁷ and an individual commenter stated that it's essential that consumers retain control of their energy resources rather than grid operators.³⁹⁸ Comments also stated that consumers and utilities also gravitate towards fast chargers, even when slower, more affordable Level 1 or 2 charging would suffice for their daily needs.³⁹⁹ Whiteboard comments also emphasized limited options for at-home V2G, vehicle-to-home, and distributed energy resource management systems to EV technology availability⁴⁰⁰ and a lack of incentives for OEMs to develop products in this space⁴⁰¹, though a comment also stated that school bus V2G is a promising area for utilities.⁴⁰²

Solutions

Commenters offered various solutions to address identified barriers. Recommendations included creating a new rate class for vehicle charging ⁴⁰³ and providing dedicated funding programs for utility upgrades and charging equipment to offset upfront costs – recognizing that clean fuels credit funds have declined recently. ⁴⁰⁴ However, a couple of PWG members noted that BPA does not send a strong pricesignal to support time-of-use charging or special EV rates, and thus need a different approach. ⁴⁰⁵ A PWG whiteboard note recommended that utilities study avoided costs resulting from transportation electrification to inform EV charging rates ⁴⁰⁶ and another note stated that appropriate ratemaking is vital to connecting resiliency values to prompt grid enhancements and flexible load behavior. ⁴⁰⁷ It was also suggested that the state require utilities to make commensurate investments if they have mandated certain transportation electrification targets. ⁴⁰⁸ A couple of PWG whiteboard notes stated that IOU incentive structures need to be adjusted to support leasing of assets and internalization of grid-benefits provided by distributed energy resources and EVs. ⁴⁰⁹

Commenters also suggested a proactive approach to grid planning to get ahead of future needs, with a PWG member stating that they were working on a menu of demand-response programmatic options and that COUs and smaller utilities might be able to benefit from this work.⁴¹⁰ Better coordination among users of direct current fast charging (DCFC) infrastructure could help decrease costs⁴¹¹ and a

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394 OES PWG EJ and Equity 2-24-25 Notes,
395 OES PWG TE 3-4-25 Notes.
396 OES PWG TE 3-4-25 Notes.
397 CTUIR 9.22.25.
398 Maleek McKenzie 9.22.25.
399 OES PWG TE 3-4-25 Notes
400 OES PWG BE EE DERS 3-5-25 Notes; OES PWG TE 3-4-25 Notes.
401 OES PWG TE 3-4-25 Notes.
402 OES PWG TE 3-4-25 Notes.
403 OES PWG TE 4-10-25 Notes.
404 OES PWG TE 4-10-25 Notes.
405 OES PWG TE 3-4-25 Notes.
406 OES PWG TE 3-4-25 Notes.
407 OES PWG TE 3-4-25 Notes.
408 OES PWG TE 4-10-25 Notes.
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³⁹³ OES PWG TE 4-10-25 Notes.

409 OES PWG TE 3-4-25 Notes.
 410 OES PWG TE 3-4-25 Notes
 411 OES PWG TE 3-4-25 Notes

PWG whiteboard note recommended automating elements of permitting to expedite processes. APPWG whiteboard note recommended coordinating with utilities to identify areas with excess capacity to site chargers and a couple PWG members recommended facilitating business and agency coordination to plan charging infrastructure around projected demand and so minimize siting and permitting efforts. Whiteboard notes also encouraged developing a route mapping tool that accounts for terrain to assist in medium-duty charging planning. Also A couple of PWG members and whiteboard notes added that smaller utilities could benefit from ODOE technical assistance in identifying where future EV charging demand is likely and in transportation electrification generally. However, an AG member commented that, contrary to statements they heard from other members and in meeting summaries, some COUs already have extensive transportation electrification programs and benefits supported by the clean fuel credit program.

PWG members also noted a need for more customer-centric programs, with a focus on education and clear communication about available rate schedules and the benefits of managed charging. Utilities should provide compelling incentives for customers to participate in these programs as well as a public awareness campaign to promote off-peak EV charging. It was also suggested that utilities promote Level 1 charging as a sufficient solution for most light-duty vehicles, though other comments recommended study of possible Level 1 charging expansion risks, such as to damaging residential electrical systems.

Commenters stated that utilities should be supported in efforts to provide technical assistance and planning for fleets transitioning to EVs. ⁴²³ It was noted that PGE and PacifiCorp already provide significant assistance to help fleets with system upgrades and technical assistance, ⁴²⁴ and that PacifiCorp operates a managed charging program for EVs that results in most light-duty vehicle charging occurring off-peak. ⁴²⁵ However, PGE noted a need for policy certainty around things like ACT to avoid overbuilding and support investment decisions. ⁴²⁶

A whiteboard note also advocated that jurisdictions promote microgrid development to mitigate load pressures imposed by fleet charging.⁴²⁷

Policy 2c. Strategic Electrification

A joint submission from numerous organizations commented that strategic electrification to quickly and equitably manage the energy transition will be vital to avoid disproportionate costs falling upon low-income Oregonians and to efficiently steward resources. The commenter supported joint electric and gas utility planning to support strategic electrification. Furthermore, the commenter recommended that the strategic electrification framework be expanded to cover transportation, based on similar relevant

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<sup>412</sup> OES PWG TE 3-4-25 Notes
<sup>413</sup> OES PWG TE 4-10-25 Notes.
<sup>414</sup> OES PWG TE 3-4-25 Notes.
<sup>415</sup> OES PWG TE 3-4-25 Notes.
<sup>416</sup> OES PWG TE 3-4-25 Notes.
<sup>417</sup> OES PWG TE 3-4-25 Notes.
<sup>418</sup> 3 20 2025 Advisory Group #8 Summary
<sup>419</sup> OES PWG TE 3-4-25 Notes
<sup>420</sup> OES PWG TE 4-10-25 Notes
<sup>421</sup> OES PWG TE 3-4-25 Notes; OES PWG TE 4-10-25 Notes.
<sup>422</sup> OES PWG TE 4-10-25 Notes.
<sup>423</sup> OES PWG TE 3-4-25 Notes
<sup>424</sup> OES PWG TE 3-4-25 Notes.
<sup>425</sup>, OES PWG TE 3-4-25 Notes.
<sup>426</sup> OES PWG TE 3-4-25 Notes
<sup>427</sup> OES PWG TE 4-10-25 Notes.
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considerations between the sectors. However, the commenter recommended breaking strategic electrification down into component parts of metrics; incentives and infrastructure; and integrated planning for managed gas-system pruning; the commenter also recommended that integrated planning be further emphasized. A coalition comment also generally recommended strengthening electrification policies to avoid stranding vulnerable communities on gas infrastructure or with inefficient technologies. A local government recommended that the Strategy recognize comparatively greater efficiency opportunities from replacing outdated electric resistance heating than from electrifying gas-heated homes. Another local government recommended that Policy 2c address a role for building codes to ensure that new homes are electrified and avoid unnecessary investments in gas infrastructure.

A PWG member provided an example of coordinated work between CUB and a gas utility to cap-off a gas system and electrify it for customers, stating that that project resulted in significant cost savings and avoided investments in equipment with 60+ year lifespans. Pursuant to the strategic electrification policy, a clean energy organization recommended considering a statewide study of residential energy costs to help manage the transition away from natural gas. ⁴³³

A climate advocacy organization wrote that strategic electrification is appropriately included in the Strategy - because of electrification's role in replacing fossil fuel infrastructure and therefore impacting the planning of energy development - but that the process for strategic electrification should be clearly described and entail "unbiased integrated electric and gas system planning process that achieves state goals with the least societal cost while preserving reliability." The advocacy organization cited a source of ODOE's definition of strategic electrification as emphasizing the importance of an "integrated approach" as essential to term. The commenter also emphasized the importance of defining this process because of the varying metrics applicable to the definition of strategic electrification used by the Strategy. Furthermore, the commenter noted instances of the terms' applicability in policies 4c and 5a, asserting that policy 5a's drafting for "facilitating" multi-fuel coordination is too weak to meet a need for coordinated, systemic planning to implement strategic electrification. A coalition comment likewise agreed that the Strategy's discussion of electrification should require integrated electric and gas utility planning to responsibly scale down the gas system.

An energy advocacy organization generally commented that transportation electrification, building electrification, and distributed energy resource planning should consider all relevant factors – including municipal plans, land use planning documents, Oregon and Tribal planning goals, and utility planning.⁴³⁶

General and Other Electrification Comments

An AG member commented on early drafting of electrification policies that the drafting was too timid; the commenter advocated that "improvement" standards are insufficient and could mean installing efficient gas appliances when, the commenter urged, the Strategy should clearly specify electrification as the policy's intent.⁴³⁷

⁴²⁸ Coalition Comments 9.22.25.

⁴²⁹ ZERO Coalition 9.22.25.

⁴³⁰ Marion County Cmmrs 9.22.25.

⁴³¹ Multnomah County 9.22.25.

⁴³² OES PWG BE EE and DERs 5-7-25 Notes.

⁴³³ Spark NW, 9.8.25.

⁴³⁴ MCAT 9.22.25.

⁴³⁵ ZERO 9.22.25.

⁴³⁶ CUB 5.14.25.

⁴³⁷ 4_23_2025_Advisory Group #9 Summary.

Benefits of electrification; air quality and cost

Several commenters urged that the Strategy consider air-quality and co-benefits of heat pumps. 438 A joint submission from numerous organizations expressed general support for forwarding electrification as an essential policy for meeting Oregon's energy policy objectives on a least-cost basis, consistent with the energy pathways modeling and other independent assessments. 439 A healthcare and public health professional association supported the electrification pathway because of fossil fuel harms to the climate and public health. The commenter provided citations in explaining that gas appliances produce dangerous indoor pollutants even when the stove is off and that outdoor air pollution from Oregon buildings result in health impacts of nearly \$88 million annually. The professional association also provided statistics on nationwide healthcare benefits that would result from residential electrification and research on energy savings, construction costs, and GHG reductions that could be realized by replacing home heating with heat pumps in Oregon.⁴⁴⁰ A PWG member also noted that heat pumps and air-conditioning provide important health-quality benefits in addressing summer air quality events. 441 A climate advocacy organization commented that low-to-moderate income residents face the greatest exposure to fossil-fuel pollution and health risks and thus would benefit most from electrification support. 442 A local government asked that the Strategy emphasize that a managed transition towards electrification will result in a healthier, more stable Oregon.⁴⁴³

Several PWG members added that electrification would realize system-wide cost reductions because it would obviate needs to construct and maintain long-lasting liquid fuel infrastructure. An AG members stated that, in their organizations' experience, heat pumps result in cost savings when residents are educated on how best to utilize them.

Viability challenges to electrification; costs and system reliability

Several commenters expressed concern regarding the viability of electrification strategies, especially regarding resource adequacy, affordability, energy system reliability, workforce needs, supply chain issues for heat pumps, and the need for maintaining heat pumps to realize efficiency gains. A petroleum trade association commented that the modeled reduction in transportation energy would require electrification rates exceeding those currently seen or provided in ACC II and ACT. The commenter also stated that California efforts to decarbonize transportation under the CARB Mobile Source Strategy is evidence of risks associated with overly-ambitious electrification, including compliance costs and grid instability. A couple of individual commenters referred to their work as part of a gas utility advisory group in recommending that ODOE revise the modeling with new assumptions to account for extreme weather event risks and natural gas' role in meeting system-wide energy needs. One of the commenters expressed appreciation for the Strategy's reference to dual-fuel heat pumps and their role during low-temperature events. A natural gas utility also provided several citations in commenting that, under many conditions, high-efficiency gas furnaces can be more carbon- and cost-

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<sup>438</sup> 4_23_2025_Advisory Group #9 Summary.
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⁴³⁹ Coalition Comments 9.22.25.

⁴⁴⁰ Oregon PSR 9.22.25.

⁴⁴¹ OES PWG BE EE and DERs 3-19-25 Notes.

⁴⁴² Rogue Climate 5.9.25.

⁴⁴³ Multnomah County 9.22.25.

⁴⁴⁴ OES PWG LCFs 2-19-25 Notes.

⁴⁴⁵ 4_23_2025_Advisory Group #9 Summary.

⁴⁴⁶ PPGA 9.16.25; Roger Gray 9.22.25; WSPA 9.22.25; NW Nat 04.02.25 Comment; NW Nat AG 05.21.25 Comment.

⁴⁴⁷ WSPA 9.22.25.

⁴⁴⁸ Steve Wright 9.22.25.

⁴⁴⁹ Steve Wright 9.22.25.

effective than electric heat pumps. 450 A propane trade association recommended that the Strategy embrace "energy diversity" based on the merits of propane, other liquid fuels, and electrified appliances. 451 Likewise, a petroleum advocacy organization recommended that the Strategy adopt a "technology neutral" approach to the energy transition, reasoning that modeled declines in fuel use by 2050 were unrealistic because of barriers to electrification in the hardest-to-electrify sectors and CFP data on Oregon fuel consumption trends showing no decline. 452

An individual commenter requested that the Strategy include language on commercial or building electrification that recognizes that commercial and industrial heat pumps are more costly than gas-fired alternatives. The commenter recommended advancing heat pumps where cost-effective and otherwise advancing efficiency through optimization of building systems.⁴⁵³

Conversely, a couple of PWG members stated that the energy pathways modeling showed electrification to contribute relatively little to load growth and that electrification-based load growth should be manageable if addressed strategically – especially insofar as some new loads, like EVs, can be managed flexibly. 454

Heat pump technologies

A community energy organization recommended the Strategy consider heat pump clothes driers; the commenter also expressed appreciation for the Strategy realistically assessing the cost-saving potential of heat pumps and how that may vary depending on policies and household circumstances. ⁴⁵⁵ A community energy organization recommended the Strategy consider next-generation portable heat pumps as being used in New York and other jurisdictions, citing an article. ⁴⁵⁶

Pathway 3: Clean Electricity⁴⁵⁷

Policy 3a. Utility-scale and Distributed Energy Resources

A local government generally supported the drafting for policy 3a, especially the recognition of a need for more clean generation in Oregon and the need to avoid, minimize, and mitigate the impacts from infrastructure development on communities. As a joint submission from numerous organizations expressed general support for the clean electricity pathway drafting. As an energy production trade association also agreed with the high-level finding that more transmission and generation are required to meet Oregon's energy transition needs and that the status quo for infrastructure procurement in Oregon is insufficient.

A couple of PWG members stated that the Strategy and policy discussions should provide more detail on what specific generating resources or technologies should be used to power Oregon and, in particular, discuss hydropower. A joint submission from COU organizations stated that, to the extent the Strategy relies on the modeling to inform generation technology selection, the Strategy should reflect technologies picked by the energy pathways modeling and describe any actions that may be needed to

⁴⁵⁰ NW Nat 05.09.25 Attachment.

⁴⁵¹ PPGA 9.16.25.

⁴⁵² WSPA 9.22.25.

⁴⁵³ Dan Tedrow, Pacific ECS, 9.8.25.

⁴⁵⁴ OES PWG BE energy efficiency DERs 3-5-25 Notes.

⁴⁵⁵ John Seng, Spark NW 9.8.25.

⁴⁵⁶ John Seng, Spark NW 9.8.25.

⁴⁵⁷ Note: in the final Oregon Energy Strategy, Clean Electricity is Pathway 2.

⁴⁵⁸ Multnomah County 9.22.25.

⁴⁵⁹ Coalition Comments 9.22.25.

⁴⁶⁰ NIPPC 9.22.25.

⁴⁶¹ OES PWG DCEGT 4-30-25 Notes.

support specific technologies.⁴⁶² Conversely, an AG member generally expressed caution that the Strategy not "pick winners and losers" and several AG members generally advocated that the Strategy support a portfolio approach to energy technologies.⁴⁶³

Many commenters noted a general need to provide more transmission to support electricity development needs, with a PWG whiteboard note particularly urging that insufficient South Coast transmission be acknowledged. An AG member emphasized that more transmission is needed with or without data-center expansion, stating that current infrastructure was largely constructed in the 1970s and needs replacement. Another AG member stated that public education is needed in Oregon to explain and garner support for transmission work. For more discussion on transmission, refer to State Transmission Entity.

Hydro and firm generating capacity

A joint submission from commenters representing COUs stated that the draft Strategy's clean energy pathway fails to sufficiently address the importance of hydropower in Oregon; the commenter stated that the draft speaks to rooftop solar, microgrids, demand flexibility, batteries, and water heaters but that these technologies and resources are miniscule compared to hydropower and dependent on hydroelectric firm baseload generating capacity. The commenter stated that the first sentence of the clean electricity pathway should state the importance of preserving federal hydropower resources. 466

A PUD organization commented that, to affordably meet demand, the state needs more firm, baseload generating capacity including existing hydropower, and advancement of natural gas, and nuclear power in addition to solar and energy efficiency resources. The commenter stated that barriers to new capacity construction include litigation of Columbia River hydro dam removal; bans on new natural gas peaker plant construction; laws that restrict the siting of nuclear generation in Oregon; land-use regulations that delay transmission permitting; and utility wildfire liability, but that the draft Strategy does not address these barriers and instead forwards additional spending, studies, and regulations. The commenter stated that the draft Strategy picks winners and losers by focusing on clean generation but that doing so is 'intellectually dishonest' and fails to account for needed baseload generation capacity. 467 A COU advocacy organization agreed that the Strategy needs to appreciate baseload generation needs, particular in LSRD generation and SMR technology. 468

Likewise, a joint submission from commenters representing COUs emphasized that hydropower provides vital baseload electricity service to the geographic majority of Oregon and rural, low-income, Tribal, and underserved communities. The commenters expressed concern that Oregon is reopening litigation to curtail portions of the Federal Columbia River Power System, with impacts to energy affordability and reliability to COU customers. The submission stated that wildlife concerns are beyond the scope of the Energy Strategy but that, nonetheless, fish and hydropower operations can co-exist, citing a Lower Granite Dam as evidence. The commenter faulted the draft Energy Strategy report for not discussing the role of hydropower in comparison to intermittent solar and wind generation or stating that hydropower accounts for 90 percent of COU energy; the commenter further urged that the Strategy more clearly state that the modeling assumed continued Columbia and Snake rivers hydroelectric operations. The commenter stated that inclusion of these dams in the modeling amounts to a 'de facto

⁴⁶² PPC, OMEU, ORECA, OPUDA 5.9.25 Joint Submission.

⁴⁶³ 9 18 2025 Advisory Group #11.

⁴⁶⁴ OES PWG EJ and Equity 2-24-25 Notes.

⁴⁶⁵ 5 15 2025 Advisory Group #10 Summary.

⁴⁶⁶ Joint COU Comments 9.22.25.

⁴⁶⁷ OPUDA 9.21.25.

⁴⁶⁸ ORECA 5.9.25.

admission that without those hydroelectric dams, the strategy is unachievable.'⁴⁶⁹ One of the commenters and a joint submission from COU organizations also stated that Snake River dams are a "foundational resource".⁴⁷⁰ A COU association provided a chart of resource reliance during the 2021 heat dome event and 2024 extreme cold period event around MLK day, noting that hydropower provided the vast majority of electricity during both events.⁴⁷¹ A local government stated that hydropower is a cornerstone of Oregon's energy portfolio and should be recognized, protected, modernized, and included in regional planning with BPA and the NWPCC, in the Strategy because of its non-emitting, firm baseload capacity contributions.⁴⁷² During Phase 2, a joint submission from COU organizations urged that the Strategy must either call for maintaining lower Snake River dams generation or clearly reiterate the modeling assumptions incorporating LSRD generation while highlighting affordability and reliability impacts that may follow from breaching the dams.⁴⁷³ One of the COU organizations emphasized separately that, to be realistic, the Strategy should express a need to maintain LSRDs to provide firm generation and meet load growth needs.⁴⁷⁴

A COU association also expressed concern regarding resource adequacy to support affordable, reliable electricity in Oregon and highlighted barriers to expanding dispatchable resources in the form of baseload and peaking natural gas capacity as well as small nuclear reactors. The commenter stated that recent history in California highlights lessons in relying too heavily on intermittent resources to meet clean energy targets, especially in a 2021 emergency proclamation to accelerate deployment of battery storage, long-duration energy resources, and demand-response programs. The commenter also highlighted California policies – the Strategic Reliability Reserve, extending the life of generation facilities, funding distributed assets, and institutionalizing joint reliability assessments across multiple agencies – as means that Oregon could emulate to advance the clean energy transition while maintaining system reliability and avoiding duplication of efforts and policy design. ⁴⁷⁵ The commenter also advocated considering these approaches in several AG meetings. ⁴⁷⁶ Recommendations from this comment regarding specific electricity actions are summarized in General and Other Clean Electricity Action Comments.

A joint submission from numerous organizations commented that offshore wind energy is recognized by the Intergovernmental Panel on Climate Change and through the directive for Oregon to produce an offshore wind energy roadmap; the commenters urged recognizing offshore wind and the need to coordinate onshore development of related infrastructure such as transmission, storage, and flexible demand-size technologies in the Strategy, as well as recognizing the need to uplift Coastal and Tribal views on the impacts of offshore development.⁴⁷⁷

Geothermal

An AG member stated that geothermal advancements are promising, especially in Newberry Crater work and beyond – including Enhanced Geothermal Systems (EGS) technologies that use fracking techniques without the same chemicals. The commenter referred to a Stanford map indicating possible best-in-U.S.

⁴⁶⁹ Joint COU Comments 9.22.25.

⁴⁷⁰ OES PWG DCEGT 4-30-25 Notes; PPC, OMEU, ORECA, OPUDA 5.9.25 Joint Submission.

⁴⁷¹ PPC 9.22.25.

⁴⁷² Marion County Cmmrs 9.22.25.

⁴⁷³ PPC, OMEU, ORECA, OPUDA 5.9.25 Joint Submission.

⁴⁷⁴ ORECA 5.9.25.

⁴⁷⁵ PPC 9.22.25.

⁴⁷⁶ 4_23_2025_Advisory Group #9 Summary.

⁴⁷⁷ Coalition Comments 9.22.25.

potential for geothermal in Oregon, including potential west of the Cascades that could avoid transmission hurdles posed by other renewable resources.⁴⁷⁸

Nuclear generation

A local government representative recommended addressing Oregon's nuclear siting ban as a barrier in the context of draft policy 3a, stating that nuclear generation provides non-emitting, carbon-free electricity with relatively limited local land-use requirements, that Oregon has a leading nuclear program at OSU, and that Oregon has a skilled workforce capable of developing nuclear in the state. And I labor group agreed that the ban of siting nuclear in Oregon should be considered a barrier to Oregon's energy and decarbonization goals. Several PWG members and a COU organization agreed that the Strategy should explore nuclear and SMR technologies as "realistically" necessary to the Strategy. Conversely, another PWG member stated that the modeling found geothermal resources, together with clean fuel peaker plants, to be a more viable option than nuclear.

A local government representative, an individual commenter, a labor group, and a renewable energy organization requested that ODOE acknowledge the current role of nuclear in providing three percent of the electricity consumed in Oregon as more than the energy provided by solar, geothermal, biomass, and biogas together, as well as a potential role for nuclear in achieving HB 2021 goals. ⁴⁸² The government representative, an individual, and a nuclear advocacy organization, cited an IPCC report in stating that nuclear power is essential for global decarbonization and beneficial in providing firm generation capacity to compliment variable resources while minimizing transmission needs and land-use impacts. ⁴⁸³ The commenters furthermore recommended ODOE advance an action to address 1980's Measure 7 and related statutory barriers to siting nuclear; the submissions reasoned that nuclear technology has advanced since 1980, especially in reducing waste production, facility development cost and timelines, and system safety. The submissions cited developments in other states' policies as recognizing these advances. ⁴⁸⁴ An individual commenter also recommended that the Strategy consider waste disposal methods, including reprocessing and vitrification as practiced in France; the commenter also recommended consideration of a regional partnership with Washington and California as an alternative to relying on the federal government for nuclear waste disposal. ⁴⁸⁵

A local government representative stated that the Strategy should not limit its focus to "compliance with existing law", stating that doing so would result in missed opportunities and impacts to resource adequacy, economic development, and energy policy objectives. The nuclear advocacy organization also recommended that the Strategy consider, particularly in the environmental justice and equity framework, the economic profile of nuclear relative to other renewables, stating that nuclear provides more stable, long-term employment and citing resources on nuclear worker wages and employment figures. Another nuclear advocacy organization agreed that nuclear can support an equitable,

⁴⁷⁸ 9_18_2025_Advisory Group #11.

⁴⁷⁹ Comm Dan Dorran 9.22.25.

⁴⁸⁰ IW 29 9.22.25.

⁴⁸¹ OES PWG DCEGT 4-30-25 Notes; ORECA 5.9.25.

⁴⁸² Comm Dan Dorran 9.22.25; Nikole Young 9.16.25; IW 29 9.22.25; CREA 9.22.25.

⁴⁸³ Comm Dan Dorran 9.22.25; Generation Atomic, 9.22.25; IW 29 9.22.25; Lucas Young 9.22.25.

⁴⁸⁴ Comm Dan Dorran 9.22.25; Generation Atomic, 9.22.25; IW 29 9.22.25; Lucas Young 9.22.25.

⁴⁸⁵ Nikole Young 9.16.25.

⁴⁸⁶ Comm Dan Dorran 9.22.25.

⁴⁸⁷ Generation Atomic, 9.22.25.

economically sound transition to meeting emission reduction goals.⁴⁸⁸ A few individual commenters also generally supported promoting nuclear power in the Energy Strategy.⁴⁸⁹

Conversely, other commenters opposed nuclear power in the Energy Strategy. An environmental organization provided a citation stating that the long lead times for nuclear disadvantage it compared to other renewables; the commenter added citations indicating that nuclear generation is not cost-competitive with renewables, produces substantial carbon emissions, and is hazardous. In particular, the commenter cited an author as finding that SMRs are not economical because they cannot achieve an economy of scale similar to conventional nuclear generation. An individual commenter made similar comments and added that Oregon has historically over-invested in nuclear energy; the commenter also provided examples of recent nuclear project timeline and cost overruns. The commenter also expressed uncertainty that a viable solution for storing nuclear waste will ever be found, providing a citation in stating that Hanford, WA tanks are currently leaking radioactive waste into the soil. Likewise, other individual commenters generally opposed nuclear as being costly and environmentally hazardous, and there being no identified site to store nuclear waste.

An environmental organization echoed these concerns, providing citations in arguing that nuclear generation has a history of cost overruns; that the financial costs of the energy transition exacerbate this issue; that there is no viable solution for waste storage; that nuclear is risky because of Price-Anderson Act limitations of liability and reductions in the federal NRC workforce; and that nuclear facilities pose risks likely to impact environmental justice communities most. The commenter added that nuclear pilot programs should be barred under state law and that existing siting restrictions should remain in place. A professional association agreed, adding that uranium mining harms indigenous land and health outcomes and an environmental organization provided citations in commenting that Hanford, WA tanks are leaking and SMRs are too energy-intensive, expensive, and time-consuming to build to viably contribute to the energy transition. As a concern of the energy transition.

Land use and wildlife resource concerns in electricity development; fishery management

Many commenters expressed concern with the management of expanding electricity infrastructure needs with respect to land use and related interests such as wildlife, cultural and ecological resources, especially in Tribal lands. A Tribe and a local government stated that policy 3a should explicitly include cultural resources, with the Tribe emphasizing the importance of doing so to avoid repeating actions that disproportionately impact Tribal treaty and cultural resources with the Columbia River hydropower system. A local government commented that more transparency is needed in land use planning and permitting, stating that "super siting" support would indicate Oregon is "uninterested in assuring compliance with local programs...[and] land use planning goals." The commenter recommended

⁴⁸⁸ Mothers for Nuclear 9.22.25.

⁴⁸⁹ Jeff Hagedorn 8.16.25; Joanne Bigman, 8.25.25; John Charles 9.22.25.

⁴⁹⁰ SOCAN 9.22.25.

⁴⁹¹ Debra Higbee 9.22.25.

⁴⁹² Ken Bonetti 9.19.25; Marshall Sanders 9.19.25; Peter Bergel, 9.20.25; Roger Knudson, 9.9.25.

⁴⁹³ Estelle Voeller 9.22.25.

⁴⁹⁴ James Miller 8.8.25.

⁴⁹⁵ OCF 9.22.25.

⁴⁹⁶ Oregon PSR 9.22.25.

⁴⁹⁷ Rogue Climate 9.22.25.

⁴⁹⁸ OES PWG DCEGT 2-26-25 Notes; OES PWG LCFs 2-19-25 Notes.

⁴⁹⁹ Multnomah County 9.22.25.

⁵⁰⁰ CTWS 9.17.25.

acknowledging and addressing inconsistencies in statutory and regulatory codes to address land use issues. 501

A Tribal organization expressed concern that Oregon energy needs and hydroelectric generation be balanced with responsible fishery management and the Columbia Basin Restoration Initiative, especially amidst climate change impacts. The commenter urged that the Strategy implement CBRI Objectives 1, 3, and 4 by aiming to avoid energy emergencies that could lead to shutoffs of fish protections; ensuring electricity adequacy while avoiding fossil-fuel electricity generation; minimize energy infrastructure siting impacts; avoid load growth and data center siting that could intensify demands on the hydroelectric system; and support improvements in community energy resilience. Overall, the commenter expressed support for the clean electricity policy drafting but emphasized that infrastructure siting should minimize impacts to Tribes and fisheries and that distributed energy resources should be promoted to support resilience and reliability while minimizing new transmission needs. Additionally, the commenter and another Tribal organization urged that aligning the Energy Strategy with the CBRI and Resilient Columbia River Basin Agreement is essential.

A conservation organization stated that the Strategy fails to provide means to address conflicts between policy 3a's directive to expanding electricity infrastructure and state Land Use Goals 3, 4, and 5; the commenter added that this policy should also address how to coordinate agencies in this effort. Overall, the conservation organization stated that the Strategy needs to better address natural resource values, especially in considering clean electricity actions. ⁵⁰⁵ Another conservation organization agreed that the Strategy falls short of addressing a need to consider energy infrastructure development in light of wildlife and habitat impact consideration. The commenter stated that the Strategy should address what type of energy development should be promoted where in Oregon so as to conserve wildlife, especially in winter rage, sage grouse habitat, and migration corridors. ⁵⁰⁶ A renewable energy advocacy organization similarly stated that Oregon Land Use Goals are in conflict with energy development needs and, given the age of the Land Use goals, it would be valuable for the Strategy to engage with them more directly. The commenter stated that HB 3630 discussions contemplated that the Strategy would address where and how much energy development is needed based on land-use and other trade-offs. ⁵⁰⁷

Several PWG members supported including ecosystem protection and interests in the Environmental Justice and Equity Framework and as factors to consider in the Strategy, especially adding that ecosystems provide important resilience and carbon sink resources.⁵⁰⁸

Distributed energy resources

A member generally supported distributed energy resources, adding that state support for utilities in promoting VPPs and DR programs is needed to realize the full benefits of these programs. ⁵⁰⁹ An AG member also supported distributed energy resources for their ability to provide energy with fewer transmission and related land-use impacts. ⁵¹⁰ A climate advocacy organization commented that the Strategy should promote distributed energy resources under policy 3a, reasoning that distributed energy resources impose fewer impacts on natural and cultural resources, provide resilience benefits, are faster

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<sup>501</sup> Wasco County, 4.30.25.
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⁵⁰² CRITFC 9.22.25.

⁵⁰³ CRITFC 9.22.25.

⁵⁰⁴ CRITFC 9.22.25; CTUIR 9.22.25.

⁵⁰⁵ OACD 9.17.25.

⁵⁰⁶ OHA 9.16.25.

⁵⁰⁷ RNW 9.22.25.

⁵⁰⁸ OES PWG EJ and Equity 4-30-25 Notes.

⁵⁰⁹ 3 20 2025 Advisory Group #8 Summary.

⁵¹⁰ 4_23_2025_Advisory Group #9 Summary.

to deploy than grid-scale infrastructure, and are thus better-suited to meet near-term energy needs despite distributed energy resources' higher per kWh cost.⁵¹¹ A PWG whiteboard note and member also identified difficulty Tribes face in selling power back to the grid;⁵¹² significantly, AG members stated that Tribes should be in an enabling position to collect benefits from distributed generation and that the state should support distributed energy resource development in Tribal lands.⁵¹³

Another AG member expressed support for distributed energy resources and, in particular, battery storage, but stated that these technologies generally require incentives to be commercially viable. Several PWG members supported co-deploying incentives with utilities and Energy Trust to support solar distributed energy resources paired with battery storage to provide improved grid flexibility benefits. Several PWG members support solar distributed energy resources paired with battery storage to provide improved grid flexibility benefits.

Engagement, public participation and perceptions in infrastructure development; permitting processes

Several PWG whiteboard notes emphasized barriers to electricity infrastructure development in the form of insufficient Tribal consultation, community engagement, trust, as well as misinformation on processes and impacts. A PWG white board note expressed a need and opportunity to create strong standards for community and Tribal engagement on identifying common-ground solutions as part of any new energy development processes. Others noted barriers included permitting timelines generally, difficulty identifying lower-conflict sites, uncertainty around costs to mitigate or avoid impacts, inconsistent state and federal permitting processes, lack of proactive planning, regulations being silent on permitting or siting processes, community capacities to negotiate community benefit agreements, and municipal and BPA capacities to process applications. A PWG member expressed that permitting takes time because of needs for local authorities to address local and property-owner concerns; PWG members also noted that it is important to distinguish planning from permitting when considering these processes.

Several PWG members noted that infrastructure expansion has historically burdened environmental justice communities and expressed a need to ensure the energy transition does not repeat this injustice. 520

Workforce and grid development

A couple of PWG members commented that rural and Tribal areas need more workforce training opportunities for grid maintenance, especially to take advantage of microgrid opportunities in Tribal territories.⁵²¹

Other comments

An individual commenter stated that there is a need in Oregon to better align electricity generation decisions with statewide goals, discussing the Leaburg dam's potential for repair as something the state

⁵¹¹ MCAT 9.22.25.

⁵¹² OES PWG EJ and Equity 2-24-25 Notes; OES PWG EJ and Equity 4-30-25 Notes.

⁵¹³ 4 23 2025 Advisory Group #9 Summary.

⁵¹⁴ 5 15 2025 Advisory Group #10 Summary.

⁵¹⁵ OES PWG BE EE and DERs 3-19-25 Notes.

⁵¹⁶ OES PWG DCEGT 2-26-25 Notes; OES PWG EJ and Equity 2-24-25 Notes.

⁵¹⁷ OES PWG EJ and Equity 4-14-25 Notes.

⁵¹⁸ OES PWG DCEGT 2-26-25 Notes.

⁵¹⁹ OES PWG DCEGT 3-17-25 Notes.

⁵²⁰ OES PWG EJ and Equity 2-24-25 Notes.

⁵²¹ OES PWG EJ and Equity 2-24-25 Notes.

is better suited to address than a locality or utility. The commenter recommended that an advisory body to examine statewide energy decisions would be helpful in advancing the energy transition. 522

Policy 3b. Load Flexibility

Several commenters generally supported load flexibility and shifting strategies as means to reduce peak demand and energy infrastructure needs. Several PWG members stated that more urgency is needed to promote DR technologies and programs, with one member stating that mandatory time-of-use policies as implemented in Hawaii should be considered. Regarding a potential policy action from PWG meetings, an energy advocacy organization recommended that time-of-use rates not be directly implemented, reasoning that a sudden shift could harm customers and especially disadvantage lower-income customers with less flexibility to take advantage of time-of-use rates. With respect to time-of-use rates for vehicle fleets, a PWG stated that backstops should be provided to protect businesses against surprise charges as they adjust to time-of-use charging and undertake operations planning to align with ToU charging. Other PWG members stated that ToU rates are consistently difficult to communicate to customers.

A joint submission from numerous organizations commented that this drafting omits discussion of the benefits offered by distributed energy resources in terms of load shifting and ancillary grid services. A climate advocacy organization agreed and stated that the Strategy should address a transition in Oregon from classic central station utility model to a more network based distributed utility model, as well as the barriers to this transition posed by utility incentive structures.

A local government supported policy 3b drafting but added that equitable adoption of load flexible technologies should be supported in the Strategy.⁵²⁹ A community energy organization recommended the Strategy discuss residential battery storage based on a Washington state policy.⁵³⁰

Policy 3c. Tribal Consultation and Engagement

A joint submission from numerous organizations commented in general support of this policy. ⁵³¹ A Tribal organization agreed but added that more actions in the Strategy are needed to have access to funding, technical assistance, and decision-making power for energy projects. The commenter also recommended that this policy be broken down into Tribal consultation, funding, and impact management for clarity. ⁵³² A Tribe supported the proposed policy, particularly in its inclusion of formal Tribal consultation and staff-level engagement. The commenter expressed that it is important for the Strategy to recognize legally enforceable treaty rights, including those held by the Confederated Tribes of Warm Springs and the Confederated Tribes of the Umatilla Indian Reservation. However, the commenter stated that Oregon's Tribal consultation framework may be inadequate because of local governments' increasing role in siting decisions but lack of obligations for Tribal consultation — as well as

⁵²² Robert Weeks OCES 9.3.25.

⁵²³ OES PWG EJ and Equity 2-24-25 Notes; OES PWG LCFs 3-14-25 Notes.

⁵²⁴ OES PWG LCFs 3-14-25 Notes.

⁵²⁵ CUB 5.14.25.

⁵²⁶ OES PWG TE 4-10-25 Notes.

⁵²⁷ Coalition Comments 9.22.25.

⁵²⁸ MCAT 9.22.25.

⁵²⁹ Multnomah County 9.22.25.

⁵³⁰ John Seng, Spark NW 9.8.25.

⁵³¹ Coalition Comments 9.22.25.

⁵³² CRITFC 9.22.25.

barriers to consultation from ex parte communication laws and permitting timelines. The commenter urged that the Strategy add an action to address this issue. 533

Policy 3d. Regional Engagement

An AG member noted that BPA and PacifiCorp are multi-state systems and thus that regional planning for energy and transmission is needed.⁵³⁴ A joint submission from numerous organizations commented that greater regional coordination is essential for an effective energy transition;⁵³⁵ a Tribal organization also supported the policy, stating that coordination with BPA will be essential to avoiding additional pressures on the hydroelectric system.⁵³⁶ An environmental organization agreed but stated that this policy has no associated, specific actions; the commenter advocated providing more specificity regarding where the state can align in regional efforts, such as those of NWPCC and the Western Interstate Energy Board; related to draft Cross-cutting action 8, the commenter recommended ODOE compile BPA and NWPCC plans to articulate how the state can better engage with and leverage federal processes. The commenter recommended leveraging FERC Order 1920 to promote regional planning that focuses on colocation of infrastructure and reconductoring.⁵³⁷ A PWG also stated that Oregon should examine working within existing regional forums, such as CREPC, Northern Grid, and coordinated activities based on the recent FERC Order 1920.⁵³⁸

A local government supported Policy 3d, especially insofar as this policy may support regional energy market integration. The commenter stated that steps towards regionalization of energy markets promote cost savings. ⁵³⁹ An AG member similarly stated that electric market integration should be advanced as a means of realizing decarbonization and electrification goals. ⁵⁴⁰ Conversely, a COU organization expressed general caution that Oregon should focus on its own state policy and reacting to other states' policies rather than attempting to influence them; the commenter generally opposed discussion of a day-ahead market decision for the region. ⁵⁴¹

A PWG member supported the need for regional collaboration and the collective benefit it would bring. Another PWG member urged more caution, stating that collaboration is not needed for every policy states have. The commenter stated that a draft policy of regional engagement was vague and concerning. Similarly, a joint submission from COU organizations stated that they did not support an action to increase collaboration with neighboring states and regional entities, asking how the action would relate to BPA's Day Ahead Energy Market decision, cap-and-trade policy, and SMR policy. The stated that this proposal needed to be specific, measurable, and achievable. S43

General and Other Clean Electricity Comments

A hydrogen trade association recommended that ODOE define "clean electricity", stating that neither HB 2021 nor EO 20-04 do so. In general, the commenter recommended providing independent, Oregonbased definitions for terms rather than relying on federal sources.⁵⁴⁴ In an AG meeting, the commenter noted that states often have differing requirements for renewable and clean energy generation,

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<sup>533</sup> CTWS 9.17.25.
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⁵³⁴ 4_23_2025_Advisory Group #9 Summary.

⁵³⁵ Coalition Comments 9.22.25.

⁵³⁶ CRITFC 9.22.25.

⁵³⁷ TNC 9.22.25.

⁵³⁸ OES PWG DCEGT 4-30-25 Notes.

⁵³⁹ Multnomah County 9.22.25.

⁵⁴⁰ 4_23_2025_Advisory Group #9 Summary.

⁵⁴¹ ORECA 5.9.25.

⁵⁴² OES PWG DCEGT 4-30-25 Notes.

⁵⁴³ PPC, OMEU, ORECA, OPUDA 5.9.22.

⁵⁴⁴ RHA 9.22.25.

especially with reference to RPS standards.⁵⁴⁵ A Tribal organization agreed, recommending that the definition focus on emissions rather than feedstocks; the commenter also requested that the Strategy explain that anthropogenic GHG emissions are responsible as contributors to climate change rather than "fossil fuels alone" or "blaming an industry based economic reasons."⁵⁴⁶

A Tribal organization requested that the Strategy explain how ODOE would implement the POWER Act (HB 3546).⁵⁴⁷

Pathway 4: Low-carbon Fuels

Policy 4a. Low-carbon Fuels and Fuel Infrastructure

Low-carbon fuel viability and role in energy transition

Multiple commenters were skeptical of the role low-carbon fuels may have in the energy transition or whether low-carbon fuels warrant policy support. An industry trade organization commented that the Energy Strategy unrealistically relies on low-carbon fuels like renewable natural gas and green hydrogen, stating that neither of these fuels can be produced at sufficient scale to replace conventional fuels; the commenter stated that the cost of transitioning to these alternatives would negatively impact businesses and consumers. Commenters also referred to hydrogen as a "false solution", with an individual commenter providing citations in writing that hydrogen has a history of investment without significant progress towards the viability of green hydrogen. The commenter added that hydrogen has high near-term warming potential in the event of even minor pipeline leaks. An environmental organization agreed, stating that green hydrogen is extremely energy- and water-intensive. An individual commenter stated that investing in low-carbon fuels would be an inefficient use of taxpayer resources for a temporary measure, advocating instead that resources be focused on developing electrification technologies for the hardest-to-electrify sectors.

Several commenters supported portions of ODOE's drafting around low-carbon fuels but provided additional comments and recommendations. An individual commenter supported framing low-carbon fuels as a solution in only the hardest-to-electrify end-uses, but urged that the State not invest effort in expanding low-carbon fuel production and usage; the commenter described land-use costs, past failure of biofuel technologies, problematic incentivization for methane-heavy practices, potential for fraud around verifying use of waste food oils, and energy-intensity in hydrogen production.⁵⁵² Another individual commenter agreed that close scrutiny is important to limiting biofuel production to agricultural waste and expressed concern that biofuel production results in environmental justice and air quality impacts.⁵⁵³ A joint submission from numerous organizations, a climate advocacy organization, and an environmental organization generally supported ODOE's low-carbon fuel policy drafting and requested that ODOE further emphasize that low-carbon fuels are a transitional tool in the energy transition and may come with unintended consequences – especially in land use and GHG emissions.⁵⁵⁴ The commenters, as well as an individual and a local government, added that supporting low-carbon fuels could also impair longer-term elements of the energy transition, such as VMT reduction and

⁵⁴⁵ 9_18_2025_Advisory Group #11.

⁵⁴⁶ CTUIR 9.22.25.

⁵⁴⁷ CTUIR 9.22.25.

⁵⁴⁸ AWEC 9.22.25.

⁵⁴⁹ Mike Badzmierowski 9.22.25.

⁵⁵⁰ Rogue Climate 9.22.25.

⁵⁵¹ Maleek McKenzie 9.22.25.

⁵⁵² Helena Birecki 9.22.25.

⁵⁵³ Mike Badzmeirowski, 9.22.25.

⁵⁵⁴ Coalition Comments 9.22.25; Rogue Climate 9.22.25; Pat DeLaquil, MCAT 9.22.25.

electrification.⁵⁵⁵ Further, the joint submission recommended that the Strategy not overvalue existing fuel infrastructure, stating that gas pipelines can only transport gases, and vice versa for liquid pipelines.⁵⁵⁶ Commenters stated that State efforts would be better directed to other efforts like electricity infrastructure improvement and electrification.⁵⁵⁷

Support for low-carbon fuel adoption generally

Conversely, other commenters argued that some low-carbon fuel technologies are proven and viable. A natural gas utility stated that RNG and hydrogen should be presented as primary decarbonization pathways and supported via performance targets for fuel to provide innovative, cost-effective means towards Oregon's energy objectives. The commenter also recommended promoting near-term lowcarbon fuel development and a cost-recovery framework for utilities to use low-carbon fuels. The commenter cited findings from their recent IRP work as indicating that RNG can take advantage of extant natural gas infrastructure while developments in electrolysis may support hydrogen uptake; their IRP analysis also found that an electrification pathway was substantially more expensive than a lowcarbon fuel-focused pathway that relied on low-carbon fuels to decarbonize sectors in addition to aviation, heavy industry, and maritime, and HDVs. 558 An AG member expressed interest in drop-in lowcarbon fuels, emphasizing that SAF is currently the only viable option for decarbonizing aviation. 559 A liquid fuel trade association agreed that low-carbon fuels allow for a less-expensive means to decarbonize end-uses than electrification, citing sources, but stated that the Strategy assumes a faster transition to low-carbon fuels than is supported by policy or the market. In particular, the commenter cited a study as finding that a technology neutral pathway, where fuel decarbonization plays a complementary role to electrification, was most cost-effective and reliable. The commenter recommended examining the decrease in renewable diesel supply from 2024 to 2025 as well as production, supply chain, and cost barriers. 560 An individual commented that clean hydrogen should be advanced as a means of promoting sustainable energy independence in Oregon, stating that other countries with clean energy goals are pursuing this technology. 561

Certainty and policy support needed for low-carbon fuel development

A State legislator commented that policy 4a should be more specific about low-carbon fuel options and realities in order to support policymakers with specific recommendations and information. A PWG member stated that uncertainty as to what will qualify as a low-carbon fuel hinders investment in the area; clear guidelines would be helpful. PWG members also stated that prudent investment requirements in OPUC processes hamper utility investment in low-carbon fuel infrastructure. One of the members referenced Minnesota's Innovation Act as allowing investment in innovation and pilots and said similar policies in Oregon could help in testing technologies like woody biomass pyrolysis. A couple of other PWG members agreed that market uncertainty is a major barrier to low-carbon fuel production and that policies complementary to CFP could be helpful.

Low-carbon fuel safety and air quality impacts

⁵⁵⁵ Coalition Comments 9.22.25; Helena Birecki 9.22.25; Rogue Climate 9.22.25; Multnomah County 9.22.25.

⁵⁵⁶ Coalition Comments 9.22.25.

⁵⁵⁷ Helena Birecki 9.22.25.

⁵⁵⁸ NW Natural 9.22.25.

⁵⁵⁹ 9 18 2025 Advisory Group #11.

⁵⁶⁰ WSPA 9.22.25.

⁵⁶¹ Toby Kinkaid 9.22.25.

⁵⁶² State Rep Mark Gamba 9.22.25.

⁵⁶³ OES PWG LCFs 3-14-25 Notes.

⁵⁶⁴ OES PWG LCFs 2-19-25 Notes.

An individual commenter generally stated that their home community in Richmond, California has been "ravaged" by hydrogen production and that renewable diesel production still leads to flaring and pollution issues. ⁵⁶⁵ Another individual commenter provided citations in commenting that hydrogen leaks are costly to prevent and monitor for. ⁵⁶⁶ An environmental organization expressed skepticism around hydrogen generally, adding that hydrogen combustion produces NOx pollutants and related respiratory health impacts. ⁵⁶⁷

An individual commenter expressed concern around the term "managed fuels transition" as applicable to the storage of fuel at the Critical Energy Infrastructure (CEI) Hub; the commenter wrote that this storage facility poses a catastrophic risk to communities and the Willamette river in the event of an earthquake and advocated a swift transition to alternative resources to obviate the need for CEI fuel storage. An energy advocacy organization agreed that the Strategy should address liquid fuel storage risks posed by seismic activity in the Cascadia Subduction Zone, stating that electricity infrastructure provides resilience and safety benefits in this context. A State legislator likewise stated that the CEI hub and fuels development facilities in Oregon should be subject to safeguards to prevent spilling and environmental disasters and that accountability and financial responsibility is sufficient to respond to any worst-case accidents. 570

Low-carbon fuel carbon-intensity accounting: biofuels and hydrogen

A joint submission from numerous organizations and a few individual commenters requested that the Strategy address a recent federal removal in renewable fuel standard carbon accounting of indirect landuse impacts, saying that Oregon should rectify this accounting for state purposes by promulgating more comprehensive standards. One of the individual commenters provided citations in arguing that, when associated emissions are fully accounted for, food crop-based biofuels' emissions often exceed conventional fuels.

Several commenters also emphasized that the Strategy should only advance green hydrogen, stating that methods of hydrogen production that do not rely on clean, renewable energy are ultimately carbon-intensive and counterproductive to Oregon decarbonization goals.⁵⁷³ An AG member expressed interest in there being an Oregon state definition of clean hydrogen independent of federal statute.⁵⁷⁴

Ammonia

A Tribal organization stated that ammonia has been relied upon for fertilizer for more than a century and that the Pacific Northwest has extensive ammonia infrastructure; the commenter added that ammonia's boiling point and vapor pressure are similar to propane, making it easier to handle than hydrogen. The commenter provided a source and recommended that ODOE further consider ammonia in the Strategy.⁵⁷⁵ In contrast, an individual commenter wrote that the Strategy should not promote ammonia as a low-carbon fuel, providing citations in commenting that ammonia risks significant air

⁵⁶⁵ Helena Birecki 9.22.25.

⁵⁶⁶ Mike Badzmeirowski, 9.22.25.

⁵⁶⁷ Rogue Climate 9.22.25.

⁵⁶⁸ Maleek McKenzie 9.22.25.

⁵⁶⁹ Better Energy LLC 4.3.25.

⁵⁷⁰ State Rep Mark Gamba 9.22.25.

⁵⁷¹ Coalition Comments 9.22.25; Helena Birecki 9.22.25; Mike Badzmeirowski, 9.22.25.

⁵⁷² Mike Badzmeirowski, 9.22.25.

⁵⁷³ Maleek McKenzie, 9.22.25; Rogue Climate 9.22.25; OES PWG LCFs 2-19-25 Notes.

⁵⁷⁴ 9 18 2025 Advisory Group #11.

⁵⁷⁵ CTUIR 9.22.25.

quality health impacts and especially N₂O leakage potential that could offset any carbon reductions it might achieve from replacing conventional fuels.⁵⁷⁶

Wood pellet and biomass fuel

Several commenters addressed wood-pellets and other biomass. An AG member generally advocated that biomass solutions for energy be prioritized in Oregon as a means of utilizing state waste and byproducts.⁵⁷⁷

Conversely, an individual commenter cited their upcoming research as demonstrating that wood-pellet biomass combustion results in "enormous health impacts" and emissions that exceed powerplant or onsite natural gas combustion. The commenter recommended that the Strategy clarify that detailed analysis of biofuels does not treat woody biomass as a zero CO2 fuel source and urged that BPS not duplicate errors in New York's code by promoting wood biomass combustion. ⁵⁷⁸ A climate advocacy organization was similarly skeptical of biomass' viability as a fuel, providing sources in stating that lifecycle emissions of biomass-based fuels are often high and that biomass combustion produces negative air quality impacts. The commenter advocated evaluating biomass potential on a strict, regulated basis of food security impacts, a net-energy production and lifecycle GHG assessment, and air quality benefits. ⁵⁷⁹ An individual commenter wrote that biomass is not renewable or low-carbon, attaching a law review article on environmental harms and misconceptions around wood pellet use as fuel. ⁵⁸⁰

Propane

A propane company recommended that ODOE include propane in the definition and discussions of low-carbon fuels; the commenter stated that propane currently provides a cleaner-burning alternative to other fossil fuels and that renewable propane from sustainable feedstocks is being rapidly invested in. The commenter provided citations in support of the relatively lower carbon-intensities of propane and renewable propane. Furthermore, the propane company commented that propane provides reliability and resilience benefits because of its potential for onsite storage; they added that four percent of Oregonians rely on propane for heating and thus that support for propane provides equity and affordability benefits. A propane trade association agreed, adding that propane is a more readily-available fuel alternative to biofuels, hydrogen, and ammonia and can be used on a "drop-in" basis in vehicles. The trade association stated that the proposed electrification pathway would have negative equity impacts because of rural and Tribal community reliance on propane in Oregon. The commenter also recommended that the Strategy clearly state that propane should be included in HB 2066's microgrid study as a clean fuel with resilience value, and that the Strategy overall take a "fuel-neutral" approach that allows energy sources to compete to lower emissions. 582

RNG

An RNG trade association supported the draft Strategy's inclusion of RNG and advocated that the fuel be further emphasized for its viability as a complementary resource to electricity, for its transport via natural gas pipelines, and for its use in transportation, heating, power generation, and existing appliances. In particular, the commenter noted that these attributes make RNG a strong resource for

⁵⁷⁶ Mike Badzmeirowski, 9.22.25.

⁵⁷⁷ Sol Coast 9.22.25; 9 18 2025 Advisory Group #11.

⁵⁷⁸ Jim Edelson 9.22.25.

⁵⁷⁹ SOCAN 9.22.25.

⁵⁸⁰ Elayna Trucker 9.19.2025.

⁵⁸¹ AmeriGas 9.22.25.

⁵⁸² PPGA 9.16.25.

system reliability and resilience. The commenter supported the draft's identification of the hardest-toelectrify sectors and RNG's potential role in decarbonizing associated end-uses. Furthermore, the commenter described progress in RNG development and use in Oregon as increasing substantially from 2019 to 2024, especially from CFP support and the utilization of organic waste feedstocks. The commenter described RNG's role in reducing waste-based methane emissions – a GHG with dramatic near-term warming potential – in stating that the Strategy should recognize a near-term role for RNG in realizing the energy transition. The commenter provided a citation as demonstrating that the capture and use of this waste methane as RNG to displace fossil natural gas could prevent the release of approximately 2 million metric tons of greenhouse gases per year and cited an ODOE resource as indicating that sustainable feedstocks in Oregon could be leveraged to replace 10 to 20 percent of the state's natural gas usage. The trade association stated that RNG production is presently proven and commercially viable, with dramatic growth in the industry between 2011 and 2025. 583 A PWG member agreed that RNG is an immediately available resource, advocating that Oregon consider polices similar to Washington and California to support RNG production. 584 A fuels and transportation advocacy organization generally recommended that the Strategy consider renewable natural gas (RNG) and hydrogen as viable means to decarbone MHD transportation while addressing operational limitations associated with BEVs; in particular, the commenter noted a forthcoming hydrogen engine which may help decarbonize HDV transportation.⁵⁸⁵

Conventional natural gas and fossil fuels

A couple of commenters provided general input on conventional fuels in Oregon. An energy advocacy group commented that the Strategy must acknowledge Oregon's present dependance on out-of-state liquid fuel sources⁵⁸⁶ and that, even if domestic oil production were to increase, the Strategy should weigh the costs of commodity fuel handling infrastructure and infrastructure maintenance.⁵⁸⁷ A presentation attendee commented that, under the Trump administration, Oregon will no longer rely on overseas oil production and that solar buildout in Oregon would be inefficient and costly.⁵⁸⁸

A climate advocacy organization asserted that natural gas should not be treated as a clean fuel, providing several citations on natural gas methane emissions and leaks, highlighting in particular that natural gas produced via fracking may have GHG emission equivalence to coal.⁵⁸⁹

An individual commenter recommended, on the basis that building low-carbon fuel production and distribution infrastructure will take time, that the Strategy consider lower-emission fossil fuels based their availability in oil company portfolios. ⁵⁹⁰ A local government expressed general concern that the Strategy should value immediate resilience values of natural gas infrastructure and backup generation more than was reflected in the Draft⁵⁹¹ and a PWG member stated that natural gas should be considered a bridge fuel with reliability benefits; the PWG member advocated reviewing statutory prohibitions on natural gas facility development. ⁵⁹²

⁵⁸³ RNGC 9.22.25.

⁵⁸⁴ OES PWG LCFs 2-19-25 Notes.

⁵⁸⁵ NW Alliance for Clean Transportation 9.16.2025

⁵⁸⁶ Tracy Farwell, Better Energy LLC 12.3.24.

⁵⁸⁷ Tracy Farwell, Better Energy LLC, Modeling Results Presentation 01.31.2025.

⁵⁸⁸ Greg Lamberg, Modeling Results Presentation 01.31.2025.

⁵⁸⁹ SOCAN 9.22.25.

⁵⁹⁰ Robert Weeks, OCES 9.3.25.

⁵⁹¹ Marion County Cmmrs 9.22.25.

⁵⁹² OES PWG DCEGT 4-30-25 Notes.

An environmental coalition and a PWG white board note highlighted concern with federal reductions in pipeline safety regulations and enforcement. ⁵⁹³ The coalition advocated that Oregon provide state-based protections to fill gaps. The commenter cited federal testimony and data on pipeline accidents, injuries, and damages as well as research on reduced pipeline safety enforcement under the current federal administration and proposed federal rulemakings to deregulate pipeline safety. The commenter reasoned that pipeline expansion and relaxed federal oversight of pipeline safety would result in increased GHG emissions via increased natural gas consumption as well as public health risks. The coalition recommended that Oregon pursue a multi-state collaborative effort to coordinate western efforts to oppose deregulatory policies, provide state-based pipeline safety oversight, and challenge Pipeline and Hazardous Materials Safety Administration (PHMSA) to allow its pipeline safety operators to do their jobs. ⁵⁹⁴

Policy 4b. Low-carbon Fuels Adoption

An individual commenter expressed doubt with drafting in policy 4b that agriculture is hard to electrify; the commenter referred to OSU and U.S. DOE research on agrivoltaics in saying that the technology can support clean energy, agriculture, and local economies. ⁵⁹⁵ Refer to General and Other Clean Electricity Action Comments for other comments on agrivoltaics and innovative solar technologies.

PWG members commented that interstate competition, especially around policy supports for low-carbon fuels, will be important in determining whether low-carbon fuels are adopted and used widely in Oregon. A PWG member also commented that a lack of refinery capacity in the Pacific Northwest, together with a lack of fuel transportation infrastructure to the Midwest, are barriers to wide low-carbon fuel usage. ⁵⁹⁶ A COU commented that there is broad demand for low-carbon fuels, but that policies to make low-carbon fuel prices stable and cost-competitive with fossil fuels is important to making them available and adopted. ⁵⁹⁷

Low-carbon fuel end-uses

Several commenters discussed whether low-carbon fuel consumption should be directed to specific end uses, while others advocated a neutral or market-based approach. A PWG member stated that, consistent with Washington policy, Oregon should consider providing targeted incentives for SAF production, while others recommended that Oregon provide equal transport and stationary end-use incentives for RNG. A PWG urged that low-carbon fuels be reserved for hardest to decarbonize sectors, stating that home heating is not among those uses. ⁵⁹⁸ A clean fuels advocacy organization stated that Strategy discussions focused too much on using low-carbon fuel in electricity production, advocated that the best and highest use for low-carbon fuels will be in hard-to-electrify transportation sectors; ⁵⁹⁹ an energy advocacy organization agreed that low-carbon fuels are best used in the hard-to-electrify sectors like transportation. ⁶⁰⁰ An energy and environmental organization agreed low-carbon fuels are not best-used in buildings and should be reserved for other uses, citing an article. ⁶⁰¹ A PWG member advocated considering hydrogen as a low-carbon fuel suited to many high-heat industrial processes ⁶⁰² and another

⁵⁹³ Stop NW Gas Expansion Coalition 9.22.25; OES PWG LCFs 2-19-25 Notes.

⁵⁹⁴ Stop NW Gas Expansion Coalition 9.22.25.

⁵⁹⁵ Maleet McKenzie 9.22.25.

⁵⁹⁶ OES PWG LCFs 2-19-25 Notes.

⁵⁹⁷ EWEB 3.25.25.

⁵⁹⁸ OES PWG LCFs 3-14-25 Notes.

⁵⁹⁹ CFAA 5.9.25.

⁶⁰⁰ CUB 5.14.25.

⁶⁰¹ GEI 5.9.25.

⁶⁰² OES PWG BE EE and DERs 3-19-25 Notes.

PWG member expressed a need to provide incentives to support low-carbon fuel adoption in industrial settings. 603

Policy 4c. Managed Fuels Transition

A climate advocacy organization recommended that policy 4c indicate that incentives only be provided for electric options when fossil-fuel based equipment needs to be replaced, reasoning that any further investment in fossil-fuel equipment will create stranded assets. The commenter also recommended updating the draft language "This transition requires a recognition of the role of strategic electrification in decarbonizing buildings, industry, and transportation as a cost containment approach" to focus on processes rather than outcomes.⁶⁰⁴

A PWG member stated that, as gas utilities pay into Oregon programs through the public purpose charge, there should be programs to modernize natural gas businesses models – possibly through hydrogen, thermal energy networks, or other emerging technologies. The commenter and a natural gas utility urged that natural gas utilities should be partners and at the table in energy transition discussions. Other PWG members similarly discussed TENs and geothermal projects as areas natural gas utilities could grow into. Members also noted that the modeling found a future for low-carbon fuel thermal electricity plants to provide system reliability services in peak demand conditions. A natural gas utility also commented that gas customer PPC funding should not be used for electrification programs.

PWG members noted several concerns in a fuel transition to electrification, including impacts to gas stations, loss of refinery infrastructure in the region, and stranding EV drivers with ICE vehicles that may become increasingly difficult to fuel and maintain. An individual commenter urged that the Strategy address the environmental legacy of liquid and fossil fuels as the energy transition to electrification advances. The commenter also stated that expanding electricity generation would result in reduced liquid fuel consumption and that the Strategy needs to further address this dynamic. An including impacts to gas

General and Other Low-Carbon Fuel Comments

A Tribal organization commented that the draft low-carbon fuel pathway has a limited, nearer-term focus than other proposed pathways and should not be prioritized against them. Relatedly, a clean fuels advocacy organization stated that low-carbon fuels are currently viable and should be advanced in the near term as Oregon transitions to electrification and other technologies; a PWG member likewise advocated reviewing Portland's RFS and analysis as indicating that low-carbon fuels have an important role in decarbonizing the economy in the shorter term as well as a possible longer-term role for green hydrogen. An individual commenter generally recommended abandoning low-carbon fuel policies and strategies, stating that Oregon imports biofuels that impose externalities on other states and that the CFS imposes costs while realizing no benefits. Another individual commenter opposed the low-carbon fuel pathway unless fuels are subject to very stringent monitoring and regulation, providing citations in

⁶⁰³ OES PWG BE energy efficiency DERs 3-5-25 Notes.

⁶⁰⁴ Pat DeLaguil, MCAT 9.22.25.

⁶⁰⁵ OES PWG BE EE and DERs 5-7-25 Notes; NW Nat Mary Rudolph-Knobbe 05.09.25 Comment.

⁶⁰⁶ OES PWG LCFs 3-14-25 Notes.

⁶⁰⁷ OES PWG LCFs 4-30-25 Notes.

⁶⁰⁸ NW Nat Mary Rudolph-Knobbe 05.09.25 Comment.

⁶⁰⁹ OES PWG LCFs 2-19-25 Notes.

⁶¹⁰ Nikki Mandell CETI Task Force 9.22.25.

⁶¹¹ CRITFC 9.22.25.

⁶¹² CFAA 5.9.25.

⁶¹³ Dave Vanthof 3.21.25.

⁶¹⁴ John Charles 9.22.25.

stating that fuel companies have historically and systematically underreported methane emissions, failed to detect fuel leaks, and lobbied to minimize or repeal methane regulations.⁶¹⁵

A climate advocacy organization recommended using the term "low GHG emissions fuels" instead of "low-carbon fuels", citing sources as showing that methane has severe, near-term warming potential and reasoning that the low-carbon fuel terminology may mislead readers. 616

An AG member generally emphasized that low-carbon fuel approaches should avoid imposing additional, onerous regulations and would instead prefer incentive-focused policies. ⁶¹⁷

Several PWG members noted information barriers to low-carbon fuel expansion in Oregon, including a need for community education and addressing misinformation. PWG whiteboard notes also expressed concerns, such as that low-carbon fuels provide "false solutions", can be used as a delay tactic by the fossil fuel industry against electrification, require pollution controls to protect communities, and a need to balance benefits from low-carbon fuel development across the state. A fuels advocacy organization similarly stated that the Strategy should ensure all parts of the state benefit from access to LCF and consider infrastructure needs accordingly.

PWG whiteboard note identified low-carbon fuels as providing an opportunity to diversify employment in Oregon and to fuel hybrid vehicles in the short term.⁶²⁰

Pathway 5: Resilience

Policy 5a. Cross-fuels Planning

Several commenters, including PWG members, stated that coordinated planning would improve preparation for meeting peak winter needs. A joint submission from numerous organizations supported this policy and recommended that its cross-cutting nature — especially regarding strategic electrification — be further emphasized in the final Energy Strategy report. A local government emphasized the importance of coordinated planning, adding that the Strategy should appreciate a need for legislative and regulatory directives towards coordinated planning and obligating utilities to respond to State needs. A natural gas trade association cited research in agreeing that integrated planning will improve system- and region-wide energy reliability. A PWG member added that county resilience plans made under the Energy Resilience Grant Program should be better woven in with state-level programs.

Policy 5b. Resilience Measures

A joint submission from numerous organizations expressed strong support for this policy.⁶²⁶ A Tribal organization recommended that policy 5b acknowledge resilience and reliability measures for Oregon's natural gas system in recognition of the fuel's importance and a need to coordinate with out-of-state facilities. The commenter recommended advancing a related action for installation of energy storage

⁶¹⁵ Mike Badzmierowski 9.22.25.

⁶¹⁶ SOCAN 9.22.25.

⁶¹⁷ 4_23_2025_Advisory Group #9 Summary.

⁶¹⁸ OES PWG LCFs 3-14-25 Notes; OES PWG EJ and Equity 2-24-25 Notes.

⁶¹⁹ CFAA 5.9.25.

⁶²⁰ OES PWG EJ and Equity 2-24-25 Notes.

⁶²¹ OES PWG DCEGT 2-26-25 Notes; OES PWG DCEGT 3-17-25 Notes.

⁶²² Coalition Comments 9.22.25.

⁶²³ Multnomah County 9.22.25.

⁶²⁴ NWGA 9.22.25.

⁶²⁵ OES PWG DCEGT 4-30-25 Notes.

⁶²⁶ Coalition Comments 9.22.25.

systems at electrical grid dependent compressor stations to increase uptime in the event of a gridoutage, as well as general weatherization measures for gas transmission infrastructure.⁶²⁷

A local government expressed general support for the draft policy 5b.⁶²⁸ A Tribal organization also supported this policy but urged that more actions and specificity be provided to effectuate it.⁶²⁹

Policy 5c. Emergency Response Capabilities

A local government supported draft policy 5c, adding that coordinating investment priorities should be undertaken with stakeholder input.⁶³⁰

Other Resilience Comments

A joint submission from numerous organizations generally supported including resilience as a policy area to focus on, with special attention to transmission and distribution. A Tribal organization recommended prioritizing resilience within the Energy Strategy to support salmon restoration efforts; the commenter recommended doing so by investing in long-term battery storage, flexible resources, adaptive hydropower operations that can respond to changing conditions, and implementing climate adaptation into all energy policy decision-making. A local government supported the inclusion of resilience in the Energy Strategy but asked that it provide clearer pathways for recognizing distributed energy resources' resilience values and how Oregon may recover after disasters. A coalition comment agreed that the Strategy should highlight the role of distributed energy resources and electrification in resilience, adding that the Strategy should prioritize building upgrades in frontline communities as a central strategy. A climate advocacy organization recommended further emphasizing the resilience policies after 2025 legislative funding decisions, specifically advocating that microgrids be promoted and minimizing further investments in fossil fuel infrastructure.

Several PWG whiteboard notes identified general barriers to improving energy resilience, including a lack of resources in multiple languages; the distributed nature of rural communities and needs for energy for drinking water wells; and lack of county and Tribal internal planning capacity. 636

A PWG member urged that, when considering how resilience benefits should be paid for, policymakers should remain mindful that community resilience provides benefits both to the community and to the grid-at-large. A PWG member also recommended that the monetized value of resilience in terms of loss-of-load risk, poor power quality, and avoided wildfire damages be assessed.⁶³⁷

An AG member advocated that resilience strategies be clarified and expressly provide resilience on the system, community, and individual or business level; the commenter stated that forward-looking technologies and approaches like microgrids, V2G, and hydrogen fuel cells should be considered in these terms. Other AG members asked that the meaning or definition of resilience be clarified to indicate

⁶²⁷ CTUIR 9.22.25.

⁶²⁸ Multnomah County 9.22.25.

⁶²⁹ CRITFC 9.22.25.

⁶³⁰ Multnomah County 9.22.25.

⁶³¹ Coalition Comments 9.22.25.

⁶³² CRITFC 9.22.25.

⁶³³ Multnomah County 9.22.25.

⁶³⁴ ZERO Coalition 9.22.25.

⁶³⁵ Rogue Climate 9.22.25.

⁶³⁶ OES PWG DCEGT 2-26-25 Notes.

⁶³⁷ OES PWG DCEGT 3-17-25 Notes.

whether, for example, resilience focuses on power restoration, preservation of life, or other ends. 638 Similarly, a PWG member asked if resilience referred to grid- or community-level resilience. 639

Based on natural gas' role in regional resource adequacy and responding to peak winter demand, as well as shortcomings in short-term battery storage capacity, a natural gas utility recommended that the resilience pathway include reference to gas appliance and backup generator resilience benefits. The commenter added that the resilience pathway should include more consideration for affordability based on criticisms of the Energy Wallet analysis. ⁶⁴⁰ A petroleum trade association likewise commented that the Strategy should further address liquid fuels' role in energy resilience and emergency response to extreme weather. The commenter recommended that Oregon codify a role for liquid fuels in resilience planning. ⁶⁴¹

V. Legislative and Policy Actions*

Transportation Actions

General and Other Transportation Action Comments

A climate advocacy organization generally supported the draft transportation actions, with a few caveats described in the sections below. A local government expressed general support for the VMT reduction approach in the Strategy; the commenter also generally supported actions to updating funding strategies in coordination with local governments and emphasized the value in supporting the energy transition of MHD fleets as a means to reduce diesel emissions and related health impacts. A joint submission from environmental organizations recommended that the Strategy better highlight the potential savings in the energy transition for transportation, ensure that funding is allocated equitably and prioritizes underserved communities by providing low-carbon fuel light-duty vehicle and multimodal transportation options, engaging rural partners to support transit-friendly development across Oregon, and promote comprehensive infrastructure development to integrate multimodal transportation options.

A PWG member expressed concern that, based on policy actions raised for discussion in Phase 2, too much emphasis was being placed on fleets and MHD; the commenter stated that work and support is needed for light-duty vehicles in rural areas, investment in which would in turn support transportation electrification in urban areas. Conversely, a joint submission from numerous organizations recommended emphasizing a need to address MHD vehicles because of their disproportionate emissions impacts and uncertainty around the Advanced Clean Truck rule. And G member recommended that the Strategy provide for the retirement of diesel fleets, especially in rural areas, and their replacement

^{638 5 15 2025} Advisory Group #10 Summary.

⁶³⁹ OES PWG DCEGT 3-17-25 Notes.

⁶⁴⁰ NW Natural 9.22.25.

⁶⁴¹ WSPA 9.22.25.

^{*} Section headings provided here abbreviate the titles of draft policy actions. Refer to the <u>Draft Energy Strategy Report</u> at page 86 for full titles of draft recommended policy and legislative actions.

⁶⁴² MCAT 9.22.25.

⁶⁴³ Multnomah County 9.22.25.

⁶⁴⁴ NEDCGEINCA 9.22.25.

⁶⁴⁵ OES PWG TE 4-30-25 Notes.

⁶⁴⁶ Coalition Comments 9.22.25.

with natural gas or hydrogen-fueled vehicles.⁶⁴⁷ A climate advocacy organization similarly recommended prioritizing action for MHD fleets because of their disproportionate contributions to emissions.⁶⁴⁸

A joint submission from numerous organizations supported giving local governments authority to generate and direct transportation revenues toward climate-aligned goals (Action 7) and a statewide incentive program for standard and cargo e-bikes (Action 6) but judged both to be lower priorities given the urgency of other actions. They further stated that developing regulations for hydrogen refueling infrastructure (Action 11) was the lowest priority at this time.⁶⁴⁹

EV-specific rates

Several commenters discussed EV-specific electricity rates, a policy action idea raised in Phase 2 policy discussions. A joint submission recommended requiring IOUs to develop EV-specific rates for residential and commercial customers, with commercial fleet rates designed to replace traditional demand charges and cater to varying demand levels. ⁶⁵⁰ Conversely, an IOU advised that EV-specific rates are not necessary because they already offer flexible rates that can account for flexible demand from EVs and other electrical loads. The IOU stated that their current ToU rate already helps residential customers reduce costs and system peak load and that they offer the option of customers installing a separate, EV-only meter to assess ToU rates from. The commenter added that they provide ToU options and a Schedule 38 rate option to commercial customers. ⁶⁵¹ A PWG member described barriers they would face to implementing EV-specific rates, including the cost of additional meters outweighing price-savings and the lack of price signals towards load management currently in their territory. The commenter stated that ToU rates are superior to EV-specific rates because they would address other significant loads, such as home appliances. ⁶⁵²

A municipal transit agency recommended that, to the extent EV-specific rates were to be promulgated, they should be designed with public transit agencies to reflect fleet operational needs, are predictable, incentivize off-peak charging, support integration of smart-charging infrastructure, and provide for a sustainable EV transition for fleets.⁶⁵³ A PWG member requested that time-of-use (ToU) policy support be in carrots rather than sticks and that cost allocations for these policies should reflect whether the policy is intended to benefit the grid generally or the regulated entity.⁶⁵⁴

Establishing average and maximum energization timelines for connecting new or upgraded electrical services

An IOU addressed a potential policy action to establishing average and maximum energization timelines for connecting new or upgraded electrical services, a policy action raised in Phase 2 policy discussions. The commenter wrote that rigid timelines for interconnections or service upgrades may be problematic because they might expose utilities to risks outside of their control, including customer-driven steps such as business case or design decision-making, contractor selection, permitting, and site construction. PWG members agreed that a definite timeline may increase system costs and fail to address supply chain causes of delays. Conversely, a PWG member asked that we consider the tension

⁶⁴⁷ 4_23_2025_Advisory Group #9 Summary.

⁶⁴⁸ Rogue Climate 9.22.25.

⁶⁴⁹ Coalition Comments 9.22.25.

⁶⁵⁰ CCC MultCo OS CEP KLCAS 5.9.25 Joint Submission.

⁶⁵¹ PGE 5.9.25 TE Comments.

⁶⁵² OES PWG TE 4-30-25 Notes.

⁶⁵³ TriMet 5.21.25.

⁶⁵⁴ OES PWG TE 4-30-25 Notes.

⁶⁵⁵ PGE 5.9.25 TE Comments.

⁶⁵⁶ OES PWG TE 4-30-25 Notes.

⁶⁵⁷ OES PWG TE 4-30-25 Notes.

OEMs face between established timelines for ZEV deployments and dynamic factors, such as grid capacity, impacting their ability to follow these timelines.⁶⁵⁸

Public information campaign

Several commenters discussed a public information campaign action to educate consumers and dealers about the benefits of electric vehicles, including grid benefits raised in Phase 2 policy discussions. A joint submission supported the action and recommended specifying that the public information campaign be provided in multiple languages and be conducted through trusted community partners to educate consumers and dealers about the benefits of electric vehicles. A municipal transit agency similarly recommended that any such public information campaign tailor messaging for different audiences, including specific content for public transit agencies; highlight benefits and challenges of EVs and hydrogen to provide a balanced perspective; and address issues relevant to transit organizations like infrastructure and funding needs, range and charging accessibility, long-term sustainability and vendor reliability, local and regional variability in infrastructure and incentives, service disruption risks, and upfront costs. 660

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

Several PWG members discussed a policy action considered in Phase 2 policy discussions, to review charge management systems and their integration. One member stated that CMSs are new technology and not appropriate for all applications;⁶⁶¹ other members and an IOU stated that CMS technologies are rapidly developing and too early to attempt to review comprehensively.⁶⁶² PWG members agreed that providing a state standard for CMS features that support their integration with utilities, the grid, and API connectivity would be beneficial.⁶⁶³

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

Several commenters discussed an action under consideration during Phase 2 policy discussions, creating a safety framework for public transit that includes standards for community-based unarmed personnel, data reporting, and safety in design. PWG members recognized safety concerns on large Oregon cities' transit systems but added concern that transit safety relates to issues of policing, social services, houselessness, traffic collision and road design, but also expressed interest in safety routes as a limited means to improve transit safety. Several PWG members added other transit-focused needs to address, including a need to provide bike parking requirements to accompany housing policy; and a need for regular and reliable transit service along with transit capacity to support construction workers who may need to transport tools during the day.

Other recommended actions

A joint submission recommended an action to promote IOU policies to support EV-infrastructure in multifamily buildings that allow residents to access similar financial benefits from EVs as single-family building residents. An AG member recommended several actions to improve access to multimodal

⁶⁵⁸ OES PWG TE 4-30-25 Notes.

⁶⁵⁹ CCC MultCo OS CEP KLCAS 5.9.25 Joint Submission.

⁶⁶⁰ TriMet 5.21.25.

⁶⁶¹ OES PWG TE 4-30-25 Notes.

⁶⁶² OES PWG TE 4-30-25 Notes; PGE 5.9.25 TE Comments.

⁶⁶³ OES PWG TE 4-30-25 Notes.

⁶⁶⁴ OES PWG TE 4-30-25 Notes.

⁶⁶⁵ OES PWG TE 4-30-25 Notes.

⁶⁶⁶ OES PWG TE 4-30-25 Notes.

transportation options, including modifying local building, development, and planning codes and policies, updating the Transportation Planning Rule, and considering approaches being taken in cities and towns in other countries to reduce reliance on single-occupancy vehicle VMT. Multiple PWG whiteboard notes similarly recommended that multi-modal and bike-focused planning and investment be prioritized, and, in particular, to provide transit service to currently underserviced areas and ensure city planning minimizes the need for car travel to access basic services and jobs. 668

Several PWG whiteboard notes provided recommended transportation actions, including:

- A recommendation that existing state rebates for charging station projects be replaced with more traditional grant program with a more traditional funding split and an application maximum, to better cover costs;
- That ACT allow for credit fungibility between all vehicle classes and reverse an exclusion of CL 7/8 tractors;
- Funding electrification of city-owned vehicles, and especially EV buses in pollution-burdened communities;
- Providing charging at governmental buildings to alleviate range anxiety;
- Incentivizing multifamily property owners to provide residential charging options at retail rates;
- Including costs of maintenance of stations in charging infrastructure programs, especially in areas where EJ community members may seek charging 669

A1. Sustainable Funding for ZEV Infrastructure

Support and suggestions

Several commenters provided input on the need for sustainable funding for ZEV infrastructure in Oregon. PWG members supported this action because small cities and rural areas need support to make charging infrastructure profitable and do not receive enough market attention⁶⁷⁰ and PWG members also recommended specifying that the funding be directed towards equitable deployment across diverse Oregon regions.⁶⁷¹ A PWG requested that the action be mindful that incentives and resources of these type are often most accessible to people and organizations with resources to take advantage of them.⁶⁷² A joint submission recommended that the funding be allocated to provide technical assistance for entities with fewer resources so they can access the funding and that ODOE clarify that this funding should be exclusively for zero-emission vehicle infrastructure and not for expanding fossil fuel infrastructure.⁶⁷³ PWG members also suggested specifying that funding should come from a "progressive" source, rather than a regressive one, such as a gas tax⁶⁷⁴, which may also be less sustainable in the long-term⁶⁷⁵ and another PWG member stated that Portland is short of funding and thus that the importance of accessible, sustainable funding for this measure not be understated.⁶⁷⁶ A

⁶⁶⁷ Jeff Hammarlund 3.19.25.

⁶⁶⁸ OES PWG EJ and Equity 4-14-25 Notes.

⁶⁶⁹ OES PWG TE 4-10-25 Notes.

⁶⁷⁰ OES PWG TE 4-30-25 Notes

⁶⁷¹ OES PWG EJ and Equity 4-30-25 Notes.

⁶⁷² OES PWG EJ and Equity 4-30-25 Notes.

⁶⁷³ CCC MultCo OS CEP KLCAS 5.9.25 Joint Submission

⁶⁷⁴ OES PWG EJ and Equity 4-30-25 Notes.

⁶⁷⁵ OES PWG EJ and Equity 4-30-25 Notes.

⁶⁷⁶ OES PWG TE 4-30-25 Notes.

PWG member also noted that this effort should be aligned with related efforts, including utility transportation electrification Plans and other transportation legislation.⁶⁷⁷

A joint submission from numerous organizations recommended prioritizing draft transportation actions 1, 2, and 4 together to address the need for a sustainable, state-based source of revenue to offset recent federal changes. A hydrogen trade association agreed with prioritizing action 1 based on the present federal and state funding climate; the commenter stated that, in these circumstances, market-based programs like the CFP and cap-and-trade programs would provide the best path forward and support businesses in accessing the 45V tax credit. The commenter added that the action should recommend collaboration with DEQ to better support ZEV and related infrastructure uptake. A climate advocacy organization agreed with prioritizing action 1, adding that creative, redistributive funding approaches such as a luxury vehicle tax should be considered.

Other comments and context

PWG members also stated, on the subject of this proposal, that an existing EV funding program ran out of money in about a month and a half, demonstrating that demand exceeds available resources.⁶⁸¹ A PWG member noted that there is no definite sense of the cost and challenges of providing MHD EV infrastructure and this is a challenge for the trucking industry.⁶⁸²

PWG members also discussed utility-ownership as a model for EV infrastructure. A couple of PWG members expressed belief that utility ownership of charging stations may not be the best model⁶⁸³ and noted that they are currently losing money on their network of DC chargers.⁶⁸⁴ Another PWG member stated that EWEB's model is to provide incentives rather than owning the stations. Due to reduced funding from the Clean Fuels Program, a PWG member stated their utility had to update their EVSE rebates and no longer offer rebates for public DCFC or Level 2 charging, though the utility still provides rebates for residential and multifamily Level 2 charging.⁶⁸⁵

An individual commenter generally recommended that the Strategy examine promoting battery-swapping stations for HDVs, referencing an article as showing this technique as successfully implemented elsewhere and promising – especially as a way to repurpose existing gas stations on contaminated, difficult to redevelop land. The commenter recommended that gas stations be repurposed as battery-swapping stations and ZEV charging hubs to best utilize extant infrastructure and address the environmental legacy of fossil fuel infrastructure.

A2. Climate-Aligned Transportation Funding Task Force

A climate advocacy organization supported and recommended prioritizing this action in light of present funding challenges and prospective environmental and cost benefits to electrifying transportation.⁶⁸⁷

A3. Light-Duty Vehicle Road Usage Charge

⁶⁷⁷ OES PWG TE 4-30-25 Notes.

⁶⁷⁸ Coalition Comments 9.22.25.

⁶⁷⁹ RHA 9.23.25.

⁶⁸⁰ Rogue Climate 9.22.25.

⁶⁸¹ OES PWG EJ and Equity 4-30-25 Notes; PWG EJ and Equity 4-14-25 Notes.

⁶⁸² OES PWG TE 4-30-25 Notes.

⁶⁸³ OES PWG TE 4-30-25 Notes.

⁶⁸⁴ OES PWG TE 4-30-25 Notes.

⁶⁸⁵ PWG TE 4-30-25 Notes.

⁶⁸⁶ Maleek McKenzie 9.22.25.

⁶⁸⁷ MCAT 9.22.25.

A new transportation funding model that incentivizes efficient vehicles was also suggested, with one PWG member proposing a "Road Usage Charge (RUC) formula" based on a vehicle's weight and efficiency. This would charge lighter, more efficient vehicles less, and heavier, less efficient vehicles more. A PWG member recommended that Action 3 call out low-income based exemptions to avoid causing a regressive funding structure that burdens low-income households that need to travel further for work.

A climate advocacy organization generally supported transportation draft action 3 but commented that the action should address a need to remove restrictions on how transportation funding is spent, such as the Highway Trust Fund. The commenter added that OReGO will only effectively support accelerated EV adoption if the program does not act as a disincentive by exclusively requiring that EV owners enroll.⁶⁹⁰

A4. Funding for Zero-Emissions Incentive Fund and Zero-Emission Medium and Heavy-Duty Vehicle Incentive Fund

A local governmental agency commented with general appreciation for the Strategy as providing a basis for more stable, ongoing grant opportunities for MDHDV ZEV projects, saying that stable funding facilitates their planning and grant application quality.⁶⁹¹

A5. State Support for Public and Active Transit; Expand Payroll Tax for Transit, Safe Routes to School, and Great Streets

A transit agency emphasized that any VMT reduction strategy should explicitly include the need for stable, long-term transit funding and that VMT reduction is essential to Oregon's climate and equity goals. The commenter stated that public transit is effective for reducing VMT but must be well-funded, frequent, reliable, and accessible. In particular, operational funding is needed, especially from the state to support municipalities.⁶⁹²

A climate advocacy organization requested that the Strategy clarify that Great Streets and Safe Routes to School are not funded through the payroll tax but have been funded out of the Highway Fund; the commenter stated that this circumstance highlights a need to establish more stable funding for these programs because of their safety benefits. Another climate advocacy organization supported funding these programs through the state payroll tax. 694

A PWG member generally opposed further investments in public transit, asserting that transit ridership has been declining since 2012 and while per-rider subsidies increase.⁶⁹⁵ The PWG member also generally expressed that the proposed action to fund Safe Routes to School, and Great Streets would not be a priority for them.⁶⁹⁶

A commenter stated that bikes should not be taxed and instead that heavier and less efficient vehicle usage should incur road maintenance charges.⁶⁹⁷

⁶⁸⁸ OES PWG TE 4-10-25 Notes

⁶⁸⁹ Tonia Moro 9.22.25.

⁶⁹⁰ MCAT 9.22.25.

⁶⁹¹ City of Wilsonville/South Metro Area Regional Transit, 8.18.25.

⁶⁹² TriMet 5.21.25.

⁶⁹³ MCAT 9.22.25.

⁶⁹⁴ Rogue Climate 9.22.25.

⁶⁹⁵ OES PWG TE 4-30-25 Notes.

⁶⁹⁶ OES PWG TE 4-30-25 Notes.

⁶⁹⁷ OES PWG TE 4-10-25 Notes.

A PWG whiteboard note recommended that, like in other states, Oregon implement a GHG Planning Rule requirement that development projects be screened for emissions and require offsets from VMT-reduction projects.⁶⁹⁸

A joint submission from numerous organizations commented that increasing funding for Safe Routes to School and Great Streets is an urgent priority that does not need a taskforce or study; the commenter recommended following the HB 2025 funding plan.⁶⁹⁹

A6. Statewide Incentives for Cargo- and E-Bikes; Prioritize Income-Qualifying Recipients

There were several comments on supporting bicycle transportation in Oregon. A PWG whiteboard note recommended the state adopt a bike and e-bike rebate program alongside bike theft prevention like registration and places to safely lock bikes. PWG members also expressed support and a need for bicycle infrastructure and support in smaller rural areas, 700 for statewide incentive programs to layer with extant programs in cities 701 and for last-mile transit needs. 702

A joint submission from numerous organizations supported a statewide incentive program for standard and cargo e-bikes but judged this to be lower priority given the urgency of other actions.⁷⁰³

A7. Expand Local Governments' Authority to Fund Climate-Aligned Transportation Infrastructure

A joint submission from numerous organizations supported giving local governments authority to generate and direct transportation revenues toward climate-aligned goals but judged this to be a lower priority given the urgency of other actions. A climate advocacy organization generally supported this action. A PWG member urged that Action 7's implementation should not be predicated on completion of the recommended Transportation Funding Task Force, urging that simple legislation and regulations be advanced immediately for:

- 1) "identifying additional categories of system development charges;
- 2) enacting limitations on pass-through gas tax funding that will require long term maintenance planning/funding for any new roads built;
- 3) incentivizing great street development through the gas tax pass through;
- 4) better prioritize federal Congestion Mitigation and Air Quality Improvement program funds to foster transit and standalone multi-modal infrastructure and eliminating or limiting use of the funds for new or expanding road projects (i.e., essentially requiring them to fully fund the active transportation aspects sidewalks, culverts, bike lanes of new road development without the use of CMAQ funds);
- 5) identify and address any other preempting state legislation that limits local authority to foster climate-aligned transportation infrastructure but also limiting such to climate-aligned infrastructure;
- 6) permitting increased opportunities for securitization of projects; and
- 7) creating consulting services and pooled resources within ODOT to aid local jurisdictions with technical expertise for revenue generation, development of climate system development charge enactment and administration, like the legal development of local improvement districts or

⁶⁹⁸ OES PWG TE 4-10-25 Notes.

⁶⁹⁹ Coalition Comments 9.22.25.

⁷⁰⁰ OES PWG TE 4-30-25 Notes.

⁷⁰¹ OES PWG TE 4-30-25 Notes.

⁷⁰² OES PWG TE 4-30-25 Notes

⁷⁰³ Coalition Comments 9.22.25.

⁷⁰⁴ Coalition Comments 9.22.25.

⁷⁰⁵ Rogue Climate 9.22.25.

bonding authority (similar to the level of technical expertise ODOT provides for road building)."706

A8. MHD ZEV Roadmap with Technology Readiness and Feasibility Assessment and Statewide Infrastructure Needs Assessment

A PWG member supported a MHD ZEV assessment as necessary to address the still-evolving nature of MHD ZEV technology and limitations that include restricted range, charging time and infrastructure challenges, reliability and availability concerns, hydrogen supply constraints, emergency planning for thermal events, and limited redundancy in operations. Another PWG member agreed that such an assessment would be helpful; they and another member added that the TEINA Report is out of date and could use a hydrogen addendum. Other PWG members stated that the statewide MHD assessment should be informed by fleets and operators and that their organization would gladly participate.

A freight trade association focused on a need for a thorough analysis of the power demands and grid capacity required to electrify the commercial vehicle industry – especially in light of barriers faced by companies in charger installation times offered by utilities. They argued that there is not enough grid capacity today to meet fleet charging needs and that an assessment of infrastructure needs, based on realistic timelines informed by utility data on grid capacity and development needs and challenges. The trade association also commented that the analysis must be inclusive of operational limitations of BEV trucks based on charging needs. The commenter stated that, to be successful, the Strategy should ensure that Oregon-based carriers would be able to compete with those not subject to the Advanced Clean Trucks (ACT) rule. Furthermore, the commenter argued that the policies to mitigate freight emissions are intended to benefit the public at large, and so funding for these measures should come from the public and Oregon's general fund rather than a new transportation tax. The commenter than a new transportation tax.

A transit agency recommended that any MHD ZEV readiness and feasibility assessment consider the reliability of technology, including battery management systems, range limitations, end-of-life battery degradation, and charge management system optimization; challenges of fluctuating funding, potential volatility in government incentives, and the long-term financial sustainability of investments; the importance of standardization in vehicle-to-charger communication and charging equipment interoperability; vendor sustainability to ensure the availability of technical support and replacement parts to prevent disruptions; and the unique challenges of public fleets, such as limited depot space, high upfront costs, and the complexity of coordinating with existing routes.⁷¹⁵

Opposition

A joint submission from numerous organizations stated that draft transportation action 8 would be unnecessarily duplicative with TEINA, <u>TIGHGER</u>, and the <u>BiZEV</u>; instead, the commenter recommended focusing efforts on transportation actions 1, 2, and 4 as a faster way to catch up with progress being made by California and Washington rather than calling for further study.⁷¹⁶ A climate advocacy

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<sup>706</sup> Tonia Moro 9.22.25.
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⁷⁰⁷ OES PWG TE 4-10-25 Notes.

⁷⁰⁸ OES PWG TE 4-30-25 Notes.

⁷⁰⁹ OES PWG TE 4-30-25 Notes.

⁷¹⁰ OES PWG TE 4-30-25 Notes.

 $^{^{711}}$ OES PWG TE 4-30-25 Notes.

⁷¹² OES PWG TE 4-30-25 Notes.

⁷¹³ OTA 5.9.25

⁷¹⁴ OTA 5.9.25

⁷¹⁵ TriMet 5.21.25

⁷¹⁶ Coalition Comments 9.22.25.

organization agreed that TEINA has already sufficiently studied this issue and that funding for vigorous implementation is needed in place of study.⁷¹⁷

Other comments

A freight trade association commented that freight VMT reduction should not be a goal of the Energy Strategy because of economic risks. 718

A9. Statewide Technical Assistance Program to Support Public and Private Fleets in Planning and Executing Transition to ZEVs

A transit agency recommended that, in a technical assistance program, technologies should be reviewed based on real-world data rather than manufacturer-provided sales information; relevant charging solutions should encompass a variety of existing options, including plug-in, on-route, overhead charging (inverted pantograph), and inductive charging; energy and load management strategies should be incorporated; any hydrogen fueling solutions should evaluate both on-site production and delivered supply; and redundant systems should be incorporated for both electric charging and hydrogen fueling infrastructure to ensure reliability and resilience.⁷¹⁹ A PWG member agreed that the proposed technical assistance program should include hydrogen and fueling infrastructure.⁷²⁰

A PWG member recommended a requirement with carve-outs (for price fluctuations, cold-weather usage), rather than encouragement, that state fleets use biofuels; they stated that Oregon already encourages and heavily uses biofuel in its fleets. The commenter recommended expanding the requirement or support for biofuel use in fleets to school districts, transit, and local government fleets, as well as a prioritization that public fleets use Oregon-produced low carbon fuels to the extent they are available and cost competitive.⁷²¹ A local government also commented that draft Policy 2a should leverage public sector procurement to advance vehicle electrification, with state-set goals for vehicle electrification across departments and coordinated, shared charging infrastructure for state and local fleets.⁷²² A PWG agreed that support for public fleet adoption of ZEVs can facilitate infrastructure development, technology uptake, and even result in revenue.⁷²³

A freight trucking trade association expressed generally hope that ODOE would offer practical solutions for the electrification of the freight sector, in light of the still-emerging nature of alternative solutions like hydrogen.⁷²⁴

A joint submission from numerous organizations recommended deprioritizing draft transportation action 9 and generally stated that utilities and an Oregon agency engaged in reducing transportation emissions could act as a repository of information for electrifying fleets.⁷²⁵

A10. IOUs to Publish and Maintain HCMs for EVs, BE, and DERs

Support

An AG member expressed support for the general concept of hosting capacity maps as a first step to provide charging infrastructure and build consumer confidence in advance of EV adoption; the member stated that this effort should be followed by translating load management value into dollars at lower

⁷¹⁷ MCAT 9.22.25.

⁷¹⁸ OTA 5.9.25

⁷¹⁹ TriMet 5.21.25.

⁷²⁰ OES PWG TE 4-30-25 Notes.

⁷²¹ Dave Vanthof 4.14.25.

⁷²² Multnomah County 9.22.25.

⁷²³ Tonia Moro 9.22.25.

⁷²⁴ OTA 5.9.25.

⁷²⁵ Coalition Comments 9.22.25.

voltage levels and was how California improved their distribution system. The AG member added that HCM maps could further advance equity by showing where circuits would be fully subscribed, better distributing upgrade costs and facilitating home EV charging and solar panel adoption.⁷²⁶

A joint submission from numerous organizations urged the Strategy to promptly require investor-owned utilities to publish and maintain Hosting Capacity Maps for EV charging, building electrification, distributed generation, and battery storage. Noting that some data already exist, they argued the OPUC can compel utilities to collect and release feeder-level grid capacity data, and the agency should mandate publication as soon as the Energy Strategy is finalized.⁷²⁷ A renewable energy trade association supported the draft HCM action, stating that OPUC has failed to provide this "promised analysis" so far and that ODOE should direct this analysis.⁷²⁸

Concerns and level of effort

An AG member stated that the proposed HCM requirement would be a heavy lift and that ODOE and national lab support would be helpful in realizing this effort. AG member argued against a universal HCM requirement, citing different resources and needs among utilities; the commenter stated that need for HCMs should be based on EV penetration in a given area. An IOU recommended that this proposal should be further considered for effectiveness, usability, and maintenance burdens. A couple of PWG members stated that it would be more efficient to address EV siting infrastructure on a project-by-project basis because of the individualized nature of such projects and utility constraints. A climate advocacy organization stated that the information needed for EV charging, building electrification, distributed generation and battery storage is already available via utilities.

Suggestions

An IOU recommended defining HCMs as electric vehicle supply equipment interconnection location map, stating that EVSE represents load—distinct in nature due to variations in charger size, number, and usage patterns—and requires utility-specific analysis based on customer-provided information. The commenter stated that they maintain load maps. ⁷³⁴

A transit agency provided several recommendations for a HCM publication requirement, including that maps must be comprehensive enough to reflect their needs, such as depot and high-power charging, provide sufficient data granularity for key locations, indicate where grid upgrades are needed, and show cost-related information like utility rates and demand charges. They also stress the need for maps to incorporate forecasting capabilities for future demand; that map data sharing be facilitated through clear and accessible protocols; and that technical assistance and funding be provided to support underserved transit agencies in using HCM data. The commenter recommended convening multiple stakeholders to ensure project success.⁷³⁵

Early PWG discussion

Several comments addressed an action raised in Phase 2 policy discussions: to provide technical assistance to help publicly owned utilities assess the load growth, distributed energy resource,

⁷²⁶ 5_15_2025_Advisory Group #10 Summary.

⁷²⁷ Coalition Comments 9.22.25.

⁷²⁸ OSSIA 9.22.25.

⁷²⁹ 5 15_2025_Advisory Group #10 Summary

⁷³⁰ 5_15_2025_Advisory Group #10 Summary

⁷³¹ PGE 5.9.25 TE Comments.

⁷³² OES PWG TE 4-30-25 Notes

⁷³³ Rogue Climate 9.22.25.

⁷³⁴ PGE 5.9.25 TE Comments.

⁷³⁵ TriMet 5.21.25.

conservation, and demand response potential in their service territory and determine hosting capacity, distribution system needs and strategies for handling load increases.

A11. HDV Hydrogen Fueling Standards Multi-Agency Working-Group

A PWG member recommended that development of hydrogen regulations in Oregon be informed by similar efforts in other states and jurisdictions. Similarly, an individual commenter stated that hydrogen is already well-regulated, with standards available internationally and nationally. The individual commenter stated that the proposed action would add bureaucracy and that more direct action should be taken. A hydrogen trade association stated that Washington does not have a regulatory framework in place to certify fueling stations and that Oregon should start on this work at once; however, the commenter urged that any fueling station framework should not be limited to HDVs. Table 1881.

A transit agency recommended that the proposed refueling infrastructure standards include battery electric, charging, safety, and interoperability standards. The commenter also recommended integrating hydrogen fueling infrastructure into state building standards and codes, in alignment with National Fire Protection Association (NFPA) Code 2, to streamline permitting.⁷³⁹

Concern and engagement process

A joint submission commented that the proposed recommendation should explicitly center Tribal perspectives. A PWG member stated that a public information campaign around hydrogen safety risks, such as hydrogen burning invisible, would be valuable. Other PWG members expressed concern regarding hydrogen safety issues and environmental justice, especially with respect to pipeline siting on Indigenous lands. Other PWG members expressed concern that hydrogen development is too expensive to merit investment at present, and concern regarding agency staffing capacity for this effort.

An environmental organization expressed concern regarding hydrogen because of environmental-, water-, and carbon-intensive means used to produce hydrogen, as well as NOx emissions. The commenter urged that only green hydrogen be permitted and that no investments be supported for the use of hydrogen in homes or personal vehicles because of hydrogen costs, inefficiencies, and safety hazards. Additionally, the environmental organization recommended that any hydrogen development regulations include a mitigation hierarchy for environmental justice concerns.⁷⁴⁵

A joint submission from numerous organizations stated that developing regulations for hydrogen refueling infrastructure is the lowest priority at this time.⁷⁴⁶

A12. CFP to Extend Advance Crediting to High-Mileage Private Oregon Fleets

⁷³⁶ OES PWG TE 4-30-25 Notes.

⁷³⁷ Toby Kinkaid 9.22.25.

⁷³⁸ RHA 9.23.25.

⁷³⁹ TriMet 5.21.25.

⁷⁴⁰ CCC MultCo OS CEP KLCAS 5.9.25 Joint Submission.

⁷⁴¹ OES PWG EJ and Equity 4-30-25 Notes.

⁷⁴² OES PWG EJ and Equity 4-30-25 Notes.

⁷⁴³ OES PWG TE 4-30-25 Notes; OES PWG EJ and Equity 4-30-25 Notes.

⁷⁴⁴ OES PWG TE 4-30-25 Notes.

⁷⁴⁵ Rogue Climate 9.22.25.

⁷⁴⁶ Coalition Comments 9.22.25.

A joint submission from numerous organizations stated that draft transportation action 12 was not vetted by PWGs and should be explained, especially as regards impacts to the CFP.⁷⁴⁷

A hydrogen trade association supported draft action 12, reasoning that technical assistance is vital to promoting fleet transition to ZEVs; the commenter recommended adding to the action a direction that DEQ add station capacity crediting for hydrogen fueling stations to support the introduction of stations early and therefore provide consumers confidence in adopting FCEVs. The commenter said that Washington and California have similar programs that have helped break the chicken-and-egg problem with infrastructure development and technology adoption.⁷⁴⁸

Buildings Actions

General and Other Buildings Action Comments

Multifamily housing and rentals

Several PWG members recommended that building improvement responsibility should fall to landlords rather than renters and that, to the extent programs are intended to assist non-owners of buildings, programs need to provide zero-cost assistance. One of the PWG members described a program in their city that supports landlord installation of efficient, packaged terminal heat pumps; the commenter also advocated a program used in their city that imposes fees on new buildings that are carbon-intensive or not electrified.⁷⁴⁹

Buildings electrification and fuels-reliance

A local government generally supported the buildings action drafting but wrote that the Strategy needs to more directly advance electrification as the primary and least-costly path forward in Oregon, rather than reliance on low-carbon fuels. The commenter also supported programmatic flexibility indicated in actions 3 through 6 and recommended that the state draw on local government and community provider expertise in this area. A joint submission from numerous organizations generally opposed including any encouragement or support for dual-fuel systems; they commenter recognized that dual-fuel systems may be adopted as part of natural market dynamics, but argued that the Strategy should instead focus on electrification and expediting the energy transition. The submission also advocated that, pursuant to the electrification pathway drafting, an action directed towards cross-utility planning be included in the buildings actions.

Demand response

A trade association generally recommended emphasizing the importance of demand management to building decarbonization, particularly via smart building systems, virtual power plants of buildings and onsite renewables and batteries; the commenter also recommended emphasizing the importance of workforce training to maximizing increasingly complex building systems.⁷⁵²

Related workstreams and efforts

A non-profit organization stated that ODOE's or any centralized resource on building decarbonization should leverage ETO's initial work on how their investments affect electric and natural gas systems.⁷⁵³

⁷⁴⁷ Coalition Comments 9.22.25.

⁷⁴⁸ RHA 9.22.25.

⁷⁴⁹ OES PWG BE EE DERs 3-5-25 Notes.

⁷⁵⁰ Multnomah County 9.22.25.

⁷⁵¹ Coalition Comments 9.22.25.

⁷⁵² Building Potential.

⁷⁵³ ETO 9.22.25.

An IOU commented that many recommended Buildings actions overlap with ETO operations and should be clarified so as to avoid costly duplication of efforts.⁷⁵⁴ A joint submission from commenters representing COUs stated that proposed actions on energy efficiency and demand response (Building Actions 2, 3, and 4 and Cross-Cutting Action 2) should clearly call for robust coordination with Oregon's COUs on the basis of their expertise administering energy efficiency and DR programs. The commenters also urged that the recommendations clarify that these programs should not be funded via the Energy Supplier Assessment.⁷⁵⁵ A PWG whiteboard note stated that additional resources may be needed to support some COU territories' energy efficiency and building electrification efforts.⁷⁵⁶

Other comments

An energy advocacy organization generally recommended that the Strategy address challenges low-income households may face in maintenance of heat pumps.⁷⁵⁷

A housing non-profit organization commented that a potential policy action from discussions should specify "high performing heat pump installations" rather than "highly efficient equipment selection" in order to provide specificity and indicate that heat pump performance is dependent on quality installation and maintenance. The commenter suggested standards that could be used to assess equipment efficiency.⁷⁵⁸

A1. Building Decarbonization Roadmap

Support or other comments indicating need for building decarbonization planning; integrated and multifuel planning

A non-profit organization supported the recommended building decarbonization roadmap as a way to support a managed energy transition while leveraging extant regulatory processes. ⁷⁵⁹ An energy advocacy organization expressed support for a managed fuel transition that limits Oregonian exposure to being stranded paying for gas infrastructure; that commenter supported the recommended building decarbonization roadmap in coordination between DEQ, OPUC, and BCD. However, the commenter advocated strengthening the recommendation language to describe how agencies should coordinate in developing the roadmap and require that agencies develop recommendations in the roadmap. ⁷⁶⁰ A petroleum trade association also generally stated that the Strategy provides little detail on how a managed fuels transition would address stranded asset risks and preserve energy security, especially in rural areas and freight corridors. ⁷⁶¹

A climate advocacy organization wrote that strategic electrification, as considered in the decarbonization roadmap, must entail a process that includes integrated fuels planning. The commenter supported the draft action generally but added that it should analyze gas and electric distribution systems to determine where the gas system could eventually be pruned and where additional generation capacity may be needed to support electrification.⁷⁶² Several other commenters, including PWG members, generally supported cross-fuels or integrated planning in strategic electrification efforts.⁷⁶³

⁷⁵⁴ PGE 9.22.25.

⁷⁵⁵ Joint COU Comments 9.22.25.

⁷⁵⁶ OES PWG LCFs 2-19-25 Notes.

⁷⁵⁷ CUB 9.23.25.

⁷⁵⁸ David Heslam Earth Advantage 5.9.25.

⁷⁵⁹ ETO 9.22.25.

⁷⁶⁰ CUB 9.23.25.

⁷⁶¹ WSPA 9.22.25.

⁷⁶² MCAT 9.22.25.

⁷⁶³ OES PWG BE EE and DERs 3-19-25 Notes.

Opposition or criticism

A joint submission from numerous organizations recommended deprioritizing draft action 1, reasoning that Oregon already has sufficient information to inform policy directives for buildings – namely, that building codes need to support electrification and fossil-fuel appliances need to be replaced with efficient electrical ones.⁷⁶⁴

A2. Update Energy Efficiency and DR Program and Delivery Infrastructure; Promote Strategic Electrification

A joint submission from numerous organizations supported prioritizing buildings draft action 2 as means towards strategic electrification.⁷⁶⁵

A3. Prioritize Energy Efficiency Incentive Measures: Weatherization, Resistance Heating Replacement with Heat Pumps, and Demand Flexibility

Support and additional comments

An energy advocacy organization supported action 3's prioritization of low-income households but asked how the Strategy would prioritize energy efficiency programs designed to reduce peak energy demand overall versus energy efficiency programs designed to prioritize environmental justice and low-income communities who contribute relatively little to peak demand. A climate advocacy organization supported prioritizing building actions 3 and 4 through direct financial support to better assist low-income households.

Commenters, including PWG members, supported addressing weatherization needs as an essential condition for making other building efficiency and flexibility improvements possible. 768

Fuel switching

Many commenters addressed Energy Trust gas appliance incentives and commented in support of fuel-switching⁷⁶⁹ or discontinuing incentives for natural gas equipment.⁷⁷⁰ A PWG member said support for gas infrastructure supports investments inconsistent with Energy Strategy goals.⁷⁷¹ A joint submission from numerous organizations repeatedly recommended removing barriers to fuel-switching, emphasizing the importance of this action from PWG meeting discussions and to protecting against delayed electrification and attendant emissions and health impacts. The commenters stated that revising ETO incentives should be a 'major component' of the Strategy. Additionally, the submission stated that draft action 3 is unnecessary and duplicative with action 2, reasoning that action 2's call for strategic electrification already calls for grid management. To the extent gas utilities need actions directed to assist with pruning the gas system, the submission advocated reviewing Washington's energy strategy for examples that call for restricting the growth of gas infrastructure and planning for an equitable transition away from gas reliance.⁷⁷² A public health and healthcare professional association similarly recommended removing obstacles to electrification in the form of ETO fuel-switching policy based on the public health, energy cost, home construction, and climate benefits of electrification.⁷⁷³ An

⁷⁶⁴ Coalition Comments 9.22.25.

⁷⁶⁵ Coalition Comments 9.22.25.

⁷⁶⁶ CUB 9.23.25.

⁷⁶⁷ Rogue Climate 9.22.25.

⁷⁶⁸ OES PWG BE EE DERs 3-5-25 Notes.

⁷⁶⁹ BPS 9.22.25; Rogue Climate 9.22.25; 5_15_2025_Advisory Group #10 Summary.

⁷⁷⁰ OES PWG EJ and Equity 2-24-25 Notes; Pat DeLaguil DecisionWare 5.9.25.

⁷⁷¹ OES PWG EJ and Equity 2-24-25 Notes.

⁷⁷² Coalition Comments 9.22.25.

⁷⁷³ Oregon PSR 9.22.25.

AG member expressed frustration that the draft Strategy did not expressly address fuel-switching incentive barriers and that, in failing to do so, the draft Strategy fails to reflect environmental justice advocate input during policy discussions.⁷⁷⁴

A4. Prioritize Existing Energy Efficiency and Weatherization Programs, Especially for Low- and Moderate-Income Households

Several commenters and PWG whiteboard notes generally addressed building electrification and energy efficiency funding, stating that current funding streams are often inadequate to meet demand.⁷⁷⁵ A joint submission from numerous organizations supported prioritizing buildings draft action 4, reasoning that targeted incentives and equitable access to smart and efficient appliances is crucial to the success of DR programs and virtual power plants.⁷⁷⁶ A Tribal organization supported this action and, in particular, "essential" energy efficiency and weatherization.⁷⁷⁷

A5. Flexible Funding for Deferred Maintenance for Low- and Moderate-Income Homes

A joint submission from numerous organizations generally supported draft buildings action 5.778

An energy advocacy organization recommended that this action explicitly mention Whole Home Repairs and importantly the Health, Safety, and Repair Measure, possibly with an additional, specific action to address upfront cost barriers, workforce barriers, and information barriers via a working group of ETO and CAP agencies. The commenter generally asked that ODOE provide more concrete solutions to address barriers to effectuating low-income weatherization and energy efficiency policies.⁷⁷⁹

A6. Allow Higher Administrative Costs for Programs Serving Environmental Justice Communities

Support or aligned comments

A climate advocacy organization commented on the draft Environmental Justice and Equity Framework that, in addition to partnering with trusted community organizations, the Strategy should advance long-term funding for community organizations; the commenter wrote that one-time funding instances make long-term planning and operations difficult. Multiple PWG members also supported providing more or more flexible administrative cost funding to support CAAs' operations; one of the members also emphasized that program delivery costs should be distinguished from administrative costs and that CAAs should not have to undertake fundraising to support state programs. An IOU also generally supported a grant program to community partners but wrote that the allocation of administration, delivery and incentives should be carefully considered and reflect measurable customer bill savings or reduced energy burden.

Request for additional detail and support

⁷⁷⁴ 5_15_2025_Advisory Group #10 Summary.

⁷⁷⁵ OES PWG EJ and Equity 2-24-25 Notes.

⁷⁷⁶ Coalition Comments 9.22.25.

⁷⁷⁷ CRITFC 9.22.25.

⁷⁷⁸ Coalition Comments 9.22.25.

⁷⁷⁹ CUB 9.23.25.

⁷⁸⁰ Coalition Comments 9.22.25.

⁷⁸¹ Rogue Climate EJ Framework Comments 06.25.25.

⁷⁸² OES PWG BE EE and DERs 3-19-25 Notes.

⁷⁸³ PGE 5.9.25 Buildings Comments.

A joint submission from commenters representing COUs stated that more context is needed for this action in terms of current reimbursement levels, standards of reimbursement levels from other states, and justification to warrant possible increases to administrative overhead costs.⁷⁸⁴

A7. Modify Residential Code for New Buildings. Improve Envelope Efficiency Measures for Buildings with Inefficient or Fossil Tech Heating

An individual commenter expressed surprise that this recommended action omits modification of the Commercial Code, saying the commercial sector offers as many or more opportunities to decarbonize Oregon as does the residential. Additionally, the commenter advocated amending residential and commercial codes to include load flexibility preparedness via DR controls and distributed energy resources.⁷⁸⁵

A joint submission from numerous organizations supported draft action 7 and stated that BPS and building codes should promote or mandate heat-pump space and water heating to realize the least-cost pathway to Oregon's energy future. The commenter stated that this action must entail alignment with the 2026 ORSC development process and include the building and residential code, as well as a Reach code – potentially with further economic goals. Furthermore, the commenter urged that ODOE include an appliance standard to begin phasing out fossil-fuel appliances by 2030 and ensure existing buildings decarbonize. A local governmental agency agreed that amending the Oregon Residential Specialty Code to require electric heat pumps for cooling would improve affordability, reduce GHG emissions, and increase resilience for hot weather events. A non-profit organization stated that building code requirements that electric resistance heating be limited to backup functionality and that strong weatherization requirements be included. Another PWG member voiced that building codes can be a barrier to improvements when renovations trigger requirements that would necessitate further, costly upgrades; the commenter asked that a provision be made for such retrofit projects.

A climate advocacy organization supported providing greater flexibility for localities to implement clean energy building codes.⁷⁹⁰

Clean Electricity Actions

General and Other Clean Electricity Action Comments

A clean energy advocacy organization expressed general support for the draft clean electricity actions. ⁷⁹¹
Recommendations for innovative solar and other action to promote DERs

A renewable energy organization, solar trade association, and a consultancy requested that the Strategy facilitate the development of innovative solar technologies including floating solar, solar-covered irrigation canals, and agrivoltaics. Specifically, the commenters noted floating solar water conservation benefits and recommended updating DLCD land-use rules to better support agrivoltaics and updating siting and permitting regulations to categorically exclude projects using these technologies. The commenters referred to ESSB 5445 in Washington as an example of legislation towards these ends. ⁷⁹² An individual commenter agreed that agrivoltaics are promising for rural Oregon, citing a USDA Northwest

⁷⁸⁴ Joint COU Comments 9.22.25.

⁷⁸⁵ Jim Edelson 9.22.25.

⁷⁸⁶ Coalition Comments 9.22.25.

⁷⁸⁷ BPS 9.22.25.

⁷⁸⁸ ETO 5.9.25.

⁷⁸⁹ OES PWG BE EE DERs 3-5-25 Notes.

⁷⁹⁰ Rogue Climate 9.22.25.

⁷⁹¹ CUB 9.23.25.

⁷⁹² CREA 9.22.25; OSSIA 9.22.25; Sol Coast 9.22.25.

report on benefits of agrivoltaics to the region. The commenter advocated advancing a recommendation for agrivoltaics pilot projects in southern and eastern Oregon, as well as ORESA mapping of parcels suitable for dual-use solar and technical assistance to interested landowners. The commenter also advocated recommending establishing permitting timelines and automation options for small-scale solar, citing a Florida statutory permitting timeline and automated permitting app. The commenter supported distributed solar as the most cost-effective clean energy source in Oregon, citing data on Oregon solar system costs and payback periods. A county government generally requested that the Strategy discuss newer distributed energy resource technologies with low barriers to adoption that have not yet been extensively adopted in Oregon, like balcony solar. A consultancy also agreed with providing categorical exclusions for renewable energy projects, recommending that a state of emergency be declared for an 18-month categorical exclusion of renewable energy and energy storage projects on non-irrigated agricultural lands near interconnection.

A conservation organization referred to an estimate communicated by ODOE consultants during the Strategy's development that 20 to 30 percent of Portland electricity needs could be serviced by large rooftop solar; the commenter stated that this option would obviate natural and working lands impacts and that omission of an action towards this end indicates a need to consider actions further in light of "other Oregon Goals" and interagency coordination. The commenter also raised the prospective role of rooftop solar in AG meetings, noting in particular a Utah statute as supporting balcony solar development; another AG member cited WA SB 5445 as a promising example providing categorical exclusions from permitting requirements for agrivoltaics, solar-covered irrigation canals, and solar-covered parking. Several PWG members also discussed large-rooftop solar on public buildings as promising resilience hubs in communities, but another PWG member stated that these types of microgrid projects face barriers in ownership and control issues.

An individual commenter asked that the Strategy protect and simplify net metering in the parts of Oregon that it is financially viable. A renewable energy trade association agreed with preserving netmetering programs where they are working – especially for IOU customers – but that virtual net metering should also be explored to facilitate landlord and tenant participation and distributed energy resource development in multifamily housing. On the strategy are sourced to facilitate landlord and tenant participation and distributed energy resourced.

A solar trade association recommended that the Strategy advance actions to strengthen building codes to be solar-ready (faulting current provisions as inadequate); expanding the Community Solar program in Oregon; and prioritizing funding for the Solar + Storage Rebate program to make up for federal shortfalls, especially based on the program's focus towards low- and moderate-income customers. ⁸⁰² A state legislator commented that there is general anxiety and ambiguity around agrivoltaics and wrote that the Strategy should advance a recommendation that a work group address siting and interconnection issues for the technology. ⁸⁰³

⁷⁹³ Nikki VanRy 9.18.25.

⁷⁹⁴ Multnomah County 9.22.25.

⁷⁹⁵ Sol Coast 9.22.25.

⁷⁹⁶ OACD 9.17.25.

⁷⁹⁷ 3_20_2025_Advisory Group #8 Summary; 9_18_2025_Advisory Group #11.

⁷⁹⁸ OES PWG DCEGT 2-26-25 Notes.

⁷⁹⁹ OES PWG DCEGT 2-26-25 Notes.

⁸⁰⁰ Nikki VanRy 9.18.25.

⁸⁰¹ OSSIA 9.22.25.

⁸⁰² OSSIA 9.22.25.

⁸⁰³ State Representative Mark Gamba 9.22.25.

An energy non-profit organization stated that the Strategy should consider distributed energy resource actions that scale deployment to customer and community affordability and resilience needs, targeted particularly to communities that need localized clean energy solutions. The commenter added that pursuing a more integrated approach to reliability, resilience, affordability, and decarbonization could lead to more customer-sited resources and better prepare communities for the forthcoming microgrid regulatory framework. A sustainability organization likewise expressed optimism for the role of distributed energy resources and microgrids in promoting energy resiliency in Oregon and HB 2066 in addressing regulatory barriers to microgrids; the commenter supported the inclusion of microgrids in draft clean electricity actions 4, 6, and 7. The commenter furthermore recommended that ODOE engage in OPUC dockets on microgrid regulations. Bos

A joint submission recommended developing, in partnership with CAP agencies, a guidebook for community level distributed energy resources and demand response aimed at supporting smaller municipalities, rural counties and other groups that cannot afford to participate alone but could benefit from collaborating on distributed energy resource and DR efforts.⁸⁰⁶

Actions towards system reliability based on California examples

A COU association advocated that the Energy Strategy 'not recreate the wheel' and look to policy approaches in California for inspiration in electricity reliability and transition policy. The commenter provided information on California's "Strategic Reliability Reserve" and, in particular, the Distributed Electricity Backup Assets Program and Demand Side Grid Support Program administered by the California Energy Commission and the Electricity Supply Reliability Reserve Fund under the Department of Water Resources. The commenter stated that the Strategic Reliability Reserve and these programs provide funding for conventional generation, efficiency upgrades at gas plants, demand response, distributed generation, and long-duration storage. Additionally, the COU association referenced work following California's 2021 emergency proclamation focusing on extreme weather response electrical capacity as developing 120 megawatts of additional generation capacity within two months; the commenter described the CEC Small Power Plant Exemption of thermal plants between 50 and 100MW from CEC certification requirements and the Distributed Electricity Backup Assets (DEBA) Program for incentivizing clean, efficient distributed emergency supply or load reduction.

In particular, the commenter emphasized that these programs – though they rely on combusting fuels for emergency power – help obviate individual consumer needs to purchase their own standby generators. These individual-level generators contribute heavily to state emissions and reflect energy equity disparity, where emergency electricity may only be available to consumers with the means to purchase and install personal generators. The commenter provided figures on diesel backup generator population as increasing dramatically in recent years and the relative carbon inefficiency and greater AQ impacts of these personal generators. Furthermore, the commenter stated that centrally managed reliability reserve programs can ensure that thermal resources are hydrogen-ready, efficient, and provide energy in an equitable way tailored to respond to demand conditions and emergencies. 808

A hydropower and environmental organization urged that clean energy actions related to siting and permitting – especially draft recommended actions 1 and 2 - include safeguards for ecosystems, communities, and Tribal interests based on research cited as finding that current and new projects face opposition based on, and risks harms to, these interests. The commenter recommended that the Equity

⁸⁰⁴ ETO 9.22.25.

⁸⁰⁵ Sustainable NW 9.22.25.

⁸⁰⁶ CCC MultCo OS CEP KLCAS 5.9.25 Joint Submission.

⁸⁰⁷ PPC 9.22.25.

⁸⁰⁸ PPC 9.22.25.

and Environmental Justice Framework be strengthened in this respect to provide outcome-oriented goals similar to the commenter's draft definition for Low Impact Pumped Storage Hydropower (LI-PSH). The organization provided a description of the LI-PSH definition, its scope and applicability, and the process used to develop the definition.⁸⁰⁹

Wildfires and Transmission

An individual commenter and PWG white board note urged that the Strategy should call for future-proofing transmission lines to minimize wildfire risks and their attendant GHG, affordability, and resilience impacts. ⁸¹⁰ An energy advocacy organization generally asked whether the Strategy considered wildfire risks, mitigation, and emergency planning. ⁸¹¹ An IOU stated that wildfire liability is the greatest risk facing the electricity sector and must be addressed in the Report. The commenter stated that unbounded liability in Oregon impedes grid investment and leads to resources being prioritized towards grid-hardening. ⁸¹²

Procurement

A labor and environmental advocacy organization urged that, as has been done in California, the Strategy include central energy procurement as a tool towards advancing energy projects; this could entail Oregon setting targets and procuring energy from schools, Tribes, and local communities. 813 For discussions of procurement processes as regulated by OPUC, refer to Investigate IOU Business Model Reform and Ratemaking.

Funding efforts

A hydroelectric environmental organization requested that, in addition to the recommended revolving loan fund and Tribal Block Grants, the Strategy consider alternative financing mechanisms such as municipal and green bonds to advance projects; the commenter advocated that these funds available to improve the efficiency of existing energy generation, stating that (currently frozen) U.S. DOE Section 247 grants were available to improve hydropower generators. The commenter also recommended adding guardrails to this funding to ensure that eligible projects deliver human and environmental benefits.⁸¹⁴

Early PWG discussions

A utility expressed support for a draft action discussed in Phase 2 to provide technical assistance to help publicly owned utilities assess the load growth, distributed energy resource, conservation, and demand response potential in their service territory and determine hosting capacity, distribution system needs and strategies for handling load increases. The commenter suggested that a forum be provided for IOUs to share best practices with publicly owned utilities on these subjects.⁸¹⁵

Other comments

A joint submission from numerous organizations stated that the draft Strategy has a "glaring hole" in failing to specifically address public power and COUs in the clean electricity actions; the submission reasoned that public power consumption in Oregon has increased from 28 percent to 38 percent in the

⁸⁰⁹ LIHI 9.19.25.

⁸¹⁰ Robert Weeks OCES 9.3.25; OES PWG LCFs 2-19-25 Notes.

⁸¹¹ CUB 5.14.25.

⁸¹² PGE 9.22.25.

⁸¹³ BGA 9.22.25.

⁸¹⁴ LIHI 9.18.25.

⁸¹⁵ PGE 5.9.25 TE Comments.

last fifteen years, largely due to data centers. The commenters urged that the Strategy recognize this development and call for COUs to play a leading role in the energy transition.⁸¹⁶

A1. State Transmission Entity

Support for transmission entity

Several commenters expressed support for the draft recommendation for a transmission authority as a means of addressing an urgent need to expedite transmission construction in Oregon, 817 with several urging ODOE and begin work within existing authorities in the immediate near term. A PWG member commented generally that coordination is lacking, that BPA serves as a resource planner but that that is not a strength of the agency. 818 A Tribal organization stated that the entity would be valuable for aligning policy, regulations, investments, community needs, and technical assistance in transmission planning; 819 an energy advocacy organization stated that the entity could help ensure cost-savings and avoiding redundant investments.820 A clean energy advocacy organization agreed, describing a need for expanded clean energy infrastructure in the region to meet HB 2021 goals and the lack of a centralized agency responsible for transmission in Oregon; the organization referred to similar efforts in seven other states as precedent for this recommendation.⁸²¹ A local government representative commented that the bonding authority of the proposed entity, as well as streamlined permitting, is important to expediting transmission development.⁸²² A joint submission from numerous organizations generally agreed with and supported prioritizing the recommended entity as addressing an urgent need; the commenters also recommended that ODOE examine whether it has authority and staff capacity to begin work identifying transmission corridors based on available data.823

A clean energy advocacy organization provided several comments on the structure and implementation of the recommended transmission entity; the commenter provided a description of differing incentive structures and authorities of utilities and agencies in Oregon, explaining that an entity entrusted to prioritize the interests of Oregonians at large is needed to effectively plan transmission in the state. The advocacy organization and an environmental organization recommending that ODOE begin by designating "statewide significant corridors" within existing rights-of-way as well as working with local jurisdictions to streamline processes while the transmission authority winds up; and that the state provide support for conflict resolution and responsible development tools, such as community benefit agreements. The commenters also urged that ODOE examine means to begin the work of and towards a transmission entity as soon as possible.824 The environmental organization agreed that a transmission entity would address siloing of transmission authority in Oregon and would not duplicate efforts, agreeing that a transmission entity would coordinate utility efforts and prioritize projects in existing corridors via reconductoring and co-location, as well as identifying funding opportunities and means to accelerate transmission development generally. The commenter stated that the entity could prioritize existing corridors through processes similar to California's land use screening and provided citations in asserting that reconductoring existing lines and GETs can meet much of Oregon's future transmission

⁸¹⁶ Coalition Comments 9.22.25.

⁸¹⁷ CTWS 9.17.25; DCC 9.22.25; Rogue Climate 9.22.25. TechNet 9.19.25.

⁸¹⁸ OES PWG DCEGT 3-17-25 Notes.

⁸¹⁹ CTWS 9.17.25

⁸²⁰ CUB 9.23.25.

⁸²¹ OCGC 9.22.25.

⁸²² City of Hillsboro 9.19.25.

⁸²³ Coalition Comments 9.22.25.

⁸²⁴ OCGC 9.22.25; RNW 9.22.25.

needs in a cost-effective manner.⁸²⁵ Another environmental organization commented immediate action on GETs and workforce development would be helpful for transmission.⁸²⁶

A joint submission supported the recommended entity, comparing it with lessons from Texas' Competitive Renewable Energy Zone efforts; the commenter said that both the recommended entity and Texas' policy demonstrate state support that can bolster transmission investment and break the "chicken-and-egg" dilemma of energy infrastructure development. Similar to the comments below, the joint submission explained that incorporating local feedback in project development was crucial to success in Texas' case, describing the scale of feedback and responses undertaken in Texas.⁸²⁷

Other PWG members expressed in general support of RTOs or a transmission entity, especially to improve transparency and clarity as to planned transmission work – though a PWG members noted that an RTO is very different from the transmission entity under consideration.⁸²⁸ Other PWG members also advocated exploring a "stepwise" approach to an RTO or otherwise improving regional transmission planning, stating that regional energy markets or BPA direction may move Oregon closer to an RTO.⁸²⁹

Transmission Entity Coordination and Composition

A Tribal organization supported the proposed transmission entity as a near-term priority, contingent upon the entity supporting Tribal participation. A local government agency supported the proposal but recommended amending it to require, rather than authorize, use of equitable processes and an environmental justice lens in identifying transmission corridors. A COU was generally critical of the recommendation but stated that any transmission entity should include strong utility representation and an equitable basis for who funds and benefits from the entity. A utility likewise urged that stakeholder processes proceed implementing plans programs so as to ensure equitable benefits for all Oregonians, stating that there are already Federal avenues, such as the CREPC-TC process, for states to engage in transmission planning.

Recent developments in transmission; regional coordination

An energy trade association generally supported CE action 1, stating that the status quo for transmission development in Oregon is insufficient to meet future needs. The commenter also requested that the Strategy clearly highlight recent developments in regional transmission that could impact the recommended entity; specifically, PGE spinning-off a new entity with its transmission assets, BPA updating Transmission Service Request processing and expansion, and delays from BPA in processing large Generator Interconnection requests. The commenter wrote that these changes could further hamper transmission development in the region beyond the current status quo, providing a description of updated BPA policy efforts, PGE's restructuring, and PacifiCorp excluding the Boardway-to-Hemingway line from its 2025 IRP, along with possible impacts. The trade association recommended that the Strategy recognize these changes and a possible need for more aggressive policy recommendations.⁸³⁴ A utility added that the transmission action should account for FERC, US DOE

⁸²⁵ TNC 9.22.25.

⁸²⁶ Rogue Climate 9.22.25.

⁸²⁷ NEDCGEINCA 9.22.25.

⁸²⁸ OES PWG DCEGT 4-30-25 Notes; OES PWG DCEGT 2-26-25 Notes.

⁸²⁹ OES PWG DCEGT 2-26-25 Notes.

⁸³⁰ CRITFC 9.22.25.

⁸³¹ Multnomah County 9.22.25.

⁸³² EWEB 9.22.25.

⁸³³ Pacific Power 9.22.25.

⁸³⁴ NIPCC 9.22.25.

funding, and BPA's GAT efforts, as well as other transmission initiatives from WestTec, Western Transmission Consortium, Northern Grid, and utility IRPs.⁸³⁵

Complementary transmission actions

An environmental organization advocated that the Strategy recommend developing a mitigation framework, such as a Regional Advance Mitigation Planning approach and an il-lieu fee program to forecast credits and offsets; the commenter said developing these could clarify whether mitigation is a barrier to project permitting and provide developers with additional cost-certainty. Similar to comments below, the environmental organization also stated that working group discussions highlighted barriers to development in the form of Oregon planning processes, especially an inconsistency in process-based federal permitting and outcome-based EFSC permitting. The commenter urged that ODOE prioritize actions to alleviate these permitting barriers, especially for reconductoring in existing rights of way.

Opposition and criticism of transmission entity action or drafting; requests for additional details

Many commenters criticized the idea of a transmission entity or recommended more direct actions regarding transmission.

A PWG member stated that a need for a transmission entity with bonding authority was not sufficiently demonstrated in policy discussions⁸³⁸ and another PWG member stated that regional transmission organizations can be problematic.⁸³⁹ A joint submission from COU organizations and one of the submitters independently also stated that the proposal does not provide enough specifics or justification, based on a similar bills considered by Oregon and Washingtons' legislatures.⁸⁴⁰ The joint submission requested detail on whether the entity under consideration would serve as a builder of last resort, as in North Dakota, would include electric utility representation in its structure, would be subject to legislative appropriations and transparency provisions, and how the entity would fit in with WestTEC processes. The submission also asked how COUs would benefit from this action, stating that COUs already benefit from contractual relationships with BPA for transmission.⁸⁴¹

A PUD, COU, utility, and an industry advocacy organization expressed agreement that Oregon needs to facilitate transmission development but that the proposed entity may instead only add bureaucratic costs and barriers to development; the commenters advocated instead removing policy and regulatory barriers to development. He PUD recommended identifying those barriers in collaboration with IOUs and COUs and via targeted, legislative changes. He PUD organization generally agreed that the proposed entity would only raise costs without addressing actual barriers to transmission development in siting, land use, and permitting. Likewise, a joint submission from commenters representing COUs agreed that a transmission entity may just add more bureaucracy and slow down development when instead the Strategy should, in order to minimize ratepayer and taxpayer expenses, have conversations with industry and focus on streamlining state and local permitting bottlenecks. The commenters also recommended that the Strategy focus on coordinating with BPA to facilitate development, such as by

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835 PGE 9.22.25.
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⁸³⁶ TNC 9.22.25.

⁸³⁷ TNC 9.22.25.

^{838 5 15 2025} Advisory Group #10 Summary.

⁸³⁹ OES PWG DCEGT 4-30-25 Notes.

⁸⁴⁰ PPC, OMEU, ORECA, OPUDA 5.9.25; ORECA 5.9.25.

⁸⁴¹ PPC, OMEU, ORECA, OPUDA 5.9.25.

⁸⁴² Central Lincoln PUD 9.17.25; AWEC 9.22.25; PGE 9.22.25; EWEB 9.22.25; ORECA 5.9.25.

⁸⁴³ Central Lincoln PUD 9.17.25.

⁸⁴⁴ OPUDA 9.21.25.

fast-tracking permitting for BPA projects for Oregon service territories.⁸⁴⁵ A couple of renewable energy organizations expressed similar concerns and supported instead prioritizing tangible outcomes via expanding transmission capacity and streamlining permitting within designated corridors;⁸⁴⁶ one of the commenters also supported co-locating infrastructure.⁸⁴⁷ A utility agreed with the proposal to designate corridors and provide for partial siting approval but urged that recommendations focus more narrowly on reducing operational and judicial barriers to transmission development.⁸⁴⁸

The joint submission furthermore stated that that, as drafted, the transmission entity action needs more detail regarding the meaning of 'partial siting and permitting authority', 'clear authority to undertake the necessary work to expedite transmission development,' whether the entity would have eminent domain authority, whether the State Treasurer supports the recommended bonding authority, and what is meant by 'taking a hard look at transmission asset utilization practices and potential business reforms to maximize the efficient usage of the existing grid.'849

An individual and a nuclear advocacy organization commented that discussions of a state transmission entity should recognize nuclear energy's potential role in alleviating state transmission needs.⁸⁵⁰

A clean energy developer opposed the recommendation for a state transmission entity as requiring more analysis of how it would engage with BPA and, as drafted, risking anti-competitive regulation and delayed agency work. Instead, the commenter advocated recommending providing direct statutory authority to accelerate permitting timelines, align state and federal processes, and hold utilities accountable for the timeliness of development. A natural gas trade association generally advocated recommending that barriers to transmission, pipeline, and energy storage constraints be addressed to ensure adequate energy availability in the region. A Tribal organization commented that recommendations to identify transmission corridors rapidly are not supported by current regulatory realities.

General and other comments on transmission needs and electricity infrastructure siting

A Tribal organization emphasized the value of collocating transmission and infrastructure development within extant corridors, as well as Tribal consultation, regional impact analyses, and enforceable mitigation plans.⁸⁵⁴ A conservation organization commented that clean electricity action 1 should include a discussion of infrastructure impacts on natural and working lands or wildlife.⁸⁵⁵

A2. ODOE Study on Streamlining Construction and Utility Interconnection Process for Permitted Projects

For comments on the draft recommendation for a state transmission entity and its adequacy in responding to transmission siting and permitting barriers, refer to <u>State Transmission Entity</u> above.

General support with additional comments

⁸⁴⁵ Joint COU Comments 9.22.25.

⁸⁴⁶ OSSIA 9.22.25; CREA 9.22.25.

⁸⁴⁷ CREA 9.22.25.

⁸⁴⁸ Pacific Power 9.22.25.

⁸⁴⁹ Joint COU Comments 9.22.25.

⁸⁵⁰ Comm Dan Dorran 9.22.25; Generation Atomic, 9.22.25; IW 29 9.22.25; Lucas Young 9.22.25.

⁸⁵¹ NSE 9.22.25.

⁸⁵² NWGA 9.22.25.

⁸⁵³ WSPA 9.22.25.

⁸⁵⁴ CRITFC 9.22.25.

⁸⁵⁵ OACD 9.17.25.

A data center trade organization and a utility generally supported draft clean electricity action 2. 856 A non-profit organization supported the recommended study on project barriers, especially to support community-scale renewable and microgrid development. A local government supported the study and recommended that ODOE provide a timeline for this study that would balance procedural equity with a need for timely information. Tribe supported the proposal and asked that the study emphasize barriers to Tribal energy participation, such as dual state taxation of private, non-Tribal activity on Tribal lands. An environmental organization advocated prioritizing this action on an expedited basis because of a truncated timeline for developers to utilize the clean energy tax credits. The commenter also recommended that the scope of the action include legal, jurisdictional, and process barriers to interconnecting permitted projects and coordination with BPA and OPUC on interconnection reform.

Need to address siting and permitting barriers, generally

A joint submission from numerous organizations expressed concern that draft actions 2 and 5 do not go far enough; the commenter said they hoped the Strategy itself would quantify the renewable energy needs of Oregon and help balance in- and out-of-State resource procurement. The commenter said this information would help ODOE recommend policies to remove barriers to in-state siting in least-conflict areas. The commenter recommended that, instead of these actions, the Strategy expedite a study of existing data to identify solutions, including streamlining regulatory processes and project review timelines. Sel Likewise, an environmental organization generally advocated that ODOE take more actionable steps towards streamlining EFSC and land-use processes as identified in rulemakings such as the DLCD Eastern Oregon Solar Siting Rulemaking, while also identifying means to identify and balance competing priorities in siting decisions. Sel

Similarly, a renewable energy organization and solar trade association expressed a general need to streamline permitting for solar development. The commenters stated that the process in Oregon is more costly and complicated than in other states and advocated, in particular, removing barriers to siting solar in areas designated but – because of drought – no longer suitable for viticulture. Furthermore, the commenters stated that soil quality alone should not be determinative of solar siting permissibility. Ref The renewable energy organization added that Oregon's goal exception process is a barrier and inconsistent with state decarbonization goals and the solar trade association stated that updating outdated DLDC rules and streamlining EFSC rules are important to simplifying permitting.

A solar developer commented that broad statutory reforms are necessary to alleviate permitting issues, which the commenter called the primary barrier to state clean energy goals. The commenter stated that state efforts thus far have not fully addressed this need and that providing for specific issues, like viticulture regions, agrivoltaics, or community, alone will not be sufficient to realize Oregon needs for utility-scale permitting. Additionally, the commenter stated that studying barriers to already-permitted

⁸⁵⁶ DCC 9.22.25; Pacific Power 9.22.25.

⁸⁵⁷ ETO 9.22.25.

⁸⁵⁸ Multnomah County 9.22.25.

⁸⁵⁹ CTWS 9.17.25.

⁸⁶⁰ TNC 9.22.25.

⁸⁶¹ Coalitions Comments 9.22.25.

⁸⁶² TNC 9.22.25.

⁸⁶³ CREA 9.22.25; OSSIA 9.22.25.

⁸⁶⁴ CREA 9.22.25.

⁸⁶⁵ OSSIA 9.22.25.

facilities is insufficient, stating that permitted facilities are easier to interconnect, construct, and obtain tax credits for.⁸⁶⁶

An AG member described their experience with siting and transmission development, saying that permitting requirements were overwhelming. The AG member stated that comprises would need to be clearly made in order to successfully advance project development. Another AG member agreed that projects are especially complicated when they involve both federal and state lands; another AG member identified default exclusive farmland designations are also a barrier and requested that the Strategy draft a land-use-related proposal.⁸⁶⁷

A climate advocacy organization stated that Clean Electricity Action 2 should focus on solutions in market and regulatory reforms rather than barriers, stating that the barriers at issue are not a new issue. 868 A renewable energy trade association agreed there is need to improve interconnection processes, but disagreed that another study is needed; instead the commenter wrote that OPUC docket UM 2111 should be prioritized to address this issue. 869

Other comments

A hydropower trade association recommended revising draft clean electricity action 2 to study barriers to "new" permitted projects and to "ensure continued operation of existing clean electricity projects"; the commenter stated that Oregon should ensure against backsliding on clean generation that would be risked by decreasing hydroelectric generation.⁸⁷⁰

A conservation organization commented that clean electricity action 2 needs to be linked to policy 3a, *utility-scale and distributed energy resources*, based on the Eastern Oregon Solar Siting Regulatory Advisory Committee Process. The commenter also stated that action 2 should include a discussion of infrastructure impacts on natural and working lands or wildlife.⁸⁷¹

A3. Report on Emerging Technologies

A data center trade organization expressed general support for draft clean electricity action 3.⁸⁷² A climate advocacy organization generally stated that the roadmaps under this proposed study should examine the costs, benefits, environmental impacts, economic development and equity benefits for each technology and identify a commercialization strategy appropriate for each.⁸⁷³ A renewable energy trade association urged that the Strategy consider offshore wind, floating or not, as a way to take advantage of abundant resources off Oregon's coast and meeting load growth needs while avoiding a need to procure out-of-state resources.⁸⁷⁴

Nuclear generation in emerging technology study

A joint submission from commenters representing COUs commented that, based on PNUCC projections of a 30 percent increase in electricity demand in the region, additional firm, baseload generating resources are needed in Oregon; the commenter recommended strengthening action 3's recommendation to study nuclear energy to recommending a removal of the bar against siting nuclear

⁸⁶⁶ NSE 9.22.25.

⁸⁶⁷ 5 15 2025 Advisory Group #10 Summary.

⁸⁶⁸ Pat DeLaquil, MCAT 9.22.25.

⁸⁶⁹ OSSIA 9.22.25.

⁸⁷⁰ NHA 9.22.25.

⁸⁷¹ OACD 9.17.25.

⁸⁷² DCC 9.22.25.

⁸⁷³ MCAT 9.22.25.

⁸⁷⁴ OREi 6.19.25.

in Oregon.⁸⁷⁵ An earlier submission from COU organizations similarly advocated studying SMRs to meet resource adequacy needs.⁸⁷⁶ A labor group, a local government representative, a couple nuclear advocacy organizations, and individual commenter recommended amending draft action three to apply to all advanced nuclear technologies, address existing legal barriers, consider economic development related to emerging technology options, consider transmission impacts of emerging technologies, and incorporate Tribal engagement.⁸⁷⁷ Conversely, an individual commented that its inaccurate to consider SMRs "emerging technologies" because of the history of U.S. military experimentation with SMRs since the 1950s⁸⁷⁸ and an environmental organization and professional association opposed including SMRs in the recommended study.⁸⁷⁹ Refer to General and Other Clean Electricity Comments for other comments on nuclear power.

Wave and marine energy

Several commenters, including a wave energy technology developer, recommended adding wave energy to the recommended action to study emerging clean energy generation technologies. The commenter explained that wave energy off the Oregon coast has high, firm generation capacity that would be able to economically satisfy 50-60 percent of the region's renewable energy needs, providing citations and a map of wave energy capacity near the state. Furthermore, the commenter stated that emerging, highload demands from data centers may be economical to site near wave generation because of the ease of developing fiberoptic infrastructure relative to transmission and the benefits of ocean-side siting for water cooling. Finally, the developer stated that the PacWave test site, as a permitted and developed facility, makes Oregon uniquely well-positioned to take advantage of wave energy development and become a leader in wave energy innovation.⁸⁸⁰ An individual commenter stated that the Strategy should consider the replacement period for energy infrastructure such as wind turbines or batteries; the commenter stated that, when accounting for these factors, pumped hydro storage and especially wave energy outperform counterparts. 881 A hydroelectric trade association agreed that the action should address marine energy, as well as pumped storage hydropower and incremental hydroelectric improvements. The commenter referenced a NREL study as showing significant pumped storage potential in the state and noted the age of many hydropower facilities in the United States as evidence that efficiency improvements are available. 882 A marine energy organization agreed with including marine energy in action 3 but recommended distinguishing the term from offshore wind development to avoid confusion.883

DERs

A joint submission from environmental organizations recommended that action 3 include both utility-scale and distributed technologies; the commenter explained that, for example, plug-in solar is a technology that can complement Oregon's generation needs and has shown promise in Europe, providing citations. The commenter explained that there is a need to address barriers to these technologies, such as safety and regulatory issues, that could be examined through pilots and study.⁸⁸⁴

⁸⁷⁵ Joint COU Comments 9.22.25.

⁸⁷⁶ PPC, OMEU, ORECA, OPUDA 5.9.25.

⁸⁷⁷ IW 29 9.22.25; Comm Dan Dorran 9.22.25; Generation Atomic 9.22.25; Mothers for Nuclear 9.22.25.

⁸⁷⁸ Debra Higbee 9.22.25.

⁸⁷⁹ OCF 9.22.25; Oregon PSR 9.22.25.

⁸⁸⁰ CalWave 9.22.25.

⁸⁸¹ Cory Little, 8.15.25.

⁸⁸² NHA 9.22.25.

⁸⁸³ PMEC 9.22.25.

⁸⁸⁴ NEDCGEINCA 9.22.25.

Opposition or criticism

A joint submission from numerous organizations recommended deprioritizing action 3, arguing that more pressing needs to solve transmission and siting barriers, as well as barriers to community and individual access to clean energy, should be prioritized; the submission added that the BER already has a section on emerging technologies and that IOUs already evaluate emerging technologies. An energy developer stated that the proposed study risks increasing already-rising energy costs and that Oregon should instead prioritize proven resources like solar, wind, and storage in the Strategy. A climate advocacy group agreed that the study could divert resources away from pressing needs and that OSW and SMRs face drawbacks and delays that should forestall Oregon's investment in these technologies.

A4. Explore Electricity System Incentives

A joint submission from commenters representing COUs stated that any study of microgrids must include coordination with utilities to address interconnection with the grid. The commenter also commented that recommendations to study of microgrids should be postponed until OPUC efforts pursuant to HBs 2024 and 2066 have progressed and are more fully understood. Research Conversely, an environmental organization advocated prioritizing this action in the near-term to promote community benefits from renewable energy development while protecting valuable habitats and working lands. The commenter recommended prioritizing existing programs to most effectively deploy funding under this action.

A joint submission from numerous organizations expressed support for draft action 4, and, particularly, the drafting that "[p]olicymakers should be prepared to implement recommendations from this study once undertaken." A local government urged that this action more directly advance funding, rather than a study; the commenter stated that Oregon has sufficient information already and that their local government has and has had successful programs that require funding rather than information to continue to be successful. A climate advocacy group agreed that a study is not needed at this time and that, instead, the Strategy should advance technical assistance to support community-owned microgrids and distributed energy resources.

A form submission from a nuclear advocacy organization and an individual commented that CE action 4 should evaluate the long-term fiscal sustainability of different clean energy technologies, stating that renewable energies may lead to "boom-bust" cycles in local tax revenue based on federal incentives versus more stable, 60-80 year revenues from a nuclear plant. 893

A5. Update and Enhance ORESA

A local government stated that this action needs to be clarified, as it is inconsistent as drafted as to whether the action is focused on updating ORESA data sets.⁸⁹⁴

Support for updating ORESA

⁸⁸⁵ Coalitions Comments 9.22.25.

⁸⁸⁶ NSE 9.22.25.

⁸⁸⁷ Rogue Climate 9.22.25.

⁸⁸⁸ Joint COU Comments 9.22.25

⁸⁸⁹ TNC 9.22.25.

⁸⁹⁰ Coalitions Comments 9.22.25.

⁸⁹¹ Multnomah County 9.22.25.

⁸⁹² Rogue Climate 9.22.25.

⁸⁹³ Generation Atomic 9.22.25; Lucas Young, 9.22.25.

⁸⁹⁴ Multnomah County 9.22.25.

A renewable energy organization expressed support for updating and improving ORESA for greater transparency and, in particular, to incorporate distribution-level electrical infrastructure data. The commenter wrote that doing so would better support market-driven solutions, including distributed resources like demand response and solar-plus-storage. A solar trade association agreed, stating that providing the distribution-level infrastructure data would support market solutions for timely siting of distributed solar plus storage and DR. An energy developer supported updating ORESA and recommended modifying wind energy facility footprints to reflect turbine locations rather than underlying land parcels to give a more accurate portrayal of land-use impacts.

Concerns and criticism of ORESA

A joint submission from numerous organizations expressed concern that draft actions 2 and 5 do not go far enough; the commenter said they hoped the Strategy itself would quantify the renewable energy needs of Oregon and help balance in- and out-of-State resource procurement. The commenter said this information would help ODOE recommend policies to remove barriers to in-state siting in least-conflict areas. The commenter recommended that, instead of these actions, the Strategy expedite a study of existing data to identify solutions, including streamlining regulatory processes and project review timelines.⁸⁹⁸

A joint submission from COU organizations stated that this action needs more detail and support; the commenter stated that the action appears unneeded because of similar work done by the Oregon Smart Siting Collaboration.⁸⁹⁹

Use of ORESA

A Tribal organization expressed concern with relying on ORESA generally, stating that the database depends on existing, available data that likely exclude confidential cultural resources that are not comprehensively compiled off of reservation lands. The commenter stated that using ORESA could therefore shift burdens to unidentified conflict areas. Pool A hydroelectric energy environmental organization generally agreed that siting tools should be used cautiously and accompanied by real-world outreach when used for siting determinations. The commenter recommended that an ORESA recommendation be accompanied with guidance on best practices for using the tool, public comment opportunity on tool inputs and outputs, and acknowledgment that many Tribal culturally sensitive areas may not be publicly disclosed. Beyond this caveat, the commenter recommended that ORESA be supplemented with NREL's tool for siting pumped-storage hydro projects, stating that this tool captures several ecosystem and social indicators.

An environmental organization generally supported the use of ORESA to create provisional least conflict areas for future projects and infrastructure investments, as well as vetting possible areas for mitigation investments, as well as recommending that ODOE communicate stories of how ORESA has been used successfully. 902

A6. Investigate IOU Business Model Reform and Ratemaking

⁸⁹⁵ CREA 9.22.25.

⁸⁹⁶ OSSIA 9.22.25.

⁸⁹⁷ NSE 9.22.25.

⁸⁹⁸ Coalitions Comments 9.22.25.

⁸⁹⁹ PPC, OMEU, ORECA, OPUDA, 5.9.25.

⁹⁰⁰ WSPA 9.22.25.

⁹⁰¹ LIHI 9.22.25.

⁹⁰² TNC 9.22.25.

Multiple commenters, including PWG members, stated that present utility incentive structures do not support distributed energy resource and non-grid-scale generation development, leading to increased transmission needs and land use and siting impacts. 903 A joint submission from numerous organizations and a climate advocacy organization expressed support for incentivizing utilities and markets to better reflect the system benefits provided by customers as part of virtual power plants. Additionally, the commenters recommended emphasizing the importance of innovative business models and utility reform in draft policy 3a and 3b drafting so as to facilitate distributed energy resource adoption and attendant HB 2021 and resilience progress. 904 The joint submission reasoned that utility incentive structures currently promote capital investments but do not support power purchase contracts, VPPs, or DR investments. Additionally, the commenters advocated for prioritizing action 6 to increase competition to support resource procurements at lower cost. 905 A local government supported this action's recognition of HB 3179 and SB 688 and expressed that the Final Report should mention a need to better support and fund stakeholder engagement on these processes. 906

An individual commenter expressed support for utilities to investigate and implement performance-based ratemaking, consistent with legislative efforts made by several organizations⁹⁰⁷ and to develop programs that show the value of distributed energy resources.⁹⁰⁸ The commenter noted that utilities have the technical expertise to manage large-scale data for such systems.⁹⁰⁹ However, the joint submission raised concern about how new programs will be funded, with a question raised about whether ratepayers will bear the cost given current upward rate pressures and suggesting that a discussion about the appropriateness of ratepayer-funded support might be needed.⁹¹⁰

A climate advocacy organization asserted and faulted a guarantee for utility return on investments as above reasonable rates, responsible for exacerbating energy affordability problems, and warping infrastructure construction to prioritize capital expansion over power purchases and distributed energy resource buildout. The commenter recommended addressing this issue by tying utility rates of return to 10-year federal treasury bond rates. 911

To address affordability, an energy developer recommended that the Strategy address underprocurement of local resources, possibly by imposing compliance penalties for failure to achieve HB 2021 targets. The commenter was especially concerned with an IOU self-build bias and restrictions on distributed energy resource programs like PURPA, Community Solar, and Direct Access; to effectuate HB 2021's goals of clean energy and affordability, the commenter recommended the Strategy call for a rate impact analysis, direct OPUC to reform anticompetitive practices and procurement and planning practices generally, and promote in-state resource procurement. A renewable energy trade association generally supported the proposed action, agreeing that dockets to increase competition in PURPA, Community Solar, Distribution System Plans, Clean Energy Plan updates, Performance Based Ratemaking and Microgrid implementation should be advanced thoughtfully and transparently. 913

Direct access for large loads

⁹⁰³ OES PWG EJ and Equity 2-24-25 Notes.

⁹⁰⁴ MCAT 9.22.25, Coalition Comments 9.22.25.

⁹⁰⁵ Coalitions Comments 9.22.25.

⁹⁰⁶ Multnomah County 9.22.25.

⁹⁰⁷ CCC MultCo OS CEP KLCAS 5.9.25 Joint Submission.

⁹⁰⁸ Pat DeLaguil DecisionWare 5.9.25.

⁹⁰⁹ Pat DeLaquil

⁹¹⁰ CCC MultCo OS CEP KLCAS Joint Submission

⁹¹¹ SOCAN 9.22.25.

⁹¹² NSE 9.22.25.

⁹¹³ OSSIA 9.22.25.

A renewable energy organization advocated that OPUC explore alternative, competitive procurement methods for large loads such as direct access. The commenter stated that this option would help keep rate impacts from large loads and data centers separate from other customers. PWG whiteboard note also raised limits to direct access - the ability to purchase electricity from a Public Utility Commission-certified electricity service supplier (ESS) other than their current utility - as possible barriers to providing generation to serve large load growth.

A7. Expand ODOE Statewide Infrastructure Resilience Programs; Fund and Amend Community Renewable Energy Grant Program

A data center trade organization expressed general support for draft clean electricity action 3.⁹¹⁶ A joint submission from numerous organizations recommended prioritizing action 7 to acquire funding for the Community Renewable Energy Grant Program.⁹¹⁷ A Tribal organization agreed with prioritizing this action, stating that funding and a statewide program are vital to resilience and consumer benefits.⁹¹⁸ A climate advocacy group agreed, adding that distributed energy resources should be promoted under this action because of their resilience benefits and relative speed of deployment and that the Community Renewable Energy Grant program should be a top priority overall.⁹¹⁹

A local government supported this action and expressed that the Final Report should mention a need to better support and fund stakeholder engagement in these processes.⁹²⁰

Industrial Actions

General and Other Industrial Action Comments

An industry advocacy organization commented that more focus is needed for industrial actions in the Energy Strategy and recommended advancing "market-based carbon allowance costs, the use of offsets for compliance, and more flexibility within the existing Climate Protection Program." A petroleum trade association expressed concern that the Strategy's discussion of electrifying or promoting low-carbon fuels in industry is unrealistic and risks businesses relocating out of state; the commenter referenced exemptions in the CPP for industry until 2030 in support of the position that near-term decarbonization of industry is unrealistic.922

A joint submission from environmental organizations recommended that the Final Report address industrial emissions by categorizing them by sector, fostering collaboration for industrial symbiosis, ensuring that efficiency programs are accessible to small and medium-sized enterprises, providing technical assistance and financial incentives for businesses to realize emissions reductions, and provide skill training for displaced workers. 923 A PWG white board note similarly advocated advancing industrial symbiosis strategies. 924

⁹¹⁴ RNW 9.22.25.

⁹¹⁵ OES PWG DCEGT 2-26-25 Notes.

⁹¹⁶ DCC 9.22.25.

⁹¹⁷ Coalitions Comments 9.22.25.

⁹¹⁸ CRITFC 9.22.25.

⁹¹⁹ Rogue Climate 9.22.25.

⁹²⁰ Multnomah County 9.22.25.

⁹²¹ AWEC 9.22.25.

⁹²² WSPA 9.22.25.

⁹²³ NEDCGEINCA 9.22.25.

⁹²⁴ OES PWG LCFs 3-14-25 Notes.

A consultancy asked that the Strategy direct academic, industrial, national laboratory representatives to develop industry action planning in a state Energy Action Plan by November 2026.⁹²⁵

A1. Evaluate Emissions-Intensive, Trade-Exposed Large Industrial Decarbonization Options Under CPP

A local government generally supported this action. ⁹²⁶ A joint submission from numerous organizations also supported draft industrial action 1, stating that funding should be directed towards highest-impact industries in communities most impacted by co-pollutants. ⁹²⁷

A climate advocacy organization recommended that draft industrial action 1 recognize the role of developing electricity-based processes to replace old thermal processes, such as in cement or steel production;⁹²⁸ other PWG members generally agreed with recognizing potential for technological development on industrial electrification.⁹²⁹ Commenting on draft Policy 2c, a local government recommended state support for demonstration projects for electrifying low-heat industrial processes, possibly leveraging the Portland Clean Industries effort to do so.⁹³⁰

A2. Industrial Modernization Revolving Loan Fund

A local government generally supported this action.⁹³¹ An industry advocacy organization expressed support for an industrial decarbonization revolving loan fund but asked that ODOE provide more detail as to funding sources and whether the proposed fund is likely to be successful, stating that, for many industrial applications, energy efficiency measures are not cost efficient and alternative fuels are unavailable.⁹³²

A joint submission from numerous organizations supported draft industrial action 2 as a priority over action 1, stating that funding should be directed towards highest-impact industries in communities most impacted by co-pollutants.⁹³³

Low-carbon Fuels Actions

General and Other Low-Carbon Fuel Action Comments

A renewable energy organization generally supported the draft low-carbon fuel actions as means to effectuate the energy transition while providing energy to hard-to-decarbonize sectors; in particular, the commenter called for a continued role for renewable diesel and renewable natural gas. 934 A State legislator generally supported the policy discussion around hard-to-decarbonize sectors and, in particular, aviation and marine transport. The legislator recommended that action drafting not limit its focus to Oregon-specific networks, examine ways to access larger markets by supporting innovative fuel options, and consider a recommendation to coordinate with Business Oregon and Oregon ports to identify low-carbon fuel economic development opportunities and policy support needs. The commenter stated that this review should consider Clean Shipping Alliance, SAF, and renewable fuels facilities in construction outside Clatskanie. 935

⁹²⁵ Sol Coast 9.22.25.

⁹²⁶ Multnomah County 9.22.25.

⁹²⁷ Coalitions Comments 9.22.25.

⁹²⁸ Pat DeLaguil, MCAT 9.22.25.

⁹²⁹ OES PWG BE EE and DERs 3-19-25 Notes.

⁹³⁰ Multnomah County 9.22.25.

⁹³¹ Multnomah County 9.22.25.

⁹³² AWEC 9.22.25.

⁹³³ Coalitions Comments 9.22.25.

⁹³⁴ CREA 9.22.25.

⁹³⁵ State Rep Mark Gamba 9.22.25.

A PWG member recommended that public fleet procurement be used to advance low-carbon fuel adoption and infrastructure development in transportation; the commenter recommending barring RNG use in residential sectors, to better ensure that low-carbon fuels are available and used for hard-to-electrify transportation uses. ⁹³⁶ Conversely, a COU commented that lack of demand is not an issue with low-carbon fuel adoption; instead, the commenter stated that more support for low-carbon fuel production is needed, regardless of where its produced. ⁹³⁷

A local government expressed general support for the low-carbon fuel action drafting but urged that impacted communities be directly included in decision-making around low-carbon fuel policy development and facility siting, stating that the draft language of "publishing recommendations on how to improve engagement with local communities" is insufficient.⁹³⁸

A hydrogen trade association advocated that, in addition to draft action 2 planning, Oregon begin to support low-carbon fuel pilot and first-of-a-kind projects as well as identifying statewide low-carbon fuel production targets to better align project developer and agency activities.⁹³⁹

A liquid fuels trade association commented that the draft Strategy proposed to increase the stringency of the Low Carbon Fuel Standard and that doing so would exacerbate transportation fuels affordability challenges in Oregon – stating that Oregon already pays the 2nd highest fuel prices in the United States. The commenter advocated that the Strategy work to expand affordable access to low-carbon fuels via reformed, streamlined fuel production facility siting, improved coordination between DEQ and permitting agencies so as to align state action towards needed low-carbon fuel infrastructure development, and minimizing duplicative agency processes to, for example, expand fuel supply capacity in the state. ⁹⁴⁰

A joint submission from numerous organizations requested that the Strategy recommend that DEQ strengthen CFP carbon intensity standards over the next decade. 941

A1. Create Criteria to Identify Low-Carbon Fuel Production Sites; Publish Recommendations on Local Community Engagement in Low-Carbon Fuel Siting

A joint submission from numerous organizations stated that industry is already evaluating sites for low-carbon fuel production and said that stringent, full-lifecycle carbon intensity analyses that include indirect land use change, carbon capture and sequestration risks, and needs to protect communities and natural resources should be provided and continually updated for low-carbon fuel production sites. ⁹⁴² A local government expressed support for this action but urged caution around the safety of fuel production and distribution – particularly, in the transportation of fuels by rail. ⁹⁴³

A public organization recommended revising action 1 to "[d]irect the Oregon Department of Energy, Oregon Department of Land Conservation and Development and Business Oregon to identify and establish policies with the greatest opportunity for supporting low-carbon-intensity fuel production development in Oregon", stating that individual businesses are better-situated to address their specific siting needs. 944

⁹³⁶ Tonia Moro 9.22.25.

⁹³⁷ EWEB 3.25.25.

⁹³⁸ Multnomah County 9.22.25.

⁹³⁹ RHA 9.23.25.

⁹⁴⁰ OFA 9.22.25.

⁹⁴¹ Coalition Comments 9.22.25.

⁹⁴² Coalitions Comments 9.22.25.

⁹⁴³ Multnomah County 9.22.25.

⁹⁴⁴ Port of Portland 9.22.25.

A hydrogen trade association recommended that Oregon consider hydrogen permitting policies adopted in Washington and California as means to streamline common permitting process and accelerate processes for the development of green hydrogen fueling stations.⁹⁴⁵

A2. Low-carbon Fuel Roadmap

General support and related comments

An individual commenter supported the proposed low-carbon fuel roadmap but urged that it address woody biomass GHG and air quality pollutant emissions. The commenter stated that the roadmap should entail coordination with DEQ, ODFW, OSU and the Nature Conservancy to identify where biomass actually and under what conditions contributes to GHG and AQ emission reductions. ⁹⁴⁶ An energy advocacy organization expressed support for a managed fuel transition that limits exposure of Oregonians to being stranded paying for gas infrastructure; that commenter supported the recommended low-carbon fuel roadmap as means of planning how to transition Oregon households to energy efficient systems under an equity lens and in coordination between ODOE, DEQ, OPUC, and BCD. ⁹⁴⁷ A climate advocacy organization also recommended that this action further recognize the transitional nature of low-carbon fuels on a unique, fuel-by-fuel basis. ⁹⁴⁸

A local government supported the proposed roadmap action, stating that technical and economic analyses will be needed to determine if state funding for low-carbon fuels is prudent and to ensure emissions reductions from low-carbon fuels are genuine. The commenter stated that this action should acknowledge a role for green hydrogen as a replacement feedstock for chemical production based on its promise for carbon reduction and in-state supply chain redundancy for industry and agriculture. Furthermore, the commenter recommended that ODOE recognize the potential for developing electrification technologies to address needs in the present "hardest-to-decarbonize" sectors, such as thermal energy storage, electrochemical storage and production techniques, industrial scale heat pumps, and heat recovery systems. 949

A public organization supported the recommendation for producing a low-carbon fuel roadmap, emphasizing the challenges in electrifying many end-uses and in understanding the specific policy and fuel delivery infrastructure needs for specific fuels; the commenter urged that stakeholder input be solicited to inform the roadmap's discussion of these issues.⁹⁵⁰

General opposition

An individual commenter and a joint submission from numerous organizations opposed the recommended low-carbon fuel roadmap, stating that Oregon already sufficiently supports low-carbon fuels through the CFP and CPP. An environmental organization agreed and recommended that, to the extent a low-carbon fuel roadmap is produced, it should focus on accountability mechanisms for low-carbon fuel safety; protect against methane-reliant fuels and further locked-in of fossil fuel dependence; provide for community consultation requirements for low-carbon fuel infrastructure; and bar IOUs from blending hydrogen with natural gas. 952

A3. Research and Forecast Fuel Needs for Emergency Preparedness

⁹⁴⁵ RHA 9.23.25.

⁹⁴⁶ Jim Edelson 9.22.25.

⁹⁴⁷ CUB 9.23.25.

⁹⁴⁸ Pat DeLaquil, MCAT 9.22.25.

⁹⁴⁹ Multnomah County 9.22.25.

⁹⁵⁰ Port of Portland 9.22.25.

⁹⁵¹ Helena Birecki 9.22.25; Coalitions Comments 9.22.25.

⁹⁵² Rogue Climate 9.22.25.

A joint submission from numerous organizations supported draft low-carbon fuel action 3 as directing low-carbon fuels to prudent uses, such as emergency preparedness.⁹⁵³

Low-carbon fuel safety concerns

An individual commenter recommended that considerations for low-carbon fuel's role in resilience be aware of the explosion and combustion risks of low-carbon fuel storage, especially in rural areas, and compared with solar and battery benefits. ⁹⁵⁴ An environmental organization supported prioritization draft low-carbon fuel action three but that this action should focus on microgrid and distributed energy resource deployment with battery storage. ⁹⁵⁵

A State legislator likewise stated that low-carbon fuel action 3 should acknowledge and identify fuel storage risks related to natural disasters and recommend resilience-focused action. The commenter noted, in particular, that the CEI hub and fuels development facilities in Oregon should be subject to safeguards to prevent spilling and environmental disasters and that accountability and financial responsibility is sufficient to respond to any worst-case accidents.⁹⁵⁶

Cross-cutting Actions

General and Other Cross-Cutting Action Comments

A couple of AG members recommended that the Strategy advance an initiative or otherwise consider pulling together energy efficiency, distributed energy resources, microgrids, resilience resources and interests to better address how end-user resources can be coordinated with utilities.⁹⁵⁷

A1. Collect Data from New Large Loads; Registration and Reporting Requirements

Support for reporting requirements

A local government generally supported this action. An energy advocacy organization and a joint submission from numerous organizations supported draft crosscutting action 1 based on a need for information on data center loads and resources. Likewise, an environmental advocacy organization supported the proposal and regulation of data center energy consumption generally; the commenter stated that unchecked data center development would endanger Oregon's decarbonization and affordability goals. A Tribal organization supported this action, adding that reporting on electric load, water quality impacts, and consumptive water use should be included.

Opposition to reporting requirements

A joint submission from commenters representing COUs expressed opposition to the recommended reporting requirements for new large loads; the commenter stated that Oregon needs less regulations generally based on Oregon dropping from 28th to 39th place in CNBC's 2025 America's Top States for Business in the last year, potential contributions from data centers to economic growth and infrastructure advancements, and both legislative and federal intent from CHIPS Act legislation to enhance Oregon competitiveness in the semiconductor industry.⁹⁶² A data center trade association and

⁹⁵³ Coalitions Comments 9.22.25.

⁹⁵⁴ Helena Birecki 9.22.25.

⁹⁵⁵ Rogue Climate 9.22.25.

⁹⁵⁶ State Rep Mark Gamba 9.22.25.

⁹⁵⁷ 9 18 2025 Advisory Group #11.

⁹⁵⁸ Multnomah County 9.22.25.

⁹⁵⁹ CUB 9.22.25; Coalition Comments 9.22.25.

⁹⁶⁰ Rogue Climate 9.22.25.

⁹⁶¹ CRITFC 9.22.25.

⁹⁶² Joint COU Comments 9.22.25.

couple of technology trade associations generally agreed, stating that the proposal would impose duplicative, unclear, and burdensome reporting requirements and instead recommended that Oregon engage in collaborative partnerships with industry and companies with clean energy commitments.⁹⁶³ The data center trade association provided citations in explaining that energy is a large cost for data centers, that data centers have improved energy efficiency over the years while also investing in power purchase agreements for clean energy. The commenter also recommended relying on HB 2021 requirements and the BPS before imposing additional reporting requirements⁹⁶⁴ and a technology trade association stated that the BPS and CPP are sufficient to address reporting requirements, also generally agreeing that removing barriers to market-based procurement of renewable energy would provide a better path forward. The trade association described permitting and transmission barriers as the more meaningful barrier to Oregon meeting energy demands than new large loads. 965 Another technology trade association agreed that data centers can help finance clean energy and grid flexibility initiatives and that utilities are responsible for resource adequacy and GHG emission compliance when a data center is sited. The commenter stated that reporting requirements would be burdensome and duplicative of these efforts, concluding that meeting load growth challenges in Oregon "is a system-level challenge best solved with system-level tools, not facility-by-facility paperwork."966 An IOU also generally opposed imposing reporting requirements on large loads in territories subject to HB 2021 clean energy targets as duplicative and counterproductive to goals of proving clean, affordable, reliable power. 967

Other recommended data center and large load actions and approaches

A Tribe recommended that, in light of load growth and associated infrastructure, affordability, wildfire, and fishery impacts, implementation of HB 3546 (2025) require large load facilities demonstrate sufficient, reliable clean energy generation and transmission, and that utilities assure power system adequacy and reliability, before operations begin. 968 Similarly, a joint submission from numerous organizations shared possible impacts of data center energy demand to Oregon communities, power quality, appliance functionality, and water; the commenter advocated recommending a limit on data center loads so as to safeguard progress on decarbonization goals. 969 A Tribal organization likewise acknowledged unprecedented load growth and environmental impacts from data centers and recommended providing a centralized pathway that addresses this challenge and provides clear policies and mitigation requirements. The commenter noted a shortcoming of comprehensive environmental impact analyses to assess the water and related environmental impacts from data center loads; additionally, the commenter emphasized the importance that data centers "pay their way" and do not abrogate Tribal treaty obligations or impose negative impacts on Tribal communities. To address these concerns, the commenter advocated requiring that data centers meet the highest applicable energy efficiency standards; demonstrate proof of sufficient, onsite battery storage and clean energy to meet emergency needs; comply with transparency and reporting requirements on energy and water consumption, as well as onsite water quality monitoring; and pay for the entire cost of infrastructure needed to service their facilities. Finally, the commenter recommended that Oregon establish a "carrying capacity" limit for data centers in the state, based on fish protection and climate objectives, with a task force assigned to monitor basin-wide impacts, engage Tribes, and develop adaptive mitigation plans.⁹⁷⁰ A PWG white board note also advocated ensuring that data centers pay the full cost

⁹⁶³ DCC 9.22.25; TechNet 9.19.25; TAO 9.22.25.

⁹⁶⁴ DCC 9.22.25.

⁹⁶⁵ TAO 9.22.25.

⁹⁶⁶ TechNet 9.19.25.

⁹⁶⁷ PGE 9.22.25.

⁹⁶⁸ CTWS 9.22.25.

⁹⁶⁹ Coalition Comments 9.22.25.

⁹⁷⁰ CRITFC 9.22.25.

of expanding infrastructure to serve their energy demand⁹⁷¹ and a PWG member stated that there is a bill in Minnesota proposing to tax data centers in order to fund measures for low-income households.⁹⁷²

An energy advocacy organization commented that large loads and data centers are responsible for the majority of load growth in Oregon and advocated that these consumers be responsible for funding many of the energy efficiency and other initiatives of the energy transition. The commenter explained that energy efficiency programs are generally cost effective on a system-wide basis, but that residential users generally subsidize large energy consumers. The commenter referenced an IOU tariff schedule as support and cited recent HB 3792's increase on non-residential contribution caps to Oregon Energy Assistance Program as evidence of legislative openness to addressing this issue. As a solution, the organization recommended that customer classes be required to finance their own energy efficiency programs or to recognize residential funding of energy efficiency programs in energy rate structures; however, the commenter explained that a lack of research quantifying residential contributions to reducing peak demand is a barrier to crediting customers via energy rates.

An IOU stated that there is already a docket – UM 2377 – at OPUC addressing large load customer rates, advocating that this process be allowed to address the issue of serving new large loads in Oregon. An AG member similarly stated that the Strategy should more clearly address data center load growth impacts and coordinate any recommendations with OPUC processes and IRP approval.

A PWG member stated that, in their county, data centers already pay their own way; they do not consider data centers as a barrier to the energy transition.⁹⁷⁵

Data center economic, environmental, and community impacts generally

An energy advocacy organization noted that data centers provide relatively few jobs relative to their energy consumption and thus that considerations of data center economic contributions should not be weighed too heavily against their environmental and energy impacts. The commenter also doubted whether data centers may contribute to clean energy generation in the state, stating that data centers will only procure the generation that is most economical for them and, even if that generation were from clean sources, data center demand would drive up renewable prices in the state.⁹⁷⁶

Conversely, a data center trade association provided figures on data center contributions to Oregon GDP as increasing by 17 percent in recent years to \$4.10 billion; employment growing the same period by two percent to 47,690; and labor income increasing by 11 percent year-over-year. The commenter stated that, based on negative overall economic forecasts for Oregon, data center economic contributions should be supported.⁹⁷⁷

A COU organization expressed opposition to a potential policy action under consideration during PWG discussions, that HB 2021 clean energy standards be extended to apply to all new large loads in the state; the commenter stated that such an action would discourage new large loads from locating in Oregon and be detrimental to rural Oregon communities and business. 978

A2. Revolving Loan Fund for Low- and No-Cost Loans

⁹⁷¹ OES PWG EJ and Equity 2-24-25 Notes.

⁹⁷² OES PWG EJ and Equity 4-14-25 Notes.

⁹⁷³ PGE 9.22.25.

⁹⁷⁴ 9_18_2025_Advisory Group #11.

⁹⁷⁵ OES PWG DCEGT 2-26-25 Notes.

⁹⁷⁶ Steve Wright 9.22.25.

⁹⁷⁷ DCC 9.22.25.

⁹⁷⁸ ORECA 5.9.25.

A joint submission from numerous organizations recommended that the Strategy prioritize upfront grants and no-cost installations, commenting that relying primarily on financing would inequitably advantage moderate-and-higher income households;⁹⁷⁹ other commenters agreed that zero-cost or 100 percent financial assistance programs are needed to help low-income households in some instances. 980 Other commenters recommended considering targeting support more clearly, with financing for more moderate-income households and full monetary or grant support for lower-income households. 981 A PWG member similarly advocated promoting multiple support mechanisms, including on-bill financial support. 982 A climate advocacy supporting prioritizing this action, adding that community engagement and local governance should themselves be prioritized in these investments. 983A local government generally supported this action, with the caveat that the action not result in defunding other energy efficiency measures for low- and moderate-income Oregonians. The commenter also emphasized the need to prioritize no-cost assistance, the value of loan forbearance in financing programs, and need to ensure that exploitative financing practices are not implemented. 984 A joint submission of environmental justice and other organizations urged that the Strategy provide more definition around the term "lowinterest" and that low-income households be eligible for financing from the proposed fund. The commenter reasoned that low-income households are already often dependent on financing with predatory terms for vehicle purchases and that no grant funding is available to fully support the purchase of EVs. 985 Similarly, a PWG member recommended that any revolving loan fund or financing support include safeguards for households with poor credit. 986

A PWG member recommended the Strategy examine Massachusetts' MassSaves program as an example of a successful financing program. 987

A clean energy advocacy organization expressed interest in the proposed fund and how it might balance needs and disbursements to meet household affordability needs and funding energy efficiency measures for large load customers. 988

Speaking to financial assistance generally, a PWG member noted that stacking tax incentives and rebates can be confusing and that, absent consumer protections and information, these benefits may accrue more to dealers and businesses than purchasers.⁹⁸⁹

A3. Tribal Energy Block Grant Program

A joint submission from numerous organizations supported draft action 3, but expressed recognition that the action may be difficult to implement amidst state funding limitations. Two Tribal organizations also supported this action, one stating that the Strategy should prioritize identifying a funding source for this program and another stating that the action would support Tribal coordination

⁹⁷⁹ Coalition Comments 9.22.25.

⁹⁸⁰ OES PWG BE EE and DERs 5-7-25 Notes; Rogue Climate 5.9.25.

⁹⁸¹ OES PWG BE EE and DERs 5-7-25 Notes.

⁹⁸² OES PWG BE EE and DERs 5-7-25 Notes.

⁹⁸³ Rogue Climate 9.22.25.

⁹⁸⁴ Multnomah County 9.22.25.

⁹⁸⁵ CCC MultCo OS CEP KLCAS 5.9.25 Joint Submission.

⁹⁸⁶ OES PWG BE EE and DERs 5-7-25 Notes.

⁹⁸⁷ OES PWG BE EE and DERs 5-7-25 Notes.

⁹⁸⁸ CUB 9.23.25.

⁹⁸⁹ OES PWG EJ and Equity 2-24-25 Notes.

⁹⁹⁰ Coalition Comments 9.22.25.

⁹⁹¹ CRITFC 9.22.25.

with economic justice communities.⁹⁹² A climate advocacy group stated that the recommended grant program is a means of investing in Tribal energy sovereignty and an equitable energy transition.⁹⁹³

A sustainability organization supported the proposed grant program to support Tribes' access to microgrids, providing a citation in stating that Tribes across the United States have been successfully incorporating microgrids into their energy portfolios.⁹⁹⁴

A4. Update Energy Burden Definition to Include Transportation and Household Costs

An energy advocacy organization urged that the energy burden definition incorporate impacts on affordability from large, in-state loads, assessed by asking what rates would be absent these loads. The commenter also generally supported the draft action insofar as it is intended to more holistic reflect economic realities, but urged that the definition replace the 6 percent threshold of household expenditures standard for energy burden and instead use the Self Sufficiency Standard and qualitative measures of energy limiting behavior.⁹⁹⁵

A joint submission from numerous organizations and a climate advocacy organization generally supported draft crosscutting action 4.996 A local government generally supported this action and added that future updates of the Strategy should better address what infrastructure will be needed to ensure Oregonians retain access to energy resources.997

A5. Biennial Energy Affordability Survey and Trends Report

During Phase 2 policy discussions, an IOU recommended that affordability impact assessments be conducted regularly to track major programmatic and policy shifts, including tracking of energy burden, low-income participation rates, and long-term cost curves across income levels. ⁹⁹⁸ A joint submission from numerous organizations supported draft action 5 as easy to implement and helpful for informing policymakers; the commenter recommended incorporating this survey in the BER. ⁹⁹⁹ A local government generally supported this action. ¹⁰⁰⁰ A marine energy organization recommended incorporate clean electricity action 3 study results in the proposed report on energy affordability. ¹⁰⁰¹

A6. Facilitate the Sharing of Data and Joint Planning for Energy Resilience and Reliability

An individual commenters generally supported coordinated gas and electrical utility planning, especially to better prepare for extreme weather events. An energy advocacy organization supported the recommendation as well, adding that this action may entail reporting of data center energy consumption down to the hourly level and that aggregated, statewide information may be a serviceable workaround to data confidentiality interests of data centers. A joint submission from numerous organizations also supported draft action 6 to align strategic electrification and system reliability; the commenter stated that the OPUC would be well-situated to initiate this effort. A local government

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<sup>992</sup> CTUIR 9.22.25.
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⁹⁹³ Rogue Climate 9.22.25.

⁹⁹⁴ Sustainable NW 9.22.25.

⁹⁹⁵ CUB 9.22.25

⁹⁹⁶ Coalition Comments 9.22.25; MCAT 9.22.25.

⁹⁹⁷ Multnomah County 9.22.25.

⁹⁹⁸ PGE 5.9.25 Buildings Comments.

⁹⁹⁹ Coalition Comments 9.22.25.

¹⁰⁰⁰ Multnomah County 9.22.25.

¹⁰⁰¹ PMEC 9.22.25.

¹⁰⁰² Steve Wright 9.22.25.

¹⁰⁰³ Steve Wright 9.22.25.

¹⁰⁰⁴ Coalition Comments 9.22.25.

generally supported this action as a way to improve strategic decision-making and provide transparency to ensure that actors are making decisions in the best interests of the state and its communities. 1005

A joint submission from commenters representing COUs expressed doubt that this recommended action is necessary, stating that utilities are already responsible for planning for system reliability and resilience and that COUs are already undertaking work in this vein. The commenter recommended that BPA is in the best position to provide coordination for resource adequacy for small utilities and that enhanced coordination overall be provided by the OPUC based on their existing emergency support functions, experience convening meetings following the 2024 winter storms, and forums for coordinating electrical and gas utilities. The commenters recommended against adding any reporting requirements to small utilities under this action.¹⁰⁰⁶

A clean energy advocacy organization expressed general support for draft cross-cutting action 6 and added that coordinated planning would be useful for generally improving investment decisions, such as coordinated wildfire mitigation and clean energy plans.¹⁰⁰⁷

A7. Identify Employment Gaps; Support and Expand Workforce Development Efforts

A joint submission from numerous organizations generally supported draft crosscutting action 7, emphasizing that workforce development is vital to ensuring the energy transition is implemented at speed and scale. A local government supported this action, adding that more state involvement is needed to help impacted workers and communities navigate the energy transition. Does not not seem to be a supported to help impacted workers and communities navigate the energy transition.

A labor and environmental advocacy organization urged that Oregon partner with University of Oregon Labor Education Research Center and labor organizations. The commenter provided a citation in stating that much of the Portland labor market is aging or near retirement and that apprenticeship programs, as the gold standard for workforce training, are supported in developing the workforce for Oregon's energy transition. The commenter emphasizes the importance of quality workforce and training programs, citing a report as indicating that workforce training corresponds with infrastructure quality and true energy savings in electrification. The commenter highlighted electricians, solar installers, HVAC installers, carpenters, laborers, operating engineers, and ironworkers as key trades to the transition, as well as EV mechanics, EV bus operators, and green janitors. 1010 A non-profit organization supported a workforce analysis to complement the jobs study and address potential job shortages in the energy transition, especially in rural Oregon and in consistency with ETO's 2026-2030 multiyear plan. 1011

A nuclear advocacy organization recommended that the workforce development plan incorporate nuclear career pathways as accommodating higher compensation and diverse training entry points. 1012

An energy developer advocated moving beyond the draft study action to advance concrete training programs aligned with community and local colleges and to add state staffing capacity to address permitting bottlenecks. ¹⁰¹³ A climate advocacy group agreed that the Strategy should directly invest in trade school and community college workforce development programs, especially in rural areas. ¹⁰¹⁴

¹⁰⁰⁵ Multnomah County 9.22.25.

¹⁰⁰⁶ Joint COU Comments 9.22.25.

¹⁰⁰⁷ CUB 9.23.25.

¹⁰⁰⁸ CUB 9.22.25; Coalition Comments 9.22.25.

¹⁰⁰⁹ Multnomah County 9.22.25.

¹⁰¹⁰ BGA 9.22.25.

¹⁰¹¹ ETO 9.22.25.

¹⁰¹² Generation Atomic 9.22.25.

¹⁰¹³ NSE 9.22.25.

¹⁰¹⁴ Rogue Climate 9.22.25.

An energy advocacy organization stated that the concern for job displacement from a transition away from fossil fuels is overstated, commenting that Oregon produces very few fossil fuels and that jobs for rural weatherization provide a more promising opportunity in the energy transition.¹⁰¹⁵

An individual commenter provided a series of articles relevant to workforce considerations in the Energy Strategy and forthcoming workforce study and to compare against the Energy Strategy job analysis. ¹⁰¹⁶

A8. Federal Advocacy

General support, comments to strengthen federal advocacy

A joint submission from numerous organizations recommended revising draft action 8 to recommend "defending against federal policies that undermine achievement of state energy objections"¹⁰¹⁷ and a climate advocacy group recommended revising the action to provide strength and specificity and reflect a need that "[t]he state must safeguard Oregonians from the impacts of federal actions by maintaining climate justice as a priority."¹⁰¹⁸ An energy developer commented that ODOE should coordinate with Oregon's delegation to secure ITC continuity, protect transferability/direct pay, mitigate tariff risk, and align state federal permitting and funding timelines.¹⁰¹⁹

Opposition; request for more detail and input

A joint submission from commenters representing COUs opposed this proposed action and stated that more detail should be provided regarding this proposed action; specifically, whether advocacy should be directed at federal hydropower resources, transmission resources, or permitting processes. The commenter wrote that Oregon advocacy on these topics should be informed by utility input.¹⁰²⁰

A9. Agency Coordination with Partners to Advance Consumer Education and Facilitate Delivery of Services

A joint submission from commenters representing COUs opposed this proposed action, reasoning that COUs and ETO already fulfill this function and declining state revenues and federal support are inconsistent with this action. The commenter added that this perspective is underlined by a recent legislative refusal to advance a similar proposal. An energy advocacy organization stated that they foresee challenges in coordinating partners because of their differing workstreams and operating structures; the commenter stated that successful coordination would be beneficial, as would advancing consumer information via a centralized source of information on benefit availability. 1022

A10. Increase Agency Resources Needed to Advance Energy Policy Objectives

A joint submission from numerous organizations supported draft action 10^{1023} and an environmental organization agreed, adding that it is more efficient to fund extant programs because of the costs incurred in standing up new programs. 1024

A11. Develop a Community Benefits Framework

¹⁰¹⁵ CUB 9.23.25.

¹⁰¹⁶ Kathaleen Parker 9.19.25.

¹⁰¹⁷ Coalition Comments 9.22.25.

¹⁰¹⁸ Rogue Climate 9.22.25.

¹⁰¹⁹ NSE 9.22.25.

¹⁰²⁰ Joint COU Comments 9.22.25.

¹⁰²¹ Joint COU Comments 9.22.25.

¹⁰²² CUB 9.23.25.

¹⁰²³ Coalition Comments 9.22.25.

¹⁰²⁴ TNC 9.22.25.

A labor and environmental advocacy organization stated that the Strategy should advance an Oregon state policy to resource public agencies and stakeholder to pursue conflict resolution and mediation for high-priority projects that offer statewide benefits as well as pursue development responsibility through community benefit agreements, Tribal benefit agreements, and project labor agreements.¹⁰²⁵

An energy advocacy organization urged that the energy burden definition incorporate impacts on affordability from large, in-state loads, assessed by asking what rates would be absent these loads. 1026

A joint submission from numerous organizations recommended merging draft action 9 with action 11, stating that better coordination is likely to occur with the presence of a community benefits framework. 1027

A marine energy organization commented that community benefits frameworks should include mandatory, rather than voluntary, benefits to better empower communities; the commenter referred to New York, Maine, Delaware, and Maryland as including mandatory benefits. The commenter also recommended including that "community" be defined within the meaning of these frameworks, that early engagement be conducted to facilitate alignment on benefits expectations between developers and communities, and that the framework provide resources to support communities in negotiating and enforcing agreements. ¹⁰²⁸ A climate advocacy group wrote that the framework should include a mitigation hierarchy ¹⁰²⁹ and an environmental organization likewise advocated that the framework entail engagement with stakeholders and communities regarding minimizing and mitigating impacts. ¹⁰³⁰

Other Actions

A joint submission from environmental organizations stated that the Strategy needs to directly address Indirect Source Rules (ISRs) as means of mitigating the emissions of MHD vehicles and from warehouse and distribution centers, along with associated air quality and health impacts shown in the complementary analysis. The commenter stated generally that the Strategy insufficiently integrated the air quality modeling findings into its actions and policies. The commenter recommended coordinating with DEQ to establish ISR for warehouse and distribution centers or removing a regulatory preference for state management of indirect sources would at least facilitate local means of addressing this challenge. ¹⁰³¹

¹⁰²⁵ BGA 9.22.25.

¹⁰²⁶ Steve Wright 9.22.25.

¹⁰²⁷ Coalition Comments 9.22.25.

¹⁰²⁸ PMEC 9.22.25.

¹⁰²⁹ Rogue Climate 9.22.25.

¹⁰³⁰ TNC 9.22.25.

¹⁰³¹ NEDCGEINCA 9.22.25.