

Oregon Statute requires the **Oregon Department of Energy to develop a Biennial Energy Report** to "inform local, state, regional, and federal energy policy development, energy planning and energy investments, and to identify opportunities to further the state's energy policies." Statute also says that the department may include "**recommendations** for the development and maximum use of cost-effective conservation methods and renewable resources..." (ORS 469.059).

ODOE's first Biennial Energy Report, published in 2018, included recommendations in four key areas: data gaps, addressing equity and energy burden, planning for the future, and assessing the need for state engagement and investment. In the 2020 report, ODOE did not include a specific list of recommendations, but instead included ideas embedded in topic-specific policy briefs.

To prepare for and draft this report, ODOE staff engaged in stakeholder and public outreach, original research, discussions with other agencies, and reviews of technical studies. Throughout this effort, staff heard numerous ideas for how the state can and should meet its energy and greenhouse gas reduction goals. From those involved in research and development to industry stakeholders to advocates to consumers, Oregonians have many perspectives on the right approach to modernize and improve our energy systems as the state moves from a reliance on fossil fuels to clean energy. There are multiple pathways to achieve the state's goals, and each comes with opportunities and challenges.

Over the past year, a common theme has emerged during the drafting of this and other legislatively directed reports and has formed the basis of our recommendation:

The state would **benefit from an energy strategy** to align policy development, regulation, financial investment, and technical assistance in support of an intentional transition to a clean energy economy. This strategy could identify specific pathways to meet the state's policy goals that maintain affordability and reliability, strengthen the economy, and prioritize equity while balancing tradeoffs to maximize benefits and minimize harms. Ultimately, this strategy could be used to **make informed decisions** and **motivate action**.

Statewide energy strategies have been recently developed and implemented in many states across the nation, including Washington, Utah, Wyoming, New Hampshire, Minnesota, and others.

The influx of federal funding coming from the Infrastructure Investment and Jobs Act and the Inflation Reduction Act creates an opportunity and adds urgency. The state should invest federal funds and deploy resources strategically in activities and programs that target areas where the market alone may not achieve the optimal outcome for Oregonians. A strategy, informed by the latest information and analysis and developed with input from diverse voices from across the state, could help guide the Oregon Department of Energy, other state agencies, and local jurisdictions as they determine which funds to apply for and how to spend the funding that comes to the state.



A valuable state energy strategy would be a comprehensive, system-wide approach that provides guiding principles and a framework to promote coordination on energy policy, planning, and resource investment. State agencies, regional entities, utilities, and local communities have led the way in developing plans with specific actions that work best for their customers and constituents. A strategy could complement and build on their existing work, identify and address gaps and barriers to success, and improve alignment within the state on energy and other related issues like public health, community development, and land use.

The policy briefs in this report review recent studies that, collectively, identify the types of actions that will be required to achieve the state's climate and energy goals, focusing on four pillars of decarbonization: energy efficiency, electrification of end uses, decarbonizing the electric sector, and developing lower-carbon fuels. The optimal approach for Oregon will likely require some combination of these four pillars, and policymakers will need to make decisions on whether, and to what extent, to encourage specific technologies and resources within this transition. Each pathway comes with tradeoffs; decision-makers need to balance these tradeoffs and make informed decisions that maximize benefits and minimize harms to Oregonians and important state resources.

The exact scope of the energy strategy should be developed by engaging with stakeholders, community members, and other state agencies, ideally as a result of direction from the Legislature and Governor. The strategy should be developed using an inclusive process and should focus not only on how the state's energy systems can decarbonize, but also how to help Oregonians navigate the transition – with previously underrepresented voices at the center of the conversation and decision making. Below are just a few of the key questions that might frame a discussion about an energy strategy.

- Renewable generation: Can the state identify a preferred resource development pathway for
  renewables that optimizes across multiple objectives, such as minimizing land use and
  agricultural disturbance, protecting cultural resources, supporting fish and wildlife, addressing
  the need for transmission development, supporting local economic development, offering
  resilience benefits, ensuring equitable access, and considering total costs of energy?
- **Energy Efficiency:** Efficiency has traditionally been the least-cost, no-regrets resource in the Pacific Northwest and must be the centerpiece of the state's approach to decarbonization. How can a strategy be designed to maximize the energy savings and additional co-benefits of energy efficiency?
- **Creating space for innovation:** Optimal technology solutions may not yet be commercially available. To what extent should Oregon develop policy flexibility to allow for a range of solutions, such as gas power plants with carbon capture, renewable hydrogen, or large-scale development of biofuels? What role should the state play in supporting or pursuing the development of these types of innovative technologies?
- **Equity:** What can the state do to ensure the distribution of benefits and burdens in the transition doesn't exacerbate historical inequities? How can the state ensure that the transition creates opportunities to lift up and invest in communities that have been left behind by previous economic transitions?



- **Cost:** What policy solutions can help mitigate the costs of the clean energy transition across sectors and types of customers, particularly for the state's most energy-burdened and vulnerable residents? Is there a way to meet the state's energy goals in way that reduces costs for Oregonians?
- **Resilience and energy security:** Given that the state is already experiencing the effects of climate change, is there an optimal pathway that achieves the necessary scale of clean energy affordably while also improving community energy resilience and energy security across the state?
- **Regionalization:** Oregon is already part of an interconnected electricity grid and imports most of its transportation and gaseous heating fuels from neighboring states. Is there a regionalization strategy that can balance interests in developing in-state clean energy resources with the efficiencies that might come from increased regionalization?
- **Workforce**: What investments does the state need to make to ensure there is a workforce available to implement the strategy, and how can the state help prepare the energy sector for energy jobs of the future? How can the state promote workforce development practices and programs that value diversity, advance equity, and create inclusive careers and opportunities in the energy sector?

The state's climate and energy goals can be achieved with a combination of different answers to these questions. But how they are answered will affect all Oregonians and have significant implications for the electric, natural gas, and transportation sectors.

With a thoughtful strategy in place, the state can align regulation, policy, financial incentives, and technical assistance to support it. The strategy can help guide Oregon's resources toward the highest priority opportunities, addressing key questions, such as:

- **Incentives:** Where and how should Oregon invest state and federal dollars to help businesses and consumers with the transition? How can the state target assistance to those who need it most?
- **Technical assistance:** What are the questions and challenges that consumers, businesses, and local governments have as Oregonians adopt new clean energy technologies? How should the state support awareness of these opportunities? What technical assistance do communities need as they adopt new clean energy technologies?
- Data, information, and analysis: What data gaps remain and what information will help inform policymakers in developing specific programs and investments to advance the strategy? What topics and types of analysis are needed to understand the energy landscape and inform future decision making?

As the Biennial Energy Report demonstrates, the clean energy transition is already happening. Through the development of an energy strategy, the state has an opportunity to proactively plan for an energy transition that works for Oregon and her people.