# Oregon's 2022 Biennial Energy Report

The Oregon Department of Energy is seeking input for the **2022 Biennial Energy Report**. The report is legislatively required (ORS 469.059) and produced by our agency every even-numbered year to inform local, state, and regional energy policy, planning, and investments. It includes basic facts about energy in Oregon, reviews of resources and technologies, foundational information on key topics, a timeline of Oregon's energy history, and policy briefs on timely and relevant issues.

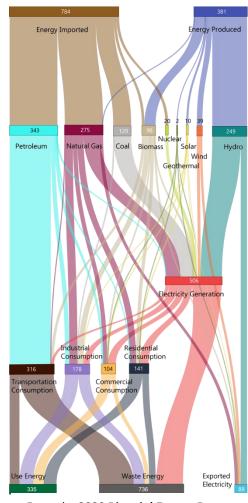
The project team plans to address required topics through a data-driven process, incorporation of equity considerations, and assessment of the policy landscape. The 2018 and 2020 Energy Reports are archived online.<sup>1</sup>

## **Topics Required in ORS 469.059**

- Consumption, generation, transmission, and production of energy, including fuel energy
- Energy costs
- Energy sectors, markets, technologies, resources, and facilities
- Energy efficiency and conservation
- The effects of energy use, including effects related to greenhouse gases
- Local, state, regional and federal regulations, policies, and planning activities
- Emerging opportunities, challenges, and impacts

The report may also include recommendations for:

- Development and maximum use of cost-effective conservation methods and renewable resources, consistent with the energy policies stated in <u>ORS 469.010</u>, <u>469.310</u>, and the <u>Northwest</u> <u>Power and Conservation Council's plans</u>.
- Proposed research, development and demonstration projects and programs necessary to further the energy policies stated in ORS 469.010 and 469.310.



From the **2020 Biennial Energy Report**Oregon's energy flow (page 1)

<sup>&</sup>lt;sup>1</sup> https://www.oregon.gov/energy/Data-and-Reports/Pages/Biennial-Energy-Report.aspx



### **Project Timeline & How to Provide Input**

January – March 2022: Public Survey and Stakeholder Input Sessions

**January – April 2022:** Updating *Energy By The Numbers* and *Technology and Resource Reviews* sections from the 2020 Report with current data

February – April 2022: Updating and expansion of timeline for *Oregon Energy History* 

**April – June 2022:** Drafting for remaining sections of the Report – *Energy 101* and *Policy Briefs*. Will include ongoing stakeholder feedback and input.

July – August 2022: Peer Review and Fact Check

August – September 2022: Final reviews and revisions

**September – November 2022:** Formatting and Publication

Based on this timeline, we hope to gather all substantive input on your ideas for the 2022 Energy Report **by April** 8, **2022**. ODOE staff is happy to discuss your input or receive it via email or our comment portal:



You can submit input via this comment portal: tinyurl.com/BER-Comment



You can send input via email or request a meeting to discuss an idea with us by emailing **AskEnergy@oregon.gov** 

## **Questions to Guide Input**

**Energy By the Numbers.** A section of the Report that serves as quick-reference energy facts and infographics with concise explanations about energy resources, energy sectors, and electricity use, direct fuel use, and transportation fuel use in Oregon. The 2022 Report will update much of the <u>2020 report section</u> to reflect current data.



The 2022 Report's Energy By the Number section will largely address the same types of questions and data as an update of the 2020 Report's "Energy By The Numbers" — Are there other questions that are best addressed through energy facts and infographics? Are there different data sources that the Department should evaluate?



**Energy Technology and Resource Reviews.** A section of the Report that provides concise information about energy technologies and resources used in Oregon – how much, trends, potential, and non-energy implications such as equity considerations, greenhouse gas emissions, and information about the economy and jobs. It's meant to serve as a quick guide, but also to support your own discussions with your stakeholders.

The 2022 Report will build on <u>Technology and Resource Reviews from the 2020 Report</u> with updated data and several new Technology and Resource Reviews.

Existing Energy Technology and Resource Reviews from the 2020 Report to be updated with most recently available data	New Energy Technology and Resource Reviews ODOE is considering for the 2022 Report
<ul> <li>Hydropower</li> <li>Conduit Hydropower</li> <li>Natural Gas</li> <li>Wind</li> <li>Coal</li> <li>Solar</li> <li>Biomass</li> <li>Biogas and RNG</li> <li>Geothermal</li> <li>Utility-Scale Energy Storage</li> <li>Residential Energy Storage</li> <li>Nuclear</li> <li>Small Modular Reactors</li> <li>Demand Response</li> <li>Advanced Meter Infrastructure</li> <li>Combined Heat and Power</li> <li>Electric Vehicle Chargers</li> <li>Electric Vehicles</li> <li>Hydrogen Fuel Cell Vehicles</li> <li>Resilient Microgrids</li> <li>Marine Energy</li> <li>Carbon Capture and Storage</li> <li>Power to Gas</li> </ul>	<ul> <li>Transportation Fuels (e.g., gasoline, diesel, natural gas, renewable fuels)</li> <li>Building Technologies (e.g., smart appliances, EV chargers, smart thermostats)</li> <li>Heat pumps</li> <li>Water Heaters</li> <li>Heating fuels (e.g., natural gas, propane, biomass, geothermal)</li> <li>Energy Storage (e.g., pumped hydro, battery storage, thermal)</li> </ul>



Are there additional types of energy resources or technologies that would be helpful to include that are not in the existing or new lists above? What questions have you, your organization, or your stakeholders had about energy resources and technologies in Oregon? Are there different data sources that the Department should evaluate when developing these Reviews?



**Oregon Energy History.** A section of the Report that shares relevant history about energy in Oregon to help create a foundation for ongoing policy discussions and to help educate stakeholders that may be new to energy policy in Oregon. The 2022 Report will build on the timeline in the 2020 Report with additional history points of reference and/or deeper content.



What, if any, major energy history references or events are missing from the <u>2020 Report's Energy History Timeline</u>? What references on the timeline could be expanded with more information and content (such as interviews, photographs, summaries, or other media?)?

**Energy 101.** A section of the Report that is made up of short summaries of key foundational topics, with the intent to help bring energy education to a level playing field across stakeholders.

Through our work in the 2022 legislative session, feedback on the 2020 Energy Report, as well as through our existing programs, ODOE staff has put together a list of ideas for Energy 101s. Staff is scoping and exploring these ideas and is looking for your feedback.

#### ODOE's Initial List of Ideas for the Energy 101 Section

- Energy 101: Energy Resource & Acquisition Planning
- Energy 101: Public Utility Regulatory Policies Act of 1978 (PURPA)
- Energy 101: Radioactive Waste Management
- Energy 101: Back-up Power
- Energy 101: Fuel Action Plan
- Energy 101: Long-Duration Storage
- Energy 101: State Climate Actions
- Energy 101: Renewable Energy Technology Lifecycle & Recycling



Do you have feedback on this initial list of ideas? What specific aspects of the topics above would be helpful for your work? Are there other energy topics that involve priority "energy opportunities, challenges, and impacts" over the next two years for you, your organization, or your stakeholders – and of these, which are in need of a summary of basics or fundamentals to bring about greater understanding? Are there different data sources, studies, or analyses that the Department should evaluate when developing these Energy 101s?



**Policy Briefs on Key Energy Questions.** A section of the Report that is made up of overviews of relevant policy issues, each providing information and considerations for key energy questions that have been or are likely to be discussed over the next two years in Oregon. Through our work in the 2022 legislative session, feedback on the 2020 Energy Report, as well as what we have heard through our existing programs, ODOE staff has put together a list of ideas for Policy Briefs. Staff is scoping and exploring these ideas and is looking for your feedback.

#### ODOE's Initial List of Ideas for the Policy Brief Section

- What are the common themes from recent technical studies about the clean energy transition and energy resource pathways that can help meet Oregon and regional energy and climate goals?
   Topics to be explored include:
  - options for clean energy resources
  - o potential trade-offs
  - o role of energy efficiency
  - o increased electrification of end-uses
  - o options for the medium and heavy-duty transportation sector
  - o direct-use fuels
  - o distributed energy resources
  - emerging technologies
  - transmission expansion
  - evolving energy markets
- How can equity considerations shape the energy pathways to meet Oregon and regional energy and climate goals?
- What are the interdependencies across liquid fuels, gas, and electric sectors that impact overall community energy resilience?
- What supply chain and workforce challenges have emerged in the energy sector in Oregon?
- What are the drivers of consumer costs for different types of energy resources from production to consumption?
- What priorities or strategies are needed to maximize energy efficiency in buildings?

