



OREGON  
DEPARTMENT OF  
ENERGY

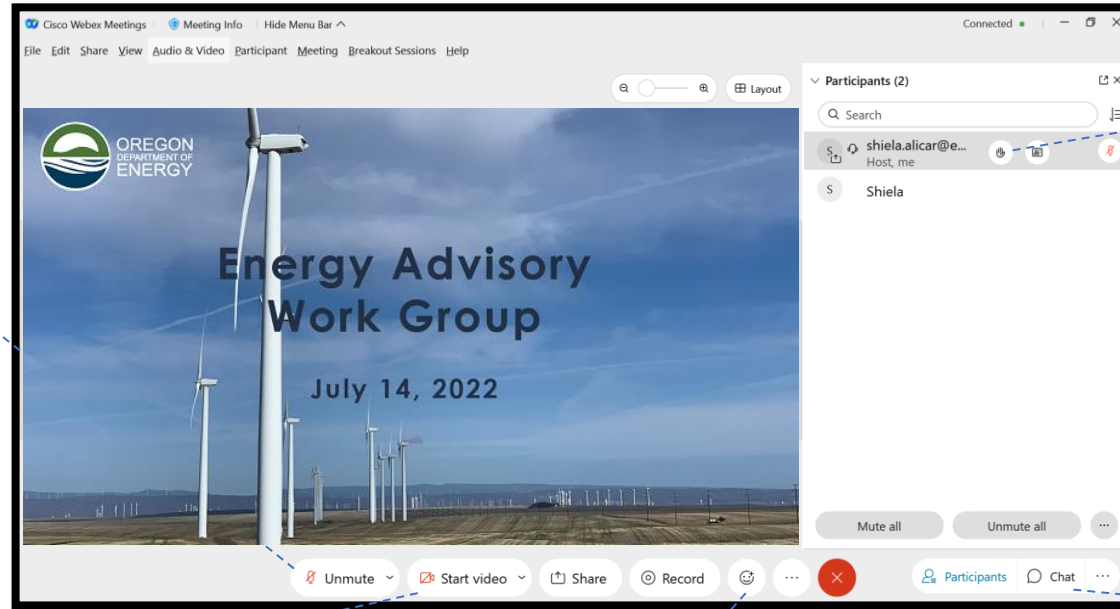
# Energy Advisory Work Group

July 14, 2022

# AGENDA

<b>3:00 p.m.</b>	Director's Welcome	Janine Benner
<b>3:05 p.m.</b>	EAWG – Any Updates Since June 28 Meeting?	EAWG Members
<b>3:20 p.m.</b>	2022 Biennial Energy Report	Jessica Reichers Erica Hertzsch
<b>3:50 p.m.</b>	Preparing Fuels Sector for Wildfire Season	Max Woods
<b>4:00 p.m.</b>	Strategic Plan Update	Ruchi Sadhir
<b>4:30 p.m.</b>	Follow up on ODOE Budget	Janine Benner
<b>4:45 p.m.</b>	Closing Comments/Q&A	EAWG Members and ODOE Staff

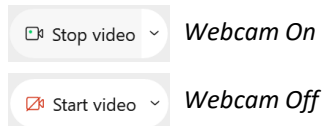
# USING WEBEX



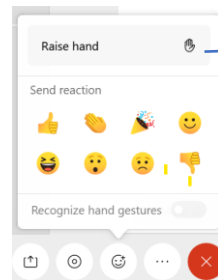
## Audio Options



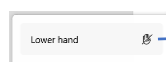
## Video Options



## Reactions



Click to Raise your hand.



Click on Lower hand when you are done.

## Second Raise Hand Option

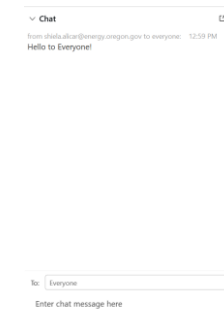
You can also click on the hand next to your name in the Participant list to raise your hand.

Click on Lower hand when you are done.

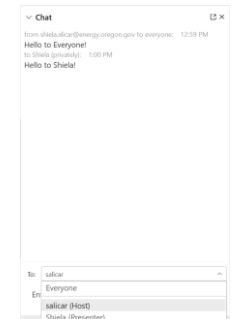


## Chat

You can chat to Everyone in the meeting.



You can send a private message to the Host or Presenter (or all Panelists when there is a Panel).





OREGON  
DEPARTMENT OF  
ENERGY

# 2022 Biennial Energy Report

Jessica Reichers

# BIENNIAL ENERGY REPORT TIMELINE

- **January – March 2022:** Public Survey and Stakeholder Input Sessions
- **January – July 2022:** Updating Energy By The Numbers and Technology and Resource Reviews sections from the 2020 Report with current data
- **February – July 2022:** Updating and expansion of timeline for Oregon Energy History
- **April – July 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

# DRAFT TABLE OF CONTENTS

## Executive Summary & Introductory Pieces

### Energy by the Numbers

- Energy Overview
- Energy Use in Oregon
- Energy Production in Oregon
- Energy Costs, Economy, and Equity
- Energy Efficiency
- Energy End Use Sectors and Sector Profiles

### Energy History Timeline

## Energy Resource & Technology Reviews

- Electricity Generation
- Electricity Storage
- Hydrogen
- Transportation Fuels
- Clean & Efficient Vehicles
- Energy Efficient Building Energy Technologies

## Energy 101s

- Utility Resource Planning and Acquisition
- Public Utility Regulatory Policies Act (PURPA)
- Long Duration Electricity Storage
- Backup Power
- Oregon Fuel Action Plan
- Radioactive Waste Management
- Clean Energy Opportunities in Agriculture
- Overview of State Climate Programs and Actions
- Infrastructure Investments & Jobs Act (IIJA) Energy Funding



# DRAFT TABLE OF CONTENTS

## Policy Briefs

- Accelerating the Energy Transition: Identifying Pathways to Achieve Oregon's Clean Energy and Climate Goals
- What Drives Energy Costs for Consumers?
- Local Energy Perspectives: Workforce and Supply Chain Opportunities & Challenges
- Oregon Clean Energy Opportunity Campaign: A Case Study in Equitable Engagement
- Beyond Energy Savings: Co-benefits of Energy Efficiency
- Expanding Energy Efficiency in Existing Buildings
- Integrating Resilience Across Energy Sectors

## Conclusion, Recommendations, and Closing Materials

# STUDIES & REPORTS INFORMING THE CLEAN ENERGY POLICY BRIEF

*Accelerating Our Energy Transition: Identifying Pathways to Achieve Oregon's Clean Energy and Climate Goals*

## **OREGON STUDIES: STATEWIDE AND LOCAL**

[Electrification Impact Analysis: Phase 1](#)

Eugene Water & Electric Board | October 2020

[Electrification Impact Analysis: Phase 2](#)

Eugene Water & Electric Board | November 2021

[Exploring Pathways to Deep Decarbonization for the Portland General Electric Service Territory](#)

Evolved Energy Research | April 2018

[Oregon Clean Energy Pathways Analysis](#)

Evolved Energy Research, GridLab, and the Clean Energy Transition Institute | July 2021

[Oregon Energy Policy Simulator Insights: Recent Development, Policies to Meet Emissions Goals](#)

Energy Innovation | March 2022

[Vision 2050: Destination Zero – NW Natural Carbon Neutrality Scenario Analysis](#)

NW Natural | November 2021

[Destination Zero – NW Natural Carbon Neutrality Scenario Analysis](#)

NW Natural

## **REGIONAL**

[Affordable and Reliable Decarbonization Pathways for Montana](#)

Vibrant Clean Energy and Grid Lab | February 2021

[Meeting the Challenge of Our Time: Pathways to a Clean Energy Future for the Northwest – An](#)

[Economy-wide Deep Decarbonization Pathways Study](#)

Clean Energy Transition Institute | June 2019

[Pacific Northwest Zero-Emitting Resources Study](#)

Energy and Environmental Economics (E3) | January 2020

[Pacific Northwest Pathways to 2050: Achieving an 80% reduction in economy-wide GHGs by 2050](#)

Evolved Energy Research | November 2018

[Seattle City Light Electrification Assessment](#)

Electric Power Research Institute (EPRI) | January 2022

[Washington 2021 State Energy Strategy: Transitioning to an Equitable Clean Energy Future](#)

Evolved Energy Research | December 2020

## **NATIONAL AND OTHER STATE AND LOCAL STUDIES**

[Analysis of Selective 2010-2018 Economy-Wide Decarbonization Studies](#)

Clean Energy Transition Institute | April 2018

[The Challenge of Retail Gas in California's Low-Carbon Future: Technology options, Customer Costs, and Public Health Benefits of Reducing Natural Gas Use](#)

Energy and Environmental Economics (E3) | April 2020

[Getting to Net Zero – Pathways Toward Carbon Neutrality: A Review of Recent Mid-Century Deep Decarbonization Studies for the United States](#)

Energy and Environmental Economics (E3) | July 2021

[LA100: The Los Angeles 100% Renewable Energy Study](#)

National Renewable Energy Laboratory (NREL) | March 2021

[Princeton Net-Zero America Project](#)

Evolved Energy Research | June 2020

[The Role of Clean Fuels and Gas Infrastructure in Achieving California's Net Zero Climate Goal](#)

SoCalGas | October 2021

[The Role of Electricity in Decarbonizing California's Energy System](#)

Energy and Environmental Economics (E3) | September 2021

If there are any major studies or reports missing from this list, please send them by July 18 to:

[Adam.Schultz@energy.oregon.gov](mailto:Adam.Schultz@energy.oregon.gov)



# SUPPLY CHAIN AND WORKFORCE OPPORTUNITIES & CHALLENGES

## BIENNIAL ENERGY REPORT FEATURE

### Our Questions

What are your organization's workforce development and/or retention challenges? What energy workforce opportunities do you see? Do you have any specific data or information that you could share that would help illustrate these challenges and/or opportunities?

What has your organization done to address your workforce-related challenges? Are you aware of workforce development efforts that are working well that we could highlight for readers of the Biennial Energy Report?

Are there recent Oregon-specific studies or analyses on workforce needs that you are aware of? Do you have workforce or supply chain related questions to recommend for future study to help fill in gaps in this important topic?

Is your organization experiencing challenges related to supply chain disruptions, either starting before the COVID-19 pandemic or tied to the pandemic? How are these supply chain disruptions affecting your operations?

### Three Ways to Contribute by July 18

1. Email your responses to [AskEnergy@oregon.gov](mailto:AskEnergy@oregon.gov)
2. Fill Out this [Online Form](#)
3. Email [linda.ross@energy.oregon.gov](mailto:linda.ross@energy.oregon.gov) to request a time to talk through your answers with ODOE staff

Please include your name, organization, email, and phone number. Please also note if you would like your responses to remain unattributed.

# OREGON ENERGY HISTORY INTERACTIVE TIMELINE

## DEMONSTRATION AND DISCUSSION

October 1942

October 1942 Milk machine exhibit as part of OAC Extension Service's Farm

TOASTER

MACHINE

VACUUM CLEANER

ELECTRIFYING AGRICULTURE

DE LAVAL MILKER

1940

1941

1944

1946

1940

1920

1941

1967

1973

1975

1979

1985

1991


First Aluminum Smelter in the Northwest  
1940



Left image- Alcoa Aluminum Co. poster during World War II, courtesy National Archives.

More →

Grand Coulee Dam begins Operation and Flooding of Kettle Falls  
1941



Left photo- Colville women, Ceremony of Tears, 1939, courtesy of UW Special Collections. Click "More" for link to article on Kettle Falls and video.

More →

World's First Plutonium Production Reactor begins Operations at the Hanford  
1944

More →

Congress passes Energy Act of 1946  
1946



OREGON  
DEPARTMENT OF  
ENERGY



# Preparing the Fuels Sector for Wildfire Season

Maxwell Woods





OREGON  
DEPARTMENT OF  
ENERGY

# 2021-2024 Strategic Plan Objective Progress Update

Ruchi Sadhir | Kaci Radcliffe

## Imperatives Objectives

### Expand and Improve Stakeholder Engagement

- Increase diversity of agency stakeholder groups, rulemaking, oversight, and advisory boards
- Year-over-year increase in agency engagement with organizations representing historically and currently underserved populations and communities
- Year-over-year increase in the external use of agency produced reports, studies, and presentations

## Initiatives

- Conduct assessment of current agency boards and decision-making bodies to identify opportunities for more diverse representation
- Develop a communication plan and engagement process collaboratively with historically and currently underserved populations and communities that includes actively listening, being responsive, and incorporating feedback in the development of programs, policies, and other areas of work
- Build on existing tribal engagement efforts by expanding internal responsibilities and resources, and reaching out to tribes to assess and amplify shared interests and priorities
- Work with external entities to assess their needs and priorities to strengthen relationships and better inform Oregon's energy policies and programs
- Strengthen staff capacity within ODOE to serve as liaisons and ambassadors with communities, stakeholder groups, and Tribes.

### Build Practices and Processes to Achieve More Inclusive and Equitable Outcomes

- Year-over-year increase in the percent of agency job applicants identifying as Black, Indigenous, and People of Color.
- Year-over-year increase in the percent of historically and currently underserved populations and communities participating in ODOE programs and services
- Increase agency Diversity, Equity, and Inclusion awareness and fluency

- Enhance ODOE's internship program to provide benefits to interns, such as paid positions and greater access to educational credits, to help build a more diverse network of ODOE and energy industry employees
- Develop a Diversity, Equity, and Inclusion Action Plan in partnership with historically and currently underserved populations and communities
- Create inclusive, multi-lingual communications to increase accessibility of agency program information and services
- Conduct agency-wide DEI assessment and training to measure and increase employee knowledge, awareness, and skills

### Assess and Enhance Organizational Data Capabilities

- 100% of specified agency products (e.g., produced reports, studies, and analyses) use standardized agency data methodologies or tools
- Year-over-year increase of collection, review, and analysis of data
- Year-over-year increase in data sharing relationships

- Establish and internally communicate agency data standards and tools
- Assess and enhance agency data management roles, responsibilities, and internal structures
- Enhance staff data analysis and visualization skills to bring more interactive, value-add products (e.g. external data dashboards) to stakeholders
- Audit agency datasets to identify gaps and ensure they support implementation of state programs and priorities
- Collect and analyze demographic data to better inform ODOE's work and to identify barriers to achieving equitable energy outcomes
- Identify, catalog, and conduct outreach with data-holders across the state and among stakeholders

### Assess and Modernize Agency Programs and Activities

- 100% of ODOE programs and activities align with ODOE mission and position statements
- Complete assessment of ODOE work in the context of the state's energy ecosystem to identify redundancies and gaps

- Conduct a strategic evaluation of each program and activity.
- Share the outcomes of the strategic evaluation and describe the alignment of programs and activities with ODOE's mission and position statements. Where necessary, identify actions to achieve better alignment.
- Collaborate with energy stakeholders to identify Key Energy Indicators and state priorities and objectives (including statutory targets and goals, executive orders, non-energy goals like job creation, other executive guidance like the Equity Framework)
- Create dashboard(s) to monitor and report on status of Key Energy Indicators
- Build on collaborative effort to assess how other agencies and organizations in the state are working toward Key Energy Indicators and state priorities, and identify areas where ODOE's work may overlap with other entities or where there might be gaps in state efforts.

### Optimize Organizational Efficiency and Impact

- Increase average Gallup Q12 engagement score to at least 4.0 (out of 5.0)
- Increase "Efficient and effective processes & procedures" (Whole Systems Model) survey score to at least 3.5
- Increase in Key Performance Measure customer satisfaction score to at least 95%

- Update and improve employee development and recognition plans and programs
- Create internal action teams to identify and implement cross-functional process improvements
- Evaluate and improve agency collaboration and communication culture
- Update ODOE's KPM customer satisfaction survey and implement timelier customer service evaluations



## IMPERATIVE

*what must be accomplished over the planning horizon?*

## OBJECTIVES

*how will we measure success?  
With metric and measurement*

## INITIATIVES

*what actions do we need to take?*

**EXAMPLE**

### **Expand and Improve Stakeholder Engagement**

Year-over-year increase in agency engagement with organizations representing historically and currently underserved populations and communities

Develop a communication plan and engagement process collaboratively with historically and currently underserved populations and communities that includes actively listening, being responsive, and incorporating feedback in the development of programs, policies, and other areas of work

# Objective

## Year-over-year increase in agency engagement with organizations representing historically and currently underserved populations and communities

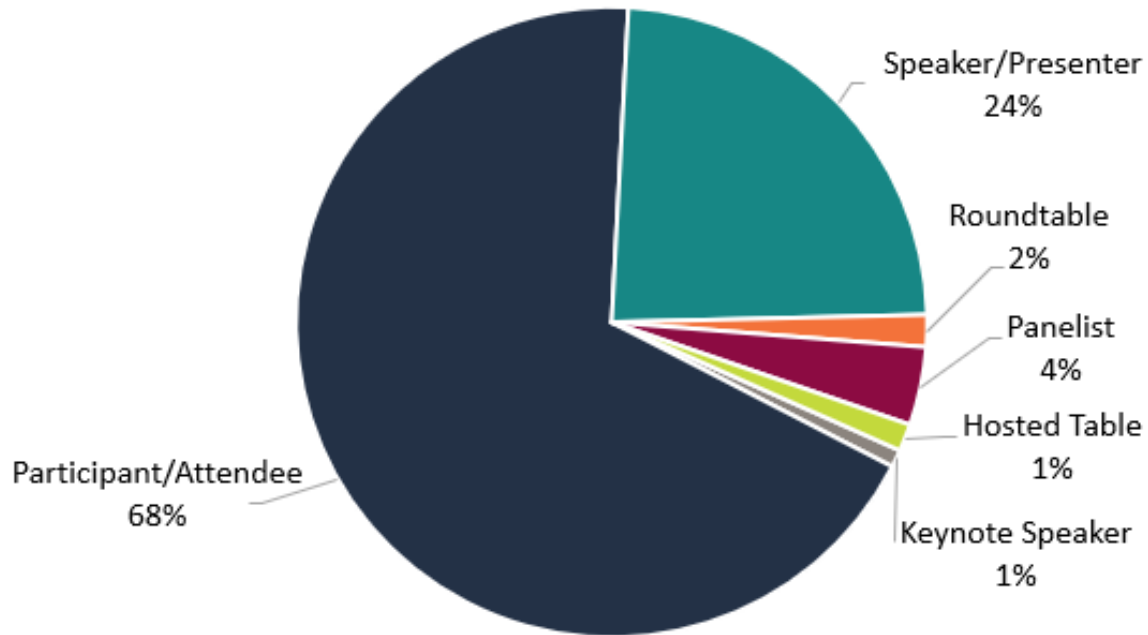


### ODOE Attended Events, Meetings, Presentations

2022 Q1: 109

2018-2022: 1,220

**ODOE Event Roles Since 2018**  
1,220 Total



Energy Efficiency	431
Renewable Energy/Solar/Hydro/etc.	275
Climate Change	233
Transportation/Alternative Fuels/EVs	200
Diversity/Equity	176
Resilience/Emergency Preparedness	137
Energy Storage/Smart Grid/DERs	131
Energy Planning/Utility IRPs/Regional	120
Sustainability	107
Legislative	97
Energy Facility Siting	88
Consumer Protection/low-income	81
Environmental Impacts/Pollution	65
Federal Issues	60
Nuclear/Hanford	52
Liquid Fuels/Petroleum/Oil	45
Agency Reports/BER	43
Natural Gas	33
Working Lands/Forests/Agriculture	28

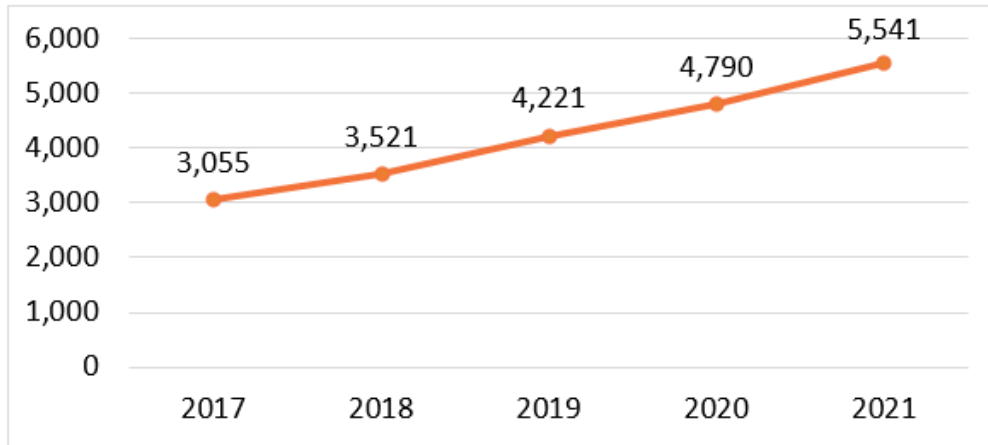
### Event Topics

# Objective

## Year-Over-Year Increase in the External Use of Agency Produced Reports, Studies, and Presentations



### Annual (Cumulative) Social Media Followers

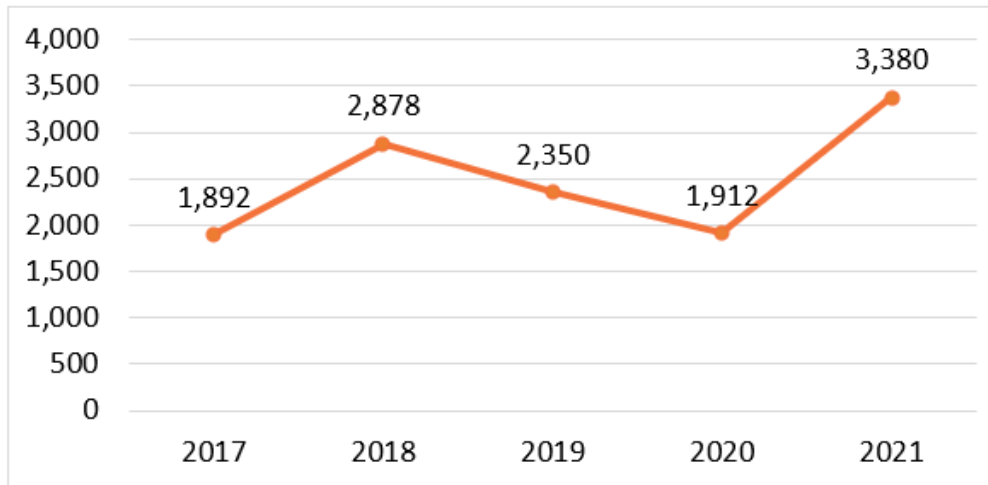


### Media Mentions on the Rise

2021: 97  
2022 (to date): 102



### Annual Podcast Episode Streams



### ODOE Legislative Presentations

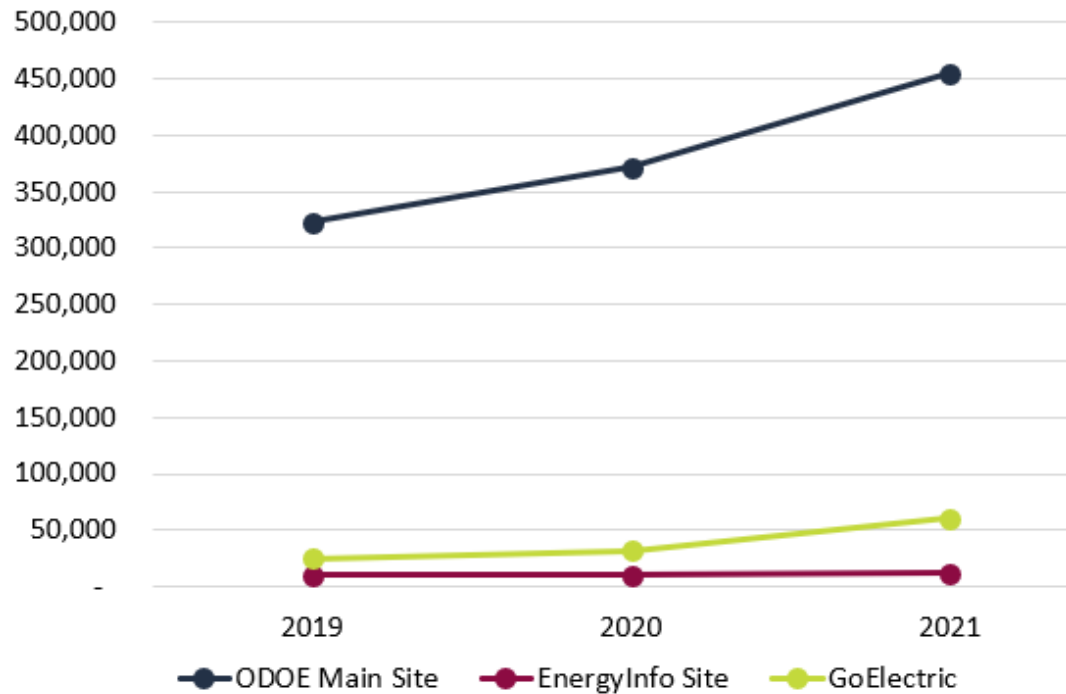
2019: 9  
2020: 9  
2021: 19  
2022 (to date): 13



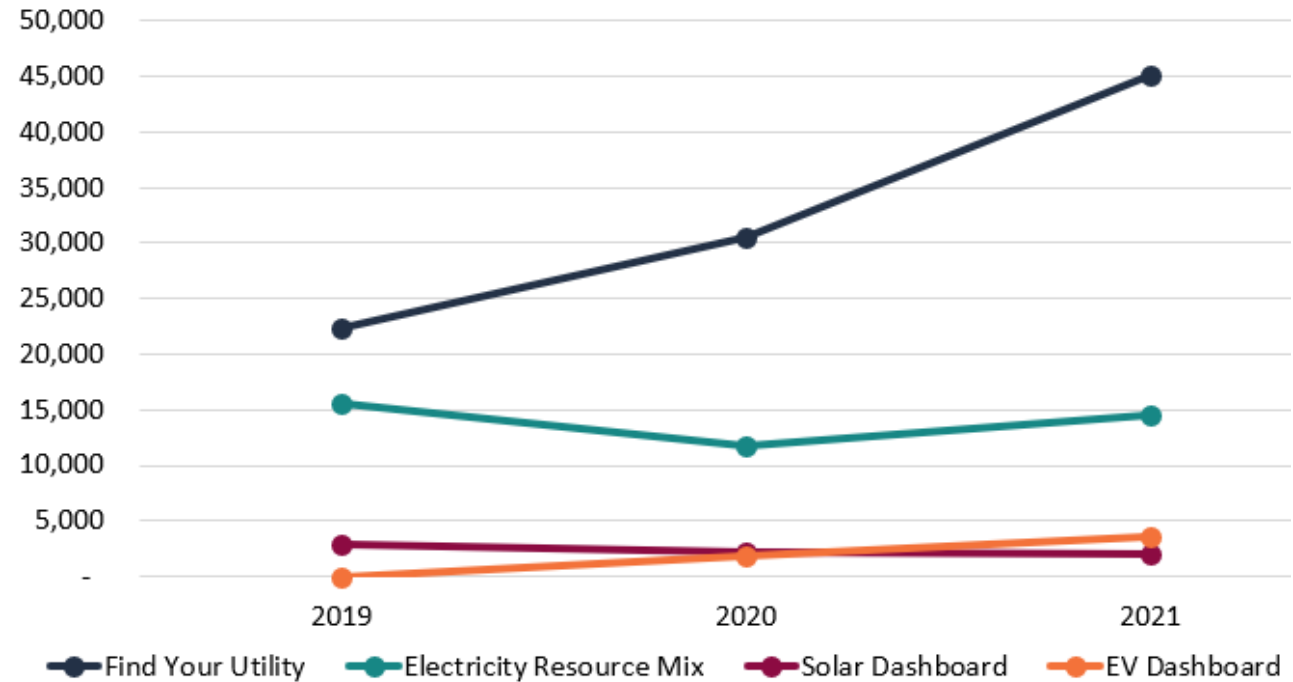
# Objective

## Year-Over-Year Increase in the External Use of Agency Produced Reports, Studies, and Presentations

### Website Hits



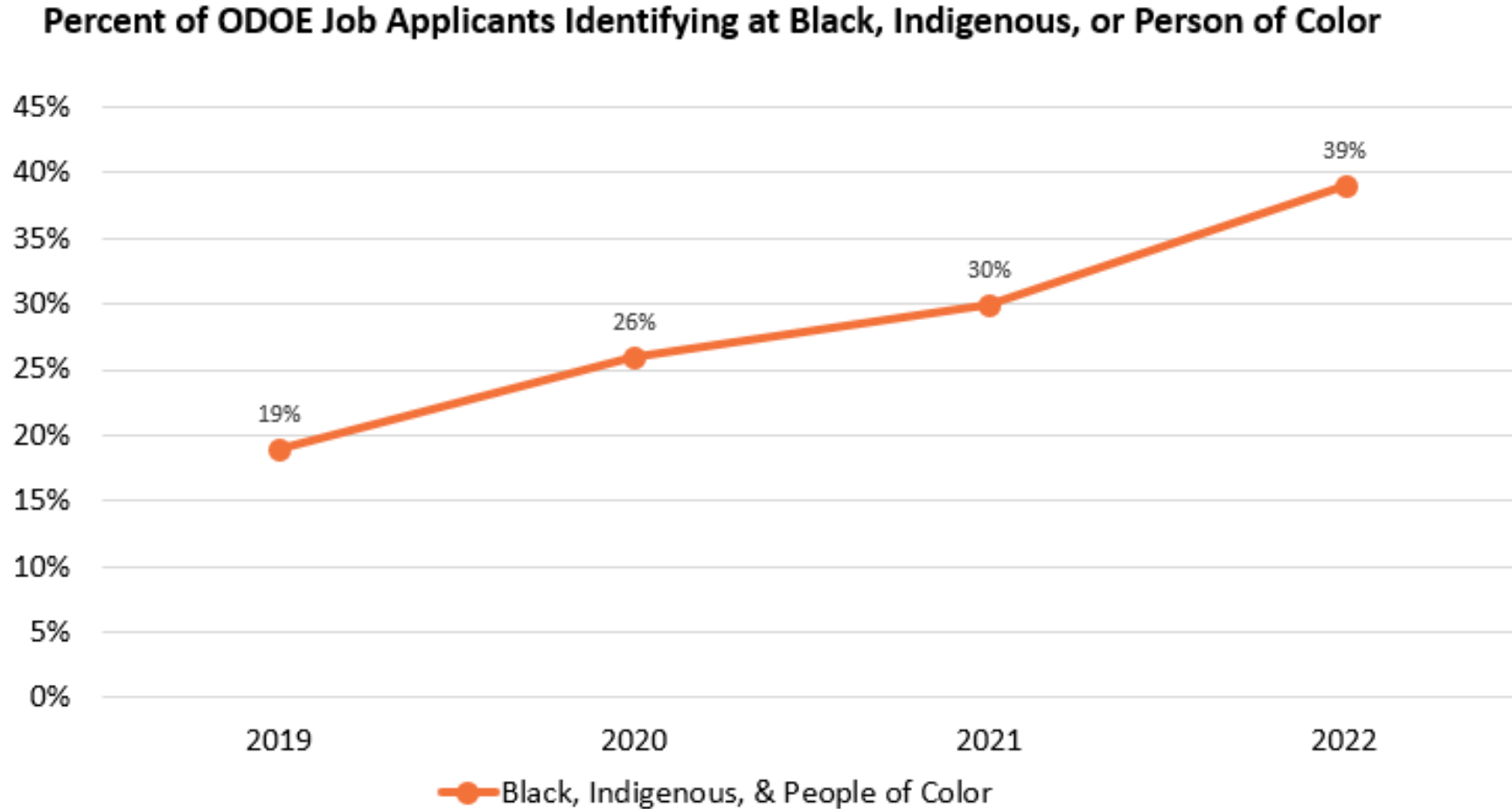
### ODOE Dashboard Hits



➤ Popular pages other than home: Find Your Utility, Biennial Energy Report, Rebate Programs

## Objective

Year-over-year increase in the percent of agency job applicants identifying as Black, Indigenous, and People of Color.



## Objective

Year-over-year increase in the percent of historically and currently underserved populations and communities participating in ODOE programs and services

## Objective

Year-over-year increase of collection, review, and analysis of data



### Oregon Solar + Storage Rebate Program

- Set-aside for Oregonians with low and moderate incomes



### Energy Efficient Wildfire Rebuilding Incentive Program

- Higher incentive for Oregonians with low and moderate incomes



### Community Renewable Energy Grant Program

- Set-aside and prioritization of Environmental Justice Communities



### Rural & Agricultural Energy Audit Program

- Rural Small Businesses and Agricultural Producers



### Heat Pump Programs

- Focus on renters and heat-vulnerable communities

# FOLLOW UP ON ODOE POPs/BUDGET

- What types of analysis might be helpful to fund through the *Energy Research Fund* and what should the vetting process through EAWG look like?
- How could a *Navigator for Community Capacity Building* support the communities, Tribes, and local governments that you work with to leverage federal and state funding?
- What methods of equitable external engagement have you/your organizations used that could be a helpful focus for ODOE to reach rural communities, Tribes, Oregonians experiencing lower incomes, and other currently or historically underserved communities?

# EAWG Charter Excerpt

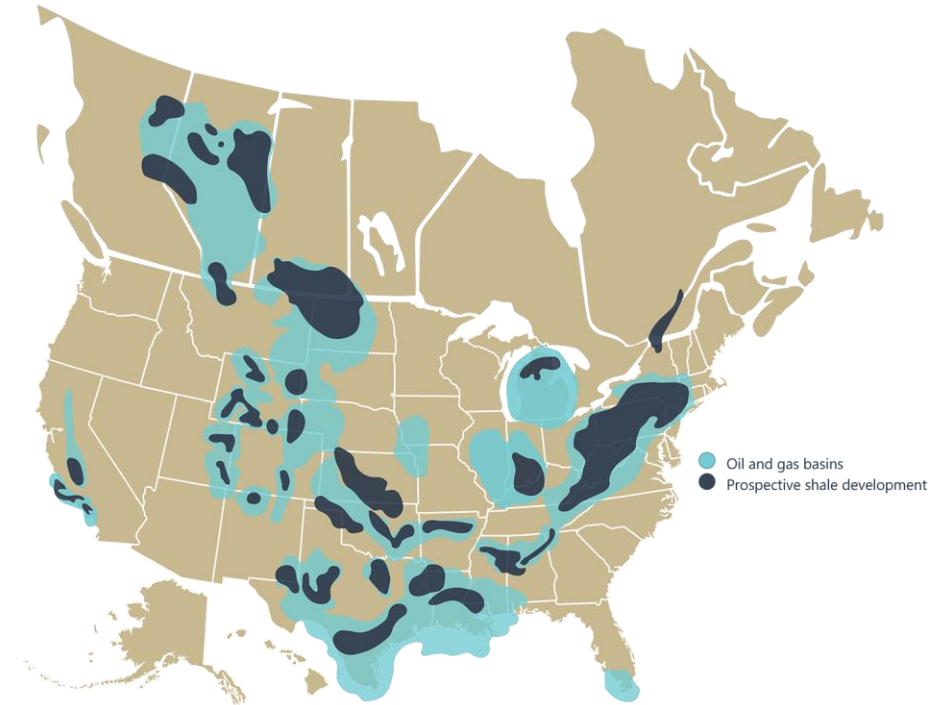
If funds are available, the “Energy Research Fund” will be used to contract with an outside firm or firms for studies, research, and analysis services when necessary to supplement existing department resources. The department will seek review and recommendations from the EAWG on draft ideas for studies, research, and analysis based on the following criteria:

- i. Does the idea for studies, research, or analysis address a research need or does it further existing or outdated studies, research, or analysis?
- ii. Does the idea for studies, research, or analysis address a topic of strong relevance in Oregon or in the broader energy policy landscape?
- iii. Is the idea for studies, research, or analysis likely to result in an impartial, data-driven contribution to the body of existing research on this topic?

# ENERGY PLANNING & INNOVATION PROPOSED POLICY OPTION PACKAGE

## Energy Research Fund

- Agency-wide, with most work coming from P&I Division
- Establish a research fund to contract with outside firms for studies, research, and analysis to supplement existing agency resources
- Estimated cost: \$250,000 ESA



# ADMINISTRATIVE SERVICES PROPOSED POLICY OPTION PACKAGE

## Navigator for Community Capacity Building

- Director's Office
- POP and companion to proposed Legislative Concept would establish a program and a position that would help provide information about potential funding as well as technical assistance to rural, tribal, and other environmental justice communities as they develop energy projects and programs
- 1 FTE
- Estimated Cost: \$396,229 General Fund



# ADMINISTRATIVE SERVICES PROPOSED POLICY OPTION PACKAGE

## Equity & External Engagement

- Agency-wide
- POP would create a Public Advocate position at the agency, focused on meeting requirements of HB 4077 and allow ODOE to more effectively engage environmental justice communities in our work
- 1 FTE
- Estimated Cost: \$406,080, including \$123,000 of ESA







OREGON  
DEPARTMENT OF  
ENERGY

**Save the Date!**  
**2023-25 Budget Public Meeting**  
**July 25, 2022**  
**4 p.m.**

[www.oregon.gov/energy/About-Us/Pages/Budget.aspx](http://www.oregon.gov/energy/About-Us/Pages/Budget.aspx)