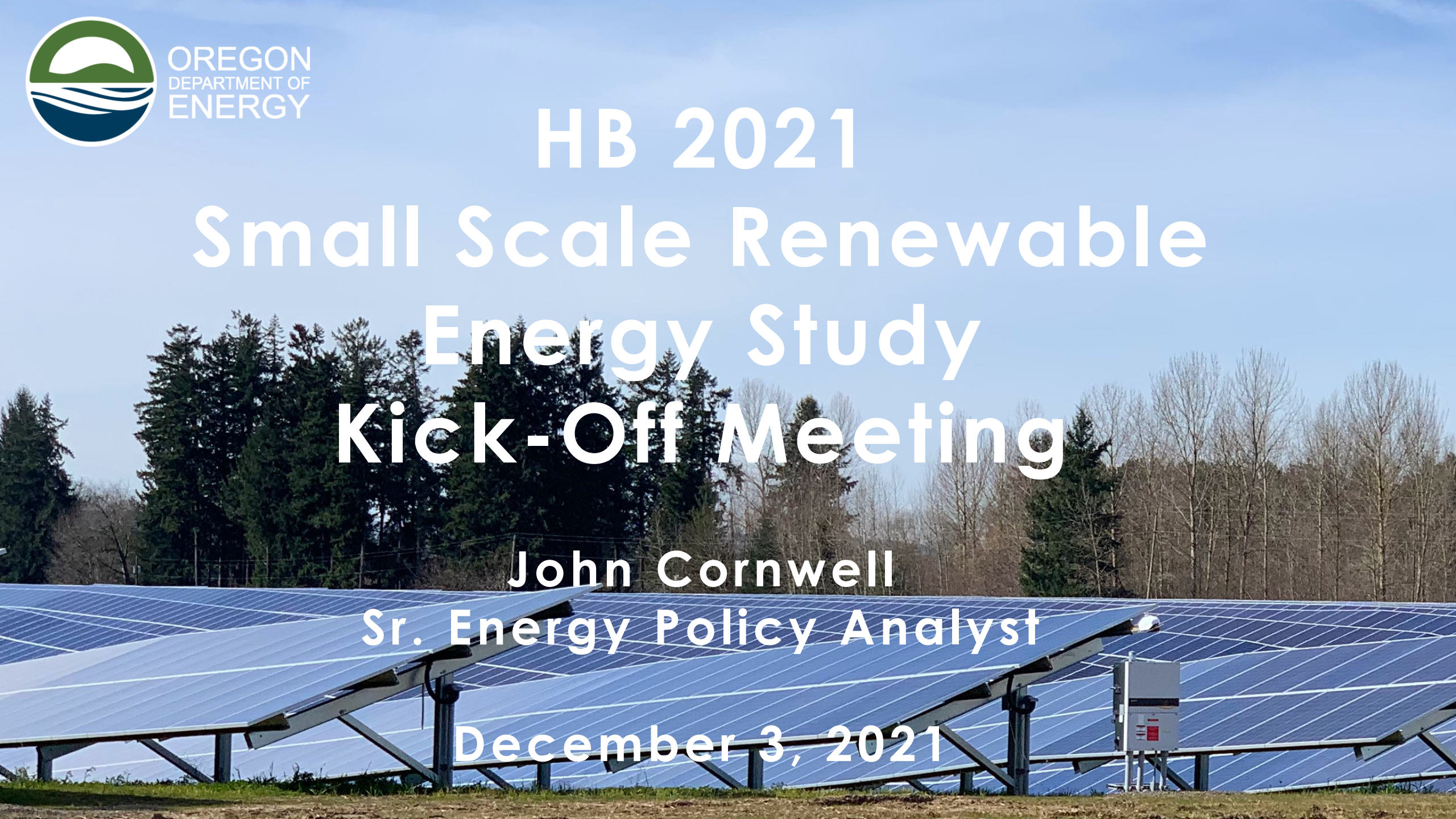

OREGON DEPARTMENT OF ENERGY

HB 2021 Small Scale Renewable Energy Study Kick-Off Meeting

John Cornwell
Sr. Energy Policy Analyst

December 3, 2021

Agenda

- Welcome Remarks
- Meeting Logistics and Operations
- Workgroup and Staff Introductions
- Study Requirements
- Study Plan and Timeline
- Small Scale and Community Based Renewable Energy Projects 101
- Open Discussion and Public Comment

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OREGON DEPARTMENT OF ENERGY

Leading Oregon to a safe, equitable, clean, and sustainable energy future.

Our Mission

The Oregon Department of Energy helps Oregonians make informed decisions and maintain a resilient and affordable energy system. We advance solutions to shape an equitable clean energy transition, protect the environment and public health, and responsibly balance energy needs and impacts for current and future generations.

What We Do

On behalf of Oregonians across the state, the Oregon Department of Energy achieves its mission by providing:

- A Central Repository of Energy Data, Information, and Analysis
- A Venue for Problem-Solving Oregon's Energy Challenges
- Energy Education and Technical Assistance
- Regulation and Oversight
- Energy Programs and Activities

WELCOME TO WEBEX!

Audio Options

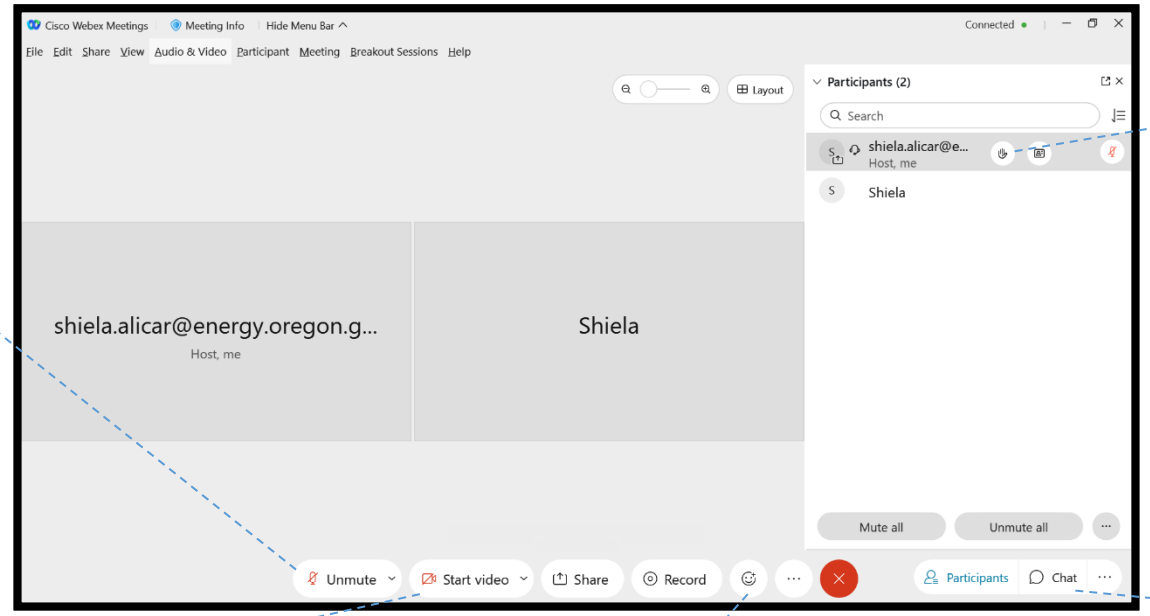
Mute — *Microphone On*

Unmute — *Microphone Off*

Video Options

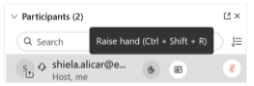
Stop video — *Webcam On*

Start video — *Webcam Off*



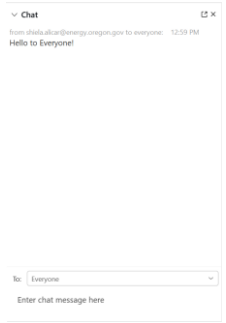
Second Raise Hand Option

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

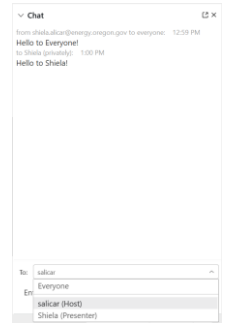


Click on Lower hand when you are done.

Chat

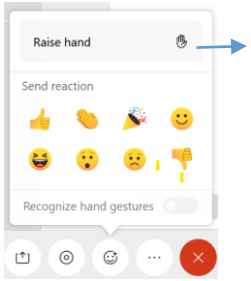


You can chat to Everyone in the meeting.



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

Reactions



Click to Raise your hand.

Click on Lower hand when you are done.

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How this meeting will be facilitated

- **Panelists and Attendees**
  - Panelists: SSREP Workgroup Members and ODOE Staff
  - Public: There will be time reserved at the end of the agenda for public comment
- **Community Agreements:** Designed to foster inclusive and respectful meeting today
  - Be present and ready to learn
  - Be respectful to others
  - Learning happens outside of our comfort zones
  - Listen to learn and not to respond
  - Thank you for being flexible and patient around any technology needs or changes
  - If you need something at this meeting, ask for it!
    - Technical issues or questions: Contact **Linda Ross** in the chat

Workgroup Member Introductions

SSREP Workgroup Membership	
Allie Rosenbluth, Rogue Climate	Kyle Roadman, Emerald PUD
Angela Crowley-Koch, OSSIA	Marc Patterson, Idaho Power
Bob Jenks, Oregon Citizens' Utility Board	Mark Nystrom, Lane County Public Works
Dan Orzech, Oregon Clean Power Cooperative	Mike McArthur, Community Renewable Energy Association
Dave Moldal, Energy Trust of Oregon	Natalie Rogers, City of Milwaukie
Diane Henkels, Small Business Utility Advocates (SBUA)	Nikita Daryanani, Coalition of Communities of Color
Erik Anderson, Pacificorp	Oriana Magnera, Verde
Jaimes Valdez, Portland Clean Energy Fund	Ranfis Giannettino-Villatoro, Blue Green Alliance
Jimmy Lindsay, PGE	Representative Mark Owens, Oregon House of Representatives
Jon Jinings, Dept. of Land Conservation and Development	Ryan Davies, Central Electric Coop
Julie Peacock, Bonneville Power Administration	Senator Michael Dembrow, Oregon State Senate
Kacia Brockman, Oregon Public Utilities Commission	Steve Uffelman, Prineville City Council
Tom McBartlett, Ashland Municipal Electric Utility	Will Van Vactor, Crook County

Warm-up Question: What is your favorite small-scale community-based renewable energy project in Oregon?

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HB 2021 Study on Small-Scale Renewable Energy Projects Overview

Small Scale Renewable Energy Project Study Overview

Objective

"Convene a work group to examine opportunities to encourage development of small scale and community-based renewable energy projects in this state that contribute to economic development and local energy resiliency." (House Bill 2021)

Outcome

ODOE shall submit a report to the legislature *"describing the current status and trends for small-scale renewable energy development … based on the findings [of the work group]." (House Bill 2021)*

Report due September 30, 2022

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Small Scale and Community-Based Renewable Energy Project - Working Definition

ORS 469A.210 "*projects with a generating capacity of 20 megawatts or less that generate electricity utilizing a type of energy" that qualifies for the Oregon RPS and is located in a community in Oregon.*

OREGON DEPARTMENT OF ENERGY

Small Scale and Community-Based Renewable Energy Project - Working Definition

ORS 469A.210 "*projects with a generating capacity of 20 megawatts or less that generate electricity utilizing a type of energy" that qualifies for the Oregon RPS and is located in a community in Oregon.*

Oregon RPS Qualifying Resources	
Wind	
Solar	
Geothermal	
Biomass / Biogas	
Marine Hydrokinetic (Wave)	
Certain Hydropower	
Hydrogen	

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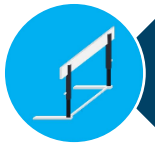
Small Scale Renewable Energy Project Topics



Barriers and opportunities to small-scale community-based project development

Economic benefits of small-scale community-based projects

Potential contributions of projects to local energy resilience

Opportunities for community access and ownership

Rate impacts of small-scale community-based project development

Potential legislative recommendations

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Small Scale Renewable Energy Project Study Workgroup Members

- Legislators
- Renewable energy developers
- Investor-owned electric
- Consumer-owned utilities
- Electricity service suppliers
- Residential, commercial, and industrial rate payers
- Cities and counties
- Tribal governments
- Business Oregon
- Department of Land Conservation and Development
- The renewable energy workforce
- Environmental justice communities
- The Public Utilities Commission
- The Energy Trust of Oregon
- The Bonneville Power Administration

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Questions and comments about the study objectives?

Trillium Lake, Mt. Hood

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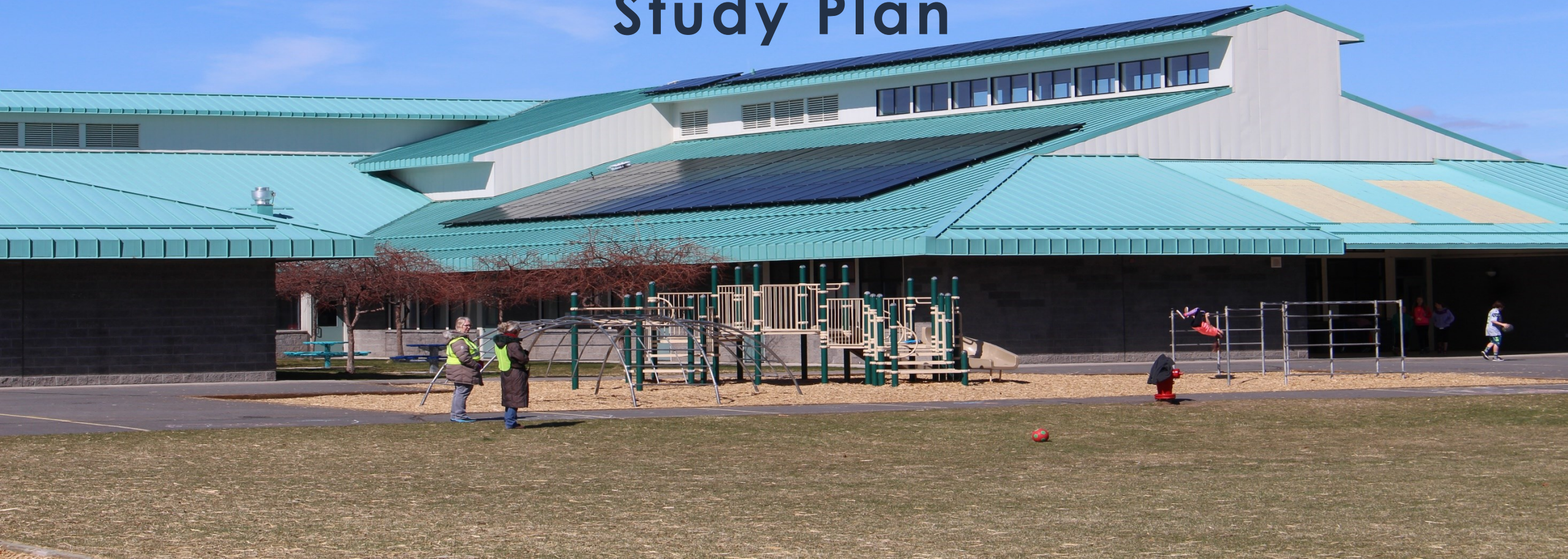
Small Scale Renewable Energy Project Study Plan



Study Plan Objectives

- ODOE recognizes that workgroup members come this study with **different perspectives and backgrounds.**
- We also recognize that individuals have **different learning styles and preferred methods of contribution.**
- ODOE aims to ensure the study is **collaborative, transparent, accessible**, and the study **products fairly reflect the perspectives of all participants**.
- To that end we have **planned the study to encourage collaboration and offer multiple avenues for engagement and participation**.

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Core Activity: Study Workshops

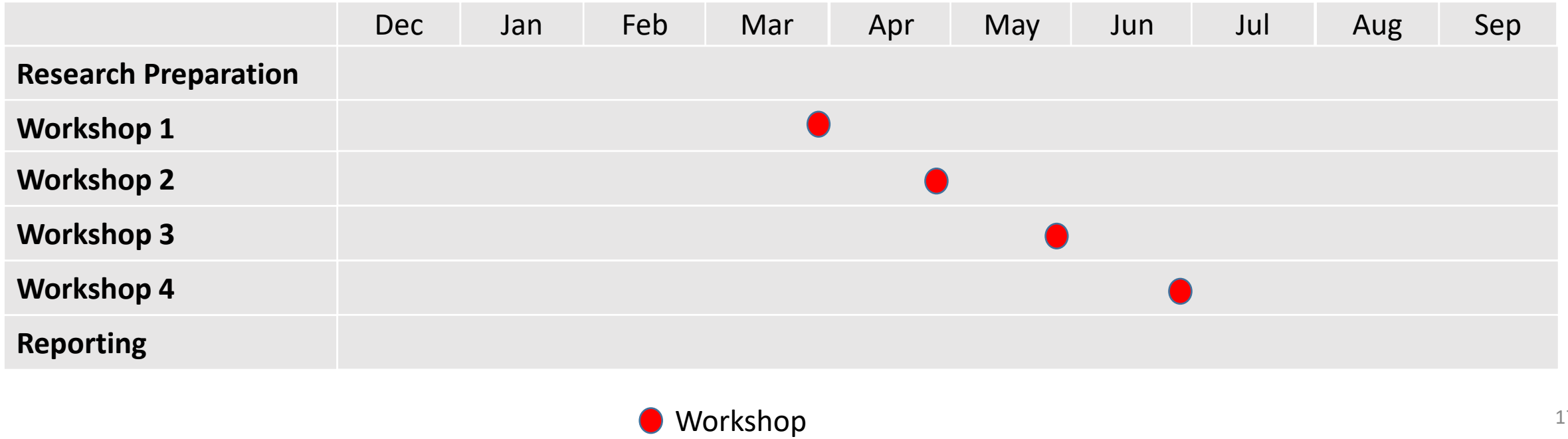
- Core workgroup activities are four topic area workshops

March 2022:	Workshop 1: Barriers and Opportunities for SSR Projects
April 2022:	Workshop 2: Access and Ownership of SSR Projects
May 2022:	Workshop 3: Benefits and Rate Impacts of SSR Projects
June 2022:	Workshop 4: Project Review and Potential legislative recommendations

Study Workshops

- Core workgroup activities are four topic area workshops

March 2022:	Workshop 1: Barriers and Opportunities for SSR Projects
April 2022:	Workshop 2: Access and Ownership of SSR Projects
May 2022:	Workshop 3: Benefits and Rate Impacts of SSR Projects
June 2022:	Workshop 4: Project Review and Potential legislative recommendations

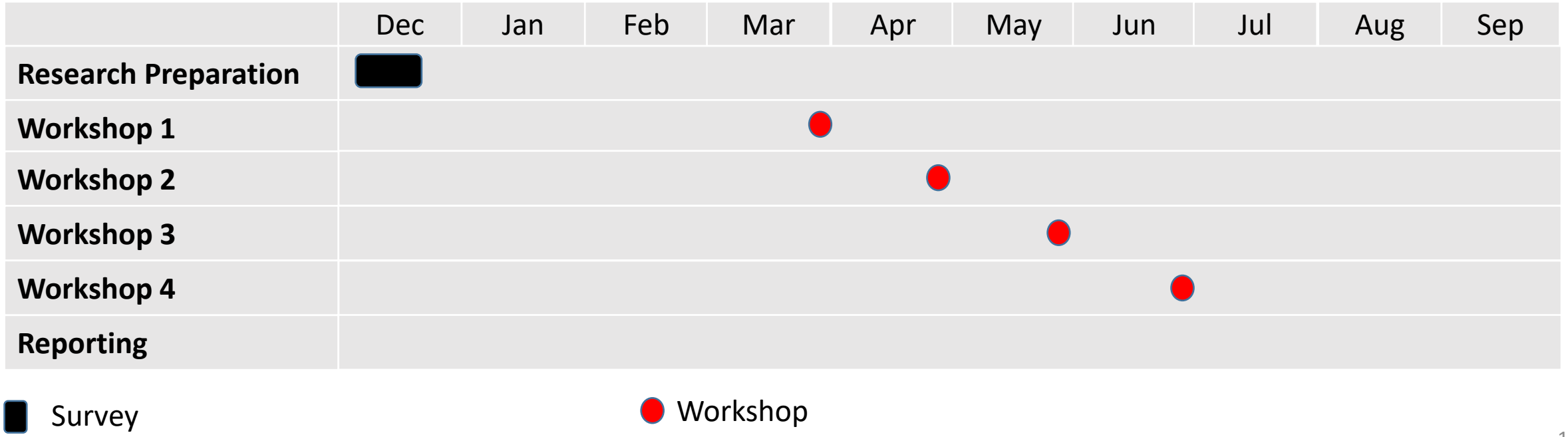


Workgroup Key Questions Questionnaire

- Workshop research will be informed by research topics questionnaire – December 2021

Workgroup Key Questions Questionnaire

- Workshop research will be informed by research topics questionnaire – December 2021

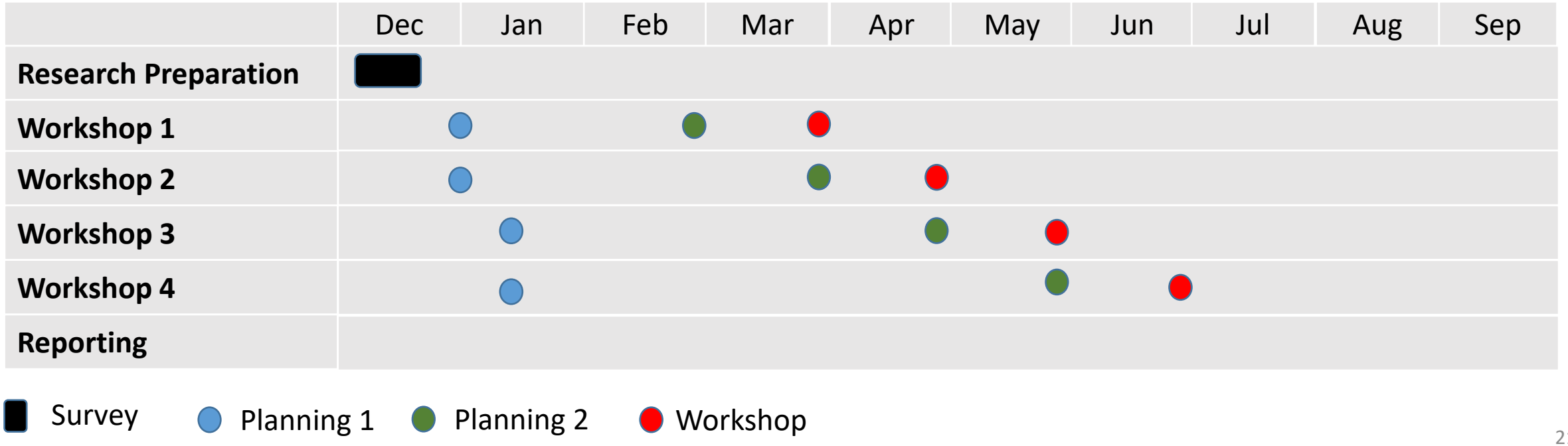


Workshop Planning

- Workgroup planning committees and ODOE staff will plan workshops
  - Planning Meeting 1: Synthesize workgroup survey results and develop research plans for workshop materials
  - Planning Meeting 2: Review background research materials and plan workshop

Workshop Planning

- Workgroup planning committees and ODOE staff will plan workshops
  - Planning Meeting 1: Synthesize workgroup survey results and develop research plans for workshop materials – January 2022
  - Planning Meeting 2: Review background research materials and plan workshop – 1 month before workshop



ODOE Research and Analysis

- ODOE staff will:
  - conduct research and analysis based on workshop research plans
  - develop draft background briefs and workshop materials

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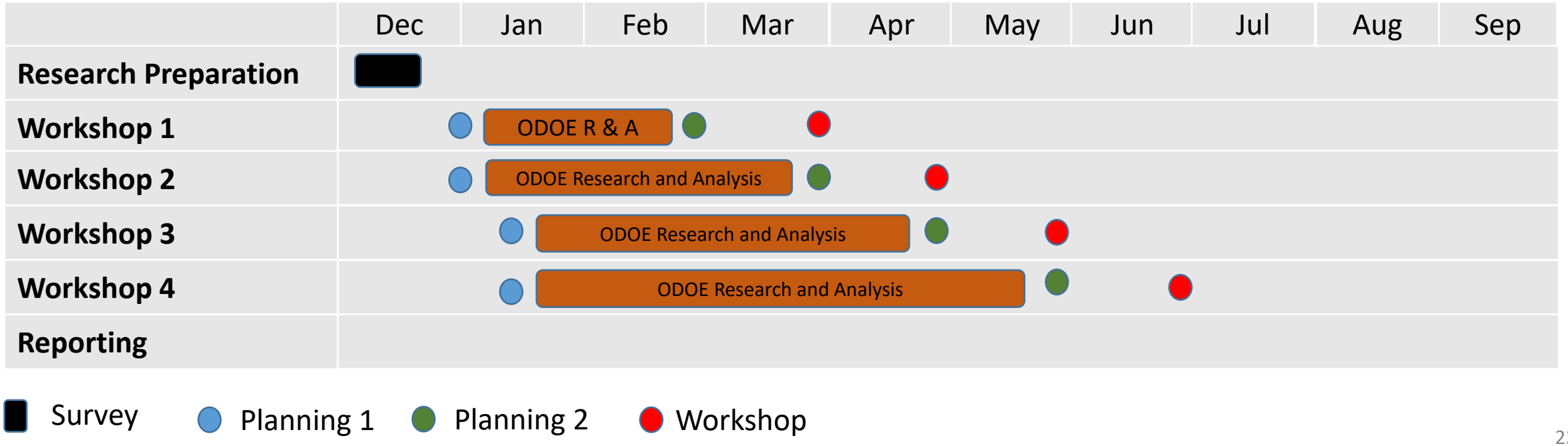
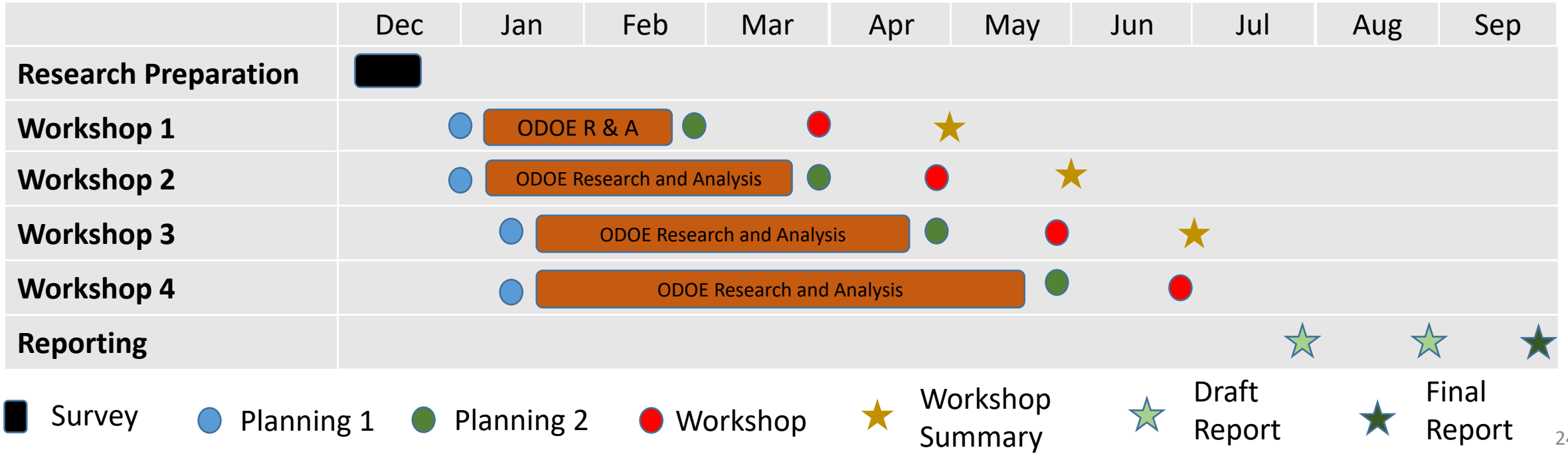
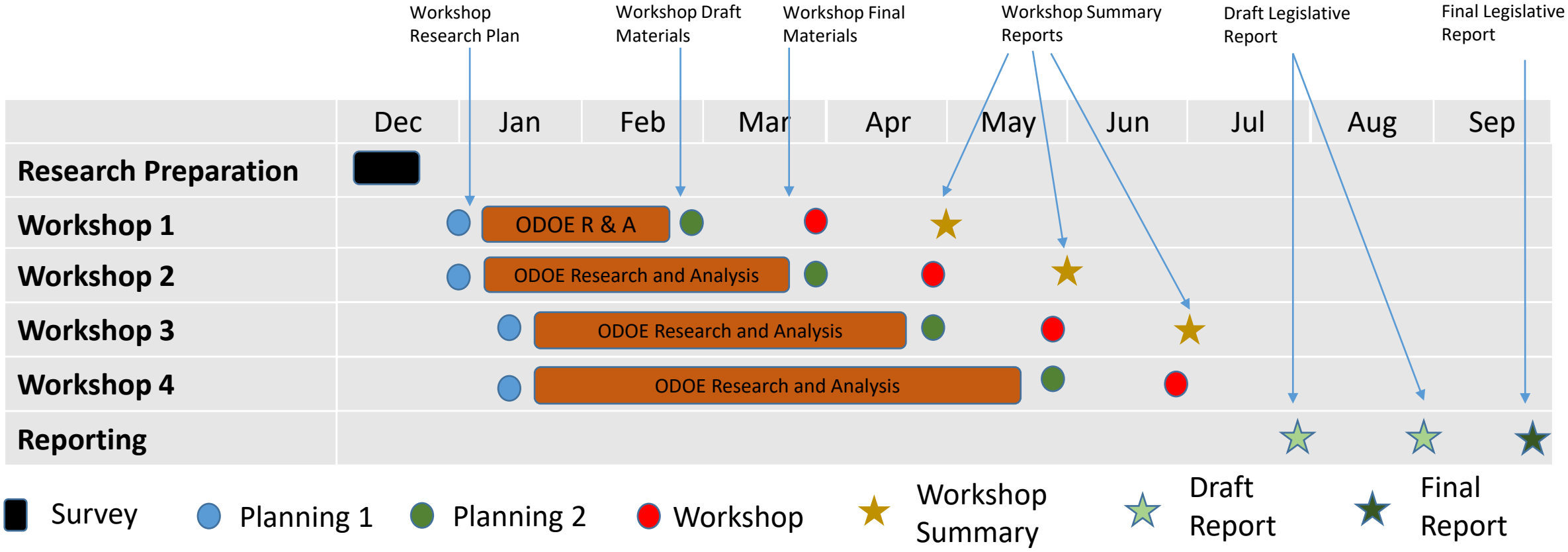


Reporting

- Workshop Topic Summaries
- Draft and Final Report to Legislature



Timeline and Deliverables



What we are asking of you.

1. Complete research topics survey
2. Participate in one workshop planning committee – 2 meetings
3. Attend and participate in workshops – 4 workshops
4. Provide feedback on deliverables

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Next Steps

- ODOE will be sending a document package week of December 13th, this will include:
  - Workgroup Charter
  - Planning Committee Preference Survey – Due December 20th
  - Topic area background brief
  - Research Topics Questionnaire – Due December 31st
- January – initial planning committee meetings

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Questions and comments about the study plan?

Trillium Lake, Mt. Hood

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Small-Scale Community Based Energy Projects 101

Small Scale and Community-Based Renewable Energy Project - Working Definition

ORS 469A.210 "*projects with a generating capacity of 20 megawatts or less that generate electricity utilizing a type of energy" that qualifies for the Oregon RPS and is located in a community in Oregon.*

Oregon RPS Qualifying Resources

- Wind
- Solar
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- Biomass / Biogas
- Marine Hydrokinetic (Wave)
- Certain Hydropower
- Hydrogen

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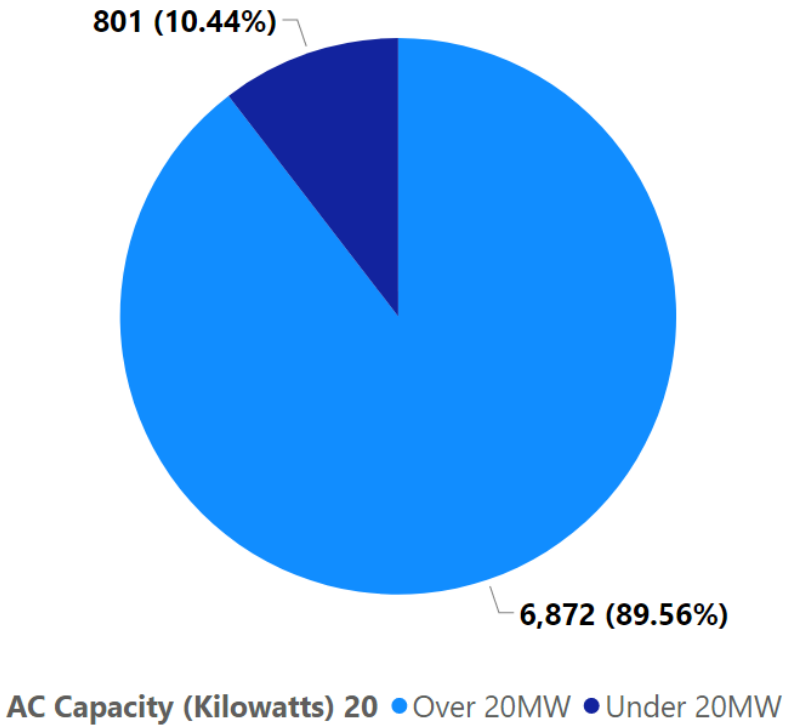
Small-Scale Renewable Projects in Oregon

Nameplate Capacity Additions 1990 to 2019 by Project Size



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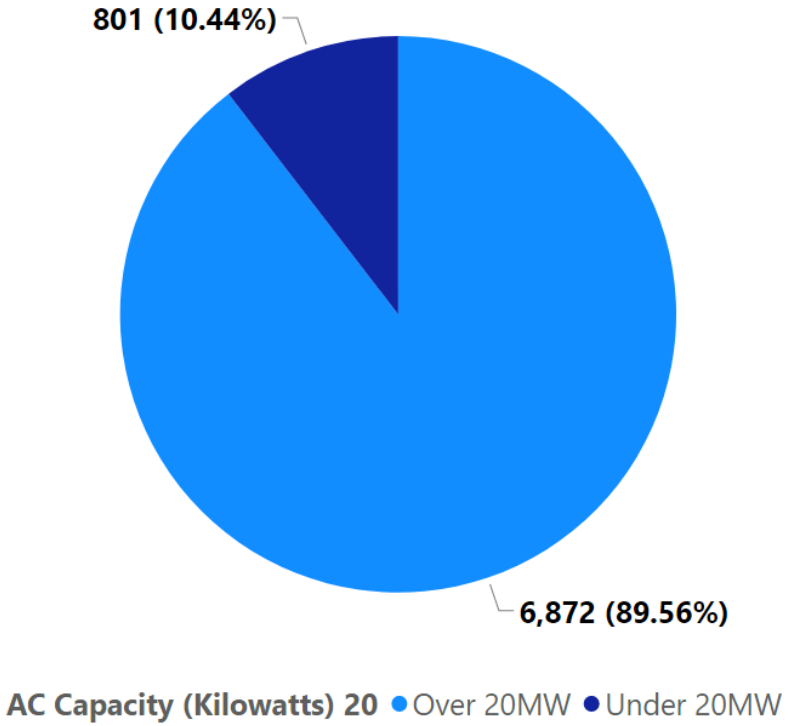
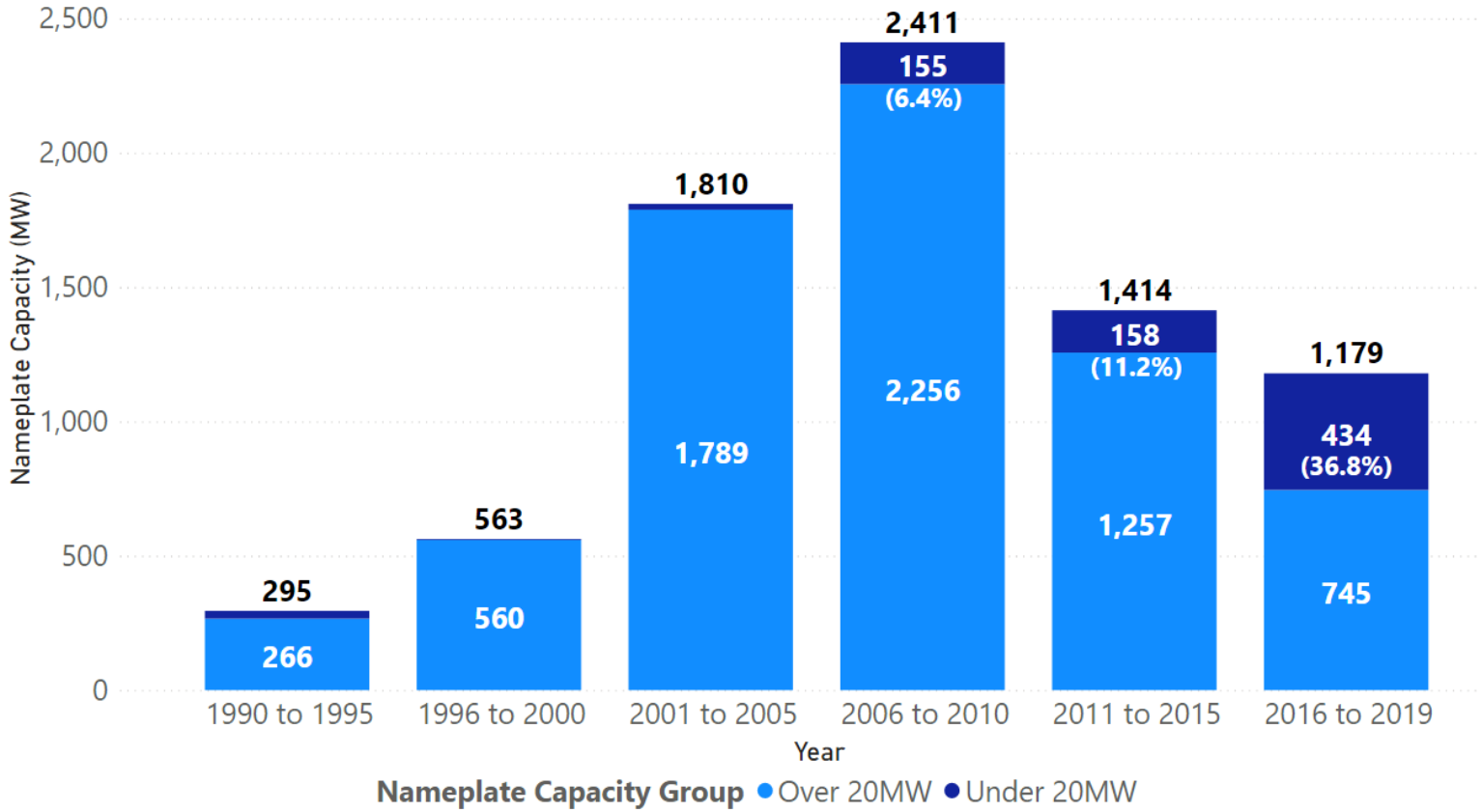
Source: ODOE Facilities Database (2019)

Small-Scale Renewable Projects in Oregon

Nameplate Capacity Additions 1990 to 2019 by Project Size



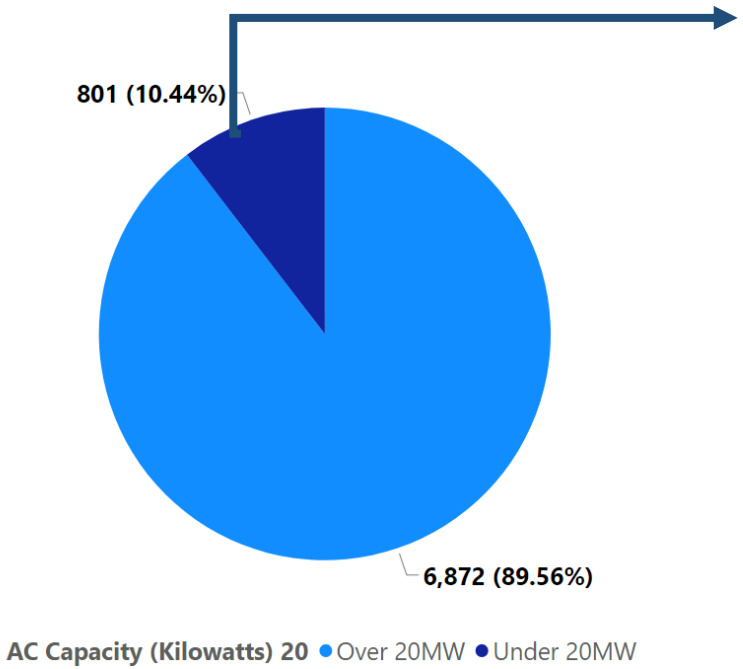


OREGON DEPARTMENT OF ENERGY

Source: ODOE Facilities Database (2019)

Small-Scale Renewable Projects in Oregon

Nameplate Capacity Additions 1990 to 2019 - 20MW or Less by Project Size and Resource (2019)



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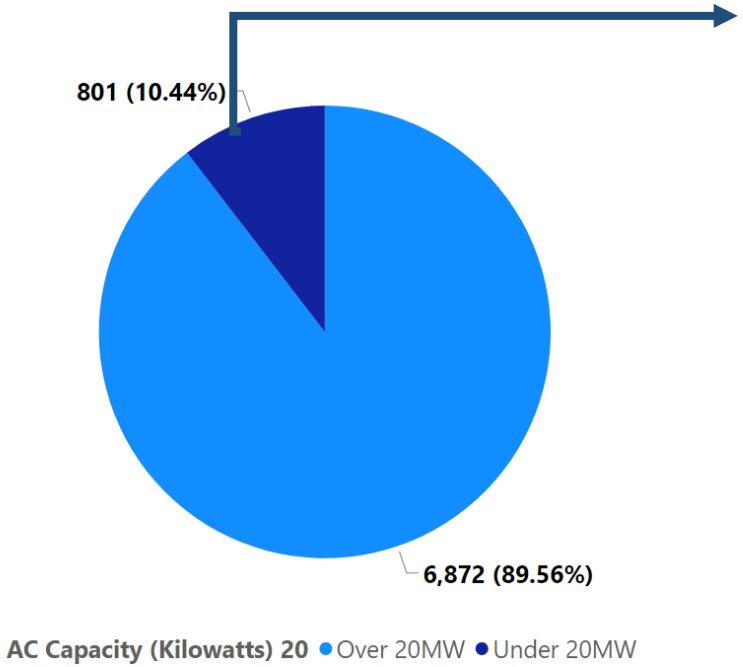
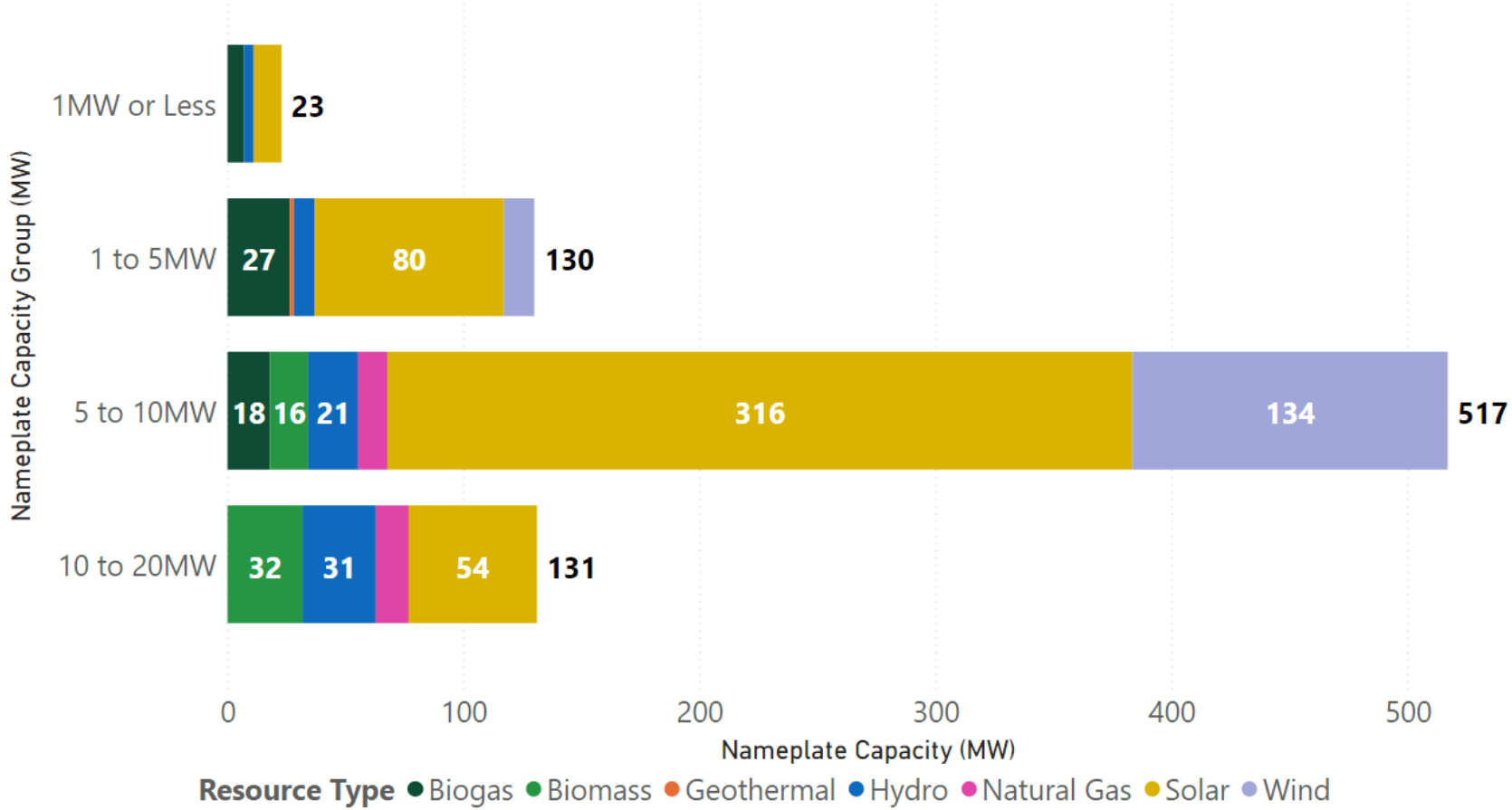


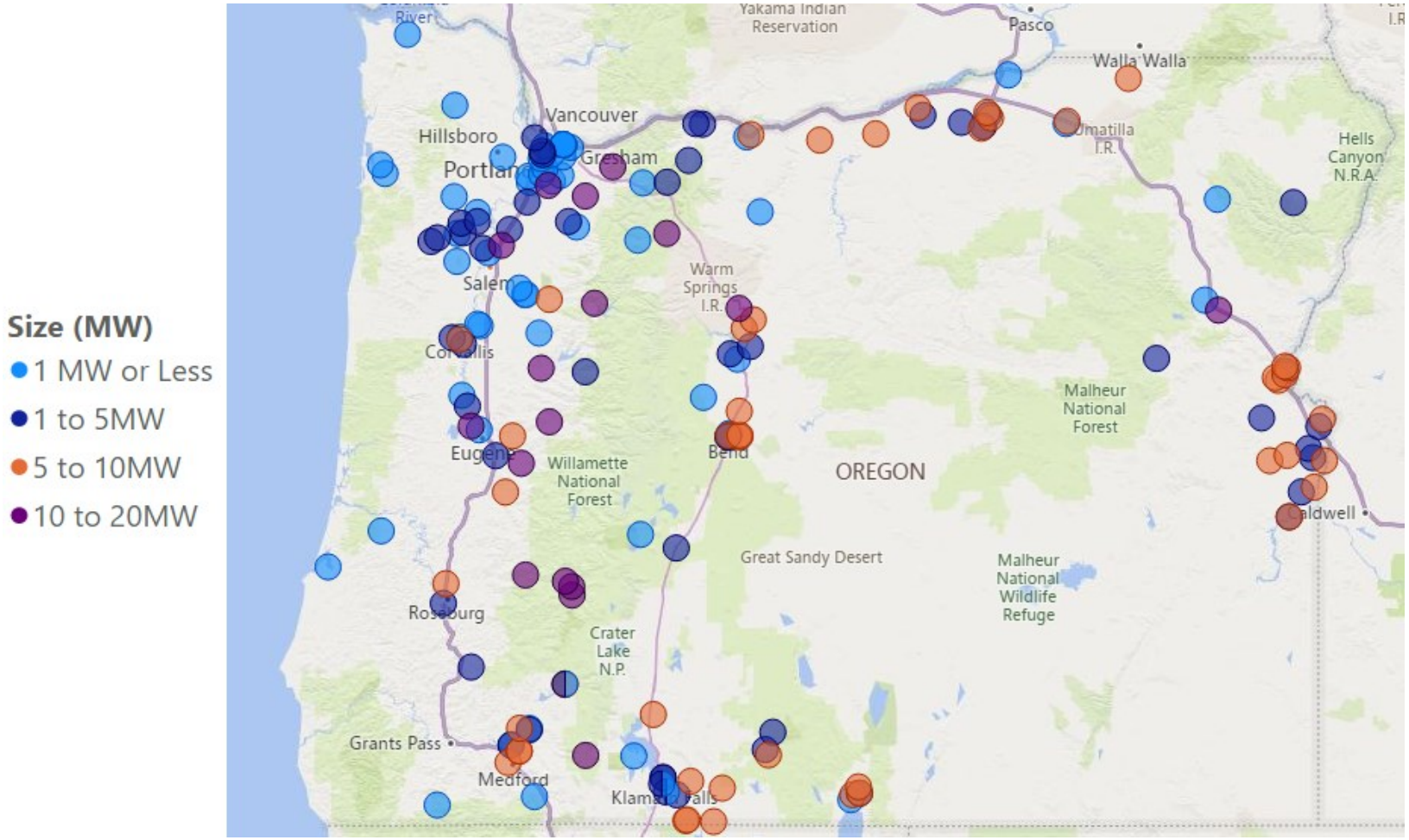


OREGON DEPARTMENT OF ENERGY

Source: ODOE Facilities Database (2019)

Small-Scale Renewable Projects in Oregon

Small-Scale Renewable Energy Project Map (2019)



OREGON DEPARTMENT OF ENERGY

Source: ODOE Facilities Database (2019)

Potential Opportunities and Barriers

Potential Opportunities

- Achieving decarbonization or clean energy goals
- Improved access to clean energy resources
- Local economic development benefits
- Mitigating land use conflicts
- Local energy resilience

Potential Barriers

- Land use conflicts
- Local and state utility regulation
- Transmission capacity
- Contracts or obligations under the PURPA
- Project implementation costs and financing

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Potential Opportunities and Barriers

Potential Opport

- Achieving decar
  or clean energy
- Improved acces
  energy resourc
- Local economic
  development b
- Mitigating land
- Local energy re

Research objective

- Identify and study opportunities and barriers to small-scale renewable energy projects and where possible identify strategies to take opportunities and mitigate barriers.

Potential Research Methods

- Literature review, in-depth interviews with stakeholders and in-depth interviews with stakeholders and regional and national experts

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Access and Ownership Opportunities

- Small-scale community-based renewable energy projects have potential to improve access and ownership opportunities for communities with limited access and infrastructure:
  - Low-income communities,
  - Black, Indigenous and People of Color communities,
  - Tribal communities
  - Rural and coastal communities

- Small-scale community-based renewable energy projects can also provide opportunities for diverse models of ownership by local governments, nonprofit organizations and cooperatives of community members.

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Access and Ownership Opportunities

- Small-scale community-base
  potential to improve acces
  communities with limited a
  - Low-income communi
  - Black, Indigenous and
  - Tribal communities
  - Rural and coastal com
- Small-scale community-ba
  also provide opportunities
  local governments, nonpro
  community members.

Research objective

- Identify and study strategies and models, including opportunities, benefits, barriers, costs, and risks, that can increase access and promote diverse ownership of small-scale renewable energy projects and identification of costs, benefits, and risks

Potential Research Methods

- Literature review, in-depth interviews with stakeholders and regional and national experts

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Potential Economic Benefits

- Small-scale community-based renewable energy projects may present opportunities for local economic benefits.

Direct Impacts

- Increased employment
- Local tax revenue
- Reduced household or business energy expenses

Indirect Impacts

- Increased local spending
- Increased employment in related industry

Induced Impacts

- Increased household or business income
- Increased local employment in other industries

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Potential Economic Benefits

- Small-scale community-based renewable energy projects may present opportunities for local economic benefits.

Direct Impacts

- Increased employment
- Local tax revenue
- Reduced household or business energy expenses

Research objective

- Identify and quantify potential economic benefits of small-scale renewable energy projects

Potential Research Methods

- Literature review, in-depth interviews with stakeholders and regional and national experts, economic impacts analysis

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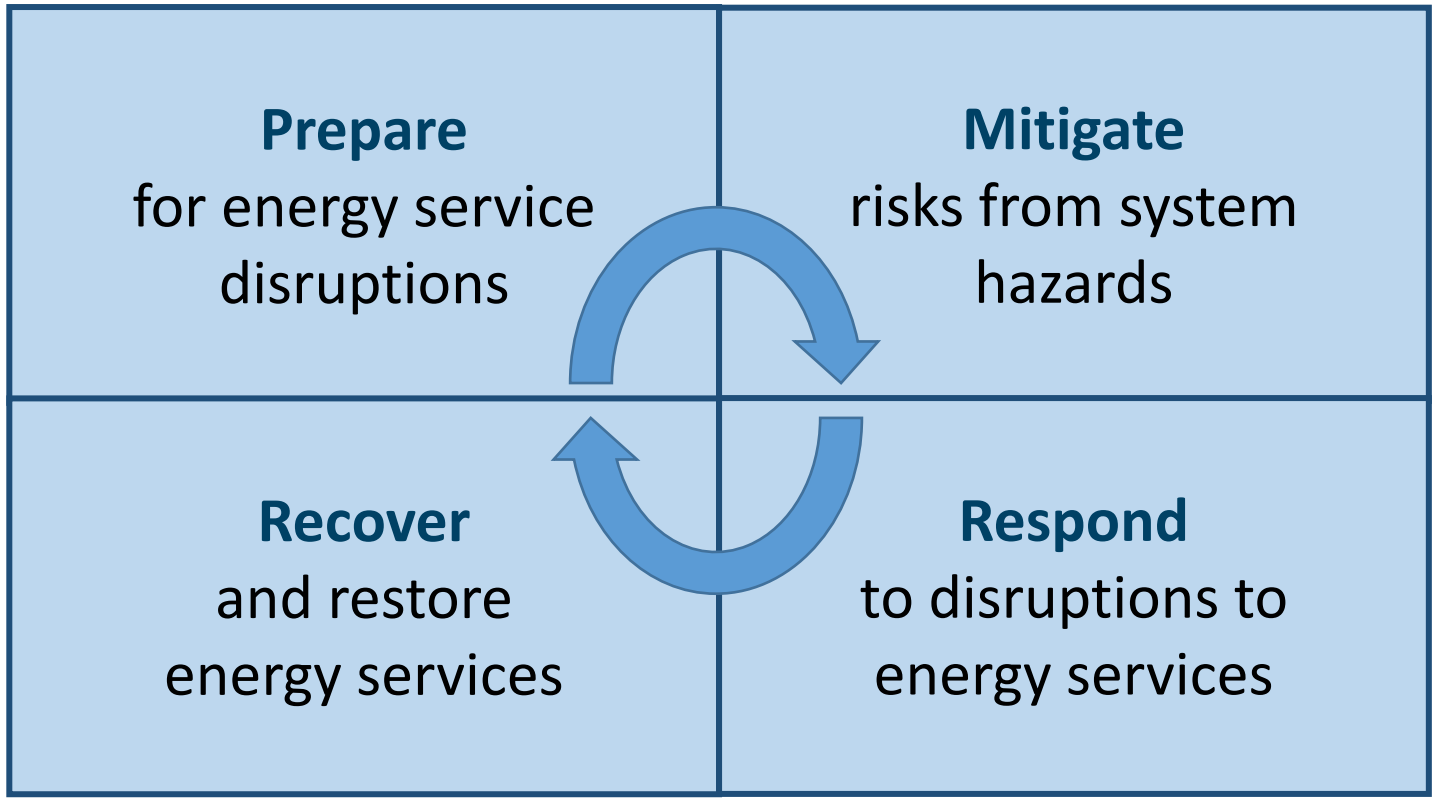
Potential Resilience Benefits



Small-scale community-based renewable energy projects have potential to:

- minimize impacts of acute disruption
- harden critical infrastructure and support emergency response
- provide emergency energy services

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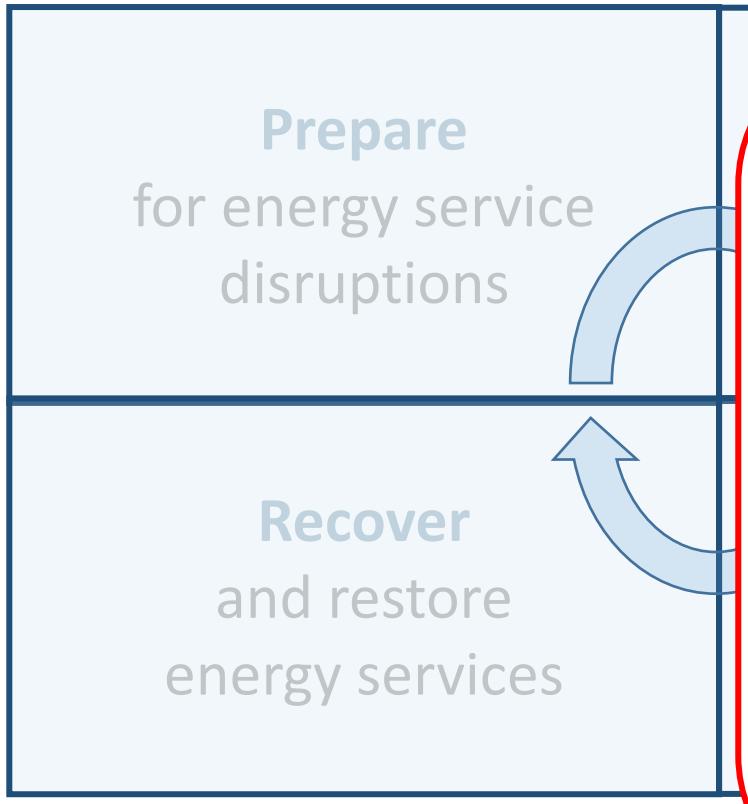
Potential Resilience Benefits

Small-scale community-based



Research objective

- Identify small-scale renewable energy projects resilience benefit categories and methods for quantification of benefits.

Potential Research Methods

- Literature review, stakeholder and expert consultation, value of resilience methodology.

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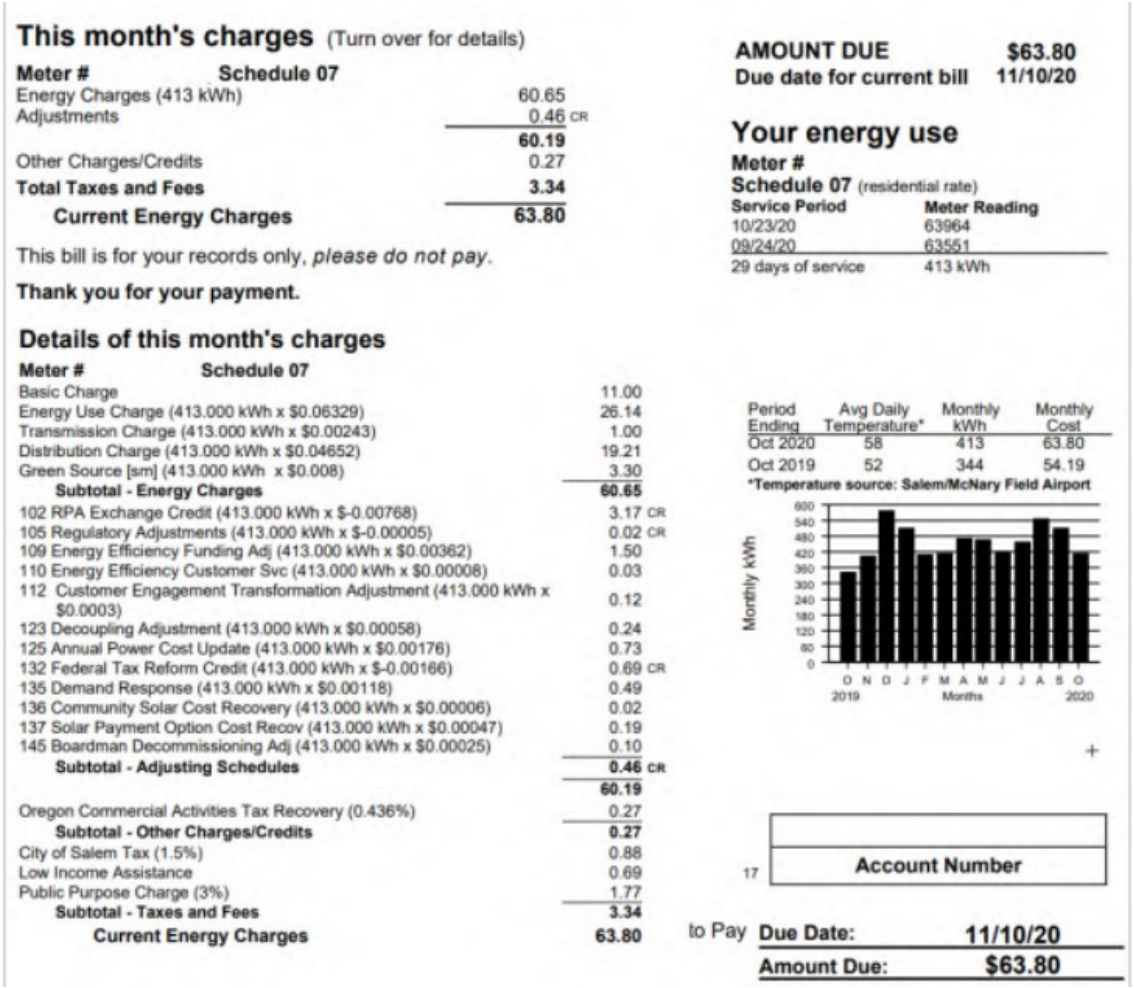
Potential Rate Impacts

Small-scale community-based renewable energy projects have potential to increase or decrease retail electricity rates.



This month's charges (Turn over for details)

Meter # Schedule 07	
Energy Charges (413 kWh)	60.65
Adjustments	0.46 CR
	60.19
Other Charges/Credits	0.27
Total Taxes and Fees	**3.34**
Current Energy Charges	**63.80**

This bill is for your records only, *please do not pay*.

Thank you for your payment.

AMOUNT DUE **$63.80**
Due date for current bill **11/10/20**

Your energy use

Meter #
Schedule 07 (residential rate)

Service Period	Meter Reading
10/23/20	63964
09/24/20	63551
29 days of service	413 kWh

Details of this month's charges

Meter # Schedule 07	
Basic Charge	11.00
Energy Use Charge (413.000 kWh x $0.06329)	26.14
Transmission Charge (413.000 kWh x $0.00243)	1.00
Distribution Charge (413.000 kWh x $0.04652)	19.21
Green Source [sm] (413.000 kWh x $0.008)	3.30
Subtotal - Energy Charges	**60.65**
102 RPA Exchange Credit (413.000 kWh x $-0.00768)	3.17 CR
105 Regulatory Adjustments (413.000 kWh x $-0.00005)	0.02 CR
109 Energy Efficiency Funding Adj (413.000 kWh x $0.00362)	1.50
110 Energy Efficiency Customer Svc (413.000 kWh x $0.00008)	0.03
112 Customer Engagement Transformation Adjustment (413.000 kWh x $0.0003)	0.12
123 Decoupling Adjustment (413.000 kWh x $0.00058)	0.24
125 Annual Power Cost Update (413.000 kWh x $0.00176)	0.73
132 Federal Tax Reform Credit (413.000 kWh x $-0.00166)	0.69 CR
135 Demand Response (413.000 kWh x $0.00118)	0.49
136 Community Solar Cost Recovery (413.000 kWh x $0.00006)	0.02
137 Solar Payment Option Cost Recov (413.000 kWh x $0.00047)	0.19
145 Boardman Decommissioning Adj (413.000 kWh x $0.00025)	0.10
Subtotal - Adjusting Schedules	**0.46 CR**
	60.19
Oregon Commercial Activities Tax Recovery (0.436%)	0.27
Subtotal - Other Charges/Credits	**0.27**
City of Salem Tax (1.5%)	0.88
Low Income Assistance	0.69
Public Purpose Charge (3%)	1.77
Subtotal - Taxes and Fees	**3.34**
Current Energy Charges	**63.80**

Period Ending	Avg Daily Temperature*	Monthly kWh	Monthly Cost
Oct 2020	58	413	63.80
Oct 2019	52	344	54.19

*Temperature source: Salem/McNary Field Airport

17 Account Number

to Pay **Due Date:** **11/10/20**
Amount Due: **$63.80**

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Potential Rate Impacts

Small-scale comm
renewable energy
potential to increa
retail electricity ra

Research objective

- Assess rate impacts of small-scale renewable energy projects at different scales of deployment.

Possible Research Methods

- Literature review, expert and stakeholder consultation, rate impact measure test scenarios

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Final questions and comments about the study?

Trillium Lake, Mt. Hood

Thank you!

For questions or more information:

John Cornwell
Senior Energy Policy Analyst
John.Cornwell@energy.Oregon.gov