

Energy Resilience & Microgrid Strategies for Oregon

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House Committee on Climate, Energy, and Environment

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SUSTAINABLE NORTHWEST



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MISSION

Natural resource solutions that work for people and nature.

OUR FOCUS

Sustainable Northwest brings entrepreneurial solutions to natural resources challenges to keep lands healthy and provide economic and community benefits. We believe a healthy economy, environment, and community are indivisible, and that all are strengthened by wise partnerships, policies, and investments.

Making Energy Work Network

A statewide network of over 550 municipalities, nonprofits, energy developers, farmers, ranchers, and state agencies working to advance community energy projects, programs, and policies.

- Quarterly Webinars
- Annual Fall Energy Symposiums
- Workshop Facilitation
- Project Development Assistance
- Funding and Information-Sharing
- Monthly Newsletters
- Policy Advocacy Informed by Community Partners across Oregon





Community Energy Resilience (*ODOE definition*)

"The ability of a specific community to maintain the availability of energy needed to support the provision of energy-dependent critical public services to the community following non-routine disruptions of severe impact or duration to the state's broader energy systems."

Why Energy Resilience?

Increasing severity and frequency of grid disruptions caused by natural disasters.

- Wildfire
- Extreme weather events
- Earthquake
- Tsunami and Flooding
- Drought



PB

Mar 7, 2019 | When Disaster Struck, This Tiny Oregon Town Was Out On Its Own

"...it will take millions of dollars to repair the sewer and water systems for this town [Elkton] of 200 people. And the local utility company, Douglas Electric Cooperative, is looking at about \$6 million in damages. Nine days after the storm, about 4,600 of its customers didn't have electricity."

'Everybody's run out of food':

"Oakridge residents without power for 3 days after massive snowstorm. The only road into town is still not fully open due to dangerous conditions."

- KGW, February 27th, 2019



Community Energy Resilience Solutions

- County energy resilience planning
- On-site energy generation paired with backup (i.e. solar + storage on a facility) on a resilience hub
- Microgrids: "A group of interconnected loads and distributed energy resources within clearly defined electrical boundaries that acts as a single controllable entity with respect to the grid. A microgrid can connect and disconnect from the grid to enable it to operate in both connected or island mode." (U.S. DOE definition)





2023 Session Recap

- Grid resilience strategies
- Microgrid development
- County Resilience Planning Grants (ODOE)
- Oregon State Energy Strategy





House Bill 2066



House Bill 2066 was drafted in direct response to the needs of community partners and clean energy project developers across the state. It strives to:

- Direct the Oregon Public Utilities Commission to conduct an investigation to determine the benefits and constraints of microgrid development;
- 2. Establish clarity around who can own and operate community-led microgrids with forward-thinking interconnection standards and requirements; and,
- 3. Create compensatory mechanisms that capture the true value of microgrids and their ability to make our grid more reliable.



Questions?



House Bill 2064



Enable communities to provide power to critical infrastructure including schools, hospitals, communications, and utility services during a grid disruption;

AND A CAR 2

- Enhance energy resilience protocols to allow microgrids to operate independently or in coordination with the grid during both normal and emergency conditions;
- Designate microgrid zones based on geographical boundaries and existing electric services infrastructure; and,
- 4. Shed light on costs associated with designing, constructing, and maintaining a microgrid.



Questions?



House Bill 2065



- Allow communities to contract with a licensed third party consultant to conduct a study or engineering evaluation, subject to public utility reasonable review and approval;
- Work with utilities as technical collaborators to add capacity and expedite the review process; and,
- Require studies or engineering evaluations to receive a professional stamp of approval in order to interconnect a community energy project with the public utility transmission or distribution system.



Questions?

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