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RESEARCH
PARTNERSHIP

Net-Zero Northwest Offshore Wind Impacts

January 2024

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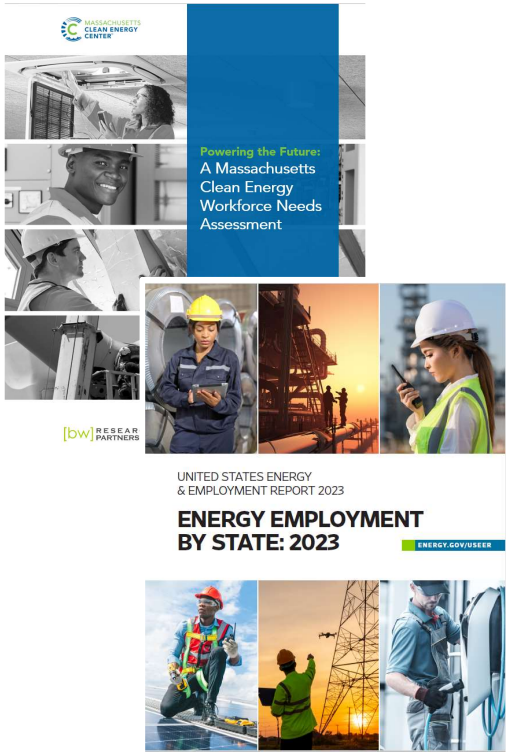
About Us

BW Research is a full-service consulting and research firm specializing in economic and workforce development research for public and private entities

BW Research has delivered comprehensive clean energy economy and workforce studies across nearly two dozen states

BW Research has provided strategic advising for several offshore wind developers during their bidding processes, calculating economic benefits, conducting workforce and supply chain analyses, and implementing community engagement strategies



Project Overview

Renewable Northwest contracted Evolved Energy Research (EER) to develop decarbonization scenarios across the Northwest Region, Oregon, Washington, Montana, and Idaho, based on reaching net-zero emissions by 2050

EER developed three capacity scenarios for Oregon offshore wind: the development of 1 GW of offshore wind capacity by 2035 (Core Scenario), 3 GW by 2030 (3GW Scenario), and 10 GW by 2050 (OR10 Scenario)

BW Research used total capacity by scenario as input into the jobs model to develop estimates for employment in the Northwest Region supporting offshore wind development in Oregon

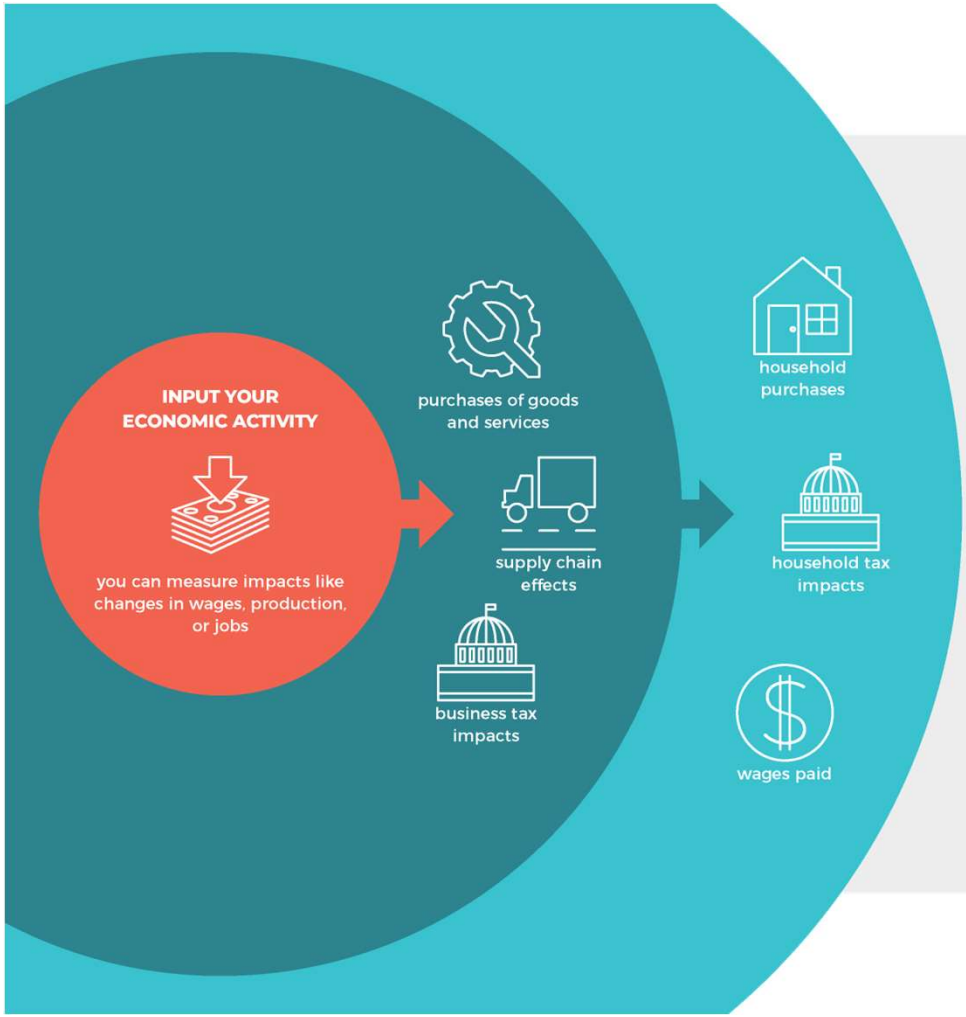
The Study Outputs

Job numbers include full-time direct, indirect, and induced employment in the offshore wind sub-sector in the Northwest Region (including Oregon and Washington) between 2021 and 2050

Note
Job numbers are the result of model assumptions made in early 2023 based on information available at that time. With new information, some job numbers may not be feasible. Job numbers presented are potential jobs that may be created.

Jobs are categorized into five industry groups:

- Construction
- Professional services
- Manufacturing
- Other supply chain
  (including wholesale trade, transportation & distribution, and utilities)
- Induced



WHAT IT SHOWS YOU

DIRECT EFFECTS

These are the initial changes that result from your economic activity. The IMPLAN model will display how the region will economically respond to these initial changes.

INDIRECT EFFECTS

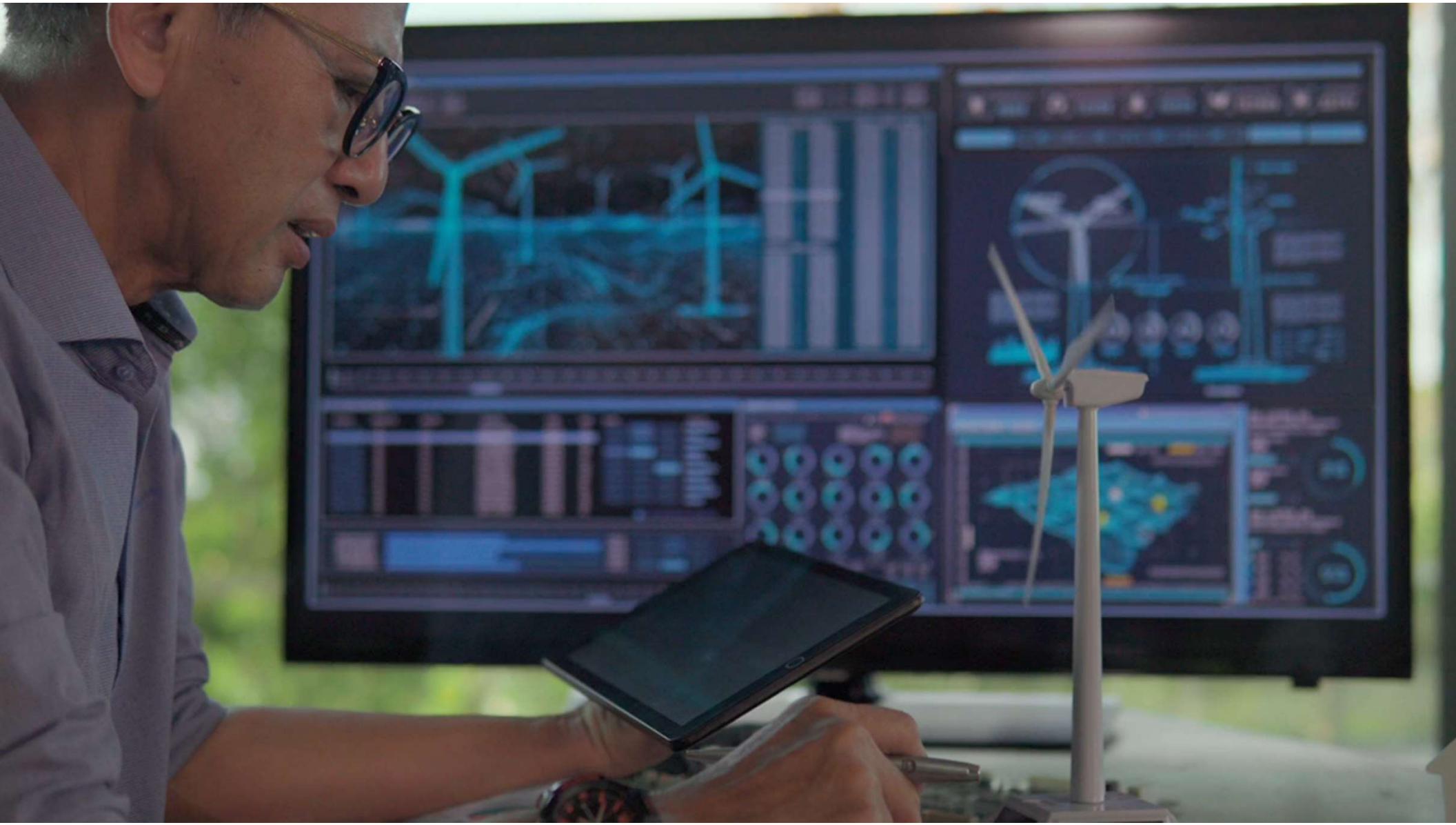
These are the impact of local industries buying goods and services from other local industries as a result of your influence in the economy.

INDUCED EFFECTS

The response by your economy to an initial change that occurs through spending of income received by wage earners.

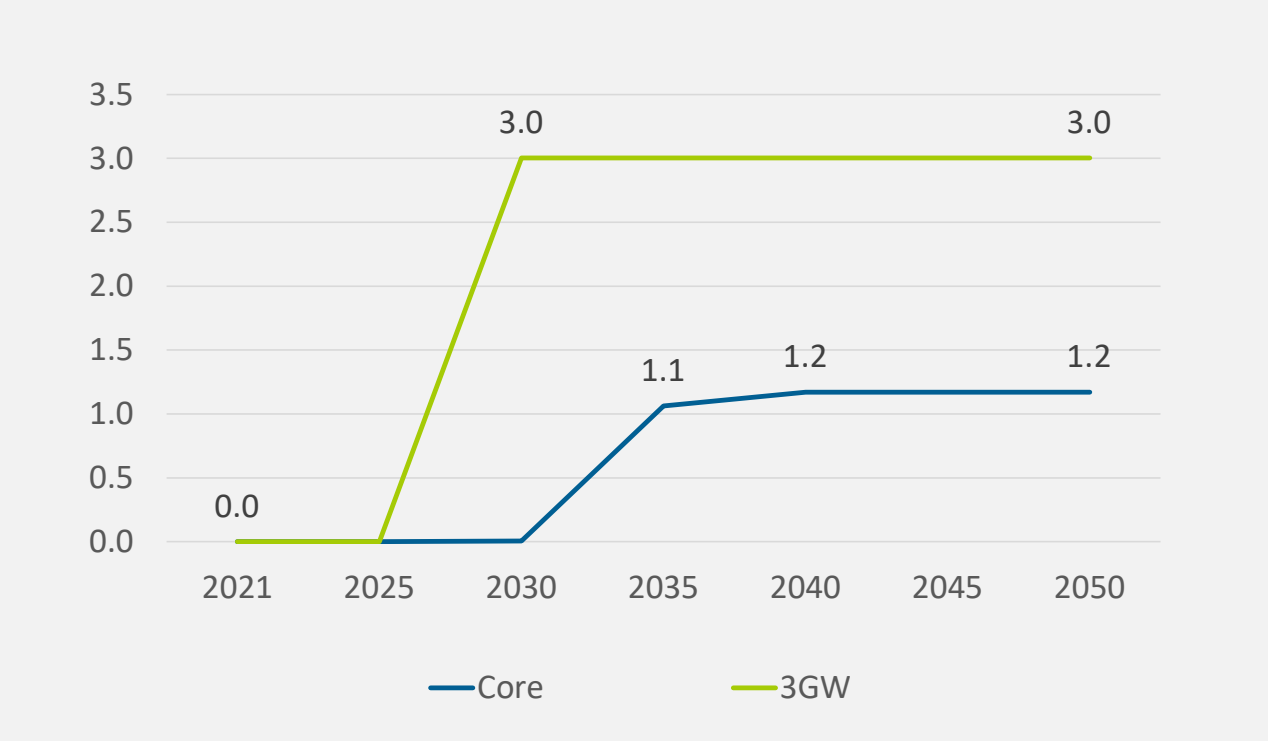
IMPLAN

Offshore Wind Job Creation

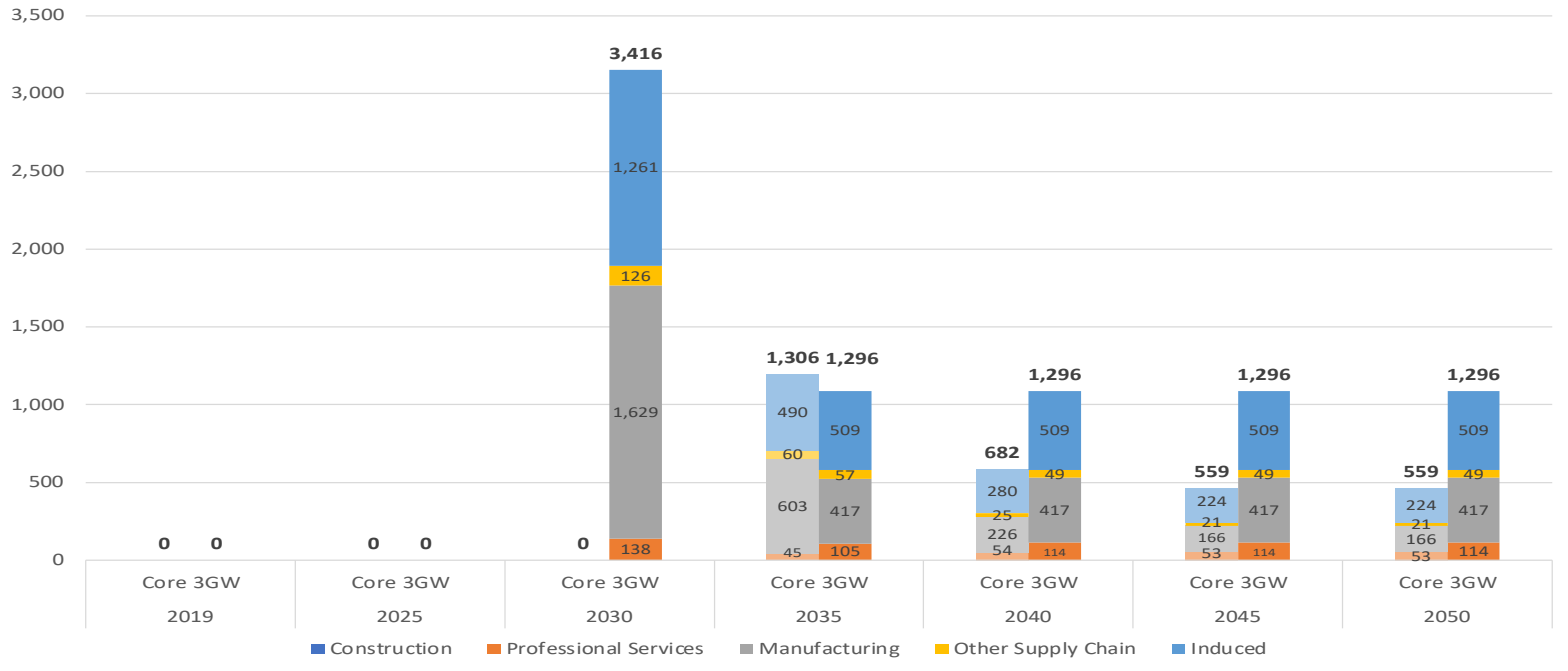


Total Region Installed Capacity (GW) Timeline

All capacity installed in Oregon



Overall Key Findings



Direct Turbine Employment

Assembly & Installation of OSW Farms

Working on the Initial Assembly and Installation of OSW Turbines

In 1GW scenario 130 short-term jobs (5 years or less)

In 3GW scenario 320 short-term jobs (5 years or less)

In 10GW scenario
Between 250 and 650 long-term jobs
(10 years, staggered installation)

These jobs are inclusive of both integration port and on-sea located activities – will require port infrastructure development

Operations Phase (Long-Term)

Jobs Doing Direct Repair & Maintenance for the Lifetime of the Turbines

150 jobs for 1GW
320 jobs for 3GW
1,200 jobs for 10GW
of OSW capacity

Workers will likely be local to the coast

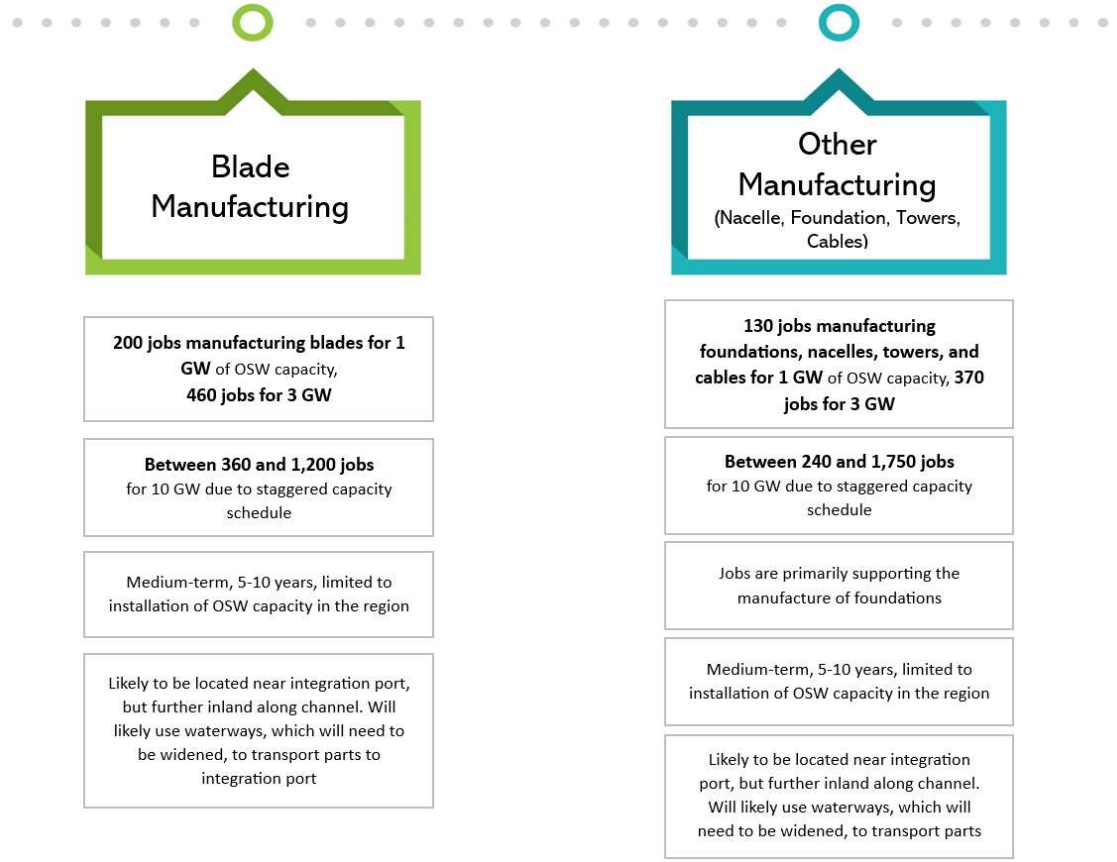
Would require port infrastructure development

Jobs Supporting Component Supply & Support Services

190 jobs for 1GW
470 jobs for 3GW
1,900 jobs for 10GW
of OSW capacity

Would require port-adjacent infrastructure development

Supply Chain Employment



Additional Employment Considerations

Coos Bay Port Infrastructure Development

Potential for **1,500 short-term jobs (3 years)** supporting ~500 induced jobs

Includes development of 2 heavy-lift berths, 1 commissioning berth, and an 80-acre storage yard

To support implementation of **250-750MW of OSW capacity per year**

Water requirements:
450ft width, 45 ft depth

The Coos Bay navigation channels would need to be widened to meet these requirements

Induced Jobs

Jobs supported by OSW workers spending their earnings in the local economy – range from about

250 – 600 jobs for 1 GW capacity, 500 – 1,200 jobs for 3 GW, and **900 – 3,900 jobs for 10 GW** depending on project phase

Induced jobs supported by O&M exist for the lifetime of the wind turbines, while induced jobs supported by construction or manufacturing would exist during those active years

Questions and
Discussion

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