

OFFSHORE WIND PORT INFRASTRUCTURE NEEDS

As offshore wind energy develops in the United States, port facilities will become strategic hubs if they meet specific requirements of the offshore wind industry. Today's ports generally require additional investment in heavy-duty wharves, lay-down areas, manufacturing facilities, dredging, and other improvements before they can serve as marshalling ports for offshore wind projects. Although states have already committed more than \$692 million in port infrastructure and offshore wind developers have committed over \$729.5 million in port infrastructure and \$280 million in U.S. manufacturing facilities nationwide, additional funds are needed. Private and state funds could be leveraged with federal programs such as the Maritime Administration's Port Improvement Development Program, the Department of Transportation's Better Utilizing Investments to Leverage Development (BUILD) Grant Program, and the Water Resources Development Act.

For example, the Port of New Bedford, MA leveraged federal, state, and private funding to build infrastructure for offshore wind staging areas. In 2018, the Department of Transportation awarded the Port a \$15.4 million BUILD grant to build areas for offshore wind staging, to create more room for fishing and other commercial vessels, and to remove contaminated materials. Industry, state, and federal funds are needed for port infrastructure to advance the full deployment of offshore wind.

IDENTIFIED NEEDS

Heavy-Duty Wharves

Wharves used for offshore wind construction must be made of materials such as iron or concrete and be capable of withstanding the weight of turbine components, such as a stationary tower rack holding at least 4 completed towers, each weighing around 750 tons.

Manufacturing Facilities

As offshore wind turbines increase in generating capacity to produce more megawatts, the turbine components become larger. Manufacturing facilities near marshalling areas are needed to ensure efficient transportation of parts and assembly.

Lay-Down Areas

Offshore wind farms involve large, heavy components, including turbine blades, foundations, and nacelles, which together can weigh over 2,800 tons. These components require areas for staging and assembly that are capable of withstanding their weight and accommodating blades that are longer than a football field.

Dredging

Constructing offshore wind turbines requires a variety of vessels. Dredging will be necessary in some ports along the east and west coast to ensure port access.

Increased federal funding for port infrastructure development is important for sufficient port capacity to meet state offshore wind goals.

Port Improvement Development Program (PIDP)
The Maritime Administration's PIDP supports efforts to improve port and freight infrastructure.

Better Utilizing Investments to Leverage Development (BUILD)
The Department of Transportation's BUILD Grant program invests in road, rail, transit, and port projects.

Water Resources Development Act (WRDA)
Authorizes water resources studies and projects such as dredging.

