Press Release

The National Offshore Wind Research and Development Consortium is pleased to announce the publication of a report focused on the U.S. offshore wind supply chain. Published today, “The Demand for a Domestic Offshore Wind Energy Supply Chain” provides a high-level assessment of the demand for deployment, workforce, ports, vessels, and components required to reach the national offshore wind target of 30 gigawatts (GW) by 2030.

This report estimates that over 2,100 wind turbines and foundations, 11,000 kilometers (or 6,800 miles) of cable, 5-6 wind turbine installation vessels, 10 feeder barges, 4 cable lay vessels, and an average annual workforce of between 12,300 and 49,000 full-time equivalents will be needed to achieve this capacity. With international supply chains stretched thin, there is a direct need to develop a domestic supply chain to meet the national and state offshore wind targets. The domestic supply chain needs to address challenges posed by constrained port infrastructure, a shortage of available installation vessels, and limited domestic manufacturing capabilities for critical-path components. Developing this supply chain represents a significant and achievable opportunity to develop a new domestic industry that will deliver clean energy, manufacturing capabilities, and job growth to the United States. The report can be found here.

This project is a partnership among the National Renewable Energy Laboratory (NREL), the Business Network for Offshore Wind, DNV, the Maryland Energy Administration (MEA), the New York State Energy Research and Development Authority (NYSERDA), and the U.S. Department of Energy (DOE).

“Understanding the demand for resources that are needed to reach the 30 GW target can help the industry strategically plan how to develop a domestic supply chain,” said Matt Shields, senior offshore wind analyst at NREL. “We will be able to build off of the critical needs that we identify in this report to characterize realistic pathways and enabling actions that can help the United States achieve both its offshore wind deployment targets and its objectives to create a sustainable domestic industry.”

“This collaborative study among DOE, NREL, states, and wind industry partners shows that we have significant opportunities to scale the development of a nascent offshore wind industry in the United States and greatly expand domestic manufacturing,” said Principal Deputy Assistant Secretary for Energy Efficiency and Renewable Energy Kelly Speakes-Backman.

“The U.S. offshore wind industry has achieved significant milestones in the past year and has a promising future ahead. This report clearly shows that we can leverage existing U.S. businesses to build offshore wind along the country’s coastlines,” said Ross Gould, vice president of Supply Chain Development at the Business Network for Offshore Wind. “As a once-in-a-generation opportunity, offshore wind can help address energy security and the effects of climate change as well as create tens of thousands of well-paying jobs. Our findings identify a wide range of subcomponents, assemblies, parts, and raw materials required for an offshore wind project,

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representing tremendous potential for existing businesses to leverage their capabilities and expand into the growing offshore wind market.”

“Maryland is pleased to support this study, which identifies vessel, port, and project component demand for the domestic offshore wind supply chain, which has the potential to grow to over 30 GW in U.S. territorial waters by 2030,” said Mary Beth Tung, Ph.D., Esq., Director of the Maryland Energy Administration. “This report will help Maryland grow its offshore wind supply chain and support a regional supply chain by identifying opportunities for early investment in the State. We look forward to understanding the U.S. supply chain gaps and readiness detailed in the follow-up report this summer.”

Doreen M. Harris, President and CEO of NYSERDA, said, “Offshore wind is poised to be a launch pad that will usher in the clean energy economy of the future in New York and the U.S., and growing the supply chain is a critical cornerstone of that work. This report is further evidence of what we’ve known to be true – that continuing to prioritize the expansion of port infrastructure and workforce development opportunities will deliver family-sustaining jobs and significant private sector investment, allowing us to realize the full benefits of the offshore wind industry.”

This Summer (2022), a follow-up report will be published that summarizes the existing gaps and readiness of the domestic supply chain for suppliers based on a quantitative analysis that uses the Network’s updated Supply Chain Registry to capture the current capabilities of the existing U.S. supply chain. The report will also demonstrate how a domestic supply chain can impact the levelized cost of energy of offshore wind and regional-level economic benefits relative to a supply chain that relies on imports. The final report will be released by the end of 2022.

The National Offshore Wind Research and Development Consortium, established in 2018, is a not-for-profit public-private partnership focused on advancing offshore wind technology in the United States through high-impact research projects and cost-effective and responsible development to maximize economic benefits. Funding for the Consortium comes from the U.S. Department of Energy and the New York State Energy Research and Development Authority (NYSERDA), with each providing $20.5 million, as well as contributions from the Commonwealths of Virginia and Massachusetts and the States of Maryland, Maine, and New Jersey, bringing total investment to approximately $47 million. For more information, please visit nationaloffshorewind.org.

The Maryland Energy Administration (MEA) advises the governor and general assembly on all energy matters, promoting affordable, reliable and cleaner energy. MEA develops and administers programs and policy to support and expand all sectors of the state’s economy while benefiting all Marylanders and implementing legislation. Please visit Energy.Maryland.gov and follow them on LinkedIn, Facebook, and Twitter for more information.