

Offshore Wind in North Carolina

A once-in-a-generation opportunity to expand business for North Carolina companies while attracting significant new investments



North Carolina must pursue offshore wind development to capture its share of this industry fully. Offshore wind will bring an estimated \$70 billion¹ in economic investment to the U.S. as we go from 42-megawatts of installed capacity to over 30,000-megawatts in the next decade.

North Carolina Voters Support Offshore Wind²

- ◇ Over seven in 10 (71%) support developing offshore wind farms, in addition to strong support for laws and regulations to allow for more offshore wind farms in the state (72%).
- ◇ 71% feel offshore wind farms would positively impact North Carolina's energy independence, the state's economy (69%), and air quality (69%). **North Carolinians recognize both the economic and environmental benefits of offshore wind.**
- ◇ The overwhelming majority of North Carolina voters (89%) say renewable energy is important to the state's future, and 77% agree the primary goal of North Carolina's energy policy should be achieving 100% clean energy. **Offshore wind will be key to achieving this goal.**

Economic Potential

An analysis³ utilizing the National Renewable Energy Lab's economic modeling tool for a 2,400-megawatt offshore wind farm off the coast of North Carolina in 2030 demonstrates the significant economic opportunity this industry presents:

10,447

FTE JOBS

During
Construction

723

FTE JOBS

During
Operations

\$2.8

BILLION

in GDP during
Construction

\$4.5

BILLION

in GDP annually
during operations

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STATE GOALS

Eastern seaboard states have identified this massive economic opportunity and are already setting aggressive goals to help secure the demand necessary to attract the manufacturing supply chain.



New York
9,000 MW



Massachusetts
5,600 MW



New Jersey
7,500 MW



Rhode Island
400 MW



Connecticut
2,000 MW



Maryland
1,400 MW



Virginia
5,200 MW

¹ *Supply Chain Contracting Forecast for U.S. Offshore Wind Power*, Special Initiative for Offshore Wind, 2019

² *SEWC-commissioned polling*, conducted by Nexus Polling, the Yale Program on Climate Change Communication, and the George Mason University Center for Climate Change Communication between Nov. 12-16, 2020

³ SEWC analysis utilizing NREL's publicly available JEDI modeling tool, assuming 25% in-state blade manufacturing

North Carolina's Offshore Wind Progress

North Carolina Congressional Delegation Encourages Offshore Wind Development

A bipartisan coalition of NC's congressional delegation, led by Representatives David Rouzer (NC-07) and Deborah Ross (NC-02), sent a letter to BOEM Director Amanda Lefton in April 2021 expressing support for BOEM's advancement of lease sales for existing wind energy areas (WEAs), as well as the identification of new WEAs. Lefton responded the following month, signaling the Bureau's intent to move forward.

Offshore Wind Supply Chain & Infrastructure Study

N.C. Department of Commerce contracted with BVG Associates, NC State University, and other partners, to conduct a robust assessment of the state's existing manufacturing & infrastructure strengths and identify growth opportunities to support offshore wind in NC.

SMART-POWER Memorandum of Understanding (MOU)

In Oct. 2020, North Carolina entered into a regional collaboration with Virginia and Maryland to promote, develop, and expand offshore wind energy generation, the manufacturing and services supply chain, and workforce preparation efforts.

Avangrid Renewables Kitty Hawk Offshore Wind Project

Avangrid Renewables submitted a Construction and Operations Plan (COP) for the Kitty Hawk Offshore Wind project off the coast of the Outer Banks to the Bureau of Ocean Energy Management (BOEM) in December 2020. The COP anticipates more than \$2 billion in economic impact⁴ and the creation of nearly 800 jobs in Virginia and North Carolina.

North Carolina Transmission Planning Collaborative (NCTPC)

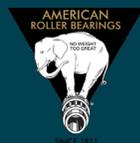
The NCTPC is currently finalizing an offshore wind transmission study, requested by SEWC with the support of the state and Duke Energy, to understand the needs of the grid to incorporate up to 15,000-megawatts of offshore wind off the coast of North Carolina.

Duke Energy's Integrated Resource Plans (IRP)

For the first time, Duke Energy included offshore wind in multiple planning scenarios in the companies' 2020 IRPs, signaling the importance of offshore wind in a carbon-free generating portfolio.

North Carolina's Advantage

- ◇ Highest offshore wind resource potential⁵ on the East Coast, and 5th highest in the country.
- ◇ Largest manufacturing workforce in the Southeast⁶
- ◇ World-class university and community college system
- ◇ Two deep-water ports with robust rail, road and air infrastructure
- ◇ 55+ existing land-based wind supply chain companies⁷



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⁴ [Avangrid Renewables' Kitty Hawks Offshore Wind Economic Impact Study](#), December 2020

⁵ [Assessment of Offshore Wind Energy Resources for the United States](#), National Renewable Energy Lab (NREL), 2010

⁶ [National Association of Manufacturers](#), 2018

⁷ [SEWC Supply Chain Map](#)