

# Offshore Wind in North Carolina

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



North Carolina must pursue offshore wind development to fully capture its share of this industry; offshore wind will bring an estimated \$70 billion in economic investment to the U.S. as we go from 42MW of installed capacity to over 25,000MW in the next decade.



## North Carolina Voters Support Offshore Wind

- 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 have a positive impact on 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 analysis 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.

**10,477**

FTE JOBS

During construction

**\$2.8**

BILLION

Local economic output during construction

**723**

FTE JOBS

During operations

**\$4.5**

BILLION

Local economic output during operations

## 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

3,200 MW



NEW JERSEY

7,500 MW



RHODE ISLAND

400 MW



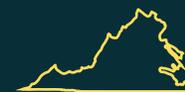
CONNECTICUT

2,000 MW



MARYLAND

1,400 MW



VIRGINIA

5,200 MW

<sup>1</sup> Supply Chain Contracting Forecast for U.S. Offshore Wind Power, Special Initiative for Offshore Wind, March 2019

<sup>2</sup> SEWC-commissioned pollin, 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

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

## North Carolina's Offshore Wind Progress

### North Carolina Clean Energy Plan

Through Governor Roy Cooper's Executive Order 80 signed in October 2018, the N.C. Department of Environmental Quality drafted the North Carolina Clean Energy Plan (CEP) which included several offshore wind recommendations to jumpstart the state's efforts in pursuing offshore wind industry.

### Offshore Wind Supply Chain & Infrastructure Study

Per recommendation from the CEP, the 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 and infrastructure strengths and identify growth opportunities to support offshore wind in North Carolina. Findings will be published in January 2021.

### SMART-POWER Memorandum of Understanding (MOU)

In October 2020, North Carolina entered into a regional collaboration with Virginia and Maryland to cooperatively promote, develop, and expand offshore wind energy generation, the manufacturing and services supply chain, as well as 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 impact and the creation of nearly 800 jobs in Virginia and North Carolina.

### North Carolina Transmission Planning Collaborative (NCTPC)

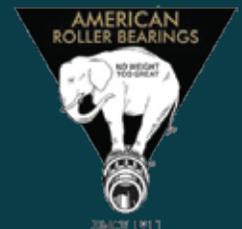
The NCTPC is currently finalizing an offshore wind transmission study, requested by SEWC with the support of the state and Duke Energy, to understand the needs of the grid to incorporate up to 15,000-megawatts of offshore wind off the coast of North Carolina. Findings to be published by March 2021.

### 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

- 5th highest offshore wind resource potential in the country
- Largest manufacturing workforce in the Southeast
- 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 companies



<sup>4</sup> Avangrid Renewables' Kitty Hawks Offshore Wind Economic Impact Study, December 2020

<sup>5</sup> Assessment of Offshore Wind Energy Resources for the United States, National Renewable Energy Lab (NREL), 2010

<sup>6</sup> SEWC Supply Chain Map

<sup>7</sup> National Association of Manufacturers, 2018