



**SOUTHEASTERN**  
WIND COALITION

# OFFSHORE WIND IN NORTH CAROLINA

A ONCE-IN-A-GENERATION OPPORTUNITY TO EXPAND BUSINESS FOR NORTH CAROLINA COMPANIES WHILE ATTRACTING SIGNIFICANT NEW INVESTMENTS



## WHY OFFSHORE WIND?

North Carolina must pursue offshore wind development to capture its share of this industry. The offshore wind industry will bring an estimated \$109 billion (1) 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.

## NC 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%) (2).
- 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 (2).
- 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 (2).

## ECONOMIC POTENTIAL

A study conducted by SEWC and our partners at Environmental Entrepreneurs (E2) (3) analyzed the impacts of a hypothetical 2.8 GW offshore wind project off North Carolina’s coast and found:

- \$4.6 Billion Net Economic Impact
- 10,000 New Jobs for Three Years During Construction
- 3.5 Tons of CO2 Reduced Annually
- 900 New Jobs Created During Operation & Maintenance

## 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**  
1000 MW



**CONNECTICUT**  
2,000 MW



**MARYLAND**  
1,400 MW



**VIRGINIA**  
5,200 MW

1. Supply Chain Contracting Forecast for U.S. Offshore Wind Power –The Updated and Expanded 2021 Edition, Special Initiative for Offshore Wind, 2020  
 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 and E2 analysis, North Carolina Cost Benefit Analysis, 2022



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## STATUS OF OFFSHORE WIND

### KITTY HAWK WIND ENERGY AREA

- 122,405 acre WEA approximately 27 miles from Kitty Hawk, NC
- Leased to Avangrid Renewables for \$9,066,650 in 2017
- Production up to 3.5GW, enough energy to power approximately 700,000 homes (4)
- Environmental Impact Statement (EIS) in progress. Construction to begin in 2026

### WILMINGTON EAST WIND ENERGY AREA

- 110,091 acre WEA approximately 20 miles from Bald Head Island, NC in the Carolina Long Bay
- Lease Area OCS-A 0545 was sold to TotalEnergies for \$160 million in May 2022, and Lease Area OCS-A 0546 was sold to Duke Energy for \$155 million in May 2022 (5)
- Combined production capacity of approx. 1.35GW, enough energy to power up to 500,000 homes (6). Construction projected to begin in 2030.

## PROJECT IMPACTS & DECOMMISSIONING

### ENVIRONMENTAL IMPACTS

Responsibly sited offshore wind experiences widespread support from the environmental community, including the National Wildlife Federation, the Sierra Club, the Environmental Defense Fund, and the Audubon Society

### SPECIES INTERACTIONS

The Wilmington East Wind Energy Area and the Kitty Hawk Wind Energy Area were both chosen due to the minimal impact on critically endangered and migratory species, including the North Atlantic Right Whale and sea turtles (7)

### NOISE MITIGATION

There are several technologies that exist that reduce noise generated during installation (quiet foundations or noise attenuation technology can significantly reduce pile-driving noise)

### DECOMMISSIONING/ RECYCLING

85%-90% of a wind turbine can be recycled. Many components retain high economic value such as copper cables (8). Composites materials used in blades are the most challenging to recycle, but many manufacturers have committed to making turbines 100% recyclable by 2030

### FISHING

Commercial and recreational fishing are an integral part of the history, culture and economy of North Carolina. Offshore wind developers work collaboratively with federal and state agencies to ensure that fishing and associated marine habitats are effectively understood and considered throughout a project's regulatory process

## NORTH CAROLINA'S ADVANTAGE

Highest offshore wind resource potential on the East Coast, and 5th highest in the country.

Strong manufacturing workforce

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



4 Avangrid Renewables' Kitty Hawks Offshore Wind Economic Impact Study, December 2020  
5 <https://www.boem.gov/renewable-energy/state-activities/north-carolina-activities>  
6 <https://www.boem.gov/sites/default/files/documents/renewable-energy/Lease-Issuance-Wind-OCS-Activities-North-Carolina-Supplemental->

7 Draft EIS for Carolina Long Bay, 2021  
8 <https://renewablesassociation.ca/wp-content/uploads/2021/04/Recycling-Wind-Turbines-English-Web.pdf>