Offshore Wind:
Offering Significant Benefits for North Carolina

Findings from the North Carolina Offshore Wind Cost-Benefit Analysis

North Carolina has enacted ambitious climate pollution reduction goals—a 70% reduction by 2030 and carbon neutrality by 2050. As our state works to achieve these goals, it's critical that all available clean energy resources are taken into consideration, including the benefits offered above and beyond helping us reach our emission reduction targets.

Our Analysis of the impacts of a hypothetical 2.8 GW offshore wind project off North Carolina's coast found:[1]

$4.6 Billion
net economic impact, with $9.45 Billion in costs and $14.03 Billion in benefits

Over 10,000 Jobs
created during three-year construction

Over 900 Jobs
created during operations and maintenance

$8.4 Billion
in total monetized environmental benefits, with 3.5 Million tons of CO_2 (carbon dioxide) reduced annually

Additional Benefits

- **Grid Demand:** North Carolina's offshore wind potential would cover 465% of the state's total 2019 retail electricity sales, indicating the opportunity for offshore wind to meet increasing demand.[2]
- **Cost Declines:** Capital, operations, and maintenance costs for new offshore wind projects will decline 2.8% per year between 2020 and 2022, 2.1% per year between 2023 and 2027, and 1.5% between 2027 and 2028.[3]
- **Local Manufacturing:** 30GW of projected offshore wind development is anticipated to generate a $100 billion revenue opportunity for companies within the offshore wind supply chain through 2030.[4]
- **Land-Use and Permitting:** While other ocean uses—including wildlife habitat and migration patterns—must be taken into account throughout the siting, permitting, development, and operations processes, offshore wind does not share many of the land-use and permitting challenges that utility-scale solar and onshore wind are increasingly facing.
- **Electricity Market Stability:** Replacing fossil-generated electricity with offshore wind would protect North Carolina against fluctuations in the availability and price of imported fossil fuels, providing greater price stability and certainty for our electric rates.

The North Carolina Offshore Wind Cost-Benefit Analysis (NC OSW CBA) quantifies the anticipated costs and benefits of the development of 2.8GW of offshore wind along the North Carolina coast by 2030, in line with the offshore wind development goal established by Governor Cooper's Executive Order 80. The NC OSW CBA includes cost-benefit calculations for both a "base" scenario, which assumed a standard amount of local manufacturing/supply chain content, as well as a "high" scenario, which assumes 100% local content. Find the complete report and methodology here.

SOUTHEASTERN WIND COALITION

E2

1 All findings listed on this fact sheet are from the "high" local content scenario in the NC OSW CBA.
2 https://environmentamerica.org/sites/environment/files/reports/AME_Offshore-Wind-For-America_2021.pdf
3 Schnettler, J., & Segal, K. (2020, April)
4 https://cpb-us-w2.wpmucdn.com/sites.udel.edu/dist/e/10028/files/2021/10/SIOW-supply-chain-report-2021-update-FINAL-1.pdf

MARCH 2022 // E2FS: 22-03-A