

IN FOCUS

OFFSHORE ▸ CANADA

THE RISING TIDE OF OFFSHORE WIND: STRENGTHENING AMERICAN COMMUNITIES AND ECONOMIES

Transition pieces
for the Coastal
Virginia Offshore
Wind project
being unloaded
for staging at
Portsmouth
Marine Terminal.
(Courtesy:
Oceanic
Network)





As more projects begin operation and the supply chain expands, the economic and environmental benefits of offshore wind will reach even more communities across the nation.

By **STEPHANIE FRANCOEUR**

The offshore wind industry is rapidly transforming the American energy landscape, bringing substantial economic benefits and job opportunities to communities across the nation. This burgeoning sector is not only a beacon of clean energy but also a catalyst for economic revitalization, both in coastal and inland areas. As the industry continues to gain momentum, it is crucial to understand the multi-faceted impacts of offshore wind projects on local economies, job creation, and the broader energy market.

AN INDUSTRY IS COMING TO LIFE

The offshore wind industry in the United States is experiencing unprecedented growth, driven by significant investments and robust federal and state commitments. With four commercial-scale projects under construction, including Ørsted's Revolution Wind and Sunrise Wind, Dominion's Coastal Virginia Offshore Wind (CVOW), and Avangrid and Copenhagen Infrastructure Partners' Vineyard Wind 1, the industry is set to add 5 GW of clean energy to the grid in short order. This capacity is enough to power more than 1.75 million homes and businesses, marking a substantial increase in renewable energy generation.

These projects have created a resilient and expansive supply chain that spans more than 30 states. The broader offshore wind supply chain has already attracted \$25 billion in investments and created thousands of jobs. The federal government has approved an additional 9.6 GW of projects for construction, coupled with more projects under review and the development of new lease areas. These advancements ensure a steady pipeline of contract work and project development that will continue to drive economic growth and job creation.

ECONOMIC RIPPLE EFFECTS

The economic impact of the offshore wind industry extends far beyond the immediate construction and operation of wind farms. Investments in supply-chain infrastructure, such as new cable manufacturing facilities in Chesapeake, Virginia; and Baltimore, Maryland, are critical to reducing the country's reliance on the global energy market and low-



The ECO Edison at its christening at the Port of New Orleans. (Courtesy: Oceanic Network)

ering local-energy costs.

Ports and transmission systems are also seeing significant investments. Equinor's \$861 million South Brooklyn Marine Terminal will employ 1,000 construction workers, while California is investing \$4.6 billion in transmission infrastructure and is set to vote on \$475 million in port upgrades in addition to \$435 million already provided by the U.S. Department of Transportation's Maritime Administration. These developments are unlocking future growth and providing greater market certainty, essential for the long-term success of the industry.

STATE-LEVEL INITIATIVES AND MARKET DRIVERS

States are playing a pivotal role in driving the offshore wind market. New York, New Jersey, Maryland, and Delaware have made significant strides in finalizing contracts, opening new offtake award rounds, and passing legislation to expand goals and ease transmission constraints. These efforts are essential for maintaining public and political support, ensuring the industry can deliver power reliably and affordably while creating jobs.

A recent study from New England by Synapse Energy Economics found that building out 9 GW of offshore wind could save ratepayers \$600 million annually on their utility bills. Initiatives like Oceanic Network's U.S. Offshore Wind Jobs Tour are spotlighting the thousands of Americans working to build the industry, both near the coast and in supporting factories far inland.

SOUTH FORK WIND: PROOF OF OFFSHORE WIND'S POTENTIAL

The South Fork Wind project, the nation's first commercial-scale offshore wind farm, exemplifies the economic and environmental benefits of offshore wind. This 12-turbine project generates 132 MW of clean electricity, enough to power more than 70,000 homes. The project has sparked nearly \$1 billion in new investments and created at least 2,000 manufacturing and construction jobs. The supply chain for South Fork Wind stretches across 19 states, demonstrating the nationwide economic impact of a single offshore wind project.

South Fork is a testament to the collaborative efforts of local communities, labor unions, government, and business.



Fincantieri Bay Shipbuilding, a company building an SOV in Sturgeon Bay, Wisconsin, for the CVOW project. (Courtesy: Oceanic Network)

The project is not only delivering clean energy to the Long Island power grid but has also created numerous new job opportunities, from electricians and ironworkers to engineers and technicians. The involvement of local businesses such as Haugland Energy Group, Elecnor Hawkeye, and Roman Stone highlights the significant role of local enterprises in the offshore wind industry.

PORTS: THE BACKBONE OF OFFSHORE WIND

Ports are critical to the success of the offshore wind industry. They serve as hubs for the assembly, storage, and transportation of wind-turbine components. Investments in port infrastructure are essential for supporting the large-scale deployment of offshore wind farms. These investments are bringing jobs to the maritime sector. The New Jersey Wind Port, for example, is expected to sustain 1,500 jobs when fully complete, with manufacturing facilities adjacent to long-term marshalling and assembly operations. The Port of Davisville in Rhode Island is also positioning itself as a key hub for long-term operations and maintenance needs.

The role of ports extends beyond logistics. They are central to the local supply chain, providing essential services

such as storage, bunkering, and secondary steel assembly. Ports such as the Port of Providence (RI), New Bedford Marine Terminal (MA), and New London State Pier (CT) have become bustling centers of economic activity, supporting offshore wind development and creating jobs.

SHIPYARDS SEE SPIKE IN ACTIVITY

American shipyards are playing a vital role in building the vessels needed for offshore wind operations. The ECO Edison, built by Edison Chouest Offshore, is a testament to the capabilities of U.S. shipyards. This state-of-the-art vessel was constructed by more than 600 workers across nearly 1 million work hours, with components sourced from 34 states. The vessel will serve as a floating homebase for offshore wind technicians, supporting Ørsted's Northeast wind farms.

The construction of the ECO Edison and other offshore wind-dedicated vessels, such as Fincantieri Bay Shipbuilding's SOV being constructed in Sturgeon Bay, Wisconsin, highlights the significant investments being made in the U.S. maritime sector. These vessels are massive projects in and of themselves, with many costing hundreds of millions of dollars and taking years to build. The involvement of Amer-



ican unions and local workers in the construction of these vessels also underscores the importance of domestic labor in the offshore wind industry.

COMMUNITY AND ECONOMIC REVITALIZATION

The economic development brought by offshore wind is transforming communities. In New England, thousands of residents are employed in designing, manufacturing, transporting, installing, and maintaining offshore wind farms. Ports such as New London, Providence, Norfolk, and New Bedford have become hubs of economic activity, supporting local businesses and creating jobs. Senesco Marine, a shipyard in Rhode Island, is a prime example of this activity, having doubled its workforce since March 2022 due to offshore wind projects.

The economic benefits extend beyond direct employment. Companies such as ThayerMahan in Connecticut have seen significant growth, with 75 percent of their revenue coming from the offshore wind sector. The redevelopment of ports in New London and Davisville has created hundreds of jobs and will continue to support economic growth for decades.

THE IMPACT OF THE INFLATION REDUCTION ACT

The passage of the Inflation Reduction Act (IRA) in 2022 has been a game changer for the offshore wind industry in the United States. This landmark legislation includes several provisions that significantly bolster the development and expansion of offshore wind projects. The IRA has just celebrated its second anniversary, so it's worth analyzing the impact it's had on the offshore wind industry.

One of the key components of the IRA is the extension and enhancement of tax credits for renewable energy proj-

ects, including offshore wind. The act provides a 30 percent investment tax credit (ITC) for offshore wind projects that begin construction before 2026. This tax credit is crucial for reducing the upfront costs, making them more financially viable and attractive to investors.

The IRA also allocates \$100 million for the planning, modeling, and analysis of interregional and offshore wind electricity transmission. This funding is essential for developing the transmission infrastructure needed to connect offshore wind farms to the grid. By improving transmission planning and coordination, the IRA helps ensure the electricity generated by offshore wind farms can be efficiently delivered to consumers.

Further, the IRA supports state siting and permitting authorities by providing funding to streamline the review and approval process for offshore wind projects. This support helps reduce the time and complexity associated with obtaining the necessary permits, accelerating the development of offshore wind projects toward operation.

Overall, the Inflation Reduction Act has provided a significant boost to the offshore wind industry, driving investment, expanding development opportunities, and supporting the necessary infrastructure for long-term growth. The law's provisions are helping to create a more favorable environment for offshore wind projects, ensuring the industry can continue to advance while contributing to the nation's clean-energy goals.

CHALLENGES AND FUTURE PROSPECTS

Despite the significant progress, the offshore wind industry faces challenges. The need for consistent contracts and orders is crucial for maintaining job stability and driving investment. Decision-makers must prioritize projects that meet regional needs and expand the development pipeline to ensure long-term success.

The future of the offshore wind industry is promising, with continued support from federal and state governments. As more projects begin operation and the supply chain expands, the economic and environmental benefits of offshore wind will reach even more communities across the nation. The industry is poised to become a cornerstone of America's clean-energy economy, driving economic growth and job creation for years to come. ↴

ABOUT THE AUTHOR

Stephanie Francoeur is senior vice president of marketing and communications at Oceantic Network. She joined the Network in June 2024 to provide strategic and operational leadership for the organization's marketing and communications efforts, developing comprehensive strategies that help achieve the Network's business goals. Working closely with the leadership team to advance the Network's mission, visibility, and reputation, Francoeur's team manages all corporate communications functions and drives awareness of U.S. market and supply chain intelligence, products, and services for its members and the wider ocean renewables industries.