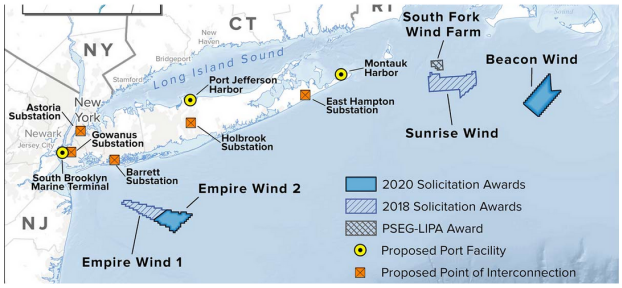
New York's Regional Offshore Wind Impacts : Long Island

New York's offshore wind developers, manufacturers, unions, port operators, neighborhood advocates, and state policymakers are determined and committed to put people and communities first, on and off the coast, working together, as partners to create opportunities that power our future.

New York, with the largest offshore wind pipeline in the United States, intends to build 9 gigawatts of offshore wind capacity by 2035, or enough to meet about 30 percent of the state's total electricity needs of millions of households.[i]



NYSERDA Map of Long Island New York State Offshore Wind Developments [iv]

Long Island

Long Island is leading New York's offshore wind industry, with a total of five wind farms scheduled for development off its coast. This includes the first operational wind farm now in development in New York, and the second in the nation, the South Fork Wind at 130 megawatts, off Montauk. The four other wind farms include, Sunrise Wind and Beacon Wind, both also off Montauk, and Empire Wind 1 and 2, off Jones Beach.

Long Island is on the front lines of climate change, with warming oceans impacting commercial and recreational fishing, rising sea levels and extreme weather events causing power outages. Energy, produced and sourced far away from Long Island consumers adds to the cost of utility bills, among the highest in the nation. All these challenges make Long Island an ideal region to be a center for New York's offshore wind industry.

Offshore Wind Projects

The South Fork Wind Farm was awarded a contract by the Long Island Power Authority (LIPA) in 2017 as the result of a competitive solicitation for new sources of cost-effective power to meet the South Fork's growing demand for electricity affordably. Costing an average residential customer on Long Island between $1.39 and $1.59 per month, the project was selected as part of a portfolio of options that also includes storage and energy efficiency systems.[iii]

The wind farm developed by a 50/50 partnership between Ørsted and Eversource, expected to be operational by the end of 2023 with 12 turbines and a state-of-the-art transmission system, will generate enough clean energy to power 70,000 average homes. It will deliver power to the local grid of the Town of East Hampton, and offsetting tons of emissions each year.

Sunrise Wind: Sunrise Wind will power nearly 600,000 homes and bring substantial economic development to the state. Located at least 30 miles east of Montauk Point, virtually unnoticeable to Long Island residents and beachgoers, it will have its planned interconnection point at the Holbrook and West-Bus substation in the town of Brookhaven within LIPA's service territory. A 50/50 partnership between Ørsted and Eversource, with support from Con Edison and the New York Power Authority, Sunrise Wind farm will be approximately 924 megawatts with the potential capacity to power nearly 600,000 homes and expected to be fully operational by 2025.

Empire Wind: Between the two Empire BWind projects, developer Equinor will provide generation capacity of 1,260 megawatts (MW) renewable offshore wind power. Empire Wind 2 will add to Equinor's commitment to provide New York with 816 MW of renewable power from Empire Wind 1. At its closest point, the two projects are located approximately 14 miles from Jones Beach State Park. Empire 1 will connect to New York's electricity grid at the Gowanus Substation in Brooklyn. Once established, both ports will have their operations and maintenance base in Sunset Park, Brooklyn. Empire 2 will connect to New York's electricity grid in Nassau County at the Barrett Substation in Oceanside on Long Island. Empire 1 will be operational by 2026 and Empire 2 by 2027.

Beacon Wind: Beacon Wind, located over 60 miles east of Montauk Point, will be one of the first offshore wind projects in the U.S. to utilize High Voltage Direct Current (HVDC) transmission technology. Along with Sunrise Wind, the Beacon project will connect to New York's electricity grid through the Astoria Substation in Queens. The project will establish an operations and maintenance base in Sunset Park, Brooklyn. At 1,230 megawatts and developed by Equinor, it is expected to be commercially operational by 2028. Beacon Wind is a 50-50 partnership between Equinor and bp, operated by Equinor.

Ports and Harbors on Long Island

Port Jefferson / East Setauket, Town of Brookhaven, Suffolk County

- Port Jefferson harbor will be the home port of the first-ever American-flagged Jones Act-qualified service operations vessel supporting Ørsted/Eversource's offshore wind portfolio projects.
- Operations center and warehouse facility located nearby.

Montauk Harbor, East End of Long Island

- Operations & Maintenance leased facility for the **South Fork Wind Farm.**
- Site adjacent to Inlet Seafood, just inside Montauk Harbor, and located adjacent to the commercial fishing and packing operations.
- Ørsted-Eversource crew transfer vessels will be based at Inlet Seafood and used to transport the wind farm's maintenance crew to and from the wind farm.
- Designed to ensure that the vessels do not impact the existing commercial fishing fleet or packing operations.

Economic Development, Jobs, and Training

- The **New York Offshore Wind Training Institute (OWTI)**, formed in 2020, is the largest public investment in offshore wind work force training in the nation. The $20 million commitment was made in collaboration with **SUNY's Farmingdale State College** and **Stony Brook University**. OWTI will advance offshore wind training programs and educational infrastructure for a skilled workforce across the state, certifying and training **2,500** New Yorkers for both offshore and onshore renewable energy projects.
- **Operations & Maintenance (O&M) hub at Port Jefferson**, will create **100 new and permanent full-time jobs**, and significant numbers of indirect jobs for Long Island, for the Sunrise Wind offshore wind project.
- Ørsted and Eversource, as part of their Sunrise Wind Project, have also invested $10 million in a **National Offshore Wind Training Center** at Suffolk Community College specifically geared to train and certify workers through the nation's first Global Wind Organization Training Center for offshore wind located on Long Island.

[i] Maria Gallucci, "New York Take Early Lead as Large-Scale Offshore Wind Starts Rolling in the US" Canary Media, 2022
[iii] LIPA material southforkwind.com/
[iv]NYSERDA Map retrieved from https://www.nyserda.ny.gov/All-Programs/offshore-wind