

What is New York State's role in developing offshore wind?

New York State wants to ensure that offshore wind is developed in the most responsible and cost-effective manner possible. That's why the State, led by the New York State Energy Research and Development Authority (NYSERDA), developed the [New York State Offshore Wind Master Plan](#) (Master Plan) to provide a roadmap for responsible offshore wind development.

As part of the Master Plan process, NYSERDA conducted 20 studies and surveys and reached out to residents of Long Island and New York City, and other interested stakeholder groups, to provide input in the development of the Master Plan. The Master Plan proposes the best possible sites for offshore wind development off New York's Atlantic Coast, establishes technical working groups to develop best practices for development, and provides options for the purchase of offshore wind energy to ensure the lowest cost to the ratepayer.

What are the benefits to reaching New York State's 2,400 megawatt (MW) offshore wind goal?

Offshore wind is a clean, renewable energy resource that will provide many benefits to New Yorkers. In addition to being a local power source that will support the goal of obtaining 50 percent of New York's electricity from renewable sources by 2030, offshore wind will result in significant investments in New York's coastal communities and create thousands of construction, manufacturing, and operations jobs. It will also diversify the State's energy resources while protecting the environment and improving the health of New Yorkers through reductions in emissions of greenhouse gases and air pollutants, which offer billions of dollars of value.

What are the next steps New York State is taking to advance offshore wind?

In his 2018 State of the State Address, Governor Cuomo called for New York to issue two solicitations in 2018 and 2019, by which the State will procure approximately 800 MW of offshore wind power, which is enough clean, renewable energy to power up to 400,000 New York households. On July 12, 2018, the New York State Public Service Commission issued an [Order](#) requiring NYSERDA to solicit approximately 800 MW of Offshore Wind Renewable Energy Certificates (ORECs) between 2018 and 2019 as the first phase (Phase 1) of the Offshore Wind Standard program.

On November 8, 2018, NYSERDA issued a competitive [solicitation](#) seeking 800 MW or more of new offshore wind projects for New York. This highly anticipated first offering kicks off competition for New York State's first large-scale offshore wind development contracts and serves as an initial step toward achieving its goal of 2,400 MW of offshore wind energy by 2030. Bids in response to this solicitation are due in February 2019, and awards are expected in Spring 2019 to take advantage of expiring federal tax credits.

What is the Offshore Wind Standard?

In 2016, the Order Adopting a Clean Energy Standard created two mechanisms to reach the State's clean energy goals, reduce harmful air pollution, and ensure a diverse and reliable low carbon energy supply. The Order directs NYSERDA to administer the Renewable Energy Standard (RES) to ensure that 50 percent of all electricity consumed in New York comes from renewable sources by 2030, and the Zero-Emissions Credit (ZEC) requirement to reach our climate emission goals by realizing the intrinsic value of carbon-free emissions from the upstate nuclear fleet.

The Offshore Wind Standard builds upon and supports the Clean Energy Standard by coordinating development of New York State's offshore wind resources through the procurement of Offshore Wind Renewable Energy Certificates (ORECs). An OREC represents the environmental attributes associated with one megawatt-hour (MWh) of electricity generated from offshore wind resources and consumed by a retail customer in New York State. Similar to renewable energy credits procured under Tier 1 of the Renewable Energy Standard, NYSERDA's purchase of ORECs will allow NYSERDA to credit the environmental attributes associated with an awarded facility to the State's goal.

What will offshore wind cost?

New York State is committed to advancing offshore wind in a way that maximizes competitive bidding and ensures the lowest cost, while stimulating economic development and fostering local job creation. With achievement of the 2,400 MW goal contributing to similar scale economies in the U.S. Northeast, NYSERDA projects that by 2030, the cost to obtain offshore wind will be lower than the cost to procure land-based renewables in the State. Offshore wind, therefore, has the potential to lower the cost of meeting the State's mandate that 50 percent of its electricity come from renewable resources by 2030. To develop the first 800 MW of offshore wind, it is expected that ratepayers will see a 0.14 to 0.76 percent increase (or less than \$0.76 per month for the typical residential customer) for the associated offshore wind deployments.

How many new jobs will the Northeast's new offshore wind industry create, and how will New York State ensure that local communities will benefit from this new industry?

New York State is mobilizing its resources to become an industry leader and commercial hub for offshore wind development. The State's pioneering 2,400 MW goal of offshore wind, the execution of the New York State Offshore Master Plan, and the Governor's solicitation for offshore wind energy projects send the strongest signals of any state that offshore wind development is happening in New York. New York's economy and its communities could benefit from more than \$6 billion of investments and approximately 5,000 new jobs in manufacturing, installation, and operation of offshore wind facilities. NYSERDA's 2018 solicitation includes first-of-a-kind requirements for wage and labor agreements by offshore wind developers to ensure that the projects deliver high-quality jobs for New York workers.

NYSERDA is investing \$15 million in clean energy workforce development and infrastructure advancement. This will include training workers for jobs in offshore wind construction, installation, operation, maintenance, and design. To attract private investment in port infrastructure and manufacturing, the State is also working with industry to determine promising infrastructure investments, helping jumpstart project development, drive job growth, and secure its status as the undisputed home for the emerging offshore wind industry in the U.S.

Will the turbines be visible from shore?

Offshore wind turbines will be located far offshore and will not be noticeable from the shoreline. New York State undertook a visibility threshold study, as part of its Offshore Wind Master Plan, to study visual impacts at different distances offshore. The Order establishing the Offshore Wind Standard affords NYSERDA in the implementation of its solicitations flexibility in setting a minimum distance from shore in consideration of economic, environmental, and viewshed factors.

Will the wind farms impact shipping in the area?

Safe navigation is vital to preserve the significant shipping activity that occurs off New York's coast. The State conducted studies and consulted with the shipping industry and related stakeholders to understand their operational requirements and concerns, and ensure impacts to shipping are minimized. Wind farm developers will be required to perform a separate

navigation risk assessment in consultation with the United States Coast Guard. Additionally, the turbine bases will be lit (but not noticeable from the shoreline) so they are visible to mariners and marked on navigation charts, similar to other offshore structures.

Will fishers still be able to fish in/around the wind farms?

New York State and the federal government do not anticipate imposing any restrictions on fishing among or around the wind turbines, which will likely be located nearly a mile apart from each other. New York is committed to working with commercial and recreational fishers to understand the areas important for fishing and identify strategies for turbine configurations and spacing to allow for fishing access.

What happens at the end of the turbines' 25-year life span?

The federal government requires that offshore wind farm developers submit a decommissioning plan as well as post a bond to cover the cost of decommissioning the wind farm when it has reached the end of its useful life.

Do offshore wind turbines negatively impact birds, bats, fish, whales, or any other species?

New York State has conducted and continues to actively study marine mammals, sea turtles, birds, bats, and fish to ensure that offshore wind will be responsibly sited. The wind turbine permitting process is incredibly thorough, and involves federal, State and local authorities who review and consider every aspect of the project's impact to the environment, and can request additional research from developers or require specific mitigation. For example, based on the best available information, projects will be sited carefully to avoid the most critical flyways for birds and bats, and habitat areas for fish and marine mammal species. Additionally, protective measures will be taken to reduce effects from construction and operations and ensure co-existence of wind farms with these species.

Where is information on New York's offshore wind development located?

Those interested in New York State's development of offshore wind can visit nyserderda.ny.gov/offshore-wind to view the latest news, studies, upcoming events, and submit questions.

NYSERDA offers objective information and analysis, innovative programs, technical expertise, and support to help New Yorkers increase energy efficiency, save money, use renewable energy, and reduce reliance on fossil fuels. NYSERDA professionals work to protect the environment and create clean energy jobs. A public benefit corporation, NYSERDA has been advancing innovative energy solutions since 1975.