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?

To achieve Governor Andrew M. Cuomo’s directive, in January of 2018, NYSERDA filed an Options Paper with the Public Service Commission regarding the first phase procurement of at least 800 MW of offshore wind. This filing will commence a public rulemaking process through which the Public Service Commission may consider certain actions described by NYSERDA in its Options Paper to commence offshore wind procurements in the coming year.

Additionally, NYSERDA will invest $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 will work with industry and 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.

Finally, the State is forming technical working groups to establish best practices for project development and ensure continued collaboration among those with technical knowledge, practical experience, and professional interest in developing offshore wind.

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 nation-leading 2,400 MW goal of offshore wind, the execution of the New York State Offshore Master Plan, and the Governor’s announcement of offshore wind procurement send the strongest signals of any state that offshore wind development is happening in New York.

Through the Master Plan, NYSERDA determined the State’s current workforce and infrastructure capabilities and identified what gaps may exist to develop an offshore wind industry in the State. New York’s economy and its communities could benefit from more than $6 billion of investments and approximately 5,000 new jobs. NYSERDA is considering activities to bring significant jobs and investments to the State through, for example, apprenticeship and specialization programs at New York’s universities and community colleges. Additionally, New York announced the Clean Climate Careers initiative to grow its emerging clean energy economy and prepare the workforce for the long-term careers associated with this industry.
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 initially develop the offshore wind market in New York, a near-term incremental program cost is estimated to be less than a 0.3 percent bill impact (or less than $0.30 per month) for the typical residential customer for the more cost-effective procurement options.

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 to ensure this is achieved. The State may elect to set development guidelines, including a minimum distance from shore, that must be met by developers.

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 conducted studies on marine mammals, sea turtles, birds, bats, and fish to ensure that offshore wind will be responsibly developed and will mitigate and minimize any environmental impacts. 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 nyserda.ny.gov/offshore-wind to view the latest news, studies, upcoming events, and submit questions.