**What is New York’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 for the development of the Master Plan. The Master Plan represents a comprehensive assessment of all aspects of offshore wind development for New York and 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 of achieving 9,000 megawatts (MW) of offshore wind by 2035?**

Offshore wind is a clean, renewable energy resource that will provide many benefits to New Yorkers. In addition to providing clean, locally produced power where demand is highest, offshore wind is a key component of the Climate Leadership and Community Protection Act (CLCPA), New York’s ambitious and comprehensive climate and clean energy legislation which codifies Governor Andrew M. Cuomo’s nation-leading goals and comprehensive climate and clean energy legislation which codifies Governor Andrew M. Cuomo’s nation-leading goals.

Additionally, New York State continues to play a critical leadership role in the Northeast and Mid-Atlantic through its technical working groups, facilitating important best practices, research and adaptive management strategies, and active stakeholder engagement approaches. Nationally, New York State leads the National Offshore Wind Research and Development Consortium, an independent, not-for-profit organization dedicated to managing industry-focused research and development of offshore wind to maximize economic benefits for the U.S.

**How is New York State investing in port infrastructure to support the growing offshore wind industry?**

In his 2019 State of the State, Governor Cuomo announced that New York will invest up to $200 million in port infrastructure to unlock private sector capital and capture long-term economic benefits for New Yorkers. These investments will reinforce New York’s position as the hub of the burgeoning U.S. offshore wind industry.

**How will the 2018 solicitation awards benefit New York State?**

Empire Wind and Sunrise Wind, both expected to be operational in the mid-2020s, will total 1,696 megawatts, enough to power more than one million New York homes. The projects will bring a combined economic impact of $3.2 billion to upstate, downstate, and Long Island, and will support more than 1,600 jobs in development, manufacturing, installation, and operations and maintenance, directly offering well-paying careers with average salaries of approximately $100,000 per year. The two projects are anticipated to yield significant new investments in port infrastructure and supply chain opportunities at facilities in multiple regions of the State, including the Capital Region, Brooklyn, Staten Island, and Long Island. When the project-specific investments are combined with Governor Cuomo’s $200 million commitment, New York port facilities will benefit from a total investment of $287 million.

**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 the achievement of the 9,000 MW offshore wind mandate, NYSERDA projects that procuring offshore wind at scale will be a critical component of reaching New York’s long-term decarbonization goals in the most cost-effective way possible. Offshore wind, therefore, has the potential to lower the cost of meeting the State’s requirement that 70 percent of electricity come from renewable sources by 2030.
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?

New York State is mobilizing its resources to become an industry leader and commercial hub for offshore wind development. New York’s economy and its communities could benefit from billions of dollars in infrastructure investments and more than 10,000 new jobs in manufacturing, installation, and operation of offshore wind facilities. NYSERDA’s 2018 solicitation included 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.

The State is also taking new steps to support workforce development in partnership with the private sector, including establishing a New York State Advisory Council on Offshore Wind Economic and Workforce Development, a new $20 million Offshore Wind Training Institute (OWTI) and a $3 million Community and Workforce Benefits Fund (CWBFund) to establish the institutional infrastructure to educate, train and employ New Yorkers in offshore wind. These investments will particularly benefit New York’s low-income and environmental justice communities, critical outcomes of the CLCPA and Governor Cuomo’s commitment to a just transition to clean power.

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.

The State is also leading an Environmental Technical Working Group (E-TWG) comprised of environmental organizations, developers, and state and federal regulators. The E-TWG is developing Best Management Practices for offshore wind that is protective of wildlife at all stages of development. Utilizing the E-TWG framework, NYSERDA required the submission of Environmental Mitigation Plans in its solicitation to ensure a formal approach that requires adaptation of those plans through discussions with environmental organizations.

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. 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. NYSERDA required the submission of Fishing Mitigation Plans, a first in the industry, as part of the offshore wind developer’s proposal to provide energy to New York State. The Mitigation Plans from awarded projects will be shared and discussed with the State’s Commercial Fishing Technical Working Group (F-TWG), comprised of commercial fishermen, developers, and State and federal regulators. As the project advances, the Mitigation Plans will evolve in a way that includes input from the F-TWG, assuring that input of the commercial fishing industry is considered throughout the process.

Will the turbines be visible from shore?

As part of its Offshore Wind Master Plan, New York State undertook a Visibility Threshold Study to analyze visual impacts under a range of atmospheric conditions and at different distances offshore. While wind turbines will be located far offshore, some may be visible during clear weather conditions to within a fraction of an inch above the horizon. Additionally, turbines may be blocked from view by existing offshore activities in the New York Bight, such as maritime traffic and common anchorages. Visibility was a consideration in the evaluation of proposals for the 2018 solicitation, and developers were required to propose and acknowledge potential mitigation efforts. Furthermore, projects are required to employ aircraft detection lighting systems (ADLS) in order to meet Federal Aviation Administration obstruction lighting requirements while minimizing lighting-related visual impacts and impacts on avian species.

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 continuously consults 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.

What happens at the end of a turbine’s 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.

Where can I find more information on New York’s offshore wind development?

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