

# New York State Offshore Wind

The View of Empire Wind



**Offshore wind is key to achieving New York State's clean energy goals of 70% renewable energy by 2030 and zero emissions electricity by 2040**

## DO YOU SEE THE TURBINES?

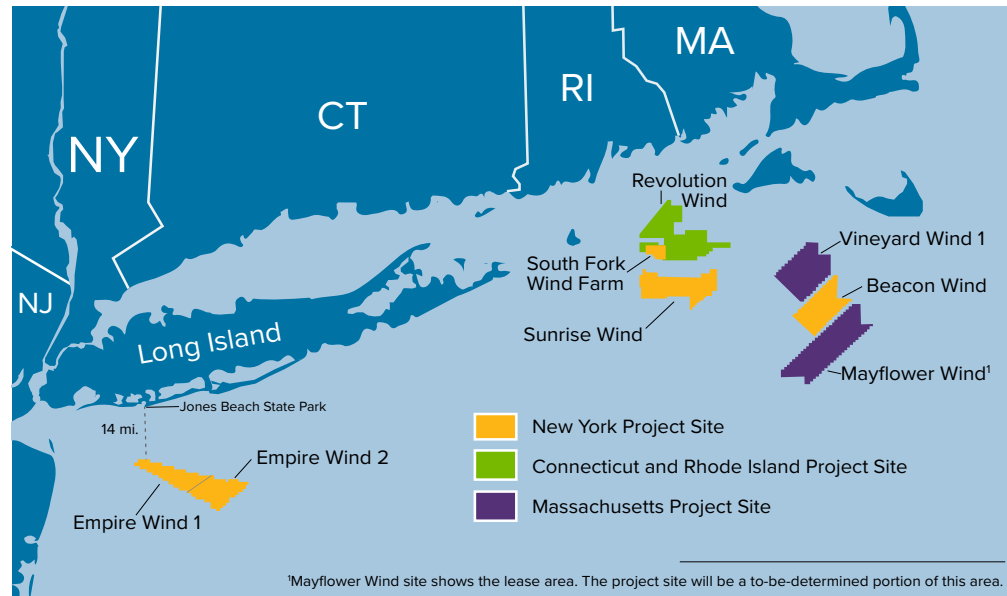
Look closely at the images below. Do you see the turbines on the horizon? These images are visual simulations developed to show how the turbines of the Empire Wind projects could appear from different points along Long Island's shore under clear conditions.

To accurately view the images, scale this document to 100% on your computer screen, or if printed, hold this page at arm's length.

## Offshore wind off the Atlantic coast

Offshore wind turbines located in the ocean off the New York coast will soon be a major source of affordable, renewable power for the State. New York currently has five offshore wind projects in active development. These projects will provide more than 4,300 megawatts (MW) of energy capacity, almost half of New York's nation-leading goal of 9,000 MW of offshore wind – enough to power up to 6 million homes by 2035.

Current project sites, and future potential sites, are in federal waters in the Atlantic Ocean, miles from shore. Most wind energy areas are more than 30 miles from the New York coast, too far away to be seen from shore. **Of the current sites, only the Empire Wind lease area comes close enough to New York's shoreline to be visible.** At its closest point, the site is approximately 14 miles south of Long Island, as shown in the map below. When conditions allow good visibility, turbines at the near end of the site may be visible from the closest point on land, Jones Beach State Park, and, to a lesser extent, from the shoreline extending west to the Rockaways and east to Fire Island.



Simulated views of 950-foot turbines (representing the maximum proposed height) from Jacob Riis Park under partly cloudy skies.



Simulated views of 950-foot turbines (representing the maximum proposed height) from Jones Beach State Park under clear skies.

## What will we see from shore?

Turbines from the Empire Wind projects will be visible from some points on the Long Island coast. **No other offshore wind projects are anticipated to be constructed within viewing distance of New York's shorelines.**

New Yorkers may see research and construction vessels closer to shore for short periods of time during the planning and construction processes, doing things such as taking soil samples and laying the submarine cables that will connect the energy generated by offshore wind turbines to the existing power grid. Viewers from shore may also see construction vessels traveling to and from the project sites as part of the shipping traffic coming and going from New York Harbor for several months.

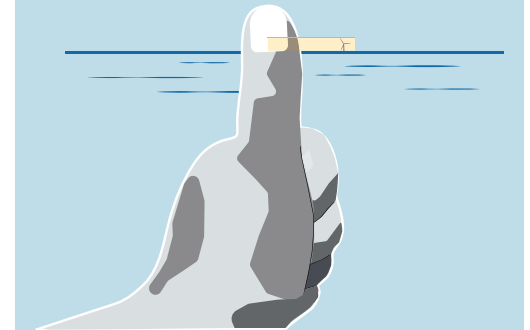
The turbines will have nighttime safety lights to help planes and boats navigate around them. The lights on the turbines in the Empire Wind lease area may be visible from certain points on the Long Island coast. The use of aircraft detection technologies could allow some lights to turn off until planes come into range and reduce nighttime light impacts.

## What impacts visibility?

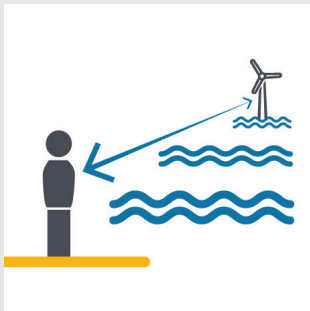
Turbines fade from view when they are between 20 and 25 miles away. Factors that impact visibility include:

## HOW BIG WILL THE TURBINES APPEAR FROM SHORE?

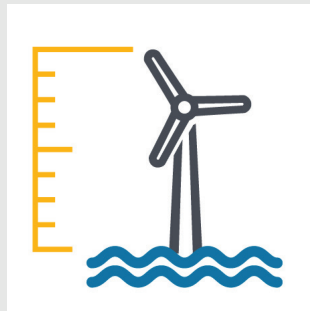
If you stand on the shore at Jones Beach and fully extend your arm in front of you, the closest wind turbines will appear less than a quarter the size of your thumbnail.



### DISTANCE



### HEIGHT



### WEATHER

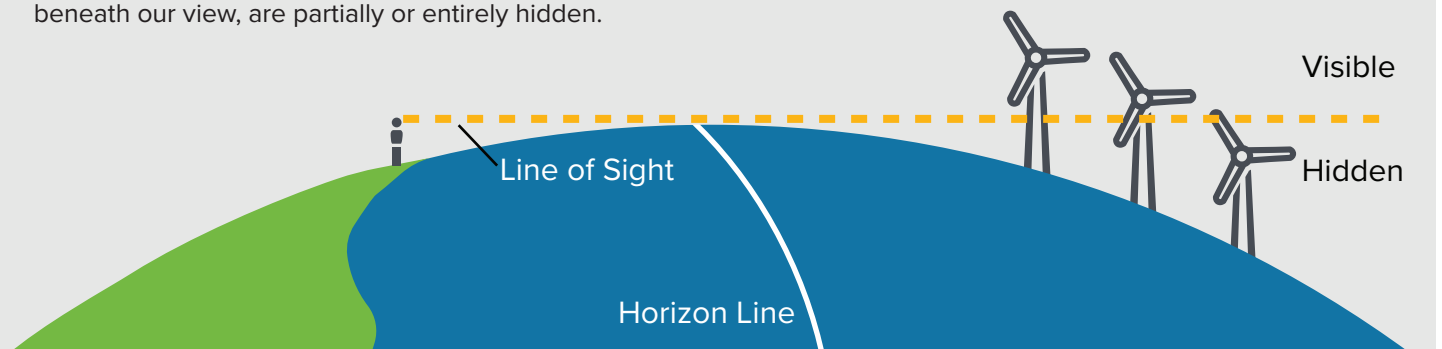


### TIME OF DAY



## BEYOND THE HORIZON

The curvature of the earth blocks our view of faraway objects. Turbines that are beyond the horizon, or past the point where the earth curves away beneath our view, are partially or entirely hidden.



## Learn more about offshore wind in New York State.

[nyscrda.ny.gov/offshorewind](http://nyscrda.ny.gov/offshorewind)

