

FACTSHEET: RESPONSIBLE & REASONABLE OFFSHORE WIND ENERGY IS A CLIMATE CHANGE SOLUTION

BUT...THE OCEAN IS AT RISK FROM TOO MUCH, TOO FAST!

Offshore wind energy is renewable but will impact the ocean and marine life. The scope, scale, magnitude, and speed of the industrialization of over **one million** acres for wind energy are unprecedented for the marine ecosystem just off the New York/New Jersey Coast; the current development is nearly the size as Grand Canyon National Park, with more to come. There will also be cumulative impacts – currently unknown by science – from offshore wind facilities proposed from Massachusetts to North Carolina. There are few laws protecting marine life. The large-scale development of the NY & NJ lease areas is **too much, too fast**. The risks are high. There are cheaper, faster, and safer energy-wise solutions that can be implemented now on land, while a pilot study determines how to conduct offshore wind in an environmentally responsible manner.



Marine life at risk!
Over one million acres of ocean leased for wind energy off NY/NJ. Photo: NOAA

Climate Action Now: No time to waste!

- Human use of fossil fuels is causing accelerated climate change, which is threatening all life on Earth.
- There is no evidence that fossil fuel energy sources will close or cease when offshore wind facilities come online.
- Projected carbon dioxide emissions are still expected to rise despite the growth of renewable energy.
- The ocean has buffered climate impacts, absorbing 90% of the heat generated and up to 30% of the carbon dioxide emissions caused by human activities, but to her own demise with sea-level rise and ocean acidification.
- A healthy ocean with minimal industrialization is key to helping reduce impacts from climate change.
- It will take more than a decade to install and build offshore wind projects, depending on conditions.
- The U.S. leads the world in wasting energy, wasting nearly 60% of the energy generated; *onshore* energy conservation, efficiency, and reasonable and responsible renewable energy must be prioritized.

The Ocean off the NY/NJ Coast is Ecologically Significant & Diverse with:

- 33 species of whales, dolphins, porpoises, 5 species of sea turtles, and 4 species of seals.
- hundreds of species of fish and birds that depend on the region for home, food, or migration.
- endangered animals, including one most at risk, the North Atlantic right whale.
- sustainable seafood for millions of people each year locally & around the world.

Ocean Industrialization Experiment Underway with Impacts:

- Over one million acres are already privatized by being sold to big energy companies (including “Big Oil”) off the NY/NJ coast.
- The **1,033,716 acres** leased off NY/NJ is nearly the size of Grand Canyon National Park.
- Hundreds of offshore wind turbines are proposed, with more on the way.
- Turbines are huge – nearly as tall as the Empire State Building (without antenna).
- Potential & unknown impacts include noise, electromagnetic fields, navigational safety, changes to benthic and pelagic habitats, behavioral changes in wildlife, alterations to food webs, invasive species concerns, and pollution from increased vessel traffic, heat, and onshore and offshore infrastructure.
- Endangered species, including the North Atlantic right whale and sea turtles, are at grave risk.
- Large *onshore* construction sites have yet to be developed.
- The NY/NJ region is VERY busy, hosting busy East Coast ports: NY/NJ Harbor and Port of Philadelphia.
- Full development is over 10 years away (without delays)—far slower than the options on hand today to meet the climate challenges. The estimated completion of offshore wind projects in the NJ wind energy areas is 2035.
- Wind turbines will alter the exchange of heat, moisture, and momentum between the surface and atmosphere.

Impacts of Offshore Wind:

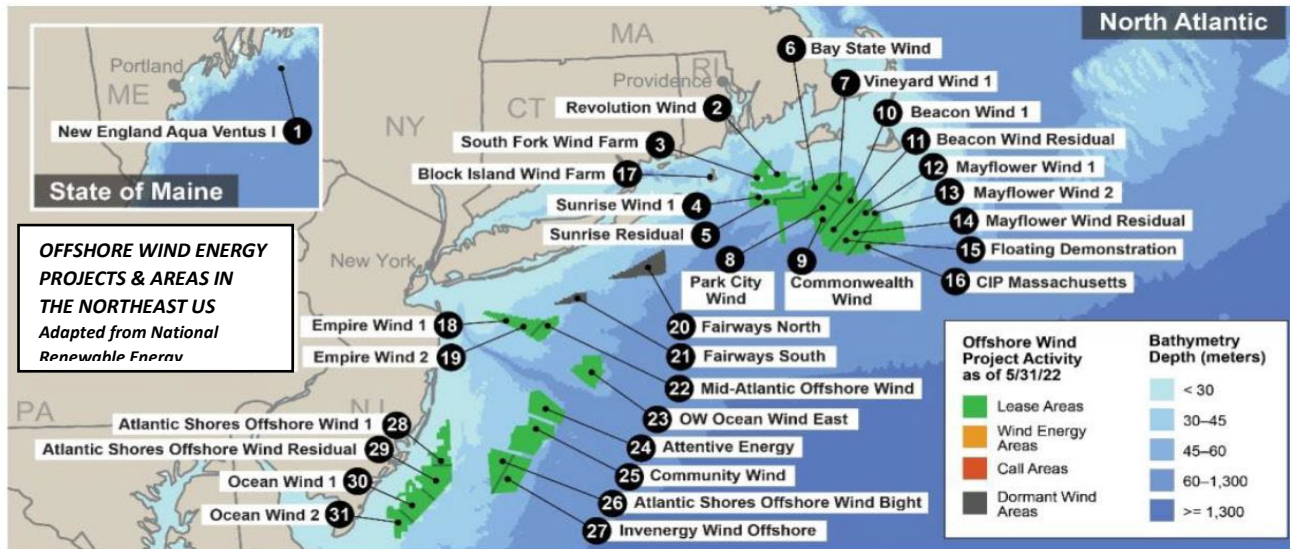
- noise
- electromagnetic fields
navigational safety
- habitat changes
- wildlife behavioral changes
- alterations to food webs
- invasive species
- pollution from increased
vessel traffic
- heat
- turbidity from sediments
- onshore infrastructure

OVER ONE MILLION ACRES ALREADY LEASED OFF NEW YORK AND NEW JERSEY!

TOO MUCH: Combined, the areas off the NY/NJ coast already leased for offshore wind **total over one million acres** – nearly the size of Grand Canyon National Park. For perspective, in total, this total is roughly:

- Nearly **5 times** the size of New York City (all 5 boroughs).
- **34 times** the size of Disney World, FL, the largest amusement park in the world.
- **Over 1.7 times** the size of Great Smoky Mountains National Park.

...TOO FAST: Federal and state agencies and officials are fast-tracking the process to develop the ocean for offshore wind energy. Rushed and uninformed development puts marine life at risk and is rife with possible unintended consequences. Right now, only the court of public opinion can protect these lands and ocean resources.



CLIMATE PROTECTION ACTION IS NEEDED NOW!

- The Intergovernmental Panel on Climate Change (IPCC) report released in August 2021 indicates climate change is widespread, rapid, and intensifying worldwide, and robust action must be taken within this decade.
- However, proposed offshore wind projects and on-land construction sites are in their infancy and will take years to get approved, constructed, and put into operation. No onshore construction facilities are on-line and could take years to develop. The projection for completion of these massive offshore wind facilities is, at best, 2030-2035 or beyond without challenges from hurricanes, storms, offshore construction, supply chain, & other delays.
- The ocean & planet cannot wait over a decade for offshore wind, which is one of the climate change solutions.
- While better than impacts from fossil fuel energy sources, impacts from offshore wind are not negligible.
- Solutions to address climate change must not adversely impact the resources that need to be protected.
- It is imperative to expedite and implement **onshore** CHEAPER, SAFER, EASIER and ENERGY-WISE options **NOW**, prioritizing energy waste reduction, and requirements and efficiency measures.
- The GREENEST energy of all is the energy people do not use, and it can save people thousands of dollars.

OFFSHORE WIND MUST BE REASONABLE & RESPONSIBLE TO PROTECT OCEAN RESOURCES

A healthy ocean is the most valuable ecosystem as it combats climate change, sustains life, and supports clean ocean economies. Clean Ocean Action (COA) supports responsible and reasonable renewable energy, including offshore wind (OSW), that is based on the “precautionary principle”, and **which would not endanger** a healthy vibrant ocean ecosystem during the phases of pre-construction, construction, operation, management, and decommissioning, as well as from the associated onshore infrastructure. However, many marine scientists agree that little is known about the harm from this industrialization of the ocean, especially at the scale, scope, magnitude, and speed of development currently proposed. This fast-tracked scope and scale of offshore wind energy development off the NY/NJ coast is not reasonable or responsible because of all the unknowns. That is why COA is calling for an independent pilot scale project to fully understand the costs, benefits, and ecosystem impacts and to establish laws to eliminate or reduce the harm to ensure a healthy ocean ecosystem.

Go to CleanOceanAction.org for opportunities to take action for the ocean!