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

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

OVER 1 MILLION ACRES ALREADY LEASED!

Offshore wind energy is renewable but will impact the ocean and marine life. The scope and magnitude 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 sale and development of the NY & NJ lease areas is *too much, too fast*. The risks are high for the ocean and marine life. There are cheaper, faster, and safer energy-wise solutions that can be implemented now on land, while pilot studies determine 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 50% 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:

- 27 species of whales, dolphins, and 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.

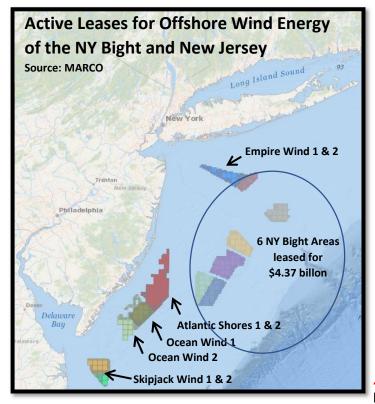
Ocean Industrialization Experiment Underway with Impacts:

- Over one million acres are already privatized by being sold to big energy companies (including "Big Oil").
- ➤ The **1,033,716** acres already leased off the NY/NJ coast is nearly equal to the size of Grand Canyon National Park.
- Over 500 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 the #1 East Coast port -- NY/NJ Harbor, and the nearby Port of Philadelphia.
- The US has no experience in industrial offshore wind development.

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

- 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.



NEARLY ONE MILLION ACRES ALREADY LEASED!

In February 2022, the U.S. Department of the Interior's Bureau of Ocean Energy Management (BOEM) held the largest lease sale for offshore wind in U.S. History, leasing a record six areas encompassing **488,201** acres of public ocean waters for offshore wind energy development (see map left). Private developers paid \$4.37 billion for the leases. These half a million areas were in addition to the nearly hundreds of thousands of acres already leased for offshore wind off New Jersey and New York.

TOO MUCH: Combined, the areas off the 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: BOEM is fast-tracking the process, seeking bidders before the Environmental Assessment, which

evaluates the marine life at risk. Once the lease areas are sold, they are no longer public lands. Current laws do not fully protect ocean resources from harm. 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, those 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 prioritize, expedite, and implement <u>onshore</u> CHEAPER, SAFER, EASIER and ENERGY-WISE options <u>NOW</u>, including energy reduction 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



Responsible offshore wind energy can play a role in reducing climate change. At the same time, a healthy ocean is a far more valuable ecosystem that combats climate change, sustains life, and supports clean ocean economies. Clean Ocean Action (COA) supports responsible and reasonable offshore wind (OSW) energy development; this includes operation, management, and decommissioning, as well as the associated onshore infrastructure. Notably, many marine scientists agree that little is known about the harm from this industrialization of the ocean, especially at the magnitude, scale, 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.

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