

New Jersey Offshore Wind

FREQUENTLY ASKED QUESTIONS



Why offshore wind for New Jersey?

Offshore wind energy is a once-in-a-generation opportunity for New Jersey to generate clean energy, protect the environment and grow the economy. New Jersey's ambitious goal of generating **11,000 megawatts** of offshore wind energy by 2040 has established the state as an East Coast leader, and will help achieve the State's greenhouse gas reduction and climate action goals. New Jersey has awarded several projects and has a set procurement schedule to meet our offshore wind target.

NJ OFFSHORE WIND PROCUREMENT SCHEDULE

Project	Capacity Target/Award (MW)**	Issue Date	Submittal Date	Award Date	Est. Commercial Date
Atlantic Shores	1,510	Q3 2020	Q4 2020	Q2 2021	2028
Attentive 2	1,342				2031
Leading Light Wind	2,400	Q1 2023	Q3 2023	Q1 2024	2031-32
4	1,200 - 4,000*	Q2 2024	Q3 2024	Q4 2024	2032
5	1,200 - 4,000**	Q2 2025	Q3 2025	Q4 2025	2034
6	1,200 - 4,000**	Q3 2028	Q4 2028	Q2 2029	2036
7	1,200 - 4,000**	Q3 2030	Q4 2030	Q2 2031	2038

* The Board may award projects above or below the target
** To be adjusted based on previous solicitation results

How does offshore wind compare to other energy sources?

Wind energy is one of the most environmentally friendly and job generating of renewable energy sources. Research shows that wind energy has a much lower carbon footprint and water usage compared to fossil fuel energy sources like coal and natural gas. The cost of wind energy has significantly decreased over the years, making it more competitive with other energy sources.

How do wind turbines generate electricity?

Offshore wind turbines generate electricity by converting the kinetic energy of the wind into electrical energy. The wind blows over the blades of the turbine, causing them to rotate. The blades are connected to a shaft that turns a generator, which produces electricity. The electricity is then transmitted through cables to the shore, where it can be used to power homes and businesses.

How will offshore wind development impact the New Jersey economy?

On average, each wind farm is expected to...

CREATE 4,000+ Jobs & **ADD \$700+ Million** to the state's economy



Where will the New Jersey offshore wind farms be built?

New Jersey's offshore wind farm lease areas are determined by the federal Bureau of Ocean Energy Management, who then auctions the rights to develop the wind farms to developers. Developers then compete for contracts with the NJ Board of Public Utilities (NJBPU) for the energy generated. As of early 2024, there are 3 awarded NJ projects.

How can my company get involved?

Companies can publicly indicate their interest and ability to supply components and services for U.S. East Coast offshore wind projects through the New Jersey Offshore Wind Supply Chain Registry, a free resource for companies to buy from and partner with NJ-based firms. Many NJ companies are already involved in the industry, including those helping to build the NJ Wind Port.

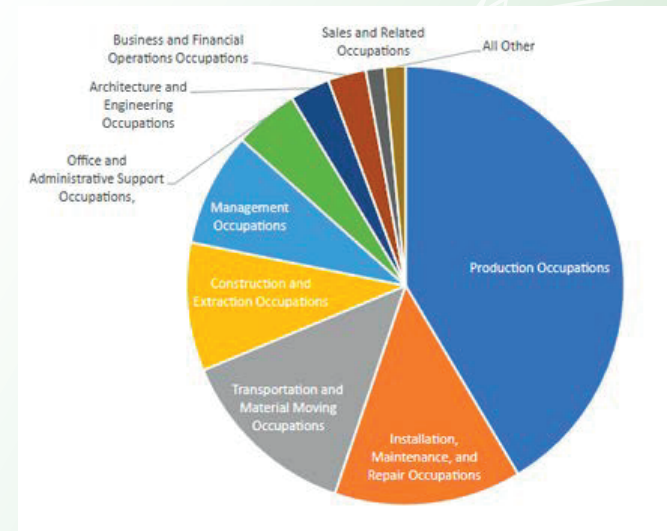
Sign up by visiting www.njeda.gov/offshorewind/

What will the job opportunities for offshore wind be for New Jersey?

Offshore wind jobs can be found in a variety of fields, including construction and installation, operations and maintenance, manufacturing, and more. In addition to direct and indirect jobs, the offshore wind industry will also create induced jobs in the New Jersey economy. For example, the construction of new offshore wind projects will create demand for goods and services from other businesses in the state, such as hotels, restaurants, and retail stores.

Offshore wind occupations include engineers, electricians, welders, logistics managers, technicians, and many more. These are high skilled, well-paying jobs that cannot be outsourced. While there are several thousand NJ workers already engaged in OSW, the State projects OSW to create more than **15,000 jobs** over the next 10 to 15 years.

OCCUPATIONAL DISTRIBUTION OF PROJECTED NJ OSW JOBS



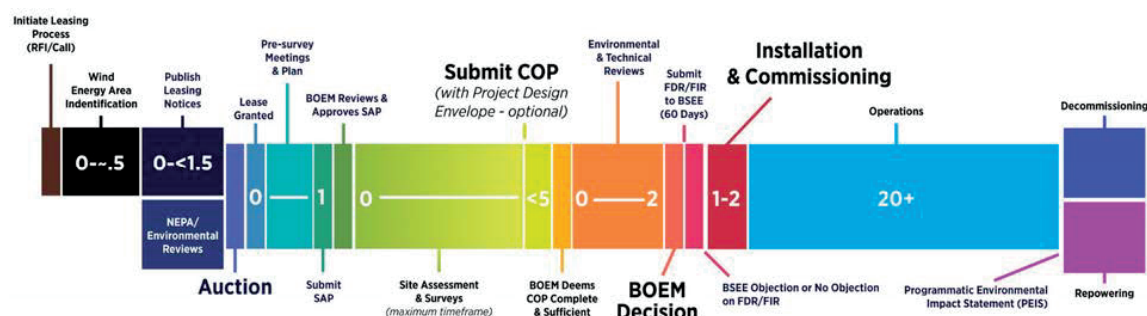
What new training opportunities are available to support careers in offshore wind?

The development of offshore wind energy in New Jersey presents significant career opportunities for residents. The State's Wind Institute for Innovation training has supported the development of a wide range of training and certification programs including in welding, industrial painting, construction management, manufacturing, and more. The State is also supporting fellowships for undergraduate and graduate students.

Learn more at www.njeda.gov/wind_institute/

What is the lifespan of a wind turbine?

Wind turbines last from **20 to 25 years**, though new technologies may prolong their lifespans.



WIND FARM INSTALLATION TIMELINE

Source: Oceanic Network

How will migratory patterns of birds be affected?

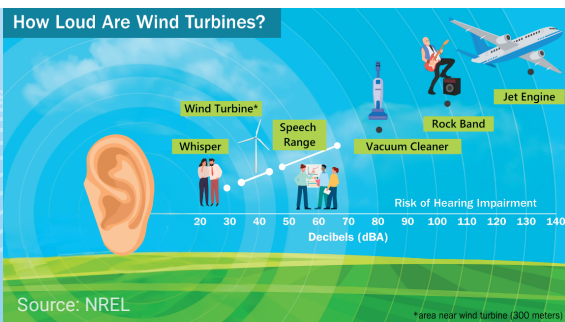
New Jersey is proactively safeguarding migratory bird species from the potential impacts of offshore wind farms, including:

- ✓ Siting wind farms in areas with low bird densities
- ✓ Requiring turbines with bird-friendly designs, such as slower rotation speeds and fewer blades
- ✓ Implementing monitoring and mitigation measures
- ✓ Promoting research and collaboration with other states, scientists and conservation organizations for new strategies to minimize bird collisions

How will offshore wind farms affect marine ecosystems in New Jersey?

Offshore wind turbines can function as artificial reefs, providing habitats for marine life. The hard surfaces of turbine foundations and support structures attract organisms like mussels, barnacles, oysters and sponges, creating a vibrant ecosystem called a turbine reef. This habitat attracts fish, crustaceans and other marine species, fostering a diverse and thriving marine community. Studies show that noise from wind turbines is not loud enough to harm whales' hearing or navigation capabilities. According to three federal scientific agencies (NOAA, BOEM, and the Marine Mammal Commission) as well independent research organizations, there is **no evidence** linking offshore wind farms with marine mammal deaths along the U.S. East Coast.

The NJ Research and Monitoring Initiative (RMI) focuses on scientific research and monitoring of marine and coastal resources during offshore wind development, aiming to protect marine resources while supporting the State's clean energy goals.



Do wind turbines make noise?

Wind turbines produce low-frequency noise, which is less likely to travel long distances and is generally not audible from more than 500 meters away.

How long will it take to build the offshore wind farms?

Planning for, assessing and constructing offshore wind farms takes approximately 10 years, offering multiple periods for public engagement and feedback throughout the process. Projects that are awarded by NJBPU in 2024 are expected to be operational in the early 2030s.

Where can I find more information about offshore wind?

To learn more about offshore wind, visit these webpages:

- New Jersey's [Offshore Wind Program](#)
- Bureau of Ocean Energy Management [Renewable Energy](#)
- National Renewable Energy Laboratory [Offshore Wind Research](#)