

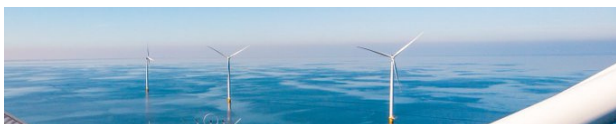


# Environmental Benefits of Offshore Wind



New York State’s burgeoning offshore wind industry is delivering renewable energy opportunities to empower communities today and tomorrow, across its Upstate and downstate regions, from West to East and from Buffalo to Babylon. New York’s offshore wind developers, manufacturers, unions, port operators, neighborhood advocates, and state policymakers are determined and committed to put people and communities first, on and off the coast, working together, as partners to create opportunities that power our future.

The offshore wind industry will deliver clean, **locally produced power** close to the nation’s largest population centers and where consumer demand is highest, moving us away from fossil fuels and providing consumers with more robust **clean energy solutions. The lower greenhouse gas emissions** and pollution will allow us to combat climate change, improve public health and quality of life with cleaner air and water, particularly in New York’s frontline communities. The **creation of a new, U.S.-based manufacturing** industry presents a once-in-a-generation opportunity to create good quality, high paying jobs, revitalize our port infrastructure and create new ways for individuals and communities to prosper.



## Environmental Progress

Building on New York’s legacy environmental leadership, offshore wind is poised to become a significant source of clean, affordable, renewable power in New York and is key to ensuring that our future electricity will come from 100% clean and renewable sources. Building offshore wind energy will displace dirty fossil-fuel power, reducing the emissions that contribute to climate change and the pollution that harms the air we breathe.

## Replacing Aging Fossil Generation

While New York has made progress in shutting down its fleet of aging coal plants, New York’s energy producers and operators have plans to phase out up to one third of the state’s remaining fossil fuel plants by 2030. Together with the private sector, advocates and communities, New York must harness offshore wind and other renewables. Offshore wind provides stable consumer costs, mitigates fuel price risk, reduces emissions, and provides a local, safe and predictable source of energy. [i]

## Beneficial Electrification

Offshore wind is also key to **decarbonizing** and **lowering** the emissions output of the New York State economy. As policymakers seek to address carbon emissions from the transportation and building sectors through options such as electric vehicles and ground source heat pumps, it is essential that these emerging technologies are powered by zero-carbon electricity.[ii]

With more than 4,300 MW of offshore wind generating capacity already under development, significant progress towards New York’s 9,000 MW of renewable offshore wind capacity by 2035 is being made[iii]. When completed by 2035, the 9,000 megawatts of energy will generate enough offshore wind energy to power approximately 30 percent of New York State’s electricity needs, equivalent to nearly 6 million New York State homes .[iv]

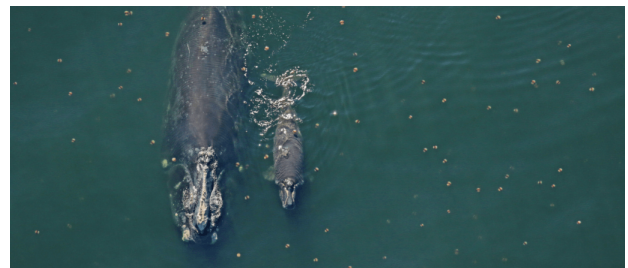






Image of a Right whale and her calf. Credit: Florida Fish and Wildlife Conservation Commission, taken under NOAA permit 20556-01 [viii]

## What will offshore wind do for the environment?

 **Lower greenhouse gas emissions** and pollution to combat climate change, improve public health and quality of life with cleaner air and water, particularly in New York's frontline communities

 **Diversify our electricity supply** which moves us away from fossil fuels and provide consumers with more robust clean energy choices to transition to clean energy

 **Produce power in locations where it is needed** - close to the nation's largest populations centers, where consumer demand is highest

 **Build responsibly**, respecting other ocean users, marine and fish wildlife, and the coastal environment

## Environmental Justice, Healthier Neighborhoods and Cleaner Air

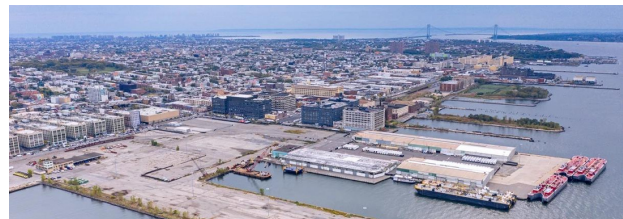
New York's frontline communities have borne the brunt of decades of environmental injustice, resulting in the concentration of high-impact industrial development in communities of color and lower income status. These industrial sites continue to exact a tremendous economic, environmental, health, and social toll. To take just one example, a child born in a disadvantaged community is 70 percent more likely to suffer from asthma into adolescence due to an unhealthy living environment because of dirty air and water pollutants.[v] Exacerbating this situation, extreme weather events, such as Superstorm Sandy, are also more likely to have a direct and detrimental impact on more disadvantaged communities and communities of color most likely to be in harm's way.

We can do better. The development of offshore wind presents a historic opportunity to reverse this trend. We need to ensure all New Yorkers have the same access to live and work in healthy and safe communities, no matter their zip code. Offshore wind energy can displace aging fossil fuel-burning generators that release the harmful greenhouse gases that contribute to global

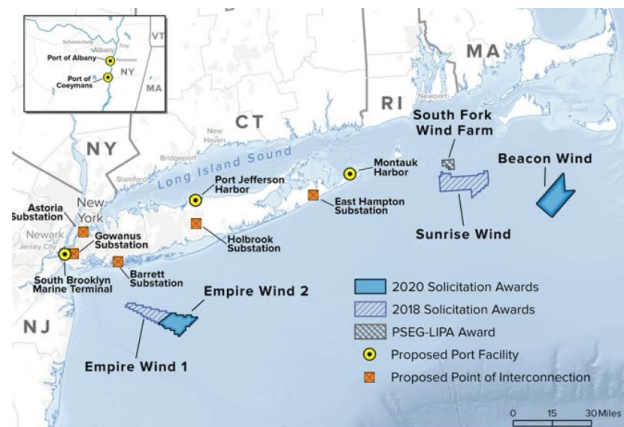
climate change causing more extreme weather events and producing harmful air pollutants. A Just Transition will facilitate the move away from such extractive policies and practices of the past, and towards a new paradigm that regenerates community investment and builds wealth.

When offshore wind projects are powered up, the emission-free electricity they generate will displace dirty power from older power plants, cleaning the air in disadvantaged neighborhoods where these plants are concentrated. The improved air quality will bring better public health.

By revitalizing, expanding, and improving underutilized ports and abandoned industrial areas, we also have new opportunities to green our waterfront communities, providing economic stability, resilience and sustainability for generations to come.



South Brooklyn Marine Terminal. Photo from NYC EDC Site [ix]



NYSDERDA Map of NYS Offshore Wind Projects [vi]

[i] Acadia Center, <https://2030.acadiacenter.org/regions/new-york-region/>

[ii] New York's Climate Action Plan underscores that the transportation (28%) and buildings (32%) sectors are the biggest contributors to New York's GHG emissions. Draft Scoping Plan at 24. Based on 2019 emissions. Can also cite to NY Power Trends 2021 report at 14. <https://www.nyiso.com/documents/20142/2223020/2021-Power-Trends-Report.pdf/471a65f8-4f3a-59f9-4f8c-3d9f2754d7de>

[iii] NYSDERDA, About Offshore Wind, 2022

[iv] NYSDERDA, New York's Third Offshore Wind Solicitation, 2022

[v] <https://thorax.bmj.com/content/early/2021/12/05/thoraxjnl-2021-217312>

[vi] NYSDERDA, Offshore Wind Projects, 2022

[vii] WoodMackenzie, The Next Decade in US OSW, 2022

[viii] <https://blog.nwf.org/2019/03/a-big-deal-for-right-whales/>

[ix] <https://edc.nyc/program/offshore-wind-nyc>