



The Block Island Wind Farm in Rhode Island.



A 6MW wind turbine off Block Island.

Offshore Wind for America

The Promise and Potential of Clean Energy off Our Coasts

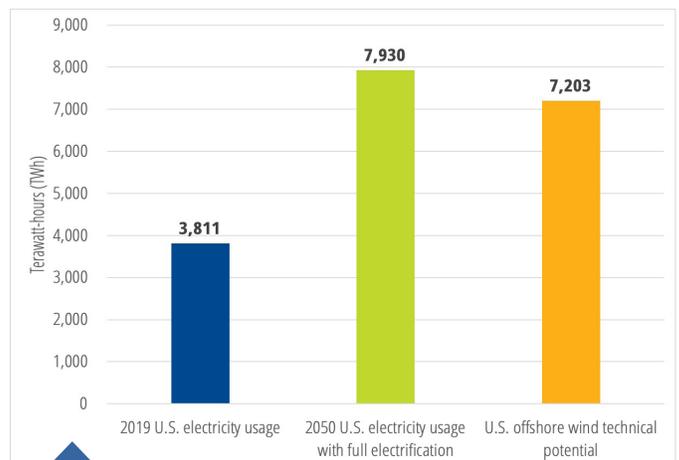
America has an abundant renewable energy resource right off our coasts: offshore wind. Offshore wind technology is proven, ready and can help America transition away from fossil fuels and toward a 100% renewable energy system.

Offshore wind is an immense clean energy resource

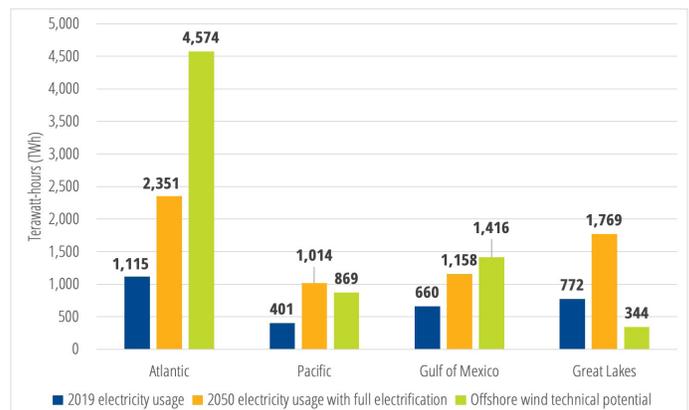
- The United States has the technical potential to produce over 7,200 terawatt-hours (TWh) of electricity annually from offshore wind.
- That's almost twice the amount of electricity consumed nationwide in 2019, and about 90% of what we would consume in 2050 if we transitioned our buildings, transportation and industry to use electricity.

Every coastal region of the U.S. has potential for offshore wind

- The Atlantic region has abundant offshore wind resources on its shallow continental shelf with strong, consistent winds.
- The Pacific region has little shallow water, necessitating the use of floating turbines.
- The Gulf region has shallow water but low average windspeed and many conflicting uses, reducing its technical potential.
- The Great Lakes region has winter ice floes that could damage floating platforms, reducing the developable area to shallow waters.



2019 electricity usage, 2050 electricity usage with full electrification, and offshore wind technical potential.



Regional variation in offshore wind technical potential and electricity consumption in the U.S.

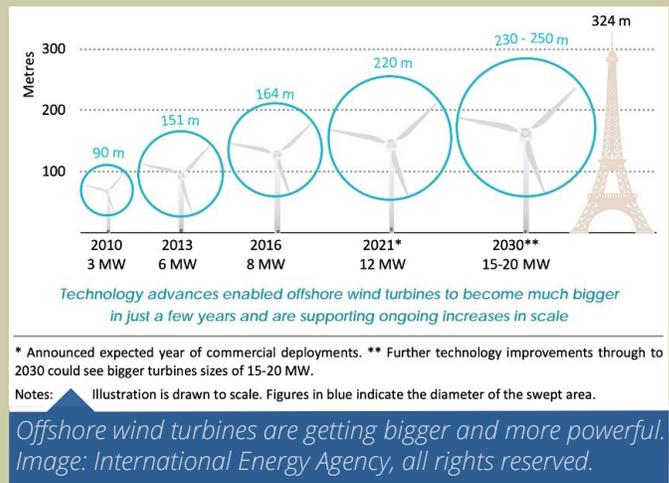
The U.S. offshore wind industry is ready to take off

- In addition to the two operational pilot projects, the 34 proposals for offshore wind development in the country – including 27 projects in various stages of planning and development – have a total of over 26 gigawatts of site capacity, enough to power almost 7.2 million homes each year.
- Many states have set targets for offshore wind generation, while others have renewable electricity standards that could include offshore wind, which will help drive growth.
- U.S. companies are about to break into the market, and states are partnering with foreign companies to manufacture offshore wind turbine components domestically.

Policy recommendations

To help the industry grow, and to hasten the transition to renewable energy, governments and regulatory agencies at all levels should:

- Provide market certainty for offshore wind, as Connecticut, Maryland, Massachusetts, New Jersey, New York and Virginia have done by setting enforceable targets for offshore wind deployment.
- Support domestic supply chain development.
- Set national standards to ensure the environmental integrity of offshore wind projects and to avoid, minimize and mitigate impacts to marine ecosystems and wildlife.
- Direct the Bureau of Ocean Energy Management and relevant state agencies to accelerate the offshore wind development process while ensuring transparency and environmental responsibility.
- Increase and extend tax credits for offshore wind power.
- Plan for regional offshore wind development, including transmission infrastructure.
- Support research and development of new offshore wind technologies.



Offshore wind technology is advanced, widely deployed and improving

- Over 5,500 offshore turbines are currently deployed around the world – mostly in Europe and Asia – with enough generating capacity to power 7.3 million U.S. homes.
- Today's turbines are hundreds of feet taller and more efficient than turbines installed in 2010. They're installed in much deeper water, tens of miles farther from shore.
- The next generation of turbines promises a new level of efficiency and generation capacity and could reduce costs while powering more of our energy needs.

Federal practices have slowed the growth of offshore wind

- Federal offshore wind tax credits are short-term and unpredictable. In December 2020, the production tax credit was extended for just one year, and the investment tax credit created for just five. Short cycles of extensions introduce uncertainty and slow development.
- The Bureau of Ocean Energy Management has not leased new areas for offshore wind since 2019 and has a slow permitting and approval process that delays projects that are being developed.