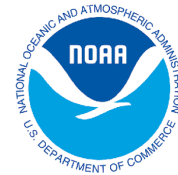


NOAA's Role in Offshore Wind Development



NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION • UNITED STATES DEPARTMENT OF COMMERCE

The robust deployment of offshore wind energy is a critical component of U.S. efforts to mitigate climate change, grow the clean energy sector, and support the Blue Economy.

The Department of the Interior's Bureau of Ocean Energy Management (BOEM) is the lead agency for offshore energy development under the [Outer Continental Shelf Lands Act](#). NOAA's science, research, and regulatory responsibilities—acting in close partnership with BOEM and other state and federal agencies and stakeholders—enable sustainable, safe, and informed offshore wind development.

In support of the President's 30 gigawatts of offshore wind by 2030 goal, NOAA is committed to building a strong legal, regulatory, and science-based foundation for this emerging use of our marine waters. NOAA offers:

- Scientific understanding of marine and coastal wildlife, fisheries, habitats, meteorological and oceanographic conditions
- Comprehensive environmental review and permitting
- Monitoring and mitigation of project environmental and ecological impacts
- Forward-thinking analyses to ensure offshore wind progresses in tandem with biodiversity protections, ocean co-use, and future changes due to climate change

NOAA's active engagement in the development process and support for inclusive partnerships at the regional and national scales help inform transparent and data-driven decisions.

NOAA's Contributions to Offshore Wind Development

1. Protection of Coastal & Marine Resources

NOAA is focused on minimizing the impacts to ocean resources, critical habitats, and fishing opportunities throughout the planning, siting, construction, operation,



and decommissioning stages. NOAA supports responsible offshore wind development by:

- Reviewing, permitting, and consulting with BOEM, other state and federal agencies, and wind energy developers to ensure compliance with the [Marine Mammal Protection Act](#), [Endangered Species Act](#), [Magnuson-Stevens Act](#), [National Marine Sanctuaries Act](#), and the [Fish and Wildlife Coordination Act](#).
- Coordinating with BOEM and other agencies to evaluate the impacts of wind development activities on coastal and marine resources, provide data and expertise on commercial and recreational fisheries, and identify mitigation measures under the [National Environmental Policy Act](#).
- Enabling coastal states to review federal actions that could affect coastal uses or resources under the [Coastal Zone Management Act's](#) Federal Consistency provision.

2. Interagency & Stakeholder Engagement

NOAA actively engages with agencies—such as BOEM and the Department of Energy (DOE)—and the private sector to develop data sharing agreements and joint

scientific studies, and to share that information with stakeholders.

For instance, NOAA has:

- Entered into a Memorandum of Understanding with BOEM to ensure early and sustained coordination at key decision points to leverage the responsibilities and expertise of each agency.
- Worked with the [Responsible Offshore Development Alliance](#) and other partners to complete a [Synthesis of the Science report](#) to improve understanding of existing science and data gaps related to offshore wind energy.
- Partnered with DOE to establish the Offshore Wind [Sea Grant Liaison](#) Program, which provides learning opportunities and science-based tools and resources to offshore wind stakeholders to support informed choices.
- Engaged with inclusive regional partnerships that convene state and federal agencies, tribes, ocean users, and industry representatives to expand the network of NOAA-knowledgeable stakeholders in productive dialogues and analysis of potentially competing ocean uses and values.

3. Environmental Intelligence

As the authoritative source of environmental intelligence, NOAA provides the best available science and data on the conditions of atmospheric conditions, ocean resources and interactions between offshore wind energy projects and marine species, habitats, and ocean users. NOAA compiles and synthesizes data that are used to monitor and assess marine life, marine ecosystems, ocean and atmospheric conditions, forecasts and outlooks, and potential impacts on ocean uses. NOAA also develops publicly available data and tools, such as nautical charts, to better apply updated information to planning and siting decisions.

These foundational and integrated data on ocean activities, resources, and socioeconomics—coupled with analyses and models on impacts of co-use—enable informed discussions and an efficient planning and permitting process.

4. Research & Operations

NOAA helps ensure safe operations of wind turbines through our forecasts, observations, and navigation resources. Additionally, NOAA is involved in a multitude of research efforts that can help inform offshore wind siting, construction, and operations such as:

- Providing data to BOEM on historic fishing operations and coastal communities' reliance on them.

- Developing climatology and wind data and modeling to optimize site selection and impacts to scientific observations.
- Developing a [passive acoustic monitoring framework](#), in collaboration with BOEM, to effectively monitor and reduce the impact of wind energy projects on marine animals.
- Working closely with DOE to improve weather forecast models to enable more accurate predictions of wind turbine energy generation, leading to more efficient integration into the electric grid.

Addressing Offshore Wind's Impacts on NOAA's Mission

NOAA is committed to supporting sustainable ocean uses, including offshore wind, and will continue to work to reduce potential impacts on NOAA's mission-critical activities. For instance, NOAA and BOEM are working in collaboration to develop and implement a [strategy](#) to reduce impacts of offshore wind energy development on [NOAA's scientific survey enterprise](#). This is essential for sustainably managing fisheries and recovering protected and endangered species. Consistent with that effort, and in collaboration with the [Regional Offshore Science Alliance](#), NOAA worked with researchers, wind developers, and state and federal agencies to develop an [offshore wind project monitoring framework and guidelines](#). These can help developers characterize, evaluate, and monitor the impacts of their proposed projects on marine life and fishing operations.

NOAA is also engaged with DOE, BOEM, the U.S. Coast Guard, and other federal agencies on the Interagency Wind Turbine Interference Mitigation Working Group, which fosters federal collaboration on mitigating wind turbine interference on radars.

NOAA is fully supportive of the goal of developing offshore wind energy while protecting the nation's ocean resources and their habitat. Balancing these different uses of the ocean is critical to the development of the American Blue Economy and a low-carbon future.

