

# California Offshore Wind **FACT SHEET**

## What is happening with offshore wind?

California has some of the best conditions for offshore wind in the world and the resource plays a key role in the state's goal to achieve 100% clean electricity by 2045.

The California Energy Commission (CEC) is currently working with relevant federal, state and local agencies, tribes and stakeholders to develop a strategic plan to develop up to 25 gigawatts of offshore wind energy in federal waters off the California coast.

In late 2022, the federal Bureau of Ocean Energy Management (BOEM) awarded five leases in the Morro Bay and Humboldt wind energy areas. The California Coastal Commission reviewed and conditionally concurred with Consistency Determinations prepared by BOEM for the lease areas, per the Coastal Zone Management Act (CZMA). More BOEM lease areas will be required to achieve the state's 2045 offshore wind goals.

## Quick facts about offshore wind:

- A single rotation of the blades on an offshore turbine can power a home for a day.
- The blades on each turbine can rotate 10 to 15 times per minute.
- To achieve 25 gigawatts of offshore wind will require more than 1,600 floating offshore wind turbines to be built off California's coast.
- The turbines will be as tall as the Eiffel Tower but when located 20 to 60 miles off the coast they are not expected to be highly visible from shore.

## What economic and community benefits could offshore wind create?

A recent study projects the creation of more than 8,000 jobs during peak offshore wind development, with many being unionized. Offshore wind leaseholders are required to develop community benefits agreements with local communities to fulfill their lease bidding credits, which may include training and educational programs and requirements for local hiring that would benefit port communities and California tribes.

## What impact could offshore wind have on coastal wildlife?

California is still studying potential impacts to wildlife and the environment from offshore wind development. Wildlife that could be affected include but are not limited to:

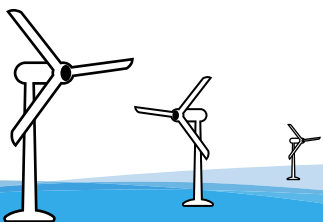
- whales, dolphins, porpoises
- sea lions, seals, sea otter
- sea turtles
- abalone
- hundreds of species of fish
- waterbirds, shorebirds, bats

Some wildlife are listed as federal or state threatened or endangered species.

Many wildlife species are migratory, so would likely pass through areas of turbine operation and near operating seaports on a recurring seasonal basis.

Other potential impacts could include:

- marine mammal and fishing gear entanglement with mooring lines or cables
- seabed disturbance
- underwater noise and vibration
- electromagnetic fields created by transmission cable
- changes to oceanographic and climatic conditions



## What impacts could offshore wind have on tribes and local communities?

Concerns identified include:

- Retaining access to commercial and recreational fishing grounds
- Access to areas used for subsistence fishing and hunting
- Impacts to species that use or pass through the federal lease areas
- Impaired viewsheds and impacts to culturally important areas
- Tribal access to the coastline and physical tribal resources such as prehistoric habitation sites, burial areas, tools, pottery or other artifacts

## What is California doing to avoid or mitigate any negative impacts from offshore wind?

California is committed to avoiding impacts where possible and minimizing or mitigating impacts where avoidance is not possible. Several studies are planned or already taking place to identify impacts and strategies to avoid, minimize or mitigate possible negative outcomes. In addition, each offshore wind development is subject to the National Environmental Policy Act, California Environmental Quality Act and the Coastal Zone Management Act, which address project specific impacts and mitigation.

Potential impacts will be studied extensively during the environmental review process and state-of-the-art monitoring technologies will be implemented to assess the need for adaptive measures to minimize impacts. State and federal governments are investing in marine monitoring and data collection to learn more.

## What is the end-of-life plan for offshore wind projects?

The anticipated operational life of an offshore wind project is approximately 20 to 30 years.

Decommissioning shall include the removal of all offshore and onshore facilities, including turbines, cables, mooring lines and anchors. State and federal project approvals will require all offshore wind components be recycled to the extent feasible.

BOEM has processes in place, regulatory requirements and financial assurances for decommissioning offshore wind facilities, and California will work with BOEM and project developers to ensure responsible decommissioning occurs. California will require offshore wind developers to submit decommissioning plans up front as part of the project permitting process.

## Where can I go to learn more and have my voice heard?

More information about offshore wind can be found on the CEC's website:

[www.energy.ca.gov/programs-and-topics/topics/renewable-energy/offshore-renewable-energy](http://www.energy.ca.gov/programs-and-topics/topics/renewable-energy/offshore-renewable-energy)

Information on CEC's Tribal Program is at:

[www.energy.ca.gov/programs-and-topics/programs/tribal-program](http://www.energy.ca.gov/programs-and-topics/programs/tribal-program)

For help or additional information, contact CEC's Public Advisor:

[publicadvisor@energy.ca.gov](mailto:publicadvisor@energy.ca.gov)



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