



**Informational Item**

June 4, 2024

Item 8a

## Status of Offshore Wind Development in California

Maya Hsu, Executive Fellow

**Location:** Statewide

**Strategic Plan Goals and Objectives:** Goal 4: Support Ocean Health Through a Sustainable Blue Economy, Objective 4.1: Guide Sustainable Renewable Energy Projects

### Executive Summary

California is committed to carbon neutrality by 2045 in its efforts to combat climate change. Meeting these bold renewable energy targets will require unprecedented changes to the state's energy portfolio and infrastructure. California's offshore waters have emerged as a prime location for floating offshore wind projects, and development has rapidly progressed in recent years. Floating offshore wind is a new and emerging industry in California, and the state must take meaningful steps to understand and minimize potential negative impacts to the environment, cultural resources, and coastal communities. OPC is working closely with the California Natural Resources Agency (CNRA) and its external partners to specifically address impacts of offshore wind to the environment, tribes, fishermen, and underserved communities. This information item provides a status update on offshore wind development in California, including recent updates on the Assembly Bill (AB) 525 Strategic Plan for Offshore Wind Development and the Bureau of Ocean Energy Management (BOEM) leasing process.

### Background

Climate change is one of the most pressing threats to our coast and ocean. The world's oceans absorb roughly one-third of the total carbon dioxide emitted by human activities each year. Simultaneously, they have absorbed over 90 percent of the warming caused by humans since the 1970s. As a result, scientists have observed biological, chemical, and physical changes that include sea-level rise, coastal erosion, ocean acidification, warming seas, changing ocean currents, and shifting species distributions. To address these impacts, California must decarbonize. [Senate Bill](#)

[\(SB\) 100](#) (Chapter 312, Statutes of 2018) requires renewable energy and zero-carbon resources to supply 100 percent of electrical retail sales to end-use customers by 2045.

Offshore wind has been identified as a key emerging component of California’s renewable energy strategy. The state has some of the best wind resources in the county off the north and central coasts, where five leases have already been awarded for offshore wind development. The [California Energy Commission \(CEC\)](#) has established a goal of achieving 2 to 5 gigawatts (GW) of offshore wind power by 2030 and 25 GW by 2045. For reference, 1 GW can supply the electric demand of around one million California homes. Despite these benefits, offshore wind is an emerging industry in California, and there will be impacts to marine resources, fisheries, tribes, and underserved communities. As the state looks to avoid and mitigate these impacts, it will need to continue investing in research, environmental monitoring, tribal consultation, and community engagement to inform and adaptively manage this emerging industry.

### **Assembly Bill 525 Strategic Plan**

In September 2021, the California Legislature passed, and the Governor signed, [Assembly Bill \(AB\) 525](#) (Chapter 231, Statutes of 2021) requiring the CEC, in coordination with the California Coastal Commission, the Ocean Protection Council, the State Lands Commission, the Office of Planning and Research, the Department of Fish and Wildlife, the Governor’s Office of Business and Economic Development, the California Independent System Operator, and the Public Utilities Commission, and other relevant federal, state, and local agencies as needed, to develop a strategic plan for offshore wind energy development. AB 525 also required the CEC to develop a series of [interim reports](#) to inform the strategic plan.

The CNRA Deputy Secretary for Tribal Affairs and the CNRA Deputy Secretary for Equity and Environmental Justice additionally contributed to the development of the Strategic Plan by conducting outreach to their respective external partners to ensure that the Strategic Plan reflected and elevated tribal and environmental justice concerns.

A [Draft AB 525 Strategic Plan](#) was released on January 19, 2024, and addresses the following topics:

- Potential impacts from offshore wind development to marine biological resources, Native American tribes and peoples, fisheries, national defense, and underserved communities
- Sea space for offshore wind development
- Port and waterfront infrastructure needs
- Workforce development and economic needs and opportunities
- Transmission planning and technologies
- Permitting needs and potential approaches

The Draft Strategic Plan underwent a nearly 4-month public comment period, during which the CEC held two public workshops on [March 20, 2024](#) and on [March 29, 2024](#). During these meetings, attendees received information about the Plan and provided public comments. The public workshop on March 20, 2024, included a [presentation on marine and biological impacts](#) from OPC’s Executive Director, Jenn Eckerle.

The CEC received written and oral comments from various external partners. Several tribes expressed formal opposition to offshore wind, citing concerns about impacts to marine life and cultural resources and the lack of tribal consultation and engagement. Many tribes also called for a more robust discussion of opportunities for co-management and increased regulatory and decision-making authority for tribes. Several environmental non-governmental organizations (NGOs) commented that the Strategic Plan should include clearer timelines and more actionable recommendations, and emphasized the need for avoiding and mitigating negative environmental impacts and prioritizing environmental justice communities during development. Offshore wind proponents also cited concerns about the lack of clear and actionable recommendations, and requested greater certainty on the state’s regulatory processes, transmission planning, and procurement. Fishing organizations submitted comments expressing concern regarding the environmental impacts offshore wind development and the lack of data and information related to these impacts.

The CEC, in coordination with other departments, is updating the Strategic Plan based on feedback received during the public comment period. The final Strategic Plan is anticipated to be released and approved at the CEC’s Business Meeting this summer.

## **Bureau of Ocean Energy Management Leasing Process**

In June of 2023, BOEM executed [five offshore wind leases](#), two in the Humboldt Wind Energy Area and three in the Morro Bay Wind Energy Area. Since then, lessees have developed Fishing and Agency Communication Plans and are in the process of developing Tribal Communication Plans. Lessees have begun or are preparing to begin surveys and site assessment activities, which will allow lessees to gather important information about the seabed and the marine environment. The survey and site assessment activities will take place over the next few years, after which lessees will submit Construction and Operation Plans (COPs). Once lessees submit their COPs, BOEM and the state will conduct environmental reviews and begin issuing permits for construction.

Currently, BOEM is developing a [Programmatic Environmental Impact Statement \(PEIS\)](#) to evaluate potential impacts from offshore wind development in federal waters off the coast of California. BOEM released a [Notice of Intent \(NOI\)](#) to prepare a PEIS, which triggered a 60-day comment period starting on December 20, 2023. OPC submitted a joint comment letter with partner

agencies at the California Natural Resources Agency (CNRA) to emphasize state priorities and environmental consideration for the PEIS. OPC and partner agencies are now reviewing an administrative draft. A draft PEIS is anticipated to be released in the fall of 2024 that may inform subsequent analysis under the National Environmental Policy Act (NEPA) for the Construction and Operation Plans for each wind energy facility.

On April 24, 2024, BOEM announced its [five-year offshore wind lease schedule](#). BOEM anticipates conducting additional offshore wind lease sales in California in late 2027 or early 2028. BOEM also expects to hold offshore wind lease sales in Oregon in October of 2024. One of the [proposed lease areas](#) is at the Southern Oregon border, meaning that offshore wind development in Oregon could have implications for California.

### California Natural Resources Agency: Ongoing Offshore Wind Activities

California is committed to avoiding impacts of offshore wind development and minimizing or mitigating impacts where avoidance is not possible. Comprehensive monitoring plans and adaptive management strategies for offshore wind projects will be key in ensuring that marine resources are protected given the high degree of uncertainty surrounding the scope and scale of impacts associated with construction and operation of offshore wind development, given this is a new industry using new technologies (for example, the use of floating platforms).

To address this uncertainty and provide scientific guidance to assess environmental impacts, OPC is managing a project in partnership with the California Marine Sanctuary Foundation to develop [environmental monitoring guidance for offshore wind development](#). This project will create a roadmap for a comprehensive environmental monitoring program to evaluate potential impacts and inform adaptive management decisions through all phases of project construction and operation. As part of this effort, OPC is conducting government-to-government consultations to ensure that tribal priorities are incorporated into the monitoring guidance. OPC has also issued a [call for nominations](#) for tribal scientists to participate in the environmental monitoring guidance development; this call remains open for tribal scientists with relevant expertise who are interested in contributing to this effort.

This effort serves as a first step to develop and establish an expert science entity to help prioritize environmental monitoring and research related to offshore wind development in California. OPC intends to establish the science entity to help focus efforts to collect, review, and disseminate the best available science-based data to inform environmentally responsible planning and deployment of offshore wind along the California Coast.

Other departments at the California Natural Resources Agency are also engaged in activities to support the development of offshore wind. OPC is supporting many of these efforts, and

interagency coordination will continue throughout the offshore wind permitting, development, and operations process.

**California Coastal Commission:** The [California Coastal Commission](#) is responsible for issuing coastal development permits and conducting a Federal Consistency Review to ensure that federal actions are consistent with the state’s coastal policies and management programs. This includes consistency determinations (CDs) of the Bureau of Ocean Energy Management proposed lease areas in federal waters of the North and Central Coasts. The Commission conditionally concurred the CDs for the Humboldt Wind Energy lease area and Morro Bay Wind Energy Area in April and June 2022, respectively.

As one condition to the CDs, the Coastal Commission established and is overseeing the [California Offshore Wind and Fisheries Working Group](#) to develop a statewide strategy to avoid and mitigate impacts to fisheries from offshore wind development. The working group meets every one to two months, and smaller subgroups meet in between these meetings to work on specific deliverables. OPC is providing funding for fishermen to participate in this Working Group.

**California Energy Commission:** The CEC is the state’s primary energy policy and planning agency. As part of its responsibilities under SB 100 (Chapter 312, Statutes of 2018), the CEC is exploring offshore wind as a potential resource to reduce reliance on fossil fuels. AB 525 and AB 3 also require the CEC to develop a strategic plan for offshore wind and develop a second-phase plan for seaport readiness that builds upon the recommendations in the offshore wind strategic plan, respectively. The CEC is also continuing to facilitate a Tribal Working Group to facilitate information sharing and solicit feedback on tribal priorities.

**State Lands Commission:** The State Lands Commission (SLC) serves as the lead agency for the California Environmental Quality Act (CEQA). SLC is responsible for reviewing lessee survey plans and issuing permits for activities in state waters and on state lands. Additionally, SLC will issue state tidelands leases to developers, ports, and other entities building offshore wind infrastructure or ancillary facilities in state waters. SLC has also published a [Port Readiness Plan](#), a [Workforce Development Plan](#), and an [Alternative Port Assessment](#) to inform the AB 525 Strategic Plan.

**California Department of Fish and Wildlife:** The [California Department of Fish and Wildlife \(CDFW\)](#) administers the California Endangered Species Act (CESA), the Native Plant Protection Act, and other provisions of the California Fish and Game Code that afford protection to the state’s fish, wildlife, and plant resources. Under these statutes, CDFW will be issuing scientific collecting permits, lake and streambed authorizations, and incidental take permits for offshore wind-related activities. CDFW also serves as a trustee agency under CEQA and will provide comments and recommendations on potential impacts to the state’s fish, plants, wildlife, and their habitats.