

California has just approved a new blueprint for offshore wind. The massive projects will cost billions

BY JULIE CART
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Boats are docked in Humboldt Bay in Eureka. Ocean waters 20 miles off this coast have been leased to energy companies for offshore wind platforms. Photo by Larry Valenzuela, CalMatters/CatchLight Local

IN SUMMARY

Harnessing clean energy is a venture of unprecedented scope in California, bringing big changes to Humboldt and the Central Coast, and requiring 26 ports along the coast.

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The California Energy Commission today unanimously approved a [sweeping plan](#) to develop a massive floating offshore wind industry in ocean waters — a first-of-its-kind undertaking that will require billions in public and private investments and could transform parts of the coast.

community leaders and others mostly expressed support for offshore wind, although concerns.

State and federal officials use the word “urgency” to describe the frenetic pace needed to lay the groundwork for development of five areas that the [federal government has leased to offshore wind companies](#).

“I feel the urgency to move forward swiftly,” said energy commissioner Patty Monahan. “The climate crisis is upon us. Offshore wind is a real opportunity for us to move forward with clean energy.”

She added, though, that the plan “is a starting point... There are a lot of uncertainties about environmental impacts. We need to be clear-eyed and engage the right scientific interests and move carefully.”



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The [five energy companies](#) are now assessing sites within the 583 square miles, which is expected to take five years. That will be followed by about two years of design, construction and environmental and technical reviews.

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ENERGY COMMISSIONER PATTY MONAHAN

Energy Commission Chairman David Hochschild recently called it “one of the single most complex processes I’ve been involved with.”

That complexity was reflected in the heft of the strategic plan, which includes three volumes and 500 pages of public comment. The breadth of the document — which involved coordination among 10 state agencies — reflects the sheer size and scope of what’s being envisioned. State officials said offshore wind requires an unprecedented level of planning and policy development in California.

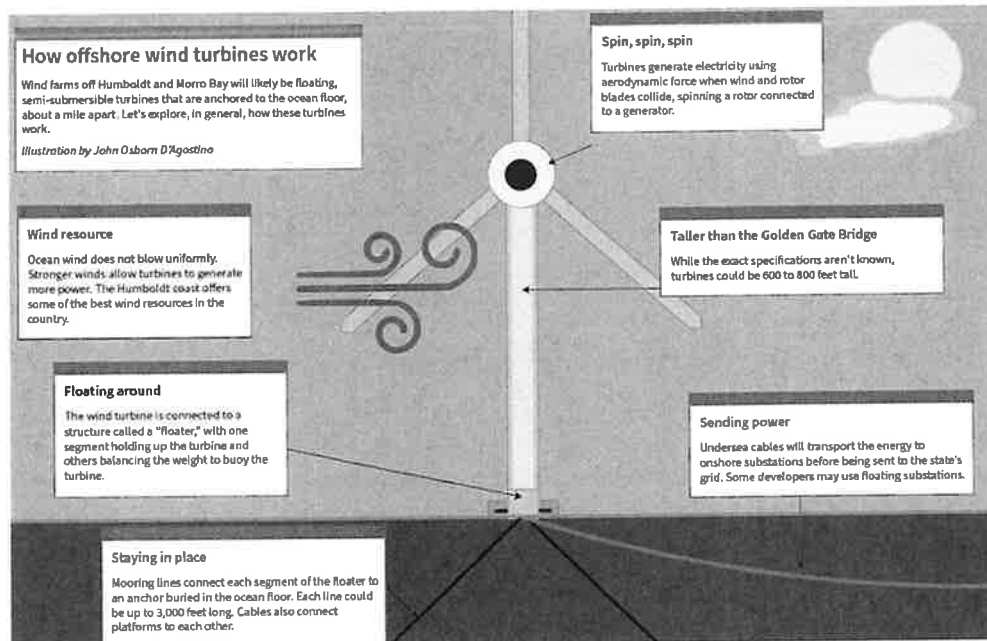
The offshore wind industry must be created almost from scratch: a new manufacturing base for the still-evolving technology; a robust and reliable supply chain; transportation networks on land and sea; specially configured ports to make, assemble and maintain the gargantuan seagoing platforms; finding and training a highly specialized workforce; building a large transmission network where none exists and beefing up those that operate now.

for port infrastructure in a [climate bond measure that will be on the November ballot.](#)

Some people at the hearing raised concerns about increased activity around major ports, where ships and trucks already create serious air pollution problems that can trigger asthma and heart attacks.

“This plan does not alleviate that. It increases that,” said Therai Golden, who lives near the Port of Long Beach. “We have a 75 to 100 year legacy of death with the current pollution. It is insane. We don’t oppose offshore wind. We oppose the development in our backyard, where we are already dying.”

Another pressing challenge is transmission — the complex job of getting the power onshore and distributing it to users. The Humboldt area presents the biggest challenge, the report says, given the rural region’s already sparse transmission network.



Capturing wind energy from giant floating ocean platforms is considered essential to achieving California’s [ambitious goal](#) of electrifying its grid with 100% zero-carbon energy. The state’s blueprint envisions offshore wind farms producing 25 gigawatts by 2045, powering 25 million homes and providing about 13% of California’s electricity.

Powering an expansive economy free of fossil fuels by 2045 means the state [must triple its power generation capacity](#) and deploy new solar and wind energy at almost five times the pace of the past decade.

The endeavor will require coordination with multiple state and federal agencies, as well as local and tribal governments, with overlapping jurisdictions and sometimes conflicting priorities.

That heavy lift, said Adam Stern, executive director of [Offshore Wind California](#), an industry group, made it all the more remarkable that the strategic plan was finalized.

None of these things was happening a year ago.”

ADAM STERN, OFFSHORE WIND CALIFORNIA

The Energy Commission missed its March deadline included in [state law](#) to approve the plan. Then the agency postponed a scheduled vote two weeks ago to give interested parties enough time to digest the dense package of documents.

The shipping industry is concerned that the plan doesn't “address and ensure navigational safety and efficiency” for the commercial ships that serve California's seaports. The ports of Los Angeles and Long Beach are the nation's busiest.

“The plan lacks any effective identification and analysis of potential impacts to the commercial shipping industry,” the Pacific Marine Shipping Association wrote in a letter to the Energy Commission. “It is frankly confounding that there is resistance to include the maritime industry in this vital Plan; to be clear, the industry is not opposed to offshore wind development in practice.”

Environmental groups scoured the documents for answers to what have been unanswerable questions about offshore wind's potential effects on marine life, migrating whales and birds, and the onshore environment.

Even state scientists have publicly noted a “data gap” when it came to understanding the impact of platforms in the sea, electrified underwater cables, huge spinning blades and increased boat traffic.

To answer those questions, the commission's plan calls for a broad-based science consortium and a bird and bat conservation strategy, among other topics. Recreational and commercial fishing will be affected, the report says, and that will require continued research, officials say.

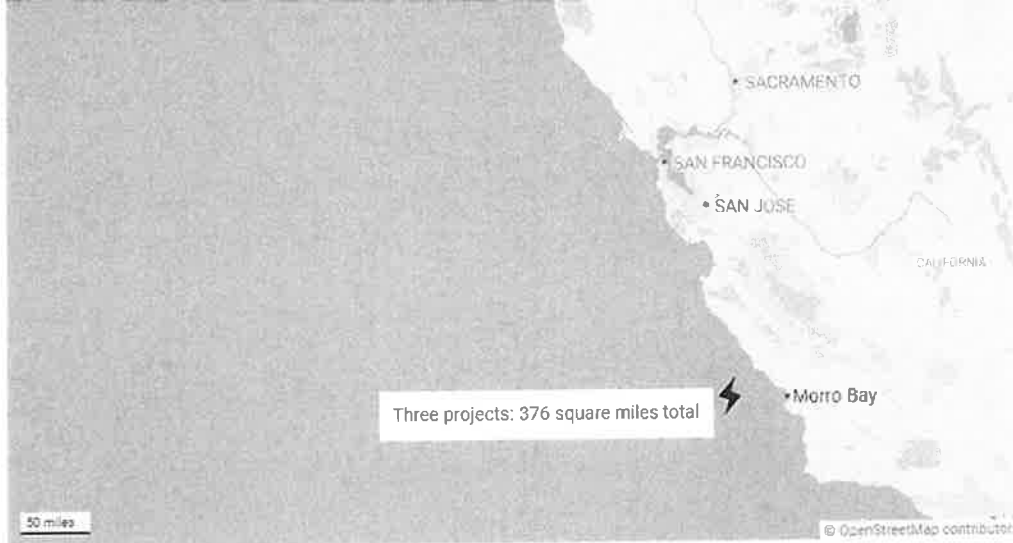
Some environmental groups have come to terms with the uneasy tradeoff between the need to address climate change with cleaner energy and the potential harmful impacts that come with any energy development.

Understanding that climate change is contributing to the rapid decline of bird populations means accepting some development, said Mike Lynes, director of public policy for Audubon California. “We want these projects to be successful. But we want to avoid impacts first and mitigate where we can.”

Dan Jacobson, senior adviser to the advocacy group Environment California, said he is becoming comfortable with the unknowns. “But we can't slow down on the science and information that we need. We have to do things quickly, inexpensively and very smartly. You usually get two out of three of those things. How do we do this so that we cause the least harm and get the most good out of it?”

Offshore wind leases off California

The federal government auctioned off leases for offshore wind production in 583 square miles of deep ocean waters off Humboldt County and Morro Bay. The areas, about 20 miles offshore, have the potential to produce more than 4.5 gigawatts to power about 1.5 million homes.



Map: John Osborn D'Agostino, CalMatters Source: Bureau of Ocean Energy Management Embed Download image Created with Datawrapper

Assemblymember Dawn Addis, whose district includes 200 miles of the Central Coast, said it is clear to her that her constituents don't have enough information to understand the implications of the new industry. Her 2023 bill to [fund offshore wind scientific research](#) was folded into the budget, with \$3.6 million going to the state Ocean Protection Council to organize the research effort.

"Everyone's hungry to understand the science," said Addis, a [Democrat from San Luis Obispo](#). "There's still work to do to get that science into the world. This is a tremendous opportunity to study the deep ocean."

Addis, who chairs the Legislature's select committee on offshore wind energy, said lawmakers will analyze the strategic plan and "uncover needs that we just don't know about yet. Getting this right is not just a slogan for me."

Generally, the plan acknowledges environmental impacts but says that so-called "adaptive management" — flexibility to change an approach if it proves unexpectedly damaging — can address most concerns.

The projects will industrialize sections of the California coast with an indelible footprint, and could usher employment and revitalized economies to neglected regions. Nearly a fifth of [Humboldt County households live in poverty](#).

Community groups and tribes along the North Coast, in particular, have been participating in formulating the state's strategic plan to make sure that wind development doesn't follow the boom-and-bust cycle of so many extractive industries, such as mining and timber, that have come and gone from the Humboldt region.

"We need to be part of the decision-making structure, to make sure that this industry delivers local community protection and investment, through legally binding and enforceable mechanism," said Katerina Oskarsson, the executive-in-residence at CORE Hub and the Humboldt Area Foundation, part of a coalition of community groups and tribes.

"If this industry moves forward, host communities need to benefit. This is not just about jobs and economic benefit. It's about justice beyond jobs. This needs to be transformational in a



‘Another attempt to industrialize the coast’: California’s Central Coast residents work to stop — or at least slow down — offshore wind

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