

ENERGY POLICY NEWS

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California sets nation's most ambitious offshore wind target

State's roadmap shows 2050 wind power production target of 20 GW

by Henrik Nilsson

Government agencies continue to provide California's wind industry with good news as the state prepares for a boom in offshore wind development. The [California Energy Commission](#) (CEC) published a draft report Friday recommending the state produce 3 gigawatts (GW) of offshore wind by 2030. That number could increase to 10 GW to 15 GW by 2045 and 20 GW by 2050.

If California realizes CEC's roadmap, the state will receive more gigawatts from wind power than any other U.S. state. The draft report stems from legislation signed into law last year by Gov. Gavin Newsom, directing CEC to provide an offshore wind target by June 30 in coordination with federal, state and local agencies and a wide variety of stakeholders.

CEC is showing that California "is serious about 'going big' on floating offshore wind," said Adam Stern, executive director at Offshore Wind California.

California is preparing for a fall [offshore wind leasing auction](#) for areas off the coast of Humboldt County in Northern California and Morro Bay in Central California. Together, the areas have the potential to generate 4.6 GW of offshore wind, enough to power 1.6 million American homes, according to the Biden administration. The Bureau of Oceanic Management (BOEM) has also eyed other potential leasing areas, such as Diablo Canyon in Central California.

"The CEC's preliminary offshore wind planning goals ... send an important signal to the industry and other state and federal agencies that California is committed to moving forward expeditiously to make offshore wind power a reality," Stern said in a statement. "This includes the federal lease auction this fall and planning for ports, transmission, procurement, additional call areas, workforce development, and a sustainable supply chain to jump-start California's offshore wind industry."

Meanwhile, [BOEM](#) cleared the way for wind leasing in Northern California after finding no significant environmental impacts, according to a review issued last week. Another review for the lease area in Central California is expected soon.

Ambitious goals

Apart from creating thousands of jobs and improving reliability, wind power can also save as much as a billion dollars annually in the generation of electricity, saving ratepayers significant money compared with other technologies, according to Adam Rose, a research professor with Price School of Public Policy at University of Southern California.

However, California must overcome some hurdles to realize its ambitious goals. "The major one is the need for new transmission infrastructure," Rose told *Energy Policy News*. "Since offshore wind, especially in Northern California, is in a remote location, there's a need to build additional transmission lines, which will cut into some of the gains unless outside investors are brought into play." Depending on the size of the offshore wind farm in Northern California, transmission upgrades could cost up to \$4 billion, according to estimates by the Schatz Energy Research Center.

Another issue is the affordability of floating technology. Given that the continental shelf drops off quickly on the West Coast, the power would have to come from floating turbines. Floating technology costs more than double those of both solar- and land-based wind technology, and is not expected to become cost competitive until at least 2030, according to Rose's research.

Floating technology is expected to be required in around 60% of offshore wind areas globally, Stern said in an interview. As the technology improves and is further tested, prices could drop, he said. "At the same time, there isn't a project yet that has done this at the scale that is envisioned for California," he said. "The thinking is, by the time the projects are ready to be built, there will have been more experience with the floating technology in Europe and Asia."

Bidding on change

BOEM in February held a [record-setting auction](#) for areas off the coast of New York and New Jersey. Total bids amounted to over \$4 billion, smashing the previous record of \$405 million in high bids for three lease areas in Massachusetts in 2018.

With state and federal government support, coupled with the increasing attractiveness and experience with offshore wind development, the upcoming auctions in California could yield strong results, said Rose. "I don't see any reason why there wouldn't be strong bidding for this," he said. "We are more and more concerned about energy crises and climate change. Offshore wind is a major option for us in coping with both of those pretty effectively."

Energy Policy News will hold a [free webinar on May 24](#) to discuss natural gas policies and their implications for FERC and the industry.