



**Field Hearing of the U.S. House of Representatives Natural Resources Committee,
Subcommittee on Energy & Mineral Resources
“Power in the Pacific: Unlocking Offshore Wind Energy for the American West”
Testimony of Adam Stern, Executive Director, Offshore Wind California
September 8, 2022**

I’m Adam Stern, executive director of *Offshore Wind California (OWC)*, a trade group that represents the offshore wind industry in our state. We want to thank the Members and staff of the U.S. House of Representatives Natural Resources Subcommittee on Energy and Mineral Resources for holding this field hearing in Morro Bay today. We also wish to thank the federal and state agencies and local stakeholder leaders, whose support is critical to making offshore wind power a sustainable source of clean energy and family-wage jobs.

This is a well-chosen site and an important moment for discussing offshore wind. It’s been almost a year since the California Legislature overwhelmingly passed and Governor Newsom signed the landmark [AB 525](#) legislation, which laid out a road map to jumpstart floating offshore wind as a new industry to help California meet its ambitious climate, clean energy, and jobs goals.

Last month marked the first of many milestones on this road map, as the California Energy Commission (CEC) [approved](#) a bold set of planning goals to put the state on a path to “go big” on floating offshore wind and responsibly develop up to 5 gigawatts (GW) by 2030 and a nation-leading 25 GW by 2045. At the federal level, Congress also passed an historic set of climate measures that go big on clean energy, including steps to advance the President’s national goal to generate 30 GW from offshore wind by 2030 and aim for 110 GW by 2050.

These are important successes. But meeting these planning goals has become even more urgent. As we have all experienced this past week, heat waves and the climate crisis are forcing California to take extreme action to address risks to our electric grid and ensure reliability. Indeed, the Earth is facing a climate emergency – not some time in the distant future, but now.

Offshore wind is poised to be a major part of the climate solution in California. The Golden State is ready to add this new renewable technology to its diverse clean-power portfolio as a strong complement to our existing solar, storage, geothermal, and other energy resources.

The size of the challenge is clear and so is the opportunity. The National Renewable Energy Laboratory (NREL) reports that California has [200 GW](#) of technical offshore wind potential, with more than [25 GW](#) in BOEM’s two designated Wind Energy Areas and two wind study areas. Moreover, developing California offshore wind at this scale would support [tens of thousands of jobs](#), generate enough [competitively priced](#) power for millions of homes, and produce [tens of billions](#) of dollars in GDP for the state by 2050.

To bring offshore wind to market for California – and realize its substantial climate, clean energy, and workforce benefits as quickly as possible – will require scale, speed, and sustained support from federal, state, local, and other key stakeholders. Decades of industry experience and academic study have demonstrated that going big is one of the most important keys to achieving success with offshore wind. Economies of scale will be essential to establish a sustainable offshore wind industry, drive down costs, deliver competitively priced clean power, and encourage suppliers, other businesses, and jobs to locate in our state.

We're seeing this scenario play out on the U.S. East Coast where states have now committed to 40 GW of fixed-bottom offshore wind. And we're seeing it overseas, including in Scotland, which last January took action that will put 15 GW of floating offshore wind turbines in the water in the coming decade.

These successes are all being driven by economies of scale and technology advances that are dramatically reducing costs, which will save ratepayers money, improve electric reliability, and reduce climate-threatening carbon emissions. NREL projects that costs for floating offshore wind in California will decline to \$53–\$64/MWh by 2032. By 2050, DNV GL reports that floating wind will reach a competitive levelized cost of energy of less than \$40/MWh.

That's why our organization encouraged California to set bold planning goals for floating offshore wind. California adopted these goals, which now are the most aggressive in the nation.

So what does going big on offshore wind look like going forward?

First, it means moving ahead with the Bureau of Ocean Energy Management's (BOEM's) plans for an initial **federal lease auction** this fall at the Morro Bay and Humboldt Wind Energy Areas (WEAs). Together these areas have more than 7 GW of capacity according to NREL's latest estimates.

It also means addressing the following issues:

On **transmission**, it means siting, permitting, and building power lines to transmit 25 GW of offshore wind power to load centers in North, Central and Southern California. We have a good start at Morro Bay, which has access to existing transmission interconnection capacity of up to 5-6 GW, according to the California Independent System Operator. This capacity comes from the past retirement of the Morro Bay Power Plant and the new retirement date set for the Diablo Canyon Power Plant in 2030, when offshore wind is due to come online. In addition, we will still need substantially more transmission capacity and an improved process to build it. We also need to work with BOEM and the National Oceanic and Atmospheric Administration to ensure power generated at Morro Bay can reach shore in the context of the proposed Chumash Heritage National Marine Sanctuary.

On **port infrastructure**, it means planning and implementing a multi-port strategy that includes the Port of Humboldt Bay on the North Coast and identification of a port or ports that can deploy and service offshore wind off the Central Coast. Development of ports and transmission are excellent initiatives that could be supported with federal and state infrastructure funding.

On **new call areas**, it means starting work with BOEM now to identify new areas for the next rounds of leasing to reach California's goal of 25 GW by 2045. As I mentioned earlier, [NREL](#) estimates there is more than [25 GW](#) of capacity in BOEM's two designated WEAs and two wind study areas off the North Coast. It's critical that the process of identifying new call areas begin soon and be as inclusive as possible to ensure full participation by all interested parties. We're committed to ensuring that offshore wind has a minimal impact on the environment and coexists well with local communities, marine life, and all other ocean users.

On **procurement**, the CEC, California Public Utilities Commission, and other state agencies need to work together to provide procurement at scale for the power offshore wind will generate. Such action will be important to create more market certainty for developers and investors.

On **workforce development**, the CEC, the Governor's Office of Economic and Business Development (GO-Biz), and other agencies must begin development and implementation of job training programs for the tens of thousands of workers who will install and service offshore wind turbines over their 30-year life cycles.

On **permitting**, the CEC, California Coastal Commission, State Lands Commission, and other state and federal agencies must coordinate on a clear road map that provides greater certainty for completing environmental and other necessary reviews in an efficient, timely manner. Clarity on permitting is essential for the state's offshore wind planning goals to be met.

For a **sustainable supply chain**, it means advancing all of the above, at scale, to attract a wide range of businesses and investment to the state to service and supply this new clean energy industry, which NREL and others estimate will generate [tens of thousands of jobs](#) and [tens of billions](#) of dollars in GDP for California.

Our ultimate goal is to develop a thriving, world-leading, floating offshore wind industry for California, and the U.S. We're committed to working with federal and state agencies and local leaders and stakeholders to implement the AB 525 road map, and to realize, as quickly as possible, the benefits of this important renewable energy resource to the Golden State.

Let me close with an observation by John Headding, Mayor of Morro Bay, who [wrote](#) last month in the *San Luis Obispo Tribune*: "Morro Bay and the Central Coast have a historic opportunity to become an energy hub that will help California reach its clean energy and climate goals while bolstering our economy with the West Coast's first floating offshore wind farms that will generate power day and night. ...The time is now to go big on offshore wind."

We agree, wholeheartedly, and are committed to making that a reality. Thank you for the opportunity to speak with you today. I look forward to responding to your questions.