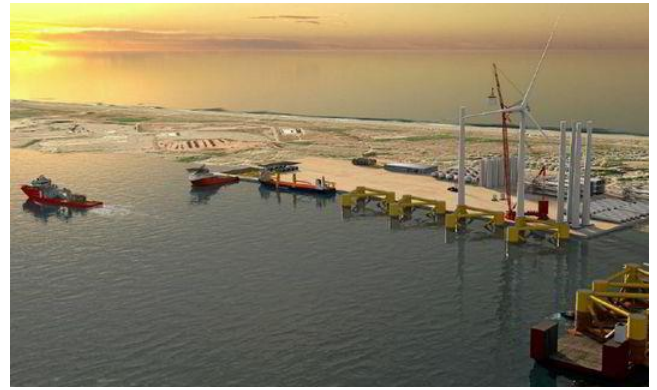


# RECHARGE

March 15, 2022

## California's Humboldt Bay floating wind plans head out of harbour with state funding boost

CGI of Humboldt Port offshore wind hub Photo: Aker Offshore Wind



*Finance totalling \$10.5m from California Energy Commission aims to help develop northern port into offshore wind hub handling gigascale US Pacific projects*

By **Tim Ferry**

The Port of Humboldt Bay in the US state of California has received \$10.5m in funding from the California Energy Commission (CEC) that will help galvanise a far-ranging industrial redevelopment plan that would turn the former timber shipping centre into a floating wind manufacturing hub.

The finance from the CEC, the state's primary energy policy and planning agency, is part of California's push to develop its offshore wind resources to both mitigate the impact of climate change and spur economic development and jobs growth.

"Offshore wind is an important part of the state's clean electricity future, providing critical supply at night to complement our abundant solar resources," said CEC Commissioner Kourtney Vaccaro.

The Bureau of Ocean Energy Management (BOEM), the federal agency charged with managing offshore wind on the outer continental shelf, has formally designated two wind energy areas (WEA), one off Humboldt in northern California with 1.6GW of capacity, and Morro Bay off the central coast with 3GW. Additional areas are being considered that could take the state offshore wind capacity much higher.

The US' most populous state enjoys some of the world's richest wind resources, with wind speeds averaging 9 meters per second (m/s) or higher, and has been calculated by the National Renewable Energy Laboratory to have 112GW of technical capacity, nearly all of it in floating wind territory due to the steep continental shelf off the west coast.

California further strengthened its resolve on offshore wind with the passage of bill **AB 525 last September** requiring the CEC to make plans to progress towards 4.6GW of offshore wind by 2030 and 10GW by 2045.

Despite these aspirations, the rollout of offshore wind faces multiple bottlenecks, including relying on relatively immature floating wind technology and **insufficient transmission capacity**, particularly in lightly populated Humboldt County, as well as a lack of ports. Humboldt Bay is one of few ports on the west coast that has sufficient draught and acreage to support the offshore wind industry.

"Humboldt Bay has the optimal conditions to serve as the primary port for the offshore wind industry for the entire West Coast," said Harbor District board president Greg Dale.

Once completed, the Humboldt Bay offshore wind heavy lift marine terminal will include manufacturing, assembly, and towing capacity for the floating wind sector which California aims to develop into a jobs and clean energy powerhouse.

The port will be looking to redevelop the 168-acre Redwood terminal within the port formerly used for shipping timber. With the demise of the lumber industry in the 1990s, the terminal has been largely unused and has been the focus of redevelopment efforts ever since.

The funds will go towards completing preliminary engineering and design work, conducting site surveys, preparing necessary environmental impact assessments, and implementing early construction. The funds may also be used to attract matching funds from federal grants and to contribute towards project construction.

In addition to the state funding, the Humboldt Bay port authority is seeking \$56m from the federal Maritime Administration's Port Infrastructure Development Program (PIDP), which was recently bolstered by an additional \$17bn in funding under the \$1tn Bipartisan Infrastructure Act of 2021.

The funds will be matched by the state to complete phase 2a of the redevelopment project, which will include construction of 3,886 square metres of berthing and heavy lift wharf improvements and 26,579 square metres of associated lay down areas to support offshore wind installation activities of up to 150MW of offshore wind.

Phase 2b will see final construction of an additional berthing, heavy lift wharf improvements, and an additional 24,000 square metres of lay down areas to support the manufacture, construction, and installation of 300MW of offshore wind generating capacity.

The Humboldt Bay redevelopment is expected to drive some \$446 million in output to the Humboldt regional economy and around \$586 million in economic activity across California, according to a 2021 economic impact study funded by the US Department of Defense (DOD).

The study estimates the construction and operation of the project and related manufacturing sites could produce between 3,000 and 6,000 jobs in California by the year 2050, and that the cumulative gross domestic product could reach as high as \$39.7 billion.

California joins a growing number of US states seeing opportunity in offshore wind, fueled by the Biden administration's **30GW of offshore wind by 2030 goal**. The recent \$4.4bn **New York Bight lease auction** set records and demonstrated the intense demand for offshore wind, which the industry expects to continue into further leasing rounds in California, **North Carolina** and the **Gulf of Mexico**.