

## Assembly Bill No. 525

### CHAPTER 231

An act to add and repeal Chapter 14 (commencing with Section 25991) of Division 15 of the Public Resources Code, relating to energy.

[Approved by Governor September 23, 2021. Filed with  
Secretary of State September 23, 2021.]

#### LEGISLATIVE COUNSEL'S DIGEST

AB 525, Chiu. Energy: offshore wind generation.

The 100 Percent Clean Energy Act of 2018 established as a policy of the state that eligible renewable energy resources and zero-carbon resources supply 100% of retail sales of electricity to California end-use customers and 100% of electricity procured to serve all state agencies by December 31, 2045. The act requires the Public Utilities Commission (PUC), State Energy Resources Conservation and Development Commission (Energy Commission), and State Air Resources Board to, as part of a public process, issue a joint report to the Legislature by January 1, 2021, and every 4 years thereafter, that includes specified information relating to the implementation of the policy.

Existing law requires the PUC and the Energy Commission to undertake various actions in furtherance of meeting the state's clean energy and pollution reduction objectives.

This bill would require the Energy Commission, on or before June 1, 2022, to evaluate and quantify the maximum feasible capacity of offshore wind to achieve reliability, ratepayer, employment, and decarbonization benefits and to establish offshore wind planning goals for 2030 and 2045, as specified.

The bill would require the Energy Commission, in coordination with specified agencies, to develop a strategic plan for offshore wind energy developments installed off the California coast in federal waters, as specified. The bill would require the Energy Commission to submit the strategic plan to the Natural Resources Agency and the Legislature on or before June 30, 2023.

The bill would require the Energy Commission, in coordination with specified agencies, to work with stakeholders, state, local, and federal agencies, and the offshore wind energy industry to identify suitable sea space for wind energy areas in federal waters sufficient to accommodate the offshore wind planning goals for 2030 and 2045. The bill would require the Energy Commission, in coordination with relevant state and local agencies, to develop a plan to improve waterfront facilities that could support a range of floating offshore wind energy development activities. The bill would require the Energy Commission, in consultation with the PUC and

Independent System Operator, to assess the transmission investments and upgrades necessary to support the offshore wind planning goals for 2030 and 2045, as specified. The bill would require the Energy Commission to develop and produce a permitting roadmap that describes timeframes and milestones for a permitting process for offshore wind energy facilities and associated electricity and transmission infrastructure off the coast of California. The bill would require the information described in this paragraph and potential impacts on coastal resources, fisheries, Native American and Indigenous peoples, and national defense, and strategies for addressing those potential impacts, to be included in the strategic plan, as specified.

The bill would require the Energy Commission, on or before December 31, 2022, to submit to the Natural Resources Agency and the relevant fiscal and policy committees of the Legislature a preliminary assessment of the economic benefits of offshore wind as they relate to seaport investments and workforce development needs and standards.

The bill would repeal all of these provisions on January 1, 2027.

*The people of the State of California do enact as follows:*

SECTION 1. The Legislature finds and declares all of the following:

(a) If developed and deployed at scale, the development of offshore wind energy can provide economic and environmental benefits to the state and the nation.

(b) Offshore wind energy can advance California's progress toward its statutory renewable energy and climate mandates.

(c) The 2021 SB 100 Joint Agency Report issued pursuant to Section 454.53 of the Public Utilities Code conducted portfolio modeling that selected at least 10 gigawatts of offshore wind energy developments to achieve the state's climate goals, finding a total reduction in total resource costs by an estimated one billion dollars (\$1,000,000,000).

(d) California may need to build at least 48 gigawatts of new renewable energy and energy storage developments by 2030 and at least 145 gigawatts of new renewable energy and energy storage developments by 2045 to achieve the goals established in SB 100 (Chapter 312 of the Statutes of 2018).

(e) Diversity in energy resources and technologies lowers overall costs. Offshore wind can add resource and technology diversity to the state's energy portfolio.

(f) Offshore wind energy development presents an opportunity to attract investment capital and to realize community economic development and workforce development benefits in California, including the development and preservation of a skilled and trained construction workforce to carry out projects, long-term job creation, and development of an offshore wind energy supply chain.

(g) Offshore wind energy can contribute to a diverse, secure, reliable, and affordable renewable energy resource portfolio to serve the electricity

needs of California ratepayers and improve air quality, particularly in disadvantaged communities.

(h) Subsea electricity transmission could reduce transmission congestion.

(i) With existing technology, each 1,000 megawatts of offshore wind energy will require between 100 and 120 square miles of sea space for development.

(j) The Ocean Protection Council’s strategic plan for 2020 to 2025, inclusive, sets an objective for development of a commercial scale offshore wind energy project in California that minimizes impacts on marine biodiversity and habitat, currents and upwelling, fishing, cultural resources, navigation, aesthetics and visual appeal, and military operations by 2026.

(k) In 2016, California initiated a collaborative process with the federal government through the formation of the Bureau of Ocean Energy Management California Intergovernmental Renewable Energy Task Force, which includes a broad public outreach process to examine potential wind leasing areas in federal waters. The federal Bureau of Ocean Energy Management identified areas in Humboldt, Morro Bay, and Diablo Canyon as the first three potential offshore wind “call areas” and issued a call for nominations of interest in 2018.

(l) The Bureau of Ocean Energy Management California Intergovernmental Renewable Energy Task Force has developed and collected important data and information relevant to the assessment of potential offshore wind energy resources, including the creation of the California Offshore Wind Energy Gateway, which assembles geospatial information on ocean wind resources, ecological and natural resources, commercial and recreational ocean uses, and community values and makes this information publicly available.

(m) Offshore wind should be developed in a manner that protects coastal and marine ecosystems. The State of California should use its authority under state programs and policies to ensure (1) avoidance, minimization, and mitigation of significant adverse impacts, and (2) monitoring and adaptive management for offshore wind projects and their associated infrastructure.

(n) The President of the United States and federal Departments of Interior, Energy, and Commerce have announced a shared goal to deploy 30,000 megawatts of offshore wind energy by 2030, employing tens of thousands of workers, protecting biodiversity, and promoting ocean co-use.

(o) Offshore wind energy development can provide clean air benefits to inland communities that experience increased impacts from poor air quality.

(p) Investment in offshore wind energy development can offer career pathways and workforce training in clean energy development. Offshore wind energy will provide additional blue collar industrial work opportunities and support apprenticeship opportunities for a diverse labor pool, and provide those opportunities to local communities experiencing high unemployment through prioritization of local hiring first.

SEC. 2. Chapter 14 (commencing with Section 25991) is added to Division 15 of the Public Resources Code, to read:

## CHAPTER 14. OFFSHORE WIND GENERATION

25991. (a) (1) The commission, 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 Independent System Operator, and the Public Utilities Commission, and other relevant federal, state, and local agencies as needed, shall develop a strategic plan for offshore wind energy developments installed off the California coast in federal waters.

(2) Development of the strategic plan shall incorporate, but not delay, progress to advance responsible development of offshore wind in other relevant policy venues.

(b) (1) The commission shall submit the strategic plan to the Natural Resources Agency and the Legislature on or before June 30, 2023.

(2) The plan submitted to the Legislature pursuant to paragraph (1) shall be submitted in compliance with Section 9795 of the Government Code.

(c) The strategic plan shall include, at a minimum, the following five chapters:

(1) Identification of sea space, including the findings and recommendations resulting from activities undertaken pursuant to Section 25991.2.

(2) Economic and workforce development and identification of port space and infrastructure, including the plan developed pursuant to Section 25991.3.

(3) Transmission planning, including the findings resulting from activities undertaken pursuant to Section 25991.4.

(4) Permitting, including the findings resulting from activities undertaken pursuant to Section 25991.5.

(5) Potential impacts on coastal resources, fisheries, Native American and Indigenous peoples, and national defense, and strategies for addressing those potential impacts.

(d) (1) The strategic plan shall emphasize and prioritize near-term actions, particularly related to port retrofits and investments and the workforce, to accommodate the probable immediate need for jobs and economic development.

(2) In considering port retrofits, the strategic plan shall strive for compatibility with other harbor tenants and ocean users to ensure that the local benefits related to offshore wind energy construction complement other local industries.

(3) The strategic plan shall emphasize and prioritize actions that will improve port infrastructure to support land-based work for the local workforce.

(e) The development of the strategic plan regarding workforce development shall include consultation with representatives of key labor organizations and apprenticeship programs that would be involved in dispatching and training the construction workforce.

(f) The commission shall provide an opportunity for public review and comment on a draft strategic plan.

25991.1. (a) On or before June 1, 2022, the commission shall evaluate and quantify the maximum feasible capacity of offshore wind to achieve reliability, ratepayer, employment, and decarbonization benefits and shall establish megawatt offshore wind planning goals for 2030 and 2045.

(b) In establishing the goals pursuant to subdivision (a), the commission shall consider all of the following:

(1) The findings of the 2021 joint report issued pursuant to Section 454.53 of the Public Utilities Code.

(2) The need to develop a skilled and trained offshore wind workforce.

(3) The potential to attract supply-chain manufacturing for offshore wind components throughout the Pacific region.

(4) The need for reliable renewable energy that accommodates California's shifting peak load.

(5) The generation profile of offshore wind off the coast of California.

(6) The need for economies of scale to reduce the costs of floating offshore wind.

(7) The need to initiate long-term transmission and infrastructure planning to facilitate delivery of offshore wind energy to Californians.

(8) The availability of federal tax incentives for offshore wind investments.

(9) The National Renewable Energy Laboratory report finding that California has 200 gigawatts of offshore wind technical power potential.

(10) The opportunity for California to participate in the federal government's intention to deploy 30,000 megawatts of offshore wind by 2030 and to create a pathway to unlocking 110,000 megawatts by 2050.

(11) Any executive action from the Governor regarding offshore wind.

(12) Potential impacts on coastal resources, fisheries, Native American and Indigenous peoples, and national defense, and strategies for addressing those potential impacts.

25991.2. (a) The commission, in coordination with the California Coastal Commission, Department of Fish and Wildlife, Ocean Protection Council, and State Lands Commission, shall work with stakeholders, other state, local, and federal agencies, and the offshore wind energy industry to identify suitable sea space for wind energy areas in federal waters sufficient to accommodate the offshore wind planning goals established pursuant to Section 25991.1, as follows:

(1) The commission shall first identify the sea space identified by the federal Bureau of Ocean Energy Management in its 2018 call for nominations, as published in the Federal Register, Volume 83, Number 203, on October 19, 2018, and any other relevant information necessary to achieve the 2030 offshore wind planning goal established pursuant to Section 25991.1.

(2) The commission, in coordination with the California Coastal Commission, Department of Fish and Wildlife, Ocean Protection Council, and State Lands Commission, shall next identify suitable sea space for a

future phase of offshore wind leasing to accommodate the 2045 offshore wind planning goal established pursuant to Section 25991.1.

(b) In identifying suitable sea space, the commission shall consider all of the following:

(1) Existing data and information on offshore wind resource potential and commercial viability.

(2) Existing and necessary transmission and port infrastructure.

(3) Protection of cultural and biological resources with the goal of prioritizing least-conflict ocean areas.

(c) In fulfilling the requirements of this section, the commission shall incorporate the information developed by the Bureau of Ocean Energy Management California Intergovernmental Renewable Energy Task Force.

(d) The commission shall use the California Offshore Wind Energy Gateway, or functionally equivalent publicly accessible, commission-approved internet website, to provide relevant information developed pursuant to this section to the public.

(e) The commission, in coordination with the California Coastal Commission, the Department of Fish and Wildlife, the Ocean Protection Council, the State Lands Commission, stakeholders, other state, local, and federal agencies, and the offshore wind energy industry, shall make recommendations regarding potential significant adverse environmental impacts and use conflicts, such as avoidance, minimization, monitoring, mitigation, and adaptive management, consistent with California's long-term renewable energy, greenhouse gas emission reduction, and biodiversity goals.

(f) Nothing in this section is intended to modify the authority of state agencies over project-specific siting and permitting.

(g) The findings and recommendations resulting from activities undertaken pursuant to this section shall be included in the chapter of the strategic plan relating to the identification of sea space as specified in paragraph (1) of subdivision (c) of Section 25991.

25991.3. (a) Based on the sea spaces identified pursuant to Section 25991.2, the commission, in coordination with relevant state and local agencies, shall develop a plan to improve waterfront facilities that could support a range of floating offshore wind energy development activities, including construction and staging of foundations, manufacturing of components, final assembly, and long-term operations and maintenance facilities.

(b) The plan developed pursuant to subdivision (a) shall include all of the following:

(1) A detailed assessment of the necessary investments in California seaports to support offshore wind energy activities, including construction, assembly, and operations and maintenance. The assessment shall consider the potential availability of land and water acreage at each seaport, including competing and current uses, infrastructure feasibility, access to deep water, bridge height restrictions, and potentially impacted natural and cultural

resources, including coastal resources, fisheries, and Native American and Indigenous peoples.

(2) An analysis of the workforce development needs of the California offshore wind energy industry, including occupational safety requirements, the need to require the use of a skilled and trained workforce to perform all work, and the need for the Division of Apprenticeship Standards to develop curriculum for in-person classroom and laboratory advanced safety training for workers.

(3) Recommendations for workforce standards for offshore wind energy facilities and associated infrastructure, including, but not limited to, prevailing wage, skilled and trained workforce, apprenticeship, local hiring, and targeted hiring standards, that ensure sustained and equitable economic development benefits.

(c) In developing the plan pursuant to subdivision (a), the commission shall consult with representatives of key labor organizations and apprenticeship programs that would be involved in dispatching and training the construction workforce.

(d) On or before December 31, 2022, the commission shall complete and submit to the Natural Resources Agency and the relevant fiscal and policy committees of the Legislature a preliminary assessment of the economic benefits of offshore wind as they relate to seaport investments and workforce development needs and standards.

(e) The plan developed pursuant to this section shall be included in the chapter of the strategic plan relating to economic and workforce development and identification of port space and infrastructure as specified in paragraph (2) of subdivision (c) of Section 25991.

25991.4. (a) The commission, in consultation with the Public Utilities Commission and the Independent System Operator, shall assess the transmission investments and upgrades necessary, including potential subsea transmission options, to support the 2030 and 2045 offshore wind planning goals established pursuant to Section 25991.1. This assessment shall include all relevant information on the cost of subsea high-voltage transmission and information made available by the Independent System Operator on the cost of network upgrades and the extent to which existing transmission infrastructure and available capacity could support offshore wind energy development.

(b) The findings resulting from activities undertaken pursuant to this section shall be included in the chapter of the strategic plan relating to transmission planning as specified in paragraph (3) of subdivision (c) of Section 25991.

25991.5. (a) The commission shall develop and produce a permitting roadmap that describes timeframes and milestones for a coordinated, comprehensive, and efficient permitting process for offshore wind energy facilities and associated electricity and transmission infrastructure off the coast of California.

(b) In developing the permitting roadmap, the commission shall consult and meaningfully collaborate with all relevant local, state, and federal

agencies, including, but not limited to, the California Coastal Commission, the Department of Fish and Wildlife, and the State Lands Commission, interested California Native American tribes, and affected stakeholders.

(c) The permitting roadmap shall include a goal for the permitting timeframe, clearly define local, state, and federal agency roles, responsibilities, and decisionmaking authority, and include interfaces with federal agencies, including timing, sequence, and coordination with federal permitting agencies, and coordination between reviews under the California Environmental Quality Act (Division 13 (commencing with Section 21000)) and the federal National Environmental Policy Act of 1969 (42 U.S.C. Sec. 4321 et seq.).

(d) The commission shall provide an opportunity for stakeholder input in the development and communication of the permitting roadmap and an opportunity for public comment on a draft permitting roadmap.

(e) The findings resulting from activities undertaken pursuant to this section shall be included in the chapter of the strategic plan relating to permitting as specified in paragraph (4) of subdivision (c) of Section 25991.

(f) On or before December 31, 2022, the commission shall complete and submit the permitting roadmap to the Natural Resources Agency and the relevant fiscal and policy committees of the Legislature.

25991.6. For purposes of this chapter, “stakeholders” includes, but is not limited to, fisheries groups, labor unions, industry, environmental justice organizations, environmental organizations, and other ocean users.

25991.7. Nothing in this chapter is intended to create a technology set-aside or mandatory minimum for any type of eligible renewable energy resource.

25991.8. This chapter shall remain in effect only until January 1, 2027, and as of that date is repealed.