

**DOCKETED**

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<b>Document Title:</b>	Presentation - Item 2 - Adoption of California Offshore Wind Energy Development Report
<b>Description:</b>	Item 2 PowerPoint Presentation for the Business Meeting Agenda August 10, 2022 - AB 525 Offshore Wind Report - OSW Report on Maximum Feasibility Capacity and Planning Goals
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# **Item 2: Adoption of California Offshore Wind Energy Development Report**

August 10, 2022 Business Meeting

Rhett deMesa

Safety and Reliability Office

Siting, Transmission, and Environmental Protection Division



# Benefits to California



Image Source: Principle Power

“California is home to one of the world’s best offshore wind resources in the world and I am confident that this clean, domestic source of electricity can play an important role in meeting our state’s growing need for clean energy.”

Governor Gavin Newsom,  
July 2022



# Assembly Bill 525 Summary of CEC Requirements

**June 1, 2022**

Evaluate and quantify maximum feasible capacity and establish megawatt planning goals for 2030 and 2045

**December 31, 2022**

- 1) Submit a preliminary assessment of economic benefits on seaport investments and workforce development needs
- 2) Submit a permitting roadmap

**June 30, 2023**

Submit a strategic plan to advance the responsible development of offshore wind

## Required Strategic Plan Chapters:

1. Identification of sea space
2. Economic and workforce development and identification of port space and infrastructure
3. Transmission planning
4. Permitting
5. Potential impacts on coastal resources, fisheries, Native American and Indigenous peoples, and national defense, and strategies for addressing them



# Assembly Bill 525 Key Actions and Analyses

Identify suitable Sea Space for wind areas in federal waters sufficient to accommodate the planning goals.

Assess Transmission Investments and Upgrades necessary, including subsea transmission options, to support the planning goals.

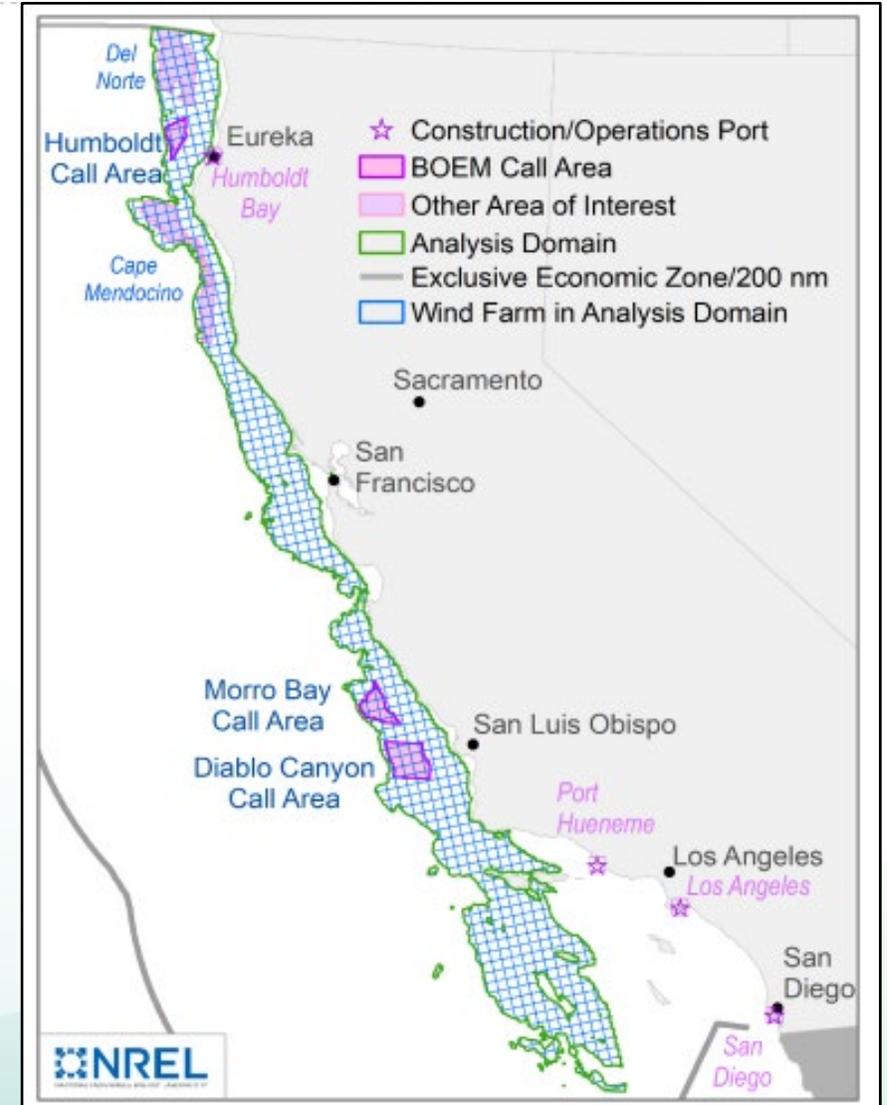
Develop plan to improve Waterfront Facilities that could support range of floating offshore wind development activities and include in strategic plan.

Ensure opportunity for public review and consult with stakeholders as defined in section 25991.6 of Public Resources Code.



# Maximum Feasible Capacity

- Studies assessed 21,800 megawatts of technically feasible offshore wind potential
- Assessments based on wind speed, ocean depth, bottom slope, distance to grid interconnection, and distance to existing port infrastructure
- Assessment establishes a reference point for AB 525 strategic plan evaluations of critical elements needed



Source: NREL, November 2020

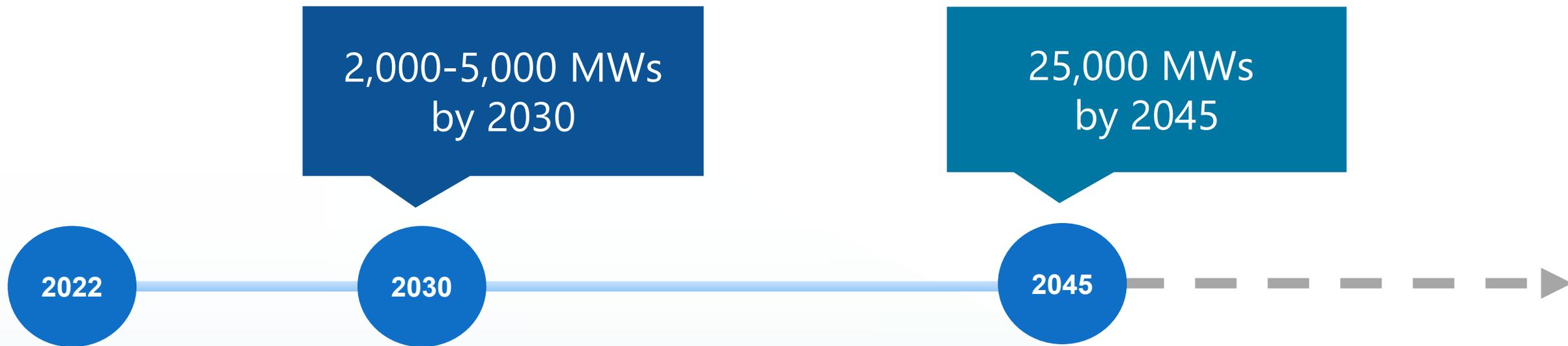


# Factors for Establishing Planning Goals

1. Findings from Joint Agency 2021 SB100 Report
2. Need to initiate long-term transmission and infrastructure planning
3. Need for renewable energy to accommodate California's shifting peak load
4. Generation profile of offshore wind off the coast of California
5. Potential impacts on coastal resources, fisheries, Native American and Indigenous peoples, and national defense and strategies to address them
6. Potential to attract supply chain manufacturing for components in Pacific region
7. Need for economies of scale to reduce costs of floating offshore wind
8. NREL finding that California has 200 GW of offshore wind technical power potential
9. Need to develop skilled and trained offshore wind workforce
10. Availability of federal tax incentives
11. Opportunity for California to participate in federal offshore wind megawatt goals
12. **Executive actions from the Governor**



# Preliminary Planning Goal Recommendations





# Summary of Report Recommendations

Preliminary Planning Goal	Preliminary Nameplate Capacity
Maximum feasible capacity of offshore wind	21,800 MWs of studied technical potential as reference point to determine maximum feasible capacity for strategic plan
Offshore wind MW planning goal for 2030	2,000 – 5,000 MWs
Offshore wind MW planning goal for 2045	25,000 MWs



# Staff Recommendation

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- Approve the report: *Offshore Wind Energy Development off the California Coast: Maximum Feasible Capacity and Megawatt Planning Goals for 2030 and 2045.*