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eNGO Comment on AB 525 Draft Strategic Plan

Additional submitted attachment is included below.

California Energy Commission
Docket Unit, MS-4
715 P Street
Sacramento, CA 95814

April 22, 2024

Re: Docket Number 17-MISC-01, AB 525 Draft Strategic Plan

On behalf of the Natural Resources Defense Council, Center for Biological Diversity, Humboldt Waterkeeper, Environmental Defense Center, Environmental Protection Information Center, California Coastal Protection Network, the National Wildlife Federation, and Ocean Conservation Research, we submit these comments to the California Energy Commission (CEC) on the draft AB 525 Strategic Plan for offshore wind energy developments in federal waters off the California coast.

Our organizations strongly support the CEC's leadership to advance responsible offshore wind development. We fully recognize the climate benefits of renewable energy, including offshore wind, which offers California an important opportunity to add to our ongoing efforts and leadership in combating climate change, reducing local and regional air pollution, and growing a new industry that will support thousands of high-quality jobs in both coastal and inland communities.

We also vigorously advocate for policies and actions that would ensure renewable energy develops and scales in an environmentally protective manner. Like any type of industry, offshore wind development poses risks to the environment. Offshore wind must be developed in a responsible manner with minimal environmental impacts, while protecting biodiversity, cultural resources, public health, and other ocean uses. Specifically, responsible offshore wind development: (1) avoids, minimizes, mitigates, and monitors for adverse impacts on wildlife and habitats; (2) minimizes negative impacts on other ocean uses; (3) includes robust consultation with Native American Tribes and communities; (4) meaningfully engages state and local

governments and stakeholders from the outset; (5) includes comprehensive efforts to avoid negative impacts and bring benefits to underserved communities; and (6) uses the best available scientific and technological data to ensure science-based and stakeholder-informed decision making. When developed as described, offshore wind can provide an important opportunity to increase access to renewable energy, reduce carbon emissions and air pollution, and improve grid reliability.

The ocean is experiencing a biodiversity crisis caused by warming water temperatures, ocean acidification, shifts in key oceanographic features and habitat availability, and other harmful changes due to fossil fuel-driven climate change. We must take stronger measures to protect and restore marine life and the habitats they depend on, which are integral to the healthy ocean ecosystems that support California residents and communities. Protecting biodiversity and rapidly transitioning to clean energy need not be in conflict; we can and need to accomplish both goals.

We appreciate the CEC's ongoing work to comply with AB 525, and the significant effort that went into drafting a Strategic Plan that incorporates the substantial stakeholder input gathered throughout the state's AB 525-related work. Overall, the draft Strategic Plan represents a comprehensive, high-level guidance document to help inform the development of offshore wind off California's coast. We especially appreciate the CEC's reference to our recommendations regarding monitoring and adaptive management plans for the protection of marine species and habitats,[1] and we support the use of these recommendations as a basis for the elements that should be included in future monitoring, and adaptive management plans.

We also appreciate the California Energy Commission's recognition that offshore wind represents a promising opportunity to simultaneously address climate change and stimulate economic growth. In particular, we share the agency's optimism that offshore wind could "add diversity to the resource portfolio and help improve reliability" and contribute to resilience for the state's energy system," as well as help meet the state's clean energy goals.[2] We also appreciate the CEC's evaluation of potential workforce and economic development benefits of the offshore wind industry, which has the potential to benefit disadvantaged communities; add tens of thousands of jobs to local economies; and add billions of dollars in wages, investments, and tax revenues across state, local, and federal levels.[3]

In our comments on this draft plan, we urge the CEC to ensure (1) strong protections and mitigation strategies for biological resources, (2) benefits and mitigation strategies for local, underserved, and Tribal communities, (3) smart port development and mitigation strategies, (4)

[1] Page 61, Volume II of California Energy Commission Draft Commission Report: Assembly Bill 525 Offshore Wind Strategic Plan. January 2024.
[2] *Ibid* pp. 4-5.
[3] *Ibid* pp. 39-43.

thoughtful and inclusive transmission planning, (5) suitable sea space analysis, (6) adaptive management strategies, and (7) data transparency.

We look forward to engaging with the CEC to continue to refine and improve the Plan.

1. Impacts on and Mitigation Strategies for Biological Resources

We appreciate that the draft Strategic Plan incorporates many avoidance, monitoring, minimization, and mitigation strategies recommended by our organizations in previous comments and communications. In particular, our organizations support the concept of a "mitigation hierarchy" in which strategies put in place first seek to avoid, then minimize and mitigate, potential environmental impacts from all stages of offshore wind development. Robust monitoring is also a key part of effectively implementing this strategy. We therefore strongly support the Strategic Plan's recommendation to develop a comprehensive mitigation framework that prioritizes avoidance.[4]

Further, we appreciate the Strategic Plan's acknowledgement that the impacts of offshore wind development to biological resources will extend beyond the footprint of the wind farms themselves. For this reason, we strongly support the CEC's inclusion of baseline and monitoring surveys for vessel transit routes and corridors—not just project sites—in the draft Strategic Plan.

In particular, we also support the draft Strategic Plan's inclusion of 10 knot speed restrictions, which help to prevent or greatly reduce the risk of serious injury and mortality of marine wildlife from vessel collisions, and the use of on-vessel observers across all project stages.[5] We also support the inclusion of incentives for derelict gear retrieval, and funding for commercial crab fisheries to switch to ropeless gear – both of which would help to remove derelict gear from the water column, reducing the risk of secondary entanglement of offshore wind infrastructure with fishing gear and any entangled animals.

We appreciate the CEC's consideration of impacts to biological resources, and inclusion of many effective mitigation strategies to address these impacts. However, the draft Strategic Plan's discussion of impacts and identification of specific mitigation strategies can be improved or clarified in several areas, detailed below.

<u>Coordinate with BOEM and Ensure Consistency with State Policies</u>

The Bureau of Ocean Energy Management (BOEM) is in the process of completing a Programmatic Environmental Impact Statement (PEIS) for offshore wind development on the

[4] *Ibid* p. 62.
[5] Slower speeds may still be required in some instances to adequately protect sea turtles in key habitats, such as jellyfish aggregations.

West Coast. The final strategic plan should incorporate new information from BOEM's PEIS regarding avoidance, minimization, mitigation, and monitoring, and the Strategic Plan should be updated regularly as additional new information becomes available.

Pursuant to the Coastal Zone Management Act, federally approved offshore wind development must also be consistent with California's coastal protection policies, including the California Coastal Act. This landmark state law provides a strong and clear mandate for the protection of marine and coastal resources, as well as the public uses of these resources. The California Coastal Act is also fundamental to protecting the state's communities, economy and way of life, which are integrally connected to its world-class coastal and ocean resources. To that end, we urge state agencies to work in close coordination with BOEM, communities, and Tribes to ensure that future offshore wind development will meet consistency with state policies.

Prioritize and Invest in Additional Research to Better Characterize Offshore Wind Development's Impacts on Upwelling

Wind-driven upwelling is an essential contributor to the primary productivity that supports the remarkable biodiversity of the California Current Ecosystem,[6] and recent research suggests that upwelling may be helping to buffer California's coastal ecosystems from the worst impacts of climate change by slowing ocean warming trends and reducing the frequency of marine heatwaves relative to other areas of the global ocean.[7] Changes in upwelling and primary productivity may cause a cascade of effects from disrupting nutrient transfer to influencing the distribution of large marine species, and could impact California's fisheries, climate resilience, and other ecosystem-wide services and processes.

We strongly support the state's investments to date in conducting research and modeling to better understand the impacts of offshore wind development on upwelling. However, current models have focused only on physical processes. We urge the state to invest in future analyses and modeling that incorporate the biological and ecosystem effects of potential offshore wind-driven changes to upwelling, as well as consideration of impacts to commercial and culturally-relevant species and fisheries.[8] We urge the state to continue to fund, support, and use the best-available science to better understand these impacts to as fine a spatial scale as possible. In particular,

[6] Jacox, M.G., Edwards, C.A., Hazen, E.L., & Bograd, S.J. (2018). Coastal upwelling revisited: Ekman, Bakun, and improved upwelling indices for the U.S. West Coast. Journal of Geophysical Research: Oceans, 123, 7332–7350. https://doi.org/10.1029/2018JC014187

[7] Dalsin, M., Walter, R.K., & Mazzini, P.L.F. (2023). Effects of basin-scale climate modes and upwelling on nearshore marine heatwaves and cold spells in the California Current. Scientific Reports: 13, 12389. https://www.nature.com/articles/s41598-023-39193-4

[8] See comment #BOEM-2023-0061-0169 from the Yurok Tribe on BOEM's California Offshore Wind Programmatic Environmental Impact Statement (docket No. BOEM-2023-0061) for examples of culturally-relevant species that may be impacted by changes to wind-driven upwelling.

research that helps to identify acceptable size limits or thresholds for wind farm footprints or turbine arrays and densities to mitigate negative impacts on upwelling should be prioritized.

Enhanced Inclusion of Design-related Strategies Can Help Avoid and Prevent Impacts Throughout Project Lifetimes

Incorporating design-related mitigation strategies into offshore wind planning can help to maximize the avoidance and prevention of impacts on biological resources throughout the lifetime of a project, as well as enhance monitoring efforts to detect and mitigate impacts. We support the CEC's inclusion of several design-related mitigation strategies in the Strategic Plan such as the use of low-intensity flashing lights and bird-friendly wavelengths on offshore wind structures to minimize seabird attraction,[9] design of siting plans such as turbine locations and cable routes to avoid sensitive habitats to the extent feasible,[10] and shielding on subsea cables to reduce impacts related to electric and magnetic fields.[11] We encourage a stronger focus on these types of strategies throughout the Plan; in particular, we recommend that the CEC specifically reference the following additional strategies:

- Mitigation strategies for noise pollution should include consideration of turbine or platform designs that reduce the amount of noise generated by turbines themselves (e.g., engineering solutions to acoustically decouple the turbine from the mast and platform, or use of direct drive wind turbine generators as opposed to generators that rely on a gear box), as well as the use of construction, operations, maintenance, and decommissioning vessels that are designed and/or operated to minimize underwater noise.[12]
- Platforms, as well as their mooring lines and inter-array cables should be designed to minimize slack lines and other entanglement risks; as well as to promote visual and acoustic inspection of potential entanglement risks.[13] Large diameter (approximately 2 meter) accessory buoys should be used to stabilize catenary mooring lines and free-floating inter-array cables. Inter-array cables should be buried whenever possible. When burial is not possible, they should be suspended at a minimum depth of 200 meters.

[9] Page 19, Volume III of California Energy Commission Draft Commission Report: Assembly Bill 525 Offshore Wind Strategic Plan. January 2024.
[10] *Ibid* p. 20.
[11] *Ibid* p. 22.
[12] International guidance and various design resources already exist, providing a basis for measures regarding vessel noise. International Maritime Organization issued *Revised Guidelines for the reduction of underwater radiated noise from shipping to address adverse impacts on marine life* (MEPC.1/Circ.833) that went into effect on October 1, 2023; Ship energy efficiency and underwater radiated noise. Report 545-000-01, Rev 3. Prepared for Transport Canada by Vard Marine Inc. October 20, 2023.
[13] Marine species are more likely to become entangled in slack lines. Burying inter-array cables, when possible, may also reduce entanglement risk. (Maxwell, S. M., Kershaw, F., Locke, C. C., Conners, M. G., Dawson, C., Aylesworth, S., Loomis, R., & Johnson, A. F. (2022). Potential impacts of floating wind turbine technology for marine species and habitats. *Journal of Environmental Management*, *307*, 114577. https://doi.org/10.1016/j.jenvman.2022.114577)

In general, large diameter wire rope or cable should be used, and chains and synthetic fiber ropes should be avoided due to their higher snagging potential.

- Moreover, infrastructure should be designed to facilitate visual or acoustic detection of ensnared marine debris by monitoring equipment and personnel (e.g. by using higher-visibility (i.e., lighter) coloration or, for acoustic detection, textures to contrast with marine debris at depths where light is limited).[14]

In addition, we appreciate the Strategic Plan's emphasis on the need for robust site surveys to characterize existing conditions, identify resources potentially at risk, and develop the project design in a manner that minimizes impacts.[15] However, activities related to site characterization and pre-construction surveys are themselves associated with a variety of impacts to biological resources.[16] Currently, the Strategic Plan's mitigation strategies for biological impacts focus heavily on construction and operation phases of offshore wind projects. We recommend the Strategic Plan more clearly identify the full suite of mitigation strategies for pre-construction and pre-operation site survey activities, which will be especially important for the responsible development of future Wind Energy Areas (WEAs).[17]

Using the best-available monitoring methods and technologies can help to maximize the prevention and avoidance of biological impacts (e.g. in the case of monitoring for the presence of marine mammals for temporary suspension of construction activities, thereby avoiding harm), and help ensure that monitoring data available is of the highest quality to inform adaptive management plans and strategies.[18] We recommend the Strategic Plan incorporate a stronger focus on the use of best-available monitoring technology to enhance real time monitoring, detection, and prevention of impacts to biological resources. For instance, vessel-based observers should be required to use the best-available thermal imaging tools and other strategies to enhance observers' ability to detect priority species.

Finally, it's widely understood that wind farm design, including turbine density and array, will have implications for the level and extent of impacts to biological resources that occur throughout the lifetime of a project.[19] The Strategic Plan's characterization of these design elements appears to conflict in some places, with turbine density described as "relatively dense

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[14] Recommendations to Reduce the Potential Risk of Entanglement of Marine Life During Floating Offshore Wind Energy Development (September 2022), https://www.nrdc.org/sites/default/files/floating-offshore-wind-entanglement-risk-20220929.pdf

[15] Page 19, Volume III of California Energy Commission Draft Commission Report: Assembly Bill 525 Offshore Wind Strategic Plan. January 2024.

[16] Maxwell et al. 2022.

[17] A full list of recommended measures to reduce impacts from site assessment activities can be found in our organizations' comment letter to BOEM re: California Offshore Wind Programmatic Environmental Impact Statement, docket No. BOEM-2023-0061 Comment ID #BOEM-2023-0061-0161.

[18] Monitoring of Marine Life During Offshore Wind Energy Development—Guidelines and Recommendations (March 2023), https://www.nrdc.org/sites/default/files/ow_marine-life_monitoring_guidelines.pdf

[19] Maxwell et al. 2022.

arrays" in Volume II and "widely spaced" in Volume III.[20] We request additional clarity to the best of the state's ability on the anticipated density, spacing, and design of wind farm turbine arrays in the next iteration of the Strategic Plan.

Floating and Onshore Substation Design Must Be Addressed

We understand that the draft Strategic Plan intends to be "technology neutral." Nonetheless, we are concerned the potentially significant impacts from the use of open loop cooling for floating substations has been largely ignored. In our experience, delaying a transparent discussion of such issues and alternatives until site specific projects have been designed and proposed is a mistake because at that stage developers often state the comments and alternative design is being raised "too late." As the CEC is well aware, it has taken decades for the state to reduce and (hopefully soon) eliminate the use of ocean water for cooling at power plants along the California coast. Floating substations using a similar open loop ocean water cooling may have similar impacts and thus face permitting challenges. The Commission and sister agencies should begin a discussion of this issue soon – potentially in a separate informational docket.

The State Should Embrace Opportunities to Incorporate Mitigation and Research Through Its Procurement Authority and Its Influence Over Consistency Determinations

The Strategic Plan can significantly improve its articulation of opportunities to directly shape mitigation and research requirements for developers, advancing environmentally responsible offshore wind development. Throughout the power procurement process and consistency review, state agencies and utilities could wield considerable influence in supporting conservation goals and initiatives. This could be achieved by integrating funding for environmental research into power agreements, incorporating environmental conditions as a bid criterion in competitive solicitation processes, and employing other strategic measures.

The limited centralized procurement authorized under AB 1373 empowers the state to shape conditions governing the competitive solicitation process, including the imposition of requirements to promote environmental research and monitoring. The draft Strategic Plan acknowledges that centralized procurement is an effective tool for ensuring compliance with policy directives, such as reliability,[21] and it can similarly bolster environmental objectives. Along the Atlantic Coast, states like New York, New Jersey, and Connecticut have leveraged

[20] Page 55, Volume II of California Energy Commission Draft Commission Report: Assembly Bill 525 Offshore Wind Strategic Plan: ""Because turbines and their infrastructure will be going in the water in relatively dense arrays, higher resolution seabird and bat surveys and data are necessary to understand the probability and frequency of turbine strikes."
Page 20, Volume III: "While offshore wind turbines would be widely spaced, operational adjustments to seasonal or time-of-day operation could be made to reduce impacts to migratory birds if studies indicate a substantial impact."
[21] Page 30, Volume II of California Energy Commission Draft Commission Report: Assembly Bill 525 Offshore Wind Strategic Plan. January 2024.

centralized procurement to mandate developers' financial contributions to wildlife and fisheries research, conservation, or mitigation or monitoring efforts.

For instance, in New York, successful proposers are required to commit to providing financial and technical support for regional wildlife and fish monitoring, with a minimum contribution of $10,000 per megawatt of Offer Capacity.[22] Similar provisions exist in New Jersey, directing funds to the state's Research and Monitoring Initiative,[23] while Connecticut requires bidders to support regional wildlife and fish monitoring through a $5,000 per megawatt fee to entities like the Regional Wildlife Science Collaborative for Offshore Wind (RWSC).[24] The CEC should consider recognizing these opportunities within the procurement process to promote environmentally responsible development.

Furthermore, the state also has the ability to influence lease sales in ways that can promote environmental and wildlife responsible development. During the lease sale stage BOEM incorporates both lease stipulations and bid credits which can both contain environmental requirements and incentives. Lease stipulations include measures that are required as conditions of the lease. These stipulations are not only created by BOEM, but are also influenced by consulting federal agencies such as NMFS and FWS, stakeholders, as well as through consistency review by the state. During the 2022 California Lease Sale, the California Coastal Commission's Consistency Review had particular influence over the lease stipulations included in the leases. Incorporated environmental stipulations included an anchoring plan requirement, a stipulation to avoid contact with sensitive, hard substrate, and vessel speed requirements.[25] The final Strategic Plan should highlight this success and indicate opportunities to expand upon it in the future.

The state may also have the ability to influence the bid credits offered by BOEM during its multi-factor auction. Under the Outer Continental Shelf Lands Act (OCSLA), BOEM is empowered to conduct multi-factor auctions for offshore wind lease sales.[26] These auctions incorporate both a cash bid and a non-monetary bid credit, aligning with BOEM's mandate under OCSLA, which prioritizes the "protection of the environment" and "conservation of the natural

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[22] NYSERDA, Purchase of Offshore Wind Renewable Energy Certificates Request for Proposals ORECRFP23-1, November 30, 2023. https://portal.nyserda.ny.gov/servlet/servlet.FileDownload?file=00P8z000003cmKBEAY

[23] New Jersey Board of Public Utilities, New Jersey Offshore Wind Fourth Solicitation, Solicitation Guidance Document, March 6, 2024, pp. 40. https://njoffshorewind.com/fourth-solicitation/solicitation-documents/Draft-Solicitation-Guidance-Document-with-attachments.pdf

[24] Connecticut Department of Energy and Environmental Protection, Request for Proposals for Offshore Wind Facilities, October 27, 2023, pp. B-12. https://www.dpuc.state.ct.us/DEEPEnergy.nsf/c6c6d525f7cdd1168525797d0047c5bf/5f3d7ee5480fdbb085258a5500500d7c/$FILE/Final%20RFP%20(2023%20OSW)_Revised%20V3.pdf

[25] BOEM Renewable Energy Lease Number OCS-P 0561; OCS-P 0562; OCS-P 0563; OCS-P 0564; OCS-P 0565

[26] 30 CFR 585.220(a)(4) and 585.221(a)(6)

resources of the Outer Continental Shelf."[27] Historically, bid credits in offshore wind auctions have aimed to incentivize supply chain and workforce development, as well as contributions to compensatory mitigation for fisheries. In a recent comment period for the Proposed Sale Notice for the Central Atlantic, BOEM signaled its consideration of introducing a Conservation Bidding Credit.[28] The final Strategic Plan should seize this opportunity to explore how such a bid credit could operate in the state to advance environmental goals. This is particularly important as BOEM may not only need to see state-led interest to encourage their incorporation of this bid credit, but may also need state coordination regarding logistics and implementation.

2. Benefits, Impacts, and Mitigation Strategies for Local, Underserved, and Tribal Communities

Offshore wind development represents an opportunity to create tens of thousands of new high-quality jobs for Californians, benefit underserved communities, and generate billions of dollars worth of wages, investments, economic benefits and tax revenues at the state and local levels.[29] It is important that offshore wind be developed in a responsible manner, and with robust community engagement coupled with long-term community oversight, to provide the most benefit to communities.

We support the draft Strategic Plan's comprehensive accounting of potential benefits and impacts, to local, underserved, and Tribal communities in California, and in particular the CEC's recognition of offshore wind development as an opportunity to correct historical wrongs and serve as an example of equitable energy development.[30] We support the Strategic Plan's strong commitments to have offshore wind truly benefit underserved and historically impacted communities, and its commitment to planning the development of ports "in partnership with the community and with the expectation that development will reduce air pollutants and improve water quality and other environmental conditions in those communities, rather than making them worse."[31]

However, the draft Strategic Plan's discussion and identification of benefits, impacts, and specific strategies for engaging with, empowering, and mitigating impacts for local, underserved, and Tribal communities can be improved or clarified in several ways.

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[27] §8(p)(4) [43 U.S.C. 1337]
[28] 88 Fed. Reg. 86145 (December 12, 2023);Central Atlantic Proposed Sale Notice (CA PSN) available at: https://www.federalregister.gov/documents/2023/12/12/2023-27200/atlantic-wind-lease-sale-10-for-commercial-leasing-for-wind-power-development-on-the-us-states.
[29] California's Offshore Wind Opportunity. E2. 2023. https://e2.org/reports/ca-offshore-wind-opportunity-2022/.
[30] Page 46, Volume II of California Energy Commission Draft Commission Report: Assembly Bill 525 Offshore Wind Strategic Plan. January 2024.
[31] *Ibid* p. 60.

Community Needs Must be Integrated Into Offshore Wind Projects From the Start

We support the draft Strategic Plan's inclusion of Community Benefits Agreements (CBAs) to enhance benefits and ameliorate impacts to local communities, as CBAs are important financing pathways for building community capacity and to enable local control to ensure community self-determination. We also support the draft Strategic Plan's recommendation to support the development of project labor agreements (PLAs) that provide local and underserved communities and tribes with meaningful workforce development opportunities and economic benefits from offshore wind development.[32]

However, the state should ensure that offshore wind projects integrate key provisions for securing community benefits and addressing community needs at the outset (i.e., during RFP scoping, scoring, etc.). While CBAs and PLAs are important mechanisms, integrating fundamental community needs directly into the bidding on projects is critical for avoiding putting the brunt of responsibility for developing and enforcing CBAs, PLAs, and other community agreements onto the communities themselves. We note that there should continue to be sufficient opportunities for the communities to also negotiate for needs that are local to their situations. We encourage the state to work with federal partners to ensure that final CBAs, PLAs, and other community agreements are codified in the final permits and contracts needed for an offshore wind project, so there is a clear record of agreements and mechanism for enforcement. We encourage the state to (1) prioritize eliminating port pollution and (2) pursue community benefits that are enforceable, and highly responsive to local impacts.

It is important to be clear that CBAs are not a substitute for, and must be additive to, all required avoidance, minimization and mitigation measures. Port development in particular must be designed to first avoid impacts to communities, minimize and mitigate impacts. CBAs could be used to achieve a net benefit for communities beyond those required in permitting. For example, air quality impacts from expanded port facilities, traffic, and other impacts to port-adjacent communities must first be avoided, then minimized as feasible, and mitigated in addition to any benefits provided through a CBA that could achieve net-reduction in impacts to those communities (e.g., by retrofitting existing facilities to further reduce existing levels of emissions).

Finally, we urge the CEC to identify opportunities to memorialize community benefits associated with offshore wind in required project permits. For example, the CEC should identify opportunities to insert a range of enforceable community benefits such as zero-emission mandates, workforce equity strategies, air quality monitoring programs, and community oversight committees to watchdog port expansion projects associated with offshore wind development and deployment. We encourage the CEC to actively collaborate with state agencies

[32] *Ibid* p. 179.

tasked with guiding future offshore wind development such as the California Coastal Commission, State Lands, and California Natural Resources Agency to ensure all project CBA and PLA commitments are met.

More Robust Strategies Are Needed for Avoiding and Mitigating the Impacts of Reduced Air Quality

Port-related activity using diesel powered ships and trucks as well as construction-related equipment could increase air pollution in adjacent, often underserved, communities. These pollutants can exacerbate health impacts of near port communities, and compound existing health impacts. While we appreciate the CEC's acknowledgement of these potential impacts throughout the draft Strategic Plan,[33] a more robust and comprehensive accounting of impacts and more comprehensive consideration of mitigation strategies is necessary to adequately plan for avoiding and mitigating these impacts on local, underserved, and Tribal communities.

For example, air quality mitigation strategies in Volume III could include consideration of the use of zero-emission equipment and vehicles at ports and other onshore facilities, as well as air quality monitoring systems to track and trigger mitigation measures if elevated, harmful air pollution levels are detected. The draft Strategic Plan should outline plans for relevant local and state agencies to share information with impacted communities using communications plans, and develop a robust suite of avoidance, minimization and mitigation strategies. Comments to inform BOEM's PEIS may be helpful to the state as it creates a more comprehensive list of potential air quality mitigation strategies to avoid and minimize air quality impacts to local, underserved, or Tribal communities, as well as mitigation strategies for unavoidable impacts.[34]

More Comprehensive Strategies Are Needed for Providing Benefits and Mitigating Impacts to Tribes and Native Communities

The draft Strategic Plan acknowledges and discusses the potential impacts to, and possible benefits for, Tribal and Native communities in California. In particular, we agree with the CEC's acknowledgement that Tribes and Native communities need compensation for time and energy spent engaging in and providing recommendations for the responsible development of offshore wind, and we support the draft Strategic Plan's recommendation to leverage existing programs and explore additional funding opportunities to compensate Tribal representatives' participation in Tribal consultations, meetings, and work group sessions.[35]

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[33] *Ibid* pp. 60, 83; Page 36-37, Volume III of California Energy Commission Draft Commission Report: Assembly Bill 525 Offshore Wind Strategic Plan. January 2024.
[34] As an example, see Brightline Defense's comment letter to BOEM re: California Offshore Wind Programmatic Environmental Impact Statement, docket No. BOEM-2023-0061. Comment ID: BOEM-2023-0061-0156
[35] Page 34, Volume III of California Energy Commission Draft Commission Report: Assembly Bill 525 Offshore Wind Strategic Plan. January 2024.

However, economic considerations for Tribes and Native communities in the Strategic Plan should not be limited to compensation for engagement in the planning process. Additional mitigation strategies related to workforce development, direct hiring, and other economic benefits or financing pathways for Tribes and Native communities are necessary for a comprehensive approach to righting historical wrongs and providing these communities with meaningful benefits through responsible offshore wind development. Volume III's Strategies for Addressing Impacts Identified by Native American Tribes and Indigenous Peoples, or other workforce development sections of the Strategic Plan, should more specifically detail strategies related to workforce development and direct hiring of local Tribal and Native community members. Further, Volume III's consideration of mitigation impacts related to site surveys states that "Native American Tribal members could participate in surveys, if desired".[36] We recommend the CEC go further—not only should Tribal members be compensated for participation in any surveys, but lessees should be required to prioritize contracting with and/or hiring Tribal experts and Native community experts to partner in marine and archaeological surveys related to cultural impact assessments.

In addition, we appreciate that the draft Strategic Plan acknowledges potential increases in Murdered & Missing Indigenous People associated with an influx of a new offshore wind-related workforce. However, we strongly encourage a more thorough consideration of potential mitigation strategies for inclusion in Volume III. We recommend the CEC include additional public safety measures in its list of mitigation strategies including zero tolerance policies; whistleblower protections; clear protocols for responding to safety issues; worker and management training on applicable issues, history and policies; and other tools to promote workplace and community safety.[37] Sixteen specific strategies for addressing the Murdered & Missing Indigenous Peoples crisis as it relates to offshore wind development can be found in the Yurok Tribe's memorandum on the issue.[38]

Finally, we appreciate the CEC's attention to cultural landscapes in the Strategic Plan, acknowledging that Tribal cultural resources are not limited to historical items found underground but also include holistic interconnections with the environment and religious and cultural lifeways.[39] These are important factors for the state to keep considering as offshore wind develops in California, and we strongly encourage the state to work closely with Tribes and Indigenous communities to identify more specific strategies to avoid, minimize, and mitigate and monitor impacts of offshore wind development on cultural landscapes.

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[36] *Ibid* p. 33.
[37] BOEM PEIS comment letter from Yurok Tribe, Comment ID: BOEM-2023-0061-0169
[38] Katherine Katcher & Chief Judge Abby Abinanti, *How to Protect Native Women, Girls, and People in Humboldt & Del Norte County as Offshore Wind Enters the Region: MMIP Prevention Planning & Recommendations* (2023).
[39] Page 68, Volume II of California Energy Commission Draft Commission Report: Assembly Bill 525 Offshore Wind Strategic Plan. January 2024.

Robust and Ongoing Engagement with Local, Tribal, and Underserved Communities is Critical

The state should engage in and encourage robust community engagement, authentic collaboration, and community empowerment to foster equitable and effective development of an offshore wind industry in California. Fully engaging local, Tribal, and underserved communities as well as the full range of stakeholders at the start and throughout the leasing, permitting, construction, and operation processes will help secure greater trust and endorsement of the siting and other outcomes of offshore wind projects.

Enabling an inclusive process requires—among other things—"prioritizing processes and outcomes on racial inclusion, deciphering the power dynamics of who benefits, who pays, and who decides." It is important that the priorities of decision-making focus on improving racial, health, and climate outcomes in addition to the fiscal bottom line.[40]

There are various ways to accomplish this – often, communities are informed or consulted, rather than being a part of co-creating strategies and solutions, as noted in the image below. Given the depth of natural and historical knowledge that Tribal and local communities hold, we urge the Commission to set expectations that at minimum, engagement should follow the "Collaborate" goal's guidance.

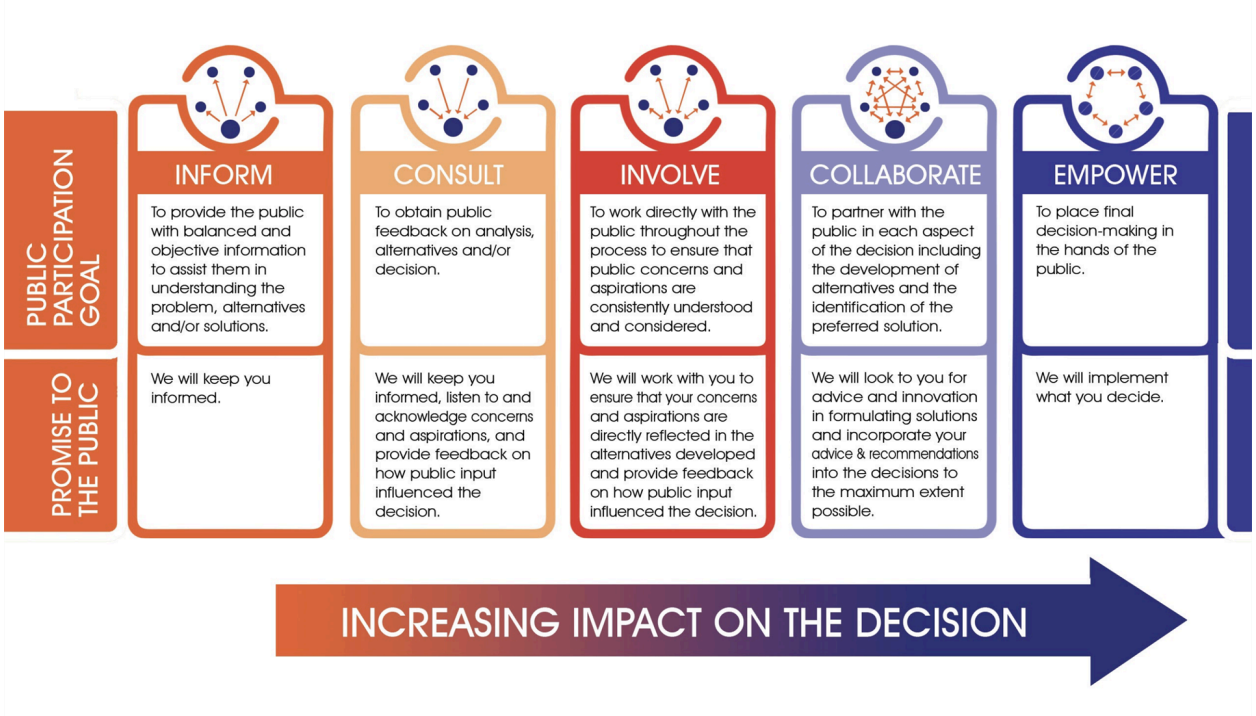

Figure 1: Public Participation Levels of Engagement

[40] The Strong, Prosperous, and Resilient Communities Challenge (SPARCC); *Inclusive Investment Starts With Equitable Community Engagement*; https://www.sparcchub.org/wp-content/uploads/2019/09/EECE-V4.pdf

As such, we urge the state to create forums for impacted residents to regularly discuss questions/concerns associated with offshore wind development and deployment with the CEC staff. The CEC should consider replicating the AB 617 Steering Committee model to maximize opportunities for public input and dedicate time to meaningfully inform community members about technical updates including results from air monitoring, pollution reduction findings, and quantifiable benefits. It is our hope and expectation that the CEC will recommend to responsible agencies that they work with impacted residents to develop and enforce strong mitigation measures that protect quality of life, public health and safety, and the local economy in areas where offshore wind staging/integration facilities are sited and in communities where offshore wind farms become operational.

We appreciate the draft Strategic Plan's acknowledgement of community engagement best practices such as "advertising meetings weeks in advance, holding meetings in trusted locations at times when working families can attend, providing children's activities and food, and creating accessible materials that are also translated".[41] We recommend the draft be further strengthened with the inclusion of the following measures:

- Advertisement of meetings and/or public hearings at community centers and accessible community venues.
- Making information, including reports, documents, and data relevant to the proposal, available to the public for feedback and input.
- Include a meaningful engagement plan to make information accessible to non English speakers—including but not limited to:
    - Online registration must be offered in languages spoken in communities of interest and those most impacted by proposed projects.
    - Follow-up instructional emails and zoom calendar invites should be available in the language selected by the registrant.
    - Public comment announcements should be made in multiple languages to facilitate the greatest level of public participation.
    - Sign language interpretation and simultaneous language translation should be made available for all virtual and in-person listening sessions, hearings, and materials.
    - Interpreters should be screened or trained to become familiar with climate change, environmental justice, environmental health, and fossil fuel terminology.
    - Interpreters should be available upon request to ask questions during proceedings.

[41] Page 83, Volume II of California Energy Commission Draft Commission Report: Assembly Bill 525 Offshore Wind Strategic Plan. January 2024.

    - Impacted communities must be consulted early and consistently to determine which language translation services are necessary to support maximum access to information and participation from community members.
    - Translation may require additional time. Time management and flexibility must be considered when ensuring public access to the comment process.
- Requirements for offshore wind developers to have a clear and transparent process to provide an overview of what stakeholder engagement they have done. This community engagement summary should be shown through a rubric or document that clearly names what the stakeholder process was and summarizes the community support and/or concerns that were provided. These summaries should show how each project is reducing climate impacts, advancing equity, and building in an environmental justice framework that empowers impacted residents by providing community oversight opportunities. This summary should include evidence of estimated emission reduction benefits and benefits to local communities with a plan for long-term monitoring and reporting actual emission reductions and local air quality improvements. The results of this summary must be publicly available.

In sum, offshore wind developers must ensure that their public engagement efforts thoroughly inform communities that will be impacted by the proposed project, and provide opportunities at community centers and in neighborhoods for impacted residents to learn about proposed projects before they are asked to weigh in. Preparing community members by breaking down elements of project proposals will set communities up for success in providing feedback. Long-term community engagement can be achieved by creating a community taskforce that continuously consults and engages with local residents and members of existing community task forces such as the AB 617 Community Steering Committees or Port of Long Beach's planned Offshore Wind Community Roundtable throughout the life of the project.

3. Port Development Impacts and Mitigation Strategies

<u>The Draft Provides Information About Port Needs but No Strategic Plan for Improvements and Buildout</u>

Following on AB 525's requirement that the agencies 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," the agencies must develop a *plan* to improve waterfront facilities to support the new OSW industry (Pub. Res. Code §§ 25991.2, 25991.3). Specifically,

> (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 <u>plan</u> to <u>improve</u> 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.

Cal. Code § 25991.3, emphasis added. AB 525 anticipates that the CEC will provide a *plan,* not just a list of issues. We are concerned that the draft Strategic Plan does not provide needed detail regarding existing port facilities or address the planning requirement regarding port facilities improvement. It is critical that the agencies explain how and when the needed planning for potential port improvements and investments will be developed.

This state-level planning is needed to address not only what types of port facilities may be needed (the report addresses this question–see more regarding that issue below), but where that development should occur to minimize impacts and provide a basis for meaningful alternatives discussions while supporting buildout of this new industry. Some key unanswered questions include, but are not limited to:

- What it means to "improve port facilities" – the draft Strategic Plan appears to treat improvement of all "existing" ports equally when looking at a wide range from very small ports such as China Beach and Gato Canyon to medium and large existing ports such as Long Beach and Bay Area ports, or in the case of Humboldt Bay, in need of demolition, characterization of soil and groundwater contamination, and remediation before any new construction can begin. Clearly expanding small ports in isolated areas of the California coast is fundamentally different from expanding or redeveloping facilities within already large port districts, or within sensitive habitats like those in Humboldt Bay.
- Whether existing port locations and local communities that have already been burdened with impacts should also be the site of expanded waterfront port facilities and increased impacts, or whether net improvement for communities should be required. For example, whether state funding should require a net improvement in air quality if the Port of Long Beach is expanded to accommodate the OSW industry.

The draft Strategic Plan's lack of detailed information regarding the range of existing port facilities and potential new improvements and development on the California coast leaves the

public and affected communities in the same position as before, needing to react to each port-initiated proposal for OSW-related port facilities without any coordinated state-level guidance on how or where this type of development should occur and what the trade-offs are between locations. Thoughtful planning and coordination as envisioned in AB 525 can ensure that the amount of port infrastructure permitted and/or built is exactly what is needed. This would help minimize unnecessary cost overruns and impacts to the California coast and coastal communities.

The Draft Provides Some Categorization of Likely Uses for Various Ports but the Rankings for Ports Are Misleading

Chapter 6 of the draft Strategic Plan provides a 2-page summary of "port infrastructure needs". The draft Strategic Plan concludes at Vol. I, page 20-21:

> No single port site in California can serve all the needs of the offshore wind industry. Instead, a coordinated multiport strategy will be needed and could require more than 16 large and 10 small port sites to support offshore wind development over the next decade or more. Staging, integration, and operations and maintenance sites are essential, unlike manufacturing and fabrication sites since components can be imported.

Volume II of the draft Strategic Plan provides another 31 pages of background information which relied heavily on the "Moffat & Nichols' Port Plan" contracted by the State Lands Commission (Port Readiness Plan").[42] While Volume II provides some detail about port needs and improvements to support the industry it provides only cursory analysis of impacts to environmental resources and communities, and the ranking and comparison between ports that is provided is not well supported. (*See* Volume II at 126 claiming the "Port Readiness Plan" provides a detailed assessment to "Evaluate and compare port sites to identify viable ports for offshore wind, including impacts to environmental resources and disadvantaged populations.") The "Port Readiness Plan" identified different types of activities that need port facilities:

> Three major activities to take place in ports, including staging and integration, manufacturing/fabrication, and operations and maintenance. Two additional port facility needs, those for mooring lines and anchor laydown, and electrical cable laydown are described.[43]

The Port Readiness Plan then sorted existing ports by whether they were likely to meet the needs for those types of facilities. For the environmental and cultural issues, Volume II states the Port

[42] Lim, Jennifer and Matt Trowbridge (Moffat & Nichol). July 2023. AB 525 Port Readiness Plan. Available at https://slcprdwordpressstorage.blob.core.windows.net/wordpressdata/2023/07/AB525-Port-Readiness-Plan_acc.pdf .
[43] Page 131, Volume II of California Energy Commission Draft Commission Report: Assembly Bill 525 Offshore Wind Strategic Plan. January 2024.

Readiness Plan looked at 8 factors (*id*. at 150-151) but it does not disclose the actual data sets used or the metrics for ranking making it impossible to understand how the rankings (greatest impact, medium impact, and least impact) were arrived at in the charts provided for each type of port facility (*id*. at 152-154). Among the factors that were <u>not</u> considered are: cumulative effects, indirect effects, visual resources, environmental justice, land use concerns, air emissions, sensitive receptors on shore to nighttime lighting and noise, transportation onshore, effects of sea level rise, storm wind/wave or changes to tidal heights, potential sound impacts to marine mammals and other aquatic species, sediment quality, the volume of and area of fill needed for new port facilities, and compensatory mitigation that would be required for port buildout in the waters of the U.S. including sound, fill and excavation and dredging, and impacts to eelgrass and wetlands.[44]

The ranking weighted each of the 8 factors equally and the methodology is simply a comparison of the port sites against each other as "least", "medium," or "greatest" impact.[45] While this does result in a "rank" for each port site addressed, given that many factors were excluded from the analysis, it does not provide a comprehensive assessment of potential impacts of port development and should not be used as a scientifically defensible metric for steering future port development.

The draft Strategic Plan itself states: "The environmental ranking discussed above is narrow and not the rigorous analysis that typically would be conducted for an environmental review document …" *Id.* at 154. The CEC should conduct a more robust, scientifically rigorous assessment of environmental impacts of port improvements to ensure the Strategic Plan's port infrastructure recommendations and ranking are as accurate and actionable as possible.

<u>The Draft Fails to Provide the Needed Background for Additional Port Planning Going Forward as Required Under AB 3</u>

The draft Strategic Plan does not provide the needed background for the additional second-phase planning required under AB 3 (2023), which is intended to build on the AB 525 strategic plan and specifically requires a second-phase plan and strategy for seaport readiness and port development in the Central Coast and North Coast by December 31, 2026. Among other things this "second phase" plan requires consideration of cultural and natural resources and prioritization of locations that minimize such impacts:

> "For purposes of the second-phase plan described in subdivision (a), the commission shall do all of the following:

[44] Port Readiness Plan, pp. 78-80.

[45] The earlier "2023 Alternatives" report suffered from some of the weaknesses in this ranking methodology. 2023 Alternative Port Assessment to Support Offshore Wind Final Assessment Report California State Lands Commission suffered from similar issues although it addressed a few additional factors.

(1) Identify feasible seaport locations for offshore wind turbine assembly to serve Central Coast and North Coast offshore wind energy projects.

(2) Recommend and prioritize only port alternatives where site control can be obtained by a port authority or state agency within five years.

(3) Recommend and prioritize alternatives only with sufficient landside and water acreage or capacity to support maximum in-state assembly and manufacturing of offshore wind energy components.

(4) Recommend and prioritize port locations that minimize impacts to cultural and natural resources, including the marine and onshore environments, sensitive species, and habitats." …(emphasis added)).[46]

The draft Strategic Plan should be revised to provide more clarity on the extent to which any impacts to cultural and natural resources from port development have or have not been considered to date by the agencies. Doing so will provide a more reliable basis for additional planning and prioritization of port improvements going forward.

4. Transmission

The CEC is uniquely situated to ensure that transmission planning associated with offshore wind is done as environmentally and socially responsible as possible. Many of our organizations' previous recommendations for doing so are already included in the draft Strategic Plan, and we thank the CEC for including them. We highlight here where improvements are needed, and where the draft Strategic Plan can be strengthened.

The AB 525 Strategic Plan Should Promote Alternative Offshore Transmission Concepts

If offshore wind farms are connected to shore via radial export transmission cables, the environmental impacts will be greater than they need to be. This is because additional radial cables will increase the number of structures in the ocean and the number of points of landfall. The Strategic Plan discusses the environmental and economic advantages of alternative offshore transmission concepts such as a Meshed Cable system or Offshore Backbone. However, it stops short of recommending that offshore wind farms use these concepts immediately and instead recommends exploring these options.[47]

The Strategic Plan should go further to encourage these alternatives. Coordinated transmission planning can significantly decrease impacts from offshore transmission corridor development. For example, a backbone transmission system for the California coast would allow there to be

[46] Pub. Res. Code § 25991.8(b)
[47] Page 238, Volume II of California Energy Commission Draft Commission Report: Assembly Bill 525 Offshore Wind Strategic Plan. January 2024.

fewer cables in the ocean and fewer locations where export cables come ashore, thus avoiding many associated impacts. Coordinated transmission planning can also reduce total cost to the developer and thus potentially also save ratepayers money. There are also reliability advantages of these alternative systems that could help offshore wind projects provide more benefits to the California electric grid. Given these benefits, we recommend the CEC go further in promoting these alternatives in the final Strategic Plan for all current and future Wind Energy Areas.

Accomplishing this would require an integrated, collaborative approach between offshore wind companies, Tribal, Federal and State agencies. Planning should begin now to ensure that offshore transmission connections are not done on a case by case basis but rather follow an integrated, collaborative plan that minimizes environmental impacts. Part of doing so would require comprehensive analyses to identify the harms and benefits to the local communities and land. Any such assessment should involve co-planning and oversight by impacted Tribal and local communities, and engagement should follow similar recommendations as noted above.

Offshore Wind Transmission Should be Planned to Promote Access to Reliable Renewable Electricity for Tribal and Rural Communities

We appreciate that the draft Strategic Plan acknowledges the need to provide improved access to reliable renewable energy for North Coast Tribal and rural communities in the Native American Tribes and Peoples section.[48] However, this same consideration is not included in the draft's section on transmission planning (Chapter 9), where it is equally relevant. We recommend repeating this consideration in the transmission planning section in order to further highlight the need for offshore wind to be accompanied by improved reliability and access to renewable energy for these communities.

We strongly recommend that the Strategic Plan include and prioritize recommendations that offshore wind energy directly connect to and benefit the communities that will be impacted by offshore wind development. For example, most of the electricity in the Humboldt Bay region is currently provided by the Humboldt Bay Generating Station (a natural gas power plant) and a few biomass plants. Planning regarding how to achieve 100% renewable energy in the Humboldt region assumes the vast majority of that power will come from future offshore wind farms.[49] Therefore, it is essential that at least some offshore wind energy "land" in Humboldt Bay and provide local renewable power to a community that will be impacted both by the construction and siting of offshore wind turbines. This applies to other communities across the state that will be impacted by offshore wind as well.

[48] *Ibid* p. 70.
[49] Redwood Coast Energy Authority, Humboldt's Electric Future, Final Report 2023, Online at https://redwoodenergy.org/wp-content/uploads/2023/07/Humboldts-Electric-Future-Final-Report.pdf

For some particularly remote Tribal and rural communities in the state not currently connected to the distribution grid, it could be unrealistic for transmission and distribution infrastructure associated with offshore wind to reach them directly. For instance, the North Coast is mountainous, forested, and remote. For these communities that may still be impacted by transmission buildout and development activities in the area, a community benefit that would be particularly beneficial may be off-grid forms of renewable energy, such as solar microgrids and battery storage. The Blue Lake Rancheria has already successfully demonstrated the value of these projects for Tribal and rural communities.[50] The financial investment associated with offshore wind provides an opportunity to directly benefit these communities by investing in this kind of climate friendly and socially beneficial infrastructure. These kinds of projects should be explored as complements to transmission during the transmission planning process.

Transmission and Distribution Planning to Support Humboldt Bay's Green Heavy Lift Terminal

In January 2024 the Humboldt Bay Harbor, Recreation, and Conservation District adopted a green terminal resolution. The resolution commits the District to developing a strategy to develop the Humboldt Bay offshore wind heavy lift marine terminal as a green terminal.[51] One of the goals of the strategy is for it to limit emissions of the terminal to the extent feasible at the outset of operations. This will require electrifying as much equipment for use at the terminal as possible. Accomplishing this will require considerable electricity to be available at the terminal.

The proposed Humboldt Bay heavy lift terminal is located on the Samoa Peninsula. The peninsula currently has limited electrical capacity. We recommend the Strategic Plan consider strategies to ensure that there is adequate electric capacity to electrify as much port equipment at the proposed Humboldt Bay heavy lift terminal as possible. This can include working with PG&E, the CPUC, CAISO, and the Humboldt Bay Harbor District to ensure that this planning happens concurrently with planning for the new heavy lift terminal.

Once offshore wind turbines are installed and operating, it would also be beneficial and harmonious for that power to land in Humboldt Bay and be connected to the heavy lift terminal. This would allow the terminal to construct future wind turbines using renewable energy.

[50] Narum, David, Jana Ganion, and D. Carter. 2016. "Developing a Low-Carbon Microgrid on Tribal Lands: A Case Study." Online at http://aceee.org/files/proceedings/2016/data/papers/11_459.pdf.
[51] Humboldt Bay Harbor, Recreation, and Conservation District, Resolution No. 2024-01, a Resolution Committing the District to Developing and Adopting a Green Terminal Strategy and Roadmap for the New Heavy Lift Multipurpose Terminal to Support the Offshore Wind Industry, online at https://humboldtbay.org/sites/humboldtbay.org/files/Resolution%202024-01%20Adopting%20a%20Green%20Terminal%20Strategy.pdf

Transmission Planning Should Rely on Local Expertise

We appreciate that the draft Strategic Plan acknowledges and relies on the Schatz Energy Research Center's offshore wind transmission study.[52] Relying on local expertise and knowledge regarding transmission planning is invaluable for successfully creating new transmission infrastructure in an environmentally and socially conscious way. Tribal Nations, cities, counties, community groups, and local nonprofit organizations like the Schatz Energy Research Center can each provide different perspectives and knowledge regarding transmission needs and risks. The Strategic Plan should more explicitly acknowledge the importance of integrating local knowledge from these communities with regards to transmission siting and planning, and the need to engage local leaders in all levels of planning (see section 2 for example strategies to enable authentic engagement).

5. Decommissioning

The Strategic Plan must address decommissioning of offshore wind infrastructure in more detail. As the agency charged with overseeing the implementation of offshore wind development, the CEC and all permitting agencies must take a cradle-to-grave approach. Safe, reliable and environmentally sensitive decommissioning plans are an essential part of the planning process and cannot be left for a future time. With a design life of 25 years,[53] there is a need to plan ahead and be prepared for unexpected circumstances, including natural disasters and unexpected closures. As our organizations have witnessed with the offshore oil industry, strong and detailed plans for decommissioning with sufficient bonds and a clear delineation of responsibility and authority are required. California taxpayers and ocean users should not be burdened with industries' clean up cost should the unforeseen occur. We recommend the final Strategic Plan articulate a process for developing decommissioning plans, with an associated timeline and requirements to be addressed.

6. Suitable Sea Space Analysis

Identifying additional wind energy areas is necessary to ensure California meets its wind energy goals. While we appreciate the CEC's reasonable approach to evaluating new sea space for future offshore wind development, we ask that future leasing and buildout be informed by lessons learned from existing WEAs. We support the acknowledgement that these areas may be reduced in size as decisions are made to minimize conflict and protect marine resources.[54]

[52] Page 25, Volume II of California Energy Commission Draft Commission Report: Assembly Bill 525 Offshore Wind Strategic Plan. January 2024.
[53] *Ibid* p. 163.
[54] *Ibid* p. 94.

The second phase of the suitable seaspace analysis included in the draft Strategic Plan utilized previous existing data, however, as the state expands upon and updates its analyses, new data should be incorporated. For example, the current models used to identify suitable seaspace integrate data on biologically important areas (BIAs) for whales from 2015; however, new data on whale BIAs were just published in early 2024.[55] As the identified suitable sea space is further refined, the newest whale BIA information should be used moving forward.

The identified suitable sea space located along the North Coast will largely be in the path of the proposed shipping lanes identified by the U.S. Coast Guard (USCG) last year in the Pacific Coast Port Access Route Study.[56] As explained in the report, moving the shipping lanes is not a simple solution as it could increase shipping and transportation costs (p. 116). More specificity and planning is needed on how to mitigate costs and impacts to the shipping industry, commercial and recreational fishing, and local coastal counties.

Of the six areas identified as suitable sea space, five of them are located along the north coast of the state. The preliminary study conducted by Energy Commission staff lists "distance to transmission and port facilities" as a characteristic used to find areas of potential (Appendix C: p. 59); however, consideration of port capacity to support new WEAs was not listed. In identifying new seaspace, it is necessary to ensure that the eventual increase in turbines will be supported by the port build out that will occur in the beginning stages of offshore wind implementation. Port build out is a necessary component to the successful construction, operation, and eventual decommissioning of offshore wind. Before any of the five areas identified as suitable sea spaces are designated as new wind energy areas, it is imperative that current data and additional studies on ports are utilized to inform those proposals.

State Biodiversity Goals: 30x30

Under Executive Order N-82-20 in 2020, later codified by Senate Bill 337 in 2023, California has set a goal to conserve 30% of California's lands and waters by 2030. Suitable sea space analyses for offshore wind development must also consider this state biodiversity goal, as the state looks to conserve approximately 500,000 acres of California coastal waters over the next six years.[57] We strongly recommend the final Strategic Plan include guidance around coordination with relevant state agencies leading and implementing California's 30x30 work, to

[55] Calambokidis, J., Kratofil, M. A., Palacios, D. M., Lagerquist, B. A., Schorr, G. S., Hanson, M. B., Baird, R. W., Forney, K. A., Becker, E. A., Rockwood, R. C., & Hazen, E. L. (2024). Biologically Important Areas II for cetaceans within U.S. and adjacent waters—West Coast Region. *Frontiers in Marine Science*, *11*. https://doi.org/10.3389/fmars.2024.1283231.
[56] U.S. Coast Guard. June 2023. Port Access Route Study: The Pacific Coast from Washington to California. 88 Fed. Reg. 36,607. Notice. Available at https://www.federalregister.gov/d/2023-11878.
[57] California Senate Committee on Natural Resources, March 12, 2024, Informational Hearing. 30x30: What is next on the Pathway to Conserve 30 Percent of California's Coastal Waters by 2030? https://sntr.senate.ca.gov/sites/sntr.senate.ca.gov/files/2024.03.12_background.pdf#:~:text=This%20means%20the%20state%20has%20already%20conserved,of%20coastal%20waters.%2030x30%20coastal%20waters%20strategies.

ensure offshore wind planning and infrastructure advances in parallel with state efforts to increase area-based strategies to help protect California's marine biodiversity.

7. Science Entity

Securing the best available science to inform decision making around management and use of the ocean requires continuous coordination across diverse stakeholders, sufficient allocation of resources, and a collaborative platform for data-sharing. Designating a single collaborative entity to guide these processes can help ensure the development—and coherent and consistent use—of best available science in all phases of offshore wind development.

The draft Strategic Plan refers to an independent science entity to be developed and established by the Ocean Protection Council (OPC).[58] As stated in previous letters, we support the establishment of a single science and data entity dedicated to directing priorities for monitoring and research, housing and synthesizing information about the effects of offshore wind, and developing data standards for monitoring, and potentially other relevant standards, which will operate independently of state agencies and include representatives from different sectors, including industry, state and federal governments, and the NGO community.[59] We request additional specificity on the intended vision and process for setting up this body.

Forming a science entity to guide monitoring and research now would be incredibly valuable to inform comprehensive monitoring guidance currently in development, and critical comprehensive baseline monitoring that has yet to get underway.

8. Adaptive Management

The full extent of environmental impacts from deploying an offshore wind industry in West Coast waters is still unknown and will require further data collection and evaluation in order to fully understand, avoid, minimize, and mitigate adverse impacts. A key part of managing adverse impacts is ensuring that adaptive management measures are in place, to allow for adjustment of operations, if needed, as more information about adverse impacts becomes known. While the monitoring guidance currently in development by the OPC will be necessary for determining the detailed metrics and standards needed for effective adaptive management, the Strategic Plan should articulate what a broader adaptive management framework would look like. Due to the importance of comprehensive baseline monitoring, the development of adaptive management plans cannot be put off until the construction and operations phase. Meaningful adaptive management is an essential part of the planning process for floating offshore wind, and needs to

[58] Page 122, Volume II of California Energy Commission Draft Commission Report: Assembly Bill 525 Offshore Wind Strategic Plan. January 2024.
[59] eNGO comment to the CEC re: Draft Conceptual Permitting Roadmap for Offshore Wind Energy Facilities Originating in Federal Waters off the Coast of California, TN #248737, Docket 17- MISC-01.

be incorporated into all phases. Development of robust adaptive management plans now will make projects more resilient and successful. These plans should include monitoring for the success or failure of the adaptive management activities.

We appreciate the CEC's recommendations regarding adaptive management in its Strategic Plan, and suggest that the CEC further tailor its recommendations in the final document along the lines below. As noted in our earlier comments, a crucial element of effective adaptive management is the generation of meaningfully and publicly accessible data concerning impacts from project operation. The CEC should establish appropriate timescales in the Strategic Plan for baseline data to be collected, and for data to be evaluated periodically. Monitoring data must be assessed more frequently than annually to be responsive to on-the-water conditions. Requiring monthly or quarterly assessments would be much more protective of marine resources (see recommendations related to data transparency in section 9 below).

Effective adaptive management also requires clear, objective standards or "triggers" that are biologically meaningful. The Strategic Plan should state that an adaptive management framework should have clear metrics and thresholds, which once crossed would require further management action, in order to be effective. For example, if monitoring data show levels of take of a protected species that will result in impacts on the population, operations should be adjusted to reduce operational risks.

These types of adaptive management measures are already in use in other types of projects, as we have noted in our comments. For example, the onshore Shiloh IV Wind project in Solano County, California uses adaptive management measures – an advisory committee determines appropriate mortality rates for golden eagles and other avian species; if monitoring shows that actual mortality rates exceed permissible levels, adaptive management measures like visual modifications of turbines or installing anti-perching devices can be implemented.[60] A similar structure with clear timelines for making determinations and implementing adaptive management measures along with public transparency could potentially be used for offshore wind.

The Strategic Plan should also make clear that there may be a need to adjust operations and spacing of future projects based on monitoring data. This could impact financial calculations, but the importance of meaningful and robust adaptive management must be clear from the onset due to the many unknowns associated with floating offshore wind and the richness of California's marine environment. The Strategic Plan should articulate that monitoring data collected will feed back into management decisions. Furthermore, adaptive management strategies should be identified to facilitate rapid response to unanticipated impacts.

[60] *See e.g.,* U.S. Fish and Wildlife Service, Draft Environmental Assessment - Shiloh IV Wind Project Eagle Conservation Plan (July 2013); *available at* https://cdn.cnsnews.com/documents/Shiloh%20DEA_0.pdf

We would also encourage the consideration of an advisory committee with broad representation from various sectors including industry, environmental NGOs, community groups, academic, Tribal interests, fisheries, Federal, State, and local government sectors to inform the adaptive management process. An advisory committee should be fully transparent and structured to have a WEA-wide approach, rather than have separate committees project-by-project. Furthermore, this entity could work closely with the science entity to ensure best available science and standards are used for the adaptive management plans.

9. Data Transparency

To ensure sound stewardship of ocean resources, research and data collection should be conducted in a collaborative and transparent manner, involve recognized marine and wildlife experts, engage relevant stakeholders, and make results publicly available. We support the draft Strategic Plan's acknowledgement of the importance of data transparency for data collected throughout all project phases, as well as its recommendation that data should be made available publicly.[61] However, we strongly recommend the CEC include more specific guidance on timelines required for data transparency in the Strategic Plan. In particular, data on entanglements, vessel strikes and fatalities, and turbine collisions should promptly be made publicly available. Survey activities could be completed over several years, so providing monitoring data only annually[62] or after completion[63] is not adequately informative when impacts could arise at any point prior to completion. Delaying the release of monitoring data precludes adaptive management and prevents meaningful mitigation. Frequent reporting is necessary to alert agencies, lessees, and the public to impacts in a timely manner and to enable avoidance, minimization, and mitigation of adverse impacts throughout all phases of development, operations, and decommissioning.

In addition, the CEC should include additional guidance on the standardization and housing of data in the Strategic Plan. For instance, all baseline, monitoring, incident and assessment data should be made publicly available and shared with standard metadata conventions used by the Marine Cadastre, the U.S. Integrated Ocean Observing System (IOOS), regional ocean data

[61] Page 122 Volume II of California Energy Commission Draft Commission Report: Assembly Bill 525 Offshore Wind Strategic Plan. January 2024.
[62] Measures to Minimize Potential Adverse Impacts to Birds: "D. An annual report shall be provided to BOEM documenting any dead birds or bats found on vessels and structures during construction, operations, and decommissioning." D-14, APPENDIX D Typical Environmental Protection Mitigation Measures and Best Management Practices, Humboldt WEA Final EA
[63] D-12, APPENDIX D Typical Environmental Protection Mitigation Measures and Best Management Practices, Humboldt WEA Final EA, E. Reporting Requirements, Required Mitigations: "30. The Lessee must submit a monitoring report to BOEM and NMFS within 90 days after completion of yearly survey activities. The report must fully document the methods and monitoring protocols, summarize the data recorded during monitoring, estimate the number of protected species that may have been taken during survey activities; and describe, assess, and compare the effectiveness of monitoring and mitigation measures. PSO raw sightings and trackline data must also be provided with the final monitoring report.

portals, or other long-term collaborative data-management efforts.[64] The California IOOS regional associations bring together data from multiple sources, including privately generated data, to support dynamic, comprehensive, regionwide data for public access in an accredited system with existing standards and practices.[65] One useful model for housing data with an independent entity could be that used by the Northeast Regional Ocean Council, which among other functions, provides access to regional data on marine life, seafloor habitat, and other data relevant to planning for offshore wind development; and, along with other organizations, supports the Regional Wildlife Science Collaborative for Offshore Wind, which develops research related to the offshore wind Industry.

10. Updates to Strategic Plan

Strategic planning typically involves regular reviews and updates to check progress and reassess the validity of the plan in light of changing conditions, to ensure agility, responsiveness, and long-term success in a dynamic and ever-changing environment.[66] To serve as a true strategic plan, we recommend the CEC consider a periodic refresh to the AB 525 Strategic Plan to improve and adjust its guidance based on new information and developments in the offshore wind development landscape.

Conclusion

We greatly appreciate the opportunity to provide these recommendations for advancing responsible development of offshore wind power through the CEC's process to draft a Strategic Plan as called for by AB 525, and we encourage the CEC to continue its work incorporating stakeholder input into a comprehensive plan. At this key moment as the climate crisis is being felt around the nation and the globe, we must seize the opportunity to ensure that renewable energy such as offshore wind is developed in a manner that protects our environment, maximizes quality job creation, and furthers environmental justice.

Sincerely,

Irene Gutierrez
Senior Attorney
Natural Resources Defense Council

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[64] We recommend incorporation of the detailed recommendations for data transparency and equitable data sharing found in Amy Trice et al., Challenges and Opportunities for Ocean Data to Advance Conservation and Management, OCEAN CONSERVANCY (2021), https://oceanconservancy.org/smart-ocean-planning/take-deep-dive/oceandatareport/

[65] California Ocean Observing Systems Data Portal: https://data.caloos.org/

[66] CA State Department of Finance, *Guidelines to Strategic Planning* (1998) https://www.calhr.ca.gov/Documents/wfp-department-of-finance-strategic-plan-guidelines.pdf

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