DOCKETED	
Docket Number:	25-AB-03
Project Title:	Assembly Bill 3 California Offshore Wind Advancement Act
TN #:	265676
Document Title:	Oceantic Network Comment- AB 3 Scoping Reports
Description:	N/A
Filer:	System
Organization:	Nancy Kirshner-Rodriguez
Submitter Role:	Public
Submission Date:	8/18/2025 4:55:37 PM
Docketed Date:	8/18/2025

Comment Received From: Nancy Kirshner-Rodriguez

Submitted On: 8/18/2025 Docket Number: 25-AB-03

Oceantic Network Comments on AB 3 Scoping Reports

Additional submitted attachment is included below.



California Energy Commission Docket Unit – Docket No. 25-AB-03 715 P Street Sacramento, CA 95814

Re: Oceantic Network Comments on AB 3 Implementation: Supporting California's Floating Offshore Wind Goals

Dear Chair Hochschild, Commissioners, and CEC staff:

We write to you today on behalf of the more than 400 member companies and organizations that make up the Oceantic Network, a 501(c)(3) national nonprofit dedicated to advancing the offshore energy market and building a strong, locally driven supply chain. Our comments are intended to inform the California Energy Commission (CEC) as it develops a scoping strategy to fully evaluate opportunities for the domestic workforce and supply chain needed to support offshore wind. Oceantic Network offers these comments in addition to joint comments submitted with American Clean Power (ACP) – California and Offshore Wind California.

The Oceantic Network and its members have long supported California's efforts to advance floating offshore wind, and we remain committed to helping the state realize its vision of becoming a global leader in this emerging technology. In our previous comments on AB 525, we emphasized the importance of coupling positive incentives, a long reliable pipeline of demand to build a sustainable, globally cost-competitive, and financially resilient supply chain. These same principles remain important as California implements AB 3, which builds on the foundation of the AB 525 strategic plan and provides the opportunity to move from broad strategic planning toward actionable steps that strengthen the state's ports, workforce, and manufacturing base.

I. About Oceantic Network & Presence in California

Since 2013, Oceantic Network has connected businesses and governments to support policies that drive industry growth while equipping companies with the education, tools, and connections needed to succeed. A cornerstone of this effort is the International Partnering Forum (IPF), which has grown into the largest convening forum for offshore wind in the Americas and serves as a hub for industry collaboration and education. On behalf of our member businesses and thousands of supply chain companies registered in our database, Oceantic Network is working to ensure offshore wind development strengthens the U.S. economy, expands domestic manufacturing, and delivers reliable, affordable clean energy to the grid. In support of this mission, Oceantic Network tracks the supplier market closely using a national supplier registry and a contract and

¹Supply Chain Connect (SCC): Oceantic Network's national supplier registry includes over 4,000 self-registered organizations. It captures workforce and facility locations, offshore wind experience, company size, certifications, MWBE status, and other key qualifications. SCC helps identify existing capabilities, match suppliers to project needs, and illuminates supply chain gaps. Oceantic has partnered with several states to create unique portals and back-end data transfers. https://oceantic.org/supplychain/



investment tracking dashboard² which shed light on how the U.S. offshore wind supply chain is forming and what opportunities exist for future suppliers in California.

Oceantic Network has been engaged in California's emerging offshore wind sector since 2018, supporting both policy development and supplier engagement. We hosted our first California Supplier Day in San Diego in 2022 immediately following the Bureau of Ocean Energy Management's (BOEM) offshore wind lease auction in California and again in Long Beach in 2023. Both events brought together local businesses, port representatives, workforce leaders, and offshore wind developers to build awareness, foster partnerships, and prepare the state's supply chain for market participation. These events provided California companies a direct connection to emerging opportunities.

In 2024, the Oceantic Network held its inaugural Floating Port & Vessel Summit in Sacramento, focusing on the unique infrastructure needs of West Coast offshore wind. The event convened port authorities, shipbuilders, vessel operators, OEMs, developers, and state officials to explore floating-specific logistical, workforce, and financing challenges. The Summit helped shape key regional conversations around marshaling ports, heavy-lift vessels, Jones Act compliance, and the intermodal support services required to scale floating projects. It also provided the forum to launch the West Coast Supplier Council (WCSC). Later in 2024, Oceantic Network provided an in-depth offshore wind training for tribal and community leaders in Humboldt County with the support of Vineyard Wind.

II. Oceantic Network's West Coast Supplier Council

The Oceantic Network launched the West Coast Supplier Council in 2024, composed of Original Equipment Manufacturers (OEM) and Tier 1/Tier 2 industry leaders with both international and domestic experience. Recognizing the unique infrastructure, procurement, and manufacturing challenges associated with floating offshore wind, the West Coast Supplier Council brings together experienced suppliers to provide direct industry insight into what is required to build a viable and sustainable floating offshore wind supply chain in California and across the region. We were pleased to see numerous actions taken by California leaders in 2024 that mirrored the West Coast Suppler Council priority recommendations.³

Through the West Coast Supplier Council and the Oceantic Network's broader supply chain programming, Oceantic Network will continue to support California stakeholders in identifying practical solutions, highlighting gaps and opportunities, and fostering collaboration between public entities and private suppliers. This collaborative approach is essential to ensuring California's

² **Offshore Wind Market Dashboard:** A 24/7 market intelligence platform covering every aspect of the U.S. offshore wind industry. The Dashboard includes project timelines, vessel tracking, funding opportunities, state legislation, permitting summaries, port infrastructure, and daily policy updates. It is maintained by dedicated Oceantic Network staff and continuously updated to ensure accuracy and relevance. Together with SCC, the Dashboard serves as the foundation of the Network's analysis and policy recommendations.

³ Further reading: Suppliers' Guide to Success: Smart Scaling for the U.S. West Coast Floating Wind Market, Oceantic Network, Published 5/15/24. https://oceantic.org/suppliers-guide-to-success-smart-scaling-for-the-u-s-west-coast-floating-wind-market/



offshore wind ambitions translate into local economic development, domestic manufacturing, and job creation.

As we continue ongoing industry engagement, the Network emphasizes three foundational conditions for success:

1. Port development is essential.

No offshore wind supply chain can exist without the port infrastructure to support it. California's floating wind ambitions require purpose-built marshaling and manufacturing space with sufficient upland acreage, draft depth, quayside length, and intermodal connectivity.

- 2. A predictable project pipeline and clear state commitment.
 - Developers and manufacturers cannot invest in long-lead infrastructure or facilities without confidence that projects will be approved, constructed, and interconnected on a defined schedule. Visible state leadership and a long-term, binding procurement roadmap are critical signals.
- 3. Realistic, phased conditions for supply chain development. Siting availability, predictable permitting processes, and timely delivery of public infrastructure are critical for keeping commercial scale timelines on track. Such predictability is essential for the supply chain to invest in new facilities, where 7-10 years of orders are needed to justify a business case.

III. California Offshore Wind Landscape

California has made commendable progress in laying the groundwork for a successful offshore wind industry, aligning closely with the foundational principles previously outlined by Oceantic Network. The passage of AB 525 in 2021 marked a pivotal moment, directing the CEC to develop a strategic plan to meet ambitious offshore wind targets of 5 GW by 2030 and 25 GW by 2045. Delivered in 2024, this plan identified critical needs across port development, permitting, workforce training, and grid infrastructure, establishing a comprehensive baseline for the state's floating wind ambitions. The California Public Utilities Commission's (CPUC) 2024 Integrated Resource Planning (IRP) process further cemented offshore wind's role, culminating in a unanimous decision to certify a centralized procurement target of 7.6 GW by 2035.

The Port of Long Beach's proposed "Pier Wind" project, a 400-acre, \$4.7 billion marshalling facility, and Humboldt Bay's \$426 million INFRA grant for port redevelopment are landmark examples of California's strong market signals. Likewise, CAISO's \$4.6 billion transmission investment to connect Humboldt's offshore wind resource to load centers represents critical system planning. These investments position California to lead, provided future development is predictable, phased, and aligned with port readiness and supply chain feasibility.

Building on this foundation, AB 3 implementation offers an opportunity to deepen California's commitment by detailing how the offshore wind market should evolve and what specific state actions are needed to ensure progress. Oceantic Network agrees with the CEC's finding that a baseline of capabilities is essential. Oceantic Network has invested years in identifying interested and qualified suppliers that would form the backbone of a regional industry. 580 California



businesses are registered in the Oceantic Network's Supply Chain Connect database, 518 are headquartered in-state. An additional 20 Oregon and 69 Washington businesses have registered, underscoring the interconnectedness of the West Coast market. As is common in developing markets, most of the companies offer consultancy or civil infrastructure services, though with respect to the state's carbon industry past, over 25% have listed chemicals/oils/paintings or structural steel as the services they offer.

As part of a Department of Energy (DOE)-funded analysis with the National Renewable Energy Laboratory (NREL), the Oceantic Network mapped subcomponents and sub-assemblies tied to Tier 1 components, for which the Oceantic Network created corresponding categories. 70 organizations with at least one West Coast address indicated interest in providing services for floating-specific components such as semisubmersible platforms, dynamic cables, and mooring systems. Developers or prospective Engineering, Procurement, and Construction (EPC) suppliers will need to validate and expand capabilities, this data indicates clear regional potential. Importantly, these companies are spread across the West Coast states rather than isolated to California, confirming the need for regional coordination.

West Coast-based or West Coast-present companies are already contributing to the U.S. offshore wind supply chain, offering a foundation for faster knowledge transfer. The Oceantic Network has identified 49 companies with at least one address in California, Oregon, and Washington that hold contracts with at least one existing U.S. offshore wind project. Of those companies, 13 are consulting/service providing companies followed by engineering firms, marine services, developers/operators, and manufacturers to round out the top five. Since few projects have matured to construction and installation on the East Coast, it follows that most of the contracts to date are in the pre-construction phase.

California also benefits from a robust innovation ecosystem and entrepreneurial culture that is already contributing to the U.S. floating wind space. Examples include:

- **Principle Power** in Emeryville has deployed 105 MW of floating wind turbines off Portugal, Scotland, and France using its patented WindFloat platform and is working with international and local shipyards to develop serial production strategies for the delivery of GW-scale floating projects in California.
- Aikido Technologies in San Francisco has developed a rapidly fabricable floating foundation with reduced build time and complexity.
- **SAILDRONE**, based in Alameda, is developing autonomous monitoring solutions to detect and classify marine mammals near offshore wind sites.
- **Sperra**, located at the Port of Los Angeles is considering innovative ways to use 3D printing with anchors and mooring lines, and exploring concrete floating platforms in collaboration with **Bardex**, based in Santa Barbara.

IV. Lessons from the East Coast

California can build a floating offshore wind market informed by more than a decade of East Coast experience. While the East Coast has achieved notable progress, nearly 5 GW of projects under installation or operation, \$40 billion in investment, and over 2,000 supplier contracts across



40 states, the region has also encountered clear challenges in aligning infrastructure readiness, manufacturing development, and project delivery. These experiences offer California a roadmap for what to replicate and, importantly, what to avoid.

Supply Chain Development and Primary Manufacturing

Oceantic Network's tracking of 2,000 supplier contracts in the U.S. offshore wind market offers lessons for California's industry development and the difficulty of landing primary component manufacturing. Early East Coast supply chain activity has been dominated by logistics and port-related manufacturing, with strong representation in lifting, electrical components, and secondary steel fabrication. Companies like SpanSet (North Carolina), I&I Sling (Pennsylvania), and Kalmar USA (New Jersey) have secured multiple lifting contracts; Kiewit's Gulf fabrication yard produced the nation's first substation; and Pfisterer and Technostrobe established new factories in New York for smaller electrical components. Steel contributions have primarily focused on secondary platform and vessel parts, with firms in New York, Maryland, and Texas, such as BV Steel Technology, Crystal Steel Fabricators, Riggs Distler and Delta Steel, leveraging existing infrastructure and expertise, particularly from the oil and gas sector.

Despite ambitious East Coast demand (at least 45 GW in state goals, 50+ GW leased, and more in planning documents), capturing primary component manufacturing facilities, monopiles, blades, cables, or nacelles, has proved elusive. Currently, only Nexans in South Carolina is operational for export cables. Nearly a dozen more factories have been announced or planned only to see the investments fail due to cancelation or delays of anchor projects, global inflation, regional market failures, and overall uncertainty about the timing and volume of the East Coast project pipeline.⁴⁵⁶

More stable investments are taking root, particularly where revenue streams extend beyond offshore wind. Stell mills in Kentucky, Ohio, and Texas invested approximately \$3 billion in plant upgrades to produce the large, specialized plates for offshore wind foundations and towers. New cable manufacturing plants are breaking ground in Chesapeake, Virginia and Baltimore, Maryland. These investments hedge risk by serving both offshore wind and broader industrial markets through generic steel demand and export opportunities.

While the U.S. has largely failed to secure new primary component manufacturing, downstream supply opportunities represent significant job and economic opportunities that show. Riggs Distler has three manufacturing sites to fabricate secondary steel and specialized foundation components, each creating hundreds of (often) union jobs sustained several years. Those

⁴ Oceantic Network. (2022) U.S. Offshore Wind Market Update & Insights. https://oceantic.org/2022-u-s-offshore-wind-market-update-insights/

⁵Oceantic Network. (2023) U.S. Offshore Wind Market Update & Insights. https://oceantic.org/2023-u-s-offshore-wind-market-update-insights/

⁶ Oceantic Network. (2024) U.S. Offshore Wind Market Report. https://oceantic.org/2024-u-s-offshore-wind-market-report/



facilities are supported by other steel suppliers that expanded operations in support. Shipyards constructing everything from smaller crew transfer vessels (CTV) to larger service operation vessels (SOV) are employing from dozens to over 600 workers for multi-year build periods.⁷

The Cost of Fragmented Port Strategies

Port development on the East Coast has often suffered from fragmented planning, leading to duplicated investments, underutilized facilities, and stranded assets. California can avoid these inefficiencies by building coordination into its strategy from the start, leveraging synergies with Oregon, Washington, and Gulf Coast shipyards that may serve specialized vessel or component fabrication needs.

The latest tri-state procurement (Massachusetts, Rhode Island, Connecticut) was an encouraging step by asking developers to view port utilization on a regional basis and opportunity. Additionally, California can take lessons from successful East Coast port build-out, including how strong and forward-looking state support has created thousands of union jobs in the near-term while driving cost-savings in the future; A 2024 report found early port development will drive down subsequent project costs by 3% to 4%.8

Workforce Lessons and Job Creation

Despite challenges in attracting investment for primary component manufacturing, offshore wind on the East Coast has generated substantial workforce opportunities. Projects like South Fork Wind, Vineyard Wind, and Coastal Virginia Offshore Wind (CVOW) demonstrate how construction, secondary manufacturing, and long-term operations roles can create thousands of durable jobs across the supply chain.

South Fork Wind, the first commercial-scale offshore wind project completed in the U.S., yielded 201 supplier contracts across 25 states, supported 2,000 jobs in construction and manufacturing, and created new long-term O&M positions. Vineyard Wind and CVOW reflect similar patterns, highlighting the need for both skilled trades and advanced manufacturing roles across the lifecycle of offshore wind projects. Importantly, many of these jobs have been filled by union workers, veterans, and tradespeople recruited from local communities. For example:

- In Virginia, the Portsmouth Marine Terminal redevelopment created over 500 construction jobs and now supports more than 60 permanent operations roles.
- In New York, Riggs Distler and partners hired over 125 union craft workers for advanced steel component fabrication at the Port of Coeymans.
- Steel fabricator LJUNGSTRÖM in Wellsville, NY shifted from coal-sector work to offshore wind, expanding its payroll by 87% and creating hundreds of new jobs.

⁷ Oceantic Network. (2025). Offshore Energy at Work. https://oceantic.org/offshore-energy-at-work/

⁸ DNV Energy USA Inc., Second Wind: The Impact of Current U.S. Offshore Wind Investments on Future Costs, prepared for Turn Forward, October 2024. https://turnforward.org/wp-content/uploads/2024/10/Second-Wind-DNV-Offshore-Wind-Investment-Study.pdf



These examples demonstrate the potential for intentional workforce development, particularly when paired with strong local content strategies, site readiness, and collaboration with labor organizations. Programs that engage veterans, support MWBEs, and build pathways for new entrants to enter the trades should be prioritized. Because floating projects are largely constructed in port, floating offshore wind is expected to create even more local jobs than fixed-bottom projects. California has the opportunity to maximize these benefits by aligning port readiness, workforce development, and local content strategies from the outset.

V. Comments on Report 1 – Offshore Wind Seaport Readiness Plan

California's ability to establish a viable floating offshore wind market will depend heavily on the strategic development, financing, and coordination of port infrastructure. As outlined in Task 1-10, port development is foundational, without sufficient marshalling, fabrication, and assembly capacity, the state cannot meaningfully advance its offshore wind goals. As with Proposition 4, California must maintain a robust, coordinated investment strategy so that ports are not forced to compete for limited state funding. Not implementing such an out-year approach risks fragmentation, inefficiency, and suboptimal sequencing of investments. A more centralized approach, led by the State, would ensure port investments are aligned with California's broader offshore wind strategy and do not occur in isolation.

Financing Strategy (Tasks 1-2, 1-10)

AB 3 should produce actionable timelines and funding triggers, in contrast to AB 525, which laid important groundwork but lacked the implementation detail necessary to spur private investment. California should develop a coordinated port financing roadmap that combines state bonding authority, green banks, and special financing districts with federal resources and private-sector capital through public–private partnerships. Lessons from Alaska's port modernization are instructive: funding construction first through local bonds and then securing a federal match can accelerate project readiness. Maintaining a portfolio of shovel-ready port projects will position California effectively for time-sensitive federal funding.⁹

Sequencing and Procurement Alignment (Tasks 1-2, 1-6, 1-10)

Port investment prioritization must also be synchronized with project procurement timelines. For example, ports serving the Central Coast lease areas may require upgrades sooner than those serving the North Coast. Sequencing infrastructure development to parallel project build-out will prevent idle capital assets and ensure ports are prepared when developers are ready to mobilize.

Permitting Challenges (Taks 1-6, 1-10)

Permitting remains a critical bottleneck for port readiness. California should explore flexible, long-duration port permits, valid through at least 2050 or with built-in extensions, to better align with the multi-decade deployment timeline. California can adapt lessons from its housing sector, where permit streamlining has successfully reduced approval delays, to the offshore wind port context. This would reduce the risk of permits expiring before construction begins due to changes in project schedules.

⁹ Anchorage Assembly. Anchorage Assembly Approves \$807 Million Port Cargo Construction Project, Don young Port of Alaska. April 18, 2025. https://www.portofalaska.com/port-news/anchorage-assembly-approves-807-million-port-cargo-construction-project/



Engineering and Design Compatibility (Tasks 1-5, 1-10)

As part of infrastructure design compatibility, port engineering and site planning should account for the load requirements, laydown space, and craning capacity necessary for 15–22 MW floating turbines and their platforms. Early engagement between engineers, developers, and state agencies will be essential to ensure facilities are built to specifications that match industry needs and anticipated technology evolutions.

Tribal and Stakeholder Engagement (Tasks 1-7, 1-8)

Tribal and stakeholder engagement must also be embedded early in the planning process. This includes transparent, consistent consultation protocols with California tribes, fishing communities, and other coastal stakeholders to ensure infrastructure siting is equitable, culturally sensitive, and aligned with community priorities.

Lessons from the East Coast

By addressing these issues in a coordinated and intentional manner, AB 3's port readiness provisions can avoid the missteps experienced on the East Coast, where port developments often occurred in isolation, lacked inter-port coordination, and were not consistently matched to project demand. California has the opportunity, and the necessity, to take a more integrated approach from the outset.

Finally, as a lesson from the East Coast, California should view potential collaborations with other West Coast ports as an opportunity to service specific roles cost effectively. East Coast states are beginning to approach port strategies as collaborative regional exercises to protect investments and capture more business. The lack of a coordinated planning on the East Coast resulted in the absence of a true marshalling port, with significant business shifting to Canada as a result. By maintaining a broader awareness of the West Coast port ecosystem, California can ensure its companies and infrastructure projects maximize economic opportunities while also building wider political support for the state's offshore wind projects.

VI. Comments on Report 2 – In-State Assembly, Supply Chain, and Workforce Feasibility

In addition to manufacturing-related metrics, the definition of local content should be expanded to capture the full range of economic activities that offshore wind development brings to California. This includes engineering and design services, environmental and site survey work and consultancy, transmission planning and construction, port redevelopment and operations, vessel operation, wind turbine installation, logistics, and operations and maintenance. Capturing this wider set of activities will provide a more accurate picture of the jobs and investments created in California even before considering new manufacturing facilities.

Supply Chain Capabilities and Gaps (Tasks 2-1, 2-2)

California's ability to build a strong offshore wind supply chain hinges on understanding where its current strengths lie and where additional capacity is needed. Even without new facility



investments, offshore wind projects will immediately bring substantial in-state activity across development, permitting, ports, transmission, construction, and long-term operations. This baseline activity must be clearly established before evaluating incremental benefits from manufacturing investments.

We recommend leveraging real-time supplier data through Oceantic Network's SCC database, which includes over 4,000 businesses with self-reported details on capabilities, workforce, certifications, offshore wind experience, and geographic presence. Combined with qualitative data from direct developer and Tier 1 supplier interviews, this can help the CEC identify near-term, mid-term, and long-term manufacturing opportunities.

Floating offshore wind projects generate significant jobs during development and construction, even before considering manufacturing. Development is a largely local activity that brings together a range of professional services to permit, engineer, plan, and finance an offshore wind project. Temporary and permanent infrastructure such as ports, transmission (including onshore substations), and O&M bases must be built locally to support project delivery. Components are procured and must be transported to site, where they are then received, assembled, tested and pre-commissioned before being sent offshore. Offshore wind turbines and floating foundations are too large to ship fully assembled. Instead, these components must be assembled at one or more ports close to the project location by crews of skilled labor (welders, fitters, riggers, electricians, painters, and more). Nearly all operations and maintenance will be staged from local O&M bases, sustaining long-term jobs throughout the project lifecycle.

There are also opportunities to attract component manufacturers to California if the right investment conditions are created. The ease of creating local capacity depends significantly on the type of component to be manufactured, which each have different sizes, complexities, facility expansion/new-builds costs, and flexibility to use in other industries.

- Near-Term/Scalable: The simplest type of manufacturing to attract in the near term are
 those that can be scaled from capacity that already exists in the region or where facility
 investment costs are minimal. For example: fabrication of secondary steel (e.g., ladders,
 boat landings, handrails & grating) and on-board equipment (e.g., davit cranes,
 instrumentation, electrical components) for wind turbines, foundations, and substations.
 These components have been among the earliest to scale across East Coast states,
 especially where facilities had overlapping utility or marine industry experience.
- Intermediate/Cross-Sectoral: Components that are larger and more complex but also serve other industries such as onshore transmission or offshore oil and gas applications. For example, a cable manufacturing facility has successfully been built on the East Coast, and a second one is under construction. These investments were attractive due to lower upfront capital costs, higher export potential, and overlap with onshore transmission needs. Importantly, these facilities are in states with little correlation to local content requirements. On the West Coast, parallels may exist for dynamic array cables and mooring components (mooring lines, connectors, anchors), which can serve both floating wind and oil and gas.
- Advanced/Primary Components: The third tier of manufacturing is related to primary components such as platform manufacturing and tower fabrication that require new facility buildouts, have longer permit timelines, and depend on coordinated infrastructure



investments. Investments in these types of facilities can range from hundreds of millions to billions of dollars and generally require a certain outlook that enables the supplier to have confidence that they will be able to amortize the investment over a 7–10-year period. Due to the size of these components, these investments are highly specific to offshore wind, and the combination of the local and international pipeline are the only opportunity to fill the factory. Suppliers therefore generally look to build these facilities in the locations where they can achieve a combination of strong long-term local demand and economic competitiveness to assure an ability to compete internationally to complement the local demand if needed. Despite considerable effort and a robust 40 GW regional pipeline, the East Coast has not yet been able to attract a viable fabricator of offshore wind foundations or wind turbine components (nacelles, blades, towers)¹⁰

Different levels of local content will drive different cost levels for the project and to rate payers. The experience of localization in Taiwan shows how putting too many restrictions on developers' ability to procure can cause affordability challenges and reduce flexibility to manage change within a project. Note that Taiwan has since announced that they will remove most local content requirements for future auctions.¹¹

Reverse-Modeled Local Content Scenarios

While AB3 establishes directs the CEC feasibility study to consider local content targets of 50% and 65%, we recommend that the study also incorporate baseline, intermediate, and advanced scenario modeling in parallel. Such tiered modeling would provide a practical roadmap for how California can realistically achieve these targets. Moreover, it would provide a more straightforward way to calculate the cost per scenario, helping policymakers and stakeholders clearly see the trade-offs and investments required to meet the legislated thresholds. Suggested scenarios:

- **Baseline**: Assembly, deployment, and O&M of the project in California, with most major components sourced nationally or internationally.
- **Intermediate**: California-based manufacturing of secondary steel, onboard equipment, and other components that can be expanded from existing industrial capabilities.
- Advanced: Expanded local fabrication of floating platforms, cables, mooring systems, and primary steel components, conditioned on the readiness of ports and the maturity of the state's permitting and investment framework.

In addition, Oceantic Network encourages California to view origin of American sourced supplies differently than internationally sourced, and even West Coast ones in their own category. On the East Coast, Oceantic Network is strongly encouraging states to embrace more regional markets as strategies for giving offshore wind suppliers more consistent demand, building wider political support, and advancing more economical projects. In addition, many Oceantic Network suppliers are sited far away from coasts but their inclusion in the supply chain strengthens wider political support while creating more reliable supply chains. California will be the market leader on the

¹⁰ The exception is EEW's Paulsboro monopile facility, which suffered from cancelation of its anchor project

¹¹ Riviera Maritime Media. Taiwan to focus on grid connection rath than local content in future offshore wind auctions. November 2024. https://www.rivieramm.com/news-content-hub/news-content-hub/taiwan-relaxes-local-content-requirements-for-offshore-windfarms-82933



West Coast, however, studying potential supply chains on regional and national levels creates a stronger state-led industry.

Workforce Development (Tasks 2-3, 2-4, 2-9)

Offshore wind creates thousands of jobs across the full project lifecycle. The workforce plan should be comprehensive and consider:

- Project Development
- · Port redevelopment and terminal operations
- Transmission build-out and substation work
- Foundation and secondary steel manufacturing
- Construction logistics, including heavy lift and marine transport
- Construction and service vessel fabrication and operation
- Operations and maintenance crews

Workforce projections should reflect the diversity of trades and professions, union labor, maritime professionals, engineers, and environmental monitors, and draw from proven models such as those established in Virginia (Portsmouth Marine Terminal), Massachusetts (New Bedford Marine Commerce Terminal), and New York (Albany regional port and supply chain hub). Targeted outreach is needed to connect small businesses and underserved communities into training pipelines, using data from regional workforce development boards and apprenticeship programs.

Cost and Investment Realities (Tasks 2-6, 2-7, 2-8)

Realizing local content goals will depend on developers' and suppliers' perceptions of risk and return. If manufacturing is mandated without proper infrastructure or workforce support, projects will face delays or cost inflation. The AB 3 study must include a "status quo" or low local content scenario as a baseline to compare against proposed policy scenarios. This will help clarify the incremental costs, benefits, and risks of imposing requirements for California-based manufacturing on the offshore wind industry.

The study should also recognize that developers and suppliers look at the offshore wind market on a global basis and will evaluate California's permitting predictability, procurement volume, and total cost structure against alternative markets in Asia, Europe, or the U.S. Gulf Coast when considering where to make investments. Where California can accelerate approvals, unlock financing, or de-risk investments (e.g., through co-location of port and manufacturing), it can improve its competitiveness and attract supply chain anchors.

The current investment environment has become more complex as U.S. offshore wind development faces political uncertainty, raising questions about deployment timelines and reliability. Similar delays in other key markets (e.g., UK, France, Netherlands, Taiwan, Korea), have compounded these pressures, reducing global order volume and straining the supply chain. As a result, suppliers increasingly evaluate the offshore wind market on a global basis, seeking to build economies of scale by investing in markets that are 1) anchored by stable domestic policy with enforceable procurement roadmaps, and 2) able to support competitive production costs across multiple markets. In this context, rigid or unrealistic content requirements risk deterring investment. However, a realistic view of California's supply chain capabilities can lower project costs, translating to lower impacts on ratepayers, and maximize local employment by seeding an



industry that might not otherwise take root. Suppliers that choose to establish a presence locally should be more sustainable in the long-term, as they will remain competitive against global alternatives.

Public-Private Partnerships

California will need to co-invest with developers and manufacturers to accelerate its offshore wind supply chain. These investments can take many forms, from land acquisition and pre-permitting to capital grants or bond financing. Policymakers should structure incentives and investment programs to reflect real project timelines, infrastructure needs, and the capacity of local firms to respond. The scope of this analysis should also include: (1) measures to make California an attractive location for companies to invest and establish long-term operations, e.g. Volume assessment; (2) strategies for setting targets that are ambitious yet achievable, aligned with realistic permitting and infrastructure timelines; and (3) a framework for meeting local content goals in a way that creates opportunity without overburdening developers or ratepayers.

VII. Suggested Workshops or Meeting Opportunities

- Port Development & Financing
 - Hold meetings with private port developers to understand funding strategies and identify ways state and federal agencies (DOT, MARAD), private capital investors, and port authorities can all effectively collaborate depending on the strategy.
- Workforce and Labor Pipeline Gaps
 - Include labor unions, trades programs, and workforce boards.
- Regional Supply Chain Collaboration and Tier 1 Manufacturing Siting Challenges
 - Host a session on how West Coast states can coordinate to avoid the pitfalls of the East Coast.
- Workshops should prioritize companies with demonstrated offshore wind experience to avoid unrealistic assumptions.
 - Use company surveys that filter by experience: real offshore wind participation (East Coast or floating).
- Vessels
 - What partnerships can California shipbuilders have to build and retrofit vessels needed for a new industry

VIII. Conclusion

By grounding supply chain and workforce planning in realistic timelines, tiered investment scenarios, and lessons learned from the East Coast, California can avoid undue delays, focus on achievable near-term wins, and position itself for long-term leadership in floating offshore wind manufacturing and assembly.

The Oceantic Network commends California's leadership in advancing a floating offshore wind market. As the state moves forward in developing these foundational reports, we urge a focus on actionable strategies grounded in supply chain and permitting realities, clear market signals, and realistic pathways to infrastructure and workforce readiness.



Through our deep industry expertise, national supplier network, and proprietary tools, including the Offshore Wind Market Dashboard and Supply Chain Connect, we stand ready to support the California Energy Commission in refining these reports and helping to inform implementation efforts. Our convening power, data insights, and industry engagement experience position us to assist in surfacing challenges, validating assumptions, and identifying viable early-stage opportunities for California's offshore wind economy.

With careful planning and sustained coordination, California can catalyze a West Coast floating wind supply chain that creates meaningful economic opportunity, drives innovation, and contributes to national climate and energy goals. We thank the Commission for the opportunity to contribute to this critical process and look forward to continued partnership.

Sincerely,

Nancy Kirshner-Rodriguez

Senior Director Policy & Outreach

Hancy Kersker - Rodriguez

Oceantic Network

916-715-3037

Nancy.Rodriguez@oceantic.org