Memo
February 28, 2025
From: Katherine Hoff, Center for Law, Energy & the Environment
To: [redacted]

Introduction

This research memo examines two questions; the first is whether California offshore wind leases contain requirements for US or local supply chain sourcing, and the second concerns whether California has any policies that create incentives or mandates around local supply chain sourcing for offshore wind or other clean energy industries.

In short, the California floating offshore wind leases and bidding credits incentivize contributions to the domestic floating offshore wind supply chain through the required Supply Chain Statement of Goals and the opt-in Workforce and/or Supply Chain Development Bidding Credit.

As to state policies, California's state strategic plan for offshore wind (the California Energy Commission's AB 525 Strategic Plan) clearly states a preference and articulates a vision for in-state supply chains and manufacturing. One state law and one proposed state bill create timelines for taskforces and studies to concretize that vision. However, at present, California's strongest and most established efforts to incentive clean energy in-state manufacturing occur through state agency programs, grants, tax incentives, loans, and other financial mechanisms.

Question 1: Do California's Offshore Wind Leases have any Buy American goals or requirements for the supply chain? Is there any language in the leases that illuminate what expectations are for developers around domestic, or even local, supply chain sourcing?

The Bureau of Ocean Energy Management (BOEM) executed final leases with five developers for five lease areas in the Morro Bay and Humboldt Wind Energy Areas on June 1, 2023.[1] BOEM did not require domestic supply chain sourcing as part of California's offshore wind process but did require a Supply Chain Statement of Goals and also offered a Workforce and/or Supply Chain Development bidding credit (20%) as a voluntary element in the Final Sale Notice and December 2022 auction.[2]

[1] All five executed leases can be found on the "Existing Leases" tab on the Bureau of Ocean Energy Management "California Activities" webpage, available at https://www.boem.gov/renewable-energy/state-activities/california.
[2] BOEM increased the bidding credits in the Final Sale Notice in response to the public comments received on the Proposed Sale Notice. These changes included "the addition of a 5 percent bidding credit for bidders who have committed to a qualifying General Community Benefit Agreement (CBA); an increase in the amount of the credit offered for the Lease Area Use CBA bidding credit from 2.5 to 5 percent; and removal of the requirement for a 25 percent commitment of funds associated with the workforce training and/or supply chain development bidding credit at the time of the submission of the Lessee's first Construction and Operations Plan (COP). In addition, BOEM developed and refined a number of lease stipulations, based on feedback solicited in the PSN…." 87 Fed. Reg. 64093, 64094 (Oct. 21, 2022), available at https://www.federalregister. gov/documents/2022/10/21/2022-22871/pacific-windlease-sale-1-pacw-1-for-commercial-leasing-forwind-power-on-the-outer-continental.

Supply Chain Statement of Goals

All five lessees are bound by this requirement, and thus each leaseholder must submit a Supply Chain Statement of Goals (Statement). The Statement must detail any plans, including any outreach to domestic suppliers, for "contributing to the creation of a robust and resilient U.S.-based floating offshore wind supply chain." The Statement must also contain the Lessee's "plans for investments in supply chain improvements, if any, to support the offshore wind industry,"[3] including:[4]

- Installation, downpipe, survey, and other vessels
- Port infrastructure related to floating offshore wind project component manufacturing and wind turbine assembly
- Grid upgrades
- Research and development
- Manufacturing of components and facilities, including assistance in converting onshore wind turbine manufacturing facilities to floating offshore wind turbine manufacturing facilities
- Supply chain architecture such as fabrication and assembly halls, port storage, laydown areas
- Lift cranes capable of installing floating foundations, towers, and nacelles quayside
- Dry docks and navigation channels
- Onshore and offshore docking and refueling stations for autonomous vehicles
- Workforce diversity, training, and development, including within underserved communities and Tribes
- Ensuring equal access to contracting opportunities, including to disadvantaged businesses (defined as a business that is at least 51% owned and controlled by a socially and economically disadvantaged individual or individuals) and wholly owned Tribal businesses

If BOEM approves the lessee's Construction and Operations Plan (COP), the leaseholder must provide updates on a yearly basis discussing its progress towards meeting the goals outlined in its Statement.[5] The lessee must submit its final report detailing its success in meeting its Statement goals no later than the submission of the first Fabrication and Installation Report (FIR).[6]

As a result of the Supply Chain Statement of Goals requirement, leaseholders must describe their plans to engage with domestic suppliers and their plans to improve the domestic offshore wind supply chain, including through workforce development, equal access contracting, and built infrastructure.

Workforce and/or Supply Chain Development Bidding Credit

Each developer included initial plans and strategies for bidding credits in their Bidder's Financial Form (submitted to BOEM before the auction), which, once accepted, reduced the cost of a developer's winning bid at auction.[7] In return for those reductions in payment, lessees must deliver documentation

[3] See e.g., Invenergy Lease, p. C-21, available at https://www.boem.gov/renewable-energy/stateactivities/boemequinorpocsrlease-0563.
[4] Id. at pp. C-21, C-22.
[5] Id. at pp. C-21, C-22.
[6] Id. at p. C-22. A public version of the lessee's report will be made available.
[7] Id. at pp. 64095-64096, 64101-64102.

that they have completed and fulfilled their bidding credit commitments by the time they submit the first Facility Design Reports—or pay the value of the bid credit to the US Treasury.[8] Each of the five winning developers received credit for the Workforce and/or Supply Chain Development bidding credit, although each pledged different dollar amounts.[9]

For the Workforce and/or Supply Chain Development Bidding Credit, leaseholders may choose whether to contribute to workforce development, supply chain development, or both. To fulfill this bidding credit, leaseholders can donate to existing programs or create new programs or incentives, as long as they are "associated with the planning, design, construction, operation, maintenance, or decommissioning of U.S. floating offshore wind energy projects, or the manufacturing or assembling of their components, in the United States."[10] Monies cannot be given to any of the leaseholder's affiliated entities and cannot duplicate other benefits, mitigation efforts, or bidding credit plans.[11]

BOEM also requires leaseholders to provide demonstrable evidence of their bidding credit contributions. The documentation is due by the time the first Facility Design Report is submitted and must be such that BOEM can confirm and validate the full payment of the contribution (amount), the beneficiary or beneficiaries of the contribution, and adherence to the bidding credit criteria and requirements in the Workforce and/or Supply Chain Development Bidding Credit section of the lease addendum.[12]

The documentation must also illustrate how the biding credit contribution has furthered, or is expected to further, the US floating offshore wind workforce training and/or supply chain development. This documentation must include qualitative and/or quantitative evidence that details the "estimated number of trainees or jobs supported, and/or the estimated leveraged supply chain investment resulting or expected to result from the Contribution."[13]

Other required documentation includes:[14]

- "All written agreements between the Lessee and beneficiary(ies) of the Contribution, which must detail the amount of the Contribution and how they will be used by the beneficiaries of the Contribution in order to satisfy the goals of the bidding credit for which the Contribution was made;"
- "All receipts documenting the amount, date, financial institution, and the account and owner of the account to which the Contribution was made;" and

[8] See e.g., Equinor Lease, p. C-23, available at https://www.boem.gov/renewable-energy/stateactivities/boemequinorpocsrlease-0563.
[9] All five executed leases can be found on the "Existing Leases" tab on the Bureau of Ocean Energy Management "California Activities" webpage, available at https://www.boem.gov/renewable-energy/ state-activities/california.
[10] See, e.g., Canopy Offshore Wind, LLC lease (OCS-P 0561) (formerly RWE Offshore Wind Holdings, LLC), p. C-22, available at https://www.boem.gov/renewable-energy/state-activities/canopy-offshore-wind-llc-ocs-p-0561.
[11] Id. at p. C-23.
[12] Id. at p. C-26.
[13] Id.
[14] Id.

- "Sworn statements by the entity that made the Contribution and the beneficiary(ies) of the Contribution, attesting that all information provided is true and accurate in the above documentation."

Workforce Bidding Credit

Developers who choose to contribute to the workforce bidding credit "must result in a better trained and/or larger domestic floating offshore wind workforce that would provide for more efficient operations via an increase in the supply of fully trained personnel." Efforts must support the workforce at large, not the leaseholder's own workers or contractors, and must foster skills used in the "planning, design, construction, operation, maintenance, or decommissioning of floating offshore wind energy projects."[15] These programs must be administered by public or private corporations, companies, associations, states, tribes, or federal executive agencies.[16]

Leaseholder efforts to bolster workforce training must include at least one of the following:[17]

- "Contributions toward union apprenticeships, labor management training partnerships, stipends for workforce training, or other technical training programs or institutions focused on providing skills necessary for the planning, design, construction, operation, maintenance, or decommissioning of floating offshore wind energy projects on the United States OCS."
- "Contributions toward maritime training necessary for the crewing of vessels to be used for the construction, servicing, and/or decommissioning of floating offshore wind energy projects on the United States OCS."
- "Contributions toward training workers in skills or techniques necessary to manufacture or assemble floating offshore wind components, subcomponents, or subassemblies. Examples of these skills and techniques include those in the areas of welding; floating offshore wind energy technology; hydraulic maintenance; braking systems; mechanical systems, including blade inspection and maintenance; or computers and programmable logic control systems."
- "Contributions toward Tribal workforce development programs or training for employees of wholly owned Tribal corporations that lead to the expeditious and orderly development of floating offshore wind energy projects on the United States OCS."
- "Contributions toward training in any other job skills that the Lessee can demonstrate are necessary for the planning, design, construction, operation, maintenance, or decommissioning of floating offshore wind energy projects on the United States OCS."

Domestic Supply Chain Development Bidding Credit

Developers who make contributions towards the supply chain bidding credit must ensure that their efforts[18]

- Benefit the US floating offshore wind supply chain available to all potential purchasers of offshore wind services, components, or subassemblies, not merely the leaseholder's own project,

[15] Id.
[16] Id. at p. C-24.
[17] Id.
[18] Id. at pp. C-24, C-25.

- Achieve a "demonstrable development new domestic capacity (including vessels) or the demonstrable buildout of existing capacity," or
- Contribute to a stronger floating offshore wind domestic supply chain by minimizing the "upfront capital or certification cost for manufacturing offshore wind components, including the building of facilities, the purchasing of capital equipment, and the certifying of existing manufacturing or assembly facilities."

Leaseholders can fulfill the bidding credit by donating to supply chain programs or offering incentives for manufacturing or other services supporting the floating offshore wind industry.[19] Contributions to supply chain development must include at least one of the following:[20]

- "Contributions supporting the development of a domestic supply chain for the floating offshore wind industry, including manufacturing of components and subassemblies and the expansion of related services."
- "Contributions to domestic Tier 2 and Tier 3 floating offshore wind component suppliers, such as mooring line manufacturers, and domestic Tier l supply chain efforts, including quayside fabrication of floating foundations and assembly of floating towers."
- "Contributions for technical assistance grants to help U.S. manufacturers retool or certify (*e.g.*, ISO-9001) for floating offshore wind manufacturing."
- "Contributions for the development of Jones Act-compliant vessels for the construction, servicing, and/or decommissioning of floating offshore wind energy projects in the United States, including semi-submersible barges for use during quayside manufacturing, assembly, or installation."
- "Contributions to the purchase and installation of self-propelled modular transporter systems (SPMTs), lift cranes capable of installing foundations, towers, and nacelles quayside, and domestic mooring manufacturing facilities."
- "Contributions to port infrastructure related to floating offshore wind component manufacturing and preparation of quayside manufacturing and assembly areas for the construction and deployment of floating foundations for, or other components of, offshore wind turbines."
- "Contributions to establish a new or existing bonding support reserve or revolving fund available to all businesses providing goods and services to floating offshore wind energy companies, including disadvantaged businesses, and/or wholly owned Tribal corporations."
- "Other Contributions to supply chain development efforts that the Lessee can demonstrate further the manufacture of floating offshore wind components or subassemblies, or the provision of floating offshore wind services, in the United States."

Conclusion

Both the Statement of Goals requirement and the Workforce and/or Supply Chain Development Bidding Credit specify that contributions, if they are made, must be made towards the domestic US floating

[19] Id.
[20] Id. at p. C-25 (citations omitted).

offshore wind industry. BOEM seems to have anticipated that the Workforce and/or Supply Chain bidding credit requirements would spur a west coast floating offshore wind supply chain, although not necessarily a California-specific one.[21] But under the lease terms, leaseholders can engage with suppliers anywhere in the US and remain in compliance with the lease and bidding credit requirements.

Question 2: Does California have any state policy goals or mandates around local supply chain sourcing for offshore wind or other clean energy industries?

The only state supply chain mandate unearthed by this research thus far is the California Transparency in Supply Chains Act, which requires large retailers and manufacturers to inform consumers about their work to dismantle human trafficking within their supply chains.[22] This research has not yet located any policies mandating offshore wind local supply chain sourcing in California. State actors, however, have recognized the importance of in-state manufacturing for offshore wind. And more broadly, the state incentivizes in-state manufacturing through a variety of grants, tax breaks, and programs.

California Offshore Wind In-State Supply Chains and Manufacturing Efforts

The California Energy Commission (CEC),[23] in its AB 525 Offshore Wind Strategic Plan, noted the importance of state-based supply chains and a California workforce in order to realize the full economic benefits of California offshore wind. For example, in Chapter Three, the report stated that:[24]

> Although an offshore wind supply chain that imports goods and services from Europe and China may provide lower costs in the short term, reliance on other countries or regions for critical components of the offshore wind turbines may result in project delays and could expose California markets to supply bottlenecks and price shocks from imported content. Developing a local supply chain can insulate California from these global shocks and reduce risk for investors and ensure sustainable economic and workforce benefits from offshore wind remain in California and benefit local communities throughout the state.
>
> A robust California and West Coast supply chain may provide opportunities for California to export offshore wind components to other states and regions, creating additional economic benefits for the state and supporting other West Coast states' floating offshore wind goals.

Thus, California's primary offshore wind road map noted the importance of in-state manufacturing and supply chains.

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[21] "BOEM's workforce training/supply chain bidding credit targets training and components required for *floating* OSW farms. By focusing investments on floating technologies, BOEM is incentivizing investments that would be most beneficial to development of lease(s) granted in this sale and any future sales BOEM may hold in the Pacific region." BOEM, *California Pacific Wind Lease Sale (PACW-1) Final Sale Notice (FSN) Response to Comments* (October 2022), p. 11, available at https://www.boem.gov/renewable-energy/state-activities/pacw-1-response-ca-psn-comments (italics in original).

[22] California Department of Justice, "The California Transparency in Supply Chains Act" (webpage), available at https://oag.ca.gov/SB657.

[23] The CEC is the lead agency for the state's offshore wind planning efforts.

[24] California Energy Commission, *AB 525 Offshore Wind Strategic Plan: Volume II* (2024), p. 138, available at https://www.energy.ca.gov/publications/2023/ab-525-offshore-wind-strategic-plan.

In addition, there are several pieces of legislation that attempt to move California in the direction of local supply chains. AB 3 (Zbur, 2023) requires the CEC to generate a next phase strategy and report for California port readiness, following up on the CEC's AB 525 Strategic Plan. The CEC's report is due on December 31, 2026. Since some of California's ports will be used to manufacture offshore wind components, this may be relevant to in-state supply chains.[25] AB 3 also requires the CEC to conduct a study, in consultation with the California Workforce Development Board, on the viability of achieving 50% and 65% in-state assembly and manufacturing of offshore wind energy projects and specified federal domestic content thresholds for offshore wind energy projects. The CEC's report on the study is due on December 31, 2027.

In addition, SB 787 (McNerney, 2025), which was introduced on February 21st of this year, would establish a Task Force on Equitable Clean Energy Supply Chains and Industrial Policy in California, to be convened on or before March 1, 2026. The bill would also require the Task Force to submit a report to the state legislature discussing proposed strategies to amplify the impact of state investments in promoting specific clean energy industries, including offshore wind. The bill would further require that the Task Force's Senior Counselor convene certain state agencies to develop a workplan to implement the Task Force's recommendations on or before January 1, 2028. The bill states that "It is the intent of the Legislature to create new formalized partnerships between state agencies, labor, community organizations, environmental organizations, clean energy industry representatives, local governments, and academic institutions to facilitate a thoughtful consideration of comprehensive industrial policies to support supply chain development in strategic clean energy supply chains, accelerate deployment of energy resources affordable to working class Californians, grow high road jobs in California, and accelerate decarbonization."

This existing and proposed legislation attempts to build on the vision created by the CEC's AB 525 Strategic Plan and move the state forward in its efforts to realize local offshore wind supply chains.

California's Clean Energy Manufacturing Grants, Incentives, and other Financial Catalysts

In general, California's policies concerning local and in-state clean energy manufacturing (including supply chain manufacturing) appear to largely take the form of tax credits & other financing mechanisms, as well as state agency grants and loans. The measures that follow comprise an illustrative but not exhaustive list of these instruments and programs.[26]

- The California Energy Commission's Clean Transportation Program ZEV Manufacturing Program
    - The California Energy Commission's (CEC) Clean Transportation Program administers funding for in-state manufacturing of zero-emission vehicles (ZEVs) and ZEV-related supply chains.[27] These funds were enabled by the California Budget Act of 2021, which created a multi-year $3.9 billion investment to foster California manufacturing and job

[25] "Manufacturing and Fabrication Sites Manufacturing and fabrication sites are located on navigable waterways where larger components are created from raw materials received by road, rail, or waterborne transit." California Energy Commission, *AB 525 Offshore Wind Strategic Plan: Volume II* (2024), p. 141, available at https://www.energy.ca.gov/publications/2023/ab-525-offshore-wind-strategic-plan.
[26] For example, for a full list of active and past grants, please see the California Grants Portal.
[27] California Energy Commission, "Zero-Emission Vehicle Related Manufacturing" (webpage), available at https://www.energy.ca.gov/programs-and-topics/programs/zero-emission-vehicle-related-manufacturing.

creation. A total of $1.165 billion was to be administered by the CEC. However, it appears that money was not allocated for this program in the last budget cycle.

- The CEC also has grant programs for EV charging such as the GFO-24-607 – FAST 2.0 – Fast and Available Charging for All Californians
    - Up to ten million dollars in grants are available for projects that will deploy EV charging infrastructure in California.

- The CEC Climate Innovation Program
    - The Climate Innovation Program was "created by Assembly Bill (AB) 209 (2022) to provide financial incentives to California-headquartered companies to develop and commercialize technologies to help California meet its climate goals." The bill's goal was to distribute "up to $525 million to support the development and scale-up of clean energy and climate change technologies" in the state. This program was defunded in the last state budget.

- PowerForward, administered by the CEC and CalSTART
    - CalSTART, in coordination with the CEC, is in the process of implementing $35 million in grants to support California ZEV battery manufacturing projects.[28] One of the stated goals of this program is to create high-quality jobs.[29]

- The Sales and Use Tax Exclusion (STE) Program, administered by the California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA)
    - CAEATFA offers a sales and use tax exclusion (STE) to eligible manufacturers that intend to construct a new manufacturing facility or expand or upgrade a currently existing manufacturing facility to advance alternative energy and advanced transportation. Eligible manufacturers may apply for up to $10 million per calendar year. The program is currently authorized through 2025.

- The Climate Catalyst Fund, administered by the California Infrastructure and Economic Development Bank (IBank)
    - Public entities, private firms, and non-profits may apply for low-interest loans, credit support, conduit bond financing and special-purpose vehicles for critical infrastructure initiatives through the Climate Catalyst Fund.

- The California Competes program, administered by Go-Biz
    - Through this program, Go-Biz provides income tax credits for eligible investments, which are awarded on a competitive basis.

- The Greenhouse Gas Reduction Loan Program, administered by CalRecycle
    - This program offers loans to recycling manufacturers that turn waste materials generated in California into recycled-content intermediate and/or final products.

[28] Power FORWARD, "Notice of Proposed Award" (webpage), available at https://powerforwardgrant.org/nopa.
[29] CalSTART, "Power FORWARD ZEV Battery Manufacturing Grant Program" (webpage), available at https://calstart.org/powerforward/.

Projects require 25% in matching funds and can offer loans in the amount of two million dollars or 75% of total project cost, whichever is less.[30]

- Other financial mechanisms, such as Green Empowerment Zones
    - Assembly Bill 844 (Grayson, Timothy), created a Green Empowerment Zone for the Northern Waterfront Area of Contra Costa County by prioritizing access to tax incentives, grants, loan programs, workforce training programs, and private sector investment in the renewable energy sector. The Contra Costa Green Empowerment Zone is overseen by representatives from seven stakeholder groups (who serve as voting directors), including labor unions.

Conclusion

California clearly has a vision for in-state supply chains and manufacturing, and several pieces of existing and proposed legislation add timelines, taskforces, and studies to that vision. However, at present, California's strongest efforts to incentive in-state manufacturing occur through state agency programs, grants, tax incentives, loans, and other financial mechanisms.

[30] California Grants Portal, "Greenhouse Gas Reduction Loan Program" (webpage), available at https://www.grants.ca.gov/grants/greenhouse-gas-reduction-loan-program/.