

Sea Change: Social Derisking America’s Offshore Wind

Connor Hughes*

Offshore wind energy represents a critical opportunity for America’s clean energy transition, yet community opposition remains a significant barrier to its success. This paper introduces the concept of “social derisking,” which emphasizes stakeholder collaboration as a strategy to mitigate the risks of project delays and cancellations due to a lack of local support. While the Bureau of Ocean Energy Management (BOEM) has implemented initial measures to foster engagement, such as community benefit agreements and workforce incentives, these approaches often fall short in addressing the unique challenges of offshore wind development, which include uncertain profits, long timelines, and vast project scales. Drawing on academic literature, policy analysis, and case studies, this Note argues for enhanced BOEM regulations, including stricter engagement requirements and the creation of funded regional benefit groups to build community capacity. These recommendations aim to socially derisk projects, ensuring both equitable stakeholder participation and the rapid deployment of renewable energy.

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INTRODUCTION

Offshore wind could be the great panacea for America’s renewable energy ills. Wind’s occurrence at all hours makes it more consistent than sunshine, and the American coast offers abundant viable project areas.¹ The technology has been successfully implemented globally, with European offshore wind installations coming online in the early 1990s.² While transmission connections

1. *Computing America’s Offshore Wind Energy Potential*, U.S. DEP’T OF ENERGY (Sept. 9, 2016), <https://www.energy.gov/eere/articles/computing-americas-offshore-wind-energy-potential> (“U.S. offshore wind has a technical resource potential of more than 2,000 GW of capacity, or 7,200 TWh of generation per year. For context, this is nearly double the nation’s current electricity use.”).

2. *Vindeby Offshore Wind Farm*, TETHYS, <https://tethys.pnnl.gov/wind-project-sites/vindeby-offshore-wind-farm> (last visited Dec. 14, 2024).

are increasingly costly for renewables like solar, which are often developed further from urban areas, they tend to be cheaper for offshore wind as the country's population disproportionately lives near the coast.³ Best of all, the infrastructure—gigantic looming windmills that cause an uproar when placed on land near communities—is situated over twenty miles off the coastline, away from the daily lives of onshore residents.

Yet, opposition to offshore wind in local communities has never been greater. Interest groups with ties to fossil fuels have channeled over \$70 million into opposition campaigns nationwide.⁴ Community opposition to transmission cables,⁵ interconnection facilities,⁶ and entire offshore wind projects⁷ has stymied development in every region of the country. A coalition of local groups has even formed the National Offshore-Wind Opposition Alliance, aiming to fight projects on both coasts.⁸ Such opposition is impactful: low demand from developers has led to the long-term delay (with no sign of reschedule) of several

3. See Emma Penrod, *Potential Benefits Of Atlantic Offshore Wind Transmission Network Are More Than Double The Costs: DOE, UTILITY DIVE* (Mar. 22, 2024), <https://www.utilitydive.com/news/atlantic-coast-offshore-wind-transmission-network/711071>; Rasul Satymov, Dmitrii Bogdanov & Christian Breyer, *Techno-Economics of Offshore Wind Power in Global Resolution*, 393 *Applied Energy* (2025) 12.

4. Kirk Moore, *Brown University Researchers 'Map' Anti-Offshore Wind Movement*, NAT'L FISHERMEN (Dec. 21, 2023), <https://www.nationalfisherman.com/northeast/brown-university-researchers-map-anti-offshore-wind-movement> (“The think tanks, in turn, influence local anti-OSW groups by providing financial resources, legal support, and personnel. We identify a total of \$72,276,593 in contributions from the six major donors to groups in the network between 2017 and 2021.”).

5. Brooke Kushwaha, *Offshore Wind Developer Sues Edgartown Conservation Commission*, THE VINEYARD GAZETTE (Apr. 25, 2023), <https://vineyardgazette.com/news/2023/04/25/offshore-wind-developer-sues-edgartown-conservation-commission>.

6. Bethany Hooper, *Wind Farm Developer Drops Delaware State Park Plan*, NEWS OCEAN CITY MD. COAST DISPATCH NEWSPAPER (July 10, 2020), <https://mdcoastdispatch.com/2020/07/10/wind-farm-developer-drops-delaware-state-park-plan>; Kevin Chandler, *Surfriders Oppose Skipjack Farm Proposal*, CAPE GAZETTE (Dec. 24, 2019), <https://www.capegazette.com/article/surfriders-oppose-skipjack-farm-proposal/194535>.

7. See, e.g., *Town of Ocean City Challenges Bureau of Ocean Energy Management on US Wind Project*, TOWN OF OCEAN CITY, MD. (Oct. 25, 2024), <https://oceancitymd.gov/oc/town-of-ocean-city-challenges-bureau-of-ocean-energy-management-on-us-wind-project>; *Ocean City's Effort to Keep Windmills Far Offshore Fails As Maryland Delegates Reject Proposal*, THE BALTIMORE SUN, <https://www.baltimoresun.com/2018/03/12/ocean-citys-effort-to-keep-windmills-far-offshore-fails-as-maryland-delegates-reject-proposal> (last visited Oct. 16, 2024); Katharine Q. Seelye, *After 16 Years, Hopes for Cape Cod Wind Farm Float Away*, N.Y. TIMES (Dec. 19, 2017), <https://www.nytimes.com/2017/12/19/us/offshore-cape-wind-farm.html>; Alejandro de la Garza, *U.S. Fishermen Are Making Their Last Stand Against Offshore Wind*, TIME (Sept. 30, 2021), <https://time.com/6102900/offshore-wind-fishing>; Nannette L. Galloway, *Atlantic County Commissioners Approve Offshore Wind Moratorium Resolution*, DOWNBEACH.COM, <https://downbeach.com/news/2023/feb/22/atlantic-county-commissioners-approve-offshore-win> (last visited Oct. 16, 2024).

8. Nichola Groom, *U.S. Offshore Wind Opponents Seek To Form National Group To Fight Projects*, REUTERS (Aug. 8, 2024), <https://www.reuters.com/business/energy/us-offshore-wind-opponents-seek-form-national-group-fight-projects-2024-08-08>.

government lease auctions, which is the necessary first step of any offshore wind development.⁹

Perhaps considering this context, BOEM, which regulates and provides the leasing for offshore wind projects, as recently as the Biden administration emphasized the need for better stakeholder engagement between developers and affected communities.¹⁰ To address this need, the agency has experimented with implementing both requirements and incentives—sticks and carrots—to increase developer collaboration with communities. For example, BOEM auctions in 2023 both *required* winning bidders to enact stakeholder communication plans and provided cash credits for developers who also signed *voluntary* benefit agreements with communities.¹¹

In April 2024, BOEM announced a new five-year offshore wind schedule authorizing up to twelve offshore lease sales before 2030.¹² As all planned offshore projects are in federal waters, these auctions are required before commencing any development. The auctions include “lease provisions and conditions,” which allow BOEM to have some control over site development processes, including how to interact with affected communities.¹³ However, it is unclear which specific policies—both requirements and incentives—BOEM will formalize in the upcoming leases to address community engagement.

Adding to the lack of clarity, Donald Trump’s 2024 election abruptly changed the future of offshore wind development in the country. The President quickly ordered a moratorium on federal actions related to wind projects.¹⁴ And later in his first year, the administration formally halted already-suspended leases and all future offshore wind lease sales.¹⁵ Further, the Congressional Research

9. See, e.g., *BOEM Postpones Oregon Offshore Wind Energy Auction*, BUREAU OF OCEAN ENERGY MGMT. (Sept. 27, 2024), <https://www.boem.gov/newsroom/press-releases/boem-postpones-oregon-offshore-wind-energy-auction>.

10. *Public Engagement*, BUREAU OF OCEAN ENERGY MGMT., <https://www.boem.gov/about-boem/public-engagement> (last visited Dec. 14, 2024) (“BOEM sees public input as a critical component of the safe and responsible exploration and development of offshore resources. Public engagement and comment is solicited in our environmental review and regulatory programs for both oil and gas, and renewable energy proposals.”).

11. See, e.g., Final Sale Notice (FSN) for Commercial Leasing for Wind Power Development on the Outer Continental Shelf in the Gulf of Mexico (GOMW-1) [hereinafter FSN for Commercial Leasing for Wind Power Development in the GOMW-1], 88 Fed. Reg. 47173, 47177 (July 21, 2023).

12. *Lease and Grant Information*, BUREAU OF OCEAN ENERGY MGMT., <https://www.boem.gov/renewable-energy/lease-and-grant-information> (last visited Oct. 16, 2024).

13. The actual leases signed by developers and the government include stipulations that the developer must follow in order to avoid breach of contract. *What Information Is Included In A Final Sale Notice?*, BUREAU OF OCEAN ENERGY MGMT., <https://www.boem.gov/renewable-energy/state-activities/what-information-included-final-sale-notice> (last visited Nov. 15, 2024).

14. Taylor Pullins et al., *Trump Orders Moratorium on Federal Actions for Wind Projects and Withdrawal of New or Renewed Wind Leases in Outer Continental Shelf*, WHITE & CASE LLP (Jan. 24, 2025), <https://www.whitecase.com/insight-alert/trump-orders-moratorium-federal-actions-wind-projects-and-withdrawal-new-or-renewed>.

15. *BOEM Rescinds Designated Wind Energy Areas on the Outer Continental Shelf*, OFFSHORE (Aug. 6, 2025), <https://www.offshore-mag.com/renewable-energy/news/55308087/bureau-of-ocean>.

Service reported that the President's actions would likely affect projects at all stages of completion and exacerbate other challenges to the industry.¹⁶ With the specter of four years of delay under a Trump administration looming, efficiently constructing projects in a post-Trump energy world becomes even more important.¹⁷ Therefore, a renewed examination of agency strategies and best practices for engaging affected communities is necessary in order to be adequately prepared if offshore development continues again after the Trump administration.

This Note uses the recent BOEM expansion of offshore leasing, as well as the subsequent moratorium on government action, as a lens to discuss risks inherent to massive, costly projects and best practices for effective community engagement. It does so by investigating the academic literature on derisking—a set of financial tools often used to lower lending risk for large infrastructure projects. Derisking aims to identify and mitigate risks associated with a project, thereby increasing its overall viability and attractiveness to investors. Certain strategies that state governments use in the offshore wind space, like creating centralized energy procurement plans, have also been categorized as derisking. This Note extends this concept by introducing the new categorization of “social derisking”—utilizing effective stakeholder collaboration to minimize the risk of project cancellations from social disapproval.

To achieve social derisking, developers must effectively engage with impacted communities. This Note argues that BOEM's regulatory scheme under President Biden that oversaw community engagement was well intentioned but lacking. Specifically, this Note finds that the previous offshore wind regulatory scheme was insufficient to fully socially derisk projects, thereby perpetuating potential harm to communities and disincentivizing much-needed development. Given this regulatory shortfall, this Note provides short-term recommendations to improve future lease stipulations and incentive programs. Building upon lessons from other government programs requiring coordination with affected communities, this Note also proposes a longer-term recommendation: funding a centralized community benefit group that builds capacity for affected communities to collaborate with developers and advocate more effectively. While offshore wind leasing is unlikely to move forward during the Trump administration, developers and stakeholders can use this time to build lasting

energy-management-boem-boem-rescinds-designated-wind-energy-areas-on-the-outer-continental-shelf.

16. LAURA B. COMAY, CONG. RSCH. SERV., IN12509, STATUS OF U.S. OFFSHORE WIND LEASING AND PERMITTING: PRESIDENT TRUMP'S JANUARY 2025 WIND LEASING MEMORANDUM 2 (Mar. 11, 2025).

17. See, e.g., Lauren Dalban, *Trump Halts Construction of Big Wind Farm Off New York Coast*, THE GUARDIAN (Apr. 18, 2025), <https://www.theguardian.com/us-news/2025/apr/18/trump-new-york-wind-farm-cancellation> (reporting the Trump administration cancelling an already-permitted offshore wind installation).

relationships and socially derisk projects for the long term, preparing for future development.

Part I explains the most recent context of BOEM offshore wind leasing, the urgent need for increased offshore wind resources, how the agency manages projects from start to finish, and where affected communities can engage in the process. Part II introduces the concept of derisking generally and social derisking in the offshore wind context. Part III reviews the literature on community engagement strategies and best practices, before specifically exploring their use and limitations in the offshore wind space. Finally, Part IV offers recommendations for community engagement strategies in offshore wind moving forward, with an emphasis on increasing collaboration with community stakeholders to increase the chances of project development and success.

I. OFFSHORE WIND IN AMERICA

Offshore wind energy is emerging as a critical component in America's shift toward a cleaner, more sustainable energy future. Both federal and state initiatives, such as the national goal of deploying thirty gigawatts (GW) of offshore wind by 2030¹⁸ and California's goal of five GW by the same year,¹⁹ illustrate the importance of the energy source to the national grid. The following Subparts explore the unique regulatory, environmental, and operational factors shaping offshore wind development in the United States. They focus on how affected communities are incorporated into the process and highlight BOEM's plans to scale the technology in the near term.

A. American Energy Context and Offshore Wind Importance

Offshore wind is poised to play a key role in the global clean energy future. According to the Intergovernmental Panel on Climate Change (IPCC), offshore wind is "expected to develop in a more significant way . . . as the technology advances and as onshore wind energy sites become constrained by local resource availability and/or siting challenges."²⁰ The IPCC estimates that wind energy worldwide could reach or exceed 20 percent of the global electricity supply by 2050, making the technology "economically attractive within the context of

18. *FACT SHEET: Biden-Harris Administration Hits Offshore Wind Milestone, Continues to Advance Clean Energy Opportunities*, THE WHITE HOUSE (Sept. 5, 2024), <https://bidenwhitehouse.archives.gov/briefing-room/statements-releases/2024/09/05/fact-sheet-biden-harris-administration-hits-offshore-wind-milestone-continues-to-advance-clean-energy-opportunities>.

19. Julie Cart, *California Has Just Approved a New Blueprint for Offshore Wind. The Massive Projects Will Cost Billions*, CALMATTERS (July 10, 2024), <http://calmatters.org/environment/2024/07/california-offshore-wind-plan-approved>; *CEC Adopts Historic California Offshore Wind Goals, Enough to Power Upwards of 25 Million Homes*, CAL. ENERGY COMM'N (Aug. 10, 2022), <https://www.energy.ca.gov/news/2022-08/cec-adopts-historic-california-offshore-wind-goals-enough-power-upwards-25>.

20. RYAN WISER ET AL., WIND ENERGY. IN IPCC SPECIAL REPORT ON RENEWABLE ENERGY SOURCES AND CLIMATE CHANGE MITIGATION 556 (Ottmar Edenhofer et al. eds., 2011).

global climate change mitigation scenarios.”²¹ Similar findings point to offshore wind’s importance across the United States. A recent University of California, Berkeley report found that offshore wind production could account for 10–25 percent of the nation’s energy demand by 2050.²²

Several factors contribute to offshore wind’s potential to serve a sizable portion of the United States’ electricity demand. First, the country has an expansive coastline and plentiful high-wind areas, which are necessary features for offshore wind farm construction. A 2008 Department of Energy study projected that America has an unconstrained capacity of four thousand GW and a technical capacity of over two thousand GW of offshore wind energy.²³ Second, offshore wind energy offers a geographic advantage over other energy sources. Although the infrastructure is located far offshore and generally out of eyesight from the coast, it is built in proximity to a substantial percentage of the country’s population, which predominantly lives near the coast.²⁴ This proximity dramatically drives down the cost of transmission infrastructure.²⁵ Third, offshore wind has higher capacity factors with less resource variability than other renewable sources, including onshore wind.²⁶ Offshore wind facilities thus run more consistently and reliably than other renewable energy sources.

Recognizing this potential, the Biden administration announced offshore wind energy as a priority for American energy production. Biden cited the industry as an energy solution in his “Tackling the Climate Crisis at Home and Abroad” executive order signed during the first week of his presidency.²⁷ Later in 2021, the administration announced a specific goal of deploying at least thirty GW of offshore wind energy by 2030.²⁸ As of October 2024, the Department of Interior (DOI), within which BOEM is situated, had approved ten utility-scale offshore wind projects since 2020, totaling over fifteen GW of potential

21. *Id.* at 595.

22. *Report: Offshore Wind Can Meet Up To 25% of U.S. Electricity Demand, 2035 AND BEYOND* (Aug. 1, 2023), <https://2035report.com/offshorewind/press>.

23. *Computing America’s Offshore Wind Energy Potential*, U.S. DEP’T OF ENERGY (Sept. 9, 2016), <https://www.energy.gov/eere/articles/computing-americas-offshore-wind-energy-potential>.

24. *What Percentage of the American Population Lives Near the Coast?*, NAT’L OCEANIC AND ATMOSPHERIC ADMIN., <https://oceanservice.noaa.gov/facts/population.html> (last visited Feb. 15, 2025).

25. *See Atlantic Offshore Wind Transmission Study*, NAT’L RENEWABLE ENERGY LAB’Y, <https://www.nrel.gov/wind/atlantic-offshore-wind-transmission-study.html> (last visited Dec. 14, 2024) (“Benefits of offshore transmission networking outweigh the costs, often by a ratio of 2 to 1 or more. Offshore networks with interregional interlinks provide the highest value.”); Penrod, *supra* note 3.

26. Armando Díaz-Motta, Francisco Díaz-González & Manuel Villa-Arietta, *Energy Sustainability Assessment of Offshore Wind-Powered Ammonia*, 420 J. CLEANER PROD. 1, 5 (2023). The capacity factor is the ratio between what a generation unit can generate at maximum output versus the unit’s actual generation output over a period of time. *Understanding Energy Capacity and Capacity Factor*, NMPP ENERGY (Jan. 29, 2021), <https://www.nmppenergy.org/energy-education/understanding-energy-capacity-and-capacity-factor>.

27. Exec. Order No. 14008, 86 Fed. Reg. 7619 (Jan. 27, 2021).

28. *FACT SHEET: Biden-Harris Administration Hits Offshore Wind Milestone, Continues to Advance Clean Energy Opportunities*, *supra* note 18.

capacity.²⁹ Another executive order, “Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability Efficient Federal Operations,” signed by President Biden in 2021, outlined the goal of a carbon pollution-free electricity sector by 2035.³⁰ To achieve this goal, the country’s renewable portfolio needs to triple in capacity over the next ten years, resulting in a combined two terawatts of wind and solar.³¹

The Biden administration’s bullishness notwithstanding, the election of Donald Trump to a second term calls into serious question the future of offshore wind development in the United States. The President has spoken negatively about the technology in the past³² and followed through on his campaign promises³³ to halt development on his first day in office.³⁴ One executive order, signed on Trump’s first afternoon in office, withdrew “all areas within the Offshore Continental Shelf (OCS)” from offshore wind leasing.³⁵ This withdrawal only applies to energy leasing “for the purposes of generation of electricity or any other such use derived from the use of wind,” not for oil and gas leases.³⁶ Further, the executive order called for a “Temporary Cessation and Immediate Review of Federal Wind Leasing and Permitting Practices,” with the Secretary of the Interior tasked with assessing the entire leasing process.³⁷ The withdrawal and assessment did not directly affect any leases already auctioned but were expected to have downstream effects on developers’ financing and interactions with the government while permitting.³⁸

The Trump administration’s attack on offshore wind have increased throughout his first year in office. In July 2025, the administration officially canceled previously announced leases off the coasts of Texas, Louisiana, Maine,

29. *Biden-Harris Administration Marks Major Milestones for Offshore Wind, Approves Tenth Project*, U.S. DEP’T OF THE INTERIOR (Sept. 5, 2024), <https://www.doi.gov/pressreleases/biden-harris-administration-marks-major-milestones-offshore-wind-approves-tenth>.

30. Exec. Order No. 14057, 86 Fed. Reg. 70,935 (Dec. 13, 2021).

31. *100% Clean Electricity by 2035 Study*, NAT’L RENEWABLE ENERGY LAB’Y, <https://www.nrel.gov/analysis/100-percent-clean-electricity-by-2035-study> (last visited Oct. 14, 2024) (using 2024 capacity numbers for comparison).

32. Brent Griffiths, *Trump Tweeted About Scottish Wind Farm 60 Times*, POLITICO (Nov. 22, 2016), <https://www.politico.com/story/2016/11/trump-scottish-wind-farms-231741>.

33. *Trump Has Vowed to Kill U.S. Offshore Wind Projects. Will He Succeed?*, APNEWS (Nov. 9, 2024), <https://apnews.com/article/trump-offshore-wind-energy-4e5b18ecd4799cc4cfd8cd7dc7b326ee> (“I’m going to write it out in an executive order. It’s going to end on Day 1.”).

34. *Temporary Withdrawal of All Areas on the Outer Continental Shelf from Offshore Wind Leasing and Review of the Federal Government’s Leasing and Permitting Practices for Wind Projects*, 90 Fed. Reg. 8363, 8363-64 (Jan. 29, 2025).

35. *Id.* at 8363.

36. *Id.*

37. *Id.* at 8363-64.

38. Julie Cart, *Trump’s Order Won’t Halt California’s Offshore Wind Leases. But Will it Derail the Industry?*, CALMATTERS (Jan. 24, 2025), <http://calmatters.org/environment/2025/01/trump-order-ban-offshore-wind-california>; Diana DiGangi, *Trump’s Executive Orders Cause Hesitation, Confusion for Clean Energy Developers*, UTILITY DIVE (Jan. 30, 2025), <https://www.utilitydive.com/news/trump-executive-orders-clean-energy-developers-funding-freeze-pause/738793>.

New York, California, and Oregon.³⁹ And while the early executive orders and changes targeted future permitting and lease auctions, the Trump Department of Energy has recently taken the more dramatic step of delaying and even halting ongoing wind farm construction. In April, the Secretary of the Interior ordered a halt to the construction of a wind farm near Long Island before lifting the stop order in May.⁴⁰ And more recently, Revolution Wind, a project that started construction in 2003 and was 80 percent complete, received a stop-order notice from the acting director of BOEM in August 2025.⁴¹ A preliminary injunction has been granted lifting the stop order, but federal officials could appeal the ruling.⁴²

Given the above actions, offshore wind experts and developers are pessimistic about the industry's prospect for growth under Trump.⁴³ One industry consultant noted that Trump's actions "could have negative implications beyond Trump's term because project developers may be wary of investing in a capital-intensive sector that faces demonstrable high election risk."⁴⁴ And project impacts are already occurring: submarine cable producers are leaving the market, ongoing projects are changing timelines, and manufacturers are scrapping plans for machinery.⁴⁵ An October 2025 interview with thirteen port representatives, shipbuilders, and trade groups noted many downstream industry effects stemming from the Trump policy shifts: \$679

39. Jennifer McDermott, *Trump Administration Cancels Plans for New Wind Energy Projects in Federal Waters*, PBS NEWS (July 31, 2025), <https://www.pbs.org/newshour/nation/trump-administration-cancels-plans-for-new-wind-energy-projects-in-federal-waters>.

40. Diana DiGangi, *Stop Work Order on Empire Wind 1 Lifted, Equinor Resumes Construction*, UTIL. DIVE (May 20, 2025), <https://www.utilitydive.com/news/stop-work-order-empire-wind-1-trump-burgum-equinor-hochul/748581>.

41. U.S. Dep't of the Interior, Director's Order to Rob Keiser (Aug. 22, 2025), https://www.boem.gov/sites/default/files/documents/renewable-energy/Director%26%23039%3BsOrder-20250822.pdf?VersionId=Y674sNo8zi7jLu3VWRvq2hFb_8KtMlde.

42. Clare Fieseler, *Revolution Wind's Stop-Work Order Has Been Lifted. What Happens Next?*, CANARY MEDIA (Sept. 23, 2025), <https://www.canarymedia.com/articles/offshore-wind/trump-revolution-halt-judge-ruling-lawsuits>.

43. See, e.g., Jennifer Hiller, *Trump Paralyzes the U.S. Wind Power Industry*, WALL ST. J. (Feb. 23, 2025), <https://www.wsj.com/business/energy-oil/trump-paralyzes-the-u-s-wind-power-industry-21fd4c7a>; Pullins et al., *supra* note 14; Joshua L. Belcher et al., *Potential Implications of President Trump's Wind Energy EO on Offshore Leasing, Development*, HOLLAND & KNIGHT (Feb. 4, 2025), <https://www.hklaw.com/en/insights/publications/2025/02/potential-implications-of-president-trumps-wind-energy-eo>.

44. Brad Plumer, *U.S. Wind Power Faces Huge Challenges After Trump Orders a Crackdown*, N.Y. TIMES (Jan. 21, 2025), <https://www.nytimes.com/2025/01/21/climate/wind-power-executive-order-trump.html>.

45. Nichola Groom, *Focus: Trump Hostility to US Offshore Wind Reverberates Through Supply Chain*, REUTERS (Feb. 14, 2025), <https://www.reuters.com/business/energy/trump-hostility-us-offshore-wind-reverberates-through-supply-chain-2025-02-13>.

million in lost financing for ports, decreased orders for U.S. shipbuilders, and an increase in uncertainty over previously committed investments.⁴⁶

B. Regulatory and Statutory Structure

Offshore wind development in the United States operates within a highly complex and multi-layered framework of federal and state regulations. Jurisdiction over submerged lands and waters is divided under the 1953 Submerged Lands Act.⁴⁷ States hold title of submerged lands, waters, and natural resources within three nautical miles of their coastline, while the federal government holds jurisdiction beyond this point.⁴⁸ Under the United Nations Convention on the Law of the Sea, countries can claim an exclusive economic zone that extends up to two hundred nautical miles from their territorial sea border.⁴⁹

The Outer Continental Shelf Lands Act (OCSLA) guides most of the federal framework for offshore wind development. Congress originally enacted OCSLA in 1953 to regulate mineral exploration and development of the Outer Continental Shelf (OCS), the sea area greater than three miles offshore.⁵⁰ While OCSLA was initially focused on offshore oil and gas exploration,⁵¹ Congress broadened its scope through subsequent amendments to include wind energy.⁵² The Energy Policy Act of 2005 allows for offshore wind infrastructure on the OCS and grants BOEM lead authority for regulating the development of projects.⁵³ BOEM governs the federal waters between two and three hundred nautical miles offshore, facilitating project development through lease auctions and regulatory oversight.⁵⁴

BOEM's statutory authority includes issuing leases, easements, and rights of way to allow for development that supports producing and transmitting energy along the OCS.⁵⁵ Its Renewable Energy Program, governed by regulations from

46. Nichola Groom, *US Shipbuilders, Ports Take Knock-On Hit from Trump Assault on Offshore Wind*, REUTERS (last updated Oct. 23, 2025), <https://www.reuters.com/sustainability/climate-energy/us-shipbuilders-ports-take-knock-on-hit-trump-assault-offshore-wind-2025-10-22>.

47. Submerged Lands Act, 43 U.S.C. §§ 1301-1356c (1953); LAURA K. WELLES ET AL., CONG. RSCH. SERV., RL32912, FEDERAL-STATE MARITIME BOUNDARY ISSUES 6-7 (May 5, 2005).

48. 43 U.S.C. § 1312; WELLES ET AL., *supra* note 47, at 3-7.

49. United Nations Convention on the Law of the Sea, art. 57, Dec. 10, 1982, 1833 U.N.T.S. 397.

50. Outer Continental Shelf Lands Act, 43 U.S.C. §§ 1331-1356c (1953).

51. *OCS Lands Act History*, BUREAU OF OCEAN ENERGY MGMT., <https://www.boem.gov/oil-gas-energy/leasing/ocs-lands-act-history> (last visited Dec. 14, 2024) (“As oil and natural gas became increasingly profitable, control over these resources became a major issue.”).

52. Energy Policy Act of 2005, Pub. L. No. 109-58, 119 Stat. 594.

53. *Id.*

54. *Id.*

55. *BOEM's Offshore Wind Role and Authority*, BUREAU OF OCEAN ENERGY MGMT., <https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/BOEM-NY-Bight-Offshore-Wind-Role.pdf> (last visited Dec. 5, 2024).

DOI,⁵⁶ divides the project lifecycle into four distinct phases: planning, leasing, site assessment, and construction and operations.⁵⁷ As part of this role, BOEM must identify wind energy areas, hold lease sales, review construction and operation plans, conduct environmental reviews, and work to incorporate feedback from ocean users and other stakeholders.⁵⁸ Under BOEM guidance issued in 2024, the agency was obligated to identify and mitigate impacts on disadvantaged communities, following two executive orders signed by Presidents Clinton and Biden.⁵⁹ However, President Trump rescinded both orders with two executive orders of his own signed in January 2025.⁶⁰ General regulations concerning community outreach from Trump's DOI have not been released. Nevertheless, community engagement remains relevant to project success.

BOEM's authority is not isolated; it must coordinate extensively with state and local agencies to ensure the success of projects. State agencies issue permits for required onshore infrastructure, such as ports, power stations, and transmission lines, which are critical for connecting the energy generated by offshore turbines to the grid.⁶¹ Further, projects often require permits and approvals from local governments to build infrastructure in certain areas.⁶²

Throughout the permitting and construction process, offshore projects must adhere to an array of environmental protection laws. Most notably, the National Environmental Policy Act (NEPA) mandates that federal agencies assess the environmental impacts of their actions, such as leasing for offshore wind projects, before making final decisions.⁶³ NEPA thus requires BOEM to prepare an environmental assessment before leasing any offshore areas, which local communities who oppose projects often challenge in court. Moreover, the

56. Renewable Energy on the Outer Continental Shelf, 30 C.F.R. §§ 585.100, 585.103(a)(1) (2024).

57. *Regulatory Framework and Guidelines*, BUREAU OF OCEAN ENERGY MGMT., <https://www.boem.gov/renewable-energy/regulatory-framework-and-guidelines> (last visited Oct. 11, 2024).

58. *Organizational Roles on Offshore Wind and Related Environmental Justice Responsibilities*, BUREAU OF OCEAN ENERGY MGMT. 1, https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/NYB_EJF_AgencyOSWRoleMessaging%20Table_BOEM_4.29.24_508.pdf (last updated Apr. 29, 2024).

59. *Id.*; Exec. Order No. 14096, 88 Fed. Reg. 25251, 25253-54 (Apr. 21, 2023); Exec. Order No. 12898, 59 Fed. Reg. 7629, 7629-30 (Feb. 16, 1994).

60. Exec. Order No. 14148, 90 Fed. Reg. 8237, 8240 (Jan. 28, 2025); Exec. Order No. 14173, 90 Fed. Reg. 8633, 8634 (Jan. 31, 2025).

61. Prakash Kashwan & Hyun Lee, *Beyond Stakeholder Consultations: Red-Green Coalition Democratizes Maine's Offshore Wind Energy Policymaking*, 116 ENERGY RSCH. & SOC. SCI. 1, 3 (2024).

62. See, e.g., NICOLE SALAS ET AL., FEDERAL, STATE, AND LOCAL ENVIRONMENTAL PERMITTING PROCESSES FOR OFFSHORE WIND DEVELOPMENT ON CALIFORNIA'S NORTH COAST 5 (In M. Severy et al. eds. 2020) ("Local governments can apply to be approved by the Coastal Commission to obtain permitting authority within the coastal zone . . . Additional local ministerial approvals (i.e., grading, sewer, waste permits, etc.) may also be required for offshore wind projects.")

63. COUNCIL ON ENV'T QUALITY, <https://ceq.doe.gov/index.html> (last visited June 28, 2025).

Endangered Species Act⁶⁴ and Marine Mammal Protection Act⁶⁵ require federal agencies to ensure their actions do not jeopardize endangered species, marine mammals, or their habitats. The Clean Water Act⁶⁶ and Rivers and Harbors Act⁶⁷ regulate pollutant discharge into and construction on the country's navigable waters, respectively. For a comprehensive overview, the Congressional Research Service's report on offshore wind's legal framework details additional statutes governing these projects.⁶⁸

To ensure compliance with the complex framework of laws and regulations, BOEM establishes cooperating agency agreements with many other federal and state agencies.⁶⁹ Developers, in turn, must navigate a web of regulatory approvals involving multiple jurisdictions. For instance, one published agency communication plan from a successful lessee in New York outlined ten federal agencies and seven state agencies that it intended to work with.⁷⁰ California Energy Commission Chairman David Hochschild recently called the regulatory scheme "one of the single most complex processes I've been involved with."⁷¹

C. From Concept to BOEM Approval

To understand how the public and local communities engage in offshore wind development, it is necessary to understand BOEM's Biden-era leasing process from start to finish.⁷² Public comment periods are common throughout the process, which give communities space to provide input or objections on the leasing process. As of February 2025, BOEM's renewable energy program occurs in four distinct phases,⁷³ outlined and explained below.

1. Planning and Analysis

To begin this phase, BOEM publishes a "Call for Nominations and Information" and opens a public comment period to gauge developer interest in

64. Endangered Species Act, 16 U.S.C. §§ 1531-1544 (1973).

65. Marine Mammal Protection Act, 16 U.S.C. §§ 1361-1407 (1972).

66. *Summary of the Clean Water Act*, EPA, <https://www.epa.gov/laws-regulations/summary-clean-water-act> (last visited Nov. 15, 2024).

67. *Section 10 of the Rivers & Harbors Act*, U.S. ARMY CORPS OF ENG'RS, <https://www.spl.usace.army.mil/Missions/Regulatory/Jurisdictional-Determination/Section-10-of-the-Rivers-Harbors-Act> (last visited Nov. 15, 2024).

68. ADAM VANN, CONG. RSCH. SERV., R40175, OFFSHORE WIND ENERGY DEVELOPMENT: LEGAL FRAMEWORK 1-11 (Feb. 28, 2023).

69. BUREAU OF OCEAN ENERGY MGMT., A CITIZEN'S GUIDE TO THE BUREAU OF OCEAN ENERGY MANAGEMENT'S RENEWABLE ENERGY AUTHORIZATION PROCESS 19 (2016).

70. *See generally* COMMUNITY OFFSHORE WIND, AGENCY COMMUNICATIONS PLAN (2025).

71. Cart, *supra* note 19.

72. The process discussed in this section refers to documents and regulations published during the Biden administration. As explained in the previous Subpart, the Trump administration has rescinded most BOEM guidance and has cancelled future leasing activities.

73. *Regulatory Framework and Guidelines*, *supra* note 57.

a specific region.⁷⁴ After the call is published, BOEM identifies Wind Energy Areas (WEA) and prepares an environmental assessment (EA) for lease issuance of each WEA.⁷⁵ According to BOEM, consultations with tribes, states, and natural resource agencies begin during this phase.⁷⁶ Additionally, public comment periods are opened when the Notice of Intent to Prepare an Environmental Assessment and Draft Environmental Assessment are published. From the initial call to completing the environmental reviews, this process can take up to two years.⁷⁷

2. Leasing

The leasing phase is the shortest of the four and results in BOEM granting a lease to a project developer. Federal regulations require BOEM to hold a competitive process for leasing if multiple parties are interested.⁷⁸ If more than one party is interested, BOEM is required to issue a Proposed Sale Notice, issue a Final Sale Notice, and hold a lease sale auction.⁷⁹ If only one developer has shown interest, the agency can noncompetitively negotiate the lease directly with the party.⁸⁰

During this time, the agency may formulate specific rules and regulations of the lease sale auction, as well as “lease provisions and conditions.”⁸¹ Auctions in different geographic areas have historically had different incentives and requirements for developers.⁸² Through these provisions and conditions, BOEM can require successful bidders to engage with different stakeholders for the entirety of the development process.⁸³

74. *What is the Purpose of a “Call For Information And Nominations” (or “Call”)?*, BUREAU OF OCEAN ENERGY MGMT., <https://www.boem.gov/renewable-energy/state-activities/what-purpose-call-information-and-nominations-or-call> (last visited Oct. 11, 2024).

75. BOEM prepares an EA to analyze the potential impacts of issuing leases and site assessment activities, not actual construction of the site. Because the activities are relatively low-impact and temporary, the EA is generally sufficient. *Offshore Wind Public Participation Guide*, AM. CLEAN POWER ASS'N (Jan. 2020), <https://cleanpower.org/resources/offshore-wind-public-participation-guide>.

76. BUREAU OF OCEAN ENERGY MGMT., WIND ENERGY COMMERCIAL LEASING PROCESS (2021).

77. BUREAU OF OCEAN ENERGY MGMT., THE RENEWABLE ENERGY PROCESS: LEASING TO OPERATIONS.

78. BUREAU OF OCEAN ENERGY MGMT., *supra* note 69, at 4.

79. *Id.* at 7.

80. *Id.* at 4.

81. *What Information Is Included In A Final Sale Notice?*, BUREAU OF OCEAN ENERGY MGMT., <https://www.boem.gov/renewable-energy/state-activities/what-information-included-final-sale-notice> (last visited Nov. 15, 2024).

82. *See, e.g.*, Pacific Wind Lease Sale 1 (PACW-1) for Commercial Leasing for Wind Power on the Outer Continental Shelf in California-Final Sale Notice [hereinafter PACW-1 for Commercial Leasing for Wind Power on the OCS in CA-FSN], 87 Fed. Reg. 64093, 64103, 64105 (Oct. 21, 2022) (creating CBA credit scheme); Atlantic Wind Lease Sale 10 for Commercial Leasing for Wind Power Development on the U.S. Central Atlantic Outer Continental Shelf-Final Sale Notice, 89 Fed. Reg. 54506, 54516-17 (July 1, 2024).

83. *See* LORELAI WALKER & ARNE JACOBSON, SCHATZ ENERGY RSCH. CENTER, COMPETITIVE OFFSHORE WIND LEASES ON THE U.S. OUTER CONTINENTAL SHELF: A REVIEW OF THE

3. Site Assessment

To begin site assessment, a successful lessee must submit a Site Assessment Plan (SAP) to BOEM.⁸⁴ The developer may need to consult with other federal and state agencies while applying for permits to conduct investigation activities while developing the SAP.⁸⁵ These investigations provide a full site characterization submitted through the SAP and include activities like geotechnical investigations, geophysical and hazard surveys, and biological studies, among others.⁸⁶ Once the lessee submits the SAP, BOEM makes the plan available for public comment and often holds public meetings to discuss the wind developer's activities.⁸⁷ The agency may approve, approve with modification, or deny the plan. After approval, the lessee can conduct site assessments and surveys, such as constructing meteorological towers and buoys.⁸⁸ This process can take up to five years.⁸⁹

This stage represents the first time that developers can follow their engagement lease stipulations and engage with stakeholders such as local communities. It is common for developers and agencies to hold discretionary stakeholder engagement activities during this period, including informational meetings and feedback sessions.⁹⁰

4. Construction and Operations

After successful SAP approval, regulations require the developer to submit a second document to the agency: the Construction and Operations Plan (COP). The COP demonstrates how the developer will build and operate the facility, including a "description of proposed construction activities, commercial operations, and conceptual decommissioning plans."⁹¹ COP completion triggers the NEPA process that requires an Environmental Impact Statement (EIS) on the COP.⁹² The agency then decides whether to grant final approval, grant approval with modification, or deny the plan in full. The NEPA process alone takes around

USE OF MULTIPLE-FACTOR AUCTIONS AND NONMONETARY CREDITS 18-19 (2023) (outlining different lease stipulations required for lessees seen in BOEM leases).

84. 30 C.F.R. §§ 585.602-585.604.

85. U.S. DEP'T OF THE INTERIOR, GUIDELINES FOR INFORMATION REQUIREMENTS FOR A RENEWABLE ENERGY SITE ASSESSMENT PLAN (SAP) 15 (June 2019) ("List the agencies and persons consulted, dates of contact, and a short summary of issues discussed. Provide the same information for contacts with state agencies requiring consultations relating to your proposed activities.").

86. *Id.* at 6.

87. MATTHEW CAMPO & CAROLYN IWICKI, OPPORTUNITIES FOR PUBLIC PARTICIPATION IN OFFSHORE WIND PLANNING IN NEW JERSEY 5 (2020).

88. U.S. DEP'T OF THE INTERIOR, *supra* note 85, at 5.

89. THE RENEWABLE ENERGY PROCESS: LEASING TO OPERATIONS, *supra* note 77.

90. CAMPO & IWICKI, *supra* note 87.

91. BUREAU OF OCEAN ENERGY MGMT., *supra* note 69, at 5.

92. Unlike BOEM's initial EA at the auction stage, this EIS must assess the full range of project impacts.

two years.⁹³ After BOEM approves the COP, the developer can start construction.⁹⁴

During this project phase, there are several public meetings and opportunities for citizens to comment on the scope of the EIS, and then the draft EIS.⁹⁵ Additionally, other permitting activities and consultations can create “other engagement processes for citizens as part of federal, state, and local permitting reviews and decisions. . . .”⁹⁶ For example, BOEM’s Citizen Guide for the renewable energy authorization process cites the NEPA review as a key area for public input and comment.⁹⁷ Once the COP process and environmental reviews are complete, the developer can submit a final Fabrication and Installation Report to BOEM, after which project construction begins.⁹⁸

D. 2024 BOEM Lease Expansion & Opposition

In April 2024, BOEM and DOI announced a new five-year auction leasing schedule.⁹⁹ The twelve potential leases announced in the schedule span a geographic area that includes the Atlantic and Pacific Oceans, the Gulf of Mexico, and waters offshore certain United States territories.¹⁰⁰ However, BOEM’s previously announced auctions have faced disruptions. For example, the agency postponed its first auction lease in Oregon due to “insufficient bidder interest.”¹⁰¹ This announcement followed another recent delay, when BOEM postponed a Gulf of Mexico auction due to a “lack of competitive interest.”¹⁰²

While the agency attributed these delays to a lack of developer interest, the canceled Oregon lease illustrates a deeper issue: the risks that a lack of local approval and support pose to offshore wind projects. Communities and affected stakeholders can engage in BOEM’s public comment process to shape agency decision making, but their influence extends beyond these formal channels. Cities and organizations can file lawsuits to challenge environmental

93. THE RENEWABLE ENERGY PROCESS: LEASING TO OPERATIONS, *supra* note 77.

94. *Id.*

95. AM. CLEAN POWER ASS’N, *supra* note 75.

96. CAMPO & IWICKI, *supra* note 87, at 6.

97. BUREAU OF OCEAN ENERGY MGMT., *supra* note 69, at 16-17.

98. CAMPO & IWICKI, *supra* note 87, at 7.

99. *Secretary Haaland Announces New Five-Year Offshore Wind Leasing Schedule*, U.S. DEP’T OF THE INTERIOR (Apr. 24, 2024), <https://www.doi.gov/pressreleases/secretary-haaland-announces-new-five-year-offshore-wind-leasing-schedule>.

100. *Lease and Grant Information*, *supra* note 12.

101. *BOEM Postpones Oregon Offshore Wind Energy Auction*, *supra* note 9.

102. Diana DiGangi, *BOEM ‘Confident’ In Gulf of Mexico Offshore Wind Despite Canceling Lease Auction*, UTILITY DIVE (July 31, 2024), <https://www.utilitydive.com/news/boem-cancels-gulf-of-mexico-offshore-wind-auction/722880>.

assessments or stop construction.¹⁰³ And they can challenge permits at the local level, creating significant obstacles for project development.¹⁰⁴

In early September 2024, the Confederated Tribes of the Coos, Lower Umpqua and Siuslaw Indians in Oregon filed a lawsuit against BOEM to delay the auction because the leasing “failed to consider the environmental, cultural and economic impacts” of an offshore wind project.¹⁰⁵ Just two weeks later, Oregon’s governor sent a letter to the DOI requesting an auction delay and withdrawing from an intergovernmental task force over concerns “from renewable energy, labor, fishing, and conservation communities on the risks that a failed competitive lease process would pose.”¹⁰⁶ The auction was canceled the same day.¹⁰⁷

While it is unclear whether the community concerns were dispositive in canceling the auction or whether better engagement could have garnered broader support for the project, the cancelled lease in Oregon underscores the significance of communities in offshore development. And the concerns raised by stakeholders in Oregon reflect those currently shared by project stakeholders nationwide. The cancellation shows explicitly how community support—or the lack thereof—can become a liability for developers.

As BOEM considers procedures for future auctions—likely under a post-Trump administration—it has an opportunity to reassess its approach to community engagement, ensuring that local concerns are addressed proactively to reduce the risk of future disruptions. By creating an effective engagement process, developers can mitigate the risk of disapproval from affected communities.

II. PROJECT DERISKING BACKGROUND

A. Traditional Project Derisking

Experts and policy makers have extensively discussed the benefits and promise of derisking in renewable energy and climate technology development

103. See, e.g., TOWN OF OCEAN CITY, MD., *supra* note 7.

104. See, e.g., Christopher Niezrecki, *US Offshore Wind Farms are Being Strangled With Red Tape*, WIRED (May 26, 2024), <https://www.wired.com/story/why-us-offshore-wind-power-is-struggling>.

105. Monica Samayoa, *Tribes File Lawsuit to Delay Southern Oregon Floating Offshore Wind Auction*, OPB (Sept. 16, 2024), <https://www.opb.org/article/2024/09/16/tribes-file-lawsuit-delay-southern-oregon-floating-offshore-wind-auction> (describing the lawsuit challenging BOEM’s initial EA conducted in preparation for the lease auction).

106. Letter from Tina Kotek, Governor, Or., to Elizabeth Klein, Dir., Bureau of Ocean Energy Mgmt. (Sept. 27, 2024) https://www.opb.org/pdf/GovernorKoteklettertoBOEMDirectorKlein_1727455319170.pdf.

107. The auction was ostensibly just delayed, not altogether cancelled, but the postponed auction has still not been rescheduled as of time of writing, and no further auctions are expected under the Trump administration. *BOEM Postpones Oregon Offshore Wind Energy Auction*, *supra* note 9.

both domestically¹⁰⁸ and internationally.¹⁰⁹ Traditionally, the focus has been on financial derisking, where governments or external entities provide funding to guarantee capital or decrease the risk premium of lending for financial institutions.¹¹⁰ The theoretical foundation is simple: Banks and investors are more likely to support a project if the return on investment is more certain.

The Organization for Economic Co-operation and Development (OECD) identifies derisking measures used by governments and finance institutions to narrow the investment gap for green infrastructure that occurs in traditionally riskier countries or for riskier projects.¹¹¹ These strategies include co-investing, revenue guarantees, and offtake agreements, among others.¹¹² Derisking aims to increase the willingness of both public and private sector lenders to support projects by attracting investors seeking acceptable risk-adjusted returns.¹¹³ For example, one derisking instrument, blended finance, combines different types of capital with varying return expectations to mitigate uncertainty.¹¹⁴ By pairing loan guarantees that guard against governmental risk with concessional loans that incentivize funding for new technologies, investments become more diversified and attractive for investors.¹¹⁵

While these financial strategies dominate traditional derisking approaches, some innovative ideas suggest broadening the concept beyond finance. One paper, for example, proposes that engineering flexibility could play a role in derisking projects.¹¹⁶ The paper argues that strategic planning, designed to accommodate project changes at minimal cost, reduces uncertainty and mitigates potential future harms.¹¹⁷ In this sense, flexibility in planning offers the same mitigation of project risks as financial protections. Thus, derisking can include not only financial mechanisms but also engineering and planning strategies.

108. JARED HAWKINS, *DE-RISKING CARBON CAPTURE STORAGE* (2023); Hannah Safford et al., *De-Risking the Clean Energy Transition: Opportunities and Principles for Subnational Actors*, FED'N OF AM. SCIENTISTS (June 18, 2025), <https://fas.org/publication/de-risking-the-clean-energy-transition>.

109. *Id.*; Esther Choi et al., *How to De-risk Low-carbon Investments*, WORLD RES. INST. (July 22, 2022), <https://www.wri.org/insights/de-risking-low-carbon-investments>.

110. *Id.* (“Typically, this involves public entities such as donor governments, multilateral development banks, development financial institutions and climate funds encouraging private investors to deploy capital by offering to bear a share of the risk.”).

111. OECD, *DE-RISKING INSTITUTIONAL INVESTMENT IN GREEN INFRASTRUCTURE: 2021 PROGRESS UPDATE 4-9* (2021).

112. *Id.* at 6-9.

113. Katrina J. Lane, *Mechanisms to De-Risk Investment in Local Adaptation: Why and How?*, DEVEX (July 30, 2024), <https://www.devex.com/news/sponsored/mechanisms-to-de-risk-investment-in-local-adaptation-why-and-how-108039>.

114. *Shifting & Mobilizing Private Finance*, WORLD RES. INST., <https://www.wri.org/paying-for-paris/shifting-and-mobilizing-private-finance> (last visited Nov. 15, 2024).

115. *Id.*

116. Duarte Pardo & Juan Pablo, *De-Risking Project Finance for Infrastructure Development through Flexibility in Engineering Design 3* (June 2019) (M.S. thesis, Massachusetts Institute of Technology).

117. *Id.*

While not included in derisking literature, financiers often cite political decisions and local acceptance of projects as major concerns for project success.¹¹⁸ A study on offshore wind showed that public acceptance was one of the most common risks and identified “adequate communication of project plans” as a key aspect of risk management.¹¹⁹ Thus, public engagement is essential for securing local approval and is a crucial factor for financial institutions evaluating project investments. Thorough consultation with affected communities not only leads to better outcomes and represents the ethical approach for projects impacting others, as discussed in Part III, but it also reduces risk for investors and developers.

B. *Derisking in Offshore Wind*

Offshore wind has benefitted from traditional derisking. Policy makers have developed two major strategies: rate-based protection¹²⁰ and procurement guarantees by individual states.¹²¹ These approaches mitigate the risk that a project may fail to secure an offtaker for its energy production or that the purchaser cancels a signed offtake agreement.¹²² Such risks are not hypothetical; since COVID-19 disruptions began in March 2020, parties in the United States have canceled or renegotiated sixteen of twenty-two projects that had previously signed offtake agreements.¹²³

In response, states like New York have increased their subsidization of wind projects. After multiple developers lost offtake agreements in the wake of COVID-19, the New York State Energy Research and Development Authority (NYSERDA) increased guaranteed strike prices for two offshore wind development contracts.¹²⁴ The strike price is the amount paid to an offshore wind

118. See Tyler A. Hansen et al., *Five Grand Challenges Of Offshore Wind Financing In The United States*, 107 ENERGY RSCH. & SOC. SCI. 103329, 103332 (2024) (citing “Permitting and Regulatory Processes” as one of the five major challenges of financing).

119. Nadine Gatzert & Thomas Kosub, *Risks and Risk Management of Renewable Energy Projects: The Case of Onshore and Offshore Wind Parks*, 60 RENEWABLE AND SUSTAINABLE ENERGY REVS. 982, 985 (2016).

120. See, e.g., Diana DiGangi, *Earlier Derisking Is Key To Offshore Wind's Future In The US, Ørsted Americas CEO, Others Say*, UTILITY DIVE (Apr. 18, 2024), <https://www.utilitydive.com/news/derisking-offshore-wind-project-finance-orsted-eversource-dominion-nysesda/713619>.

121. See, e.g., Assemb. B. 1373 (Cal. 2023).

122. Offtaker refers to the entity that agrees to purchase the electricity generated by a project. Developers generally secure offtake agreements with these entities that outline the pricing, volume, and duration of the energy purchase. See *Bridging Demand and Financing: Voluntary Offtake in Clean Energy*, AM. COUNCIL ON RENEWABLE ENERGY (Dec. 17, 2024), <https://acore.org/resources/bridging-demand-and-financing-voluntary-offtake-in-clean-energy>.

123. Tyler A. Hansen et al., *De-Risking Offshore Wind: Developing a New Sector through Turbulent Times*, in *MANAGING COMPLEX SYSTEMS IN A CHALLENGING WORLD: INSIGHTS FROM SUSTAINABLE ENERGY AND BEYOND 3* (Alexandra Mallet & Craig Merrett eds., 2024) (explaining that COVID-19 created a series of macroeconomic shocks like supply chain disruptions, inflation, and higher interest rates).

124. Melanie Brusseler & Sophie Flinders, *Bridge Over Troubled Water: Rethinking the Role of the State in New York Offshore Wind*, COMMON WEALTH (Jan. 3, 2024), <https://www.commonwealthmagazine.org/energy/2024/01/03/bridge-over-troubled-water-rethinking-the-role-of-the-state-in-new-york-offshore-wind/>.

generator for each megawatt-hour of electricity produced. This increase nearly doubles the amount that New York ratepayers will subsidize offshore wind, but the state considers it essential to ensure that project development continues.¹²⁵

California has implemented a different type of derisking strategy: direct state procurement of energy. The state legislature passed a bill allowing the California Public Utility Commission (CPUC) to order the state Department of Water Resources to purchase offshore wind energy.¹²⁶ The bill analysis published for the legislation explained that the technology is “too costly and too risky for any one [load serving entity], or small collection of [load serving entities] to take on.”¹²⁷ Further, the centralized procurement “dilutes risk associated with such resources.”¹²⁸ The CPUC then finalized a state procurement strategy that will purchase up to 7.6 GW of offshore wind energy by 2037.¹²⁹

These strategies, while impactful, are not without limitations. In 2023, Ørsted, a leading Danish developer, terminated two East Coast projects despite having secured BOEM and New Jersey approvals.¹³⁰ Ørsted’s CEO noted that the industry should consider “derisking projects much earlier or spending a lot less until projects are derisked.”¹³¹ Other offshore wind projects have included rate-based protection that created a risk ceiling for the developer in case costs increased, although Ørsted’s project did not.¹³² These strategies allow outside financiers like private equity to fund projects more readily.¹³³

While these existing derisking strategies have provided critical support for offshore wind projects, they alone are insufficient to guarantee project completion. Procurement guarantees, which already extend beyond traditional financial derisking by incorporating state-driven risk sharing, highlight the potential for broader, more innovative approaches. But because these interventions tend to be costly for tax- and ratepayers, it is even more important that the public have a positive perception of the projects. Further, the financial support from governments will be moot if local communities oppose projects.

wealth.org/publications/bridge-over-troubled-water-rethinking-the-role-of-the-state-in-new-york-offshore-wind.

125. Marie J. French, *Offshore Wind Costs Double for Consumers as New York Keeps Early Projects on Track*, POLITICO (Feb. 29, 2024), <https://www.politico.com/news/2024/02/29/offshore-wind-costs-new-york-projects-00144143>.

126. Assemb. B. 1373, *supra* note 121.

127. Eduardo Garcia et al., *Concurrence in Senate Amendments CSA1 Bill Id:AB 1373*, CALMATTERS (Sept. 7, 2023), https://calmatters.digitaldemocracy.org/bills/ca_202320240ab1373.

128. *Id.*

129. *CPUC Advances Clean Energy with Centralized Procurement Strategy*, CPUC (Aug. 26, 2024), <https://www.cpuc.ca.gov/news-and-updates/all-news/cpuc-advances-clean-energy-with-centralized-procurement-strategy>.

130. Jillian Ambrose, *Ørsted Cancels Two US Offshore Windfarm Projects At £3.3bn Cost*, THE GUARDIAN (Nov. 1, 2023), <https://www.theguardian.com/environment/2023/nov/01/rsted-cancels-two-us-offshore-windfarm-projects-at-33bn-cost>.

131. DiGangi, *supra* note 120.

132. *Id.*

133. *Id.*

And there is cause for concern: project and electricity costs have increased while public support for offshore wind has dwindled.¹³⁴ To support these existing derisking initiatives and increase the chances of project approval and completion, developers should employ an additional strategy: social derisking. By proactively engaging stakeholders and addressing local concerns, developers can reduce opposition and increase the overall feasibility of their projects.

C. Adding Social Derisking to the Portfolio

To ensure the success of offshore wind projects, social derisking through effective community outreach and stakeholder engagement is just as critical as financial derisking. The scope of derisking should expand beyond financial and political instruments to include social strategies as well. From a developer perspective, one of the primary risks that large infrastructure projects run into is securing local approvals and permits, but social derisking can mitigate some of these risks.

Numerous highly capitalized planned infrastructure projects fail to receive necessary approvals and permits due to a lack of community support.¹³⁵ The reasons for opposition are numerous and varied: Renewable projects have received opposition for inequitable benefits,¹³⁶ environmental harms,¹³⁷ and blocking views of the horizon,¹³⁸ among many others.

Further, some states and counties have enacted legislation that allows local governments to ban renewable projects outright. A 2021 Ohio law gives local elected officials the ability to foreclose new wind and solar projects by designating “restricted areas” where solar and wind facilities cannot be located.¹³⁹ San Bernardino County, the largest county in the continental United States, banned utility-scale solar and wind development in 2019.¹⁴⁰ And these bans affect the offshore wind space as well: The technology requires on-shore

134. Jeff St. John, *The US Offshore Wind Industry Faces a Moment of Reckoning*, CANARY MEDIA (Nov. 2, 2023), <https://www.canarymedia.com/articles/wind/the-us-offshore-wind-industry-faces-a-moment-of-reckoning>.

135. See *supra* Introduction.

136. *Lawsuit Challenges California’s Regressive Rooftop Solar Policy*, CENTER FOR BIOLOGICAL DIVERSITY (May 4, 2023), <https://biologicaldiversity.org/w/news/press-releases/lawsuit-challenges-californias-regressive-rooftop-solar-policy-2023-05-04>.

137. Camille von Kaenel, *Jacumba Neighbors Sue To Block San Diego County’s Largest Solar Farm*, CBS8 (Sept. 22, 2021), <https://www.cbs8.com/article/news/local/jacumba-neighbors-sue-block-construction-san-diego-countys-largest-solar-farm/509-4aef14a6-de6c-453c-bdb6-5e9e9fac169c>.

138. Wayne Parry, *Lawsuits Buffet U.S. Offshore Wind Projects, Seeking to End or Delay Them*, AP NEWS, <https://apnews.com/article/offshore-wind-lawsuits-clean-energy-windmills-turbines-9258cc52b8695df7ba22d51da829b811> (last visited Feb. 28, 2025).

139. *Senate Bill 52 Resources*, OHIO POWER SITING BOARD, <https://opsb.ohio.gov/processes/senate-bill-52-resources> (last visited Nov. 4, 2024).

140. Christian Roselund, *San Bernardino County Bans Large-Scale Solar, Wind in Some Areas*, PV MAGAZINE USA (Mar. 1, 2019), <https://pv-magazine-usa.com/2019/03/01/san-bernardino-county-bans-large-scale-solar-wind-in-some-areas>.

facilities, ports, and transmission connections, which are all covered by these bans.

These examples underscore the critical role that community support plays in the long-term success of renewable projects. To mitigate this social risk, it is essential to expand the concept of derisking beyond financial mechanisms to include effective stakeholder engagement and collaboration.

The benefits of categorizing effective community engagement as a derisking strategy are threefold. First, expanding the notion of derisking to stakeholder engagement provides support for communities' beliefs and concerns. Financial concerns are seen as most critical or "real" to developers and project financiers. If BOEM were to align concerns from individuals and community groups with quantifiable financial risk, this accounting may increase the likelihood of developers taking the groups' concerns seriously. In successful projects, a characteristic of effective engagement is that both parties believe their concerns are acknowledged by the other.¹⁴¹ When communities feel that their concerns are heard, the likelihood of conflict with policy makers and developers decreases.

Second, categorizing effective collaboration as a derisking measure leads to a more comprehensive view of risk—one that goes beyond financing and credit. This more holistic approach helps educate developers and financiers about the full range of risks associated with potential projects. Limiting derisking to financial mechanisms overlooks non-financial challenges—such as local opposition—that can derail projects. The many failed renewable energy projects across the United States due to local opposition, whether through lawsuits or unsuccessful permits, prove that development risks are not confined to funding and credit.¹⁴² Social derisking in this context could help ensure that developers do not repeat the mistakes of these projects.

Third, categorizing stakeholder engagement as a form of derisking legitimizes government actions aimed at fostering broader engagement systems. NYSERDA, the agency that increased New York's strike price, internally defined its role as "[d]e-risking energy transitions and deployment" in a draft strategic outlook report published in 2024.¹⁴³ Just as California's state procurement plans were framed by the legislature as a tool to reduce financial risk, a similar approach could enhance the political feasibility of engagement policies. As outlined below, one potential stakeholder engagement strategy is to massively increase state funding to help communities build the capacity to

141. Lawrence Susskind et al., *Sources of Opposition to Renewable Energy Projects in the United States*, 165 ENERGY POL'Y 1, 9 (2022).

142. See *supra* Part II.

143. N.Y. STATE ENERGY RSCH. AND DEV. AUTH., TOWARD A CLEAN ENERGY FUTURE: A STRATEGIC OUTLOOK 4 (2023); N.Y. State Energy Rsch. and Dev. Auth., *Notice of Meeting and Agenda* (Apr. 17, 2024), <https://www.nyserda.ny.gov/-/media/Project/Nyserda/Files/About/Board-Governance/Board-and-committee-meetings/Materials/2024-04-Meeting-Materials.pdf>.

engage more fully in project collaboration. Framing this approach as social derisking could improve the chances of this type of capital investment successfully passing through state or federal legislatures.

III. COMMUNITY ENGAGEMENT AND OFFSHORE WIND

Social derisking relies on building community and stakeholder support to prevent delays or cancellations caused by opposition. Achieving this goal is complex, with no single engagement strategy guaranteeing success. However, research offers insight into engagement strategies that foster productive relationships among stakeholders, developers, and government agencies. This Part examines best practices and common pitfalls for offshore wind community engagement as identified in academic literature, reviews the approaches implemented by BOEM, and explores the unique challenges of applying these strategies to offshore wind projects.

A. Community Engagement Literature

1. Best Practices

Offshore wind projects have been operational in Europe since the 1990s, providing a robust foundation of research on community engagement within the sector. Studies consistently demonstrate that community approval and the provision of tangible benefits are closely linked, both of which are critical for reducing project risk. Meta-analyses and literature reviews highlight three key attributes of effective community engagement in the offshore space: early and regular engagement, collaborative dialogue, and the integration of scientific and local knowledge.¹⁴⁴

First, a foundational element of effective stakeholder engagement is initiating early and regular communication. Case studies related to offshore wind development in Ireland,¹⁴⁵ Oregon,¹⁴⁶ and Rhode Island¹⁴⁷ underscore the need for meaningful engagement with community groups at the initial stages of planning. For the Rhode Island project, process fairness was the most important factor cited by residents when deciding whether to support the project.¹⁴⁸

144. See, e.g., Morgan Brunbauer et al., *Effective Stakeholder Engagement for Offshore Wind Energy Development: The State of New York's Fisheries and Environmental Technical Working Groups*, 15 *MARINE & COASTAL FISHERIES* 1, 2 (2023).

145. Yvonne Cronin et al., *Public Perception Of Offshore Wind Farms In Ireland*, 134 *MARINE POL'Y* 1, 7 (2021).

146. Diane Brandt, *A Current Look at Marine Renewable Energy in Oregon: Oregon MRE and the role of Public Perception and Participation in Oregon's MRE Future 6 (2021)* (M.P.P. essay, Oregon State University); Mikaela C. Freeman et al., *Case Study on the Novel Permitting and Authorization of PacWave South, a US Grid-connected Wave Energy Test Facility: Development, Challenges, and Insights*, 168 *ENERGY POL'Y* 1, 5 (2022).

147. Jeremy Firestone et al., *Faring Well in Offshore Wind Power Siting? Trust, Engagement and Process Fairness in the United States*, 62 *ENERGY RSCH. & SOC. SCI.* 1, 2 (2020).

148. *Id.* at 9.

Residents generally valued being engaged with early in the planning process, but noted that interactions needed to be transparent and open.¹⁴⁹ In Oregon, developers began community consultations and advisory groups the year after the initial feasibility study. Project sponsors considered the early engagement process before filing for permits—a benefit that led to fewer delays and future requests for information.¹⁵⁰ In addition to formal development proceedings, one study of ocean stakeholder meetings found that “all parties want to be meaningfully involved in decision making from the earliest stages.”¹⁵¹ A report on the perceptions of fisherman regarding co-located wind farms found that “early engagement and community management” was necessary to secure approvals.¹⁵² While early engagement can mean different things for different projects, assumedly it is before any binding project approvals.

Second, successful stakeholder engagement processes typically incorporate dialogue and actions that facilitate actual collaboration between diverse groups.¹⁵³ Collaboration in this context can take various forms. A report published by Facilitating Power, a non-profit focused on increasing participation in community-driven projects, characterized the range of relationships between communities and developers as a spectrum from “ignor[ing]” to “defer[ring.]”¹⁵⁴ Some activities aligned with collaboration include negotiated agreements between communities and developers, citizen advisory committees, and open planning forums.¹⁵⁵

A case study focusing on Maine’s offshore wind context detailed an abrupt shift in approval and project outcomes when community groups moved from engaging in agency-organized public consultations to more direct political engagement such as lobbying and legislation. In that case, community groups influenced the mapping of offshore wind lease areas and labor standards before an auction or lease area was announced.¹⁵⁶ While operating at an earlier stage than the developer-based engagement discussed in this Note, the Maine case study represents a successful outcome for all parties that was driven by community groups’ collaboration in the decision-making process that can still be applied to the developer process.

Similarly, an offshore wind study in New England discussed the importance of parties collaborating to identify community benefits, as opposed

149. *Id.*

150. Freeman et al., *supra* note 146, at 5.

151. Morgan Gopnik et al., *Coming to the Table: Early Stakeholder Engagement in Marine Spatial Planning* g, 36 MARINE POL’Y 1139, 1148 (2012).

152. Tara Hooper et al., *Perceptions of Fishers and Developers on the Co-Location of Offshore Wind Farms and Decapod Fisheries in the UK*, 61 MARINE POL’Y 16, 21 (2015).

153. Brunbauer et al., *supra* note 144, at 2.

154. ROSA GONZÁLEZ, *THE SPECTRUM OF COMMUNITY ENGAGEMENT TO OWNERSHIP* 2 (2019).

155. *Id.*

156. Kashwan & Lee, *supra* note 61.

to only responding to government information concerning them.¹⁵⁷ The developer of that project, Deepwater Wind, paid for a consultant to represent the local town's interests in conversations with the developer and hired a local liaison to facilitate engagement meetings.¹⁵⁸ These actions resulted in "locally-relevant community benefits" that played "an important role" in project success such as fiber optic installation and other town infrastructure improvements.¹⁵⁹

Stakeholder collaboration focusing on anticipating and defining future actions, rather than mere informational engagement, has gained traction within the larger energy justice literature because it allows for more stakeholder input into actual decision making.¹⁶⁰ Put one way, engagement activities should ensure that "all stakeholders are central to the participation process and that none are neglected nor presumed."¹⁶¹ These examples also show the importance of access to traditional power structures in effective community collaboration.

Third, effective stakeholder engagement actively incorporates and values the local knowledge of affected communities. A literature review on stakeholder participation in environmental management found that "a combination of local and scientific knowledge may empower local communities to monitor and manage environmental change easily and accurately."¹⁶² Drawing on interviews from terrestrial planning stakeholders in the UK, one report found that stakeholder subjectivity needed to be taken seriously—"valued for its enrichment of debate"—and not simply acknowledged and then ignored in order to be effective.¹⁶³ And specific to offshore wind in the United States, stakeholders interviewed in New England emphasized "the importance of the developers learning about local knowledge, values and priorities."¹⁶⁴ For example, developers traveled to the lease area and asked fishermen to "rank their fishing activity effort around the island in order to identify a site of least impact for wind turbines."¹⁶⁵ Particularized engagement is especially important in the offshore space as local demographics and needs can vary greatly; the concerns

157. Sarah C. Klain et al., *Will Communities "Open-Up" to Offshore Wind? Lessons Learned from New England Islands in the United States*, 34 ENERGY RSCH. & SOC. SCI. 13, 22 (2017).

158. *Id.* at 17.

159. *Id.*

160. See, e.g., Olivier Berthod et al., *The Rise and Fall of Energy Democracy: 5 Cases of Collaborative Governance in Energy Systems*, 71 ENV'T'L MGMT. 551, 561-62 (2023); Joseph Dwyer & David Bidwell, *Chains of Trust: Energy Justice, Public Engagement, and the First Offshore Wind Farm in the United States*, 47 ENERGY RSCH. & SOC. SCI. 166, 167 (2019); Kashwan & Lee, *supra* note 61.

161. Heather Ritchie & Geraint Ellis, 'A System that Works for the Sea'? *Exploring Stakeholder Engagement in Marine Spatial Planning*, 53 J. ENV'T'L PLAN. & MGMT. 1, 10-11 (2010).

162. Mark S. Reed, *Stakeholder Participation for Environmental Management: A Literature Review*, 141 BIO. CONSERVATION 2417, 2425 (2008).

163. Ritchie & Ellis, *supra* note 161, at 11 ("[T]he subjectivity that stakeholders bring to the process needs to be valued for its enrichment of debate, despite the fact that it may give rise to frustrations and awkward questions for those driving the policy process.").

164. Klain et al., *supra* note 157, at 20.

165. *Id.* at 18.

and values espoused by seasonal residents of Martha's Vineyard¹⁶⁶ differ from those of tribal fishers in Washington.¹⁶⁷

In sum, when done well, community engagement in offshore wind can increase public support for projects and improve developer decision making.¹⁶⁸

2. Environmental Justice and Engagement

As many proposed offshore wind projects intersect with environmental justice communities, those groups' concerns are central to project success.¹⁶⁹ Research underscores that effective engagement in these communities relies on some of the same principles identified in the broader stakeholder engagement literature above: early collaboration, meaningful dialogue, and the integration of local knowledge. However, environmental justice groups also emphasize the importance of community agency in shaping project outcomes, rather than simply receiving benefits as a form of compensation.¹⁷⁰

A seminal paper on the subject, *Acceptance, Acceptability and Environmental Justice: The Role of Community Benefits in Wind Energy Development*, details some key considerations of engaging with environmental justice groups.¹⁷¹ The paper challenges the assumption that community benefits directly lead to project acceptance, with the authors focusing on communities' ability to influence projects as more important.¹⁷² A more recent report, *Offshore Wind: A Path Forward* published by Brightline Defense, emphasizes the need for community-driven advocacy that is supported by a fair process.¹⁷³ The authors note that "developer-initiated discussions" have the potential to lead to community benefits, citing the Castle Wind Community Benefits Agreement (CBA) that was negotiated between parties for over three years.¹⁷⁴ These sources align with the broader scholarship, detailed below, emphasizing that effective engagement must prioritize inclusive decision-making processes alongside tangible economic or infrastructural benefits.

166. The Vineyard Gazette, *supra* note 5.

167. See, e.g., Melissa Santos, *Scoop: Washington Tribes Seek to Halt Offshore Wind Farm Development*, AXIOS (July 26, 2024), <https://www.axios.com/local/seattle/2024/07/26/wind-farm-offshore-quinault-hoh-tribe>.

168. See Brunbauer et al., *supra* note 144, at 2; Klain et al., *supra* note 157, at 23; Gopnik et al., *supra* note 151, at 1148.

169. Roman Battaglia, *Tribes Oppose Federal Offshore Wind Projects in Oregon and California*, OPB (Mar. 23, 2024), <https://www.opb.org/article/2024/03/23/tribes-oppose-federal-wind-projects-oregon-california>; see also UPROSE ET AL., PRINCIPLES FOR A JUST TRANSITION IN OFFSHORE WIND ENERGY 1-3.

170. GONZÁLEZ, *supra* note 154, at 9.

171. Richard Cowell et al., *Acceptance, Acceptability and Environmental Justice: The Role of Community Benefits in Wind Energy Development*, 54 J. ENV'T PLAN. & MGMT. 539, 539 (2011).

172. *Id.*

173. BRIGHTLINE DEFENSE, A PATH FORWARD: EMPOWERING COMMUNITIES IN PACIFIC OFFSHORE WIND DEVELOPMENT 9 (2023).

174. *Id.* at 11.

As in the general literature about environmental justice outreach, early stakeholder engagement in offshore wind projects is essential for fostering community acceptance. Effective stakeholder involvement can mitigate local opposition by integrating community concerns into project planning and decision-making processes.¹⁷⁵ Prior studies have highlighted the necessity for comprehensive engagement strategies that inform local residents about the benefits and potential environmental impacts of offshore wind projects, thereby empowering them to participate meaningfully.¹⁷⁶

Tribal governments and organizations have raised concerns about the ecological effects of project implementation. For example, offshore wind farms can disrupt marine ecosystems, affecting local fishing industries and traditional ecological practices.¹⁷⁷ Engaging local communities in assessing these environmental concerns is imperative for developers to understand not only the impact on the environment but also the concerns of tribal communities. For example, the Yurok Tribal Council, overseeing areas around a proposed offshore wind development in California, opposed the project because of “potential risks to the interlinked ecosystem extending from the deep ocean to the headwaters of the Klamath River.”¹⁷⁸ To avoid cases like this where local communities oppose projects due to underexamined ecological risks, this strategic planning must incorporate community input regarding the ecological value of specific areas in order to align the projects with local environmental priorities.

Equitable benefit distribution is another critical element of environmental justice in offshore wind development. The concept of “community benefits” encompasses both tangible financial rewards and non-material enhancements, such as job training and local infrastructure improvements.¹⁷⁹ Research conducted in the U.K. found that community benefit programs aimed at providing financial gains or infrastructure improvements can enhance local support for offshore wind initiatives.¹⁸⁰ These programs can serve as a form of redistribution of benefits that often accompany large-scale renewable projects (or traditional infrastructure projects). Notably, BOEM has recognized the importance of community benefits in both its published guidance and lease structures.¹⁸¹ As expressed by Cowell et al., such benefits are not merely

175. Cowell et al., *supra* note 171, at 552-54.

176. *Id.*; John Glasson, *Community Benefits and UK Offshore Wind Farms: Evolving Convergence in a Divergent Practice*, 22 J. ENV'T ASSESSMENT POL'Y & MGMT. 1, 4-12(2021).

177. Helen Bailey et al., *Assessing Environmental Impacts of Offshore Wind Farms: Lessons Learned and Recommendations for the Future*, 10 AQUATIC BIOSYSTEMS 1, 1-2 (2014).

178. *Yurok Tribal Council Votes to Formally Oppose Floating Offshore Wind Energy Projects Along the North Coast*, LOST COAST OUTPOST (Mar. 8, 2024), <https://lostcoastoutpost.com/2024/mar/8/yurok-tribal-council-votes-formally-oppose-local-f>.

179. Cowell et al., *supra* note 171, at 548.

180. Glasson, *supra* note 176, at 12.

181. *See, e.g.*, Pacific Wind Lease Sale 1 (PACW-1) for Commercial Leasing for Wind Power on the Outer Continental Shelf in California-Proposed Sale Notice, 87 Fed. Reg. 32443, 32447-51 (May 31, 2022) (creating auction credit for signed community benefits agreement).

compensation but also crucial for fostering an equitable transition to renewable energy sources.¹⁸²

A report from the National Renewable Energy Laboratory advocates a similar framework, where disadvantaged groups could shape the development of the industry provision of community-specific benefits.¹⁸³ The report highlights specific actions such as providing “diverse benefits,” “transparency,” and understanding “community context” as pivotal for working with energy justice groups.¹⁸⁴ However, challenges remain. A U.K.-based study found that community benefit schemes in offshore wind projects often lack inclusivity, particularly in defining the relevant beneficiaries.¹⁸⁵

Ultimately, the literature suggests that achieving environmental justice in offshore wind development requires a sustained commitment to community participation throughout a project’s lifecycle. Effective engagement strategies should not only mitigate harm but also empower communities by integrating their priorities into decision-making processes.

3. *Community Engagement Gone Wrong*

The literature also highlights the shortcomings and inadequacies of community engagement strategies often implemented by government agencies. Unsurprisingly, the attributes of ineffective engagement are often the opposite of those seen in effective cases. Stakeholders in a participatory process feel undervalued when developers or policymakers fail to take public participation seriously, discount their opinions, or prioritize the opinions of “experts” like scientists over theirs.¹⁸⁶ One literature review of stakeholder engagement within the industry summarized the issue: “inadequate engagement that is viewed as ‘checking the box’ or tokenism” can result in “project failures, diminished trust, strong opposition, or costly, drawn-out processes.”¹⁸⁷

Unfortunately, government agencies currently use participatory methods and procedures that tend to be reactive, top-down, and one-way.¹⁸⁸ Scholars and communities have called out these practices as superficial, undermining trust and intensifying opposition. The seminal paper on public participation in government processes, *Reframing Public Participation: Strategies for the 21st Century* by Judith Innes and David Booher, found that “legally required methods of public

182. Cowell et al., *supra* note 171, at 554.

183. NAT’L RENEWABLE ENERGY LAB’Y, TP-5000-84710, A SUPPLY CHAIN ROAD MAP FOR OFFSHORE WIND ENERGY IN THE UNITED STATES xix (2023).

184. *Id.*

185. Glasson, *supra* note 176, at 9.

186. Jessica Glicken, *Getting Stakeholder Participation ‘Right’: A Discussion of Participatory Processes and Possible Pitfalls*, 3 ENV’T’L SCI. & POL’Y 305, 307-08 (2000).

187. Deborah J. Rose & Mikaela C. Freeman, *Stakeholder Engagement for Marine Renewable Energy*, in 2024 STATE OF THE SCIENCE REPORT 145 (2024).

188. Judith E. Innes & David E. Booher, *Reframing Public Participation: Strategies for the 21st Century*, 5 PLAN. THEORY & PRAC. 419, 430 (2004).

participation in government decision making in the U.S.—public hearings, review and comment procedures in particular—do not work.”¹⁸⁹

Within the offshore industry, developers and agencies often rely on less impactful strategies like comment periods, open houses, and focus groups to engage with communities, for example, in advance of the NEPA process.¹⁹⁰ As described in the literature, these methods are largely focused on informing communities, rather than fostering genuine collaboration.¹⁹¹ Such approaches stand in stark contrast to the engagement model presented in the best practices literature, which advocates for a deeper, more interactive exchange of ideas and a stronger partnership between all parties involved.

B. BOEM Strategies

Perhaps recognizing the challenges of current participatory methods, BOEM has previously taken steps to improve developer engagement with communities. Through its power to create lease stipulations, under the Biden administration the agency introduced a set of regulations for how developers must engage with stakeholders and report their interactions.¹⁹² Policies fell into two categories: (1) mandatory actions that developers must take to engage with communities, and (2) incentives offered to developers that stimulate deeper collaboration with affected communities.

1. Sticks: Reporting Requirements and Other Stipulations

Starting in 2022, BOEM included stricter community engagement stipulations within its lease agreements.¹⁹³ All Final Sale Notices required the winning lessee to submit semiannual progress reports and “regular[ly] engage[]” with tribes and other communities and organizations affected by activities in the lease areas.¹⁹⁴ The lessee must “minimize linguistic, technological, cultural, capacity, or other obstacles.”¹⁹⁵ However, the Final Sale Notice failed to provide any more specific strategies, agreements, or requirements. And the actual

189. *Id.* at 419 (“[Government strategies] do not achieve genuine participation in planning or other decisions; they do not satisfy members of the public that they are being heard; they seldom can be said to improve the decisions that agencies and public officials make; and they do not incorporate a broad spectrum of the public.”).

190. Brunbauer et al., *supra* note 144, at 2.

191. *Id.*

192. U.S. DEP’T OF THE INTERIOR, COMMERCIAL LEASE OF SUBMERGED LANDS FOR RENEWABLE ENERGY DEVELOPMENT ON THE OUTER CONTINENTAL SHELF 1 (2016).

193. Previous leases did not include requirements related to community or stakeholder engagement. *See, e.g.*, Atlantic Wind Lease Sale 4 (ATLW4) Commercial Leasing for Wind Power on the Outer Continental Shelf Offshore Massachusetts-Final Sale Notice; MMAA104000, 79 Fed. Reg. 70545, 70545-55 (Nov. 26, 2014); *see also* WALKER & JACOBSON, *supra* note 83, at 18-19 (outlining the lease stipulations included in every auction lease).

194. PACW-1 for Commercial Leasing for Wind Power on the OCS in CA-FSN, *supra* note 82, at 64097.

195. *Id.*

commercial leases did not provide more specifics on how to engage with affected communities that were not fisheries or tribes.¹⁹⁶ The leases merely required that lessees “will make reasonable efforts to implement the project in a manner that minimizes, mitigates, and/or redresses the project’s adverse effects, if any, on tribes and parties.”¹⁹⁷ Additionally, the leases did not define or provide examples of what “reasonable efforts” means.

Another standard BOEM lease stipulation seen in the Biden administration mandated the submission of three separate communication plans: one for government agencies, another for fisheries, and a third for tribes.¹⁹⁸ Submitted plans include communication objectives, methods, and timelines, as well as the identification of facilitators and representatives responsible for outreach.¹⁹⁹ The leases provide extensive details on how lessees should communicate with these groups and what specific actions are required.²⁰⁰ For example, the Tribal Communication Plan must include “detailed information and protocols for regular engagement,” such as the types and frequency of meetings and the specific methods for disseminating information.²⁰¹ These stipulations are some of the sticks that currently inform developer communications and actions throughout the BOEM leasing process.

2. Carrots: Credits for Collaboration

In addition to implementing strict requirements, BOEM has also experimented with incentivizing community engagement in its offshore projects. Previous auctions have used auction credits (i.e., a cash discount on bids) to incentivize developers to provide benefits—like cash payments, employment programs, and supply-chain guarantees—to local communities.²⁰² These strategies are more varied than the requirements explained above; lease stipulations are generally standardized across auction leases, while the credit incentives change with every auction.

BOEM has introduced a CBA scheme as an incentive for developers.²⁰³ CBAs have traditionally been used in other development contexts, such as

196. See, e.g., U.S. DEP’T OF THE INTERIOR, *supra* note 192, at C-5.

197. *Id.*

198. FSN for Commercial Leasing for Wind Power Development in the GOMW-1, *supra* note 11, at 47177.

199. ØRSTED, FISHERIES COMMUNICATION AND OUTREACH PLAN 1-9 (2023).

200. See U.S. DEP’T OF THE INTERIOR, *supra* note 192, at C-5.

201. *Id.*

202. PACW-1 for Commercial Leasing for Wind Power on the OCS in CA-FSN, *supra* note 82, at 64094.

203. *Biden-Harris Administration Announces Winners of California Offshore Wind Energy Auction*, U.S. DEP’T OF THE INTERIOR (Dec. 7, 2022), <https://www.doi.gov/pressreleases/biden-harris-administration-announces-winners-california-offshore-wind-energy-auction>.

mixed-use real estate,²⁰⁴ sports venues,²⁰⁵ oil and gas,²⁰⁶ and infrastructure projects.²⁰⁷ These legally binding contracts between a developer and a community group outline what benefits the community will receive through development.²⁰⁸ In exchange, communities often pledge support for the project.²⁰⁹ For instance, a CBA for an offshore wind project in New England resulted in over \$20 million in payments to a township in exchange for not opposing local approvals or permits and allowing easements for construction.²¹⁰ Other CBAs negotiate more specific benefits. A negotiated (but unexecuted), CBA from California guaranteed the hiring of local workers, the establishment of training programs, creation of a communications plan, and a promise to mitigate harm to fishing areas.²¹¹ By requiring negotiation and creating an agreement document, CBAs require substantial collaboration and engagement between developers and communities.

BOEM's CBA incentive marks a change from the stick-based policy instruments that the agency uses, which focus on requirements for identifying and reporting to communities. However, it is unclear whether BOEM intends to use this type of incentivized collaboration strategy in the future. The final leases of the Biden administration eliminated the CBA credit scheme and replaced it with credits for directly donating to mitigation funds or workforce development programs.²¹²

Specifically, the 2023 Gulf Coast and 2024 Atlantic Coast auctions did not include CBA credits and instead offered just two bidding credits related to fisheries mitigation and workforce development.²¹³ Bidders received a 10 percent credit on their cash bid for donating to an existing or creating a new fishery mitigation fund.²¹⁴ The fund must help "mitigate potential negative impacts to commercial and for-hire recreational fisheries" caused by OCS

204. HOLLYWOOD & VINE MIXED-USE DEVELOPMENT PROJECT, GATEHOUSE HOLLYWOOD COMMUNITY BENEFITS AGREEMENT 1-11 (2004).

205. LAS VEGAS STADIUM AUTH., COMMUNITY BENEFITS AGREEMENT 1-17 (2024).

206. CITY OF SALEM, MASS., COMMUNITY BENEFITS AGREEMENT (2014).

207. *Energy Project Benefits Agreement Database*, CA. FORWARD, <https://projectbenefits.cafwd.org> (last visited Oct. 24, 2025).

208. *Community Benefits Agreements: Basics and Benefits*, KARP STRATEGIES, <https://www.karpstrategies.com/post/community-benefits-agreements-basics-and-benefits> (last visited Nov. 15, 2024).

209. LOUISE BEDSWORTH & KATHERINE HOFF, OFFSHORE WIND & COMMUNITY BENEFITS AGREEMENTS IN CALIFORNIA 8 (2024).

210. SOUTH FORK WIND LLC, HOST COMMUNITY AGREEMENT 4-5 (2021), <https://hamptonny.gov/DocumentCenter/View/8493/Host-Community-Agreement---South-Fork-Wind-LLC?bidId=>.

211. CASTLE WIND LLC & CITY OF MORRO BAY, COMMUNITY BENEFITS AGREEMENT: CASTLE WIND MORRO BAY OFFSHORE WIND FARM PROJECT 3-4 (2018).

212. *See, e.g.*, FSN for Commercial Leasing for Wind Power Development in the GOMW-1, *supra* note 11, at 47173-87 (CBA credit scheme eliminated from lease structure).

213. *Id.* at 47181-84.

214. *Id.* at 47181-83.

development.²¹⁵ Additionally, developers received a 20 percent bid credit for “supporting workforce training programs for the offshore wind industry or developing a domestic supply chain for the offshore wind industry.”²¹⁶ Both credits required developers to commit an equal dollar amount to the programs as that of the credit they received. The 2024 Atlantic Coast lease auction utilized two bidding credits: 12.5 percent for a fisheries mitigation fund and 12.5 percent for supporting workforce training programs or supply chain development.²¹⁷

These recent credits still represent a shift towards providing benefits to affected communities, but they remove the responsibility of engagement, let alone collaboration, from the lessees. To understand how these strategies manifest in real-world applications, the 2022 California lease auction provides a revealing example of the strengths and limitations of BOEM’s approach.

3. Case Study: California Lease Auction

The 2022 California lease auction offers an instructive case study of BOEM’s engagement strategies in practice, as well as their limitations. The lease included standard stipulations requiring communications plans for tribes, government agencies, and fisheries, along with semiannual progress reports and measures to minimize cultural impacts.²¹⁸ It also included requirements for developers to minimize or redress the project’s potential adverse effects on tribes and other parties.²¹⁹ Perhaps most significantly, it created a CBA credit scheme where developers could receive up to a 10 percent credit if they negotiated CBAs with community groups.²²⁰ Taken together, the lease stipulations represent BOEM’s most stringent set of community engagement requirements to date.

The California lease auction created two 5 percent credit incentives related to CBAs. First, developers received a 5 percent credit if they signed, or committed to sign, a “Lease Area Use CBA” with a community group whose “geographic space” or “resources harvested from that geographic space” would be impacted by development.²²¹ Additionally, BOEM created a second 5 percent credit for a “General CBA,” requiring developers to sign or commit to signing agreements with groups affected by the “potential impacts on the . . . environment (such as impacts on visual or cultural resources) from development activities.”²²² Thus, developers could receive up to 10 percent of their auction cash bid in credit (over \$10 million for each lease) from the government by

215. *Id.* at 47181.

216. *Id.*

217. Atlantic Wind Lease Sale 10 for Commercial Leasing for Wind Power Development on the U.S. Central Atlantic Outer Continental Shelf-Final Sale Notice, 89 Fed. Reg. at 54516-17.

218. PACW-1 for Commercial Leasing for Wind Power on the OCS in CA-FSN, *supra* note 82, at 64097.

219. *Id.* at 64098.

220. *Id.* at 64102.

221. *Id.* at 64104.

222. *Id.* at 64105.

negotiating CBAs.²²³ And they did: Four out of the five auction winners negotiated and signed a CBA with a local community group.²²⁴

But the CBA credit scheme in the California auction created issues. Firstly, BOEM encouraged prospective developers to enter into a CBA, but only gave them a credit if they had a CBA *and* they won the auction.²²⁵ This structure led to a scenario in which community groups engaged in good-faith negotiations with developers who ultimately lost the auction.²²⁶ A local community group negotiated and signed a Lease Area Use CBA with a developer who ended up losing, and the winning developer did not execute the same agreement.²²⁷ As a result, these agreements became void, leaving groups disillusioned and mistrustful.²²⁸ Meanwhile, developers who bid higher amounts—with or without CBAs—secured leases, bypassing the collaborative agreements negotiated by competing bidders.²²⁹ Consequently, the relationship between the community groups and the winning project developer became strained. In February 2024, the Morro Bay Commercial Fishermen’s Organization and the Port San Luis Commercial Fishermen Association, two groups who negotiated the CBA with the losing developer, sued all three Morro Bay lease winners and various California agencies challenging site survey approvals.²³⁰ The lawsuit alleged that the winning developers bypassed the collaborative agreements the groups previously had.²³¹ Press releases in the wake of the lawsuit explained that the groups were satisfied with the CBA initially agreed upon, but not with the winning developer: “The Federal Government awards the leases to the ‘highest bidders,’ not necessarily to companies with the best mitigation and monitoring commitments.”²³²

223. *Id.* at 64104-05.

224. KATHERINE HOFF & KATIE SEGAL, *STAKEHOLDER ENGAGEMENT IN CALIFORNIA OFFSHORE WIND* (2023).

225. PACW-1 for Commercial Leasing for Wind Power on the OCS in CA-FSN, *supra* note 82, at 64109.

226. *See* CASTLE WIND LLC & CITY OF MORRO BAY, *supra* note 211, at 4-5.

227. KATHERINE HOFF & LOUISE BEDSWORTH, *OFFSHORE WIND & COMMUNITY BENEFITS AGREEMENTS IN CALIFORNIA* 26 (2024), https://www.law.berkeley.edu/wp-content/uploads/2024/04/Offshore-Wind-CBAs-in-CA-Report_CLEE.pdf.

228. *See, e.g.*, Carli Stewart, *Fishermen File Lawsuit Over Morro Bay Wind Farm*, NATIONAL FISHERMAN (Oct. 16, 2024), <https://www.nationalfisherman.com/fishermen-lawsuit-over-morro-bay-wind-farm>.

229. *See id.*

230. Karen Velie, *Central Coast Fishermen Sue California Coastal Commission Over Wind Energy*, CAL COAST NEWS (Oct. 11, 2024), <https://calcoastnews.com/2024/10/central-coast-fishermen-sue-california-coastal-commission-over-wind-energy>.

231. Stewart, *supra* note 228.

232. Chris Arechaederra, *Why Morro Bay and Port San Luis Fisherman Have Asked Local Courts For Protection of Commercial and Recreational Fishing and Biological Productivity from Industrial Scale Offshore Wind Developers*, COASTAL CONSERVATION ASSOCIATION CALIFORNIA (Mar. 20, 2024), <https://ccacalifornia.org/why-morro-bay-and-port-san-luis-fisherman-have-asked-local-courts-for-protection-of-commercial-and-recreational-fishing-and-biological-productivity-from-industrial-scale-offshore-wind-developers>.

BOEM's incentive scheme created conflict in this case, the opposite of derisking the project as intended. This outcome can be partially explained by the agency's attempt to shoehorn a strategy that has worked in other contexts, CBAs, into its offshore wind auctions. BOEM should carefully consider its design of these incentive structures, and the agency should account for how the offshore industry differs from other infrastructure projects. Understanding the differences between the offshore wind space and other industries is critical to crafting engagement strategies that effectively address the distinctive needs of stakeholders in offshore wind projects.

C. Offshore Wind is Different

As the California lease auction exemplifies, certain community engagement strategies that work in other contexts may be less successful in the offshore wind industry. Offshore wind presents unique challenges that are not found in traditional infrastructure industries. This Part outlines two unique characteristics of offshore wind—long development timelines and vast project territory sizes—that complicate the application of traditional community engagement practices that BOEM has used.

1. Longer Timelines

Simply put, offshore wind projects require significantly longer development timelines than other types of renewable energy. A worldwide analysis of over twelve thousand renewables projects found that offshore wind lead times were significantly longer than solar, onshore wind, biomass, and hydro projects.²³³ In OECD countries, the average commissioning time alone was 5.4 years for offshore wind, compared to 2.7 and 2.3 for onshore wind and solar projects, respectively.²³⁴ The United States had average commissioning times of under two years for both solar and onshore wind projects completed between 2000 and 2022.²³⁵ While insufficient offshore wind projects have been completed to report U.S. data, BOEM's published estimates predict a project length of over ten years.²³⁶ Comments from scoping meetings held by BOEM officials in California estimated project lengths of twelve to fifteen years.²³⁷

These extended timelines are compounded by political uncertainties. Offshore wind remains more controversial than solar or onshore wind, particularly at the federal level. The Trump administration's executive order

233. Anurag Gumber et al., *A Global Analysis of Renewable Energy Project Commissioning Timelines*, 358 APPLIED ENERGY 1, 6-7 (2024).

234. *Id.* at 7.

235. *Id.* at 23.

236. *The Renewable Energy Process: Leasing to Operations*, *supra* note 77.

237. Samantha Herrera, *Offshore Wind Farm Development Could Take Up to 15 Years*, NEW TIMES SAN LUIS OBISPO (Feb. 8, 2024), <https://www.newtimeslo.com/news/offshore-wind-farm-development-could-take-up-to-15-years-14839526>.

halting future leases has already increased the expected lead times for projects while putting future leases on hold indefinitely.²³⁸ While solar project approvals seem to have hit a critical mass in terms of infrastructure, funding, and public sentiment that will continue regardless of administration,²³⁹ offshore wind is more vulnerable. RWE and Siemens, the second largest developer of offshore wind and the largest turbine manufacturer in the world, respectively, announced expectations of major project delays due to changes in administration support for the industry.²⁴⁰ If these delays materialize, the average lead time for projects would extend past the already long estimate of ten years from BOEM.

These prolonged timelines raise issues for certain types of engagement strategies. For one, a negotiated CBA signed at the time of a lease auction may be less relevant to the community when construction on the project may not commence for five or more years; the needs of community groups will likely change during this time. CBAs for developing sports arenas and onshore solar farms concern projects with both shorter and relatively fixed timelines and expected completion dates; offshore wind projects do not.²⁴¹ Second, one-time engagement instruments like fishery mitigation payments are less impactful when development occurs over many years, especially if delays occur. Community needs may change over the course of the project, and initial compensation can be inadequate if projects overrun expected timelines, potentially burdening communities further. Longer timelines emphasize the need for ongoing collaboration and planning between parties.

2. Territory Size and Scope

The sheer scale of the project areas also differentiates offshore wind from other renewables. The combined size of the five auctioned California sites is over

238. Temporary Withdrawal of All Areas on the Outer Continental Shelf from Offshore Wind Leasing and Review of the Federal Government's Leasing and Permitting Practices for Wind Projects, 90 Fed. Reg. 8363, 8363-64 (Jan. 29, 2025).

239. Mark Shenk, *U.S. Solar Set to Surge Long Past Trump-Harris Election*, REUTERS (Sept. 19, 2024), <https://www.reuters.com/business/energy/us-solar-set-surge-long-past-trump-harris-election-2024-09-19>; Richard Valdmanis, *Trump Return Likely to Slow, Not Stop, U.S. Clean-Energy Boom*, REUTERS (Nov. 6, 2024), <https://www.reuters.com/business/energy/trump-return-will-slow-not-stop-us-clean-energy-boom-2024-11-06>; Matt Simon, *He'll Try, but Trump Can't Stop the Clean Energy Revolution*, GRIST (Nov. 11, 2024), <https://grist.org/economics/hell-try-but-trump-cant-stop-the-clean-energy-revolution>.

240. Christoph Stietz & Vera Eckert, *Siemens Energy, RWE Warn of Trump Fallout in U.S. Offshore Wind Sector*, REUTERS (Nov. 13, 2024), <https://www.reuters.com/sustainability/climate-energy/siemens-energy-rwe-warn-trump-fallout-us-offshore-wind-sector-2024-11-13>.

241. See, e.g., Colin A. Young, *New Deadline Means More Offshore Wind Delays*, NEW BEDFORD LIGHT (Jan. 18, 2024), <https://newbedfordlight.org/new-deadline-means-more-offshore-wind-delays>; Michael P. Norton, *Delay Possible in Offshore Wind Timeline*, HERALD NEWS (Apr. 5, 2018), <https://www.heraldnews.com/story/news/state/2018/04/05/delay-possible-in-offshore-wind/12814920007>.

360,000 acres.²⁴² While turbines and underwater cables will occupy only portions of these zones, the infrastructure will be distributed throughout the entirety of the lease zone.²⁴³ For scale, the largest solar farm in the United States as of December 2024 is 4,700 acres.²⁴⁴

And the overall acreage of the actual lease area does not entirely encapsulate the extent of the project when it comes to offshore wind; the technology's land impact and footprint is significant, too. In California, developers require ports to build and assemble the turbines²⁴⁵ and onshore transmission infrastructure to connect the energy to the grid.²⁴⁶ In fact, the full scope of the territory impacted is still unclear for most potential BOEM lease sites. Developers frequently lack detailed plans for connecting transmission lines, identifying port locations, or specifying the onshore infrastructure required.²⁴⁷ Yet, in the case of the California CBA auction credit, BOEM incentivized developers to negotiate a binding agreement with communities before such details were determined.²⁴⁸

Community representatives have raised concerns about utilizing standard measures like CBAs when the territory impact is so large and unknown. For example, fishing representatives shared that the credit model used in the California auction would not be effective because members of the fishing community come from all over the state—not just in the Humboldt or Morro Bay areas.²⁴⁹ The representatives noted that the CBA model “might exclude those who are not based in the region where a wind project is located” and advocated for an alternative model that ensured benefits regardless of location.²⁵⁰

242. BUREAU OF OCEAN ENERGY MGMT., CALIFORNIA LEASE AREAS (2024), https://www.boem.gov/sites/default/files/images/CA%20PSN%202022_05_20%20Updated%202024_10_01.jpg. The correct footprint to use when comparing the land intensity of wind projects to other sources of energy is debated. Some estimates use the footprint area (the land that is directly covered by turbines). Other estimates use the spacing area, which is the entire area within the perimeter of a project site.

243. See U.S. DEP'T OF THE INTERIOR, OFFSHORE WIND SUBMARINE CABLE SPACING GUIDANCE 7 (Dec. 2014).

244. Craig Kaiser, *Largest Solar Farms in the U.S.*, LANDAPP (Oct. 11, 2024), <https://www.landgate.com/news/largest-solar-farms-in-the-us>.

245. Stas Margaronis, *California Ports Gear up to Build Offshore Wind Ports*, AM. J. TRANSP. (May 17, 2024), <https://www.ajot.com/insights/full/ai-california-ports-gear-up-to-build-offshore-wind-ports>.

246. *Offshore Wind Big Part of ISO's 2023-2024 Transmission Plan*, CALIFORNIA ISO (Apr. 2, 2024), <https://www.caiso.com/about/news/offshore-wind-big-part-of-isos-2023-2024-transmission-plan>.

247. See, e.g., *Efforts Push Forward for California Offshore Wind Despite Uncertainties*, MARITIME EXEC. (Nov. 14, 2024), <https://maritime-executive.com/article/efforts-push-forward-for-california-offshore-wind-despite-uncertainties>.

248. See PACW-1 for Commercial Leasing for Wind Power on the OCS in CA-FSN, *supra* note 82, at 64097-98.

249. HOFF & SEGAL, *supra* note 224, at 11-12.

250. *Id.*

Those same concerns can be extended to fishery mitigation funds and workforce development plans. Without a clear project scope, certain geographic communities or industries are at risk of exclusion from these programs. Furthermore, expecting communities and developers to engage in repeated negotiations is demanding and often infeasible due to the significant time and effort required.

3. Overall Lessons

Taken together, these distinctive attributes of offshore wind lend support for creating a new framework for community engagement and collaboration. Strategies used in other contexts to negotiate benefits before construction may be less helpful, as the needs of communities, and even the number of communities themselves, may vary greatly over the development timeline. The replacement of a CBA scheme with mandatory payments for workforce development and fisheries in future BOEM leases reflects an acknowledgment of these challenges. But this solution is nearsighted and could fail for the same reasons the CBA scheme did: The long timelines and unknown impact of development make one-time payments less beneficial for communities. Further, these new tactics do nothing to foster long-term relationships and collaboration between parties.

Instead, government agencies and developers should prioritize engagement strategies that promote sustained collaboration over a project's lifecycle. Adaptive, long-term planning tailored to the unique characteristics of offshore wind—its prolonged timelines and vast, unpredictable impacts—is essential for ensuring community support and minimizing conflict. These principles form the foundation of the recommendations outlined in the following Part.

IV. RECOMMENDATIONS

BOEM's recent move to explicitly incorporate community engagement is commendable, but its policy prescription was imperfect and did not lead to comprehensive social derisking. Most of its initiatives required nothing but financial contributions from developers²⁵¹—policies unlikely to create a swell of support from communities where collaboration is desired. And the one incentive scheme that required collaboration, the negotiated CBA, has led to frustration and an ongoing lawsuit.²⁵²

The Trump administration notwithstanding, future administrations' BOEM policies can lead the way on utilizing community engagement as a way to boost project success. The following recommendations represent both short-term and

251. See, e.g., Atlantic Wind Lease Sale 10 for Commercial Leasing for Wind Power Development on the U.S. Central Atlantic Outer Continental Shelf-Final Sale Notice, 89 Fed. Reg. at 54512-13.

252. See Stewart, *supra* note 228.

long-term policies that BOEM can implement through its leasing authority to help socially derisk a project.

A. Short-Term Procedural Changes

Short-term solutions are unlikely to dramatically transform the dynamic between developers and communities. But they can nevertheless help shift conversations toward more effective collaboration. These procedural changes can be implemented quickly by BOEM in future leases and represent policy tweaks that encourage long-term planning between developers and interested parties.

1. Require Collaboration with Long-Term Planning Groups

First, BOEM should prioritize the creation of regional planning groups that involve government agencies, developers, and community groups. A model to emulate is the Regional Wildlife Science Collaborative for Offshore Wind (RWSC), located on the East Coast. The RWSC consists of state departments, federal agencies, offshore wind industry companies, and environmental organizations.²⁵³ The organization is a “coordination hub” for offshore wind and wildlife research that holds meetings and publishes an Integrated Science Plan for the industry and wildlife in the Atlantic Ocean.²⁵⁴ The group coordinates wildlife research between entities and standardizes data collection, research methods, and the communication of findings.²⁵⁵ And the research has led to tangible impact: Avangrid, a leading sustainable energy company, partnered with RWSC to release the Integrated Science Plan.²⁵⁶ The company committed to the “implementation of best practices” outlined in the plan when constructing its Vineyard Wind 1 project, the nation’s first large-scale offshore wind development.²⁵⁷

California recently established a similar regional planning group focused on issues related to fisheries. The group, established by statute, is tasked with “developing a statewide strategy for ensuring that offshore wind energy projects avoid and minimize impacts to ocean fisheries to the maximum extent possible.”²⁵⁸ The group includes representatives from every successful lessee,

253. *Steering Committee*, REG’L WILDLIFE SCI. COLLABORATIVE, <https://rwsc.org/about/steering-committee> (last visited Oct. 17, 2024).

254. *Integrated Science Plan for Offshore Wind, Wildlife, and Habitat in U.S. Atlantic Waters*, REG’L WILDLIFE SCI. COLLABORATIVE (2024), <https://rwsc.org/science-plan>.

255. *Id.*

256. *Avangrid Advances Responsible Offshore Wind Development as Part of Regional Wildlife Science Collaborative*, AVANGRID (Jan. 25, 2024), <https://www.avangrid.com/w/regional-wildlife-science-collaborative>.

257. *Id.*

258. Offshore Wind Energy Projects, S. 286, 2023 Leg., Reg. Sess. (Cal. 2023).

affected tribes, government agencies, fishery associations, and individual fishery experts.²⁵⁹

BOEM should facilitate the creation of similar regional groups in regions that do not have them and expand their scope to address broader issues like workforce development, environmental justice, and economic impacts. In areas with existing groups, BOEM should require lessees to participate in them. For example, New York requires successful lessees to collaborate with the RWSC.²⁶⁰ As explained in Part III, certain attributes of offshore wind make its impact on communities opaque. By emphasizing long-term planning and collaboration, BOEM guarantees that both the developer and the community address future impacts when working together.

Establishing regional long-term planning groups also directly reduces gaps in information and coordination that create friction between developers and communities. Requiring participation in collaborative planning groups would ensure that interested parties identify, study, and address these impacts proactively for all projects across the country. This approach would also help resolve uncertainty related to project timelines and scope inherent to offshore wind because planning groups research and plan over the length of the project, ensuring collaboration with all affected communities that want to engage. The collaborative nature of the long-term planning groups, as exemplified by RWSC's coordinated research, allows for affected communities to wield greater influence in project decisions.

Further, this recommendation represents only a minor investment in time and resources for the developer. The RWSC steering committee and California Fisheries Working Group both only meet quarterly and are both made up of many agency, community, and tribal organizations who share the work of coordinating and researching.²⁶¹

2. *Require a Community Stakeholder Engagement Plan*

Recent BOEM lease stipulations require developers to submit communication plans for government agencies, fisheries, and tribes—but overlook local community groups.²⁶² These engagement plan requirements are

259. CAL. COASTAL COMM'N, CALIFORNIA OFFSHORE WIND AND FISHERIES WORKING GROUP MEMBERS 1-2 (2024).

260. Alison Chase, *First-Ever Regional Offshore Wind and Wildlife Science Plan Released*, NAT. RES. DEF. COUNCIL (Jan. 25, 2024), <https://www.nrdc.org/bio/alison-chase/first-ever-regional-offshore-wind-and-wildlife-science-plan-released>.

261. RWSC ANNUAL WORK PLAN, REG'L WILDLIFE SCI. COLLABORATIVE FOR OFFSHORE WIND 2 (2023) (“Convene regular meetings at least quarterly”); CAL. COASTAL COMM'N, CALIFORNIA OFFSHORE WIND AND FISHERIES WORKING GROUP: BACKGROUND AND CALL FOR NOMINATIONS OF FISHING INDUSTRY REPRESENTATIVES 3 (2023) (“The Working Group is expected to meet approximately quarterly; most of these meetings will be virtual, and up to two meetings will be in-person.”).

262. See, e.g., FSN for Commercial Leasing for Wind Power Development in the GOMW-1, *supra* note 11, at 47177.

not as strict as state equivalents, like NYSERDA's stakeholder engagement plan.²⁶³ NYSERDA lists many more potential stakeholders, including environmental organizations, navigational safety committees, economic and workforce development organizations, labor leaders, tourism operators, training and research institutions, and environmental justice communities or proximate disadvantaged communities.²⁶⁴ BOEM should change its stipulations to require a larger community stakeholder engagement plan and obligate developers to update their plans every year.

Research shows that early and meaningful engagement²⁶⁵ and transparency in information sharing²⁶⁶ lead to better development outcomes. Requiring developers to think about which parties to communicate with is a necessary start to early and transparent communication. BOEM recognizes this need, as it requires such plans for government agencies, fisheries, and tribes. While not sufficient in guaranteeing effective collaboration, requiring a communication plan for community groups is a necessary step to enhancing collaboration. Additionally, the requirement of updating communication plans each year serves as a first step in addressing the issues of long project timelines and unknown project scope. Moreover, this requirement implies that project developers will necessarily add to communication plans to account for newly affected communities as they arise due to changes in project scope.

While the addition of this communication plan results in additional work for developers, it is not onerous. BOEM already requires the creation of three other communication plans for specific communities. Further, while the communication plan requires an initial investment of time and energy, it can increase the efficiency with which developers interact with communities in the future. Having a set of strategies and timelines for communication, as well as specific contact information for different groups, only eases future burdens for developers.

Without a communication plan requirement, BOEM only requires lessees to identify affected groups in its semiannual progress reports.²⁶⁷ But the agency provides no specific strategy or procedure on how these communities should be identified. In this regard, requiring an annually-updated community stakeholder engagement plan helps socially derisk a project by addressing the dangers of surface-level engagement, uncertainty from long project timelines, and unknown scope. By mandating that developers plan a specific engagement strategy each year, BOEM lays the groundwork for more transparent and frequent engagement.

263. N.Y. STATE ENERGY RSCH. & DEV. AUTH., ELEMENTS OF THE STAKEHOLDER ENGAGEMENT PLAN 1-3 (2024).

264. *Id.* at 2.

265. *See, e.g.*, Cronin et al., *supra* note 145, at 7.

266. *See, e.g.*, Dwyer & Bidwell, *supra* note 160, at 174-75.

267. FSN for Commercial Leasing for Wind Power Development in the GOMW-1, *supra* note 11, at 47177.

B. Long-term Creation of a Funded Regional Benefits Group

As outlined throughout this Note, the current treatment of community engagement in the renewables space is often cursory and surface-level, leaving projects vulnerable to opposition. To facilitate a shift from engagement to collaboration—thereby increasing chances of project success—developers and communities need both the motivation and capacity to come together. While financial incentives can encourage participation, local organizations also require technical expertise and capacity-building support to meaningfully engage in complicated planning processes. The offshore wind bureaucratic process is complex.²⁶⁸ Communities require time and funding to fully understand and engage in the process from start to finish. The federal government can drive this capacity building by providing funding and logistical support.

The Center for Law, Energy & the Environment at the University of California, Berkeley School of Law has released a set of policy memoranda related to CBAs and offshore wind in California.²⁶⁹ It identifies several preconditions for successfully negotiating a CBA: technical expertise, legal expertise, and other capacity-building assistance.²⁷⁰ Without these resources, communities are unlikely to achieve meaningful outcomes through CBAs or other negotiated benefits plans.²⁷¹ BOEM can address these challenges by establishing a centralized benefits program that incentivizes long-term partnerships between developers and communities while providing necessary expertise.

Rather than relying on mitigation fees or cash credits for a signed CBA like in the California case study, BOEM should create an auction credit system that rewards developers and communities who participate in a Regional Benefits Management Program. This program would bring together affected parties to collaboratively plan how benefits from offshore wind projects will be distributed. Funds would be earmarked for capacity-building efforts, ensuring that all participants have the expertise and resources necessary to engage in the process effectively. Unlike the current CBA credit model, which encourages agreements with individual groups, this approach would foster broader regional collaboration among multiple entities.

California's Integrated Regional Water Management (IRWM) program offers a compelling model. The IRWM began in 2002 when the California legislature passed the Regional Water Management Planning Act.²⁷² Under the IRWM, local communities receive funding for water infrastructure projects from the state government, but only if they collaborate at a regional level with other

268. Cart, *supra* note 19.

269. UC BERKELEY LAW, CLEE OFFSHORE WIND PAPERS (2024).

270. LOUISE BEDSWORTH ET AL., COMMUNITY BENEFITS POLICY BRIEF TOOLS AND CALIFORNIA CLEAN ENERGY PROJECTS (2024).

271. *Id.*

272. Integrated Regional Water Management Planning Act of 2002, S. 1672 (Cal. 2002).

groups.²⁷³ Thus, all affected communities have an incentive to come together to plan the future of water projects in the region. Local areas develop comprehensive Integrated Regional Water Management Plans that cover issues of water quality, flood protection, watershed management, and habitat restoration, among others.²⁷⁴ Since its inception in 2002, the program has resulted in the successful implementation of over 1,400 water projects, demonstrating the value of incentivized, collaborative planning.²⁷⁵

BOEM should adopt a similar approach by facilitating the creation of Regional Benefits Plans for offshore wind projects. By doing so, BOEM would encourage long-term partnerships between developers and communities, which socially derisk projects. Parties would meet to design a Regional Benefits Plan for offshore wind projects in a specified region. Crucially, developer participants would receive the cash benefits outlined in the Plan only if they actively engaged in the benefits management process and the project was successfully constructed.

While this approach requires an initial investment of time and effort, the long-term gains are substantial. Centralizing benefits negotiations into a single regional body may actually reduce the time and labor required for developers, who would otherwise need to negotiate with multiple individual groups. Furthermore, such a program addresses information asymmetries for communities by involving technical experts and government liaisons to provide consistent, accessible information to all participants. Most importantly, this recommendation directly addresses the social risks that offshore wind projects face. Collaborative planning through a regional benefits group ensures that community voices are not only acknowledged but actively integrated into project outcomes. As outlined in the Best Practices Subpart, a collaborative structure creates a shared sense of ownership among groups, fostering goodwill and increasing public support for offshore wind projects.²⁷⁶ By building trust and aligning incentives, this approach reduces the likelihood of opposition, delays, and cancellations.

Ultimately, this recommendation reframes BOEM's role from a regulatory overseer to a proactive facilitator of collaboration. By supporting long-term planning and capacity building, BOEM can move beyond checklist-style requirements to create a framework where meaningful engagement is not only encouraged but foundational to project success. In this way, the creation of a

273. CAL. NAT. RES. AGENCY, DEP'T OF WATER RES., DIV. OF INTEGRATED REGIONAL WATER MGM'T, 2019 INTEGRATED REGIONAL WATER MANAGEMENT GRANT PROGRAM GUIDELINES; Anna Aljabiry, *2019 Integrated Regional Water Management Grant Program Guidelines* (2022) (noting that eligible projects must "[p]rovide incentives for water agencies throughout each watershed to collaborate in managing the region's water resources and setting regional priorities for water infrastructure").

274. See, e.g., KENNEDY/JENKS CONSULTANTS, SAN FRANCISCO BAY AREA INTEGRATED REGIONAL WATER MANAGEMENT PLAN II (2013).

275. *Integrated Regional Water Management*, CAL. DEP'T OF WATER RES., <https://water.ca.gov/Programs/Integrated-Regional-Water-Management> (last visited Dec. 15, 2024).

276. See *supra* Part III.A.

funded regional benefits group serves as a powerful social derisking tool by fostering trust, aligning incentives, and reducing uncertainty for developers and interested parties alike. Further, the recommendation is still timely; given the expectation of no further leases during the Trump administration, developers and state governments can utilize this system to build community knowledge and trust in the meantime. And if a friendlier federal administration takes office in the future, this recommendation can be utilized in future lease auctions.

CONCLUSION

BOEM's offshore wind lease auctions represent a chance to convert thousands of GW of American energy to renewable sources. Yet, along with various financial and political hurdles, risks posed by community opposition encompass a growing obstacle for offshore wind projects. By intentionally and effectively engaging local communities, developers can comprehensively socially derisk a project, thereby lowering the likelihood of project failure and providing improved benefits for local communities, tribes, fisheries, and environmental groups, among others. However, to effectively socially derisk a project, both developers and government entities must adopt strategies tailored to the unique context of offshore wind development. Because the industry differs from other traditional infrastructure projects due to the vast territorial scopes and long project timelines, the federal government must think critically about how it incentivizes and facilitates early engagement between groups. In the short term, BOEM should require engagement plans and mandate that developers participate in regional planning groups aimed at researching project effects on different communities. In the long term, BOEM should help facilitate capacity building for affected communities by using an auction credit to bring interested parties together through a regional benefits group to collectively negotiate project support and benefits. Together, these recommendations can help jumpstart the nascent offshore wind industry in the United States by mitigating the growing obstacle of social risk.

We welcome responses to this Note. If you are interested in submitting a response for our online journal, *Ecology Law Currents*, please contact cse.elq@law.berkeley.edu. Responses to articles may be viewed at our website, <http://www.ecologylawquarterly.org>.