

**REVIEWING MECHANISMS FOR STAKEHOLDER ENGAGEMENT WITH LOCAL
GOVERNMENTS DURING OFFSHORE WIND DEVELOPMENT**

R. Graham Barrett
Master of Environmental Studies
Environmental Sustainability
Spring 2023

Brandon W. Burke, Esq.
Yvette Bordeaux, PhD

Acknowledgments

The author is grateful to readers Brandon W. Burke, Managing Consultant with Ramboll's Offshore Wind Advisory, and Yvette Bordeaux, Ph.D., Director of Professional Programs in Earth & Environmental Science, University of Pennsylvania, for their patience, mentoring, essential input, and assistance with editing. The author is also grateful to the staff of the Business Network for Offshore Wind for their continual assistance and support. This paper benefitted from contact with the following individuals, to whom the author is most appreciative:

Suzanne Flockhart, Lead Commercial Manager Continental Europe, Ørsted

Paul Gallagher, Principal, Gallagher Energy Advisors

Pete Kimchuk, Senior Learning Specialist, University of Pennsylvania Weingarten Center

Sophie Hartfield Lewis, Offshore Project Development Support and Permitting, BP

Madeline Urbish, Head of Government Affairs and Market Strategy – New Jersey, Ørsted

Ewan Walker, Offshore Project Director, Mainstream Renewable Power

The conclusions of the paper are solely the opinion of the author.

ABSTRACT

REVIEWING MECHANISMS FOR STAKEHOLDER ENGAGEMENT WITH LOCAL GOVERNMENTS DURING OFFSHORE WIND DEVELOPMENT

R. Graham Barrett

As new markets open to offshore wind (OSW) development, it is vital that OSW developers have the best possible resources to conduct successful stakeholder engagement activities with the governments of the local communities in proximity to their projects. This report is an examination of the mechanisms provided by national governments to help facilitate stakeholder engagement and cooperation between developers and local governments. The report examines two case studies, one from Scotland, and one from the United States, to show how different nations have approached this issue. In Scotland, the national government's mechanism is a government publication, "Good Practice Principles for Community Benefits from Offshore Renewable Energy Developments", which provides a framework for developers to use when they voluntarily create and offer community benefits packages to local communities. In the United States, the mechanism is the Bureau of Ocean Energy Management's (BOEM) permitting process, which includes two features, the Intergovernmental Renewable Energy Task Forces, and the public comment periods, which provide opportunities for stakeholders to influence developers' plans and the benefits that developers could provide to local communities. By reviewing the stakeholder engagement mechanisms from these two case studies, several of their features stand out and are useful for developers to use in their own stakeholder engagement work. It is recommended that developers begin stakeholder engagement as early as possible, that they voluntarily offer community benefit packages to affected stakeholders, and that they invite local government officials to participate in the process and offer feedback on how projects impact their communities.

Introduction

Within a few years, the United States' contribution to the total global installed capacity of offshore wind (OSW) energy is expected to rise. The Biden Administration aims to develop 30,000 megawatts (MW), or 30 gigawatts (GW), worth of OSW projects off the American coast by 2030, which will be part of a projected global capacity in 2030 of approximately 200 GW of OSW energy (EERE, 2021; The White House, 2022). The United States' ability to meet its 2030 goal though will be influenced by the opening of new OSW markets within the country. Several states are assisting with this by setting state-specific deployment goals to encourage development. Massachusetts is committing to develop 5.6 GW by 2030 and North Carolina wants to develop 2.8 GW by 2030 as well (Christopher et al., 2022). While most of the U.S. OSW development has been focused on East Coast markets, state and federal entities are now moving to open other regions to OSW development. In December 2022, the Bureau of Ocean Energy Management (BOEM) – part of the Department of the Interior – held an OSW lease auction of areas offshore in Northern and Central California representing the first step towards a U.S. West Coast offshore wind market (Lopez, 2022).

Yet even as OSW development becomes a key energy policy item for the United States federal government and other governments around the world, these national governments must remain aware of the local governments in coastal areas in close proximity to OSW projects and will have to manage the impacts of them throughout the projects' lifespan. Developers in turn will have to interact with local governments throughout the years of their projects' existence. It is important then to consider the government and regulatory mechanisms that exist worldwide to help offshore wind developers with stakeholder engagement activities and help them to build and maintain good relations with local governments.

These stakeholder engagement mechanisms can be vital for OSW developers in their efforts to complete their projects. While national and regional governments may set an OSW agenda, it is the local communities that will be more directly and indirectly affected by the implementation of the agenda and the actions of project developers. Regardless of OSW energy's expected climate benefits, these projects are like any other large infrastructure project and will generate several impacts, potentially good or bad, as well as a variety of opinions about the projects and their benefits. Local governments have an obligation to protect their community's best interests from potential negative impacts of infrastructure projects, and they must also advocate for and ensure that their community's input is adequately addressed during development. As such, local governments in coastal areas close to OSW projects have been active in the review and approval of OSW projects in various markets and as a result have gained a degree of influence on the progression of OSW projects.

As OSW projects continue to be developed in both existing and new markets then, it is critical that OSW developers properly interact with local governments and other stakeholders. Stakeholder engagement in renewable energy projects is essential for ensuring project success as these activities can provide context for both project challenges and benefits to affected stakeholders (Haddaway et al., 2017). Well managed stakeholder engagement strategies can influence the acceptability of projects among stakeholders like neighboring municipalities, potentially mitigating stakeholder resistance, and ideally gain the support of local authorities (Efthimiou, 2022). As such, in both American and international OSW markets, OSW developers invest significant time and resources on stakeholder engagement work. Yet as new markets open to OSW development, there remains the possibility that stakeholders, including local governments, will push back against projects. Because stakeholder opposition has the potential to delay or

entirely disrupt projects, it is critical that developers and proponents have as many resources as possible to make engaging with stakeholders easier and mitigate opposing activities.

As such, in addition to industry practices for stakeholder engagement, national governments have been developing stakeholder-engagement mechanisms for the OSW industry. Having these government-provided resources can be beneficial to OSW developers as they can provide context for the regulatory requirements and expectations for developers' interactions with local governments (Thompson, 2022). These tools can range from guidelines for actions that developers can voluntarily perform, to opportunities for stakeholder participation within the permitting process. The mechanisms can be helpful tools for developers to use to improve the likelihood of positive relationships with stakeholder communities.

The first mechanism to be assessed is from Scotland, selected to demonstrate a mechanism from an international, older, and more established OSW market. Scotland was chosen to demonstrate an engagement mechanism that is based on a developer's voluntary usage of such a tool. Likewise, to show how one avenue of OSW stakeholder engagement works in the United States, the resources used by BOEM will be discussed. This will also demonstrate how aspects of a government-controlled leasing and permitting system can facilitate cooperation between developers and communities during a project's development.

In showcasing both countries' approaches to creating stakeholder engagement opportunities for developers with stakeholders like local governments, both industry and community representatives can better understand these mechanisms. By reviewing these mechanisms, this paper shall also synthesize and present recommendations that OSW developers can use to enhance their own engagement efforts with local communities in other OSW markets.

Scotland

Due to favorable climate conditions, which give it approximately a quarter of Europe's potential OSW energy resources, and economic strengths, such as a workforce familiar with offshore energy work, Scotland is an example of a mature OSW market (Energy and Climate Change Directorate, 2018; Scottish Government, b). As of late 2022, Scotland's installed capacity of OSW projects is over 2.0 GW, with another 3.92 GW already approved and in various stages of development (Scottish Renewables). Because of the anticipated growth of OSW deployments, the Scottish government and OSW developers have worked collaboratively to create a framework to engage with local communities regarding OSW development. The mechanism that Scotland's government created to help OSW developers work with local governments and stakeholders is the national government's "Good Practice Principles for Community Benefits from Offshore Renewable Energy Developments" guidelines.

In Scotland, renewable energy developers have historically experienced some pushback against their projects from neighboring communities. For a time, there was a lack of clear guidance from Scotland's national government regarding how the developers should respond to this opposition (Aitken, 2010). In response to developers' need for this guidance though, in 2014 the Scottish national government began formalizing community engagement standards to support offshore wind development (Energy and Climate Change Directorate, 2018). The national government's work included research into developer-offered community benefits (Energy and Climate Change Directorate, 2018). In the context of renewable energy development, community benefits constitute additional features of the project that a community could benefit from besides access to the generated energy, economic activity related to project development, or government funds from the Crown Estate (Energy and Climate Change Directorate, 2018). Specific community benefits could include monetary payments known as Community Benefit Funds (CBF) that are

paid by the developers directly to the communities (Energy and Climate Change Directorate, 2018).

In Scotland, when developers offer more than one community benefit to stakeholders, they are combined into Community Benefit Schemes (CBS). These CBS are agreements in which developers pledge to provide host and neighboring communities with financial compensation and other types of benefits in exchange for allowing developers' projects and related infrastructure to be developed within the community's jurisdiction (Glasson, 2021). While it is recommended that developers tailor a CBS for specific projects and communities, usually based on site-specific conditions, developers generally offer a CBS and specific benefits which are consistent with the CBS benefits that have been offered by developers of previous projects (Glasson, 2021). Community input is particularly notable as the Scottish national government has at times encouraged local municipal governments to set demands for the composition of their CBS with developers (Cowell et al., 2011). Yet despite the general flexibility and voluntary nature of offering CBS benefits, the Scottish national government's research suggests OSW developers and Scottish coastal communities were willing to accept community benefit guidelines from a national government. Indeed, having the government provide clear rules for engagement and community benefits helps make individual residents see the benefits as a regular feature of the OSW development process that is sanctioned by the national government (Aitken, 2010).

Following research into CBS agreements, the Scottish national government published the "Good Practice Principles for Community Benefits from Offshore Renewable Energy Developments" to help OSW developers create CBS programs that could be offered to coastal communities (Energy and Climate Change Directorate, 2018). The document emphasizes the Scottish Government's belief that creating a CBS should be a voluntary act on the part of the

project developers (Energy and Climate Change Directorate, 2018). It was also the national government's hope that the OSW project developers still decide to create a CBS package and adhere to some of the government's provided recommendations for CBS content and benefits (Energy and Climate Change Directorate, 2018). As such, the document suggests that developers propose a CBS package to local communities very early on in the development process and work with the communities to negotiate the specific details of the CBS (Energy and Climate Change Directorate, 2018). The document specifically mentions that developers should reach out to and consult with local authorities like Community Councils, the most local tier of statutory representation in the country and who make the opinions and needs of their communities known to other authorities (Energy and Climate Change Directorate, 2018; Local Government and Housing Directorate). The document recommends this as these authorities can tell developers which local stakeholders should be consulted, and how the benefits should be administered to the community (Energy and Climate Change Directorate, 2018). These officials can also be a potential aid in communicating information about OSW technology and details to constituents about the OSW project and the specific benefits that are included in the CBS (Energy and Climate Change Directorate, 2018).

Since the Scottish national government published these guidelines in 2015, they have already proven to be useful to OSW developers. One OSW project that has benefitted from the guidelines is the Aberdeen Bay Wind Farm, also known as the European Offshore Wind Deployment Centre (EOWDC), a 96.8 MW OSW project located off the coast of Aberdeen, Scotland and developed by Vattenfall (Vattenfall, n.d.). During the EOWDC's development, Vattenfall had to contend with an opposition campaign directed at the project due to its proximity to the Trump International golf course in Aberdeen (Glasson et al., 2022). Because of the

opposition, Vattenfall reviewed the Scottish government's guidance document for direction on how best to engage with stakeholders like Aberdeen officials and gain more local support for the project (Glasson, 2021).

Thereafter, Vattenfall began community engagement activities with local Aberdeen authorities before the EOWDC began construction, to create the framework of a benefit package for the Aberdeen area. As part of the process, Vattenfall created the position of Local Community Liaison Officer (LCLO) to serve as the developer's main point of contact with the local community (Glasson et al., 2022). Through the LCLO, Vattenfall provided information to Aberdeen officials and other stakeholders on OSW technology and the project's features, assessed stakeholders' concerns, and provided funding for the local community before an official CBF was finalized (Glasson, 2021). As a result of these efforts, Vattenfall increased local support for the project and, despite some delays from the Trump Organization's legal challenges, the EOWDC began operating in April 2018 (The Scotsman, 2018). As a condition of the EOWDC's construction and operation activities, Vattenfall now annually contributes £150,000 to a CBF, called the "Unlock Our Future Fund", which finances a variety of local climate projects intended to benefit the Aberdeen community (Vattenfall, n.d.). Vattenfall's work reaching out to Aberdeen officials and providing the region with a CBF is now considered an ideal example in Scotland of how stakeholder engagement work should be conducted as part of the OSW development process (Glasson, 2021).

Vattenfall's success in building a mutually beneficial relationship with the local Aberdeen government supports the premise that early and voluntary engagement based around community benefits helps OSW developers be a "good neighbor" to nearby residents (Glasson, 2021). Vattenfall's actions and strategy itself were impactful and were also helped along by the

availability of “Good Practice Principles for Community Benefits from Offshore Renewable Energy Developments”. Through the research into community benefits and the subsequent publication of the document, Scotland’s national government found an effective method for providing guidance requested by OSW developers. This is significant because although the document is meant to guide developers and local governments towards both parties benefitting from an OSW project, the document’s suggestions are not regulatory requirements that must be strictly adhered to.

Rather, the Scottish government presented developers with a series of recommendations that developers could choose to deploy in their own work with local communities. This grants OSW developers a measure of flexibility in how they incorporate the guidance document’s suggestions for a CBS into their own engagement strategies. Yet as mentioned, because the community benefits are enhanced by suggestions made by the national government, it grants the benefits a degree of legitimacy in the eyes of the Scottish public. Provided that the developers consult the government’s guidelines early enough in the project’s development, they also have enough flexibility to create a benefit package that works for both parties. Indeed, by choosing to create a LCLO position and engage with Aberdeen officials early on, Vattenfall gave officials a means to become an active participant in the development process and help direct Vattenfall (Glasson, 2021; Rudolph et al, 2017). In addition to flexibility then, the Scottish government’s framework can be considered a helpful tool for fostering participation and discourse over local OSW projects.

United States

While Scotland's mechanism for building relationships between OSW developers and local governments is a publication of guidelines for offering community benefits to local communities, the United States' mechanism is built around the country's leasing and permitting framework. More specifically, it is the opportunities that BOEM creates for members of the public and local government stakeholders to give feedback on OSW projects, which in turn helps build opportunities to connect with the developers.

BOEM has authority over OSW development in the United States by means of the Outer Continental Shelf Lands Act (OCSLA), which makes the federal government responsible for offshore mineral and energy resources on the Outer Continental Shelf (OCS) (BOEM, n.d.). An OCSLA amendment, the Energy Policy Act of 2005, grants BOEM the power to lease federal lands in the OCS for marine renewable energy projects, and the authority to grant some of the necessary federal permits for these projects (BOEM, n.d.). BOEM has subsequently created a multi-phase leasing and permitting process that OSW developers must follow before their projects can begin construction and operations:

- Planning & Analysis Phase: In this phase, BOEM releases a Call for Information & Nominations for possible OSW project development areas, followed by identifying wind energy areas (WEAs) where OSW projects can be located (Lilley & Penn's Hill Media, 2019).
- Leasing Phase: After establishing the WEAs, BOEM will publish sales notices, first a proposed sale notice (PSN) and eventually a final sale notice (FSN), for an auction for leases in the WEAs (Lilley & Penn's Hill Media, 2019).
- Site Assessment Phase: Developers conduct site characterization surveys (i.e., geotechnical, geophysical, biological, etc.) and then submit a Site Assessment Plan (SAP) to BOEM for review and approval (Lilley & Penn's Hill Media, 2019).

- Construction & Operations Phase: Developers must submit a Construction & Operation Plan (COP), Facility Design Report (FDR), and Fabrication and Installation Report (FIR) to BOEM for final review and approval before work can begin on the OSW project (Lilley & Penn's Hill Media, 2019).

As part of the leasing and permitting process, BOEM includes two components of the process that make it possible for a local government to provide input on an OSW project, the Intergovernmental Renewable Energy Task Forces (IRETF) and public comment periods.

The IRETFs are BOEM's means of including and coordinating all government entities impacted by an OSW project's development, such as federal agencies, federally recognized tribes, state governments, and local governments (BOEM, 2016). By bringing these entities together, the IRETFs evaluate the features and uses of possible WEA sites, share survey data on the sites, and educate stakeholders on both the site's data and applicable BOEM regulations (BOEM, 2016). As such, an IRETF is a forum in which local governments can provide input on the way OSW development in a WEA can proceed. Thus, even in the early stages of project development, local governments have an opportunity to provide input on OSW development. either through the local officials making up the state-organized groups presenting at the IRETF meetings or speaking directly during the meetings' Public Input sessions (BOEM, 2019; Mailloux, 2019).

By being a part of these task forces, local governments have the opportunity to elevate both their presence in the permitting process, as well their thoughts on the direction that the federal and state governments are taking OSW development. Although local governments' authority is still limited to performing local actions like approving permits for local development and operational work, their presence in IRETFs underscores the value they can still offer to the task forces and BOEM's entire process. Thus, local governments should use the IRETFs as an opportunity to engage with BOEM's system, understand the impacts of proposed WEAs and

projects, and use that knowledge to give input on the process before projects get to the development stage where local governments usually are expected to directly engage with developers, such as granting local permits.

Indeed, BOEM has taken steps to ensure the IRETFs solicit stakeholder input from entities like local governments. In 2018, BOEM completed a review of the Task Forces' previous operations and accomplishments to find ways to improve upon its capabilities. After the review, BOEM took several steps to improve the Task Forces' effectiveness in facilitating engagement with stakeholders and the role of local stakeholders like municipal governments (BOEM, 2018). One step BOEM took was doing more to integrate additional regional perspectives within state-specific OSW task forces like highlighting local concerns and holding more accessible and regional meetings to discuss them (BOEM, 2018). Another step was to expand the IRETFs' outreach to local stakeholders through developing more customized stakeholder outreach within each state (BOEM, 2018). The third step was to make the IRETF process and activities more transparent to the public, through publishing both the Task Force's decision-making process and updates from meetings, as well as the next steps the IRETFs will take (BOEM, 2018). Through each of these steps, BOEM provided local stakeholders with more opportunities during the process to provide feedback. These opportunities allow for local governments to present to other government entities their thoughts and concerns about potential OSW projects. OSW developers can gain valuable information by observing IRETF meetings. Reviewing what has been discussed at the meetings can give developers a better understanding of the positions of local communities. Developers can thus better prepare to engage with these communities and work collaboratively to find solutions that address local concerns.

The second aspect of BOEM's permitting and leasing process that can help facilitate beneficial relationships between OSW developers and stakeholders like local community governments is the public comment period. At different points of the permitting process, particularly during the Planning & Analysis and Leasing phases, BOEM designates a period in which members of the public can provide comments regarding a particular call area, WEA, lease area, or OSW project (Lilley & Penn's Hill Media, 2019). For instance, after the publication of a PSN in the leasing phase, the public has 60 days to submit comments to BOEM on the suitability of the development area, potential impacts, etc. (Lilley & Penn's Hill Media, 2019). Through these public comment periods, BOEM can solicit feedback and use this input to help refine the selection of WEAs, which can give stakeholders like a local government some say in what marine areas are to be used for OSW projects. Public comment periods also present stakeholders with a means to provide input to OSW developers regarding entering cooperative engagements with local governments.

In May 2022, BOEM published a FSN for the Atlantic Wind Lease Sale 9 auction for OSW leases in the Carolina Long Bay Area (CLBA) (BOEM, 2022a). In this FSN, BOEM stated that it had reviewed comments from previous public comment periods for the CLBA and used them to develop lease stipulations that OSW developers could elect to utilize in order to enhance their project bids during the lease auction (BOEM, 2022a). One stipulation was that BOEM would grant a 20% "bidding credit" to developers' project bids if those developers included a plan to contribute to local workforce training programs or to the development of either the local or national OSW supply chains (BOEM, 2022a). The inclusion of this bidding credit is significant for the OSW development and leasing process in the United States because it is a directly identifiable example

of BOEM utilizing stakeholder feedback from a public comment period to encourage developers to invest in local benefits in such a way.

The creation of the bidding credit for use in the CLBA auction process continues to have effects on OSW development and engagement between developers and stakeholders like local governments. For instance, in preparation for the first OSW auction in U.S. Pacific waters, Pacific Wind Lease Sale 1 (PACW-1), BOEM conducted a similar review of stakeholder input received during previous public comment periods (BOEM, 2022b). Based on both the public comments received from stakeholders and the CLBA auction's bidding credit precedent, BOEM implemented a bidding credit stipulation to the PACW-1 auction as well (BOEM, 2022b). BOEM did this by expanding upon the bidding credit concept in the PACW-1 PSN to create a credit that is reminiscent of Scotland's CBS concept (BOEM, 2022b). Specifically, BOEM stated it would offer two types of credits based for PACW-1 around OSW developers offering Community Benefit Agreements (CBAs) to local communities (BOEM, 2022b).

Like a Scottish CBS, a CBA is an agreement between a developer and community-based organizations, like a municipal government, which represent residents' interests (DOE Office of Economic Impact and Diversity). In the context of United States OSW development, a CBA is offered by a developer to one or more communities, stakeholder groups, or Tribal entities whose access to the WEAs will be affected by OSW development (BOEM, 2022c). By offering and then entering a CBA with a community-based organization, the developer agrees to provide additional benefits that will either mitigate any impacts of their projects or will compensate the community for these impacts (BOEM, 2022b). In the case of the California PSN, BOEM would offer developers a 5% bidding credit if developers had an existing CBA with a local government or submitted binding documentation showing the developers would enter one (BOEM, 2022b).

As more OSW markets open in the United States, BOEM appears committed to the continued use of the public comment periods to create opportunities for BOEM, and by extension OSW developers, to learn from stakeholder feedback. In turn, these comment periods can potentially lead to scenarios in which community benefits like a CBA could be offered to facilitate the project development process. For instance, in BOEM's recent PSN for OSW leasing in the Gulf of Mexico, GOMW-1, BOEM stated it is considering more stipulations for the auction to ensure that developers are engaging with local communities (BOEM, 2023). BOEM is inviting the public to submit comments about mechanisms to encourage stipulations and bidding credits tied into developer-sponsored mitigation funds for impacts on local communities (BOEM, 2023). The request for comments calling for feedback regarding these stipulations and credits tied to community benefits suggests that BOEM now considers their inclusion to be an important feature of its offshore wind leasing process. While public comment periods are not direct forms of negotiations between stakeholders and developers, they still serve as a way stakeholders can provide feedback to BOEM and offshore wind developers, that can create circumstances wherein developers can foster collaborative and positive relationships with local communities.

Just like the IRETFs, the public comment periods can facilitate input gathering and engagement with local stakeholders in a manner that makes developers consider how they could offer community benefits to those communities their projects will impact. In this, BOEM has created engagement mechanisms within its OSW permitting and leasing process that are reminiscent of the Scottish government's stakeholder engagement publication and guidelines. Like the Scottish government, BOEM does not necessarily mandate that OSW developers offer a community benefit package to communities their projects will impact. However, through offering bidding credits for use during OSW lease auctions, BOEM encourages potential lease holders to

consider plans for CBA-style arrangements with local governments to give bidders an advantage at the auction. In leaving the specific composition of the CBA up to the developers and local stakeholders, BOEM offers both parties a degree of autonomy over the process. This could be considered a direct result of the feedback that BOEM solicits from stakeholders during the public comment period and the presence of local governments in the IRETFs meetings. Both features demonstrate the role local governments can play within the OSW development and the BOEM process.

As a mechanism of stakeholder engagement then, BOEM's process has evolved to be more accommodating to stakeholder and developer needs. As it has changed, it created different avenues for the two parties to interact and potentially craft mutually beneficial agreements related to OSW projects. As the United States expects to increase its installed capacity of OSW projects and related infrastructure, it is important for developers to meaningfully engage in the BOEM processes, including both the IRETF processes and the public comment periods for suggestions and stipulations that can improve their projects. Doing such indicates that the developers are willing to utilize local government suggestions that come out of these processes and create effective CBS packages.

Recommendations

In reviewing the Scottish Government’s “Good Practice Principles for Community Benefits from Offshore Renewable Energy Developments” guidelines and the United States BOEM processes, one can see two examples of mechanisms that can help developers connect with local governments via community benefits. While both mechanisms are provided by and linked with the national governments of both countries, they are designed in such a way that both the developers and local municipalities determine the exact nature of benefits developers could provide local communities. That said, these resources do not guarantee discussions over community benefits will lead to productive negotiations between developers and local governments. These mechanisms also do not guarantee the elimination of all lingering opposition for individual OSW projects. Yet these mechanisms show promise in that they have facilitated several positive engagements between the OSW industry and local government stakeholders in these two markets. In Aberdeen, Vattenfall was able to smooth out its project development process by consulting the national government’s guidelines and using its LCLO employee to work directly with local stakeholders and the CBF to support Aberdeen’s community climate projects. In the case of BOEM’s Intergovernmental Renewable Energy Task Forces and PSNs like PACW-1’s, they demonstrate BOEM’s recognition that stakeholder feedback can create the means for stakeholders and developers to engage and reach beneficial agreements.

Other OSW markets in Europe, Asia, or other parts of the world could showcase other useful engagement tools that are similar or significantly differ from these mechanisms. While further research on other mechanisms may be necessary, this examination of the mechanisms in both Scotland and the United States presents a good baseline for engagement mechanisms that emphasize community benefits. By reviewing the two case studies, the OSW industry can

understand what has worked in these markets and what could work should a developer decide to use a stakeholder engagement strategy inspired by these mechanisms. Should a developer choose to do so, it is advised that they consider the following recommendations that are based on the Scottish and American mechanisms.

Recommendation #1: An OSW developer should start stakeholder engagement activities as early as possible with the local governments in close geographic proximity to the project deployment site and related infrastructure. As demonstrated throughout the BOEM process, BOEM has given local stakeholders an avenue for providing input regarding OSW development in their region from the very start of the process. The Intergovernmental Renewable Energy Task Forces include local governments' input during the early permitting and stages and the public comment periods give these municipalities and other stakeholders an opportunity to give feedback at different points of BOEM's offshore wind development process.

Developers are encouraged to initiate stakeholder engagement activities early. As BOEM has already made it possible for local governments to provide input about possible OSW projects early in the review at IRETF meetings and public comment periods, OSW developers should begin preparing eventual engagement work with locals at this point too. By starting early in the process, an OSW developer will give themselves more time to review stakeholder feedback in order to refine their engagement plans and any community benefits they might offer. As part of this early engagement process, OSW developers should consider creating a position like Vattenfall's LCLO for their own project to lead interactions with the local governments and other stakeholders. And while the permitting and leasing process may differ in other OSW markets around the world, developers there should also consider commencing engagement with local governments early on in these markets' equivalent stages of their project development process.

Recommendation #2: As part of their engagement strategy with local municipalities, OSW developers should consider creating a CBS or similar package of community benefits that could be offered to local governments as a condition of the project's construction and operations. In both the Scotland and United States case studies, community benefit plans are becoming an important part of engagement with local governments and stakeholders. Both the Scottish national government and BOEM research into stakeholder feedback and community benefit examples demonstrate their potential avenues for success. Both government entities subsequently put forth mechanisms that encourage developers to utilize these mechanisms. Although neither government entity has mandated that developers create a CBS, the success Vattenfall has seen and the bidding credits in BOEM's auctions indicate that developers that choose to enter a CBS have benefited.

In designing and offering a CBS in their stakeholder engagement, the CBS' community benefits should consider including a monetary fund that supports community improvement projects similar to Vattenfall's Unlock Our Future Fund. Such a fund could not only help local governments fund other projects in the impacted communities, but could also fund climate-focused projects like Aberdeen has done, furthering the regional sustainability benefits that an OSW project can bring. While national governments can provide suggestions for other types of potential benefits and the CBS framework for developers to use, the final contents of a CBS package should be the result of a mutually beneficial collaboration between local stakeholders and OSW developers.

Recommendation #3: As part of the developers' engagement strategy and both the creation of and inclusion of community benefits, they should specifically create opportunities for local authorities to provide feedback on their preferred benefits to be offered in CBS packages. By bringing local government representatives into the development process, developers can demonstrate their willingness to listen to and meaningfully engage with local community

representatives and that they are willing to listen to elected community representatives about any issues. Likewise, as in the case with Aberdeen, these representatives can directly provide developers with information about the types of community benefits that they and their communities are seeking.

As part of this process, OSW developers should consider ensuring that there are several ways in which local governments can provide input to the development of the planned CBS package. Direct meetings between the local governments and a developer's representative(s), such as an LCLO figure, is an important option. Developers may want to consider making the negotiation process more transparent, creating public meetings to discuss potential benefits, such as townhall meetings in affected communities. Likewise, BOEM's Intergovernmental Renewable Energy Task Forces meetings, or their international equivalents, represent a potential opportunity for developers to receive input from local governments and create a CBS or other tools that could benefit both parties.

Conclusion

Both the Scottish offshore wind guidance framework and components of the BOEM permitting process demonstrate how aspects of a government-controlled leasing and permitting system can facilitate cooperation between developers and communities during an OSW project's development. In less-mature offshore wind markets like California, as well as existing and future markets around the world, local governments will play a significant role in the ongoing development of OSW projects and infrastructure. The stakeholder engagement and community mechanisms discussed here represent promising ways in which OSW developers could forge connections with these municipalities and advance their projects in a mindful and collaborative way. As nations get closer to the deadlines of their OSW goals, the continued use and evolution of these and similar mechanisms should be monitored to see how they advance offshore wind development at a local level.

References

- Aitken, M. (2010). Wind Power and Community Benefits: Challenges and Opportunities. *Energy Policy*, 38(10), 6066–6075. <https://doi.org/10.1016/j.enpol.2010.05.062>
- Bureau of Ocean Energy Management (BOEM). (n.d.). *BOEM Governing Statutes*. Bureau of Ocean Energy Management. Retrieved March 6, 2023, from <https://www.boem.gov/about-boem/regulations-guidance/boem-governing-statutes#:~:text=The%20Oil%20Pollution%20Act%20of,OPA%2090%20authority%20to%20BOEM.>
- Bureau of Ocean Energy Management (BOEM). (2016, December). *A Citizen’s Guide to the Bureau of Ocean Energy Management’s Renewable Energy Authorization Process*. Retrieved February 21, 2023, from <https://www.boem.gov/sites/default/files/renewable-energy-program/KW-CG-Broch.pdf>
- Bureau of Ocean Energy Management (BOEM). (2018, February). *Strengthening the Intergovernmental Renewable Energy Task Forces*. Retrieved February 21, 2023, from <https://www.boem.gov/sites/default/files/renewable-energy-program/Strengthening-the-Task-Forces-Final-4.2-%281%29.pdf>
- Bureau of Ocean Energy Management (BOEM). (2019, December). *2019 Gulf of Maine Intergovernmental Renewable Energy Task Force Meeting*. Bureau of Ocean Energy Management (BOEM). Retrieved April 5, 2023, from <https://www.boem.gov/renewable-energy/maine/state-activities/gulf-maine/2019-gulf-maine-intergovernmental-renewable>
- Bureau of Ocean Energy Management (BOEM) Atlantic Wind Lease Sale 9 (ATLW–9) for Commercial Leasing for Wind Power on the Outer Continental Shelf (OCS) in the Carolina Long Bay Area (CLBA)—Final Sale Notice (FSN), 87 FR 17324. Docket No. BOEM-2022-0015, 2022-06507. 17324-17336 (March 28, 2022) (BOEM, 2022a) <https://www.federalregister.gov/documents/2022/03/28/2022-06507/atlantic-wind-lease-sale-9-atlw-9-for-commercial-leasing-for-wind-power-on-the-outer-continental>
- Bureau of Ocean Energy Management (BOEM) Pacific Wind Lease Sale 1 (PACW–1) for Commercial Leasing for Wind Power on the Outer Continental Shelf in California—Final Sale Notice, 87 FR 64093. Docket No. BOEM-2022-0017, 2022-22871. 64093-64110 (October 21, 2022) (BOEM, 2022b) <https://www.federalregister.gov/documents/2022/10/21/2022-22871/pacific-wind-lease-sale-1-pacw-1-for-commercial-leasing-for-wind-power-on-the-outer-continental>
- Bureau of Ocean Energy Management (BOEM) Pacific Wind Lease Sale 1 (PACW–1) for Commercial Leasing for Wind Power on the Outer Continental Shelf in California — Bidder’s Financial Form Addendum, Bidding Credits – Requirements and Restrictions (2022) (BOEM, 2022c) <https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/PACW-1%20BFF%20Addendum.pdf>

- Bureau of Ocean Energy Management (BOEM) Proposed Sale Notice for Commercial Leasing for Wind Power Development on the Outer Continental Shelf in the Gulf of Mexico (GOMW-1), 88 FR 11939. Docket No. BOEM-2023-0021, 2023-03842. 11939-11953 (February, 24 2023) <https://www.federalregister.gov/documents/2023/02/24/2023-03842/proposed-sale-notice-for-commercial-leasing-for-wind-power-development-on-the-outer-continental>
- Christopher, T. R., Goldstein, M., Williams, M., & Carter, A. (2022, March 22). *The road to 30 gigawatts: Key actions to scale an offshore wind industry in the United States*. Center for American Progress. Retrieved March 29, 2023, from <https://www.americanprogress.org/article/the-road-to-30-gigawatts-key-actions-to-scale-an-offshore-wind-industry-in-the-united-states/>
- Cowell, R., Bristow, G., & Munday, M. (2011). Acceptance, Acceptability and Environmental Justice: The Role of Community Benefits in Wind Energy Development. *Journal of Environmental Planning and Management*, 54(4), 539–557. <https://doi.org/10.1080/09640568.2010.52104>
- Department of Energy (DOE) - Office of Economic Impact and Diversity. (n.d.). *Community benefit agreement (CBA) toolkit*. Energy.gov. Retrieved March 30, 2023, from <https://www.energy.gov/diversity/community-benefit-agreement-cba-toolkit>
- Efthimiou, L. (2022, August 2). *Environmental Stakeholder Engagement in Offshore Wind: What Is It Exactly?* WFO. Retrieved February 16, 2023, from <https://wfo-global.org/environmental-stakeholder-engagement-in-offshore-wind-what-is-it-exactly/>
- Energy and Climate Change Directorate. (2018) *Scottish Government Good Practice Principles for Community Benefits from Offshore Renewable Energy Developments*. Scottish Government. 1–34. Edinburgh.
- Glasson, J. (2021). Community benefits and UK offshore wind farms: Evolving convergence in a divergent practice. *Journal of Environmental Assessment Policy and Management*, 22(01n02), 1–18. <https://doi.org/10.1142/s1464333221500010>
- Glasson, J., Durning, B., Welch, K., & Olorundami, T. (2022). The local socio-economic impacts of offshore wind farms. *Environmental Impact Assessment Review*, 95, 1–11. <https://doi.org/10.1016/j.eiar.2022.106783>
- Haddaway, N. R., Kohl, C., Rebelo da Silva, N., Schiemann, J., Spök, A., Stewart, R., Sweet, J. B., & Wilhelm, R. (2017). A Framework for Stakeholder Engagement During Systematic Reviews and Maps in Environmental Management. *Environmental Evidence*, 6(1). <https://doi.org/10.1186/s13750-017-0089-8>

- Lilley, M., & Penn's Hill Media (2019, December 11). *Agenda for the Intergovernmental Renewable Energy Task Force for the Gulf of Maine*. YouTube. Retrieved March 6, 2023, from https://www.youtube.com/watch?v=_nD0qop_hMs
- Lopez, N. (2022, December 6). *First-Ever California Offshore Wind Auction Nets \$757 million*. CalMatters. Retrieved December 30, 2022, from <https://calmatters.org/environment/2022/12/california-offshore-wind/>
- Mailloux, M. (2019, December 12). *Offshore Wind Energy Outlook* [PowerPoint slides]. New Hampshire Office of Strategic Initiatives (OSI). <https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/NH-OSW.pdf>
- Office of Energy Efficiency & Renewable Energy (EERE) (2021). *Offshore Wind Market Report: 2021 Edition*. U.S. Department of Energy. Retrieved December 30, 2022, from https://www.energy.gov/sites/default/files/2021-08/Offshore%20Wind%20Market%20Report%202021%20Edition_Final.pdf
- ReNew.biz. (2022, September 7). *Global Offshore Wind Capacity Quadrupled During First Half of 2022*. Institute for Energy Economics and Financial Analysis (IEEFA). Retrieved December 30, 2022, from <https://ieefa.org/articles/global-offshore-wind-capacity-quadrupled-during-first-half-2022#:~:text=Global%20installed%20offshore%20wind%20capacity,Korea%2C%20and%201%20in%20Italy.>
- Rudolph, D., Hagggett, C., & Aitken, M. (2017). Community Benefits From Offshore Renewables: The Relationship Between Different Understandings of Impact, Community, and Benefit. *Environment and Planning C: Politics and Space*, 36(1), 92–117. <https://doi.org/10.1177/2399654417699206>
- Scottish Government (a). (n.d.). *Marine Renewable Energy - Offshore Wind Energy*. Scottish Government. Retrieved February 27, 2023, from <https://www.gov.scot/policies/marine-renewable-energy/offshore-wind-energy/#:~:text=Its%20strong%20offshore%20winds%20provide,shelving%20nature%20of%20the%20seabed.>
- Scottish Government (b). (n.d.). *Renewable and Low Carbon Energy Policies - Offshore Wind*. Scottish Government. Retrieved February 27, 2023, from <https://www.gov.scot/policies/renewable-and-low-carbon-energy/offshore-wind/>
- Scottish Government (Local Government and Housing Directorate). (n.d.). *Policy - Community Councils*. Scottish Government. Retrieved March 27, 2023, from <https://www.gov.scot/policies/community-empowerment/community-councils/#:~:text=Community%20councils%20are%20the%20most,active%20community%20councils%20in%20Scotland.>

Scottish Renewables. (n.d.). *Renewable Energy Facts & Statistics: Scottish Renewables*. Scottish Renewables. Retrieved February 23, 2023, from <https://www.scottishrenewables.com/our-industry/statistics>

The Scotsman. (2018, April 3). *Donald Trump-opposed Wind Farm in Aberdeen Bay Connected to Grid*. The Scotsman. Retrieved February 28, 2023, from <https://www.scotsman.com/news/environment/donald-trump-opposed-wind-farm-aberdeen-bay-connected-grid-1431033>

The White House. (2022, September 22). *FACT SHEET: Biden-Harris Administration Announces New Actions to Expand U.S. Offshore Wind Energy* [Press release]. <https://www.whitehouse.gov/briefing-room/statements-releases/2022/09/15/fact-sheet-biden-harris-administration-announces-new-actions-to-expand-u-s-offshore-wind-energy/#:~:text=The%20President%20set%20a%20bold,and%20down%20the%20supply%20chain.>

Thompson, F. (2022, November 18). *Early Stakeholder Engagement Vital for Offshore Wind Success*. RPS. Retrieved February 20, 2023, from <https://www.rpsgroup.com/insights/aap/early-stakeholder-engagement-vital-for-offshore-wind-success/>

Vattenfall. (n.d.). *European Offshore Wind Deployment Centre*. Vattenfall. Retrieved February 27, 2023, from <https://group.vattenfall.com/uk/what-we-do/our-projects/european-offshore-wind-deployment-centre>