OFFSHORE WIND FARM PROJECTS

STAKEHOLDER ENGAGEMENT & COMMUNITY BENEFITS A PRACTICAL GUIDE

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Introduction

This guide provides practical recommendations for Offshore Wind Farm Projects, Stakeholder Engagement, and **Community Benefits.**

Many countries have a strong track record in the deployment of onshore wind farms. A small number of countries (e.g., UK, Germany, Denmark, Netherlands) account for most of all operational offshore wind capacity connected globally, most of which comprises fixed, rather than floating turbine technology. Many other countries (e.g., Ireland, Portugal, Norway, Finland, France, Canada, USA, Australia, Japan, South Korea, China, Vietnam, and Taiwan) are in their infancy of offshore wind farm development and have plans underway to grow this sector significantly.

Community acceptance has been a key constraint to the development of onshore wind projects. Offshore wind projects also experience resistance among coastal and port communities. There is an opportunity to learn from international best practice in community acceptance and stakeholder engagement. Community engagement practitioners and communications departments of established offshore wind farm developers were generous in sharing their expertise to create this document.

The potential for Irish offshore wind projects is well documented in terms of economic and social benefits, investment, jobs, and supply chain integrity. In Ireland, companies such as SSE, DP Energy, Parkwind, ESB, Equinor, Ocean Winds, Saorgus, Statkraft, Simply Blue Energy, Energia, and RWE Renewables are progressing projects off the East and South-east coasts.

The current system of transition protocol, different government department

involvement, Maritime Area Consent, Marine Protected Areas, Maritime Area Planning Bill (MAP), and An Bord Planeala, debate the merits of decentralised (i.e., developer led) versus centralised grid integration, which is cumbersome and hard to navigate.

These offshore wind projects represent substantial financial investments and the benefits of offshore are attractive. Yet, there is a lack of industry coherence in the appreciation of, and approach to, social acceptance of offshore wind projects. especially with respect to community acceptance in terms of procedural and distributive justice. Individual projects are progressing through the various regulatory stages, however, there is little evidence of coordinated communication campaigns to educate and inform the public. Also lacking are industry agreements regarding the implementation of best practices for community acceptance and local stakeholder engagement among host communities.

Consenting and marine spatial planning arrangements differ depending on the jurisdiction. For example, if the support scheme for offshore wind is based on competitive bidding (i.e., auctions and tendering) where the lowest bid wins, it will affect the capabilities to undertake stakeholder engagement and deliver community benefits. These initiatives add to the project costs, even though they are a relatively small financial investment in comparison to the overall project budget. Policy makers need to consider whether certain standards and social metrics should be part of the bidding criteria.

Regardless of the project location, the following five criteria should be considered.

Social Acceptance Strategy:

There needs to be an overarching social acceptance strategy developed for offshore wind projects developed by the relevant national authorities (state agencies) in concert with industry representatives. The absence of an agreed industry strategy has led to a lack of consistency as different projects pursue different approaches. This inconsistency adds to the confusion local and national stakeholders may experience. Project promoters must be cognisant that host communities are non-homogenous and social acceptance strategies need to be responsive to the unique values and needs of individual host communities.

Consenting Regime:

At each stage of the project lifecycle providing clarity on the consenting regime should form part of the local stakeholder engagement plan.

- Stakeholder Interface: The intensity of stakeholder interface varies with the project lifecycle.
- **Project Ownership:** A key consideration is the project ownership, as this changes from the beginning to end of a project's lifecycle. Many projects are initiated and owned by project promoters who do not have the intention, capability or capacity to deliver the project to its completion. This

changing ownership raises the question

as to whether such promoters have the inclination and resources to implement stakeholder engagement competently. Further, when promoters sell a project to a large industry entity, the question becomes what stakeholder engagement continuity prevails - industry should ensure this in order to help protect the sectors reputation and ensure its growth amicably with the public. Ownership change in the onshore sector is much more common. When a consortium of owners is involved in an offshore project, it is important the owners agree on a strategy regarding stakeholder engagement, communications, and community benefits.

Stakeholder Engagement Plans:

Considering the importance of and the financial investment required to deliver an offshore project, stakeholder planning and engagement is a small cost that delivers high value. Also consider the risk of not doing adequate stakeholder engagement – higher likelihood for project failure and/or perceptions of injustice.

Opposition groups may campaign on issues such as democratic deficit, negative impacts on visual amenities, tourism, heritage, birds, fish and marine life, and commercial fishing. Cable landing points and onshore cable routes may prove to be significant issues with host communities, in addition to electric magnetic field (EMF) concerns, and inadequacies of Foreshore/Marine legislation may also be highlighted in such submissions. In one German study, shipping

security was important to residents, as shipping accidents pollute local beaches. Coastal communities and stakeholders. such as fishermen, may claim they have no information and there has been a lack of consultation. Although the developer may be at the early stage of consent, conducting marine and environmental surveys should be part of the planning process requirements. The developer's message can become lost in a poorly informed media narrative, or public discourse. As a result, the developer will quickly find they are under pressure to take a reactive stance, rather than proactively engaging with stakeholders. Further, not being proactive damages the prospects for future offshore projects. To safeguard community interests, developers should appoint a Community Liaison Representative (preferably someone who is familiar with the area and receives the appropriate training), and if resources allow, a Fishing Liaison Officer, who may be a retired member of the local fishing community.

Rather than pursuing a silo approach, it would be beneficial to pursue a coordinated approach, in which all developers agree on the procedural stages, strategies, and techniques for deploying a:

- Stakeholder Relations Advisor (titles and roles can differ depending on jurisdiction and project scale – Community Liaison and Fishing Liaison for example)
- Stakeholder Relations Programme
- Community Engagement Programme
- Community Benefits Programme (i.e., including Local Supply Chain initiatives)

In pursuing a coordinated approach, the offshore industry, can look to the best practices employed in other jurisdictions. Many companies developing offshore projects in new territories, also operate in countries where there are established best practice approaches for local stakeholder engagement.

Other Constructive Considerations

Stakeholder Identification:

Stakeholders need to be identified and consulted, early and throughout the project. Developers, through industry representative structures, should be obliged and/or guided to undertake wide-ranging and flexible community engagement methods to facilitate ongoing dialogue. Clear guidelines or a Code of Conduct for community engagement, tailored to the local context, would facilitate this dialogue.

Consultative Forums:

Key stakeholders, such as the fishing community, port, and coastal communities, need a forum in which dialogue can occur with those supporting the offshore project. The coalition of the willing, often comprised of the government and politicians, the national and regional authorities, developers and local stakeholders, need to embrace and promote offshore projects in a unified manner.

Community Obligations and Contributions:

Even though coastal communities may not be affected by the offshore construction works, they are neighbours who should be considered. For example, visual impact may be more of a concern for some coastal communities. There are examples where the closest coastal community may not be the one



most affected due to onshore construction works elsewhere. That is, the grid connection and substation is placed in an area which is not visually impacted. For example, the Beatrice Offshore Wind Farm in Scotland, where Caithness is the closest area, but the grid connection and substation is placed in the area of Moray.

Consenting and Planning Process:

These processes need to be communicated in a way that is easy to understand, transparent, and collaborative in terms of citizen engagement. An offshore wind public participation guide would be beneficial.

Other Non-host Community Stakeholders:

Other relevant stakeholders are the military and aviation interests, where radar may be relevant. The navy where harbour protection, coastal security, customs, war ships, and the use of drones are issues for consideration. Small and large commercial fishing fleets, which operate co-operatives and shipping lanes, need to be part of broader industry groups so they are on-message in terms of industry objectives and communication.

Government Offshore Wind Development Committee:

As a statement of intent and to provide leadership, focus, and proactivity, it is advisable to create a governmental committee for offshore wind development. This committee would act as a dedicated forum for local stakeholder and community voices.

Investor Confidence:

As offshore wind farms are long-term, capital-intensive investments, a key challenge for investors is confidence in the government's strategic commitment to the sector. This confidence needs to percolate through to local stakeholders and local seaside/coastal/port communities.

National Wind Energy Association:

Most offshore developers are members of the National Wind Energy Association's Offshore Committee. This committee could assist in the coordination of guidelines and standards to achieve community acceptance.

Social Acceptance:

Offshore wind projects should increase when people are aware of the positive impacts associated with offshore wind energy.

Alternative energy sources, such as oil and gas, have limited reserves. Further, oil and gas can be perceived as more expensive and more polluting. The geo-political security of supply considerations should also be stressed in the public dialogue. The general public may be more accepting of offshore wind projects, than the local host community (i.e., perceived local pain, in exchange for national gain). Again, representations concerning visual impact and shipping collisions should be expected.

Public Acceptance Research:

Offshore wind public acceptance research should be commissioned in countries where offshore planning and deployment is relatively new. One example is to establish a monitoring programme, which focuses on public acceptance before and after the installation of an offshore wind farm, as a means to monitor the degree of public involvement and active conflict management. Consultation with the research sector (e.g., state agencies, University post-doctoral programmes) would be desirable.

Marine and Renewable Energy Ireland (MaREI):

MaREI, a Science Foundation Ireland centre based at University College Cork, surveyed 1,154 people and found there is significant support from the Irish public for the development of offshore windfarms in Irish waters. Of those surveyed, 93% said they would not object to an offshore windfarm anywhere in Irish waters and 87% said they would not object to the development of an offshore windfarm off the coast of their locality. Additionally, 60% of respondents said

that seeing offshore wind turbines made them feel they were helping to forestall the climate crisis.

MaREI's lead researcher noted that "Moving turbines offshore can help to overcome issues of space for wind turbines on land. It can also help to meet targets for clean, renewable energy and create jobs as Ireland seeks to rebuild the economy." The survey findings suggest those with experience of offshore windfarms are more positive towards their development in Irish waters than those with no experience of offshore windfarms. In terms of the effect on wildlife, tourism and aesthetics, respondents said offshore turbines are relatively unobtrusive.

Subsequent to MaREI's survey, the Irish Government announced its intention to fast-track seven offshore wind projects in the Irish Sea under a new planning regime. Under the Climate Action Plan, the Irish Government is aiming to have 70% of Ireland's electricity generated from renewable sources by 2030.

According to the World Wind Energy
Association (WWEA), developers should
demonstrate how their proposed
development, as a recommended renewable
energy initiative, is sustainable and of a net
benefit to the community. To facilitate this
argument, early engagement with relevant
stakeholders on the comparative benefits
of feasible options is recommended. WWEA
recommends a comprehensive stakeholder
consultation and participation process so as to
mitigate the risk of community opposition, or
loss of support for the project.

Benefits to Offshore Wind and Perceived Drawbacks

The benefits associated with offshore wind are outlined in Table 1.

Benefit	Comment
Security of Energy Supply	Wind enhances energy supply, diminishing the need for oil and gas
Power Grid Stability	 Offshore wind farms are important for energy transition success and grid stability
Sustainable Grid Power	 Wind energy is a clean, free, and abundant resource that can be extracted and converted into electricity without emissions
Environmental Protection Standards	The industry complies with international regulations and strict environmental standards
Reduced Pollution	Wind farming is a renewable energy source
Affords Benefits to the Marine	 Bans on fishing in offshore wind farms improves fish stocks and wind turbine foundations act as artificial reefs
Green Hydrogen Production	 Green hydrogen enables energy-intensive industries such as cement, steel, or chemical plants to improve significantly their carbon footprint
High Acceptance Level	 Far-shore farms are preferred, as they are less visible but can be more expensive and less feasible
Job Creation	 Offshore investment creates opportunities in manufacturing, engineering, construction, marine services, local coastal transport, turbine operations, and professional services. Enables education and training opportunities
Export Potential	The market for offshore wind energy is growing rapidly

Offshore wind energy can serve as the foundation for security of supply in a future renewable energy system. Oil and gas reserves are limited, more polluting, and when externalities are considered, more expensive. Wind energy is a clean, free, and abundant resource that can be extracted and converted into electricity without emissions. Phasing out fossil fuelled power plants and replacing them with wind power would help to address climate change. As a cleaner energy source, it would reduce unnecessary health problems,

Table 1: Key Benefits to Offshore Wind

increase lifetime expectancy, and mitigate health related costs. Offshore wind farms are in-dispensable for energy transition and are an important factor for the stability of the power grid. Being located offshore, they will experience a much greater percentage of consistent winds compared to onshore wind turbines. The wind does not encounter obstacles such as buildings, hills, valleys, and trees that can impede wind speeds. Offshore wind turbines are able to generate more power compared to other onshore turbines.

Wind farming is a renewable energy source that reduces air pollution by replacing the more polluting energy sources with wind-generated power, helping to reduce emissions of sulphur dioxide, nitrogen oxides, and carbon dioxide. Significant efforts are being undertaken in all areas of the offshore wind industry to protect the environment. The industry complies with international regulations and strict environmental standards, and it designs its production processes as ecologically as possible. The marine environment can benefit from offshore wind. The ban on fishing in offshore wind farms can have a positive effect on fish stocks. The foundations of offshore wind turbines can also act as artificial reefs. The use of green hydrogen produced with renewable energy may enable energy-intensive industries such as cement, steel, or chemical plants to significantly reduce their carbon footprint. The production of green hydrogen from offshore wind energy using electrolysis is already possible on an industrial scale. Hydrogen production from wind power is set to play a fundamental role, especially in sector coupling. One example is the production of synthetic fuels from green hydrogen for aviation.

Social acceptance of offshore wind is expected to increase substantially, as people become aware of the positive impacts of offshore wind energy. Wind turbines have been known to produce a lot of noise. As offshore turbines are typically located far from the coast, and away from residential areas, noise is not a significant issue. Consequently, offshore wind farms enjoy a high level of acceptance among the population. Far-shore farms may be preferred

to near-shore farms, as they are less visible., however these can be expensive, also floating wind turbine technology requires further development which will further enable the feasibility of far-shore.

The Global Wind Energy Council (GWEC) and the Global Wind Organisation reported in April 2020 that offshore markets will require 77,000 trained employees by 2024 to support growth targets. They calculate 2.5 jobs per megawatt per project.1 It is important to note, job creation may not necessarily be locally focused, so projects need to be careful not to over-promise and under-deliver in this regard when communicating with local host and coastal communities. The value chain of the offshore wind industry has been characterised by small and medium-sized enterprises from the beginning, which can bolster local hostcommunity, port, and coastal economies. The industry is strongly committed to a growing international training sector and has a high level of qualification. Offshore investment will create opportunities in manufacturing, engineering, construction, marine services, local coastal transport, turbine operations, and professional services. Peripheral coastal communities could be transformed by these new employment opportunities. The know-how and added value of offshore wind industry offer substantial potential for export. The market for offshore wind is growing rapidly, not only in Europe, but also in Asia and North America. The International Energy Agency estimates the capacity for offshore wind farms will increase by a factor of fifteen over the next twenty years.

The perceived drawbacks raised by concerned stakeholders are outlined in Table 2.

Perceived Drawback	Comment
Natural Environment	 Potential decrease in fish-stock and marine life Concerns for the bird population and their flightpaths Changes to the natural beauty and quality of coastline Eroding the value of unspoilt nature Visual intrusion due to turbines
Livelihood	 Local fishermen are concerned about the loss of their livelihood, skills, and way of life Interference with shipping routes and increased risk of collisions
Culture	 Interrupt or damage local culture and values Poor fit with the ascribed characteristics and values of a coastal landscape Damaging the attachment people have to an area Potential for a democratic deficit
Living Environment	 Erode the local residents' living environment in terms of their view and real estate value Negative effects on recreational activities including boating, fishing and yachting
Business Interests	Negative impact on tourism, heritage, fishing, leisure crafting, air traffic, and telecommunications
Health and Safety	 The presence of EMF Potential and safety impacts of cable landing points/onshore grid connections, cable routes, and substations

Table 2: Stakeholders' Perceived Drawbacks of Offshore Wind

¹ Powering the Future: Global Offshore Wind Workforce Outlook 2020-2024

Offshore Vs. On-shore Community Acceptance and Stakeholder Engagement Differences

The differences between offshore and onshore wind industry community benefit provision have been viewed positively and there is scope to transfer certain lessons. The rationale for community benefit provision is similar for both industries, which is driven by a desire to share equitably the benefits gained by harnessing a natural resource.

Considering the differences in identifying nearby communities, maturity of the industry, technology and project economics, community benefit schemes are unlikely to be realised in precisely the same manner. While significant development is planned to occur across the globe, commercial scale projects in deeper, more challenging water, means the resulting costs and risks associated with these projects can be much higher than for onshore projects.

Cost reduction is a key driver for the offshore wind industry, particularly in the context of increasingly competitive contracts for difference allocation. Therefore, the scale of community benefits may be highly dependent on the developer's financial means.

Developers may legitimately ask the national, state, regional, or local government whether they prefer cheaper electricity or generous community benefit schemes.

In Germany, for example, offshore projects are planned at the state level and far-shore projects are planned at the national level. Hence, communities are not part of the official planning process, unless shipping facilities have to be constructed, or the cable comes to shore, and/or the substation is constructed adjacent to local population.

There are additional technical challenges in constructing and maintaining sites offshore. The timescales and phased development process of offshore projects differs greatly from the onshore industry where the construction is less complex.

Offshore projects involve a more diverse and complex range of stakeholders with whom to negotiate agreements. For example, air interest for commercial, military and coastal rescue operations requires assurances for radar and lighting. Commercial and leisure fishing, shipping, and boating, and coastal resort tourism seek reassurance their operations will not be adversely impacted.

In terms of offshore wind farm environmental impacts, developers should be cognisant of the following considerations:

- Marine habitats and benthic (i.e., seabed) communities
- Bathymetry, sediment transport paths, bed forms, scouring, mixing, turbidity
- Water quality and pollution incidents during installation and maintenance
- Designated areas and proximity of protected areas
- Fish resource, migration patterns, and nursery areas
- Birds' distribution, disturbance, displacement, mortality, breeding and feeding impacts
- Marine mammals' distribution, disturbance, displacement, and the impacts of noise and vibration

- Archaeological heritage
- Visual impact and its potential consequences on tourism and property values

- Residential and holiday homeowners, who are a significant stakeholder group in coastal communities
- Noise, vibration, lighting, and turbine installation.



Stakeholders and Consultation

Stakeholder Engagement and Stakeholder Mapping

Depending on national legislation, some countries have official stakeholder lists, which distinguish between statutory and non-statutory stakeholders.

Regardless of whether a certain stakeholder group is on an official regulatory list, it is advisable to engage with all identified stakeholders, even beyond legal obligations.

Examples of stakeholder categories are outlined in Tables 3 and 4.



Local Stakeholder Groups	Examples
Residential	 Coastal and port communities Resident cooperatives and associations Community societies Neighbourhood security, community watch
Community Influencers	 Local opinion leaders Large employers Elected public representatives Local, municipal, regional, state, and national broadcast and print media Social media interests Celebrities
Economic Groups	 Local retail Chambers of commerce Service and manufacturing businesses Commercial fisherman Shipping companies Employment unions Telecommunications companies Tourism industry providers Hospitality and accommodation providers
Authorities	 Military and defence ministry Airport authorities Aviation companies Air rescue Marine management services Catchment management authorities Local government Local networks e.g., public participation networks, community fora Tourism agencies Indigenous People and their representatives
Other Groups	 Religious groups Sport clubs Leisure boating clubs, boating and yachting associations Sea scouts Environmental, nature and conservation groups Bird watching groups Walking and hiking clubs Special interest groups (e.g., Bathymetry)

Ireland: Stakeholder Identification

Ireland Stakeholder Types	Examples	Ireland Stakeholder Types	Examples
General	 County councils, area committees, strategic policy committees Elected public representatives Special interest groups Residents' associations Charities and voluntary groups Business groups, Chamber of Commerce, Chambers Ireland 	Environmental Organisations	 Bird Watch Ireland National Parks and Wildlife Service (NPWS) An Taisce Irish Whale and Dolphin Group Geological Survey Ireland Seal Rescue Ireland
	 Tourism groups Commercial fishing Leisure craft owners and clubs Sports clubs	Local Stakeholder Engagement	 Municipal District Councils Town Teams Local Chamber of Commerce Local RNLI
Government and National Organisations	 Government Departments Transport Infrastructure Ireland (TII) Irish Aviation Authority (IVA) Fáilte Ireland Inland Fisheries Ireland Health Services Executive (HSE) Environmental Protection Agency (EPA) Commissioners Irish Lights Health and Safety Authority (HSA) Marine Survey Office Sustainable Energy Association of Ireland (SEAI) 		 Local Sailing Clubs Local Sea Swimmers Local Port User Groups Sea Angling Clubs Sub Aqua Clubs Local Rowing Club Local Sea Scouts Local Triathlon Local Education Training Boards Regional Assemblies
	Gardai Siochana (Irish Police Force)	Execution Stage Stakeholder Engagement	Department of Business, Enterprise, and InnovationDepartment of Rural and Community Development
Marine Organisations	 Irish Sailing Association (ISA) Marine Institute of Ireland Irish Maritime Development Office (IMDO) Met Eireann (Irish Meteorological Office) Irish Water Safety Royal National Lifeboat Institution (RNLI) Irish Coast Guard (Department of Transport, Tourism, and Sport) 		 Department of Education and Skills Industrial Development Authority (IDA) Ireland Enterprise Ireland Air Corp Navy
Marine Interests	 Bord lascaigh Mhara (BIM) Local Fishing Community Commercial Fishing Harbours and Ports 		

Stakeholder Strategies

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Most stakeholders, individuals, and special interest groups and organisations (statutory and non-statutory) will have concerns legitimate to them, some will be articulated by professional consultants, which will form submissions as part of the consenting process. A comprehensive stakeholder engagement and communication plan, deployed by a qualified and experienced project management team, is a prerequisite to developing a new offshore wind farm successfully. Sound community consultation and participation, with appropriate representations (i.e., visualisations) of the wind farm are often effective. On a strategic level, there are four degrees of public engagement based on the level of participation to be accorded to the public: 1) inform, 2) consult, 3) involve, and 4) collaborate or empower. Table 5 outlines the key principles for community consultation and stakeholder management.

Principle	Comment
Engage Early	Clear community engagement plan known to all at early stages
Visualisations	 Planners and developers should use visualisations, as project opponents may develop their own visualisations, which may be misrepresentations if not technically developed (e.g., in terms of scale) Local councils or municipalities may not have the resources to develop such visualisations, particularly when a project is in its infancy or exploratory stage
Community Involvement	Recognise the value of community involvement and local knowledge in planning
Consultation Process	Plan and design consultation process with the local planning authorities and stakeholders
Inclusive	Use an inclusive approach to engage and consider all stakeholder groups
Level of Strategic Engagement	Use consultation methods and techniques appropriate to the local context; determine the level of strategic engagement
Transparency	Transparency and accessibility at all times and in engagement activities disseminating information, and receiving feedback
Flexibility	The plan must be flexible so as to incorporate stakeholders' perspectives
Dialogue	 Continuing meaningful respectful dialogue regarding changes to the project design/plan, which are communicated and discussed on a timely basis, cognisant of the planning regime.
Networks	 Recognise the importance of social and informal networks; establish collaborative relationship with community
Local Resources	Leverage local resources to fulfil jobs and contracts
Benefit Scheme	 Discuss mitigation, compensation measures, and benefit scheme with the local community Be cognisant of ethical corporate socially responsibility and governance

Capacity Building

Capacity building for communities should be a consideration, so as to ensure individuals and groups are equipped to contribute effectively to discussions. Developers should work and engage with stakeholders and agencies that can support the process. In the early stages of consultation, developers should signpost community groups to support, including:

- Grant support for communities to form a constituted group or to develop an action plan
- Advice and support from a regional development officer
- Online community guidance package to help with the process
- Local or regional government register of community benefits from renewables
- Local supply chain opportunities noticeboard
- Advice to access further tailored funding and support.

Agency support may be available for providing:

- networking services and community learning and capacity building
- support to groups wishing to form a community development trust.

On occasion, there may be conflicts within or between stakeholder groups. It is recommended developers seek advice or support, and to be mindful that 'community of place' does not necessarily translate into 'community of interest'.



Offshore Wind Farm Neighbours

Project promoters need to recognise inhabitants and other local stakeholders within the surrounding area of an offshore wind farm are impacted. A general information campaign is recommended at project initiation and during the planning process.

There may be supporters of wind energy who do not accept wind turbines in their locality, even though they perceive wind energy as an innovation within energy generation and transition. Opponents may view the offshore wind farm as a threat to nature, the environment, view shed, marine life, and the local economy (e.g., impact on fishing and tourism community).

When developing a consultation strategy, be clear about the level of involvement and the process by which that involvement should take place. Some members of the public will not care about the origin of the energy they use, while others will be drawn to a green energy electricity supply.

As the project mobilises and construction commences, the project manager needs to monitor contractors and sub-contractors to ensure the project complies with planning permission and any conditions attached. They should also have and continually assess and review implementation of the:

- Stakeholder Engagement Plan
- · Communications Plan
- Local Supply Chain/Local Economic Benefits Plan
- · Community Benefits Plan.

Visual impact

It is recommended the local community and other identified local stakeholders be informed about the proposed development before the submission of a planning application through the normal communication channels (e.g., non-statutory consultation, localised information campaigns via print, broadcast and social media). The visual impact of wind turbines depends on their location, size, number, layout, design, colour, and the viewers' perceptions. From an early stage of the project, developers can prepare photomontages, perhaps polling the local and nearby communities on options to gain insight on this aspect.

As more wind farms are established, people will observe the visual impacts from offshore wind farms. The public's positive attitude could shift, particularly if the experienced visual impacts differ substantially from the development plans. Offshore wind turbines are much taller than onshore wind turbines, but their visibility is moderated, because they are located several kilometres from the nearest shoreline. At 7 to 10 kilometres (4 to 6 miles), the turbines appear to be about the height of a person's thumbnail, held at arm's length. Hence, the visual impact of offshore wind turbines is lower than visual impact of onshore wind turbines.

It is worthy to note the scale of offshore wind farms, which is in the hundreds of megawatts, can achieve generation capacities equivalent to many onshore projects. For example, in some European locations, one 400 MW offshore wind farm with 50 turbines is equivalent to 20 onshore wind farms of 20 MW, not counting the effect of higher and more consistent wind speeds offshore.

Tourism Impact

An important question for coastal communities is how offshore wind farms will affect recreation and tourism. The distance wind turbines are from the beach significantly influences how tourists feel about them.

A survey conducted in the US (Parsons and Firestone, 2018) interviewed almost two-thousand beachgoers, who were representative of a beachgoing population on the East Coast. Participants experienced visual simulations of a wind power project with 100 six-megawatt wind turbines, 150 meters tall to the tip of the blade at its apex, at different distances from shore, and in different conditions (i.e., clear, hazy, and night-time). The wind turbines were assembled into a photomontage by a firm, recognised as a leader of visual impact analysis and graphics in the wind industry.

Participants were asked whether the projects would affect their beach experience and prompt them to change their travel plans. The data were analysed using an economic model of trip choice. The Federal Bureau of Ocean Energy Management (BOEM), which leases offshore areas for wind power generation, and the National Oceanic and Atmospheric Administration (NOAA) funded the research.

Survey respondents were shown turbines ranging from 2.5 to 20 miles (4 to 32 km) offshore. BOEM leases and planning areas for wind power projects are projected to be installed at 13 or more miles (21 km) offshore. For example, the wind project proposed off Bethany Beach, Delaware would be located about 17 miles (27 km) offshore. At the 12.5-mile (20 km) mark, 20% of respondents

reported their experience would be worsened by the turbines; 13% reported it would be improved, and 67% reported no effect. In contrast, at 20 miles (32 km) offshore, only 10% of respondents reported their experience would be worsened, 17% said it would be improved, and 73% said it would have no effect.

This research found beachgoers are more likely to go to another beach when the wind turbines are closer to shore and are more likely to remain when turbines are located farther from shore. The size of this effect is important to BOEM for documenting impacts of wind turbines on local economies. The break-even point is 15 miles (25 km) offshore. At this distance, there are as many people who would be better off, as there are people who would be worse off. While there are economic advantages to having wind turbines closer to shore, because it is cheaper to deliver the energy and easier to maintain the turbines. most proposed projects are placing turbines at the 15-mile (25 km) mark.

The researchers also found a surprising number of respondents would make special trips just to see wind turbines offshore. The expansion of offshore wind can promote local tourism. Researchers from the University of Rhode Island, USA, found the first offshore wind farm located on the east coast of the USA has strengthened local tourism. The Block Island offshore wind farm is located approximately six kilometres (3.7 miles) off the island of the same name. For their study, the researchers analysed three years of Airbnb booking data during the timeframe when the wind farm was commissioned. Their findings, published in the Journal Resource and

Energy Economics, indicate bookings were approximately 20% higher than before the wind farm was built. When wind farm planners announced they intended to install offshore turbines off the coast of Block Island, concerns were raised that the project might harm local tourism. Several important indicators for the tourism market indicate that interest in visiting Block Island has increased. Coastal cities where the offshore industry operates have set up information centres and offer tours to offshore wind farms. Offshore wind farm tourism complements the North Sea island of Heligoland (also spelt Helgoland). In this case, tourism did decrease, but then recovered. More tourists have come to the island since the offshore service port was opened. The increasing demand for tours with fast catamarans and for sight-seeing flights to nearby offshore wind farms suggest visitors are interested in offshore wind. Wind power plants at sea can become a tourism attraction if local initiatives introduce visitors to the technology.

Offshore wind development can also have economic implications for coastal recreation demand, particularly for countries characterised by high offshore wind power potential, and for being popular tourist destinations. In this context, a Spanish study (Voltaire et al., 2017) examined the impact of offshore wind farm projects on beach recreation demand in Catalonia, Spain, during the 2012 summer season. The results demonstrate a significant welfare loss up to €203 million per season. The results suggest the installation of a wind farm will encourage tourists to seek Catalan beaches without wind farms; the estimated negative economic impacts occur in areas where wind farms are located. From a political economy perspective, this finding may call for the design and implementation of redistributive instruments to offset the negative impacts caused by wind farms. (Voltaire et al., 2017).



Political and Community Assessments

A key consideration in an offshore wind project is to assess the political and community environments in which the project will be located. Table 6 outlines the general process developers and investors may follow, as a means to creating the foundation for an engagement plan.

Element	Comment
Key Stakeholders	Create a core group of key stakeholders, who reflect the local and regional opinion
Scope Issues	 Identify stakeholders, conduct an initial scoping of the issues, clarifying which issues are important to which stakeholders
Consultation Process	 Design the consultation process, agreeing objectives and outputs, techniques, key events, timing, resourcing, budgets, and co-ordination with other statutory or non-statutory processes
Stakeholders' Liaison Representative	 Identify and appoint an individual with whom stakeholders can communicate with such as a Community/Project Liaison Representative. Consider agreeing an Independent Chairperson and the establishment of a Residents Project Monitoring Committee, which is representative of the various previously identified stakeholders
Dialogue	Bilateral communication methods such as public meetings, staffed exhibitions and establishment of local contact person or number would be required at the early stages to draw out views and concerns of the local community and interested parties, including clarity of the various groups of stakeholders, and the unique elements of the proposed location for the offshore wind farm
Communication Strategy	The project promoter needs to establish a comprehensive understanding of the local stakeholders within the project catchment area, and develop a strategy on how to approach them
Impacts	When the project developer is applying for consent, they must be able demonstrate a comprehensive assessment of the project's likely impacts on a wide range of stakeholders and factors, including the marine environment and birds, visual impact, fishing, and shipping

Table 6: Key Steps in Assessing the Political and Community Environments

In developing a stakeholder engagement plan, it is advisable for the project developer to consider the manner in which to disseminate project information, timing of information, coordination with local governments, degree of engagement, community structures, how to leverage local intermediaries, identify stakeholder liaisons, and the need for independent facilitators. Table 7 illustrates the elements within a stakeholder engagement plan.

Element	Comment
Information	 Consider what networks will be most effective for disseminating information Use local broadcast, print and social media platforms Which local papers and which local notice boards are always read Consider the availability of parish (Ireland & UK) newsletters Are there local leaders who can share information Identify groups that are hard to reach and how best to engage them
Timing of Information	 Timing of information is important in several regards; for example, when to inform people - what and how much detail is available to share Too much information in the wrong format can cause more confusion rather than enhance clarity When to engage people; for example, consultation events arranged for day-time hours are not typically well attended because people are working
Local Government Coordination	 A stakeholder engagement plan can be coordinated with county and local municipalities to be more efficient and effective
Degrees of Engagement	 Consider different degrees and activities of engagement at different stages throughout the process, making use of different methods
Community Structures	 Consider community structures, geography of the area, the economic climate, and the current concerns of local communities
Local Intermediaries	 Consult local intermediary bodies, such as Parish Councils and Rural Community Councils, and Public Participation Networks, that can help the developer to understand the various interests in the area and to find other community organisations
Stakeholder Liaisons	 Establish a clear and well-linked contact to liaise with public and other stakeholders (e.g., Project/Community Liaison Representative, Fishing Liaison Representative), while encouraging identified stakeholders to do so as well
Independent Facilitator	 With statutory stakeholders, consider whether there is the need for independent facilitator or intermediatory Cost of such services is usually born by the developer, low cost-high value

Consultation processes can experience difficulties in identifying and reaching the different groups within a community, which is barrier to engaging the community in planning. Table 8 lists the questions on which developers should reflect during the consultation process.

Topic	Question
Impact (+/-)	 Who will be affected, positively or negatively, by the development? Who holds official positions in the area and who are likely to be affected by the development?
Support and Opposition	 Who supports or opposes the changes the development will bring and why?
Interests	Who runs local organisations with economic, environmental, or social interests?
Influencers	Who is influential in the local community; who are the opinion leaders?
Previous Participation	 Who has been involved in any similar issues in the past? Approaches for reaching hard-to-reach stakeholders?
Future Impact	Who may not be affected by any immediate development, but may be impacted, if similar developments were to locate in the area?

Table 8: Key Questions in Relation to the Consultation Process



Stakeholders Involved in Offshore Zoning and Site Selection Considerations

Informal discussions should be held at an early stage with local planning officers, or national planning officers, if the project is deemed to be national strategic infrastructure. The elimination of unsuitable sites at this stage avoids spending time and money on sites that have little chance of obtaining planning permission or may involve foreseeable opposition.

The impact on local ecology, marine life, and migratory bird routes should be investigated through the relevant state agency, searching state databases, performing a literature search, and conducting an initial field survey. Engaging relevant consultants during the site selection and feasibility stages should



be considered. Also to be considered are other environmental considerations, such as recreational and conservation areas, telecommunications, aircraft safety, and restricted areas.

During this site selection phase, the preliminary internal research on the technical, social, environmental, and infrastructural characteristics of an area should be conducted. Site selection should draw on various published sources, such as maps, local development reports, and other relevant secondary sources.

Initial community consultation involves discussions with officers of the local planning authority and statutory consultees to identify and agree potential issues to be addressed and consider approaching other consultees, such as those suggested by the local planning authority. The level of consultation, at this speculative stage, is kept high and restricted to the planning authority. It would be inappropriate for developers to begin a process of local public consultation, which may cause unnecessary concern or excitement about a proposal. To assess public sentiments regarding the project, conducting public opinion surveys is recommended early in the project and on a period basis through the development of the offshore wind farm operation. These polls will assist in identifying appropriate strategies to engage and inform local stakeholder groups. The consultation activities, according to the project development phases, are itemised in Table 9.

Phase	Activity
Early Consultation	 Identify a site Identify local communities Develop consultation strategy Conduct community and social audit Assess facilities, services, boundaries, and factions
Early Intermediate Consultation	 Disseminate initial information Raise awareness via leaflets, posters, press releases in local/regional print, social media, information packs, and letters to community groups Identify and approach key groups and local figures Prepare for a full consultation, including a virtual consultation option Conduct project feasibility
Advanced Intermediate Consultation	 Provide a full consultation via press releases, a series of presentations, frequently asked questions, open days that include a virtual option, and a local base to respond to queries, Define majority views regarding location, size, and power output Identify main concerns by maintaining a contact book, database of residents and their concerns, and communications matrix (always adhering to Data Protection Regulations) Disseminate further information and responses regarding these concerns Clarify what constitutes non-statutory and statutory consultation phases Develop a community committee and identify roles Prepare statutory documents for planning applications Continue contact with interested parties, community liaison committees, and key personnel
Advanced Consultation	 Disseminate plans to the community via traditional media, social media, and virtual channels; social media and virtual channels proved important during the Covid-19 pandemic and they are likely to remain prominent in communication campaigns Continued contact with interested parties, community liaison committees, and key personnel Disseminate status and results of planning application Develop strategy for appeal or public inquiry

Community Benefit Schemes

The global offshore wind industry is at a critical stage in its development. The industry's focus is on ensuring the deployment of offshore renewable energy projects and the creation of a strong, diverse supply chain, which will deliver sustainable benefits through the creation of jobs and inward investment. Complementary to the delivery of supply chain benefits, developers are encouraged to consider a community benefit package.

The challenges in delivering community benefits from offshore projects require heightened transparency regarding the discussions and governance of distributive justice. Developers should consult widely and discuss openly what is achievable from an early stage. The host can be any location geographically linked to a renewable energy development, and those living in the area. In this context, there is no set formula to identify a host community, although, selfidentification and collaborative discussion may help. Developers should not have a blanket policy, which is rolled out on all projects. Scheme or package is often used to describe community benefit provision. There is no single delivery mechanism which can, or should, be employed with every offshore wind farm. A successful scheme or package is designed on a case-by-case basis and has several components. For example, a community benefit scheme may include funds to assist coastal communities to experience regeneration and economic growth through projects that directly or indirectly create sustainable jobs and safeguard existing jobs.

In designing a new community benefit scheme, the developer should examine offshore wind farm schemes already in operation. In addition, the developer should review schemes designed for other types of infrastructure projects, such as landfill and waste management, sports stadia, urban development, oil and gas offshore platforms, onshore pipelines and processing facilities, power plants, and overhead high-voltage electricity transmission lines.

Community benefit schemes are now a feature of international infrastructure development. In the context of wind farm projects, developers provide funds to communities living in close proximity to their project and local benefits can be in the form of new community facilities or environmental enhancement. An important feature of community benefit schemes is that they are viewed and administered as distinct from traditional economic benefits (e.g., local supply chain, employment), though, there are complementary synergies.

One UK fund prioritised the following criteria within their community benefit schemes:

- Small and medium size coastal communities with a population of 60,000 or less, which are facing economic challenges
- Promote sustainable economic growth and jobs through economic diversification activities in coastal communities that enable the growth of local businesses
- Complement strategic regeneration initiatives within coastal communities

Another project funded a part-time business and marketing manager, a new workshop with equipment, and promotional materials. The award helped support the business to create a range of products, establish a customer base quickly, and employ people locally.

Other examples of project contributions within community benefit schemes are:²

- · Water sports facilities
- · Apprenticeship schemes
- Renovations to a sailing club's boathouse
- Developing a coastal walkway
- · Creating slipways and moorings
- Sea rescue boats and equipment
- Support for coastal area voluntary rescue teams
- University bursary schemes
- Local nature, conservation, and heritage enhancements
- Promoting and safeguarding jobs in tourism

The community benefits described and discussed in this document are not compensation for any perceived negative impacts. Community benefit provisions should not be confused with any compensatory payments or provisions to specific stakeholder groups. Where developers consider it appropriate to provide individual compensation for a development, this arrangement should be agreed between the relevant parties and is separate from any community benefit proposals.

As there are many challenges in delivering community benefits from offshore projects, there is a prerequisite for transparency in all discussions between local stakeholders and the project promoter. Flexibility is a key component of community benefits. There is no single approach and design which is suitable for every project. Community benefit schemes should be tailored to the needs of the local context and characteristics of the site and project.

The scale of a community benefit fund depends on the project variables and should be discussed openly with the community. Communities should understand that projects may be financially limited and should not expect transferal of fund arrangements from one project to another.

Table 10 suggests possible starting points in discussing a fund.

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² See London Array and Beatrice Offshore Wind Farms for examples of community benefit schemes.

Fund Focus Comments Local Fund A local community benefit fund administered by a new or existing local organisation **Regional Fund** • A new regional fund to deliver the community benefit across a wider region than the immediate hosts • This approach can facilitate a more geographically equitable distribution of benefits • Funds designated for a specific purpose (e.g., tourism, environment) **Specific Purpose** are allocated to certain projects by a board of trustees or local authorities Collaborative Scheme • Developers within the region collaborate to deliver a package, which contributes to existing regional funds

Table 10: Suggested Starting Points in Fund Discussions

Other measures may be delivered alongside a fund to create a package of benefits. These benefits should be identified by the developer on a site-specific basis and in consultation with the community. Developers may also support communities in accessing expertise to maximise the impact of a community benefit fund.



Common Features of Offshore Community Benefit Funds

Feature	Comments
Fund Structure	 Binding agreements between developers and local authorities or communities to deliver benefits Fund mechanisms are established in consultation with affected and benefiting communities Fund is index linked with the annual retail price index Developers pay into a particular fund arranged for an offshore development Contributions are made on voluntary basis and provide constant flow of revenues Annual payments are made corresponding with the capacity of the offshore wind farm Electricity discount schemes from offshore renewables should be a consideration
Fund Administration	 Distribution is usually centrally managed by one authority Community funds may be administered by developers, authorities, or communities Tax income from offshore wind is levied by federal states in some countries (e.g., Germany, as offshore area is not municipalised)
Developer Fund Investment	 Pay into existing funds, not specifically set-up for funds from offshore renewables Direct investments or donations to local projects and initiatives One-off investments to boost areas of the local economy, e.g., tourism Investment in existing programmes structures, with a focus on employment, training, apprenticeships, or any other area local stakeholders deem to be appropriate
Access to Funds	 Access to funds can be regulated Funds are allocated to affected communities and regions, or to communities in which developers operate Developers work in partnership with local government authorities for access to wider funding options through a simple application form Local charities, community, and voluntary groups apply for funding packages Scheme funds are uses for capital and/or revenue projects
Beneficiaries of Funds	 Investment in nature preservation, wildlife reserves, and wildlife trusts Develop exhibitions, community centres, and visitor centres, Funding for skills training, bursary schemes, studentships, and local education programmes
Job Creation	 Job creation through regional supply chain involving local businesses and using local infrastructures Sponsorship of a pre-apprenticeship programme for wind turbine technician training in partnership with a local technical college
Communication Programmes	 Highlight local supply indirect benefits in addition to community benefit arrangements Presentations and workshops in schools and colleges to increase awareness of climate change, sustainability, environment, and renewables Providing specific skills and knowledge for careers in the renewable energy sector Innovative technology encourages wind farms to become tourist attractions

Table 11: Features Common to Offshore Community Benefit Funds

Wind farm development can deliver direct and indirect benefits to the local community. These benefits may garner community support for the proposal and reduce opposition. Benefit schemes help address perceived social and environmental disruptions to the landscape and local amenities. Their emphasis, structure and administration may differ depending on the jurisdiction, for example differences in approach between USA and Europe.

Governance and Administration

It is vital that a governance and administration structure is selected on a site-by-site basis. Table 12 identifies questions, which could be a starting point for discussion. It will be prudent for communities to seek professional advice to ensure funds are administered correctly and accountably. Developers may wish to support this process.

Fund Governance	Comments
Community Capacity and Resource	Is the recipient group adequately resourced to deliver the scheme
Fund Scale	 Where large sums will be paid annually, does the recipient group have the confidence and experience to manage and distribute funds effectively?
Fund Structure	 Will regular meetings be required? Is there an open application process which will require detailed assessment from a panel? Are there set criteria which will require minimal input? Have any potential conflicts of interest been identified? Will a portion of the fund be ring-fenced for particular stakeholders such as the local commercial fishing fleet or tourism association?

Table 12: Key Questions Regarding Fund Governance and Administration

Designing a Community Benefit Package

Before engaging in discussions on a community benefit scheme, it is recommended local communities and other stakeholders understand the project details and have a basic understanding of the offshore renewable energy industry. Each scheme will vary depending on the developer, the local communities, and the project itself. To achieve the most effective impact, schemes should reflect and respond to local needs. Each scheme should be tailored to reflect the characteristics of the development and the local social and economic environment.

Factors to consider in designing a community benefit scheme are the:

- Scale of project
- Technology
- Distance of project from shore
- Proximity to local port and coastal communities
- Nature of project (i.e., trial or actual site for an offshore wind farm)

Community benefits are intended as a tool to share the benefits of a natural resource in recognition of project impacts. They are applicable to commercial sites where there is an economic benefit to the developer.

Although community benefits from research sites may not be a requirement of good practice, developers may wish to consider or discuss possible provision of benefits from such sites on a case-by-case basis.

Prior to a full public consultation, the developer is recommended to undertake an initial study to determine a proposal for:

- What might be the geographical area to benefit (e.g., communities, towns, villages within 1km, 3km, 5km from shore)
- Whether a concentric hierarchy approach be a consideration in the community fund award criteria?
- Within that area, who could be the appropriate contacts and communities of interest for consultation?
- Do impacts differ depending on community locations i.e. those close to substation or where cable coming onshore, or impacted visually by turbines offshore
- This process should be undertaken at an early stage to allow communities the opportunity to contribute to discussions.

Local opinions should be sought on the most appropriate beneficiary structure, and existing users of the marine, port and coastal area should be engaged. As the project progresses, there should be scope for identified communities to be involved in the process, contributing to the identification of additional stakeholders and shaping the consultation process. Ongoing collaborative consultation and dialogue should be designed and tailored for each project.

Contributing to community benefit discussions does not affect an individual's right to express a view on the development proposals. Supporting or objecting to the development does not affect an individual's right to discuss the community benefit proposals. Efforts should be taken to avoid potential or perceived conflicts of interest. Designing and developing a community benefit package can be a lengthy and laborious process for all stakeholders.

Community councils should be open to dialogue with developers and should suggest any relevant groups and individuals to engage in discussions. Community groups can be supported to engage in community benefit discussions by contacting local government agencies, mayoral offices, chambers of commerce, and public participation networks. Communities are encouraged to consider the scope for strategic spending in their area. Communities should be aware there may be limitations to the scope of community benefits, or how many communities can be fairly represented. Such limitations should be discussed with the developer and understood at an early stage.

Local authorities, municipalities, and local government offices should aim to be involved in identifying appropriate communities by suggesting contacts and facilitating discussions. Where appropriate, local authorities may consider administering funds. Stakeholders should be aware that where funds are administered by a local authority, any awards made to community groups are likely to be classed as state aid and are treated accordingly. It is also important community

groups are mindful of other local government funded projects and that the offshore wind community benefit scheme is ring-fenced for new projects and should not be used to subsidise or replace spending previously planned.

In considering effective implementation, the focus of community benefits and the delivering mechanism should be optimised. The composition, delivery, and structure of the package should be designed through dialogue with local stakeholders.

Community groups may be existing groups or created for the purpose of designing and/ or administering the fund. Typically, these groups are identified as the host communities. In identifying host communities, it is worth considering the proximity of the community to the project, including onshore substation, cable landing points, cable routes, as well as other infrastructure construction sites and compounds.

There are likely to be local or regional structures or organisations which are already engaged with a geographical area and could be supported to provide further benefits. A new mechanism could be established to deliver benefits over a local authority region(s). This approach would complement local authority provision by supporting non-statutory projects in one or more local authority regions. Some local authorities will have issued guidance on the expected benefits from offshore renewable energy, which is a helpful starting point for discussion. Where local authorities have issued policies or guidelines relating to community benefits from offshore developments, it should be

noted these policies represent one possible route, and developers and communities are not obliged to adhere to them. Developers and communities should discuss the relevant local authority approach, and arrive at a mutual agreement on whether it is the most suitable pathway to follow.

Depending on the jurisdiction, developers may not be required, or wish to have ongoing input throughout the lifetime of the scheme. Developers may aim to ensure the package is structured appropriately and to provide support where necessary. Any delivery mechanism or topic can be considered; communities and developers should work together to devise a site-specific solution.

The focus of a community benefit package should be driven by the local community, who should play an active role in determining how funds are spent. Starting points for such discussions may include building, developing, or supporting local initiatives, such as:

- Apprenticeship schemes (e.g., steel fabrication, turbine pre-assembly)
- Skills and upskilling development programmes
- Extra-curricular engagement with schools, colleges, and universities
- Capacity in the community
- Charitable causes
- Cultural assets
- Natural capital (e.g., upgrades to areas of cultural or environmental interest)
- Infrastructure upgrades (e.g., harbour maintenance)
- Electricity discounts
- Facilities or services to complement statutory provisions

- Tourism and facilities e.g., museums or visitor centres
- Marine management

- Commercial fishing community
- Environmental communities
- Women's empowerment networks

Summary Points

- Offshore wind power can play an important role in helping decarbonise the energy sector. All stakeholders need to realise, if they want a green revolution, this will mean transition to a change period. National and local stakeholder consent and support are vital to enable energy transition to achieve close to or net zero emissions. Offshore wind power is an integral component of helping meet governmental climate change targets internationally. Citizen and community collaboration is instrumental to delivering these targets.
- Offshore wind power has many benefits for climate, the economy, job creation, training and education, coastal and port communities, local supply chain.
 Complementary to the delivery of supply chain benefits, developers are encouraged to consider a community benefit scheme.
- The range of stakeholders for offshore wind is different to onshore wind. These must be identified and engaged with from an early stage in the project.
- Perceptions of distributional and procedural fairness, and trust, are fundamental to sustained social support for the expansion of offshore wind power.
- If project promoters engage early, they
 must be prepared to incorporate feedback
 into project design. Incorporating feedback
 is better than not consulting and having to
 redesign at a later stage.

- In pursuit of social consensus, there is a role for government to ensure that positive offshore wind power engagement and narrative are coordinated and communicated at project, sectoral, municipal, regional, and national levels. Social and engagement innovation should be explored.
- Projects should ensure not to mismatch local benefits with local needs. Collaboration between host communities and project promoters is key to successful deployment of offshore wind power.
- Projects should ensure that community engagement is as constructive as possible.
 The quality of interactions with host communities in advance of and during the planning application process is important to building and sustaining meaningful local stakeholder relations and engendering acceptance.
- It is not unusual for the granting of survey licenses to be challenged in the courts. The general public and local communities need to be engaged to help them understand what is involved in developing offshore, for example why assessment work is required to identify seabed conditions, environmental restrictions, fishing and other marine activities to design a layout which is compliant and is cognisant of all local stakeholders.

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Additional Sources and Useful Links

- All-Energy Exhibition and Conference: www.all-energy.co.uk
- American Clean Power: https://cleanpower.org/
- Beatrice Offshore Windfarm Ltd: www.beatricewind.com
- Benelux Infrastructure Forum: www.beneluxconf.com
- Bureau of Ocean Energy Management: www.boem.gov/Atlantic-Fishing-Industry-Communication-and-Engagement/ and www.boem.gov/Stakeholder-Engagement-and-Partnerships/
- Codling Wind Park www.codlingwindpark.ie
- Crown Estate: www.thecrownestate.co.uk
- · Climate Exchange: www.climatexchange.org.uk/research/projects/community-benefits-
- Dublin Array: www.dublinarray.com
- EUCC-D: www.eucc-d.de/projekte-fallstudien.html
- Energi Coast North East England's Offshore Wind Cluster: www.energicoast.co.uk
- ETIP Wind European Technology & Innovation Platform on Wind Energy: www.etipwind.eu
- Fore Wind: https://forewind.co.uk/off-shore-wind-farming-the-future-of-green-electricity/
- GrantScape: www.grantscape.org.uk
- · Global Wind Energy Council www.gwec.net
- International Energy Agency www.iea.org
- International Renewable Energy Agency: www.irena.org
- Local Energy Scotland: www.localenergyscotland.org/goodpractice
- London Array: www.londonarray.com
- Marine and Renewable Energy Ireland www.marei.ie
- Oceanology International: www.oceanologyinternational.com
- Offshore Day: www.offshore-day.com
- Offshore Energy: www.offshore-energy.biz
- Offshore Industry: www.offshoreconference.eu
- · www.offshoreenergy.dk/event
- www.offshorewind.biz
- The Offshore Wind Energy Website: www.offshorewindenergy.org

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• Offshore Wind Journal: www.owjonline.com

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- Pondera Consult: www.windminds.com
- Rampion Offshore Wind Fund: www.rampionoffshore.com/community/benefit-fund/
- www.ren21.net
- Renewables Grid Initiative www.renewables-grid.eu
- Renewable UK: www.renewableuk.com
- Reuters Events Renewables: www.newenergyupdate.com
- Reuters Events US Offshore Wind: https://events.newenergyupdate.com/offshore-wind/
- RWE: www.group.rwe/en/the-group/countries-and-locations/in-your-community/community-funding-in-action
- The Scottish Parliament: www.parliament.scot/parliamentarybusiness/Bills/77926.aspx
- Scottish Renewables: https://www.scottishrenewables.com
- Vinevard Wind: www.vinevardwind.com
- · WAB The Network for Wind Energy: www.wab.net
- Wind 2050: www.wind2050.dk
- Wind Energy Ireland: https://windenergyireland.com/
- Wind Europe: www.windeurope.org
- Windforce Conference: www.windforce.info
- World Forum Offshore Wind: www.wfo-global.org



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