

WP2: Public acceptance of off-shore wind energy

Does social acceptance differ between floating v fixed offshore wind farm proposals?

How does social acceptance differ between near-shore v far-shore installations?

What stakeholders are involved in offshore zoning and what are the site selection considerations?

What are the legal and tax framework differences between floating and fixed?

In some jurisdictions, local and national government tax treatments are applicable; if not fixed to seabed, local and/or national taxes may not apply.

What are the experiences of different countries in this regard?

How do local governments influence this local debate among communities?

What are the local social and economic benefits to off-shore wind farms?

Do you have any contacts with community engagement or communications personnel in any of the following companies?

§ DONG

§ SSE

§ Innogy

§ Vattenfall

§ Statoil

§ Iberdrola

§ EON

§ Other, please detail:

Deliverable to include:

Community Impacts Overview:

- Social
- Recreation
- Visual
- Tourism
- Economic
- Health

Stakeholder Engagement Overview:

- Stakeholder Mapping (Fishing, Shipping, Aviation, Military, Marine, Birdlife)
- Political and Community Assessments
- Stakeholder Strategies
- Public Perceptions and Attitudes
- Best Practice Case Studies











Stakeholders involved in site selection include:

- fishing industry,
- shipping industry,
- tourism and economic development organizations,
- local government,
- state government,
- federal government,
- environmental protection regulators,
- environmental/marine advocates,
- developers,
- project owners,
- utilities,
- local residents.












Site selection considerations include:

- wind speed,
- water depth,
- grid integration,
- soil conditions,
- turbine technology,
- distance from shore,
- array spacing,
- potentially conflicting uses (e.g., military, radar, air traffic),
- impact on
 1. local economy (including fishing and shipping),
 2. cultural sensitivities,
 3. utility pricing,
 4. local marine and coastal environments.






















Name

-  Estimating-preferences-for-Wind-Turbine-locations
-  Mapping the Legal Framework for Siting Wind Farms
-  Mapping Wind Controversies methods & datasets
-  Nearshore v Offshore
-  Preferences for offshore wind power Ladenburg-and-Knapp-2015-
-  Public Engagement in Danish Nearshore Wind Projects in Law & Practice
-  Response to different social acceptance issues Thesis
-  Social Acceptance of Wind Energy in Cornwall 2017
-  Social Context & Fairness for Local Acceptance of Wind Power
-  Visual Impact of Offshore Thesis-Jacob-Bjerregaard

Name

-  Bidwell OCM 2017
-  Bush & Hoagland 2016 Public opinion, aesthetic impacts of offshore
-  Fournis & Fortin 2017 Social acceptance to acceptability
-  Friedl & Reichl 2016 Local Practices to address social acceptance of energy infrastructure projects
-  Hooper Hattman & Austen 2017 Recreational Use of Offshore
-  Installed Offshore Capacity Europe 2016
-  Langer, Decker & Menrad 2017 germany, Participation, Acceptance
-  Offshore Challenges Chapter Dec 2014
-  Sokoloski Markowitz Bidwell 2018
-  Walker Wiersma & Bailey 2014 Community Benefits, Offshore, England Study
-  Westerberg Jacobsen & Lifran 2015 Offshore Southern Europe

Name

-  New literature Sept 2017
-  155861-444353.response-to-oriel-eis-june-2007
-  201703 March_2017_RenewableUK_Offshore_Wind_Project_Intelligence
-  COP15_ET_TheDanishWindturbineSecretariat
-  Crown Estate 2015 public perceptions
-  Crown Estate 2015 wellbeing impacts
-  FISGA NOW IRELAND POLICY POSITION PAPER AUGUST 2015
-  FOWIND_offshore_wind_policy_and_market_assessment_15-02-02_LowRes
-  Full_Report_-_Community_Benefits_from_Offshore_Renewables_-_Good_Practice_Review
-  Good-Practice-Principles-for-Offshore-Community-Benefits
-  IEA-RETD-REWind-Offshore-March 2017 report
-  IRENA_Leveraging_for_Onshore_Wind_2017 pd
-  Jan 2017 WindEurope-Annual-Offshore-Statistics-2016
-  Non-Technical Summary ORIEL
-  OFFSHORE USA ARTICLE Beiter-et-al-2017-NETL
-  offshorewindbiz article May 2017
-  Oriel Project Presentation
-  PRESENTATION CRITIQUE MAY 2017
-  Task28 JAPAN MEMO NOV 2018 offshore_1031
-  UK report May 2017
-  Understanding community benefit payments_June 2017

Political: As offshore are long-term capital intensive investments, a key challenge facing investors is gaining government strategic confidence in the sector.

Ports Infrastructure: Ports play a crucial role in the construction and operation of offshore wind farms, with different types of ports acting as the construction port, manufacturing port and O&M port.

Requirements for constn & manuf for offshore wind are generally different to that of other sectors due to the need for:

- long quaysides,
- high loading limits,
- large laydown areas
- and 24 hour unrestricted access.

- Significant investment is often needed to bring ports up to meet offshore wind requirements, which can be problematic, particularly in countries which have largely privatised port industry (like the UK).
- Portside requirements for the O&M phase are much less onerous, with proximity to site the most important driver.

Socio-economic constraints:

- Potential impacts need to be assessed and where required mitigated to an acceptable level.

Potential impacts on:

- Birds
- Marine mammals
- Fishing communities
- Shipping
- Seaside / coastal communities
- Those who live close to onshore grid connection

Assessing the impacts of offshore wind is extremely challenging given the lack of general knowledge of the marine environment.

For instance, on one bird survey in the UK, a developer found a greater number of one species of birds in a small wind farm than was understood to exist across the UK.

This lack of information poses significant challenges for regulators who have to make choices on the basis of far from perfect information.

The best way of avoiding conflict and planning issues is through good site selection, reducing any risk of impacts well before a project applies for consent.

Site selection is best achieved through:

- Robust marine spatial planning exercises, which seek to develop a good understanding of potential environmental constraints, alongside
- meaningful engagement with key stakeholders (such as fishermen and shipping communities) (***Concerned Coastal Communities Alliance***) to identify areas best suited to offshore wind.

Germany developed a formal Marine Spatial Plan, leading to greater support from shipping and environmental groups,

while in contrast in China, sites initially leased to offshore wind developers had to be moved due to overlaps with competing marine interests.

Regulatory Challenges:

Europe has developed a range of approaches to consenting and licensing, reflecting the historical legacies of the countries involved.

Key success factors for consenting and licensing regimes are as follows:

Sufficient institutional capacity: it is critical that organisations involved with consenting and licensing offshore wind projects have the institutional capacity to do so, both in terms of human capital (skills, knowledge, personnel) and financial capital (access to sufficient finance to perform the tasks that are required)

Sympathy to technology development timescales:

consenting and licensing processes need to adopt a realistic approach to the timescales of development.

For instance, the issue of timelines in the failure of the Danish Anholt offshore wind single site tender in 2009.

Due to lack of dialogue between the industry and the agency holding the tender, unrealistic build timelines were built into the contract and many developers were deterred from bidding.

Clear institutional incentives for offshore wind:

developers and institutions must be appropriately motivated to promote offshore wind deployment.

For instance, an organisation that has a very straight forward area of responsibility and authority is the UK's Crown Estate. Operating with a purely commercial mandate has allowed it to take decisions and to plan what have undeniably successful leasing rounds.

As a commercial landlord, the Crown Estate has a long term interest in the viability of the industry and the exploitation of the renewable resources of UK waters, making it a proactive and forward-looking stakeholder as well as an administrative body.