

Environmental Impact Assessment Best Practices

27 February 2025

Agenda

Environmental Impact Assessment: Best Practices for Offshore Wind

- Environmental Impact Assessment (EIA) is a structured process used to evaluate a project's potential environmental effects
 - EIAs help decision-makers assess environmental impacts early in project planning, aiming to avoid, reduce, or offset adverse effects. This improves project transparency and minimises risks before approval
- **Steps in the EIA Process**
 - **The Iterative Nature of Design and EIA**
 - **Best Practices**
 1. Right-Sized Project Design Envelope
 2. Communication Between Design and Environmental Teams
 3. Make Assessment of Cumulative Impacts Easier
 4. Even More Best Practices



Stages of the EIA process

Stage	What's involved
1. Screening	Deciding if an EIA is required.
2. Scoping	Deciding what needs to be covered in the assessment and reported in the EIA Report.
3. Preparing the EIA Report	The EIA Report must include the likely significant environmental effects of the proposed development.
4. Making an application and consultation	The EIA Report and development application must be publicised, interested parties and the public must be given an opportunity to give their views on it.
5. Decision making	The EIA Report and any comments made on it must be considered by the regulator before they decide whether to give consent for the development.
6. Post decision	The developer starts any monitoring required by the development consent conditions and commitments made in the EIA Report.

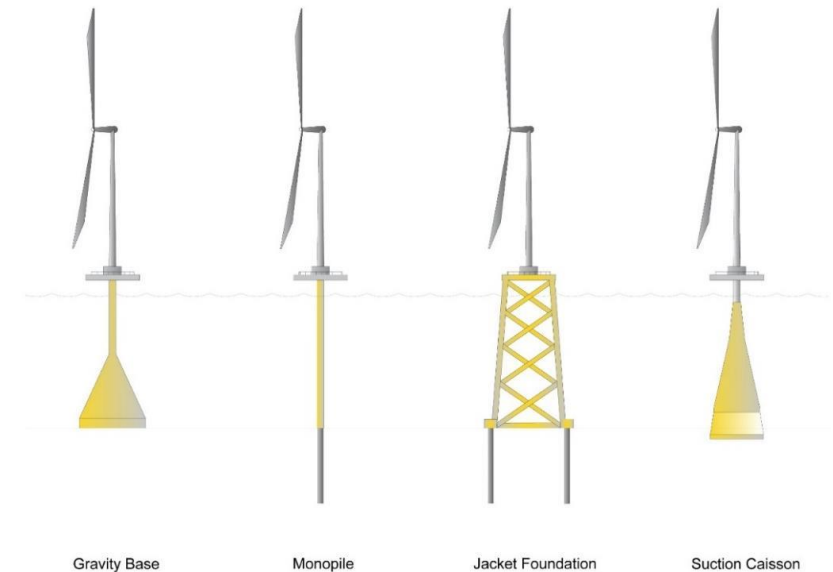
The Iterative Nature of Design & EIA

Engineering design and environmental study are inherently iterative processes, each feeding valuable information into the other to refine and optimize the final project.



Right-Sized Project Design Envelope

- A project design envelope (PDE) for offshore wind permitting and EIA is the set of defined boundaries - both physical and operational - within which an offshore wind project must be developed.
- It serves as a strategic framework during early planning and permitting, helping to balance technical feasibility with environmental and regulatory requirements.
- It is essentially what is studied in the EIA process to support permitting a constructable, economic design:
 - **Spatial Boundaries** – broad enough to allow for flexibility in micro-siting to avoid sensitive environmental areas, design constraints, conflicting ocean uses, etc.
 - **Technical Parameters** – broad enough to allow for changes in turbine size, spacing, foundation type, construction methodology, etc.



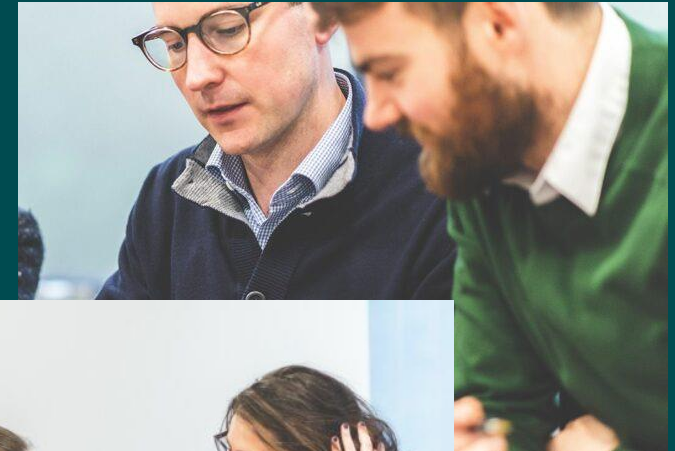
Right-Sized Project Design Envelope

- The best practice is to set a realistic PDE, which allows for the selection of an environmentally and socially acceptable project configuration, that maximizes energy output and is economically and technically feasible to build.
- A PDE should incorporate adequate flexibility by allowing for a range of project configurations, design parameters, and construction methodologies to be assessed and permitted.
- Too wide a PDE (too large, too many parameters) can introduce unnecessary complexity into the EIA, which can create confusion amongst stakeholders and potentially delay obtaining development consents.



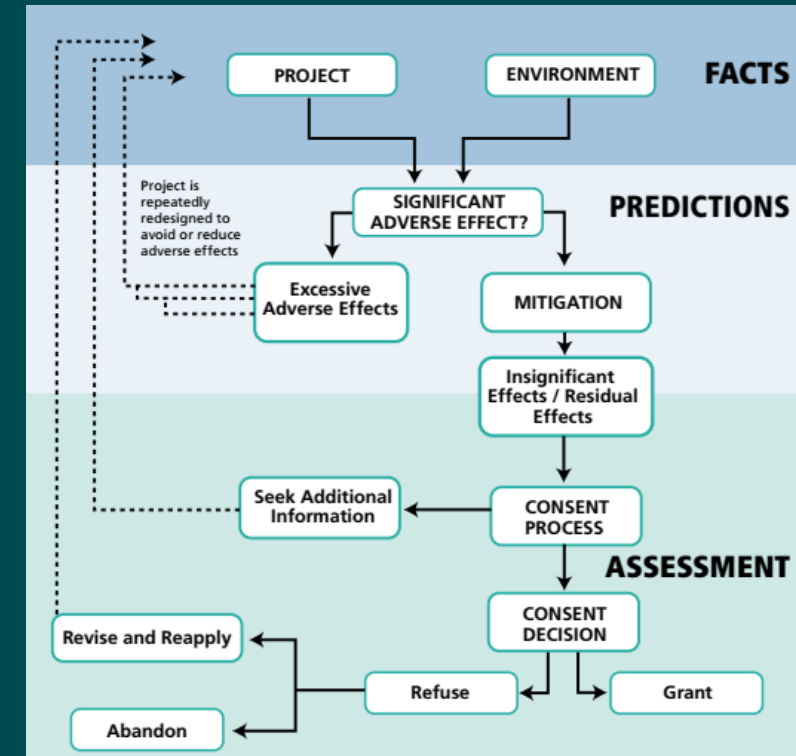
Communication Inside the Development Team about EIA

- We all know that it is important to maintain open lines of communication with regulatory agencies and to engage stakeholders through transparent communication and participatory processes.
- But, a communication point that is often overlooked is regular communication within the project team, particularly between engineering/construction teams and the consenting/EIA teams.
- If the environmental team is unaware of changing design parameters, equipment options, construction methodologies, etc., the EIA may not adequately study important project components, leading to delays and rework.



Communication Inside the Development Team about EIA

- EIA can be managed to accommodate an iterative process, work it that way, as you move through the different stages communicate these to the project team and make changes as required
- Take onboard meaningful stakeholder engagement feedback and incorporate into project design, assessment approach and commitments (e.g., mitigation measures)
- Have project team engineers significantly contribute, write, review and sign-off on project description, PDE and design parameters
- Define the project description early in the process for more constructive stakeholder engagement, to create opportunities for feedback and to enable the EIA team, chapter writers to move forward with production of the EIA Report



Easier Assessment of Cumulative Impacts

Developers can make cumulative impact assessments more efficient and robust by working together in several strategic ways:

Data Sharing and Joint Studies:

Developers can avoid duplicative efforts with shared data sets, which enable a more comprehensive understanding of the cumulative impacts while reducing individual study costs.

Harmonized Methodologies:

Collaborating on standardized assessment frameworks and modeling tools ensures that all projects are evaluated on the same criteria. This consistency not only facilitates smoother regulatory reviews but also provides a clearer picture of overlapping impacts.

Coordinated Stakeholder Engagement:

Working together to engage with regulators, local communities, and environmental experts can streamline discussions around environmental thresholds and mitigation strategies. Joint workshops or consultations can foster a common understanding of the cumulative impacts and lead to coordinated management approaches.

Cost and Resource Sharing:

Developing a consortium or alliance for shared environmental studies can distribute the financial and logistical burdens among multiple projects.

Even More Best Practices

- Conduct thorough environmental baseline surveys early in the process to inform impact assessments – Consider methodologies that allow for adaptive sampling
- Resource Up
 1. Ensure adequate resources to meaningfully participate in the EIA process within the developer organization
 2. Lobby and push for regulator and key stakeholders to have enough good quality resources to accept and process your EIA Report / development consent applications. Consider funding third party technical assistance
- Expect new issues to crop up – from the design and construction teams, from regulators and stakeholders, from baseline studies, from politics – and address issues as they arise in a transparent, logical manner
- A defensible administrative record is important: Record and document all regulator and stakeholder engagements from Day 1, Keep a decision log that tracks key project milestones and explains changes to project design, consenting strategy, and assessment approach, etc.
- Build positive working relationships with everyone – regulators, stakeholders, community groups and collaborators / competitors – development of offshore wind farm projects from inception to construction is a long process and requires many allies

Get in touch

Contact:

Anntonette Zembrzuska Alberti,
VP Strategic Growth, Venterra
Anntonette.Alberti@Venterra-Group.com



www.venterra-group.com