Environmental Impact Assessment Report
Volume 1, Chapter 5: Approach to the EIA

MarramWind Offshore Wind Farm

December 2025

MarramWind

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Checked by:	WSP UK Limited
Approved by:	MarramWind Limited

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5. Approach to the EIA

5.1 Introduction

5.1.1.1 This Chapter of the Environmental Impact Assessment (EIA) Report describes the EIA methodology followed for MarramWind Offshore Wind Farm (hereafter, referred to as 'the Project').

5.1.1.2 The Project is a proposed floating wind farm located in the North Sea, with a grid connection capacity of up to 3 gigawatts. The location of the Project is determined by the Option Agreement Area, which is the spatial boundary of the Northeast 7 (NE7) Plan Option within which the electricity generating infrastructure will be located. The NE7 Plan Option is located north-east of Rattray Head on the Aberdeenshire coast in north-east Scotland, approximately 75 kilometres (km) at its nearest point to shore and 110km at its furthest point. An Option to Lease Agreement for the Project within the NE7 Plan Option was signed in April 2022.

5.1.1.3 A summary of the Project is provided in **Chapter 1: Introduction** and a comprehensive description of the Project is provided in **Chapter 4: Project Description** of the EIA Report.

5.1.1.4 An EIA is a process for identifying and assessing the likely significant effects of a proposed project to inform the decision-making process for development consent to be granted. The EIA process culminates in the provision of an EIA Report, written in accordance with the planning legislation set out in Section 2.2 in **Chapter 2: Legislative and Policy Context**.

5.1.1.5 The purpose of this EIA Report is to help the decision makers, statutory consultees, other stakeholders, and the public understand the predicted likely significant effects (positive and negative) and the scope for avoiding, preventing, reducing, and if possible offsetting negative effects, before a decision is made as to whether to consent development. The EIA Report supports the determination of the planning application, marine licences consents and Section 36 (s.36) consent for the Project (see Section 1.5 in **Chapter 1: Introduction**). This EIA Report provides an assessment of the likely significant effects associated with the Project during its construction, operation and maintenance (O&M), and decommissioning stages.

5.1.1.6 The approach to EIA (for instance, the way in which the assessment is conducted) and the assessment criteria applied across different aspects[1] vary. The aspect assessments have been carried out using the general approach and processes set out in this Chapter. Where required, aspects have refined the approach set out here in order to properly address their particular requirements. Any changes to the approach set out in this Chapter are detailed in the appropriate aspect chapter (**Chapters 6** to **33**).

5.1.2 Structure of this Chapter

5.1.2.1 The remainder of this Chapter is structured as follows:

- **Section 5.2: The EIA process** – this Section sets out an overview of the legislative context and relevant guidance for undertaking an EIA and describes the necessary stages of the EIA process;

[1] The term 'aspects' refers to the individual environmental and socio-economic topics or disciplines that are assessed in the EIA Report.

- **Section 5.3: Delivering proportionate EIA** – this Section describes the considerations and commitments being undertaken to ensure a robust yet focused and proportionate EIA;
- **Section 5.4: EIA Scoping** – this Section sets out legislative and guidance background for the Scoping process, and a history of the Scoping process undertaken for the Project;
- **Section 5.5: Consultation and engagement** – this Section sets out the Statutory Consultation and non-statutory engagement undertaken throughout the EIA process for the Project;
- **Section 5.6: Scope of the assessment** – this Section describes the scope of the assessment in terms of the technical scope (aspects), the geographical area (spatial scope), and the time periods considered (temporal scope);
- **Section 5.7: Approach to assessment of significance** – this Section outlines the overarching approach to evaluating the significance of any likely environmental effects of the Project identified;
- **Section 5.8**: **Environmental measures and residual effects** – this Section describes the types of embedded environmental measures and how they are considered within this EIA Report;
- **Section 5.9: Transboundary effects assessment** – this Section defines transboundary effects, identifies the need for a transboundary effects assessment, and describes how it is addressed in this EIA Report;
- **Section 5.10: Inter-related effects** – this Section defines inter-related effects and sets out how they have been identified and will be assessed in the EIA Report;
- **Section 5.11: Cumulative effects assessment (CEA)** – this Section defines cumulative effects and how they have been identified and assessed;
- **Section 5.12: Related environmental assessments** – this Section identifies the need for any other related environmental assessments and how these are addressed in the EIA Report;
- **Section 5.13: References**; and
- **Section 5.14: Glossary of terms and abbreviations**.

5.1.2.2 This Chapter is also supported by the following Appendices in **Volume 3**:

- **Appendix 5.1: Stakeholder Issues Responses**;
- **Appendix 5.2: Commitments Register**; and
- **Appendix 5.3: Marine Strategy Framework Directive Assessment**.

5.2 The EIA process

5.2.1 Design evolution process

5.2.1.1 The EIA process is an iterative, systematic, analytical, impartial, and consultative process which allows opportunities for environmental concerns to be addressed during the design evolution of a project. The design evolution process is a fundamental element of the EIA and provides evidence that the Project has been developed following feedback via the Scoping Opinion, Statutory Consultation and other engagement with key stakeholders.

Statutory and non-statutory engagement is essential for stakeholders to provide feedback and to understand and influence the design as it progresses.

5.2.1.2 The iterative design evolution process integrates the advice and experience of both the environmental subject matter experts and the Project's engineering team. Regular liaison between these groups ensures that the design evolution is informed by a comprehensive understanding of both environmental sensitivities and engineering requirements. This collaborative approach ensure that the mitigation hierarchy is adhered to throughout the Project's development, while also considering practical engineering solutions and constraints.

5.2.1.3 From the outset, the environment has been central to the design of the Project. This is demonstrated through the development of embedded environmental measures presented in this EIA Report and detailed in the Commitments Register (**Volume 3, Appendix 5.2**). These were initially presented in the Scoping Report and further developed for the planning application, marine licences applications and s.36 consent submission. Design advice and environmental considerations raised from the Marine Directorate Licensing Operations Team (MD-LOT) and Aberdeenshire Council's Scoping Opinions have informed the iterative design process. Responses are included within **Volume 3, Appendix 5.1** and the offshore consent application document **MD-LOT Gap Analysis**. With this approach to design, MarramWind Limited (hereafter, referred to as 'the Applicant') has sought to achieve a sustainable and environmentally appropriate design for the Project, one that will meet operational requirements at the same time as limiting and mitigating the environmental effects of the Project as far as practicable.

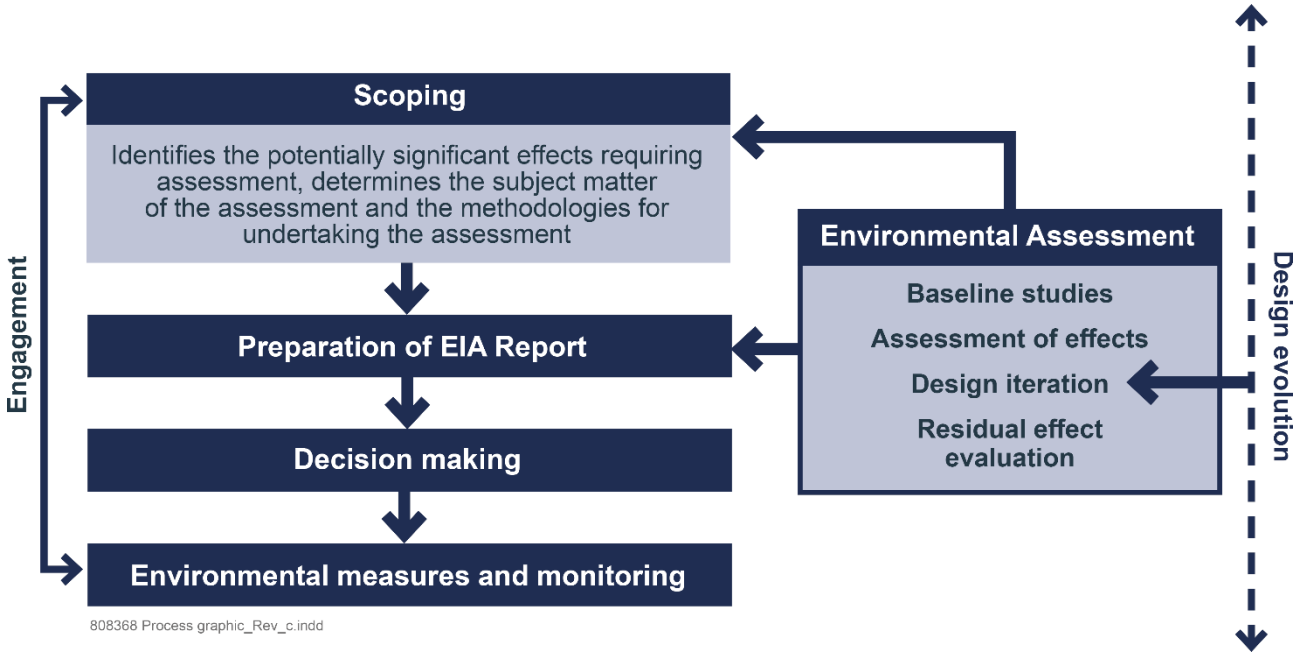
5.2.1.4 The design evolution process and activities undertaken are described in **Chapter 3: Site Selection and Consideration of Alternatives** and **Chapter 4: Project Description**.

5.2.1.5 The findings presented in this EIA Report reflect the current stage in the design process and understanding of baseline conditions and have allowed for conclusions as to the likely significant effects to be drawn. Where the design is still evolving, a precautionary approach is applied to ensure a maximum design scenario which represents the worst-case scenario for each aspect assessed in this EIA Report. In using this precautionary approach to the assessment, the level of effect may be overstated and subsequently reduced at the time of development. Each individual aspect chapter, **Chapters 6** to **33**, provides commentary on the appropriate reasonable worst-case scenario adopted for the individual assessment.

5.2.2 EIA process overview

5.2.2.1 The preparation of this EIA Report is one of the key stages in the EIA process, as it brings together information about any likely significant effects. The EIA process is summarised in **Plate 5.1**. The remainder of this Chapter provides further detail around the key stages of the EIA process for the Project.

Plate 5.1 The EIA process



5.2.2.2 Four sets of EIA Regulations are applicable to the Project, as outlined below. Where relevant, these are collectively referred to as the 'EIA Regulations' in this EIA Report. This EIA Report has therefore been prepared in accordance with the EIA Regulations:

- The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017;
- The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017;
- The Marine Works (Environmental Impact Assessment) Regulations 2007 (applies to applications that require an EIA, for a marine licence from 12 nautical miles (nm) to 200nm); and
- The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017.

5.2.2.3 This EIA Report has therefore been prepared in accordance with the EIA Regulations. Further details on the EIA Regulations can be found in **Chapter 2: Legislative and Policy Context**.

5.3 Delivering proportionate EIA

5.3.1 Overview

5.3.1.1 To support the decision-making process, the Applicant has sought to ensure that the EIA and resultant EIA Report are robust yet focused on the most pertinent matters. The EIA has taken into consideration the Institute of Environmental Management and Assessment (IEMA)'s guidance document Delivering Proportionate EIA: A Collaborative Strategy for Enhancing UK Environmental Impact Assessment Practice (IEMA, 2017), Planning Advice Note (PAN) 1/2013 (Scottish Government, 2013) and the Good Practice Guidance for Applications under s.36 and Section 37 of the Electricity Act 1989 (Scottish Government,

2022b) . This aims to help ensure that 'proportionate' EIA is delivered in support of projects. IEMA guidance specifically highlights industry-wide concerns relating to "…*individual EIAs being too broadly scoped and their related Environmental Statement to be overly long and cumbersome*" (IEMA, 2017).

5.3.1.2 The Scoping stage sought to scope out environmental aspects and specific matters under an aspect from further assessment with suitable justification and evidence provided. This focussed the EIA on key likely significant effects.

5.3.1.3 The following key tools and approaches have been adopted from the scoping stage for the Project, to assist in the delivery of a proportionate EIA:

- use of existing evidence base;
- relevant stakeholder engagement responses which include the Scoping Opinions are transposed into **Volume 3, Appendix 5.1** for comments in relation to **Chapters 1** to **5** (introductory chapters) and within the 'Consultation and engagement' section of each technical aspect chapter (**Chapter 6** to **33**) (see **Section 5.5** for further details);
- inclusion of embedded environmental measures as identified in the **Volume 3, Appendix 5.2** (informed by the site selection exercise, and good and standard practices); and
- approach to appropriate level of assessment.

5.3.1.4 A proactive, early-stage scoping process was undertaken in 2022 to 2023 to ensure that the EIA and EIA Report would be robust whilst suitably focused on aspects of the environment likely to be subject to significant effects. The Applicant's responses to the MD-LOT Scoping Opinion (Scottish Government, 2023) and Aberdeenshire Council's Scoping Opinion (Aberdeenshire Council, 2023), Statutory Consultation exercises response comments, detailing how they have been addressed within this EIA Report, are provided within each of the aspect chapters (**Chapters 6** to **33**), and a full list is presented in **Volume 3**, **Appendix 5.1**.

5.3.2 Existing evidence base

5.3.2.1 There is considerable existing evidence base for the Project in the form of data and information relating to baseline conditions. Much of this data and information has been collated as part of the ongoing design refinement process (outlined in **Chapter 3: Site Selection and Consideration of Alternatives**), and ongoing environmental surveys. This existing evidence base has been collated, supplemented, and drawn upon to help develop the scope of the environmental assessments and establish the robustness of survey data collected for the EIA.

5.3.2.2 The evidence base has been regularly discussed with relevant stakeholders to ensure that it is appropriate. Further details are provided in **Chapters 6** to **33** for each of the relevant individual environmental aspects.

5.3.3 Commitments register

5.3.3.1 As part of the EIA process, the Project has built on the embedded environmental measures that were established at the Scoping stage and these have been developed into the **Commitments Register** (see **Volume 3, Appendix 5.2**). The **Commitments Register** identifies environmental measures that the Applicant will implement as part of the Project and that will be embedded into design, also referred to as 'embedded environmental measures', please also refer to **Section 5.7**).

5.3.3.2 The embedded environmental measures include proposed avoidance measures, which have been informed by the design evolution process (see **Chapter 3: Site Selection and Consideration of Alternatives**), and sectoral best practice commitments.

5.3.3.3 Additionally, the **Commitments Register** in **Volume 3, Appendix 5.2** identifies how each embedded environmental measure will be secured (i.e. through planning conditions, deemed marine licence, or other documents such as management plans). Where required, commitments have been established through engagement with key stakeholders.

5.3.3.4 Where relevant to individual aspect assessments, the commitments are outlined in **Chapters 6** to **33**. The **Commitments Register** in **Volume 3, Appendix 5.2** is presented in full as a standalone document and has been regularly updated and maintained throughout the EIA, forming an intrinsic part of the design evolution narrative.

5.3.4 Appropriate level of assessment

5.3.4.1 The assessment of the likely significant effects has been based upon:

- review of existing evidence base;
- consideration of commitments made (embedded environmental measures);
- quantitative and qualitative analyses, and professional judgement; and
- where relevant, aspect specific methodologies following established good practice.

5.3.4.2 Effects that are considered to not be significant were scoped out of further assessment in the EIA during the Scoping stage (MarramWind Limited, 2023). Full justification for scoping out effects and any amendment made since receipt of the Scoping Opinion's (Aberdeenshire Council, 2023 and Scottish Government, 2023) is provided for each relevant environmental aspect chapter in **Chapters 6** to **33** of this EIA Report.

5.4 EIA Scoping

5.4.1 Overview

5.4.1.1 A Scoping Report (MarramWind Limited, 2023) was submitted by the Applicant to Aberdeenshire Council and MD-LOT on 26 January 2023. The Scoping Report presented a Scoping Boundary that was defined as the area within which the offshore and onshore infrastructure associated with the Project would be located, including the temporary construction areas and operational work areas. It set out the likely significant effects that would be assessed in more detail (i.e. scoped in), as well as those that were unlikely to be significant and could therefore be scoped out of the EIA.

5.4.1.2 A Scoping Opinion was adopted by MD-LOT on 12 May 2023 (Scottish Government, 2023) and by Aberdeenshire Council on 22 March 2023 (Aberdeenshire Council, 2023). An addendum from Aberdeenshire Council and MD-LOT was adopted on 26 April 2023 and 12 September 2023; respectively.

5.4.1.3 Regulation 6(3) of The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017; and Regulation 5(3) of The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 and The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 requires an EIA Report to be "*based on that scoping opinion and must include the information that may reasonably be required for reaching a reasoned conclusion on the significant effects of the works on the environment, taking into account current knowledge and methods of assessment*."

5.4.1.4 The Scoping Opinions and the associated Statutory consultee responses have therefore subsequently informed the assessment work and the evolution of the design of the Project. Responses to the Scoping Opinions' comments, detailing how they have been addressed within this EIA Report.

5.4.1.5 A full list of comments raised by stakeholders in relation to the introductory EIA Report chapters (**Chapter 1: Introduction**, **Chapter 2: Legislative and Policy Context**, **Chapter 3: Site Selection and Consideration of Alternatives**, **Chapter 4: Project Description** and this Chapter) is presented in **Volume 3**, **Appendix 5.1**. Responses received in relation to technical aspects are provided in the 'Consultation and engagement' section of each respective technical aspect chapters (**Chapters 6** to **33**).

5.4.2 MD-LOT's Scoping Opinion responses

5.4.2.1 A completed **MD-LOT Gap Analysis** spreadsheet is provided as part of the offshore application. The Gap Analysis is a tool used by MD-LOT to track all consultation activities, issues raised during these activities and actions taken to close out issues.

5.5 Consultation and engagement

5.5.1 Overview

5.5.1.1 Central to the development of the Project and the delivery of the EIA has been stakeholder engagement and the delivery of Statutory Consultation. A range of stakeholders have been provided with opportunities to share feedback and input into design of the Project, refinement of the EIA, and assisting in the development of any required mitigation measures. Stakeholders have included statutory consultees, environmental organisations, government bodies, politicians, local communities and community organisations, businesses and landowners.

5.5.1.2 Since early 2022, the Project has proactively involved stakeholders from the early stages of development to ensure those with an interest have been able to share their views, make suggestions and input into the development process. This Section summarises the engagement and consultations delivered in line with the consenting regime requirements applicable to the Project.

5.5.1.3 The Applicant has produced a **Pre-Application Consultation (PAC) Report** which supports the determination of the planning application, marine licences applications and s.36 consent for the Project.

5.5.2 Stakeholder engagement

5.5.2.1 From the start of the Project's development, engagement was undertaken with Aberdeenshire Council and MD-LOT as the two consenting bodies for the onshore and offshore consenting regimes. Regular meetings were held with these stakeholders to discuss the Project's progress, ensure all relevant stakeholders were being engaged and that any concerns or issues could be discussed (see **Section 5.5** for further details).

5.5.2.2 Ahead of the submission of the Scoping Report to Aberdeenshire Council and MD-LOT in January 2023, key stakeholders were engaged to obtain their input into the Scoping Report's development. This was undertaken through a series of individual meetings and group workshops, as shown in the 'consultation and engagement' sections of the Scoping Report (MarramWind Limited, 2023). These were mainly statutory stakeholders, but

included non-statutory stakeholders, such as the Royal Society for the Protection of Birds, whose early input was important in the development of the Scoping Report.

5.5.2.3 Following the submission of the Scoping Report and subsequent Scoping Opinions presented by Aberdeenshire Council and MD-LOT, engagement with key technical statutory and non-statutory consultees continued to further gain input into the proposals as the Project progressed (see **Section 5.4**).

Further engagement

5.5.2.4 In the preparation of this EIA Report, stakeholder engagement has included Statutory Consultation and further aspect-specific meetings and communications with a range of stakeholders across the environmental aspects, to inform the more detailed assessment and identification of appropriate measures to mitigate the effects of the Project. Further details of the consultation and engagement of relevance to the evolution of the Project design are provided in **Volume 3, Appendix 5.1**.

5.5.2.5 **Volume 3, Appendix 5.1** sets out issues raised by stakeholders from pre-engagement, Scoping workshops, Scoping Opinions, post-Scoping workshops relevant to the introductory EIA Report chapters (**Chapters 1** to **5**). Responses to technical aspects are provided in the respective technical aspect chapters (**Chapters 1** to **33**), which include a 'consultation and engagement' section that provides a record of all relevant comments received in relation to that aspect.

5.5.3 Public information event

5.5.3.1 Prior to statutory consultation, the Project held a public information event at the Scottish Maritime Academy, Peterhead on 19 May 2023. Fifty-four stakeholders attended including residents, business owners, representatives of local fisheries, Councillors, community council representatives and a local Member of the Scottish Parliament.

5.5.3.2 The discussions and feedback were used to tailor the approach and information to be presented at the Statutory Consultation. This was crucial to ensure the Project team could anticipate local concerns in advance of statutory consultation.

5.5.4 Statutory Consultation

5.5.4.1 PAC is a statutory requirement set out in the Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013 and the Marine Licences under the Marine Licensing (Pre-Application Consultation) (Scotland) Regulations 2013.

5.5.4.2 In order to meet and exceed Statutory Consultation requirements, four rounds of Statutory Consultation were undertaken.

5.5.4.3 The first round of Statutory Consultation took place from 27 May to 1 July 2024. In person public drop-in sessions were held on 6 June and 7 June 2024. Online question and answer (Q&A) events were held on 30 May and 26 June 2024.

5.5.4.4 The second round of Statutory Consultation took place from 9 October to 19 November 2024. Public drop-in sessions were held on 29 and 30 October. Online Q&A events were held on 7 October and 7 November 2024.

5.5.4.5 The aims of the third and fourth rounds of Statutory Consultation were to provide Project updates based on previous consultation and gather views from the community, statutory consultees, the wider public and all interested in the Project. These rounds of Statutory Consultation also presented the Red Line Boundary for EIA to stakeholders. Key focusses of Statutory Consultation 3 and 4 were to provide information on and gather feedback on

proposed mitigation to minimise effects of the Project on people, communities and the environment.

5.5.4.6 The third round of Statutory Consultation took place from 18 August to 9 September 2025 with a public drop-in session on 27 August 2025.

5.5.4.7 The fourth round of Statutory Consultation took place from 30 October to 13 November 2025. A public drop-in session was held on 3 November 2025.

5.5.4.8 Further information on the Statutory Consultation is available in the **PAC Report** which supports the determination of the planning application, marine licence consent/s and s.36 consent for the Project.

5.6 Scope of the assessment

5.6.1 Baseline

5.6.1.1 Determining the existing environmental conditions is an important part of the EIA process. This is established through desk-based study and / or surveys of the study area and provides a 'baseline' against which changes potentially caused by the Project can be compared. This is explained within the individual aspect chapters (**Chapters 6** to **33**).

5.6.1.2 It is also considered whether in the absence of the Project, there is likely to be a change in the baseline conditions (relating to particular aspects or receptors), over the lifetime of the Project (future baseline). For some aspects such as transport, there will be traffic growth based on regional or national trends, and this would normally be applied consistently across all road transport-related receptors. However, for other aspects, it is possible that a specific part of a study area is predicted to change, by virtue of other potential development being likely to take place, therefore introducing new future receptors.

5.6.1.3 All obtained data is reviewed to ensure it is robust, relevant in spatial and temporal terms, and that it allows the required level of assessment in order to determine the significance of any potential effect with sufficient confidence. Detailed methodologies for baseline data gathering specific for each aspect assessment can be found in **Chapters 6** to **33**. For onshore **Chapters 19** to **27**, the description of the baseline conditions is presented directionally from the landfall(s) to the onshore substations (east to west); and subsequently from the onshore substations to the point of connection at Scottish and Southern Electricity Networks (SSEN) Netherton Hub. To assist interpretation, where appropriate, the baseline conditions are presented zonally, as shown in **Volume 2, Figure 5.1: Onshore Red Line Boundary (zones)**.

5.6.2 Technical scope

5.6.2.1 The technical scope of the EIA was defined in the Scoping Report and has been further informed by Aberdeenshire Council's Scoping Opinion (Aberdeenshire Council, 2023) and MD-LOT's Scoping Opinion (Scottish Government, 2023) and subsequent engagement and consultation. This has determined the extent to which aspects are likely to give rise to significant effects. The aspects that are addressed in this EIA Report as giving rise to likely significant effects are presented in the following chapters:

- **Chapter 6: Marine Geology, Oceanography and Physical Processes**;
- **Chapter 7: Marine Water and Sediment Quality**;
- **Chapter 10: Benthic, Epibenthic and Intertidal Ecology**;

- **Chapter 11: Marine Mammals**;
- **Chapter 12: Offshore and Intertidal Ornithology**;
- **Chapter 13: Fish Ecology**;
- **Chapter 14: Commercial Fisheries**;
- **Chapter 15: Shipping and Navigation**;
- **Chapter 16: Marine Archaeology and Cultural Heritage**;
- **Chapter 17: Seascape, Landscape and Visual**;
- **Chapter 18: Infrastructure and Other Marine Users**;
- **Chapter 19: Ground Conditions and Contamination**;
- **Chapter 20: Water Resources and Flood Risk**;
- **Chapter 21: Air Quality**;
- **Chapter 22: Land Use**;
- **Chapter 23: Terrestrial Ecology and Ornithology**;
- **Chapter 24: Onshore Archaeology and Cultural Heritage**;
- **Chapter 25: Onshore Noise and Vibration**;
- **Chapter 26: Traffic and Transport**;
- **Chapter 27: Landscape and Visual**;
- **Chapter 28: Climate Resilience**;
- **Chapter 29: Greenhouse Gases**;
- **Chapter 30: Socio-economics**;
- **Chapter 31: Civil and Military Aviation**;
- **Chapter 32: Inter-Related Effects**; and
- **Chapter 33: Cumulative Effects Assessment**.

5.6.2.2 It should be noted that **Chapter 8: Underwater Noise** and **Chapter 9: Electromagnetic Fields** do not carry out their own impact assessments but are used to inform impact assessments within other chapters.

5.6.2.3 The underwater noise assessment informs the assessments of the following chapters:

- **Chapter 10: Benthic, Epibenthic and Intertidal Ecology**;
- **Chapter 11: Marine Mammals**;
- **Chapter 13: Fish Ecology**;
- **Chapter 14: Commercial Fisheries**; and
- **Chapter 30: Socio-Economics**.

5.6.2.4 The electromagnetic fields (EMF) modelling outputs inform the assessments in the following chapters:

- **Chapter 10: Benthic, Epibenthic and Intertidal Ecology**;

- **Chapter 11: Marine Mammals**;
- **Chapter 12: Offshore and Intertidal Ornithology**;
- **Chapter 13: Fish Ecology**; and
- **Chapter 14: Commercial Fisheries**.

5.6.2.5 Other EIA matters that have been given due consideration for the technical scope of the EIA are detailed in **paragraph 5.6.2.6** to **paragraph 5.6.2.15**.

Major accidents and disasters

5.6.2.6 Schedule 4 of the EIA Regulations 2017 requires the EIA to identify, describe and assess the vulnerability of the Project to major accidents and / or disasters. These can be caused by Project activities or by a third party. A 'major accident' is an unintended event (such as a vessel collision or grounding resulting in a major release of environmental contaminants) that threatens immediate or delayed serious environmental effects to human health, welfare and / or the environment. A 'disaster' is a man-made / external hazard (for example, an act of terrorism) or a natural hazard (for example, an earthquake) with the potential to cause an event or situation that meets the definition of a major accident (IEMA, 2020).

5.6.2.7 The Project will comply with the Health and Safety at Work etc. Act 1974 and all regulations made thereunder. The Health and Safety at Work etc. Act 1974 and supporting regulations require that a suitable risk assessment is undertaken for all workplace activities, and that any residual risks must be reduced to 'As Low As Reasonably Practicable' (i.e. the ALARP principle). The provisions of the Health and Safety at Work etc. Act (as amended) are applied to work activities beyond the 12nm territorial sea limit and include energy structures and related structures, such as wind farms through the Health and Safety at Work etc. Act 1974 (Application outside Great Britain) Order 2013. The construction of the Project will be undertaken in compliance with the Construction (Design and Management) Regulations 2015, which make specific requirements for the client, designers and construction contractors to reduce the risk of accidents to ALARP. The Project will also comply to the Health and Safety Executive's (HSE's) regulatory expectation for emergency response arrangements for the offshore renewable energy industry (HSE, 2019) and RenewableUK's guidance Offshore Wind and Marine Energy Health and Safety (RenewableUK, 2014).

5.6.2.8 A standalone EIA Report chapter on major accidents and / or disasters was not proposed at Scoping and agreed via the MD-LOT's Scoping Opinion. Where appropriate, relevant environmental aspects, as part of the EIA, will assess the likely risks either to / or arising from the Project in relation to potential areas of vulnerability and the associated control measures which will be employed to address these. For example, any flood risk concerns are considered with **Chapter 20: Water Resources and Flood Risk** and will be addressed as part of the Flood Risk Assessment (FRA).

5.6.2.9 Other matters will be dealt with through routine design and construction good practice as required by the Construction (Design and Management) regulations. One area which has been raised is the potential to cross major accident hazard pipelines as designated under the Pipelines Safety Regulations 1996, of which there are a significant number in Aberdeenshire owing largely to the historic oil and gas industry presence.

5.6.2.10 While construction in proximity to these assets, including pipeline crossings, poses a risk during the construction stage, this is considered to be effectively mitigated through adherence to the pipeline operators' requirements and agreement on the design of crossing points. The requirement to cross underground services is a well understood hazard which is routinely dealt with through good design practices.

5.6.2.11 These pipelines also have a Land Use Planning consultation zone, within which the HSE are a statutory consultee and will offer an opinion to the relevant planning authorities as to whether they "*advise against*" or "*do not advise against*" granting consent on the basis of public safety. As the Project is a low occupancy and low sensitivity level development, in line with the HSE Land Use Planning Methodology (2008), the location of the Project is not sensitive to the Land Use Planning Consultation Zones. On this basis, the HSE are anticipated to respond that they "*Do Not Advise Against*" granting consent. This is considered to be confirmation of the Scoping Report position that there are no likely significant effects relating to major accidents and disasters.

Human health

5.6.2.12 Schedule 4 of the EIA Regulations 2017 also outlines that 'human health' needs to be taken into consideration in the EIA. It is anticipated that potential interactions of the Project with human health will likely be through ground conditions, water resources and flood risk, noise and vibration, air quality, visual, marine water quality, socio-economic and transport effects during construction, O&M, and decommissioning. Therefore, human health is addressed through these relevant environmental aspect chapters in this EIA Report, for example **Chapter 7: Marine Water and Sediment Quality** considers bathing water quality and **Chapter 30: Socio-Economics** considers temporary and potentially permanent change in population size leading to change in demand for public and private services, including accommodation and education, health and commercial services (including tourism). Inter-related effects on health are addressed in the inter-related effects EIA Report chapter. In addition, as outlined above for major accidents and disasters, the Project will comply with the Health and Safety at Work etc. Act 1974 and all regulations made thereunder, as well as the Construction (Design and Management) Regulations 2015. Consequently, a stand-alone human health EIA Report chapter was not proposed at Scoping and agreed via the MD-LOT Scoping Opinion.

Waste

5.6.2.13 Schedule 4 of the EIA Regulations 2017 and Schedule 3 of the Marine Works (Environmental Impact Assessment) Regulations 2007 requires the EIA to describe effects from the disposal and recovery of waste. The Project will adopt best practice construction and management techniques to ensure waste is minimised as far as possible and that the storage, transport and eventual disposal of waste has no significant environmental effects. The management and collection of waste arisings will be carried out under the requirements of the Scottish waste regulatory regime. It was therefore proposed at Scoping that waste would not be the subject of a separate environmental aspect chapter in the EIA. Any waste generated by the Project are described in **Chapter 4: Project Description** of the EIA Report and any effects relating to such development addressed as part of the relevant environmental aspects and associated strategies. An example of this will be that, where appropriate, the transport effects from the management of waste arisings will be considered in **Chapter 26: Traffic and Transport**.

Climate change

5.6.2.14 The influence of climate change on the future baseline and likely significant effects of the Project is considered, where necessary, within the aspect specific assessments. For example, **Chapter 6: Marine Geology, Oceanography and Physical Processes** considers changes to coastal morphology and **Chapter 20: Water Resources and Flood Risk** considers flood risk. The Project's potential climatic impact as a result of greenhouse gas emissions, and consideration of the Project's resilience to climate change, are considered in **Chapter 28: Climate Resilience** and **Chapter 29: Greenhouse Gases**.

Electromagnetic fields

5.6.2.15 The generation of EMF by the Project and the potential effects of EMF caused by offshore Project infrastructure is considered in **Chapter 9: Electromagnetic Fields**, **Chapter 10: Benthic, Epibenthic and Intertidal Ecology**, **Chapter 11: Marine Mammals**, **Chapter 12: Offshore and Intertidal Ornithology**; **Chapter 13: Fish Ecology**; and **Chapter 14: Commercial Fisheries**.

5.6.2.16 The generation of EMF by the Project and the potential effects of EMF caused by onshore Project infrastructure is considered in **Chapter 23: Terrestrial Ecology and Ornithology**.

5.6.2.17 The Project will generate EMFs from onshore cable circuits and equipment housed within the onshore substations. The underground cables and onshore substations will be designed and operated in accordance with all relevant health and safety legislation and the occupational exposure guidelines for EMF (such as The Control of Electronic Fields at Work Regulations (2016); International Commission on Non-Ionizing Radiation Protection (ICNIRP) Guidelines (2020); and the Department of Energy & Climate Change (DECC) Demonstrating Compliance with EMF Public Exposure Guidelines (DECC, 2012). This will ensure safe distances between electrical components and publicly accessible points. The maximum EMF level that the public will be exposed to will be significantly below the guideline for public exposure limits which are set to protect health (ICNIRP, 2020). Therefore, EMFs related to onshore infrastructure on onshore human receptors will not be considered further and are scoped out of the EIA.

5.6.3 Identification of receptors

5.6.3.1 The EIA undertaken for the Project has used the conceptual 'source-pathway-receptor' model for the identification of receptors, where appropriate to do so. This model identifies potential effects resulting from the Project on sensitive receptors within the environment. This process provides an easy-to-follow assessment route between impact sources and potentially sensitive receptors ensuring a transparent impact assessment. The aspects of this model are defined as follows:

- **Source** – the origin of a potential impact (i.e. an activity such as dredging of an offshore works area and a resultant effect, for example: the release of suspended sediments from the area of works);
- **Pathway** – the means by which the effect of the activity could impact a receptor (for instance, for the example above, changes to the suspended sediment concentrations of the surrounding watercourses / ocean); and
- **Receptor** – the element of the receiving environment that is impacted (this could either be a component of the physical, ecological or human environment such as water quality or benthic habitat, for example, for the above example, species living on or in the watercourses affected).

5.6.3.2 Where a different approach has been necessary to reflect the specific assessment requirements of a particular aspect, this is described in the corresponding technical chapter.

5.6.4 Spatial scope

5.6.4.1 The geographical context within which the Project is located is shown in **Volume 2, Figure 1.1: Red Line Boundary**. The proposed locations of the Project infrastructure have developed as a result of the iterative project design process, Scoping Opinions and consultation feedback and is described further in **Chapter 3: Site Selection and Consideration of Alternatives**.

5.6.4.2 The spatial scope for each aspect assessment is dependent on the nature of the potential effects and the location of receptors that could be affected by direct or indirect effects from the Project. Relevant aspect study areas are described for each of the environmental aspects in **Chapters 6** to **31** where appropriate. The spatial scope of the technical assessments will therefore take account of:

- the physical or developable area of the Project;
- the nature of the baseline environment; and
- the manner and extent to which environmental effects may occur within the developable area or beyond its boundaries.

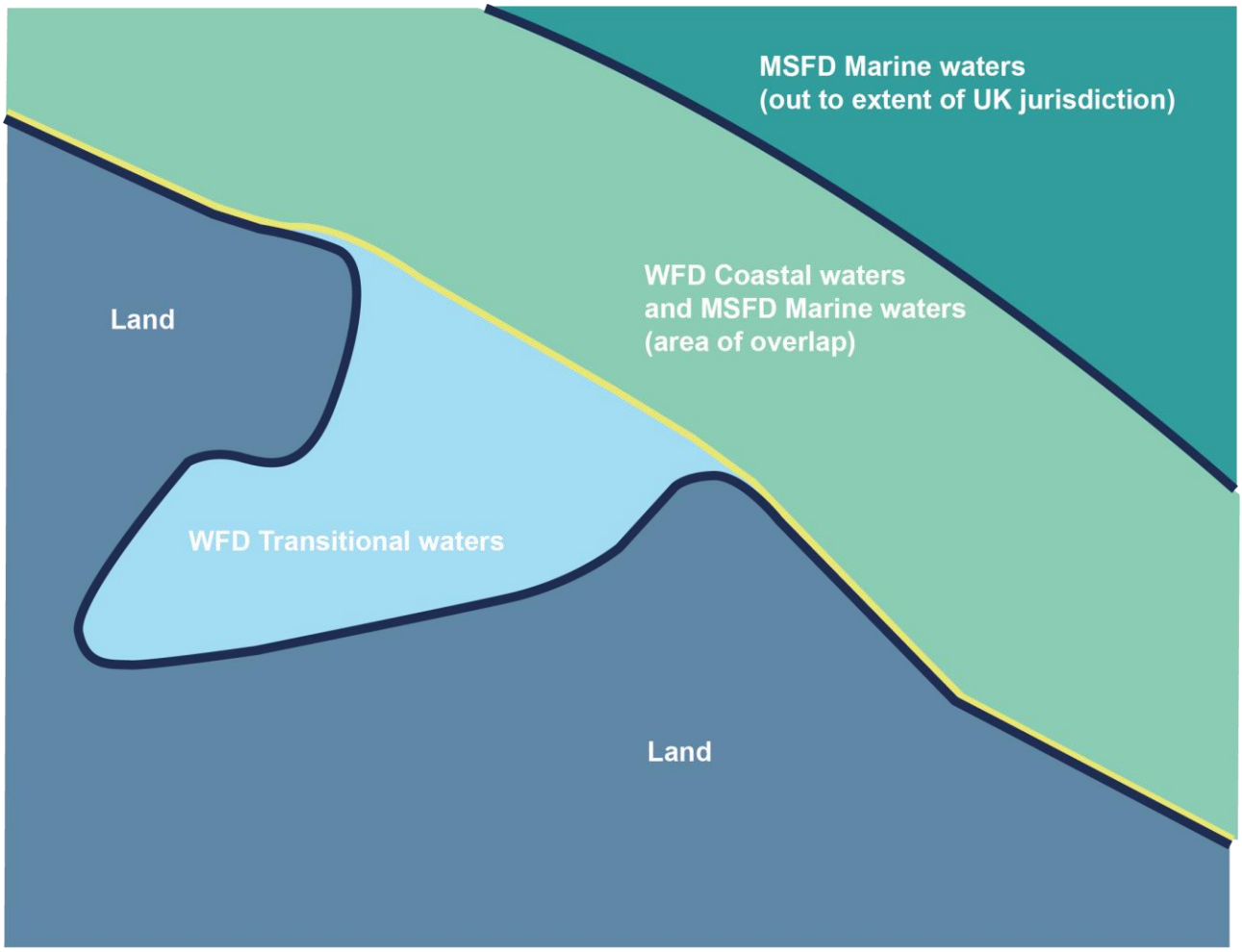
Approach to the land-water interface

5.6.4.3 All onshore infrastructure located above Mean Low Water Springs (MLWS) is consented under the Town and Country Planning (Scotland) Act 1997. The Marine and Coastal Access Act 2009 and the Marine (Scotland) Act 2010 have a landward jurisdictional limit of Mean High Water Springs (MHWS). Since marine licencing covers the marine area up to MHWS and terrestrial planning control extends down to MLWS, there is an overlap of consenting regimes in the intertidal zone (see Plate 2.1 in **Chapter 2: Legislative and Policy Context**). The intertidal zone is defined as the area between MLWS and MHWS.

5.6.4.4 The term 'offshore' refers to environmental features located on the seaward side of MHWS and 'onshore' refers to environmental features on the landward side of MLWS. It is acknowledged that this approach creates an area of overlap, i.e. the 'intertidal' area between MLWS and MHWS. This is considered appropriate given the overlap between the respective consenting regimes. The approach to the assessment of the intertidal zone is indicated within each relevant aspect chapter in the study area description (within **Chapters 6** to **31**).

5.6.4.5 The relationship across the land-water interface is also of importance with regard to assessments of potential effects under the Water Framework Directive (WFD) and Marine Strategy Framework Directive (MSFD) (see Section 2.8.4 in **Chapter 2: Legislative and Policy Context** for further detail). Due to their consideration of potential effects on the aquatic environment, there is an element of overlap between the two Directives' jurisdictions and objectives. The MSFD includes coastal waters, but not transitional waters as defined by the WFD, such as estuaries, sea lochs or coastal lagoons. The line between the two Directives is taken as the 'bay closing line', or the seaward limit of transitional waters, as defined under the WFD (see **Plate 5.2**).

Plate 5.2 Schematic to illustrate WFD and MSFD interface



5.6.5 Temporal scope

5.6.5.1 The temporal scope refers to the time periods over which impacts and effects are experienced by sensitive receptors, which may be permanent, temporary, long term or short term. This has been established for each aspect in discussion with relevant consultees. The EIA assesses effects during the construction, O&M and where appropriate, decommissioning stages of the Project. Further details on the different stages are provided in **Chapter 4: Project Description.**

5.6.5.2 Environmental effects are compared to the situation prevailing before the Project commences development (i.e. the current baseline) and will also take into consideration the projected future baseline (i.e. the theoretical situation that would exist in the absence of the Project), where possible. For example, predictable changes such as climate change, or change that can be expected based on reasonable assumptions and modelling calculations, will be taken into account. Each environmental aspect chapter will define the baseline (current and future, where possible) against which the environmental effects of the Project will be assessed. The baseline conditions to be assessed for each environmental aspect are outlined in **Chapters 6** to **31** of this EIA Report.

5.6.6 Design envelope

5.6.6.1 In order to establish the scope of environmental assessment, this EIA Report adopts what is termed a parameter-based design envelope approach. The provision of a design envelope is intended to identify key parameters to enable the EIA to be carried out whilst retaining sufficient flexibility to accommodate further refinement during detailed design. The design envelope approach is widely used and accepted for major infrastructure projects in the United Kingdom (UK), including for recent applications for offshore wind farms in Scotland. The approach is recognised by the Marine Directorate and the Energy Consents Unit in their guidance on how the design envelope assessment approach may be applied in the context of applications received for generation stations under s.36 of the Electricity Act 1989 (Scottish Government, 2022c). This states:

> "*in some instances, the nature of the proposed development and evolving technology mean that some aspects of the final project are yet to be settled in precise detail at the time that the application is submitted (such as the precise location of certain types of infrastructure, the foundation type, the size of certain structures or the turbine model). Where that is the case and some details are still the be finalised, the design envelope approach can be employed for such applications to enable a degree of flexibility and address these uncertainties. Through the design envelope approach, the application can set out parameters for the proposal including the maximum extents of the proposal and can assess on that basis what the likely worst-case effects of the proposal may be. The detailed design of the project can then vary within this 'envelope' to ensure that the project as-constructed has been properly assessed.*"

5.6.6.2 This guidance requires applicants to develop a credible and informed design envelop with parameters that are realistic, deliverable and justified.

5.6.6.3 There is also UK guidance for the design envelope approach, including within the UK National Policy Statement for Renewable Energy Infrastructure (EN-3) (Department for Energy Security & Net Zero, 2023) and in the Planning Inspectorate's Advice Note Nine: Rochdale Envelope (Planning Inspectorate, 2018). Both guidance closely align with the Marine Directorate and the Energy Consents Unit guidance.

5.6.6.4 The assessment considers a maximum design scenario whilst allowing the flexibility to make improvements in the future in ways that cannot be predicted at the time of submission of the consent and licence applications. This will enable a meaningful and comprehensive assessment of the Project on a reasonable worst-case scenario basis, whilst maintaining flexibility for refinements to the design as it continues to evolve. The reasonable worst-case scenario defined for a given parameter may vary by technical aspect, depending on how the parameter can be expected to interact with the receptor being considered. The use of this approach enables the EIA to be based on a description of the location, design and size of the Project that is suitable to allow a comprehensive assessment of its likely significant effects. Further details of this approach are provided in **Chapter 2: Legislative and Policy Context**, **Chapter 3: Site Selection and Consideration of Alternatives** and the maximum design envelope for the Project is identified in **Chapter 4: Project Description**. Where appropriate, the maximum design envelope by aspect is outlined within **Chapters 6** to **31**, respectively.

5.7 Approach to assessment of significance

5.7.1.1 **Plate 5.3** sets out the approach to the evaluation of significance of likely environmental effects that may arise from the Project. The graphic sets out the general process of evaluating significance incorporating the consideration of magnitude of impact, value or sensitivity of receptor and any environmental measures that are embedded into the design of the Project to reduce likely effects.

5.7.1.2 In practice, the approaches and criteria applied across different environmental aspects could vary. Therefore, professional judgement in the application of standards mandated by professional bodies (for example the Chartered Institute of Ecology and Environmental Management or the Landscape Institute) is applied. Where this is the case, further detail and justification is provided in **Chapters 6** to **33**, as appropriate.

Plate 5.3 Approach to assessment of significance

Process

Increasing interaction with baseline studies, project design and stakeholders

Describe Baseline
Baseline data are collected to better understand the potentially most important impacts and effects identified in scoping. Baseline data may quantify existing exposure levels (e.g. for noise, air and water pollution), identify potentially vulnerable / sensitive habitats, species or human populations/groups of people, more clearly delineate valued cultural property and ecosystem services, etc.

Where a baseline aspect cannot be quantified then nominal levels of importance, quality or value (low, medium, high) are assigned based on widely accepted criteria in fields such as ecology, cultural heritage, landscape and socioeconomic assessment. Inter-relationships between elements of the baseline will be identified.

Interact with Project design
The EIA process interacts with the Project design team to develop a basis for the assessment (for example, quantities of emissions, noise levels of equipment, sizes of structures). The EIA process also interacts with design to assess 'best available technique' and options for environmental measures, especially when after initial assessment some impacts and effects may need to be further reduced.

Consult Stakeholders
Ongoing stakeholder consultation, post-scoping, is good practice in EIA and is undertaken to refine the assessment and present preliminary findings to stakeholders to elicit early responses and help make the EIA Report as fit for purpose as possible.

Identify Impacts

Informed by high level baseline, project information and consultation with key stakeholders.

The scoping process identifies the potentially most important/significant impacts and effects (including secondary, indirect and cumulative) for the assessment to address. This is done through a combination of:

- looking at the nature of the Project activities and the impacts they will give rise to;
- looking at the Project's environmental and social setting and its aspects that are likely to be most sensitive/vulnerable to impacts from the Project;
- applying professional understanding gained from the evidence base; and
- considering inputs from stakeholders through consultation.

Decisions are then made on which impacts and effects to assess or to prioritise in the assessment (scoping in and scoping out) and how to assess them (proposed methodology).

Predict Magnitude

Project as currently planned with environmental measures incorporated.

The Project's impacts are quantified in terms of e.g.:

- areas of land required for construction or habitat loss;
- proportion of an ecological population exposed to impact;
- change in noise levels at a receptor;
- pollutant exposure at a receptor; and
- numbers of jobs generated in the local economy.

In predicting magnitude the effect of all the project mitigation in place is taken into account (the residual effects).

For some effects, especially noise, air and water pollution, significance can be assessed directly against numerical criteria and standards. For exceedances of standards, further mitigation must be incorporated by the Project to reduce the magnitude of the impact and the significance of its effect.

For other impacts nominal levels of magnitude (e.g. small, medium, large) may be adopted based on widely recognised factors such as: the nature of a change (what is affected and how); its size, scale or intensity; its geographical extent and distribution; its duration, frequency, reversibility and, for unplanned events, likelihood of occurrence.

Some activities will result in changes to the environment that may be immeasurable or undetectable or within the range of normal natural variation. Such changes will be assessed as having no impact or to be of negligible magnitude and will not lead to significant effects.

Evaluate Significance

Compared against standards or looking at magnitude in combination with affected receptor/ feature.

In evaluating significance, the EIA process is seeking to inform regulators and stakeholders about the likely significant effects of the project. In a way that helps them make decisions on whether to approve and allows them to develop suitable conditions to attach to an approval. The evaluation of significance should ideally demonstrate legal compliance at least (e.g. compliance with quantified standards, avoidance of effects on legally protected resources).

In the absence of quantified standards, significance can be evaluated through considering the magnitude of an impact in combination with the value/sensitivity of the receptor/feature that is affected. Presented is the overall significance matrix that will be used for the EIA.
The generic definitions that will be used to determine the level of significance are shown in the matrix. Reference is made to:

- 'Major' effects, which will always be determined as being significant. These are highlighted yellow in the matrix.
- 'Moderate' effects can be significant, or not significant, based on specific scenarios and professional judgement. These are highlighted in blue in the matrix.
- 'Minor' or 'negligible' effects, will always be deemed as 'not significant'. These are highlighted in green in the matrix.
- Effects can be either positive or negative.

Value/ Sensitivity	Magnitude of change: High	Medium	Low	Very low
High	Major (Significant)	Major (Significant)	Moderate (Potentially significant	Minor (Not significant)
Medium	Major (Significant)	Moderate (Potentially significant	Minor (Not significant)	Minor (Not significant)
Low	Moderate (Potentially significant)	Minor (Not significant)	Minor (Not significant)	Negligible (Not significant)
Very low	Minor (Not significant)	Minor (Not significant)	Negligible (Not significant)	Negligible (Not significant)

For many environmental aspects, significance can be determined by using a matrix. Variations to this matrix approach, which may be applicable to specific environmental aspects (for example, biodiversity), are detailed within the respective aspect sections, along with descriptions of receptor sensitivity, magnitude of change and levels of effect that are considered significant. Definitions of how the categories that are used in the matrix are derived for each environmental aspect are also set out.

The identified effects may warrant re-examination to see if the magnitude of either the impact or effect can be reduced further. It may also be possible to apply environmental measures that make the receptor/feature less sensitive. Different options for environmental measures may be examined and the reasons for selecting one and rejecting others explained. Some effects that cannot be adequately mitigated may need to be addressed through the consideration of offsets or compensation. The evaluation process may go through more than one iteration of working with project design to develop suitable environmental measures and re-evaluating impacts and effects.

Report Effects

For some impacts and effects further or different environmental measures may need to be considered and the effect re-evaluated.

Plate 5.3 Approach to EIA_revA.indd

5.7.2 Receptor (or feature) sensitivity or value

5.7.2.1 The sensitivity or value of a receptor (or feature when referring to ecological receptors) is largely a product of its societal importance, as informed by legislation and policy, and as qualified by professional judgement. For example, higher value receptors for landscape, biodiversity or the historic environment may be defined as being of international or national importance; lower value receptors may be designated as being sensitive or important at a council area or district level.

5.7.2.2 The use of a receptor also plays a part in its classification. For example, when considering the visual amenity, a receptor that is residential in nature may be values more than a place of work as the environmental quality of the residential receptor is more likely to be an important part of that receptor's use.

5.7.2.3 **Table 5.1** sets out the generic guidelines for the assessment of sensitivity and value of a receptor or feature. Guidelines specific to each aspect are provided in each aspect section within **Chapters 6** to **31**.

Table 5.1 Generic guidelines for the assessment of sensitivity or value

Value or sensitivity	Guidelines
High	Value: Feature or receptor possesses key characteristics that contribute significantly to the distinctiveness, rarity and character of the site or receptor (for example designated features of international or national importance). Sensitivity: Feature or receptor has a very low capacity to accommodate the proposed change.
Medium	Value: Feature or receptor possesses key characteristics that contribute significantly to the distinctiveness and character of the site or feature (for example designated features of regional importance). Sensitivity: Feature or receptor has a low capacity to accommodate the proposed change.
Low	Value: Feature or receptor possesses characteristics which are locally significant. Feature or receptor which is either not designated or is designated at a local or district level. Sensitivity: Feature or receptor has some tolerance to accommodate the proposed change.
Very low	Value: Feature or receptor characteristics do not make a significant contribution to local distinctiveness and not designated. Sensitivity: Feature or receptor is generally tolerant and can accommodate the proposed change.

5.7.3 Magnitude of change

5.7.3.1 The magnitude of change affecting a receptor that would result from the Project will be identified on a scale from minor alterations or change, up to major changes or the total or substantial loss of the receptor. For certain aspects, the magnitude of change would be related to guidance on levels of acceptability (for example, for air quality or noise) and is therefore based on numerical parameters. For others, it will be a matter of professional judgment to determine the magnitude of change, using descriptive terminology.

5.7.3.2 **Table 5.2** sets out the guidance criteria of the assessment of the magnitude of change.

Table 5.2 Generic criteria for the assessment of magnitude

Magnitude	Guidelines
High	Large scale changes over the whole development areas and potentially beyond to key characteristics or features of the particular environmental aspect's character or distinctiveness.
Medium	Medium scale changes over the majority of the development area and potentially beyond to key characteristics or features of the particular environmental aspect's character or distinctiveness.
Low	Noticeable but small-scale changes over part of the development aera and potentially beyond to key characteristics or features of the particular environmental aspect's character or distinctiveness.
Very low	Noticeable but very small-scale change or barely discernible changes over a small part of the development area and potentially beyond, to key characteristics or features of the particular environmental aspect's character or distinctiveness.

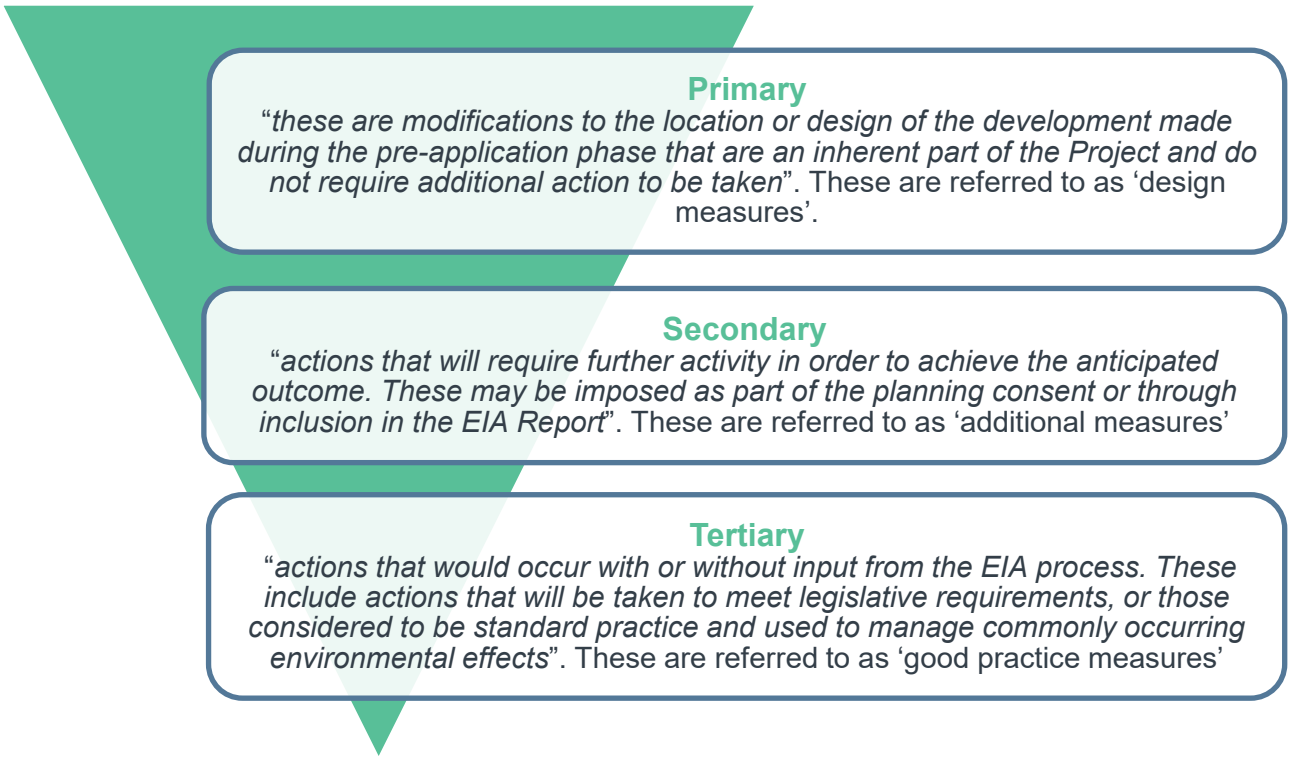
5.8 Environmental measures and residual effects

5.8.1 Embedded environmental measures

5.8.1.1 EIA is an iterative process and opportunities for mitigation, referred to as 'embedded environmental measures' have been considered throughout the design development of the Project and in the assessment undertaken for this EIA Report where likely significant effects have been identified. Where possible, these measures have been developed with input from key stakeholders together with appropriate technical standards, policies and guidance.

5.8.1.2 These embedded environmental measures include both avoidance, best practice and design commitments. The IEMA Implementing the Mitigation Hierarchy from Concept to Construction (IEMA, 2024) provides guidance on three categories of environmental measures: primary, secondary or tertiary measures and set out in **Plate 5.4**. Best practice consideration and application of environmental measures involves a hierarchal approach, considering avoidance of negative effects as the primary objective.

Plate 5.4 Embedded environmental measures



5.8.1.3 In the context of this EIA Report, embedded environmental measures incorporate all types of measures as set out in **Plate 5.4**. The iterative design evolution process followed has been driven by collaborative working between the design, environment and landowner teams and in consultation with key stakeholders. This may have been through the consideration and adoption of alternatives or through measures incorporated within the design itself.

5.8.1.4 Any additional measures identified as being required during the EIA process have been embedded into the Project and included in **Volume 3, Appendix 5.2**.

5.8.2 Mitigation hierarchy

5.8.2.1 The mitigation hierarchy is a fundamental principle in design evolution that indicates the order in which the impacts of a development should be considered and addressed. The EIA Regulations define the mitigation hierarchy as follows:

- avoid;
- prevent;
- reduce; and
- offset.

5.8.2.2 The IEMA Implementing the Mitigation Hierarchy from Concept to Construction (2024) states that the mitigation hierarchy is "*A systematic approach used to minimise adverse effects of a project or scheme on the environment and people. It is a series of steps or principles to guide decision-making and prioritise activity. The hierarchy comprises four stages, with the most desirable first: avoid, prevent, reduce and, finally, offset. The hierarchy*

indicates that avoidance is the priority and offsetting should only be relied on as a last resort."

5.8.2.3 Robust application of the mitigation hierarchy has been followed throughout the site selection and design iteration process and also applied more widely on the Project.

5.8.2.4 The iterative design process has integrated the advice and expertise of environmental specialists who conducted the analyses informing this EIA Report, alongside regular collaboration with the Project's design teams. This has ensured that the design evolution reflects a comprehensive understanding of environmental sensitivities and that the mitigation hierarchy has been consistently applied.

5.8.3 Monitoring measures

5.8.3.1 The EIA Regulations require Scottish Ministers to consider whether monitoring measures are required in relation to any significant adverse effects on the environment caused by the Project, including any environmental measures that are committed to or imposed as consent conditions. Any monitoring proposed at this stage with respect to significant negative effects will be identified in the aspect chapters (**Chapters 6** to **31**).

5.8.4 Securing mitigation and monitoring measures

5.8.4.1 The **Commitments Register** in **Volume 3, Appendix 5.2** acts as the primary tool to capture and agree all embedded environmental measures, and the mechanisms for securing them. This EIA Report is based on the assumption that all of these measures will be implemented as part of the Project. Implementation for the embedded environmental measures relied upon in the assessment are secured through adherence to the design envelope, s.36 conditions, Town and Country Planning (Scotland) Act 1997 planning consent conditions[2] and / or marine licence conditions, as appropriate.

Embedded environmental measures advice raised from MD-LOT's and Aberdeenshire Council's Scoping Opinions have informed the **Commitments Register**. Responses are included within **Volume 3, Appendix 5.1**; the 'consultation and engagement' sections of **Chapters 6** to **31**; and the offshore consent application document **MD-LOT Gap Analysis**.

5.9 Transboundary effects assessment

5.9.1.1 Transboundary effects may occur when impacts from a development within one European Economic Area (EEA) States affects the environment of another EEA State(s).

5.9.1.2 The United Nations Economic Commission for Europe Convention on EIA in a Transboundary Context (adopted in 1991 as the 'Espoo Convention') was negotiated to enhance the cooperation between EEA States in assessing environmental effects. The Espoo Convention has been transposed into Scottish EIA law by way of Regulation 29 of the Electricity Works (EIA) (Scotland) Regulations 2017, Regulation 30 of the Marine Works (EIA) (Scotland) Regulations 2017, and Regulation 41 of the Town and Country Planning (EIA) (Scotland) Regulations 2017. These Regulations set out the processes for consultation and notification. In the event that a project is considered to cause significant transboundary effects, the EIA Regulations 2017 require Scottish Ministers to engage with the affected EEA State and invite them to participate in consultation.

[2] Onshore consent for MarramWind is being sought through Planning Permission in Principle under the Town and Country Planning (Scotland) Act 1997. Approval of Matters Specified in Conditions are applicable.

5.9.1.3 Following the exit of the UK from the European Union (EU) in December 2020, the UK is no longer an EU Member State. However, for the purposes of assessing potential transboundary effects, the approach outlined above has been followed for the Project.

5.9.1.4 The assessment of potential transboundary effects and, determination of their significance draws on the use of Zones of Influence (ZOIs) for key categories of effect. In the absence of specific Scottish guidance, the proposed approach to transboundary assessment has drawn on guidance provided in Planning Inspectorate's Nationally Significant Infrastructure Projects: Advice on Transboundary Impacts and Process (Planning Inspectorate, 2025). This includes consideration of the transboundary screening process, which outlines key aspects of the Project to consider from an international perspective, including:

- characteristics of the Project;
- location of the Project, including proximity to relevant EEA States;
- environmental context / importance, for example any EEA protected areas that may be affected by the Project;
- potential pathways of effect;
- the extent of potential effects;
- the scale of the potential effect, to consider magnitude, probability, duration, frequency and recoverability; and
- cumulative impacts.

5.9.1.5 The Scoping Report undertaken for the Project, identified that the Project may potentially have transboundary interactions with EEA States, Denmark, Germany, Netherland, Norway and Sweden. The Scoping Report identified seven environmental aspects in relation to which a transboundary effect on other EEA States could conceivably arise as a result of the Project. The Scoping Report concluded that on the basis of the current information, there was the potential for significant effects arising from the Project on the interests of EEA States and as such transboundary effects may arise. Those impacts for which a transboundary effect may arise, and which are therefore have been screened into the EIA, are as follows:

- marine mammals;
- offshore and intertidal ornithology;
- fish ecology;
- shipping and navigation;
- traffic and transport; and
- greenhouse gases.

5.9.1.6 The transboundary assessment for each aspect has been progressed and is set out in the relevant technical aspect chapters (**Chapter 11: Marine Mammals**; **Chapter 12: Offshore and Intertidal Ornithology**; **Chapter 13: Fish Ecology**; **Chapter 15: Shipping and Navigation**; **Chapter 26: Traffic and Transport**; and **Chapter 29: Greenhouse Gases**).

5.10 Inter-related effects

5.10.1.1 The EIA Regulations require that the EIA consider the interaction of environmental effects associated with the Project. The likely significant effects of multiple impacts from the Project on one receptor will be identified and assessed in the EIA. There is no policy or guidance

relevant to inter-related effects in Scotland, therefore **Chapter 32: Inter-Related Effects** has been compiled following advice from stakeholders.

5.10.1.2 The inter-related effects assessment does not include effects on receptors as a result of the Project and other developments, which is assessed within the CEA (See **Section 5.11**).

5.10.1.3 Inter-related effects can be the following:

- Project lifetime inter-related effects: those effects arising throughout more than one stage of the Project (construction, O&M and decommissioning) to interact to potentially create a more significant effect on a receptor than if just one stage were assessed in isolation. For example, increases in suspended sediment concentrations across all three Project stages may have a greater significance than the effects of each Project stage considered alone.
- Receptor-led inter-related effects: assessment of the scope for all effects to interact, spatially and temporally, to create inter-related effects on a receptor (or group). Receptor-led effects might be short term, temporary or transient effects, or incorporate longer term effects. For example, noise and air quality impacts together could have a greater effect on a residential receptor than each impact considered separately.

5.10.1.4 Common receptors for environmental aspects have been identified, and consideration given to whether the aspect effects on any common receptors are likely to combine. This consideration looked at:

- identification of the common receptor(s) from the individual aspect assessments;
- identification of impact-source-pathways that can affect the common receptor(s);
- identification of potential effects on the identified common receptor(s); and
- the inter-related effects across the construction, O&M and decommissioning stages, where appropriate.

5.10.1.5 More specific details on the approach to the assessment of inter-related effects and aspect specific assessments is provided in **Chapter 32: Inter-Related Effects**.

5.11 Cumulative effects assessment

5.11.1.1 A CEA has been carried out for the Project. It examines the combined impacts of the Project with other projects / plans on the same singular receptor / receptor group.

5.11.1.2 The EIA Regulations require that cumulative effects of the development should be described in the EIA Report. Planning Circular 1/2017 (Scottish Government, 2017) and PAN 1/2013 (Scottish Government, 2013) also set out this requirement. There is currently no specific Scottish guidance on the methodological framework for assessing cumulative effects in general. PAN 1/2013 acknowledges that "*assessment methods for cumulative impacts and interactions vary*" and that it is a "*matter of professional judgement to ensure the relevant projects and activities - and their environmental effects - are identified, taking into account the circumstances of the individual proposal and its location*". As such, the approach to the CEA has been informed by several guidance documents including: the Planning Inspectorate's Advice on Cumulative Effects Assessment (Planning Inspectorate, 2024a), the RenewableUK and the Natural Environment Research Council published guidelines (RenewableUK, 2013) on the undertaking of CEA and the Marine Directorate guidance on offshore wind, wave and tidal energy applications, which provides guidance on the types of projects to include in a CEA (Scottish Government, 2018).

5.11.1.3 Cumulative effects arise from the interaction of the Project with other relevant proposed developments and / or plans within the ZOI of the Project. Cumulative effects are those that

result from changes caused by other past, present or reasonably foreseeable developments and / or plans together with the Project.

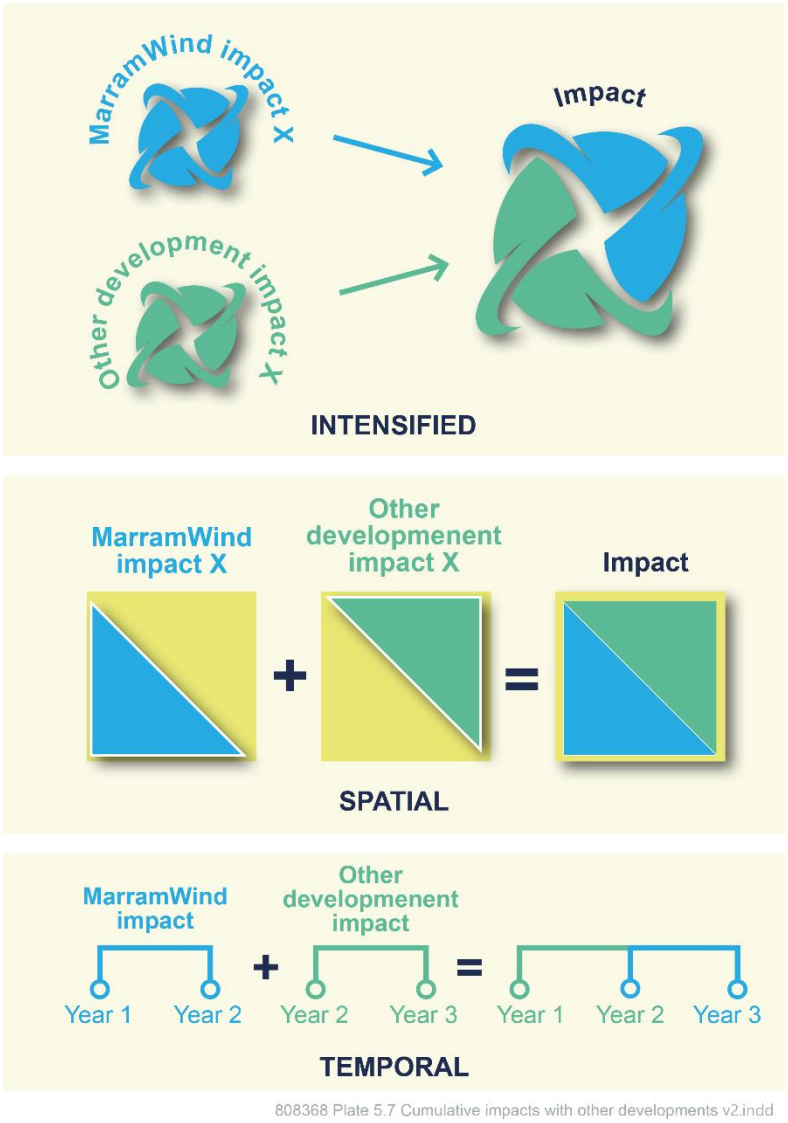
5.11.1.4 Impacts can occur cumulatively with other developments in different ways:

- Intensified cumulative impacts: An environmental impact from the Project affecting a particular receptor could be intensified through its accumulation with impact(s) from another development occurring at the same time. For example, noise or air quality impacts resulting from construction traffic, along with increased traffic volumes on local roads generated from other developments.
- Spatially cumulative impacts: Habitat loss impacts from the Project could be exacerbated with habitat loss from another development.
- Temporally cumulative impacts: An impact whose effect is experienced over a given period can be exacerbated where it precedes or follows another similar impact. For example, prolonged noise impacts from construction of consecutive projects affecting the same community.

5.11.1.5 **Plate 5.5** illustrates the different ways impacts can occur cumulatively with other developments on the same singular receptor / receptor group.

5.11.1.6 More specific details on the approach to CEA, including the identification of the 'reasonably foreseeable' projects and developments that are considered in the CEA and aspect specific assessments is provided in **Chapter 33: Cumulative Effects Assessment**.

Plate 5.5 Cumulative impacts with other developments



5.11.1.7 In-combination effects are similar but relate specifically to European Sites for the purposes of Habitats Regulations Appraisal (HRA). These are effects resulting from the combined impacts of the Project with other projects / plans on European Sites and will be presented separately within the HRA documentation.

5.12 Related environmental assessments

5.12.1.1 The EIA process is not a standalone assessment with regards to the consenting of the Project. In addition, assessments are required under additional legislation which will be captured within the consent application for the Project. The legislation that sets out the requirement for these related environmental assessments is described within Section 2.7 in **Chapter 2: Legislative and Policy Context**. For consistency of approach, these environmental assessments have drawn on the established evidence base, i.e. the results of site-specific survey studies and any third-party data and / or information collected to support the Project. **Table 5.3** provides a summary of the related environmental assessments.

Table 5.3 Summary of related environmental assessments

Related environmental assessment	Summary
HRA	HRA, as described within Section 2.7.1 in **Chapter 2: Legislative and Policy Context**, considers the potential for likely significant effects to arise as a result of a plan or project, which may affect the integrity of the national site network and their associated qualifying features, and can involve up to four stages: • **Stage 1**: Screening: This stage identifies the likely impacts upon a national site network of a project or plan, either alone or 'in combination' with other projects or plans and considers whether these impacts are likely to be significant. • **Stage 2**: Appropriate Assessment (AA): Where there are likely significant effects, this stage considers the impacts of the plan or project on the integrity of the relevant national site network sites, either alone or 'in combination' with other projects or plans, with respect to the sites' structure and function and their conservation objectives. Where there are adverse impacts, it also includes an assessment of the potential mitigation for those impacts. • **Stage 3**: Assessment of Alternative Solutions: Where adverse impacts (on the integrity of the site) are predicted, this stage examines (whether or not there are) alternative ways of achieving the objectives of the project or plan that avoid adverse impacts on the integrity of the national site network. • **Stage 4**: Assessment Where No Alternative Solutions Exist and Where Adverse Impacts Remain: This stage assesses compensatory measures where it is deemed that the project or plan should proceed for Imperative Reasons of Overriding Public Interest. From the outset the Project has been underpinned by a Portfolio Level HRA Strategy and HRA Plan, which aim to develop robust and compliant consent applications for the Project. The plan will: • set out the steps required in order to apply the portfolio level strategy to the Project, with a guide to timelines applicable to the Project programme; • provide the working document that will be updated and revised as the Project progresses through the strategy; • establish common methods for reaching agreement with Statutory consultees specifically applicable to the Project and identify the forums and mechanisms for doing so; • provide the framework and timelines for decision making to aid the selection of any appropriate compensation measures for the Project (if required); • identify any project specific uncertainties; and • set out the steps necessary to provide robust conclusions of the assessment, through agreement with Statutory Nature Conservation bodies prior to-submission of the application (i.e. before final HRA AA is submitted), of the: ▸ need or otherwise for derogation or a shadow derogation;

Related environmental assessment	Summary
	▸ extent / scale of impact on site integrity above Adverse Effect on Site Integrity (AEoSI) threshold (not just that AEoSI cannot be avoided); and ▸ project implications for achievement of site Conservation Objectives, and the suitability and the adequacy of compensation proposals. An HRA is required for the Project, therefore, the Project has provided the Scottish Government with a **Report to Inform Appropriate Assessment**, providing the necessary information to undertake all required stages of the HRA. The HRA has been undertaken holistically for the whole Project. As Stage 2 of the HRA requires the findings of the EIA process to enable full assessment, the full HRA reporting will be submitted alongside the EIA Report for the Project. An HRA Screening Report, addressing Stage 1, was submitted on 16 August 2024, subsequent to the EIA Scoping Report.
FRA	A FRA has been carried out in accordance with applicable national planning policies and guidance to ensure the Project is not significantly prone to impacts from flooding, and that it does not increase the probability of flooding elsewhere from a range of sources (including coastal, fluvial, surface water, groundwater and artificial). A FRA has been included within this EIA Report in **Volume 3, Appendix 20.1: Flood Risk Assessment**. Policy 22 of the Approved National Planning Framework 4 (NPF4) (Scottish Government, 2022a) sets out that development proposals will not increase the risk of surface water flooding to others, or themselves be at risk. Policy 22 of the Approved NPF4 recognises a need to strengthen resilience to flood risk by promoting avoidance of development in areas of flood risk as a first principal and by reducing the vulnerability of existing and future development to flooding. The Planning system should encourage the use of natural flood risk management to provide wider benefits for people and nature (Scottish Government, 2022a). Any mitigation required for the protection of any flood risk receptors has been identified and incorporated into the design of the Project and presented in the Onshore EIA Report and FRA.
WFD Assessment	The purpose of the WFD assessment is to provide Scottish Environment Protection Agency (as the competent authority), with sufficient information to evaluate whether the Project could cause or contribute to the deterioration of the WFD status of any water body, as described within Section 2.7.4 in **Chapter 2: Legislative and Policy Context**. It also provides for an evaluation of whether the Project could jeopardise the water body achieving good status, and / or whether the Project activities comply with the River Basin Management Plan. The competent authority must also consider the objectives of any WFD Protected Areas (including Special Areas of Conservation, Special Protection Areas, bathing waters and shellfish waters), where relevant. In the Project's approach to the WFD compliance assessment, the Project propose that in the absence of specific Scottish guidance, the Project will adhere to the Environment Agency's guidelines for coastal and transitional waters ('Clearing the Waters for All' (Environment Agency, 2016)) and

Related environmental assessment	Summary
	the Planning Inspectorate's advice on the WFD (Planning Inspectorate, 2024b), the Project believe that this will be a robust approach to the WFD. • **Stage 1**: WFD Screening: Identification of the activities associated with the Project that are to be assessed, and determination of which WFD water bodies could potentially be affected through identification of a ZOI; • **Stage 2**: WFD Scoping: For each water body identified in Stage 1, an assessment is carried out to identify the effects and potential risks to quality elements from all activities; and • **Stage 3**: WFD Impact Assessment: A detailed assessment of the water bodies and activities carried forward from the WFD screening and scoping stages. The WFD assessment is described and assessed in **Volume 3, Appendix 6.2: Water Framework Directive Assessment**.
MSFD	Unlike the WFD, there is no formal guidance or approach to completing a MSFD assessment for a project. As outlined within Section 2.7.5 in **Chapter 2: Legislative and Policy Context**, the goal of the MSFD is for an EU Member State's marine waters to reach and / or maintain good environmental status (GES), through adaption of a serious of measures, monitored through key indicators, under 11 high-level environmental descriptors. The approach to the MSFD assessment that has been applied to the Project was therefore qualitative and narrative-based, drawing on the findings of the EIA, as applicable to the descriptors, with the objective of the assessment being to determine whether the Project has the potential to influence the UK's ability to achieve or maintain GES within its waters and is provided in **Volume 3, Appendix 5.3: Marine Strategy Framework Directive**.
Marine Protected Area (MPA) Assessment	The Marine (Scotland) Act 2010 and the Marine and Coastal Access Act 2009 introduced provisions to support the management of Nature Conservation MPAs. Under section 93 of the Marine (Scotland) Act 2010 and section 126 of the Marine and Coastal Access Act 2009, MD-LOT, as the competent authority, is required to consider whether a licensable activity is capable of affecting (other than insignificantly) a protected feature in a NC MPA or any ecological or geomorphological process on which the conservation of any protected feature in a NC MPA is dependent. The assessment has two sequential stages: • Stage one: initial screening (submitted at Scoping (Appendix 4B)); and • Stage two: main assessment (submitted with this application: **Nature Conservation Marine Protected Areas Assessment**).
European Protected Species (EPS) Risk Assessment	The Conservation (Natural Habitats & c) Regulations 1994 Schedule 2 specify EPS that are afforded protection under UK law. EPS include animals found in both terrestrial and marine environments.

Related environmental assessment	Summary
	Under The Conservation (Natural Habitats & c) Regulations 1994 and The Conservation of Offshore Marine Habitats and Species Regulations 2017, it is an offence to: • deliberately or recklessly capture, injure or kill a wild animal of an EPS; • deliberately disturb wild animals of an EPS; • deliberately take or destroy the eggs of such an animal; or • damage, destroy or deteriorate the breeding site or resting place of an EPS. Disturbance is defined as an activity that impairs the ability of the EPS to survive, breed, rear / nurture their young, to migrate, or an activity that significantly affects the local distribution or abundance of the species. As described in **Chapter 2: Legislative and Policy Context**, EPS mitigation licences may need to be applied for the Project where activities are proposed that could result in the disturbance of EPS, such as site investigation, or buoy deployment and surveys. If the risk of injury or significant disturbance cannot be reduced to negligible levels with mitigation, then an EPS mitigation licence is required. An EPS mitigation licence can only be granted subject to the following three tests being met (NatureScot, 2022): • Test 1: There must be a licensable purpose for which licences can be granted. The reason for the licence must relate to one of several purposes specified in Regulation 44(2) of the Conservation (Natural Habitats &c.) Regulations 1994 (as amended). • Test 2: There must be no satisfactory alternative. • Test 3: The proposed action must not be detrimental to maintaining the species at 'favourable conservation status'. In considering this test, NatureScot and MD-LOT will take into account any possible impacts of development proposals on the favourable conservation status of the relevant species in its native range. The Project is responsible for providing risk assessments and supporting information to NatureScot and MD-LOT in order to facilitate their decision-making in relation to an EPS mitigation licence application. EPS will be identified within the relevant technical aspect chapters of the EIA Report. Any need for future EPS risk assessment will be identified and undertaken pre-construction as necessary. EPS risk assessments do not form part of the consent submission.

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5.14 Glossary of terms and abbreviations

5.14.1 Abbreviations

Acronym	Definition
AA	Appropriate Assessment
AEoSI	Adverse Effect on Site Integrity
ALARP	As Low As Reasonably Possible
CEA	Cumulative Effects Assessment
DECC	Department of Energy & Climate Change
EEA	European Economic Area
EIA	Environmental Impact Assessment
EMF	Electromagnetic Fields
EN-3	National Policy Statement for Renewable Energy
EPS	European Protected Species
EU	European Union
FRA	Flood Risk Assessment
GES	Good Environmental Status
HRA	Habitats Regulations Appraisal
HSE	Health and Safety Executive

Acronym	Definition
ICNIRP	International Commission on Non-Ionizing Radiation Protection
IEMA	Institute of Environmental Management and Assessment
Km	Kilometres
MD-LOT	Marine Directorate – Licensing Operations Team
MHWS	Mean High Water Springs
MLWS	Mean Low Water Springs
MPA	Marine Protected Area
MSFD	Marine Strategy Framework Directive
NE7	Northeast 7
nm	Nautical miles
NPF4	National Planning Framework 4
O&M	Operation and maintenance
PAC	Pre-Application Consultation Report
PAN	Planning Advice Note
Q&A	Question and Answer
s.36	Section 36
UK	United Kingdom
WFD	Water Framework Directive
ZOI	Zone of Influence

5.14.2 Glossary of terms

Term	Definition
Aberdeenshire Council	Aberdeenshire Council is the regulator for determining onshore applications for planning applications under the Town and Country Planning (Scotland) Act 1997 for all Project infrastructure located landward of the Mean Low Water Springs (MLWS).
Appropriate Assessment	An assessment to determine the implications of a plan or project on relevant national site networks in view of that site's conservation objectives. An Appropriate Assessment forms part of the Habitats Regulations Appraisal (HRA) and is required when a plan or project (either alone or in-combination with other plans or projects) is likely to have significant effect

Term	Definition
	on a national site network. Where there are adverse impacts, it also includes an assessment of the potential mitigation for those impacts.
Aspect	Used to refer to the individual environmental topics
Baseline	Existing conditions as represented by the latest available data, whether from literature or survey and used as a benchmark for making comparisons to assess the impact of a development or project.
Cumulative effects	Additional changes cause by the Project in conjunction with other similar developments or as a combined effect of a set of developments, taken together.
Cumulative Effects Assessment	Assessment of effects as a result of the incremental changes caused by other past, present and reasonably foreseeable human activities and natural processes together with the Project.
Cumulative impact	Impacts resulting from incremental changes cause by other past, present or reasonably foreseeable actions together with the Project.
Decommissioning	The period during which a development and its associated processes are removed from active operation.
Environmental Impact Assessment	The process of evaluating the likely significant environmental effects of a proposed project or development over and above the existing circumstances (or 'baseline').
EIA Report	The written output presenting the full findings of the EIA.
EIA Regulations	Terminology used in this EIA Report to refer to the four sets of regulations: • The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017; • The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017; • The Marine Works (Environmental Impact Assessment) Regulations 2007; and • The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017.
Environmental measures	Measures that are proposed to prevent, reduce and where possible offset any significant adverse effects (or to avoid, reduce and if possible, remedy identified effects).
European Economic Area	Member States of the European Union (EU) and three countries of the European Free Trade Association (Iceland, Liechtenstein and Norway, excluding Switzerland).
Flood Risk Assessment	A technical assessment required under the Flood Risk Management Act (Scotland) 2009 for developments proposed within a flood zone, as defined by the Scottish Environmental Protection Agency (SEPA).
Future baseline	Refers to the situation in future years without the Project.
Habitats Regulations Appraisal	The assessment of the impacts of implementing a plan or policy on a European Site, the purpose being to consider the impacts of a project

Term	Definition
	against conservation objectives of the site and to ascertain whether it would adversely affect the integrity of the site.
Habitats Regulations	The Habitats Directive (Directive 92/43/ECC) and the Wild Birds Directive (Directive 2009/147/EC) were transposed into Scottish Law by the Conservation (Natural Habitats &c) Regulations 1994 ('Habitats Regulations') (up to 12 nm); by the Conservation of Offshore Marine Habitats and Species Regulations 2017 ('Offshore Marine Regulations') (beyond 12 nm); the Conservation of Habitats and Species Regulations 2017 (of relevance to consents under Section 36 of the Electricity Act 1989); the Offshore Petroleum Activities (Conservation of Habitats) Regulations 2001; and the Wildlife and Countryside Act 1981. The Habitats Regulations set out the stages of the Habitats Regulations Appraisal (HRA) process required to assess the potential impacts of a proposed project on European Sites (Special Areas of Conservation, Special Protection Areas, candidate SACs and SPAs and Ramsar Sites).
Impact	The changes resulting from an action.
Impact pathway	A change descriptively assessed by one aspect, used by another aspect to inform a related assessment.
In-combination effects	Effects resulting from the combined impacts of the Project with other projects / plan on European Conservation Sites. These will be presented separated within HRA-related documentation.
Inter-related effects	Inter-related effects can be the following: • Project lifetime effects: i.e., those arising throughout more than one stage of the Project (construction, O&M and decommissioning) to interact to potentially create a more significant effect on a receptor than if just one stage were assessed in isolation. For example. For example, increases in suspended sediment concentrations across all three project stages may have a greater significance than the effects of each project stage considered alone. • Receptor-led effects: assessment of the scope for all effects to interact, spatially and temporally, to create inter-related effects on a receptor (or group). Receptor-led effects might be short term, temporary or transient effects, or incorporate longer term effects. For example, when combined, the effects of increased noise and poorer air quality during construction could be of greater significance to a residential receptor than when considered separately. A receptor-led effect assessment also considers whether an impact is predicted to be an inter-related effect over a project lifetime.
Institute of Environmental Management and Assessment	International membership organisation for environment and sustainability professionals.
Likely significant effects	It is a requirement of the EIA Regulations to determine the likely significant effects of the Project on the environment which should relate to the level of an effect and the type of effect.
Magnitude (of change)	A term that combines judgements about the size and scale of the effect, the extent of the area over which it occurs, whether it is reversible or

Term	Definition
	irreversible and whether it is short term or long term in duration'. Also known as the 'degree' or 'nature' of change.
Marine Directive – Licensing Operations Teams	Formerly known as Marine Scotland – Licensing Operations Team, MD-LOT is the regulator for determining marine licence applications on behalf of the Scottish Ministers in the Scottish inshore region (between 0 and 12 nautical miles) under the Marine (Scotland) Act 2010, and in the Scottish offshore region (between 12 and 200 nautical miles) under the Marine and Coastal Access Act 2009.
Marine licence	Licence required for certain activities in the marine environment and granted under either the Marine and Coastal Access Act 2009 or the Marine (Scotland) Act 2010.
Marine Strategic Framework Directive	The European Union Directive (2008/56/EC) seeking to achieve good environmental status (GES) in Europe's seas.
MarramWind Limited ('the Applicant')	A company wholly owned by ScottishPower Renewables UK Limited (SPR).
Maximum design scenario	The maximum design scenario represents the worst-case scenario for each aspect whilst allowing the flexibility to make improvements in the future in ways that cannot be predicted at the time of submission of the planning, s.36 consent and marine licence applications.
National Policy Statement	National Policy Statements are statutory documents published in accordance with the Planning Act 2008. They set out the UK government's policy on, and the national need for specific types of nationally significant infrastructure projects.
NatureScot	Formerly known as Scottish Natural Heritage, NatureScot is a public body and government advisor responsible for Scotland's natural heritage, in particular for its natural, genetic and scenic diversity.
Non-statutory engagement	The undertaking of a consultation that is not a requirement under the relevant consenting regime(s) to obtain stakeholder feedback on the Project.
Non-statutory stakeholder	A stakeholder engaged in the Project's development who is not required to be engaged under the relevant consenting regime(s) but is engaged none-the-less.
Offshore	Pertaining to the seaward side of MHWS, and typically in reference to locations some distance from the coast.
Offshore wind farm	An offshore wind farm is a group of wind turbine generators in the same location (offshore) in the sea, which are used to produce electricity.
Onshore	Pertaining to the landward side of MLWS.
Planning Permission in Principle	Planning Permission in Principle establishes the acceptability of a type of development or land use on a site without requiring a significant level of detail about the design and implementation of a development proposal. This approach is typically used for major development proposals to avoid the initial high costs of detailed design work and to retain design flexibility. A PPiP application only seeks initial consent for, as a minimum, a proposed

Term	Definition
	land use and associated suite of high-level development parameters (including access from a public road) within a defined site boundary. All detailed design and implementation matters would be deferred to subsequent applications for Approval of Matters Specified in Conditions.
Project	The MarramWind Offshore Wind Farm Project that is the subject of this EIA Report, as described in **Chapter 4: Project Description**.
Pre-Application Consultation Report	A document required to be submitted at the submission stage that presents how pre-application consultation and stakeholder engagement was delivered in line with statutory minimum requirements or any additional requirements set out by the consenting body in their response to the Proposal of Application Notice.
Primary measures	These are modifications to the location or design of the development made during the pre-application phase that are an inherent part of the Project and do not require additional action to be taken. These are also referred to as 'design measures'.
Receptor	This term originates as defined in Regulation 5(2) of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 and include population and human health, biodiversity, land, soil, water, air, climate, material assets, cultural heritage and landscape that may be at risk from exposure to pollutants which could potentially arise as a result of the Project. It is equivalent to the term ‘factors’ defined in 4(3) of the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017, where factors may be subject to significant effects of the Project and include population and human health, biodiversity, land, soil, water, air, climate, material assets, cultural heritage and the landscape.
Scoping Opinion	A Scoping Opinion is adopted by the Planning Authority and Scottish Ministers for a proposed project.
Scoping Report	A report that presents the findings of an initial stage in the Environmental Impact Assessment process.
Scottish Environmental Protection Agency	A non-departmental public body of the Scottish Government, responsible for environmental regulation. This includes ensuring that the environment and human health are protected, and that Scotland’s natural resources and services are used as sustainably as possible and contribute to sustainable economic growth
Scottish Government Marine Directorate (formerly Marine Scotland)	Civil service directorate for Scotland, which is responsible for the integrated management of Scotland’s seas.
Scottish Ministers	The devolved government of Scotland.
Secondary measures	Actions that will require further activity in order to achieve the anticipated outcome. These may be imposed as part of the planning consent or through inclusion in the EIA Report. These are also referred to as 'additional measures'.
Section 36 consent	Consent that can be granted under section 36 of the Electricity Act 1989 for the construction or extension, and operation, of an electricity station.

Term	Definition
Sensitivity	A term applied to specific receptors, combining judgements of the susceptibility of the receptor to the specific type of change or development proposed and the value associated to that receptor.
Significance	A measure of the importance of the environmental effect, defined by criteria specific to the environmental aspect.
Significant effect	It is a requirement of the EIA Regulations to determine the likely significant effects of the development on the environment, which should relate to the level of an effect and the type of effect. Where possible significant effects should be mitigated. The significance of an effect gives an indication as to the degree of importance (based on the magnitude of the effect and the sensitivity of the receptor) that should be attached to the impact described. Whether or not an effect should be considered significant is not absolute and requires the application of professional judgement. Significant – 'noteworthy, of considerable amount or effect or importance, not insignificant or negligible' (The Concise Oxford Dictionary). Those levels and types of landscape and visual effect likely to have a major or important / noteworthy or special effect of which a decision maker should take particular note.
Spatial scope	The area over which changes to the environment are predicted to occur as a consequence of a project.
Statutory Consultation	The undertaking of a consultation that is delivered in line with or beyond the minimum requirements of the relevant consenting regime(s) to obtain stakeholder feedback on the Project.
Statutory stakeholder	A stakeholder who must be given opportunity to engage with the Project as the Project design develops, as required under the relevant consenting regime(s).
Temporal scope	The temporal scope refers to the time periods over which impacts and effects may be experienced by sensitive receptors.
Temporary or permanent effects	Effects may be considered as temporary or permanent within a timeframe of relevance to the aspect or receptor in question.
Tertiary measures	Actions that would occur with or without input from the EIA process. These include actions that will be taken to meet legislative requirements, or those considered to be standard practice and used to manage commonly occurring environmental effects. These are also referred to as 'good practice measures'.

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