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# 3 ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

#### 3.1 Introduction

3.1.1 This Chapter discusses the need for Environmental Impact Assessment (EIA) and sets out the approach to assessment taken in this EIA Report. This EIA Report has been prepared in compliance with the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended) ('the EIA Regulations').

# 3.2 EIA Regulations

- 3.2.1 Where a development falls within one of the descriptions in and meets the associated criteria of Schedule 2 of the EIA Regulations and is considered likely to have significant effects on the environment, then an EIA is required to be submitted with the planning application. The Proposed Development falls under paragraph 2(3)(j) of Schedule 2 of the EIA Regulations as an "Installation for the harnessing of wind power for energy production (wind farm)" which will involve the installation of more than 2 turbines, the hub heights of which will exceed 15 metres (m).
- 3.2.2 It was acknowledged at an early stage that given the scale and nature of the Proposed Development, an EIA would be required. It was therefore not considered necessary to seek a screening opinion and this EIA Report is submitted voluntarily.
- 3.2.3 Scoping is the process of identifying those aspects of the environment and associated issues which are likely to be significantly affected by any Proposed Development and which therefore need to be considered in detail when assessing the potential effects. This recognises that there may be some environmental elements where there would be no significant issues or likely effects resulting from the Proposed Development, and hence where there is no need for further assessment to be undertaken.
- 3.2.4 Following the identification of the scope of the EIA, individual environmental matters are subject to survey, investigation and assessment, and individual technical discipline chapters are prepared for presentation in an EIA Report to accompany the application for a Proposed Development. The assessment methodologies are based on recognised good practice and guidelines specific to each discipline area.
- 3.2.5 The EIA Regulations prohibit a planning authority from granting planning permission for EIA development unless they have taken the environmental information provided into consideration.
- 3.2.6 This EIA Report has been prepared in order to be taken into consideration by the local planning authority (LPA), Argyll & Bute Council (A&BC), in the determination of an application under the Town and Country Planning (Scotland) Act 1997 (as amended) for the Proposed Development.

# 3.3 Requirements of the EIA Regulations

3.3.1 The approach to this EIA has followed the requirements of the EIA Regulations. Regulation 4 of the EIA Regulations (discussed further in **Section 3.6**) defines the process of EIA and highlights the factors and their interactions that should be considered. Regulation 5 sets out the minimum requirements for an EIA Report, and notes that where a Scoping Opinion is issued the EIA must be prepared based on that Scoping Opinion.

# 3.4 EIA and the Design Process

- 3.4.1 The EIA was conducted as an iterative process, rather than a one-off, post design environmental appraisal. This has allowed the findings of the EIA to be fed into the design process, to avoid, reduce and where possible, mitigate environmental effects. Where potentially adverse environmental effects were identified through preliminary investigations as part of feasibility work, or later in the detailed EIA, consideration was given as to how the scheme design could be modified to design out adverse environmental effects, or where this was not possible, to identify appropriate mitigation.
- 3.4.2 This iterative design process is explained further in **Volume 2, Chapter 2: Proposed Development and Design Evolution** and the **Design and Access Statement**. Consultation, with key consultees and the public, that also fed into the design process is outlined in this chapter.

# 3.5 EIA Project Team and Competency

3.5.1 The EIA team is led by RSK with assistance from specialist consultants where required. **Table 1.2** in **Volume 2**, **Chapter 1**: **Introduction** shows the EIA Team's responsibilities, qualifications and experience.

# 3.6 Determining the Scope of the EIA Report

- 3.6.1 This EIA Report is the independent assessment of the likely significant environmental effects arising as a result of the Proposed Development, and the measures proposed to avoid, reduce and where possible mitigate significant adverse effects.
- 3.6.2 The scope of this EIA Report has been established through baseline collection and research, reference to standard and best practice guidance in relation to onshore wind projects (e.g. that produced by the Scottish Government, NatureScot, Scottish Environment Protection Agency (SEPA), Historic Environment Scotland (HES) and Institute of Acoustics (IOA)), as well as experience of similar projects and professional judgement.
- 3.6.3 Any proposal to construct or operate a power generation scheme with a capacity in excess of 50 (Megawatts) MW requires Scottish Ministers' consent under Section 36 of the Electricity Act 1989. Whilst not a statutory requirement, as part of the EIA process, the Applicant sought a formal scoping opinion from the Scottish Government Energy Consents Unit (ECU) on behalf of the Scottish Ministers under the EIA regulations in June 2022 for a project comprising up to 18 wind turbines exceeding 50 MW.

- 3.6.4 The Scoping Opinion of the Scottish Ministers was issued by the Energy Consents Unit (ECU)<sup>1</sup> on 07 October 2022, followed by an addendum containing the scoping response received from Argyll and Bute Council (A&BC) on 31 May 2023.
- 3.6.5 Following further site design work and consideration of ornithology mitigation, the Applicant reduced the scale of the Proposed Development from 12 turbines to 7 wind turbines at up to 149.9 m to tip. As the Proposed Development would now be less than 50 MW this meant that the planning application would be made to A&BC as opposed to the ECU. Given the number of turbines has reduced significantly since scoping and consultation in relation to project scope and other matters has been ongoing with consultees over the last few years, it was decided not to formally scope the project again. The following considerations were factored into the scoping process:
  - The nature of the receiving environment and the type of operations associated with the Proposed Development are such that environmental effects could arise during construction, operation and decommissioning stages;
  - The need for early consultation and commencement of ecological and ornithological surveys and peat depth probing to accommodate data collection within seasonal and programme constraints;
  - The local and national planning context, as well as relevant technically specific, planning and environmental policy and guidance;
  - The need for early consultation with NatureScot, and A&BC on the selected preliminary viewpoints to minimise potential impact on sensitive landscape and visual receptors;
  - The requirement for early liaison with stakeholder and regulatory authorities (e.g., telecommunication link operators) to provide input for the EIA and design development processes; and
  - The potential to scope out the environmental factors in relation to which the Proposed Development was assessed to have a negligible (adverse) and Not Significant effect.

#### **Scoping Process**

- 3.6.6 The Scoping exercise involved a review of available environmental information related to the form and status of the existing environment; preliminary desk-based and site-based appraisals and surveys; and application of knowledge of the potential environmental implications of comparable schemes (based on direct past project experience and other published experience and guidance).
- 3.6.7 The outcomes of the Scoping exercise were collated in a Scoping Report, which accompanied a formal request for a Scoping Opinion that was issued by the Applicant to the ECU on 30<sup>th</sup> June 2022. The report identified environmental aspects which the Applicant proposed to address within the EIA. It discussed each aspect with a brief summary of the environmental baseline (where practical), the relevant potential impacts, and an overview of the proposed method of assessment. Where relevant, technical areas were assessed in the context of industry guidance, best practice, and likely design of the Proposed Development.

<sup>&</sup>lt;sup>1</sup> Search 'ECU00004540' on the ECU website (<a href="https://www.energyconsents.scot/ApplicationDetails.aspx?cr=ECU00004540">https://www.energyconsents.scot/ApplicationDetails.aspx?cr=ECU00004540</a>) for the Beinn Ghlas Wind Farm Scoping Documents

- 3.6.8 Following receipt of the Scoping Request, the ECU consulted with statutory and non-statutory agencies, consultees, and other environmental bodies with knowledge of the Proposed Development Site. The following provided responses that were contained in a Scoping Opinion (07 October 2022) and a Scoping Opinion Addendum (31 May 2023):
  - Aberdeen International Airport
  - A&BC
    - o Landscape & Visual
    - Policy Considerations
    - o Socio-economics, Land use and Tourism
    - Aviation and Radar
    - o Telecommunications and electronic interference
    - o Shadow Flicker
    - o Climate Change
    - Population and Human Health
    - o Major Accidents and/or Disasters
  - Arqiva
  - British Telecommunications plc
  - Defence Infrastructure Organisation
  - Edinburgh Airport
  - Fisheries Management Scotland
  - Glasgow Airport
  - Glasgow Prestwick Airport
  - · Highlands and Islands Airports Limited
  - HES
  - Joint Radio Company
  - Marine Scotland Science
  - Mountaineering Scotland
  - NATS Safeguarding
  - NatureScot
  - Office for Nuclear Regulation
  - Scottish Environment Protection Agency
  - ScotWays
  - Telefonica
  - Transport Scotland
  - Vodafone
- 3.6.9 No responses were received from the following consultees:
  - Argyll District Salmon Fishery Board
  - A&BC
    - o Ecology and Ornithology (Local Biodiversity Officer)
    - Hydrology, Geology and Hydrogeology (Flood Prevention Officer)
    - Archaeology and Cultural Heritage (West of Scotland Archaeology Service)
    - Traffic and Transport (Area Roads Engineer)

- Noise and Vibration (Environmental Health Officer)
- Dust & Air Quality (Environmental Health Officer)
- Argyll Fisheries Trust
- Atkins
- British Horse Society
- Civil Aviation Authority Airspace
- Crown Estate Scotland
- John Muir Trust
- Mobile Broadband Network Limited
- Oban Airport
- RSPB Scotland
- Scottish Forestry
- Scottish Wild Land Group
- Scottish Wildlife Trust
- Visit Scotland
- West of Scotland Archaeology Service
- 3.6.10 A summary of the consultation undertaken during project development including a reference to consultee responses and actions taken, an explanation of the assessment methodologies adopted and identified issues, as well as scoped out issues are presented in Volume 2, Chapters 05 to 14 of this EIA Report, which detail the findings in relation to the various environmental aspects considered.

#### Scope of EIA Report

- 3.6.11 In general terms, the Scoping Opinion concluded that the following aspects were relevant to the investigation in the EIA Report owing to the potential for significant environmental effects to arise:
  - Landscape and Visual Impact Assessment;
  - Ecology;
  - Ornithology;
  - Hydrology, Hydrogeology, Geology and Peat;
  - Cultural Heritage;
  - Traffic and Transport:
  - Noise and Vibration;
  - Socio-economics; and
  - Other Issues:
    - o Telecommunications and Electronic Interference;
    - o Climate Change; and
    - o Aviation and Radar.
- 3.6.12 As discussed in **Section 3.6**, consultation with statutory consultees and other organisations has been undertaken throughout all stages of the EIA preparation process to obtain environmental data, to discuss and agree the scope and adopted methods of environmental assessments, and to develop the appropriate environmental mitigation measures. EIA topic-specific consultation is summarised in each chapter where relevant.

#### Scoped out of the EIA

3.6.13 A host of environmental aspects were reviewed and subsequently scoped out of the EIA report based on the limited potential for environmental effects to arise. No objections in relation to these elements being scoped out were raised by the Scoping Opinion.

Vulnerability of the Proposed Development to Risks of Major Accidents and/or Disasters (including climate change)

- 3.6.14 None of the following climate trends identified by UK Climate Projections (UKCP18<sup>2</sup>) could affect the Proposed Development with the exception of increased windstorms:
  - Increased temperature;
  - Wildfire:
  - Changes in the frequency, intensity and distribution of rainfall events (e.g., an increase in the contribution to winter rainfall from heavy precipitation events and decreases in summer rainfall);
  - Increased windstorms; and
  - Sea level rise.
- 3.6.15 Braking mechanisms can be installed on turbines to allow them to be operated only under specific wind speeds and should severe windstorms be experienced, then the turbines would be shut down.
- 3.6.16 In addition, given the elevated location of the Site, flooding would not pose a significant risk to the operation of the wind farm nor would the construction of the Proposed Development contribute to flooding elsewhere.

**Dust and Air Quality** 

- 3.6.17 The main source of impact on air quality would be increased traffic flows on local roads during construction and emissions from construction activities, including exhaust fumes, and dust generated from blasting activities associated with the construction of wind turbine bases and crane pads.
- 3.6.18 It is considered that air emissions associated with these activities would be transient localised, and highly unlikely to have a significant effect on local air quality. Best practice measures would be applied to construction, forming an integral part of the Construction Environmental Management Plan (CEMP). There would be no significant emissions to air during operation.

Population and Human Health

3.6.19 At the scoping stage, as per the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 (2017a), it was proposed that population and human health could be covered through the findings of other assessments undertaken as part of the EIA process and so, no dedicated EIA Chapter would be produced. Properly designed and maintained wind turbines are a safe technology. The site design and in-

<sup>&</sup>lt;sup>2</sup> Met Office (2022), UK Climate Projections. Available at : (https://www.metoffice.gov.uk/binaries/content/assets/metofficegovuk/pdf/research/ukcp/ukcp18 headline finding s v4 aug22.pdf). [Accessed November 2023].

built buffers from sensitive receptors would minimise any risk to human health resulting from the operation of the turbines.

- 3.6.20 Limited interactions with human health are possible, and consideration was given to the findings of the following assessments in the EIA Report:
  - Ice build-up on turbine blades and risk of ice throw (Chapter 2: Proposed Development and Design Evolution);
  - Lightning Strike (Chapter 2: Proposed Development and Design Evolution);
  - Risk of turbine failure and consideration of inbuilt emergency procedures and best practice (Chapter 2: Proposed Development and Design Evolution);
  - Residential Amenity (Chapter 5: Landscape and Visual Assessment);
  - Traffic and Transportation (Chapter 10: Traffic and Movement);
  - Noise and Vibration (Chapter 11: Noise);
  - Aviation and Radar (Chapter 13: Other Issues); and
  - Telecommunications (Chapter 13: Other Issues).

#### Consideration of Transboundary Effects

In accordance with the EIA Regulations, this assessment intended to consider 'transboundary effects'. Regulation 41 of the EIA Regulations refers to development with significant transboundary effects as being development proposed to be carried out in Scotland that is likely to have significant effects on the environment in another European Economic Area (EEA) State.

However, given the nature of the Proposed Development, with potential impacts confined to areas within the relevant study areas (and within Scotland) and the location of the application site, being remote from other EEA States are such that significant transboundary effects are not predicted for the Proposed Development and therefore scoped out of the EIA Report

#### 3.7 Consultation Overview

- 3.7.1 Consultation has been integral to the design and development of the Proposed Development, the identification of existing environmental constraints and sensitivities, and the identification and assessment of likely environmental effects of the Proposed Development.
- 3.7.2 Consultation with statutory organisations, non-statutory organisations and the general public commenced in July 2022, following the publication of the Scoping Report, and has taken a number of forms, including:
  - Stakeholder liaison:
  - Public information events;
  - Informal discussions; and
  - Gatecheck report (part of previous s36 process).
- 3.7.3 Further detail regarding the public exhibition events and the consultation requirements for the Proposed Development has been provided in the Pre-Application Consultation (PAC) Report, supplementary to the EIAR. The PAC has been submitted with the

- planning application and describes the consultation requirements for the Proposed Development, the consultation measures undertaken by the Applicant, the feedback received and any resulting modifications to the Proposed Development.
- 3.7.4 This PAC report identifies the relevant national and local policy as well as the approach that the Applicant has taken to inform and consult with the local community and other stakeholders throughout the project timeline.
- 3.7.5 The Applicant has responded to all email/feedback queries raised throughout the Public Exhibition process (in line with General Data Protection Regulations (GDPR) requirements) and all comments made have been considered as part of the proposed application.

# 3.8 Environmental Impact Assessment

#### Legislation

- 3.8.1 Regulation 4 of the EIA Regulations (2017a) states that the EIA must identify, describe, and assess the direct and indirect significant effects of the Proposed Development on the following:
  - Population and human health;
  - Biodiversity;
  - Land, Soil, Water, Air and climate; and
  - Material assets, cultural heritage and the landscape.
- 3.8.2 The findings of an EIA should be included in an EIA Report prepared by the developer. Regulation 5 sets out the content required to be included in an EIA report. The EIA report must provide descriptions of the likely significant effects resulting from:
  - The construction, existence, and where relevant demolition of the Proposed Development;
  - The use of natural resources, in particular land, soil, water and biodiversity;
  - The emission of pollutants, noise, vibration, light, heat and radiation;
  - The creation of nuisance and the disposal/recovery of waste;
  - Risks to human health, cultural heritage and the environment;
  - The cumulation of effects with other existing and/or approved projects;
  - The impact of the project on the climate and vulnerability of the project to climate change; and
  - The technologies and substances used.
- 3.8.3 The EIA must also describe and assess the potential direct and indirect significant effects of the Proposed Development and the potential interactions between those factors. The description should detail the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the Proposed Development.
- 3.8.4 Schedule 4 of the EIA Regulations set out the information that must be included in the EIA Report, including:
  - A description of the Proposed Development, including in particular:
    - A description of the location of the development;

- o A description of the physical characteristics of the whole development;
- A description of the main characteristics of the operational phase of the development; and
- An estimate, by type and quantity, of expected residues and emissions (water, air and soil pollution, noise, vibration, light, heat, radiation and quantities and types of waste produced during the construction and operation phases).
- A description of the reasonable alternatives studied by the developer;
- A description of the relevant aspects of the current state of the environment (the 'baseline scenario') and an outline of the likely evolution thereof without implementation of the project;
- A description of the factors specified above likely to be significantly affected by the development;
- A description of the likely significant effects of the development on the environment, resulting from:
  - The construction and existence of the development, including, where relevant, demolition works:
  - The use of natural resources, in particular land, soil, water and biodiversity;
  - The emission of pollutants, noise, vibration, light, heat and radiation, the creation of nuisances and the disposal and recovery of waste;
  - The risks to human health, cultural heritage or the environment;
  - The cumulation of effects with other existing and/or approved development;
  - The impact of the development on climate and the vulnerability of the development to climate change; and
  - The technologies and the substances used.
- A description of the forecasting methods or evidence, used to identify and assess the significant effects on the environment;
- A description of the mitigation measures envisaged to avoid, prevent, reduce and, if possible, offset any significant adverse effects on the environment and, where appropriate, of any monitoring arrangements;
- A description of the expected significant adverse effects of the development on the environment deriving from the vulnerability of the development to risks of major accidents and/or disasters which are relevant to the project concerned;
- A non-technical summary of the information covered by the points above; and
- A reference list detailing the sources used for the descriptions and assessments in the EIA report.

#### **EIA Delivery**

3.8.5 When practical, a common approach has been adopted in the undertaking and reporting of individual environmental assessments.

#### EIA Guidance

- 3.8.6 The EIA has been undertaken with regard to the following best-practice guidance:
  - Planning Circular 1/2017: The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations (Scottish Government, 2017b);

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- Planning Advice Note 1/2013: Environmental Impact Assessment (Scottish Government, 2013);
- Web Based Guidance Onshore Wind Turbines (Scottish Government, 2014);
- Guidelines for Environmental Impact Assessment (IEMA, 2004);
- A handbook on environmental impact assessment: Guidance for competent authorities, consultees and others involved in the Environmental Impact Assessment process in Scotland (Scottish Natural Heritage, 2013); and
- Environmental Impact Assessment Guide to Shaping Quality Development (IEMA, 2015).

#### Establishment of Baseline Environment

- 3.8.7 In each of the EIA Report technical chapters, the effects will be assessed against the existing baseline conditions, (i.e., without the Proposed Development but including the existing Beinn Ghlas Wind Farm). This assessment will be carried out assuming that there are no existing significant adverse effects on the population, range or distribution of a species (i.e., no significant effect on the species' conservation status); and no significant interference with the flight paths of migratory birds.
- 3.8.8 The EIA of scoped-in environmental aspects commenced with the identification and review of information relating to known, or the likely presence of, environmental receptors and resources within a defined study area, in order to determine their relative value, importance and/or sensitivity towards change.
- 3.8.9 Environmental resources were defined as those environmental aspects that either support, or are essential to, natural or human systems. These include elements of population, ecosystems, watercourses, air and climatic factors, landscape, and material assets.
- 3.8.10 Environmental receptors were defined as people (i.e., occupiers of residences, users of recreational areas, places of employment and community facilities) and elements within the environment (e.g., flora and fauna) that rely on environmental resources.
- 3.8.11 Desk-based data sources comprised consultation responses; published literature; databases, records and schedules relating to environmental designations; national, regional and local policy documentation; historic and current mapping; aerial photography; and data gathered from previous environmental studies.
- 3.8.12 Site surveys were undertaken to verify and consolidate information gathered during the desk-based review, and to evaluate the relationships between specific environmental interests and their wider environmental value.
- 3.8.13 Study area extents vary in accordance with the environmental aspect being considered. For some topics, a study area has been defined as being relatively localised to the Proposed Development, while for others it has extended outward to capture the surrounding road network, distant communities, and environmentally sensitive areas. The definition of each study area has been informed by a review of the relationship between the Proposed Development and the receiving environment, the outcomes of Scoping, and reference to thresholds stipulated in topic-specific EIA guidance.

#### Impacts Prediction and Assessment

- 3.8.14 Impacts comprise identifiable changes to the baseline environment. These can be either beneficial (e.g., introduction of planting to screen visually detracting elements) or adverse (e.g., loss of attractive environmental components). Such impacts can take the following forms:
  - Direct [primary] (e.g. loss of habitat to accommodate the Proposed Development);
  - Indirect [secondary] (e.g. pollution downstream arising from silt deposition during earthworks);
  - Transboundary (e.g. impacts which affect Natura 2000 sites (sites designated under the Habitats Directive) outside of the UK in other EU Member States;
  - Short-term/temporary (e.g. dust generated during construction);
  - Medium-term (e.g. cutting back of planting which is subsequently allowed to regenerate);
  - Long-term/permanent (e.g. improvement in air quality); and
  - Cumulative (e.g. incremental changes caused by other past, present or reasonably foreseeable actions together with those associated with the proposed scheme, or where a receptor or resource is subject to a combination of individual impacts such as air pollution, noise and visual impact associated with the proposed scheme in isolation).
- 3.8.15 Impact assessments have been both quantitative and qualitative in nature and based on comparisons drawn between the environmental conditions immediately prior to the assumed construction of the Proposed Development and the predicted environmental conditions resulting from its implementation. Each technical chapter of the EIA Report describes the forecasting methods used in the EIA.
- 3.8.16 Impacts have been defined in accordance with accepted terminology and standardised methodologies to predict the magnitude of impact (or change) resulting from the Proposed Development.
- 3.8.17 Assessments have been undertaken for the construction period and in the year when the Proposed Development would become operational. Some environmental aspects have required further assessment beyond the operational year to take account of factors such as predicted traffic growth or activities associated with decommissioning of the Proposed Development.
- 3.8.18 Where relevant, the assessments describe the expected significant effects of the Proposed Development on the environment deriving from the vulnerability of the development to risks of major accidents and/or disasters relevant to the Proposed Development. This includes consideration of effects resulting from future climate change and the vulnerability of the project to climate change.

#### Environmental Effects

- 3.8.19 Effects are defined as the consequence of impacts. They are formulated as a function of the receptor/resource value and sensitivity, and the predicted magnitude of impact.
- 3.8.20 Professional judgement, defined thresholds, established criteria and standards have been used to report the environmental effects of impacts, which can be referred to as either being prior to, or following establishment of, environmental mitigation.

#### **Environmental Mitigation**

- 3.8.21 Environmental mitigation measures have been developed to address potentially significant adverse environmental effects.
- 3.8.22 Mitigation can take the form of agreed measures incorporated into the evolving design of the Proposed Development (e.g., environmental treatments), standard measures (e.g., best practice construction management to control dust emissions) that are enforceable through planning conditions, and measures proposed in outline (e.g., off-site planting to provide visual screening to nearby residential dwellings) that may require further development and formal agreement to ensure their implementation.
- 3.8.23 All development proposals should adhere to the mitigation hierarchy set out in the National Planning Framework 4 (NPF4), defined (**see bold**) as:
  - **Avoid** by removing the impact at the outset.
  - Minimise by reducing the impact.
  - Restore by repairing damaged habitats.
  - Offset by compensating for residual impact that remains, with preference to onsite over off-site measures.
- 3.8.24 In addition to the mitigation hierarchy, under NPF4 Policy 3b, developments are required to provide significant biodiversity enhancement. The development must demonstrate the conservation, restoration and enhancement of biodiversity and local ecological networks. Significant biodiversity enhancements can be provided through restoring degraded habitats and creating nature networks which improves the habitat connectivity within and beyond the development. This is a requirement, and these measures are in addition to any proposed mitigation.

#### Enhancement

3.8.25 Opportunities for environmental enhancement measures within the site have been given due consideration throughout the design evolution process. Enhancement refers to measures to be implemented which don't form mitigation or compensation by avoiding, reducing or offsetting effects; but instead provide an opportunity to improve the characteristics, features, land use or habitats on-site to make them into a better state than are currently present prior to the Proposed Development being constructed. There is, therefore, a net or new benefit to the environment. These cases are identified in technical chapters as appropriate.

#### Monitoring

3.8.26 The EIA Report sets out details of any post-consent monitoring which is proposed. This includes, where appropriate, proposals to measure the effectiveness of the identified mitigation measures.

### Significance of Environmental Effects

3.8.27 The significance of an environmental effect has been established by way of reference to the importance/value of affected resources; the number and sensitivity of affected receptors; impact magnitude, duration, frequency and extent of effect; and the reversibility of effect (or the extent to which the adverse effects can be effectively reduced).

3.8.28 Generic significance criteria highlighted in **Table 3.1** have been applied across the environmental aspects considered in this EIA Report to ensure identified environmental effects are assessed in a transparent and comparable manner, except where such criteria are not applicable due to other prevailing topic-specific guidance (e.g. ecological impact assessment) and/or established standards and thresholds (e.g. EU limit values for air emissions).

**Table 3.1: Generic Significance Criteria** 

Level of Effect	Description
Major	Very large or large change in environmental or socio-economic conditions. These effects, both adverse and beneficial, are likely to be important considerations at a national to regional level because they contribute to achieving national / regional objectives or are likely to result in exceedance of statutory objectives and/or breaches of legislation.
Moderate	Intermediate change in environmental or socio-economic conditions. These effects are likely to be important considerations at a regional and local level.
Minor	Small change in environmental or socio-economic conditions. These effects may be raised as local issues but are unlikely to be of importance in the decision-making process.
Negligible	No discernible change in environmental or socio-economic conditions (i.e., variation within normal bounds or below measurable levels). An effect that is likely to have a negligible or neutral influence, irrespective of other effects.

# 3.9 Assessment Reporting

- 3.9.1 Each individual assessment follows a comparable format to ensure consistency in reporting the existing environmental conditions and the potential effects on them arising from implementation of the Proposed Development. Technical assessments in **Chapters 05 to 14** include the following sections:
  - **Introduction:** introduces the assessment topic under consideration;
  - Scope and Methodology: identifies and describes the scope of the assessment, the methods and criteria adopted, relevant guidance followed, and any assessment limitations, assumptions or difficulties encountered:
  - Consultation Undertaken: summarises the stakeholder engagement including dialogue with statutory consultees and with other stakeholders and where relevant the influence on the EIA;
  - **Statutory and Planning Context**: outlines statutes, guidance, policies and plans relevant to the environmental interests forming the focus of the assessment;
  - Existing Environment: describes the features and characteristics associated with the baseline environment:
  - Predicted Impacts: reports the predicted impacts, including cumulative impacts, on the baseline environment during the construction, operational and decommissioning phases;

- **Mitigation**: details all measures that have been incorporated into the design of the project and/or agreed as deliverable, including proposed monitoring where applicable; and
- Summary of Residual Effects: summarises the nature and significance of residual environmental effects that are predicted to remain, post-implementation of mitigation measures.

## 3.10 Assessment Assumptions, Difficulties and Uncertainties

- 3.10.1 The EIA Report has been compiled using the environmental information made available to the EIA team by the Applicant and members of their Project team; it has also been assembled using other readily available and publicly accessible material, including existing literature and studies, as well as personal communication with local experts. To the best of RSK's knowledge, the information used as a basis for the assessment is accurate and up to date. The team is not aware of any limitations of the underlying information or of any constraints that would materially affect the evaluations.
- 3.10.2 RSK and other members of the project team has also carried out its own site visits, surveys and investigations, at or in the vicinity of the Site to provide more information for the assessments and to fill data gaps. This has resulted in a more complete and up to date set of baseline data to use as the basis for the impact assessment. Although the data have been collected over a period, RSK is of the opinion that the data is relevant and valid at the time of reporting. It should be noted that the surveys and investigations are conducted on a sampling basis, which places a limit on the certainty of the data set.
- 3.10.3 This EIA Report has been based on the best available information at the time of publication. However, further information may become available during the detailed design phase that would be used to inform the project if relevant.
- 3.10.4 Assumptions adopted in the evaluation of impacts in each chapter are reported in each of the relevant sections. However, these assumptions are often implicit and rely on expert judgement. Any assumptions and known technical deficiencies have been documented.
- 3.10.5 The preparation of this EIA Report has been undertaken during the initial design phase of the project and, therefore, some of the technical aspects of the construction and operation have yet to be determined. Where an alternative option could be adopted which is likely to cause additional impacts, these are discussed within the relevant sections. In addition, the EIA has taken a precautionary approach to adopt conservatism in the assumptions made and any scenarios assumed, so that a reasonable 'worst case' scenario was assessed. Therefore, inherent uncertainties are accounted for and subsequent modifications to the project during the detailed design phase are less likely to fall outside of the assumed envelope of the assessment parameters.

#### 3.11 References

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