

# Muir Mhòr Offshore Wind Farm

## Environmental Impact Assessment Report

Volume 4, Appendix 9: Offshore Planning Statement



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## Glossary

<b>Term</b>	<b>Definition</b>
Array Area	The area in which the generation infrastructure (including Wind Turbine Generators and associated foundations, inter-array cables), Offshore Electrical Platform(s) and an interconnector cable will be located.
Developer	Muir Mhòr Offshore Wind Farm Limited
E2	The ScotWind Plan Option Area where the Proposed Development is located
EIA Regulations	Collectively the term used to refer to The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017, The Marine Works (Environmental Impact Assessment) Regulations 2007, and The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017.ch
Floating Foundations	The floating structures which the wind turbine generators are fixed to.
Foundation Anchors	The structures which anchor the Floating Foundations to the seabed, connected to the Foundation Mooring.
Foundation Mooring	The mooring lines or structures which connect the Floating Foundations to the anchors.
Habitats Regulations	The Conservation (Natural Habitats, &c..) Regulations 1994, the Conservation of Offshore Marine Habitats and Species Regulations 2017 and the Conservation of Habitats and Species Regulations 2017
Offshore Electrical Platform (OEP)	Offshore platform consisting of High Voltage Alternating Current (HVAC) equipment, details depending on the final electrical set up of the Project.
Project	Muir Mhòr Offshore Wind Farm – comprises the wind farm and all associated offshore and onshore components.
Proposed Development	The offshore Muir Mhòr Offshore Wind Farm project elements to which this Offshore EIA Report relates.
Wind Turbine Generator (WTG)	The wind turbines that generate electricity consisting of tubular towers and blades attached to a nacelle housing mechanical and electrical generating equipment.

## Acronyms

<b>Term</b>	<b>Definition</b>
AA	Appropriate Assessment
AEoI	Adverse Effect on Integrity
BESS	British Energy Security Strategy
CB6	Sixth Carbon Budget
CBRA	Cable Burial Risk Assessment
CCC	Committee on Climate Change
CCP	Climate Change Plan
CCS	Carbon Capture and Storage
CES	Crown Estate Scotland
COP	Conference of the Parties
COP21	Paris Climate Conference
CTV	Crew Transfer Vessel
DPO	Draft Plan Options
ECC	Export Cable Corridor
EEZ	Exclusive Economic Zone
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EPS	European Protected Species
EU	European Union
GES	Good Environmental Status
GHG	Greenhouse Gas
GVA	Gross Value Added
GW	Gigawatt
HDD	Horizontal Directional Drilling
HRA	Habitat Regulation Appraisal
HVAC	High Voltage Alternating Current
HVDC	High Voltage Direct Current
IAC	Inter Array Cables
IIP	Infrastructure Investment Plan
INTOG	Innovation and Targeted Oil & Gas
IPCC	Inter-Governmental Panel on Climate Change
IROPI	Imperative Reasons of Overriding Public Interest
JNCC	Joint Nature Conservation Committee
JV	Joint Venture
km	Kilometre
LAT	Lowest Astronomical Tide
LSE	Likely Significant Effect
MCAA	Marine and Coastal Access Act 2009
MD-LOT	Marine Directorate - Licensing Operations Team

<b>Term</b>	<b>Definition</b>
MPS	Marine Policy Statement
MSFD	Marine Strategy Framework Directive
MHWS	Mean High Water Springs
MLWS	Mean Low Water Springs
MPS	Marine Policy Statement
MSA	Marine (Scotland) Act 2010
MSFD	The Marine Strategy Framework Directive
MW	Megawatt
NC MPA	Nature Conservation Marine Protected Area
ND3	National Development 3
NDC	Nationally Determined Contributions
NMP	National Marine Plan
NPF	National Planning Framework
O&M	Operation and Maintenance
OEP	Offshore Electrical Platform
OWF	Offshore Wind Farm
OWPS	Offshore Wind Policy Statement
PO	Plan Option
REZ	Renewable Energy Zones
RIAA	Report to Inform Appropriate Assessment
RMP	Regional Marine Plan
SAC	Special Areas of Conservation
SEA	Strategic Environmental Assessment
SEPA	Scottish Environment Protection Agency
SES	Scottish Energy Strategy
SIA	Socio-Economic Impact Assessment
SMP	Sectoral Marine Plan
SNP	Scottish National Party
SOV	Service Operation Vessel
SPA	Special Protected Area
SSSI	Site of Scientific Special Interest
tCO <sub>2</sub> e	Carbon Dioxide Equivalent
UK	United Kingdom
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
WFD	Water Framework Directive
WTG	Wind Turbine Generator



## EXECUTIVE SUMMARY

### THE PROPOSED DEVELOPMENT

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Muir Mhòr Offshore Wind Farm Limited (hereafter referred to as 'the Developer') is proposing to develop the Muir Mhòr Offshore Wind Farm (hereafter 'the Project'). The Project is made up of both offshore and onshore components. The subject of this Offshore Environmental Impact Assessment Report (EIAR) is the offshore infrastructure of the Project seaward of Mean High-Water Springs (MHWS) which is hereafter referred to as 'the Proposed Development'.

The Array Area for the Proposed Development covers an area of approximately 200 km<sup>2</sup> and is located approximately 63 km east of Peterhead on the east coast of Scotland. The offshore infrastructure of the Proposed Development includes Wind Turbine Generators (WTGs) and associated Floating Foundations, the Offshore Electrical Platform (OEP) and associated foundations, the Inter-Array Cables (IACs), an interconnector cable, offshore export cables and landfall.

The Proposed Development will significantly contribute to Scotland and the United Kingdom's legally binding climate change targets by aiding in the decarbonisation of energy supply. It also plays a crucial role in ensuring energy security and providing low-cost energy for consumers, in alignment with national policies of both the Scottish and UK Governments.

The Proposed Development will also have a significant impact on the economic and social landscape in Scotland and the UK by creating substantial employment opportunities and fostering skills development, especially in coastal communities. Additionally, it will play a significant role in supporting supply chains in both Scotland and the UK.

An Environmental Impact Assessment Report (EIAR) for the Proposed Development has been completed in compliance with The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended), the Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017, and the Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended). Additionally, as required by the Conservation (Natural Habitats, &c.) Regulations 1994, The Conservation of Habitats and Species Regulations 2017, and the Conservation of Offshore Marine Habitats and Species Regulations 2017 (collectively referred to as the "Habitats Regulations"), the offshore Habitats Regulations Appraisal (HRA) process has been progressed alongside the EIAR and has been reported upon separately.

The HRA Screening Report for the Proposed Development (Muir Mhòr Offshore Wind Farm Limited, 2023) was submitted to the Marine Directorate - Licensing Operations Team (MD-LOT) alongside the Offshore Scoping Report (Volume 3, Appendix 5.1) in June 2023. This Offshore HRA Screening Report detailed the outcome of Likely Significant Effect (LSE) screening on the qualifying features of relevant European sites for the Proposed Development. The Report to Inform Appropriate Assessment (RIAA) for the Proposed Development (Muir Mhòr Offshore Wind Farm Limited, 2024) has been submitted to MD-LOT alongside this EIAR.

### THE ROLE OF THIS PLANNING STATEMENT

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This Offshore Planning Statement supports the offshore consent application under Section 36 of the Electricity Act 1989, as well as the applications for Marine Licences under the Marine and Coastal Access Act (MCAA) 2009 and the Marine (Scotland) Act 2010, up to MHWS. A separate Onshore Planning Statement has been prepared to support the application for planning permission under the Town and Country Planning (Scotland) Act 1997 for the onshore transmission infrastructure landward of Mean Low Water Springs (MLWS).

The Scottish Ministers are the primary regulatory authority responsible for the necessary consents and licences required for the construction and operation of the Proposed Development. To enable the Scottish Ministers to carefully consider the development proposals, developers must provide information demonstrating compliance with relevant legislation and policy, allowing for an adequate understanding of the pertinent material considerations.

This Offshore Planning Statement demonstrates compliance with legislation and consenting requirements for the Proposed Development and sets out a clear case for consent. Once implemented, the Proposed Development will significantly contribute to decarbonisation, energy security, and affordability in the near future. The Proposed Development aligns with the Scottish Energy Strategy and UK energy policy and is crucial for achieving the Scottish and UK policy aims and legislative Net Zero targets within the targeted timelines.

## **WHY CONSENT THE PROPOSED DEVELOPMENT?**

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The Proposed Development aims to deliver 1 Gigawatt (GW) of offshore wind energy by the early 2030s. The Developer has conducted extensive work to maximise the generating capacity of the Proposed Development to contribute to the urgent need for decarbonisation and to meet legally binding climate change commitments, while minimising and mitigating potential adverse environmental effects.

This Offshore Planning Statement illustrates that deploying offshore wind, and specifically the Proposed Development, is essential for making a substantial contribution to the UK Government's national policy objectives for decarbonisation (HM Government, 2021). These objectives include:

- Achieving net-zero by scaling up zero-carbon generation assets;
- Enhancing security of supply through geographically and technologically diverse sources; and
- Ensuring energy affordability.

Maximising the generating capacity will enable the Proposed Development to make substantial progress toward Scotland's legally binding Net Zero commitment by 2045 and the UK's target by 2050.

Without the Proposed Development, not only would the Scottish decarbonisation targets (primarily the 2045 target) potentially be more challenging or fail to be met, but it is likely that delivery of several key policies could fall short. For example, Scotland would struggle to deliver the outputs as per the Scotland Sectoral Marine Plan for Offshore Wind Energy (Scottish Government, 2020a), Scottish Energy Strategy (Scottish Government, 2017), UK Net Zero Strategy (DESNZ, 2022) and UK Offshore Wind Sector Deal (BEIS, 2020b), as well as the targets set by the Climate Change (Scotland) Act 2009 (as amended) and the Climate Change Act 2008 (as amended).

Offshore wind is crucial for low-carbon generation, and there is an urgent need for substantial capacities of low-carbon energy to ensure electricity supply security. Specifically, the Proposed Development will be an essential component of the future generation mix, making a significant contribution towards meeting the policy objectives and decarbonisation commitments of Scotland and the UK Government.

The Proposed Development also presents a crucial opportunity to enhance energy security, a key national policy objective at present, in that energy generated by the Proposed Development will contribute towards reducing the UK's reliance on imported energy. Given also that electricity generated by offshore wind is not dependent on input fuels, the price of the electricity it generates will provide a shield for electricity consumers against volatile international fuel markets and reduce the UK's exposure to their effects. Once fully commissioned, the floating Muir Mhòr Offshore Wind Farm could generate enough renewable electricity to power the equivalent of 1.2 million Scottish homes. The Proposed Development therefore offers substantial benefits to UK consumers.

Reducing the UK's reliance on hydrocarbons is essential. Approving the full technical potential of the Proposed Development by the early 2030s would be a significant advance toward achieving this goal.

## POLICY APPRAISAL

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The Proposed Development has been evaluated against the relevant energy and planning policy framework that the decision-maker must consider when determining the applications for Section 36 Consent and the associated Marine Licences.

The likely environmental effects of the Proposed Development have been evaluated. These need to be viewed in the context of the nature and scale of a floating offshore wind development project in the East Region Plan Option (PO) areas and in relation to proposed mitigation. It is considered that any adverse effects that do arise, are outweighed by the benefits that would result.

In the context of relevant policy and legislative considerations, it is evident that the Proposed Development aligns with key policy objectives, which focus on increasing renewable energy capacity, minimising effects on human health, reducing broader environmental harm, and ensuring that conflicts with other marine environment users are kept to a minimum.

Alternative options have been thoroughly assessed and excluded based on strong reasoning. Further information on the consideration of alternatives can be found in Volume 1, Chapter 4 (Site Selection Alternatives and Consideration of Alternatives).

The Developer's RIAA (Muir Mhòr Offshore Wind Farm Limited, 2024) has identified that there is potential Adverse Effect on Site Integrity (AEoSI) on five Special Protection Areas (SPAs), and no potential for AEoSI on any of the other SPAs, Special Areas of Conservation (SACs), and Ramsar sites considered within the assessment.

## CONCLUSION

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While some significant effects were identified in the EIAR, they have been reduced through the application of secondary mitigation and all residual effects from the Proposed Development (i.e. following mitigation) are not significant. A suite of mitigation and monitoring measures are proposed.

Overall, the Proposed Development aligns with relevant legislation and policy, particularly in terms of increasing renewable energy generation and capacity while minimising conflicts with marine environment users, human health, and the environment.

A worst-case scenario has been assessed, and appropriate mitigation measures have been proposed and can be secured to address any remaining effects. The UK Marine Policy Statement (MPS) (2011) emphasises the need to balance the benefits against the potential adverse effects.

The policy appraisal presented in this submission makes a compelling case that the Proposed Development would deliver significant benefits in the broader public interest. The Proposed Development has been designed and assessed in full compliance with relevant legislative requirements and the underlying aims and objectives of the policy framework.

The Proposed Development has the potential to make a significant contribution to Scotland's and the UK's legally binding climate change targets by aiding in the decarbonization of the energy supply. It also plays a crucial role in ensuring energy security and providing low-cost energy for consumers, aligning with national policies of both the Scottish and UK governments.

The Proposed Development will also have a meaningful impact on the economic and social landscape in Scotland and the UK, creating substantial employment opportunities and fostering skills development, particularly in coastal communities, while also supporting supply chains in both countries.

Given these points, the benefits of the Proposed Development should be given considerable weight in the planning balance. The Proposed Development is essential to Scotland's energy supply, focusing on urgent delivery throughout the 2030s to meet rising needs and lay the groundwork for the 2045 Net

Zero target. Without it, Scotland risks falling short of its decarbonisation goals, making the Proposed Development vital not only for long-term targets but for immediate progress in the coming decade.

In evaluating the application, decision-makers will need to balance the Proposed Development's necessity and benefits against the mitigation and compensation of predicted environmental impacts. The benefits of the Proposed Development far outweigh its adverse effects.

For these reasons, it is recommended that Section 36 consent and Marine Licences be granted.

# 1. INTRODUCTION

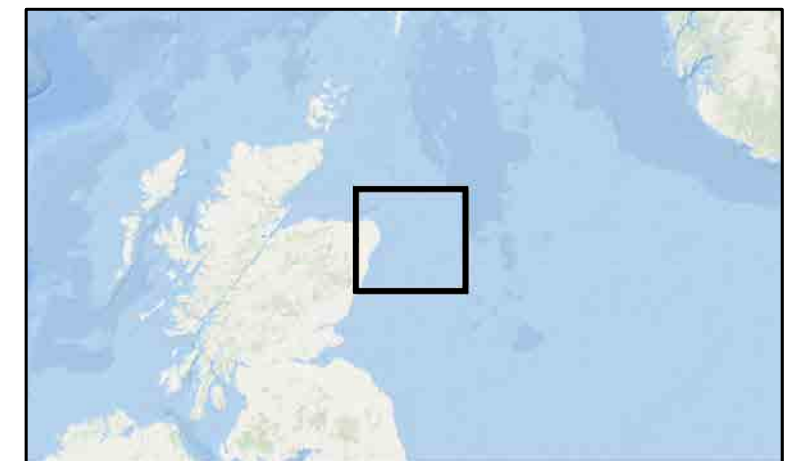
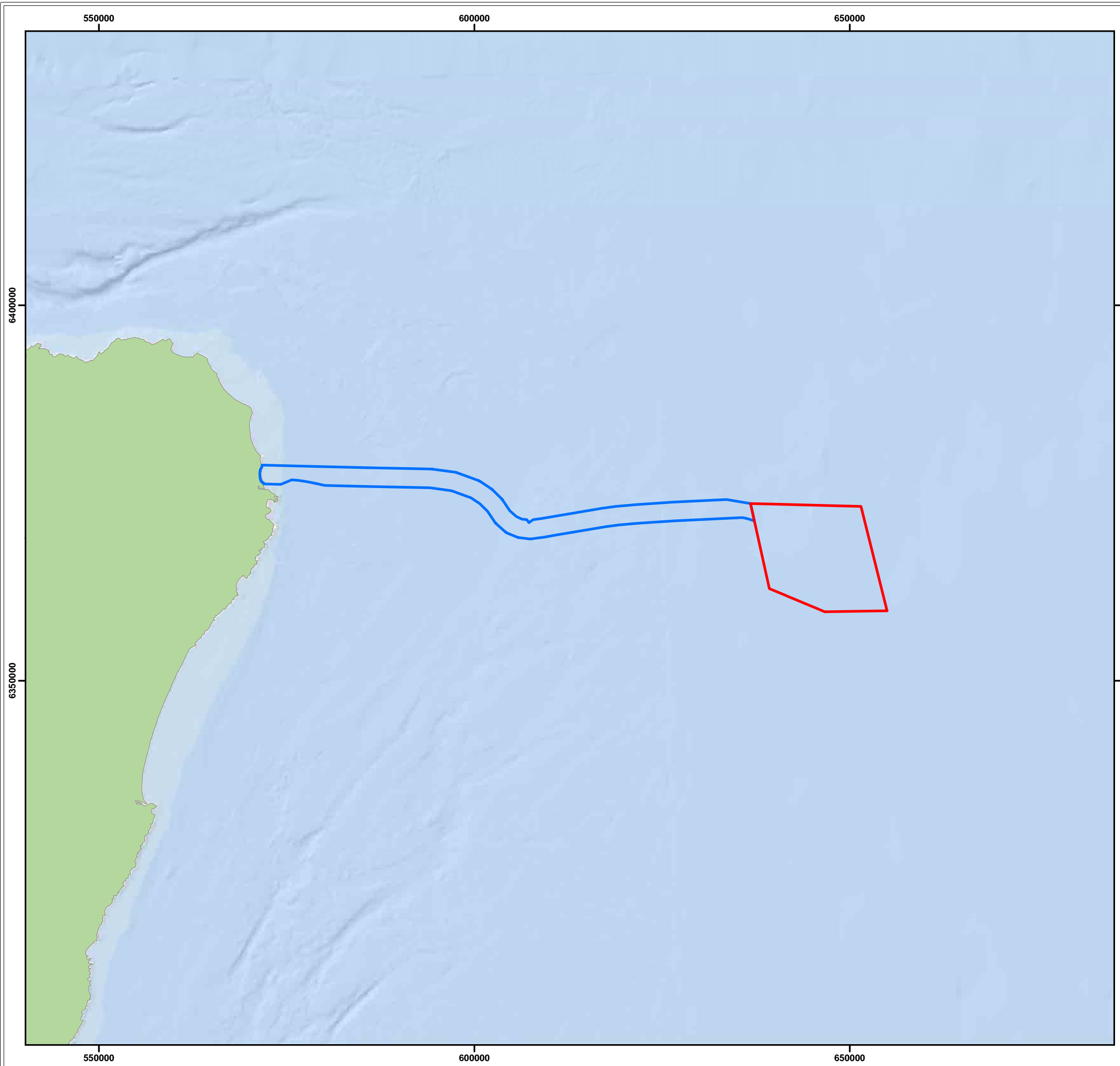
## 1.1. BACKGROUND

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- 1.1.1. In response to the Scottish Government's target of net-zero emissions of all greenhouse gases by 2045 and the aim to generate 50% of Scotland's overall energy consumption from renewable sources by 2030, the Crown Estate Scotland (CES) launched the ScotWind Leasing process in 2021, which released new areas of seabed within Scottish waters for future offshore development. The ambition was to offer offshore wind generating capacity within a series of Plan Options (POs), identified by the Scottish Government as the most suitable areas for development as set out within the Sectoral Marine Plan (SMP) for Offshore Wind Energy.
- 1.1.2. As part of the CES ScotWind Leasing process in January 2022, Muir Mhòr Offshore Wind Farm Limited (a Joint Venture (JV) between Fred. Olsen Seawind Limited and Vattenfall Wind Power Limited), hereafter 'the Developer' was identified as the successful bidder and awarded an Option Agreement (granting exclusive rights for offshore wind development) for what the Developer has named the Muir Mhòr Offshore Wind Farm (OWF) (hereafter 'the Project'), located within the E2 PO area. The Project is anticipated to have a capacity of approximately 1 GW comprising floating offshore wind technology.
- 1.1.3. The Project is made up of both offshore and onshore components. The subject of the Offshore EIAR is the offshore infrastructure of the Project seaward of MHWS which is hereafter referred to as 'the Proposed Development'. The Array Area for the Proposed Development covers an area of approximately 200 km<sup>2</sup> and is located approximately 63 km east of Peterhead on the east coast of Scotland (Figure 1-1). The offshore infrastructure of the Proposed Development includes WTGs and associated Floating Foundations, the Offshore Electrical Platform (OEP) and associated foundations, the IACs, an interconnector cable, offshore export cables and landfall. The anticipated operational lifetime of the Proposed Development is 35 years.
- 1.1.4. This Offshore Planning Statement has been prepared by GoBe Consultants on behalf of the Developer. This Offshore Planning Statement supports the applications for consent for the offshore components submitted under Section 36 of the Electricity Act 1989 (as amended) and for Marine Licences under the MCAA 2009 and the Marine (Scotland) Act 2010 for the Proposed Development, as outlined in this EIAR and accompanying application documents.
- 1.1.5. Muir Mhòr Offshore Wind Farm Limited is an equal JV between Fred. Olsen Seawind Limited and Vattenfall Wind Power Limited. This partnership combines unique strengths in financial resources, technical expertise, and project development capabilities, along with a strong commitment to delivering the Proposed Development and a clear strategic vision.
- 1.1.6. Fred. Olsen Seawind Limited is a well-established offshore wind developer, building on Fred. Olsen Renewables' 25-year track record, market presence, and portfolio. With extensive experience in Scotland, Fred. Olsen Seawind has over 25 years of involvement in the development, construction, and operation of onshore wind projects in the region. The company is active in Ireland, Norway, and Scotland, and is exploring new market opportunities. Fred. Olsen Wind Carrier, a related entity, has installed 20% of the world's offshore wind turbines outside of China, while Fred. Olsen 1848 focuses on developing and commercialising renewable energy innovations.
- 1.1.7. Vattenfall Wind Power Limited is one of Europe's largest producers and retailers of electricity and heat. Operating in the UK for over a decade, Vattenfall has focused on developing fossil fuel-free energy projects. Since launching its wind business with one project in 2008, Vattenfall has expanded to 11 projects by 2023, operating more than 1 GW of wind energy capacity in the UK. In Scotland, their wind farms generate approximately 400 Megawatt (MW),

enough to power over 130,000 homes. This includes the 96.8 MW Aberdeen Offshore Wind Farm, which allows the domestic supply chain to test and showcase the latest innovations in a real-world setting. Vattenfall is also developing the South Kyle project, a 240 MW onshore wind farm in south-west Scotland.

- 1.1.8. An Environmental Impact Assessment (EIA) has been conducted, and an EIAR has been submitted in support of the Proposed Development, in compliance with the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended), The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended), and the Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended). Additionally, a separate Onshore EIAR and Planning Statement is being prepared for the onshore elements of the Project, which will be approved under the Town and Country Planning (Scotland) Act 1997 (as amended).
- 1.1.9. Additionally, as required by the Conservation (Natural Habitats, &c.) Regulations 1994, the Conservation of Habitats and Species Regulations 2017, and the Conservation of Offshore Marine Habitats and Species Regulations 2017 (collectively referred to as the "Habitats Regulations"), the offshore Habitats Regulations Appraisal (HRA) process has been progressed alongside the EIA and has been reported upon separately.
- 1.1.10. The HRA Screening Report for the Proposed Development (Muir Mhòr Offshore Wind Farm Limited, 2023) was submitted to MD-LOT alongside the Offshore Scoping Report (Volume 3, Appendix 5.1) in June 2023. This Offshore HRA Screening Report detailed the outcome of LSE screening on the qualifying features of relevant European sites for the Proposed Development. The Report to Inform Appropriate Assessment (RIAA) for the Proposed Development (Muir Mhòr Offshore Wind Farm Limited, 2024) has been submitted to MD-LOT alongside this EIAR.
- 1.1.11. This Offshore Planning Statement evaluates the Proposed Development in relation to the relevant marine planning and renewable energy policy framework, including National Planning Framework 4 (NPF4) (Scottish Government, 2023), insofar as it is a material consideration pertaining to offshore effects. This Offshore Planning Statement complements and is distinct from this EIAR, and both documents should be reviewed together.



**Legend:**

- Array Area
- Offshore Export Cable Corridor

Project: <b>Muir Mhòr</b>	Report: <b>Environmental Impact Assessment Report</b>
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**Muir Mhor Location Map**

Figure: 1-1	Drawing No: GoBe-0163		
Revision: 01	Date: 11/09/24	Drawn: EV	Checked: BPHB

Map scale 1:500,000 @ A3

**Co-ordinate system:** ETRS 1989 UTM Zone 30N **EPSG:** 25830

**MUIR MHÒR**  
OFFSHORE WIND FARM

A joint venture between Fred. Olsen Seawind & Vattenfall

## 1.2. PROJECT DESCRIPTION

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1.2.1. The offshore elements of the Proposed Development are divided into three distinct areas, which are depicted in Figure 1-2 below and detailed below further:

- **The Array Area (200 km<sup>2</sup>):** This is the offshore energy generation site, containing the following key infrastructure:
  - Up to 67 WTGs on Floating Foundations comprising of tower section, nacelle, hub, three blades and associated floating foundations;
  - Anchors and mooring lines system for each floating foundation;
  - Up to 250 km of IACs, which connect the individual WTGs to each other and then to the OEP(s);
  - Up to two OEP(s), where the IAC transition to the export cables; and
  - A single interconnector cable of up to 3 km in length to connect the OEP(s).
- **Offshore Export Cable Corridor (ECC) (167 km<sup>2</sup>):** This is the offshore area containing the export cables which connect the Array Area to the grid connection point on the Scottish mainland:
  - The Offshore ECC includes all the export cabling seaward of MHWS to the OEP(s) within the Array Area.
  - There are up to three export cables, each up to 90 km in length.
- **Intertidal Area:** This is the area between MHWS and Mean Low Water Springs (MLWS), where the export cable transitions towards landfall and the onshore infrastructure:
  - The offshore export cables will cross the intertidal area via trenchless techniques such as Horizontal Directional Drilling (HDD).

1.2.2. Volume 1, Chapter 3 (Project Description) of this EIAR details the Proposed Development. This description is based on the design work completed to date and the current understanding of the site-specific environmental conditions. The Chapter outlines the individual components of the Proposed Development, as well as the associated activities related to construction, operation, maintenance, and decommissioning. A summary of these details is provided below.

## THE PROPOSED DEVELOPMENT - APPROACH AND DESCRIPTION OF ELEMENTS

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1.2.3. The design envelope has been designed to include a necessary degree of flexibility to accommodate further project refinement during detailed design, which is carried out during the post consent stage. The Proposed Development requires flexibility in choice of foundation options, specific siting of infrastructure, construction methodologies, etc., to ensure that anticipated changes in available technology and project economics can be accommodated within the final design. The final project design will depend on factors including ground conditions, wave and tidal conditions, project economics and procurement approach.

1.2.4. As details of particular design components require further refinement, the Developer has adopted a design envelope approach to the impact assessment (also known as a 'Rochdale Envelope'). In line with the Scottish Government's guidance 'Guidance for applicants on using the design envelope for applications under section 36 of the Electricity Act 1989', the design envelope approach offers flexibility in the EIA process by enabling impact assessment to be carried out against several potential design options. On the condition that sufficient detail is provided, impact assessment can be undertaken against the worst-case design parameters



identified from design options. This approach enables developers to meet the requirements of the EIA Regulations for section 36 consent applications under the Electricity Act 1989, whilst the final detailed design for a project is still to be defined.

- 1.2.5. The worst-case scenario approach adopted within the design envelope framework ensures that, regardless of the final design selected, environmental impacts will not exceed those assessed in the EIA. By evaluating the maximum potential impacts across various design options, this method provides assurance that any refined or final design configurations will fall within the environmental limits already assessed. This conservative approach safeguards the environment by establishing an upper bound for impacts, allowing the project to progress without the need for additional EIA revisions, provided it remains within the defined envelope.
- 1.2.6. Volume 1, Chapter 3 (Project Description) provides an overview of the design options being considered for each of the key design components. Within each option, a range of values is provided for the key technical parameters which are considered influential to the relevant source-pathway-receptor relationships identified for the Proposed Development. From this range of values, a worst-case scenario is established for each of the impact pathways in the impact assessment within the EIAR.
- 1.2.7. An example of the worst-case design scenario approach would be where several types of floating wind turbine foundations are being considered. The assessment in this case would be based on the foundation known to have the greatest potential for impact on a given receptor. In this instance, the worst-case design scenario for the foundation with the greatest seabed disturbance potential would be the foundation with the largest footprint (i.e. the worst-case design scenario for benthic subtidal and intertidal ecology). It can be assumed that any parameters equal to or less than those assessed will have environmental effects of the same level or less upon the receptors for the topic under consideration.
- 1.2.8. Across the Array Area the water depths are between 62.0 m and 97.7 m below Lowest Astronomical Tide (LAT). A maximum seabed depth is recorded in the north-eastern corner of the Array Area and the shallowest area is observed in the south-eastern corner of the Array Area. The average seabed depth across the Array Area is 79.9 m below LAT.
- 1.2.9. The Offshore ECC<sup>1</sup> has an average water depth of 88.4 m below LAT. A maximum water depth of 118.8 m below LAT is recorded at the Buchan Deep.
- 1.2.10. Offshore Export Cables transfer the power from the OEP(s) to the transition joint bay at landfall, where they are adapted, and the Onshore Export Cables begin, which then connect to the grid. A maximum of three Offshore Export Cables is being considered as part of the Proposed Development, with a maximum total length of 270 km. The Offshore Export Cables will be HVAC, and the selected design will influence OEP design. Any seabed assets, such as cables and pipelines, which are crossed by the Offshore Export Cable will have a specific crossing design which will be agreed with the asset owner in advance of installation through a cable crossing agreement.
- 1.2.11. The Offshore Export Cables may require seabed preparation activities, such as sand wave clearance, which will be informed by the Pre-Construction Surveys. Details, durations and timing of seabed preparation activities are provided in the Construction section below. The Offshore Export Cables are expected to be buried along most of their length, with optimum cable burial depth informed by the detailed depth of burial assessment undertaken as a part of the Cable Burial Risk Assessment (CBRA) for the Proposed Development. If the optimum burial depth identified by the CBRA is not achieved during cable laying, then additional cable

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<sup>1</sup> All measurements are taken from the centreline of the export cable corridor, relative to LAT.

protection may be installed. Scour protection may also be required at the Offshore Export Cables touchdown point(s) near the OEP.

- 1.2.12. Although CES leases for the Proposed Development will be for 50 years, the operational life of the Proposed Development is anticipated to be 35 years. During this time, there will be a requirement for upkeep and maintenance of the Proposed Development. Such maintenance is outlined below and is discussed in more detail in Volume 1, Chapter 3 (Project Description).
- 1.2.13. The onshore elements are considered separately and are therefore not addressed within this report.
- 1.2.14. The following paragraphs provide a summary of the key stages of development. More detail on each of these states is included in Volume 1, Chapter 3 (Project Description).

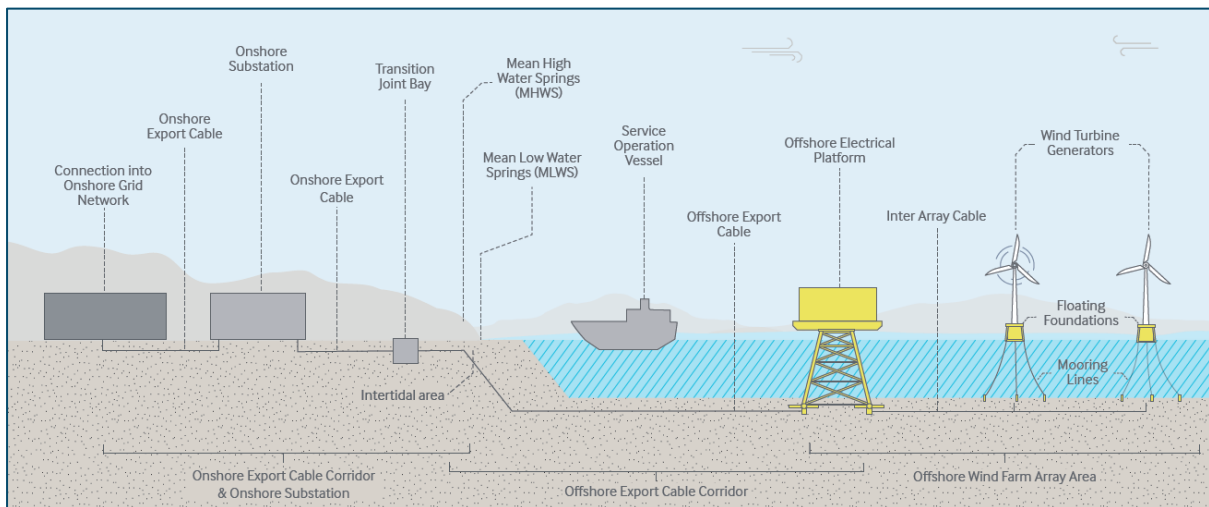


Figure 1-2 Indicative Project Overview<sup>2</sup>

## PRE-CONSTRUCTION SURVEYS

- 1.2.15. Prior to the four-year construction phase, several pre-construction surveys will be undertaken to identify in detail:
- Seabed conditions and morphology;
  - The presence/absence of any potential obstructions or hazards; and
  - To inform detailed project design works.
- 1.2.16. These geophysical and geotechnical surveys will be conducted across the Array Area and offshore ECC and are expected to have a duration of three months.
- 1.2.17. Several site preparation activities will be necessary in both the Array Area and the offshore ECC. These preparatory works are expected to commence before the initial construction activities and will continue as needed throughout the construction phase. These activities include:
- Clearance of unexploded ordnance; and
  - Boulder clearance.

<sup>2</sup> Consent is not sought in the Offshore Section 36 Consent Application for the Onshore Export Cable Corridor & Onshore Substation.

## CONSTRUCTION PHASE

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- 1.2.18. The construction of the Proposed Development will follow the general sequence outlined below. Detailed information on each step can be found in Volume 1, Chapter 3 (Project Description):
- Step 1: Installation of the offshore export cable at landfall;
  - Step 2: Installation of Floating Foundations and WTGs and installation of anchors and mooring lines and scour protection;
  - Step 3: Installation and commissioning of the offshore substation topside;
  - Step 4: Installation of inter-array and interconnector cables, including cable protection; and
  - Step 5: Offshore installation of export cables and cable protection.

## OPERATION AND MAINTENANCE PHASE

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- 1.2.19. The comprehensive operation and maintenance strategy will be developed once the baseline location and technical specifications are finalised. The offshore operation and maintenance approach will encompass both preventative and corrective measures. This strategy will involve an onshore (harbor-based) operation and maintenance base, supported by a Service Operation Vessel (SOV) and/or a Crew Transfer Vessel (CTV) logistics plan.

## DECOMMISSIONING PHASE

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- 1.2.20. The Energy Act 2004 (as amended) contains statutory requirements for the decommissioning of offshore renewable energy installations and requires the Developer to provide a costed Decommissioning Programme for approval, prior to construction of the Proposed Development. Good industry practice will be followed by the Developer for developing the Decommissioning Programme. It is expected that decommissioning activities will last approximately three years. The worst case scenario for decommissioning of each component of the Proposed Development has been assessed for each topic within this EIAR.
- 1.2.21. It is anticipated that the WTGs and their Floating Foundations will be removed in a reversal of their installation process, similarly for the floating Foundation Mooring lines. The removal of anchors which are fully embedded in the seabed may not be feasible, with the potential for piled anchors (if used) to be cut 1-2 m below seabed and the remainder of the pile left in-situ. The OEP(s) topside and jacket foundation will both be fully removed from site. If piles are used for the OEP(s) foundation, these may be cut 1-2 m below seabed and the remainder of the pile left in-situ. The optimum approach will be agreed via consultation with relevant stakeholders and will follow industry practice guidance at the time of decommissioning.
- 1.2.22. If scour protection is required for the OEP Piles or floating Foundation Anchors, the feasibility of and level of disturbance from removal will depend upon the material used. The dynamic section of the IAC within the water column will be removed. There is the potential for buried sections of the cable to be left in-situ to avoid unnecessarily disturbing the seabed. The decommissioning process will follow best practice guidance at the time of decommissioning, which may include the potential for the scour protection materials to be left in-situ to minimise disturbance.
- 1.2.23. There is also the possibility of repowering, which would be addressed through the necessary consenting applications before the end of the current lifespan, if desired. If pursued, at this time, it is not expected that repowering would require any removal of existing or installation of new offshore cables.

## 1.3. STRUCTURE OF THIS OFFSHORE PLANNING STATEMENT

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1.3.1. This Offshore Planning Statement is structured as follows:

- Section 2: Describes the relevant statutory and legislative provisions applicable to the consenting process for the Proposed Development;
- Section 3: Outlines the climate change and renewable energy policy framework;
- Section 4: Details other planning policy considerations;
- Section 5: Assesses the policy implications in relation to the significant environmental effects predicted in this EIAR and provides overall conclusions on policy matters;
- Section 6: Describes and evaluates the key benefits of the Proposed Development; and
- Section 7: Provides conclusions.

## 2. STATUTORY CONSIDERATIONS

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- 2.1.1. This section outlines the relevant legislative provisions governing the determination of the Section 36 Consent application and associated Marine Licences. These provisions specify the factors that decision-makers must consider when evaluating the applications. This Planning Statement pertains solely to the offshore generation components of the Proposed Development and the related transmission infrastructure located seaward of MHWS, including wind turbines, their foundations and substructures, IACs, cabling to and from the OEP(s) or offshore converter stations, an interconnector cable, and export cables that will reach landfall.
- 2.1.2. The following legislation applies to the consents and licences needed for offshore electricity generation projects in both inshore and offshore waters:
- The Electricity Act 1989 (as amended);
  - The Marine (Scotland) Act 2010;
  - The MCAA 2009;
  - The Energy Act 2004;
  - The Energy Act 2013;
  - The Energy Act 2023 and
  - The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended), the Conservation of Habitats and Species Regulations 2017 (as amended), and the Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended).

### 2.2. SECTION 36 CONSENT

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- 2.2.1. The Proposed Development will be subject to an application to the Scottish Ministers under Section 36 of the Electricity Act 1989 (as amended) for consent to construct and operate an electricity generating station. The scope of this consent will include the construction, installation and Operation and Maintenance (O&M) of WTG and IAC.
- 2.2.2. Consent under Section 36 of the Electricity Act 1989 (as amended) is required for any proposal to construct, extend, or operate a generating station (such as an OWF) situated in:
- Scottish Territorial Waters (from shore out to 12 nm), which have a generating capacity more than 1 Megawatt (MW); or
  - Scottish Offshore Region (from 12 to 200 nm), with a generating station more than 50 MW.
- 2.2.3. Scottish Ministers can grant consent under Section 36 of the Electricity Act 1989 with consideration of input and recommendations from MD-LOT.
- 2.2.4. An application for consent under Section 36 of this Act has been submitted and must be evaluated in accordance with Schedules 8 and 9 of the Act.

## 2.3. THE MARINE (SCOTLAND) ACT 2010 AND THE MARINE AND COASTAL ACCESS ACT 2009

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- 2.3.1. The Marine (Scotland) Act 2010 provides the legislative and management framework for the marine environment within Scottish Territorial Waters (from MHWS out to 12 nm). Under section 21 of the Marine (Scotland) Act 2010, the Proposed Development requires a Marine Licence for the construction and deposit of structures below MHWS.
- 2.3.2. Part 4 (Marine Licensing) of the Marine (Scotland) Act 2010 includes licensable marine activities (Section 21) for which the following would apply to the Proposed Development.
- (1) To deposit any substance or object within the Scottish marine area, either in the sea or on or under the seabed, from any of the following:*
- (a) a vehicle, vessel, aircraft, or marine structure,*
  - (b) a container floating in the sea, or*
  - (c) a structure on land constructed or adapted wholly or mainly for the purpose of depositing solids in the sea.*
- (2) To deposit any substance or object anywhere in the sea or on or under the seabed from a vehicle, vessel, aircraft, marine structure, or floating container which was loaded with the substance or object either:*
- (a) in Scotland, or*
  - (b) in the Scottish marine area.*
- (5) To construct, alter or improve any works within the Scottish marine area either:*
- (a) in or over the sea, or*
  - (b) on or under the seabed.*
- (6) To use a vehicle, vessel, aircraft, marine structure, or floating container to remove any substance or object from the seabed within the Scottish marine area.*
- (7) To carry out any form of dredging within the Scottish marine area (whether or not involving the removal of any material from the sea or seabed).*
- 2.3.3. The Scottish Ministers can grant a Marine Licence under Part 4 of the Marine (Scotland) Act 2010 with consideration of input and recommendations from MD-LOT.
- 2.3.4. The MCAA 2009 provides devolved authority to Scottish Ministers for marine planning and conservation powers in the Scottish Offshore Region (from 12 to 200 nm). Under section 66 of the MCAA 2009 (in the context of the Scottish Offshore Region), the Proposed Development requires a Marine Licence for the construction and deposit of structures beyond 12 nm.
- 2.3.5. Part 4 (Marine Licensing) of the MCAA 2009 includes licensable marine activities (Section 66) for which broadly the same activities listed above for the Marine (Scotland) Act 2010 would apply to the Proposed Development (e.g., deposits, removals, and construction). Scottish Ministers can grant a Marine Licence under Part 4 of the MCAA 2009 with consideration of input and recommendations from MD-LOT.
- 2.3.6. Section 58 of the MCAA 2009 mandates that public authorities align their authorisation or enforcement decisions with pertinent marine policy documents, unless specific factors justify a deviation. A similar requirement is found in Section 15 of the MSA.

- 2.3.7. Sections 27 of the Marine (Scotland) Act 2010 and 69 of the MCAA 2009 specify the considerations for assessing licence applications, which include:
- Environmental protection;
  - Safeguarding human health;
  - Preventing interference with legitimate sea users; and
  - Any other relevant matters identified by the determining authority.
- 2.3.8. These considerations have been addressed in the EIAR. This Offshore Planning Statement summarises these findings within the legislative context.

## **2.1. THE ENERGY ACT 2004**

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- 2.1.1. The Energy Act 2004 established provisions for safety zones around offshore renewable energy installations during both construction and operation phases. It is considered a criminal offence for vessels to enter these safety zones unless authorised or in an emergency situation.
- 2.1.2. The safety zone regulations outlined in the Energy Act 2004 and the Electricity (Offshore Generating Stations) (Safety Zones) (Applications Procedures and Control of Access) Regulations 2007 apply to territorial waters within 12 nautical miles (nm) of Scotland and to waters within the UK's Renewable Energy Zones (REZ). These regulations cover all Offshore Renewable Energy Installations (OREIs) but do not apply to export or inter-array cables. The Scotland Act 2016 has amended the Energy Act 2004, transferring the responsibility for declaring safety zones in Scottish offshore waters to Scottish Ministers. It is planned that the relevant applications will be processed following the main application submission.
- 2.1.3. Additionally, the Energy Act 2004, as amended by the Energy Act 2008 and the Scotland Act 2016, introduced a decommissioning regime for offshore wind and marine energy installations. Under this regime, Scottish Ministers may require those responsible for installations in Scottish waters or Scottish parts of a REZ to prepare and implement a decommissioning programme, which must be submitted for their approval.
- 2.1.4. The decommissioning programme will be guided by this EIAR, with a final draft to be submitted to Scottish Ministers no later than six months before construction begins. Ministers have the authority to determine the specific decommissioning procedures, including the form, timing, and number of financial securities required.
- 2.1.5. Detailed information on the content and scope of the decommissioning program is provided in this EIAR, ensuring compliance with the Energy Act requirements.

## **2.2. THE ENERGY ACT 2013**

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- 2.2.1. The 2013 Energy Act makes provisions to incentivise investment in low carbon electricity generation, ensure security of supply, and help the UK meet its emissions reduction and renewables targets. These provisions are as follows:
- The Secretary of State is granted authority to set a 2030 decarbonisation target range for electricity in secondary legislation; and
  - Electricity Market Reform – consists of measures aimed at attracting the £110 billion investment needed for the low-carbon transition. The Act includes the framework for

Contracts for Difference (CfD) as well as introducing requirements to enable a statutory 2030 decarbonisation target range for the UK's electricity sector.

## 2.3. THE ENERGY ACT 2023

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2.3.1. The 2023 Energy Act makes provisions to enhance energy security, affordability, and sustainability. The Act is designed to support the UK's transition to a cleaner, more resilient energy system and is considered to have the following broad aims and objectives:

- Facilitating ambitious targets for offshore wind capacity to be achieved by 2030 and beyond, aligning with the UK's broader renewable energy goals;
- Increasing public and private investment in offshore wind projects, establishing financial mechanisms to de-risk investments in offshore wind, encouraging more private sector participation;
- Simplifying the planning and licensing processes, reducing timeframes for obtaining necessary permits and facilitating strategic compensation including a Marine Recovery Fund;
- Investing in the development and upgrading of grid infrastructure to accommodate the increased electricity generation from offshore wind farms; and
- Ensuring efficient integration of offshore wind power into the national grid.

## 2.4. HABITAT REGULATIONS

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2.4.1. Article 3 of the EU Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora, commonly known as the Habitats Directive (92/43/EEC), requires the establishment of a European network of important high-quality conservation sites known as Special Areas of Conservation (SACs) that will contribute to conserving habitats and species identified in Annexes I and II of the Directive. The listed habitat types and species are those considered to be most in need of conservation at a European level (excluding birds). In accordance with Article 4 of the EU Directive on the conservation of wild birds, commonly known as the Birds Directive (2009/147/EC), Special Protection Areas (SPAs) are strictly protected sites classified for rare and vulnerable birds (Annex I of the Directive), and for regularly occurring migratory species.

2.4.2. As relevant for an OWF in Scotland's terrestrial and marine environment, the requirements of the Habitats and Birds Directives are largely transposed by the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) (up to 12 nm), the Conservation of Habitats and Species Regulations 2017 (of relevance to consents under Section 36 of the Electricity Act 1989), the Conservation of Offshore Marine Habitats and Species Regulations 2017 (beyond 12 nm) and the Wildlife and Countryside Act 1981 (as amended).

2.4.3. Following the UK's departure from the EU on 31 December 2020, the UK is no longer an EU Member State. Notwithstanding, the Conservation (Natural Habitats, &c.) (EU Exit) (Scotland) (Amendment) Regulations 2019 and the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 have transferred functions from the European Commission to the appropriate authorities in the UK/Scotland, with SACs and SPAs in the UK no longer forming part of the EU's Natura 2000 ecological network. These Habitats Regulations have created the UK's National Site Network on land and at sea, including both the inshore and offshore marine areas in the UK. This includes all existing SACs and SPAs, and new SACs and SPAs designated under the Habitats Regulations, noting policy on the protections and standards



afforded to these sites remains unchanged. These European sites are still protected in Scotland and the rest of the UK, and the terms “European site”, “European marine site” and “European offshore marine site” have been retained.

- 2.4.4. Scottish Government policy notes that in Scotland, all Ramsar sites are also SACs and/or SPAs or Sites of Scientific Special Interest (SSSIs). Ramsar sites are wetlands of international importance designated under the Ramsar Convention (adopted in 1971 and came into force in 1975), providing a framework for the conservation and wise use of wetlands and their resources. For the purposes of the RIAA for the Proposed Development (Muir Mhòr Offshore Wind Farm Limited, 2024), all relevant Ramsar sites were considered alongside designated European sites.
- 2.4.5. The Habitats Regulations require that wherever a plan, project or activity, that is not directly connected to, or necessary to the management of a European/Ramsar site, is to have a Likely Significant Effect (LSE) on a European/Ramsar site (directly, indirectly, alone or in combination with other plans, projects or activities), then an Appropriate Assessment (AA) of the implications of that site in view of that site’s Conservation Objectives must be undertaken by the competent authority. The HRA process, comprising Stage 1 (HRA Screening) and, if required, Stage 2 (AA), must be carried out before consent or authorisation can be given for the Proposed Development and there is no regulatory timescale for the competent authority to provide HRA consent.
- 2.4.6. The Offshore HRA process has been progressed alongside the EIA and has been reported upon separately. The Muir Mhòr HRA Offshore Screening Report (Muir Mhòr Offshore Wind Farm Limited, 2023) was submitted to MD-LOT alongside the Offshore Scoping Report (Volume 3, Appendix 5.1) in June 2023. This detailed the outcome of LSE screening on the qualifying features of relevant European sites for the Proposed Development. The RIAA has been submitted to MD-LOT alongside this EIAR (Muir Mhòr Offshore Wind Farm Limited, 2024).

## **2.5. EUROPEAN PROTECTED SPECIES (EPS)**

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- 2.5.1. EPS are animals and plants listed within Annex IV of the Habitats Directive and as such are protected under the Habitats Regulations. Under these Regulations certain activities likely to cause disturbance or injury to EPS which would otherwise constitute an offence, can be carried out legally under an EPS Licence, as follows:
- Within 12 nm of the coast (Scottish Territorial Water): An EPS Licence may be required under the Conservation (Natural Habitats, &c) Regulations 1994 (as amended) where an activity is likely to cause disturbance or injury to an EPS. EPS Licences are granted by NatureScot (for scientific research) or MD-LOT on behalf of the Scottish Ministers (e.g., for commercial activities); and.
  - Outside 12 nm (Scottish Offshore Region): An EPS Licence may be required under the Conservation of Offshore Marine Habitats and Species Regulations 2017 where an activity is likely to cause disturbance or injury to an EPS (population level effect rather than individual animals). MD-LOT is the licensing authority for EPS Licences beyond 12 nm.
- 2.5.2. Activities which can be licensed under EPS licences include those such as subsea noise disturbance to marine mammals due to piling construction activities. Separate EPS licences may be required for different construction activities.

## 2.6. MARINE STRATEGY FRAMEWORK DIRECTIVE

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- 2.6.1. The Marine Strategy Framework Directive (MSFD) was implemented on 15th July 2008 and incorporated into UK law through the Marine Strategy Regulations 2010. The MSFD mandates that Member States develop national strategies to manage their marine environments to achieve Good Environmental Status (GES) by 2020.

## 2.7. THE WATER FRAMEWORK DIRECTIVE

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- 2.7.1. Activities that have the potential to cause ecological stress to waterbodies (ground and otherwise) have a requirement to comply with the 'Water Framework Directive' (WFD). The WFD was established in 2000 and aims to prevent deterioration and enhance the status of aquatic ecosystems, including ground water (NatureScot, 2020). This is achieved by:
- Promoting sustainable water use;
  - Reducing pollution; and
  - Contributing to mitigation of floods and droughts.
- 2.7.2. In relation to the Proposed Development, this piece of legislation covers certain activities in coastal waters (3 nm from the limit of the highest tide (Scottish Environmental Protection Agency (SEPA), 2018)).
- 2.7.3. In compliance with the WFD a WFD report has been submitted as part of the EIAR. The Proposed Development is not considered to give rise to activities in the relevant coastal water areas which will contribute to deterioration in water body status in this regard (see Volume 3, Appendix 8.1 (Water Framework Directive Report)).

## 2.8. NATURE CONSERVATION MARINE PROTECTED AREAS

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- 2.8.1. Under the Marine (Scotland) Act 2010 and the MCAA 2009, MD-LOT is required to consider whether a licensable activity can affect (other than insignificantly) a protected feature of an Nature Conservation Marine Protected Areas (NC MPA) or any protected ecological or geomorphological process on which the conservation of any protected feature of an NC MPA is dependent.
- 2.8.2. In such cases, authorisations may only be granted if the applicant can demonstrate to the authority that:
- There is no significant risk of the activity obstructing the conservation objectives for the NC MPA; or
  - There is no alternative approach that would substantially reduce the risk of hindering those objectives, that the public benefits of proceeding clearly outweigh the environmental risks, and that the applicant will implement measures providing equivalent environmental benefits to offset the potential damage to the NC MPA. If the authority considers that there is, or may be, a significant risk, then they must notify the appropriate statutory conservation bodies of that fact (e.g. NatureScot (for NC MPAs within 12 nm), or the Joint Nature Conservation Committee (JNCC) (for NC MPAs out with 12 nm)).

- 2.8.3. If the authority determines that there is, or may be, a significant risk, they must inform the relevant statutory conservation bodies (e.g., NatureScot for NC MPAs within 12 nm, or the Joint Nature Conservation Committee (JNCC) for NC MPAs beyond 12 nm).
- 2.8.4. Impacts on the relevant NC MPAs are addressed in the EIAR, with pertinent information and assessments included in the EIA Report. An MPA Assessment has been conducted, see Volume 3, Appendix 9.2 (Marine Protected Area Assessment Report). This concludes that the Proposed Development poses no significant risk to the conservation objectives of the Southern Trench NC MPA and the Turbot Bank NC MPA, in line with Section 83 of the Marine (Scotland) Act 2010 and Section 126 of the MCAA 2009.

## 3. THE CLIMATE CHANGE AND RENEWABLE ENERGY POLICY FRAMEWORK

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- 3.1.1. This section outlines the policy framework for climate change and renewable energy, including international, UK Government, and Scottish Government policies and targets. It details the relevant aspects of UK and Scottish Marine Policy concerning marine renewables and their connection to the broader renewable energy policy landscape. This section draws on Volume 1, Chapter 2 (Legislation and Policy Context) of this EIAR.
- 3.1.2. While international renewable and green energy policies are important, Scottish climate change, renewable energy, and marine policies are deemed the most pertinent for evaluating and deciding on the Proposed Development.
- 3.1.3. The framework presented is a key material consideration that should be given significant weight in the determination of the Section 36 application and associated Marine Licences.

### 3.2. CLIMATE CHANGE AND RENEWABLE ENERGY POLICY: INTERNATIONAL COMMITMENTS

#### UN FRAMEWORK CONVENTION ON CLIMATE CHANGE (UNFCCC)

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- 3.2.1. The 28th Conference of the Parties (COP), 'COP28' took place in Dubai in 2023. The conference determined more work was required regarding global climate action, reiterating that governments must transition away from fossil fuels to renewables like wind and solar power for the next round of climate commitments (UNFCCC, 2024).

#### THE PARIS AGREEMENT (2016)

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- 3.2.2. The Paris Agreement is a legally binding, international treaty on climate change, adopted at COP21 in December 2015, coming into force in November 2016. The Agreement aims to limit increases to the global average temperature to below 2°C above pre-industrial levels, as well as limiting temperature increase to 1.5°C above pre-industrial levels. There is an additional overall aim to reduce Greenhouse Gas (GHG) emissions by 43% by 2030. The Paris Agreement also provides a framework for technical, financial, and capacity building support for representative countries (UNFCCC, 2024a).

#### THE KYOTO PROTOCOL

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- 3.2.3. The Kyoto Protocol commits industrialised countries to limit and reduce Greenhouse Gas (GHG) emissions, using policies and mitigation measures based on principles and provisions of convention. These emission limits were agreed between the 192 parties for their respective countries. The protocol was adopted on December 11th, 1997, coming into force on February 16th, 2005, amended in Doha on December 8th, 2012. These amendments had a commitment period between 2013 to 2020, before coming into force December 31st, 2020 (UNFCCC, 2019).

## THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC) SIXTH ASSESSMENT REPORT (2021 & 2022), RELATED PRESS RELEASE AND STATEMENTS

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- 3.2.4. The first section of the Inter-Governmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6) was published on August 9, 2021 (IPCC, 2021). This report marks the first significant update on climate science since 2013 and provides new estimates regarding the likelihood of surpassing the 1.5°C global warming threshold within the next decade. It emphasizes that immediate and substantial reductions in greenhouse gases are essential to meet the targets of limiting warming to 1.5°C or even 2°C above pre-industrial levels. The United Nations Secretary General has labelled this report as a “Code Red for humanity.”
- 3.2.5. The second section of the AR6 report was released on February 28, 2022 (IPCC, 2022). The accompanying press release characterizes it as a “dire warning about the consequences of inaction,” underscoring the narrowing timeframe for effective intervention.” It highlights the shrinking window for effective action, stating:
- “The scientific evidence is unequivocal: climate change poses a threat to human wellbeing and the planet’s health. Further delay in global action will miss a rapidly closing window to secure a liveable future.”*
- 3.2.6. The third part of the IPCC's AR6 Report, titled "Mitigation of Climate Change," was published on April 4, 2022 (IPCC, 2022a). It highlights the serious and lasting consequences of not restricting global temperature rise and emphasises the urgent necessity for immediate emissions reductions. The report advocates for a substantial and swift escalation in global climate action to reduce greenhouse gas emissions.
- 3.2.7. Key points from the third report include:
- *“limiting global warming will require major transitions in the energy sector. This will involve a substantial reduction in fossil fuel use, widespread electrification, improved energy efficiency and use of alternative fuels.” The report sets out that the “next two years are critical”. (page 1)*
  - *In the scenarios assessed, limiting warming to around 1.5°C “requires global greenhouse gas emissions to peak before 2025 at the latest, and be reduced by 43% by 2030.... even if we do this, it is almost inevitable that we will temporarily exceed this temperature threshold but could return to below it by the end of the century”. (page 2)*
- 3.2.8. The third IPCC report addresses how human activities can help mitigate climate change. It emphasizes that although humanity is currently off track to limit warming, it is still possible to make significant progress by 2030 through the use of existing technologies, such as a rapid shift to non-fossil fuel energy sources.
- 3.2.9. This sense of urgency is in line with the Scottish Government's policies, which assert that the next decade must be transformative in order to achieve climate goals.

## THE UNITED NATIONS EMISSIONS GAP REPORT 2022

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- 3.2.10. On October 27, 2022, the UN published its annual "Emissions Gap Report," titled "The Closing Window – Climate Crisis Calls for Rapid Transformation of Societies" (United Nations Environment Programme, 2022). This report evaluates the current trajectory of global greenhouse gas emissions, and the necessary reductions needed to prevent severe climate impacts.

- 3.2.11. The accompanying "Key Messages" document emphasises that "the world continues to fall short of the Paris climate goals, with no viable path to 1.5°C currently available. Only a swift and comprehensive system-wide transformation can avert escalating climate disaster."
- 3.2.12. The report details strategies for achieving this transformation across multiple sectors, including electricity, industry, transport, buildings, food, and finance. Key messages from the report include:
- *"Despite a call for a strengthened Nationally Determined Contributions (NDCs) for 2030, progress since COP 26 in Glasgow has been woefully inadequate."*
  - *"This lack of progress leaves the world on a path towards a temperature rise far above the Paris agreed goal of well below 2°C, preferably 1.5°C."*
  - *"To get on track to meet the Paris Agreement goal, the world needs to reduce greenhouse gases by unprecedented levels over the next eight years."*
  - *"Such massive cuts require a large scale rapid and systemic transformation across the globe."*
  - *"The transformation towards zero greenhouse gas emissions and electricity supply, industry, transportation and buildings is underway but needs to move much faster".*

### 3.3. SCOTTISH LEGISLATION AND POLICY

#### THE CLIMATE EMERGENCY

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- 3.3.1. In April 2019, Scottish First Minister Nicola Sturgeon declared a "Climate Emergency" during her speech at the Scottish National Party (SNP) Conference. Additionally, on May 14, Climate Change Secretary Roseanna Cunningham addressed the Scottish Parliament regarding the 'Global Climate Emergency' and stated:

*"There is a global climate emergency. The evidence is irrefutable. The science is clear, and people have been clear: they expect action. The Intergovernmental Panel on Climate Change issued a stark warning last year - the world must act now by 2030 it will be too late to limit warming to 1.5 degrees."*

*"We acted immediately with amendments to our Climate Change Bill to set a 2045 target for net zero emissions - as we said we'd do. If agreed by Parliament, these will be the most stringent legislative targets anywhere in the world and Scotland's contribution to climate change will end, definitively, within a generation. The CCC was clear that this will be enormously challenging...."*

- 3.3.2. The Minister also emphasised the crucial role of the planning system, noting:

*"And subject to the passage of the Planning Bill at Stage 3, the next National Planning Framework and review of Scottish Planning Policy will include considerable focus on how the planning system can support our climate change goals."*

*The Scottish Government has therefore begun to act on the stark warnings issued by the IPCC who have stated that by 2030 it would be too late to limit global heating to 1.5 degrees – but there is much more to be done".*

- 3.3.3. The central message of these statements is their acknowledgment of the urgent need for radical change, emphasising that by 2030, it will be too late to restrict warming to 1.5 °C. As a result, the Scottish Government responded to the Climate Emergency in 2019 by enacting new legislation.

- 3.3.4. Furthermore, the emergency declaration is not just a political statement; it has become a priority for the Government at all levels. Declaring it an emergency highlights the seriousness of climate change, its potential consequences, and the urgent need for immediate action to reduce carbon dioxide and other greenhouse gas emissions.
- 3.3.5. The scale of the challenge presented by the new net zero targets established by the Scottish Government, based on recommendations from the CCC, is considerable, especially given the requirements for decarbonisation of heat and transport - this will require very substantial increases in renewable electricity generation by 2030.

## **THE SCOTTISH ENERGY STRATEGY**

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- 3.3.6. The Scottish Energy Strategy: The Future of Energy in Scotland (Scottish Government, 2017) outlines the Scottish Government's vision for the future energy system in Scotland. Renewable energy and low carbon energy solutions are two of six defined priorities. These priorities aim to enable Scotland to reach its 2050 vision. By 2030 Scotland aims to produce 50% of its heat, transport, and electricity consumption from renewable sources. The Scottish Energy Strategy highlights the success of Scottish projects in Offshore Wind and the potential of future development both coastal and offshore.
- 3.3.7. The Proposed Development will contribute to achieving the goals set out by the Scottish Government. With targets being continuously reviewed, such as those outlined in The Climate Change (Scotland) Act 2009, the need for renewable development is increasingly important.
- 3.3.8. The importance of offshore wind development is highlighted in both the Position Statement for the Scottish Energy Strategy (Scottish Government, 2021), and in Scotland's National Strategy for Economic Transformation, (Scottish Government, 2022). Scotland's Energy Strategy and Just Transition Plan (Draft), (Scottish Government, 2023a), further outlines the benefits of Offshore Wind whilst identifying it as one of the lowest cost forms of electricity and as a more secure energy system than those of international markets. The Energy Strategy and Just Transition Plan (Draft) is now under review following consultation.

## **CLIMATE CHANGE (EMISSIONS REDUCTIONS TARGETS) (SCOTLAND) ACT 2019**

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- 3.3.9. An amendment of the Climate Change (Scotland) Act 2009 was made by the Scottish Parliament creating the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019. This act set firm targets on the Scottish Government to reduce GHG emissions with the aim to deliver appropriately to the Paris Agreement, the world's GHG reduction targets set out at COP21 of the UNFCCC (UNFCCC, 2024a).
- 3.3.10. The amended Act outlined a net-zero emissions target and stated the Scottish Government were to reduce GHG emissions by 100% (lower than baseline levels) by 2045 in order to meet this target.
- 3.3.11. Interim targets (% lower than the baseline levels) were set out to achieve the net-zero emissions target and are as follows:
- 51.1% by 2021;
  - 75% by 2030<sup>3</sup>; and
  - 90% by 2040 (Scottish Government, 2019).

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<sup>3</sup> The 2030 interim target of 75% reduction in emissions from baseline levels has been deemed "out of reach" by Scottish Government and has since been removed as a target.

- 3.3.12. The Scottish Government publishes an annual report to assess whether each year's emissions reduction target has been met. Table 3-1 outlines the annual targets leading up to net zero. The report for 2019, released in June 2021, showed that the 2021 annual target of a 51.1% reduction from baseline levels was not met (Scottish Government, 2023b). This fell short of the 55% reduction specified by the 2019 Act, meaning the targets for 2018 and 2019 were not achieved.
- 3.3.13. The Scottish Greenhouse Gas Statistics for 2020, published in June 2022, indicated a 58.7% reduction in emissions from the baseline period. However, this decrease was primarily driven by lower emissions from domestic transport, international flights, shipping, and energy supply. Other sectors experienced only modest reductions, with the housing sector showing no significant change.
- 3.3.14. The decline in transport emissions was mainly attributed to coronavirus restrictions, while residential emissions rose by 0.1 MtCO<sub>2</sub>e as more people worked from home during the pandemic. Scottish Net Zero Secretary Michael Mathewson commented on the latest statistics in June 2022:
- “Nonetheless, the most significant changes are in the transport sector and are associated with the temporary measures taken in response to the Covid-19 pandemic. We must be prepared for these figures to substantially rebound in 2021. There can be no satisfaction taken in emissions reductions resulting from the health, economic and social harms of the pandemic.”*
- 3.3.15. While the interim target of 75% by 2030 has been eliminated, the 2045 net-zero target remains unchanged. This underscores the major transformation necessary over the next decade to achieve net zero. Developing the essential generation and transmission infrastructure in Scotland will be vital for accommodating the significant growth in renewable capacity needed to support the anticipated rise in renewable electricity usage.

Table 3-1 Scotland's Annual Emission Reduction Targets to Net Zero with Interim Targets Shown in Bold

Year	% Reduction Target	Actual Emissions Reduction %	Year	% Reduction Target
2018	54	50	2032	78
2019	55	51.5	2033	79.5
<b>2020</b>	<b>56</b>	<b>58.7</b>	2034	81
2021	57.9	-	2035	82.5
2022	59.8	-	2036	84
2023	61.7	-	2037	85.5
2024	63.6	-	2038	87
2025	65.5	-	2039	88.5
2026	67.4	-	<b>2040</b>	<b>90</b>
2027	69.3	-	2041	92
2028	71.2	-	2042	94
2029	73.1	-	2043	96
2030	75	-	2044	98
2031	76.5	-	<b>2045</b>	<b>100 (Net Zero)</b>



- 3.3.16. The targets outlined in Table 3-1 clearly demonstrate the rapid and extensive changes needed, particularly before 2030. Up to 2020, the required annual percentage reduction was 1%, but this requirement escalates significantly from 2020 onwards, reaching 1.9% annually between 2020 and 2030. This represents nearly a doubling of the effort needed to meet the 2030 target.
- 3.3.17. Consequently, the trajectory for reducing carbon dioxide emissions is steeper and more demanding than previously. The 2020s are identified as a pivotal decade.

## OFFSHORE WIND POLICY STATEMENT

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- 3.3.18. The Scottish Offshore Wind Energy Policy Statement (Scottish Government, 2020), building upon the ambitions outlined within the Scottish Energy Strategy (Scottish Government, 2017) sets out the Scottish Government's ambition to capitalise on the potential that offshore wind development can bring to Scotland and the role this technology could play in meeting the commitment to reach net zero by 2045.
- 3.3.19. The Offshore Wind Policy Statement aims to have net-zero emissions of all GHG by 2045. Other interim targets included:
- Reducing emissions by 75%, by 2030, against 1990 baseline;
  - Reduce emissions by 90% by 2040; and
  - Limit global average temperature increase to 15°C or less.
- 3.3.20. The Scottish Government announced in April 2024 that they are to discard the target of reducing emissions by 75% by 2030 compared to 1990 levels. The government has stated that it remains committed to achieving net-zero emissions by 2045 and will continue to work towards this goal.
- 3.3.21. It is important to note that achieving these targets would require the increased development and support for renewable energy (Scottish Government, 2020).

## THE UPDATE TO THE CLIMATE CHANGE PLAN (2018-2032)

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- 3.3.22. On 16 December 2020, the Scottish Government published the updated Climate Change Plan (CCP) titled Securing a Green Recovery on a Path to Net Zero. Covering the period from 2018 to 2032, this plan addresses the new net zero targets intended to eliminate Scotland's contribution to climate change by 2045.
- 3.3.23. A central element of the plan is the green recovery, which states (page 1) that:
- "It is essential that a recovery from the pandemic responds to the climate emergency and puts us on a pathway to deliver our statutory climate change targets and a just transition to net zero, by ensuring our actions in the immediate term are in line with our long-term goals".*
- "The Scottish Government has been clear in its commitment to securing a just and green recovery, which prioritises economic, social and environmental well-being, and responds to the twin challenges of the climate emergency and biodiversity loss".*
- 3.3.24. In terms of electricity, the CCP update announces:
- "further policies to continue the rapid growth in renewable generation over the past 20 years, moving from a low to a zero-carbon electricity system".*
- 3.3.25. Page 18 discusses the "pathway to 2032" and explains the practical implications of the policies. It notes:

*“our electricity system will have deepened its transformation for the better, with over 100% of Scotland’s electricity demand being met by renewable sources. More and more households, vehicles, businesses and industrial processes will be powered by renewable electricity, combined with green hydrogen production. There will also be a substantial increase in renewable generation, particularly through new offshore and onshore wind capacity”* (page 18).

- 3.3.26. Chapter 1 focuses on electricity. Paragraph 3.1.4 acknowledges that as Scotland moves toward net zero, a growing and increasingly decarbonised electricity sector “is essential for enabling other areas of our economy to decarbonise – particularly transport, buildings, and industry.”
- 3.3.27. Annex A of the CCP includes policies and proposals. For the electricity sector, ‘outcome 1’ states that “the electricity system will be powered by a high share of renewables, supported by a variety of flexible and responsive technologies”.
- 3.3.28. Key points from the Climate Change Plan Update include:
- The Government views it as crucial that the pandemic recovery addresses the climate emergency and positions Scotland to meet its statutory climate change targets and achieve net zero (page 1);
  - Regarding electricity, the plan outlines that actions from the Offshore Wind Policy Statement will support the development of between 8 and 11 GW of offshore wind capacity by 2030 (page 10);
  - A growing and increasingly decarbonised electricity sector is deemed essential for enabling other sectors, such as transport, buildings, and industry, to decarbonise (page 32);
  - Investing in renewable generation and related infrastructure is vital for reducing greenhouse gas emissions, creating green jobs, and supporting the green recovery and long-term energy transition (page 78); and
  - Renewable generation is expected to grow significantly by 2032, with the development of between 11 and 16 gigawatts (GW) of new capacity anticipated, which will aid in decarbonising transport and heating energy demand (page 40).

## **THE PROGRAMME FOR GOVERNMENT 2023-24**

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- 3.3.29. The ‘Programme for Government 2023-24’, titled ‘Equality, Opportunity, Community’, was published in September 2023 (Scottish Government, 2023c) and underscores Scotland’s commitment to achieving net-zero emissions by 2045, with offshore wind as a critical contributor. The program prioritises investment in renewable infrastructure, viewing offshore wind as essential for reducing emissions, enhancing energy security, and supporting economic resilience through job creation in green sectors. This approach aligns with government goals to meet 2030 climate milestones, reduce energy costs, and drive sustainable economic growth across Scotland.

## **3.4. UK LEGISLATION AND POLICY**

### **THE CLIMATE EMERGENCY**

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- 3.4.1. A key aspect of addressing climate change was Scotland’s declaration of a Climate Emergency in April 2019. This declaration should be understood in the context of the advice

from the Committee on Climate Change (CCC), the commitments under the Paris Agreement, and the subsequent introduction of new emissions reduction legislation.

## THE CLIMATE CHANGE ACT 2008 AND CARBON BUDGETS

- 3.4.2. The Climate Change Act 2008 committed the UK to a net reduction in GHG emissions of 34% of 1990 emissions by 2022, and an 80% reduction by 2050. The Act was then amended in 2019, requiring a 100% emissions reduction relative to the 1990 baseline emissions. The Act's legal framework implements a delivery pathway to net zero by 2050, and 50 GW of offshore wind by 2050 (UK Parliament, 2011).
- 3.4.3. The Act also established the Climate Change Committee (CCC), which provides advice to the UK Government on emissions targets and reports to Parliament on progress in reducing greenhouse gas emissions.
- 3.4.4. The CCC has formulated six carbon budgets, each spanning a four-year period from 2008 to 2037. These budgets impose increasingly stringent limits on the total allowable greenhouse gas emissions for each five-year interval, as summarised in Table 3-2 below.
- 3.4.5. These legally binding carbon budgets act as interim milestones towards the 2050 net zero target. The CCC recommends the levels for each carbon budget, which are then approved by the Government and enacted by Parliament. All six carbon budgets have been established, with the UK currently in the fourth carbon budget period, which covers 20123-2027.

*Table 3-2 Carbon Budgets and Progress (Climate Change Committee, 2024)*

Budget	Carbon Budget Level	Reduction below 1990 levels	Met?
1st Carbon Budget (2008-2012)	3,018 MtCO <sub>2</sub> e	25%	Yes
2nd Carbon Budget (2013-2017)	2,782 MtCO <sub>2</sub> e	31%	Yes
3rd Carbon Budget (2018-2022)	2,544 MtCO <sub>2</sub> e	37% by 2020	Yes
4th Carbon Budget (2023-2027)	1,950 MtCO <sub>2</sub> e	51% by 2025	Off Track
5th Carbon Budget (2028-2032)	1,725 MtCO <sub>2</sub> e	57% by 2030	Off Track
6th Carbon Budget (2033-2037)	965 MtCO <sub>2</sub> e	78% by 2035	Off Track
Net Zero Target	-	100% by 2050	-

- 3.4.6. The Sixth Carbon Budget (CB6) requires a 78% reduction in UK greenhouse gas emissions by 2035 compared to 1990 levels. This ambitious target is seen as a global benchmark, firmly positioning the UK on the path to achieving net zero emissions by 2050 at the latest, in line with the objectives of the Paris Agreement.
- 3.4.7. Page 23 of the 6<sup>th</sup> Carbon Budget (CB6) discusses the devolved nations, stating that "UK climate targets cannot be met without significant policy action across Scotland, Wales, and Northern Ireland." It notes that while the main policy controls are overseen by the UK Government, Scotland can contribute through complementary measures at the devolved level, including support for policies related to "planning and consenting."

3.4.8. Key points from CB6 include:

- UK climate targets cannot be met without strong policy action in Scotland.
- The CCC is clear in setting out that new demand for electricity will mean that electricity demand will rise 50% to 2035 and potentially trebling by 2050.
- CB6 needs to be met and that will need more and faster deployment of renewable energy developments than has happened in the past.
- In terms of the expansion of low carbon energy supplies, the in the CCC's 'balanced pathway' the low carbon share of generation is 100% by 2035 – the "largest contribution is from offshore wind reaching the Government's goal of 40 GW in 2030, on a path to 65-125 GW by 2050." (page 25)

3.4.9. Following CB6, the UK Government announced on April 20<sup>th</sup>, 2021 that it would set the world's most ambitious climate change target into law (by the Carbon Budget Order 2021) to reduce emissions by 78% by 2035 compared to 1990 levels.

3.4.10. The Climate Change Committee's 2024 Progress Report (Climate Change Committee, 2024) indicates that the UK's progress toward meeting its carbon budgets and reaching net zero by 2050 remains off track in multiple areas. Although recent reductions in emissions have been significant, largely due to the phase-out of coal, the Committee warns that this pace is insufficient to meet upcoming targets. For offshore wind projects specifically, the Committee stresses the need to increase annual installations by at least three times to help achieve the UK's 2030 target, which includes a planned 50 GW of offshore wind capacity.

## **THE UK ENERGY WHITE PAPER DECEMBER 2020**

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3.4.11. The UK Government Energy White Paper 'Powering our Net Zero Future' (HM Government, 2020) sets out that: "electricity is a key enabler for the transition away from fossil fuels and decarbonising the economy cost-effectively by 2050".

3.4.12. It notes a key objective is to "accelerate the deployment of clean electricity generation through the 2020s" (page 38). Electricity demand is forecast to double out to 2050, which will "require a four-fold increase in clean electricity generation with the decarbonisation of electricity increasingly underpinning the delivery of our net zero target" (page 42).

3.4.13. This anticipated growth of renewable electricity is illustrated in Figure 3-1 below:

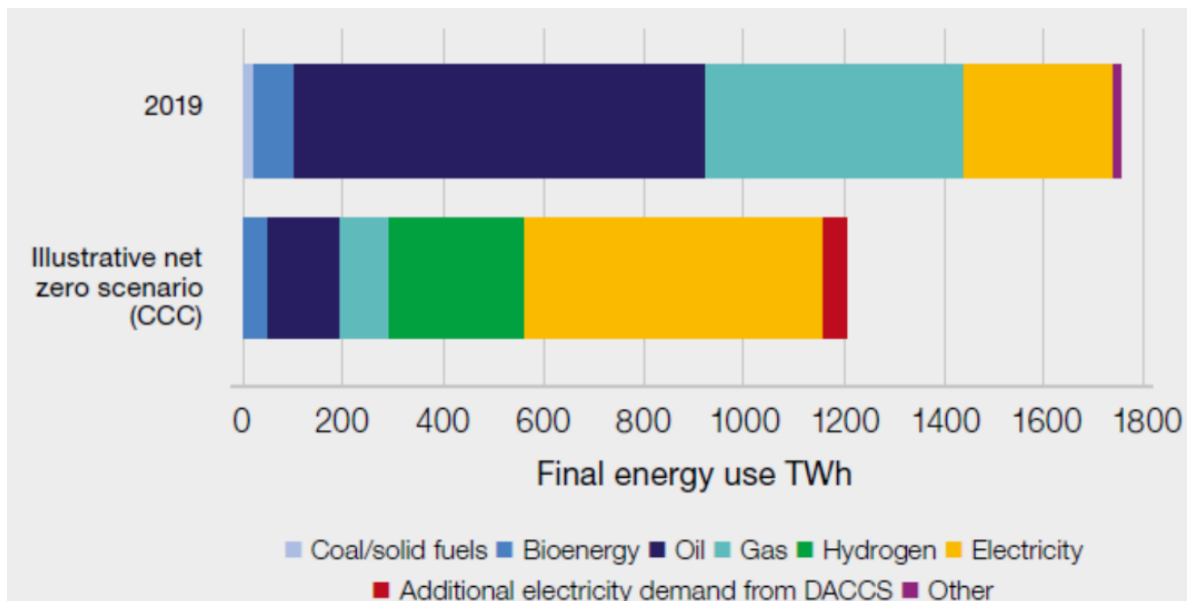


Figure 3-1 Illustrative UK Final Energy Use in 2050

3.4.14. The White Paper emphasises that the scale of change required to address climate change is at a critical turning point. It foresees a global green industrial revolution as essential for effectively confronting climate challenges. Chapter 1 of the White Paper sets this context and highlights the anticipated changes in the nature and volume of electricity generation. It recognises the vital role of renewable electricity in fulfilling total energy needs, stressing that it must take on a much larger role in decarbonising both transport and heating.

## THE UK NET ZERO STRATEGY OCTOBER 2021

- 3.4.15. In October 2021, the UK Government released the Net Zero Strategy, detailing policies and proposals to ensure the UK meets its carbon budgets and NDCs. This strategy outlines the long-term plan to achieve net zero by 2050.
- 3.4.16. However, in July 2022, the High Court ruled that the strategy was unlawful due to insufficient detail on how carbon budgets would be met. The UK Government subsequently updated and reissued the strategy to address these legal deficiencies.
- 3.4.17. The Net Zero Strategy describes the Government's approach to reducing emissions across various sectors of the UK economy, aligning with both the carbon budgets and the 2050 net zero target. It has been submitted to the United Nations Framework Convention on Climate Change (UNFCCC) as the UK's second long-term low greenhouse gas emission development strategy under the Paris Agreement.
- 3.4.18. Page 19 of the strategy specifically addresses the power sector, stating that the power system will be fully decarbonised by 2035.
- 3.4.19. Key policies include the goal of achieving approximately 40 GW of offshore wind capacity by 2030, alongside increased contributions from onshore wind, solar energy, and other renewable sources.
- 3.4.20. Regarding the power sector, the Strategy references the Energy White Paper (2020), which established the objective of achieving a fully decarbonised and cost-effective power system by 2050. It notes that CB6 represents "a substantial acceleration in the pace of power sector decarbonization, alongside increased demand driven by accelerated action in other sectors reliant on low-carbon electricity" (page 98). It further states:

*“although the Energy White Paper envisaged achieving an overwhelmingly decarbonised power system during the 2030s, we have since increased our ambition further. By 2035 all our electricity will need to come from low carbon sources, subject to security of supply bringing forward the Government’s commitment to a fully decarbonised power system by 15 years, whilst meeting at 40-60% increase in demand”.*

- 3.4.21. The Strategy also outlines the Government’s commitment to supporting the ongoing expansion of low-carbon generation (page 103). It emphasizes the need for continued and accelerated deployment of renewable energy sources.

## BRITISH ENERGY SECURITY STRATEGY

- 3.4.22. The British Energy Security Strategy (BESS) (HM Government, 2022) sets out the UK Government’s ambition to deliver up to 50 GW of offshore wind energy development by 2030, including up to 5 GW of innovative floating wind, which aligns with Scottish Government’s National ambitions of the same.
- 3.4.23. In March 2023, the UK Government expanded on this vision with the "Powering Up Britain" plan (UK Government, 2023), which consolidates and updates the BESS with a sharper focus on accelerating renewable energy deployment. This updated strategy emphasises offshore wind and nuclear energy as key pillars of a self-sufficient energy future. Additionally, "Powering Up Britain" sets out more detailed steps for achieving net zero targets, addressing both energy security and affordability as central priorities.
- 3.4.24. This Planning Statement specifically mentions the BESS, highlighting its relevance to the case for the Proposed Development. It underscores the strategic importance of establishing electricity supplies that are independent of volatile international markets and generated within the UK. A self-reliant electricity system, free from fossil fuels, is essential for protecting consumers from fluctuating and high energy prices, as well as for reducing risks from disruptive geopolitical factors affecting national energy supplies and economies. The Proposed Development would play a significant role in achieving these objectives.

## 3.5. KEY ZERO CARBON TARGETS: SUMMARY

- 3.5.1. It is useful to summarises the key targets and the status of each. Table 3-3 below outlines several important zero-carbon targets and their current positions.

*Table 3-3 Key Zero Carbon Targets*

Year	Target	Summary	Current Position
2045	Net Zero in Scotland	Scotland has already made considerable progress in decarbonising its electricity production. The main challenge now is to transition away from fossil fuels used in industry, building heating, and transportation. This will primarily involve replacing fossil fuels with zero-carbon electricity, necessitating a substantial expansion in the generation, transmission, distribution, and supply of renewable energy.	The Scottish greenhouse gas account decreased by 58.7% from the baseline year of 1990 to 2020.
2050	Net Zero in the UK	This means achieving no net carbon emissions in the UK. Since some	In 2021, total greenhouse gas emissions were 47.3%

Year	Target	Summary	Current Position
		residual emissions (such as from agriculture) will remain, an equivalent amount of carbon removal will be necessary, utilising methods like carbon capture, storage, or utilisation.	lower compared to 1990 levels.
2035	Zero Carbon Electricity in the UK	The UK Government aims for all electricity to be generated by zero-carbon sources by 2035, meaning no unabated fossil fuels will be used.	In 2021, fossil fuels accounted for 41.9% of the UK's electricity generation, so a significant increase in renewable energy is needed to meet this target.
2030	50% renewable energy in Scotland	Renewable energy is expected to meet 50% of the total energy demand across electricity, heat, and transport. Achieving this will require a substantial increase in renewable energy sources, along with expanded energy storage, flexibility, and stability services.	In 2022, renewables accounted for 27.7% of total energy consumption in Scotland.
2030	75% Interim emissions reduction target in Scotland	A key interim target outlined in the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 is a 75% reduction in emissions compared to 1990 baseline levels. While the 2030 interim target of a 75% emissions reduction was recently deemed "out of reach" by the Scottish Government, it remains important to recognise as part of Scotland's ongoing commitment to tackling climate change, with the 2045 net-zero target continuing to serve as the central focus of its climate strategy.	The Scottish greenhouse gas account ('GHG Account') decreased by 58.7% from the baseline year of 1990 to 2020.

## 3.6. THE MARINE POLICY FRAMEWORK

3.6.1. This section outlines the marine policy framework relevant to the evaluation of the Proposed Development. The primary marine policies include:

- The UK Marine Policy Statement (MPS) (2011) (and Guidance effective from 1 January 2021);
- Scotland's National Marine Plan (NMP) (2015); and
- Sectoral Marine Plan for Offshore Wind Energy (Scottish Government, 28th October 2020).

### THE UK MARINE POLICY STATEMENT 2011

3.6.2. The MPS is a cohesive policy adopted by all UK governments, including the Scottish Government, and establishes the framework for developing Marine Plans and making

decisions that impact the marine environment. It was created and implemented under section 44 of the MCAA 2009.

- 3.6.3. The MPS reaffirms the requirement set forth in the MCAA 2009 that “all public authorities making authorisation or enforcement decisions that affect or may affect UK marine areas must do so in accordance with the MPS unless relevant considerations suggest otherwise”.
- 3.6.4. The MPS aids in the development of Marine Plans to ensure that marine resources are utilised sustainably, aligning with overarching marine objectives to:
- “Promote sustainable economic development;
  - Enable the UK’s move towards a low carbon economy, to mitigate the cause of climate change and ocean acidification and adapt to their effects;
  - Ensure a sustainable marine environment which promotes healthy, functioning marine ecosystems and protects marine habitats, species and heritage assets; and
  - Contribute to the societal benefits of the marine areas, including the sustainable use of marine resources to address local social and economic issues”
- 3.6.5. The MPS also guides marine licensing and other relevant authorisation systems. As a result, marine planning is directed to:
- “Achieve integration between different objectives;
  - Recognise that the demand for use of our seas and the resulting pressures on them will continue to increase;
  - Manage competing demands on the marine areas, taking an ecosystem-based approach;
  - Enable the co-existence of compatible activities wherever possible; and
  - Integrate with terrestrial planning”.
- 3.6.6. The MPS and Marine Plans establish a “plan-led system for marine activities” that enhances coherence in policy while promoting a proactive and spatial planning approach to managing the marine area, its resources, and the activities and interactions occurring within it. Marine Plans must be developed and adopted in accordance with the relevant legislation. Scottish Ministers are tasked with preparing the Marine Plan for both the Scottish inshore and offshore regions. These plans must provide detailed policy and spatial guidance for each area, ensuring that decisions within the plan areas align with and support the achievement of UK, national, and area-specific policy objectives.
- 3.6.7. The MPS and marine planning systems work in conjunction with existing planning frameworks, such as town and country planning. In Scotland, this includes the National Planning Framework. Since the Marine Plan encompasses areas up to the level of mean high water spring tides, while terrestrial planning boundaries typically extend to mean low water spring tides, there will be a physical overlap between marine and terrestrial plan areas. This overlap ensures that both marine and terrestrial environments are thoroughly addressed and that organisations collaborate effectively to make informed decisions.
- 3.6.8. Chapter 2 of the MPS outlines overarching marine objectives for the marine environment, summarised as follows:
- Achieving a sustainable marine economy;
  - Ensuring a strong, healthy and just society;
  - Living within environmental limits;



- Promoting good governance; and
  - Using sound science responsibly.
- 3.6.9. Additionally, the MPS presents several high-level principles for marine decision-making, including that relevant decision-making should:
- Be conducted in a manner that meets requirements under UK and EU legislations;
  - Be based on detailed information and advice in the relevant marine policy documents for the administrative area;
  - Be conducted in a manner that takes account of other relevant projects, programmes, plans and national policies and guidance;
  - Be taken after appropriate liaison with terrestrial planning authorities and other regulators, and in consultation with statutory and other advisors when appropriate;
  - Be taken using risk-based approach that allows for uncertainty, recognising the need to use sound science responsibly;
  - Be sensitive to any potential impacts on sites of particular significance including those:
    - Protected under environmental legislation or designed in relation to cultural heritage;
    - Of particular social or economic significance.
  - Take account of potential impacts of climate change mitigation and adaptation in individual applications to ensure that any appropriate adaptation and mitigation measures have been identified;
  - Take account of the benefits of good design (including the best use of available technologies and innovation) can delivery; and
  - Look to avoid and then mitigate negative impacts where possible at various stages of development, including appropriate conditions in line with legal obligations, in a manner that is proportionate to the potential impacts of the proposal under consideration. Where alternative site selection or design could mitigate negative effects whilst retaining benefits, this should be considered, where appropriate.
- 3.6.10. When evaluating benefits and adverse effects, the marine plan authority (Scottish Ministers) must assess the impacts of proposals within the marine plan area. The nature of these impacts will vary based on factors such as the type of proposed activity, the specific characteristics of the affected area, and how the proposed use aligns with existing or planned activities. The assessment of cumulative impacts is highlighted as a critical component of this process.
- 3.6.11. The MPS stipulates that these considerations must be incorporated into the Marine Plan development process through a Sustainability Appraisal for each Marine Plan. This appraisal should encompass a Strategic Environmental Assessment (SEA) and an Appropriate Assessment. Furthermore, Marine Plan Authorities should consider various factors when preparing the necessary assessments, including economic, social, and environmental benefits, along with any potential adverse effects from proposed activities. Key issues to be addressed in marine plans are summarised as follows:
- Marine ecology and biodiversity;
  - Air quality;
  - Noise;
  - Ecological and chemical water quality and resources;

- Seascape;
  - Historic environment;
  - Climate change adaptation and mitigation; and
  - Coastal change and flooding.
- 3.6.12. Section 3.3 of the MPS focuses on 'Energy Production and Infrastructure Development'. It recommends that decision makers consider the following factors when evaluating applications for energy infrastructure:
- The national level of need for energy infrastructure as set out in the National Planning Framework (in Scotland);
  - The positive wider environmental, societal and economic benefits of low carbon electricity generation and Carbon Capture and Storage (CCS) as key technologies for reducing carbon dioxide emissions;
  - That renewable energy resources can only be developed where that resource existing and where economically feasible;
  - The potential impact of inward investment in offshore wind, wave, tidal stream and tidal range energy related manufacturing and deployment activity, as well as the impact of associated employment opportunities on the regeneration of local and national economies – all of which support the objective of developing the UK's low carbon manufacturing capability;
  - The UK's programme to support the development and deployment of CCS and in particular the need for suitable locations that provide for the permanent storage of carbon dioxide.
- 3.6.13. Paragraph 3.3.19 of the MPS identifies that “the UK has some of the best wind resources in the world and offshore wind will play an important and growing part in meeting our renewable energy and carbon emission targets and improving energy security by 2020, and afterwards towards 2050”.
- 3.6.14. The MPS is a strategic policy document that outlines the requirements for specific Marine Plans, including detailed policy provisions and guidance.

## **SCOTLAND'S NATIONAL MARINE PLAN 2015**

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- 3.6.15. Scotland's National Marine Plan (NMP) (Scottish Government, 2015) was adopted in March 2015 and details strategic policies for the sustainable development of Scotland's marine resources out to 200 nm (i.e., the contribution of waters offshore from Scotland to the UK's Exclusive Economic Zone (EEZ)). It is required to be compatible with the UK Marine Policy Statement (HM Government, 2011) and existing marine plans across the UK where there is interaction between England's inshore and offshore marine plans and Northern Ireland's Marine Plans. Sector-specific objectives (Offshore Wind and Marine Renewable Energy) of Scotland's National Marine Plan to the Proposed Development are as follows:
- Sustainable development of offshore wind, wave, and tidal renewable energy in the most suitable locations;
  - Economic benefits from offshore wind, wave and tidal energy developments maximised by securing a competitive local supply chain in Scotland;

- Alignment of marine and terrestrial planning and efficient consenting and licensing processes including but not limited to data sharing, engagement, and timings, where possible;
  - Aligned marine and terrestrial electricity transmission grid planning and development in Scottish waters;
  - Contribute to achieving the renewables target to generate electricity equivalent to 100% of Scotland's gross annual electricity consumption from renewable sources by 2020;
  - Contribute to achieving the decarbonisation target of 50 g CO<sub>2</sub>/kWh by 2030 (to cut carbon emissions from electricity generation by more than four-fifths);
  - Sustainable development and expansion of test and demonstration facilities for offshore wind and marine renewable energy devices; and
  - Co-ordinated government and industry-wide monitoring.
- 3.6.16. The NMP also sets objectives for other users of the sea that the offshore wind sector needs to align with, for example commercial fisheries, shipping and navigation, and socioeconomics, tourism and recreation.
- 3.6.17. A set of ten Marine Planning Policies for 'Renewables' have been established. A summary of the policies most pertinent to the Proposed Development is provided in Table 3-4.

*Table 3-4 Relevant NMP Marine Planning Policies for Renewables*

<b>Policy</b>	<b>Summary</b>
<b>Renewables 1</b>	Commercial-scale offshore wind and marine renewable energy projects should be located in PO areas identified through the Sectoral Marine Plan process. These POs are designated as preferred strategic sites for the sustainable development of offshore wind and marine renewables. All proposals must undergo the necessary consenting and licensing processes.
<b>Renewables 4</b>	Applications for marine licences and consents related to offshore wind and marine renewable energy projects should comply with the Marine Licensing Manual and Marine Scotland's Licensing Policy Guidance.
<b>Renewables 5</b>	Marine planners and decision makers must ensure that renewable energy projects meet the requirements for EIA and HRA compliance.
<b>Renewables 6</b>	New and future planning for grid connections should, where applicable, align with relevant sectoral and marine spatial planning processes to ensure a coordinated and strategic approach to grid development.
<b>Renewables 8</b>	Developers proposing new projects must actively engage with the general public and relevant stakeholders, both in the area of the proposal and in neighbouring areas that may be impacted, at an early stage.
<b>Renewables 10</b>	Developers proposing new projects must proactively involve the general public and relevant stakeholders, both within the area of the proposal and in adjacent areas that might be affected, from the outset.

- 3.6.18. The Plan outlines its understanding of key issues in marine planning and examines opportunities to support economically productive activities related to offshore wind and renewable energy projects. This includes onshore support, manufacturing, and other ancillary functions. It also addresses grid provision, potential interactions with other users, and the importance of operating within environmental limits. Additionally, it stresses the need for mechanisms that tackle uncertainties and underscores the significance of SEA, HRA, and EIAs in evaluating key environmental risks. These assessments will be integrated into both planning and project development, as well as in consenting procedures.

- 3.6.19. The Plan also references the 2020 Routemap for Renewable Energy in Scotland, which presents a comprehensive strategy for achieving Scotland's renewable energy objectives.
- 3.6.20. The 2021 Review of NMP (Scottish Government, 2021a) aimed to evaluate the progress and effectiveness of the plan since its adoption in 2015 and identify areas for improvement. The review found the NMP has been largely effective in guiding the sustainable use and management of Scotland's marine resources. Recommendations included strengthening policy integration and stakeholder engagement and further improving environmental protections.
- 3.6.21. Scotland's NMP is currently undergoing a significant update, transitioning to the National Marine Plan 2 (NMP2). This update aims to address contemporary challenges and opportunities in marine management. The new plan is guided by the Blue Economy Vision, promoting sustainable development and environmental stewardship.

## **SECTORAL MARINE PLAN FOR OFFSHORE WIND ENERGY IN SCOTLAND 2020**

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- 3.6.22. The SMP sets the framework for the ScotWind Leasing cycles and is regularly reviewed to adapt to new evidence. It acknowledges that technological advancements, cost reductions, and industry innovations are key to maximising Scotland's natural resources. Each leasing round includes strategic planning to assess the suitability of locations and ensure compatibility with other projects and marine users.
- 3.6.23. The first SMP for Offshore Wind Energy (Marine Scotland, 2011) was adopted in 2011. In July 2013, Marine Scotland published the Draft Sectoral Marine Plan for Offshore Wind, Wave and Tidal energy in Scotland. It identified potential future options for commercial scale offshore wind energy developments. These draft plans were never formally adopted by Scottish Ministers, but the draft options were included in Scotland's National Marine Plan and are retained on Marine Scotland Maps for reference (Scottish Government, 2019).
- 3.6.24. In November 2017 CES announced their intention to run a leasing round for commercial scale offshore wind energy projects in Scottish Waters. To inform the spatial development of this leasing round, the Scottish Government, as Planning Authority for Scotland's Seas, were required to undertake a planning exercise in accordance with relevant UK and Scottish legislation. In practice this was carried out by the Marine Directorate on behalf of the Scottish Ministers.
- 3.6.25. The SMP for Offshore Wind Energy (Scottish Government, 2020a), published in October 2020, provided the strategic framework for offshore wind development in Scotland. It identified the most sustainable POs for the future development of commercial-scale offshore wind energy in Scotland, including deep water wind technologies and covered both Scottish inshore and offshore waters. It also contributed to achieving Scottish and the UK's energy and climate change objectives and was developed to ensure consistency with Scotland's National Marine Plan. In the recent ScotWind Leasing process, a total of 20 proposed OWF projects were awarded option agreements within 15 of these PO, reaching ~30 GW of capacity. This includes 17 proposed OWF projects awarded in January 2022, with a further three sites awarded in August 2022 as part of the ScotWind 'Clearing' process. The SMP identifies 15 POs across four regions, capable of generating several GW of renewable energy. Based on consultation feedback, adjustments were made to the boundaries of seven Draft Plan Options (DPOs), and two DPOs were removed to mitigate potential negative impacts on commercial fishing, natural heritage, and shipping, as well as to address public opposition.
- 3.6.26. The SMP for Offshore Wind Energy (Scottish Government, 2020a) refers to the Strategic Environmental Assessment of the SMP (Scottish Government, 2019a) which states:

*“there is potential for significant effects on bird species, for which previous wind farm consultations have raised significant concerns. The conclusion of these consultations based on potential risk to bird populations, specifically Kittiwake, Great Black-backed Gull, Razorbill, Gannet and Guillemot is that currently there may be very limited capacity for further development on the east coast of Scotland, although these concerns are recognised to be more applicable to the inshore sites and risks are reduced in this case by the distance of E1 offshore.*

*In addition, within E2 there is potential for a significant effect on spawning fish and navigational safety. Effects on spawning fish have the potential to be mitigated through avoidance of piling activities during key spawning periods, whilst effects on navigational safety can be managed through appropriate spatial planning...”*

- 3.6.27. These key issues relating to offshore and intertidal ornithology, fish and shellfish, and shipping and navigation have been addressed as part of the EIA (and parallel Habitat Regulations Assessment (HRA) process for nature conservation designated sites) and as noted above, no residual significant effects have been identified in the EIAR following mitigation.
- 3.6.28. The Developer acknowledges that the Marine Directorate is undertaking an iterative plan review of the SMP, and assessments are being updated. These will provide specific conclusions for the E2a PO (Note the Array Area is termed E2a within the E2 PO area).
- 3.6.29. It is noted that if the assessment of the competent authority concludes adverse effects on site integrity, it may be necessary for the Developer to seek a derogation and agreement on compensation measures.
- 3.6.30. CES has also announced the results of the first leasing round designed to enable offshore wind energy to directly supply offshore oil and gas platforms, termed Innovation and Targeted Oil & Gas (INTOG). In March 2023, 13 INTOG projects were offered initial agreements to start offshore wind development, while the Scottish Government completes the planning process and assessments for the INTOG projects. In April 2024, the Greenvolt project was granted planning and consent approval, and entered into an Option Agreement with CES.
- 3.6.31. In March 2024, the Scottish Government confirmed revised timelines for the publication of the updated SMP for Offshore Wind Energy which will incorporate the INTOG SMP. They have indicated that the final plan will be adopted in the second half of 2025.
- 3.6.32. The Marine (Scotland) Act 2010 enables the delegation of regional marine planning to a party nominated by Scottish Ministers. Regional Marine Plans (RMPs) are therefore delivered by Marine Planning Partnerships but adopted by Scottish Ministers. RMPs must be produced in conformity with and are directly linked to the NMP. Should a RMP for the region be implemented, every effort will be made to ensure alignment with its objectives and guidance, in order to support the broader aims of sustainable marine management and comply with the relevant provisions.
- 3.6.33. Nationally, the SMP 15 POs across four distinct regions are anticipated to have cumulative positive effects by greatly contributing to the decarbonisation of the energy sector and ensuring a secure energy supply.
- 3.6.34. The SMP is acknowledged as a dynamic document that will evolve as new information and needs emerge. Although it does not directly address the Proposed Development, which postdates its publication, the principles and support for significantly increased offshore wind generation in Scotland's waters remain relevant.

## 3.7. SUMMARY

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- 3.7.1. The trajectory for reducing emissions has become steeper, and rapid progress is crucial throughout the 2020s. To meet the legally binding target of a 75% reduction in greenhouse gas emissions by 2030, the pace of emission reductions must accelerate.
- 3.7.2. The UK Energy White Paper and forecasts from the CCC indicate that electricity demand is expected to grow significantly—potentially by a factor of three or four—as carbon-intensive energy sources are replaced by the electrification of other sectors, particularly heat and transport.
- 3.7.3. Decisions made through the consenting system need to reflect this changed context. Decision makers should give considerable weight to the energy policy objectives outlined above when making planning decisions.
- 3.7.4. In the most recent renewable energy policy documents referred to, there is a consistent and what might be termed a ‘green thread’ which ties a number of related policy matters together: namely the urgent challenge of net zero and the need to substantially increase renewable capacity.
- 3.7.5. It must follow that the need case is to be afforded substantial weight in the planning balance. The way that decision makers can do that is by properly recognising the seriousness and importance of energy policy related considerations in the planning balance. It is the cumulative effect of a large number of individual projects which will move Scotland towards where it needs to be.
- 3.7.6. The relevant marine policy documents provide significant support for the Proposed Development subject to demonstrating the effects of development are acceptable. The MPS provides the statutory framework within which to consider the Proposed Development and SMP clearly sets out the strategic baseline and acceptance for development in this location and clearly states the additional clarifications and information required to determine acceptability at project specific level.

## 4. OTHER RELEVANT POLICY CONSIDERATIONS

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4.1.1. This section outlines other policy considerations relevant to the assessment and determination of the Proposed Development, beyond those directly related to renewables or climate change. These considerations include:

- The National Planning Framework for Scotland 4 (NPF4) (Scottish Government, 2023).

### 4.2. NATIONAL PLANNING FRAMEWORK 4

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4.2.1. The National Planning Framework 4 (NPF4) received government approval in January 2023 and was adopted in February 2023. The Framework sets spatial principles, regional priorities, national developments, and national planning policy, whilst incorporating the updated 'Scottish Planning Policy', putting spatial and thematic policies in one place. The NPF4 replaces the 'National Planning Framework 3', and it is hoped that it contributes to the United Nations Sustainable Development Goals (UNSDG) and national outcomes, as well as looking to be a long-term plan until 2045 (Scottish Government, 2023).

4.2.2. NPF4 is highly supportive of all forms of renewable energy, including offshore wind. Policy 11 within NPF4 explicitly encourages renewable energy projects, emphasising the expansion of low-carbon and zero-emission technologies.

### NATIONAL DEVELOPMENTS

4.2.3. Page 97 of NPF4 outlines that 18 national developments have been identified. These are characterised as "significant developments of national importance that will help to deliver the spatial strategy ... National development status does not grant planning permission for the development and all relevant consents are required". Adding that

*"Their designation means that the principle for development does not need to be agreed in later consenting processes, providing more certainty for communities, businesses and investors. ... In addition to the statement of need at Annex B, decision makers for applications for consent for national developments should take into account all relevant policies".*

4.2.4. Annex B of NPF4 details the various national developments along with their corresponding statements of need.

4.2.5. It specifies that national developments are significant projects of national importance that will contribute to achieving our spatial strategy. It further adds that:

*"The statements of need set out in this annex are a requirement of the Town and Country Planning (Scotland) Act 1997 and describe the development to be considered as a national development for consent handling purposes".*

4.2.6. National Development 3 (ND3) is *"Strategic Renewable Electricity Generation and Transmission Infrastructure"*.

4.2.7. Page 103 of NPF4 describes ND3 and it notes:

*"This national development supports renewable electricity generation, repowering, and expansion of the electricity grid.*

*A large and rapid increase in electricity generation from renewable sources will be essential for Scotland to meet its net zero emissions targets. Certain types of renewable electricity generation will also be required, which will include energy storage technology and capacity, to provide the vital services, including flexible response, that a zero carbon network will*

*require. Generation is for domestic consumption as well as for export to the UK and beyond, with new capacity helping to decarbonise heat, transport and industrial energy demand. This has the potential to support jobs and business investment, with wider economic benefits.*

*The electricity transmission grid will need substantial reinforcement including the addition of new infrastructure to connect and transmit the output from new on and offshore capacity to consumers in Scotland, the rest of the UK and beyond. Delivery of this national development will be informed by market, policy and regulatory developments and decisions.”*

## **NATIONAL PLANNING POLICY**

4.2.8. Part 2 of NPF4 outlines National Planning Policy. For the onshore aspects of the Proposed Development, the relevant policies concerning sustainable places will include the following:

- Policy 1: Tackling the Climate and Nature Crisis;
- Policy 3: Biodiversity
- Policy 4: Natural Places;
- Policy 5: Soils;
- Policy 6: Forestry, Woodland and Trees;
- Policy 7: Historic Assets and Places; and
- Policy 11: Energy.

4.2.9. Policy 1 states *“when considering all development proposals significant weight will be given to the global climate and nature of crisis.”*

4.2.10. Policy intent is set out as being *“to encourage, promote and facilitate development that addresses the global climate emergency in nature crisis”*. Policy outcomes are identified as being zero carbon, nature positive places.

4.2.11. Policy 11 is as follows:

*“a) Development proposals for all forms of renewable, low-carbon and zero emissions technologies will be supported”.*

The policy lists a range of assessment criteria. This is referred to in detail in the separate Planning Statement dealing with the onshore elements of the Project.

4.2.12. Policy intent for Policy 11 is set out as:

*“to encourage, promote and facilitate all forms of renewable energy development onshore and offshore. This includes energy generation, storage, new and replacement transmission and distribution infrastructure and emerging low carbon and zero emission technologies including hydrogen and carbon capture utilisation and storage.”*

4.2.13. Policy Outcomes for Policy 11 are seen as *“expansion of renewable, low carbon and zero emission technologies”*.

## **NPF4: CONTRIBUTION TO NATIONAL OUTCOMES**

4.2.14. The Proposed Development aligns with the overarching goals of NPF4, particularly in supporting the expansion of renewable energy infrastructure in Scotland. As a National Development, the Proposed Development will contribute to the achievement of Scotland’s spatial strategy, including its commitment to net-zero emissions and the broader sustainability agenda.



- 4.2.15. In accordance with Policy 11 of NPF4, which explicitly encourages the development of renewable, low-carbon, and zero-emission technologies, the Proposed Development will play a pivotal role in the expansion of renewable energy generation and the necessary transmission infrastructure. The development is fully aligned with the policy's intent to facilitate renewable energy projects that contribute to decarbonising heat, transport, and industrial energy demand.
- 4.2.16. By contributing to the generation of renewable electricity, the Proposed Development will support Scotland's goal of reducing greenhouse gas emissions and meeting its climate targets, as outlined in the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019. Additionally, the development will provide a substantial boost to the economy, creating jobs and business investment opportunities while supporting national priorities for energy security and sustainability.
- 4.2.17. The Proposed Development's status as a National Development within NPF4 ensures that the principle of the development has already been recognised, providing a high degree of certainty for communities, businesses, and investors. It demonstrates alignment with national policy priorities and the broader objectives of the Scottish Government to transition to a net-zero economy and promote a sustainable, low-carbon future.

## 5. POLICY ASSESSMENT

- 5.1.1. The previous sections have outlined the policy framework for assessing the Proposed Development. This section offers a high-level review of the key findings from the EIA to determine how well the Proposed Development aligns with the relevant policy objectives. More detailed information is available in the topic-specific Chapters and Non-Technical Summary of the EIAR.
- 5.1.2. The degree to which the Developer has considered Schedule 9 of the Electricity Act 1989 and adhered to the EIA Regulations is evident throughout the EIAR and is further examined in the conclusions of this section and the Planning Statement as a whole.
- 5.1.3. The EIA has been conducted in accordance with the EIA Regulations, including the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017, the Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017, and the Marine Works (Environmental Impact Assessment) Regulations 2007. This EIAR details the anticipated environmental impacts of the Proposed Development on key areas specified in the Proposed Development's Scoping Opinion (Volume 3, Appendix 5.2) and through stakeholder consultations. These impacts can be broadly evaluated in the context of the policy requirements outlined in the preceding Chapters under the following core headings (Table 5-1).

*Table 5-1 Core Headings of the EIAR.*

Core Heading	Chapters
Physical Environment	<ul style="list-style-type: none"> <li>Volume 2, Chapter 7 (Marine and Coastal Processes);</li> <li>Volume 2, Chapter 8 (Marine Water and Sediment Quality); and</li> <li>Volume 2, Chapter 18 (Climate).</li> </ul>
Biological Environment	<ul style="list-style-type: none"> <li>Volume 2, Chapter 9 (Benthic, Subtidal and Intertidal Ecology);</li> <li>Volume 2, Chapter 10 (Fish and Ecology);</li> <li>Volume 2, Chapter 11 (Offshore and Intertidal Ornithology); and</li> <li>Volume 2, Chapter 12 (Marine Mammals).</li> </ul>
Human Environment	<ul style="list-style-type: none"> <li>Volume 2, Chapter 13 (Commercial Fisheries);</li> <li>Volume 2, Chapter 14 (Shipping and Navigation);</li> <li>Volume 2, Chapter 15 (Marine Archaeology and Cultural Heritage);</li> <li>Volume 2, Chapter 16 (Military and Civil Aviation);</li> <li>Volume 2, Chapter 17 (Socio-Economics, Tourism and Recreation);</li> <li>Volume 2, Chapter 19 (Infrastructure and Other Users); and</li> <li>Volume 2, Chapter 20 (Major Accidents and Disasters).</li> </ul>

## 5.2. RESIDUAL ENVIRONMENTAL EFFECTS

- 5.2.1. Protecting the physical, biological and human environment is a central objective in the Proposed Development's design and EIA process. The methodology used for the EIA is outlined in Volume 1, Chapter 6 (Environmental Impact Assessment Methodology) and will not be repeated here. This approach has been shaped significantly through consultations with relevant consultees and stakeholders to ensure that significant effects are properly identified and evaluated.
- 5.2.2. Where possible, likely significant effects have been reduced to non-significant levels through detailed iterative design, assessments, and analyses, which has facilitated the development and application of appropriate mitigation measures. The assessment of effects and the

identification of any significant residual adverse environmental impacts have been based on realistic worst-case scenarios. It is important to note that these effects may be limited in duration, location, or impact on specific receptors. Positive effects are also specifically reported where applicable.

- 5.2.3. Table 5-2 (Physical Environment), Table 5-3 (Biological Environment) and Table 5-4 (Human Environment) below provide a summary of the assessment of effects as reported in the EIAR.

Table 5-2 Summary of Key EIA Report Findings- Need to Protect the Physical Environment

EIAR Chapter within Volume 2	Proposed Development Alone			Cumulative		
	Construction <sup>4</sup>	O&M	Decommissioning	Construction	O&M	Decommissioning
Chapter 7 (Marine and Coastal Processes)	No residual significant effects identified			No residual significant effects identified		
Chapter 8 (Marine Water and Sediment Quality)	No residual significant effects identified			No residual significant effects identified		
Chapter 18 (Climate)	No residual significant effects identified			No residual significant effects identified		

Table 5-3 Summary of Key EIA Report Findings- Need to Protect the Biological Environment

EIAR Chapter within Volume 2	Proposed Development Alone			Cumulative		
	Construction <sup>5</sup>	O&M	Decommissioning	Construction	O&M	Decommissioning
Chapter 9 (Benthic Subtidal and Intertidal Ecology)	No residual significant effects identified			No residual significant effects identified		
Chapter 10 (Fish and Shellfish Ecology)	No residual significant effects identified			No residual significant effects identified		
Chapter 11 (Offshore and Intertidal Ornithology)	No residual significant effects identified			No residual significant effects identified		
Chapter 12 (Marine Mammals)	No residual significant effects identified			No residual significant effects identified		

<sup>4</sup> Including Pre-Construction for Project alone and cumulative assessments

<sup>5</sup> Including Pre-Construction for Project alone and cumulative assessments

Table 5-4 Summary of Key EIA Report Findings - Need to Protect the Human Environment

EIAR Chapter within Volume 2	Proposed Development Alone			Cumulative		
	Construction <sup>6</sup>	O&M	Decommissioning	Construction	O&M	Decommissioning
Chapter 13 (Commercial Fisheries)	No residual significant effects identified	Significant residual effect (Moderate)	No residual significant effects identified	Significant residual effect (Moderate)		
Chapter 14 (Shipping and Navigation)	No residual significant effects identified			No residual significant effects identified		
Chapter 15 (Marine Archaeology and Cultural Heritage)	No residual significant effects identified			No residual significant effects identified		
Chapter 16 (Military and Civil Aviation)	No residual significant effects identified			No residual significant effects identified		
Chapter 17 (Socio-Economics, Tourism and Recreation)	No residual significant (adverse) effects identified Residual significant (beneficial) effects identified			No residual significant effects identified		
Chapter 19 (Infrastructure and Other Users)	No residual significant effects identified			No residual significant effects identified		
Chapter 20 (Major Accidents and Disasters)	No residual significant effects identified			No residual significant effects identified		

<sup>6</sup> Including Pre-Construction for Project alone and cumulative assessments

## **6. BENEFITS OF THE PROPOSED DEVELOPMENT**

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- 6.1.1. This section outlines the benefits of the Proposed Development, focusing on its contributions to renewable electricity generation, climate change mitigation, and socio-economic impacts. The conclusions highlight how these benefits align with and are supported by the relevant climate change and renewable energy policy objectives discussed in Section 3.

### **6.2. RENEWABLE GENERATION, EMISSION SAVINGS AND SECURITY OF SUPPLY**

#### **RENEWABLE GENERATION AND DECARBONISATION**

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- 6.2.1. As outlined, the Proposed Development will feature up to 67 wind turbines installed within the Array Area. By maximising generation capacity in the resource-rich, accessible, and technically feasible Array Area, the Proposed Development benefits all GB consumers and the wind industry as a whole.
- 6.2.2. A climate assessment for the Proposed Development is included in Volume 2, Chapter 18: (Climate) and Volume 3, Appendix 18.1 (GHG Technical Report). These documents assess the Proposed Developments' vulnerability and resilience to climate change and evaluate the Proposed Development's impact on climate through its GHG emissions.
- 6.2.3. As detailed in Section 3 of this Offshore Planning Statement, the UK Government is legally committed to achieving net zero carbon emissions by 2050, with the Scottish Government having legally committed to this target by 2045. 'Net zero' means that total GHG emissions produced will be balanced by the amount removed from the atmosphere, achieved through a combination of reducing emissions and increasing removal efforts. The UK Government has established a series of carbon 'budgets' for five-year periods, serving as milestones towards the 2050 target. These budgets currently extend to 2037, with the UK being 'off track' to meet the later budgets within this timeframe.
- 6.2.4. The climate assessment estimates that the Proposed Development will generate low-carbon electricity over its 35-year operational and maintenance period. Throughout its lifecycle, the Proposed Development is projected to have an emission intensity of between 25.4 and 36.9g gCO<sub>2</sub>e/kWh. By replacing conventional, higher-carbon energy sources (such as fossil fuels), the Proposed Development will prevent a substantial amount of tCO<sub>2</sub>e from being emitted.
- 6.2.5. It is important to note that the actual carbon savings are expected to exceed those estimated in the assessment. This is because the load factor used, derived from RenewableUK data based on current offshore wind turbine performance, is expected to improve in the future with advancements in wind turbine technology and actual site-specific wind data.
- 6.2.6. The impact of increasing global temperatures above the suggested limit of 1.5°C would result in significant ecological damage. This includes significant impacts on terrestrial species and habitats, soils, natural carbon stores (potentially releasing more GHG into the atmosphere and accelerating the impacts of climate change), agricultural and forestry productivity, and marine species, habitats and fisheries.
- 6.2.7. The immediate, rapid, and large-scale decarbonisation of the UK's energy supply is one of the recommended ways of preventing climate change from worsening and therefore resulting in beneficial consequences to the environment.

## GRID BALANCING AND SECURITY OF SUPPLY

- 6.2.8. Reducing Scotland's and the wider UK's reliance on hydrocarbons offers crucial benefits for energy security, electricity costs, and mitigating fuel poverty. The urgency of these actions, which are essential in combating climate change, is now heightened by the need for global political stability and reducing dependencies on unstable nations.
- 6.2.9. By maximising the capacity installed, the Proposed Development aims to achieve the maximum reduction in hydrocarbon usage and minimise reliance on foreign energy imports. As outlined in this Planning Statement, if developed to its full technical potential, Muir Mhòr could provide enough energy to replace a proportion of Russian gas imports to the UK, highlighting its significant contribution to national energy security.

## SUMMARY

- 6.2.10. The above information illustrates the essential role of offshore wind deployment, particularly the Proposed Development, in achieving key UK Government national policy goals for renewable energy generation, decarbonisation, grid balancing and security of supply.
- 6.2.11. The Proposed Development is poised to make a significant, timely contribution to decarbonisation and energy security. It will also help reduce consumer energy bills throughout its operational lifespan, thereby addressing important aspects of Scotland's and the UK's legal obligations and aligning with both current and emerging government policies.

## 6.3. SOCIO-ECONOMIC BENEFITS

- 6.3.1. While socio-economic benefits are not a primary factor in this Offshore Planning Statement for the Proposed Development, it is still an important factor to consider within the overall balance of the Proposed Development.
- 6.3.2. During construction alone, the Proposed Development is anticipated to spend a total of £1,909 million, with £220 million spent in Scotland and £462 million in the wider UK economy. This expenditure will drive economic activity through the Gross Value Added (GVA) and jobs that it supports as presented within Table 6-1.

*Table 6-1 Offshore Construction Direct Impact, Scotland and the UK*

Parameters	Scotland		UK	
	GVA	Years of Employment	GVA	Years of Employment
Development	£26 m	400	£40 m	620
Manufacturing and Fabrication	£65 m	940	£149 m	2,170
Installation	£3 m	60	£5 m	80
<b>Total Construction</b>	<b>£65 m</b>	<b>940</b>	<b>£149 m</b>	<b>2,170</b>

- 6.3.3. During the operational phase, the Proposed Development is anticipated to spend a total of £91 million, with £32 million spent in Scotland and £66 million in the wider UK economy. This expenditure will drive economic activity through the GVA and jobs that it supports as presented within Table 6-2.

Table 6-2 Offshore Operations and Maintenance Direct Impact, Scotland and the UK

Parameters	Scotland		UK	
	GVA	Jobs	GVA	Jobs
Operational Training	£1 m	20	£2 m	30
Operational Offshore Logistics	£1 m	10	£2 m	20
Health and Safety Inspections	<£1 m	<10	<£1 m	<10
Operational Insurance	-	-	£3 m	10
Operations Control Centre	£6 m	80	£6 m	80
Turbine Maintenance and Service	£3 m	40	£7 m	90
Balance of Plant Maintenance and Service	£2 m	30	£4 m	70
Maintenance Vessels	<£1 m	10	£1 m	10
Maintenance Port	<£1 m	<10	<£1 m	<10
<b>Total Operation and Maintenance</b>	<b>£13 m</b>	<b>180</b>	<b>£25 m</b>	<b>320</b>



## **6.4. SOCIO-ECONOMIC CONCLUSIONS**

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- 6.4.1. Throughout the whole lifecycle of the Proposed Development, there will be a significant socio-economic benefit to both Scotland and the UK. This is greater during construction; however, the operational phase still provides additional input to the economy of Scotland and the UK.

## **6.5. CONCLUSIONS IN RELATION TO OVERALL PROPOSED DEVELOPMENT BENEFITS**

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- 6.5.1. Substantial support for the Proposed Development stems from recognising the extensive positive impacts it will have on renewable energy generation, climate change mitigation, and socio-economic growth. This support is grounded in relevant legislation and policy, including the MPS, broader national marine and energy policies, and Development Plans such as NPF4. The benefits of the Proposed Development will significantly advance several renewable energy, climate change, economic, and marine policy objectives and statutory targets set by the UK and Scottish Governments.
- 6.5.2. The anticipated benefits should be given significant consideration in the decision-making process for the Section 36 consent application and related Marine Licences.

## **7. CONCLUSION**

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- 7.1.1. This section presents the overall conclusions regarding the alignment of the Proposed Development with the relevant legislative and policy considerations that the decision-maker must consider when determining the applications for Section 36 Consent and the associated Marine Licences. It also highlights the significant body of renewable energy and marine-related policies identified as material to the determination, which hold statutory significance.

### **7.2. THE ELECTRICITY ACT 1989**

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- 7.2.1. Paragraph 3(2) of Schedule 9 of the 1989 Act requires the Scottish Ministers to consider the desirability of the matters outlined in paragraph 3(1)(a) and to assess how well the Developer has fulfilled the duty imposed by paragraph 3(1)(b). The list in sub-paragraph (a) includes matters that are likely relevant to the granting of consent and have been addressed in this EIAR.
- 7.2.2. The information provided in the individual topic sections of this EIAR, along with additional environmental data, enables the Scottish Ministers to be satisfied with the requirements of Schedule 9. This EIAR also demonstrates that the detailed work conducted during the EIA process confirms and ensures that the Proposed Development would be conducted in an environmentally acceptable manner.

### **7.3. ENERGY AND CLIMATE CHANGE POLICY AND LEGISLATIVE REQUIREMENTS**

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- 7.3.1. The urgent need for offshore wind energy has been clearly established, with strong support from both UK and Scottish Government for the expanded deployment of this renewable technology through various policy documents and commitments by the Scottish Government, particularly within the Offshore Wind Policy Statement.
- 7.3.2. The declaration of a Climate Emergency should be understood in the context of its serious implications and the actions it necessitates. It was declared in recognition of the severe impacts of climate change and the urgent need to reduce carbon dioxide and other greenhouse gas emissions. This requires immediate action, not delayed efforts.
- 7.3.3. The legal commitment to achieving net zero emissions is now firmly established at both the UK and Scottish Government levels, through amendments to the Climate Change Act 2008 and the provisions of the Climate Change (Scotland) Act 2009 and the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019.
- 7.3.4. The climate emergency is not just a consideration but a factor of substantial importance, adding significant weight to the support for this Proposed Development. The need for the Proposed Development should be given considerable weight in the planning process, with decision-makers recognizing the seriousness and importance of energy policy considerations. The cumulative impact of numerous renewable projects is crucial for Scotland's progress, and the Proposed Development would make a substantial contribution in a single step.
- 7.3.5. This Offshore Planning Statement also highlights the critical benefits of energy security and affordability that come from developing domestic electricity supplies independent of volatile international markets. The urgency of creating a self-reliant electricity system, free from fossil fuel dependence, is crucial to protect consumers from high and unpredictable energy prices and to reduce the risk of geopolitical interference in national electricity supplies. The Proposed

Development would play a significant role in helping the UK achieve these security and socio-economic objectives.

## **7.4. POLICY ASSESSMENT**

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- 7.4.1. After evaluating all the predicted environmental impacts of the Proposed Development, and application of mitigation where appropriate, the EIAR concludes the residual Likely Significant Effects are very limited.
- 7.4.2. In the context of relevant policy and legislative considerations, it is evident that the Proposed Development generally aligns with the key policy objectives, which focus on increasing renewable energy capacity, minimising effects on human health, reducing broader environmental harm, and ensuring that conflicts with other marine environment users are kept to a minimum.

## **7.5. OVERALL CONCLUSIONS**

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- 7.5.1. Overall, the Proposed Development aligns with relevant legislation and policy, particularly in terms of increasing renewable energy generation and capacity while minimising conflicts with marine environment users, human health, and the environment.
- 7.5.2. A worst-case scenario has been assessed, and appropriate mitigation measures have been proposed and can be secured to address any remaining effects. The MPS emphasises the need to balance the benefits against the potential adverse effects.
- 7.5.3. The policy appraisal presented in this submission makes a compelling case that the Proposed Development would deliver significant benefits in the broader public interest. The Proposed Development has been designed and assessed in full compliance with relevant legislative requirements and the underlying aims and objectives of the policy framework.
- 7.5.4. The Proposed Development has the potential to make a significant contribution to Scotland's and the UK's legally binding climate change targets by aiding in the decarbonization of the energy supply. It also plays a crucial role in ensuring energy security and providing low-cost energy for consumers, aligning with national policies of both the Scottish and UK governments.
- 7.5.5. The Proposed Development will also have a meaningful impact on the economic and social landscape in Scotland and the UK, creating substantial employment opportunities and fostering skills development, particularly in coastal communities, while also supporting supply chains in both countries.
- 7.5.6. Given these points, the benefits of the Proposed Development should be given considerable weight in the planning balance. The development of this renewable energy infrastructure is essential for achieving the Net Zero targets by the critical deadline of 2045.
- 7.5.7. In evaluating the application, decision-makers will need to balance the Proposed Development's necessity and benefits against the mitigation and compensation of predicted environmental impacts. The benefits of the Proposed Development far outweigh its adverse effects.
- 7.5.8. For these reasons, it is recommended that Section 36 consent and Marine Licences be granted.

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