# West of Orkney Windfarm Offshore EIA Report Offshore Planning Statement

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# 1. INTRODUCTION

This Planning Statement has been prepared on behalf of Offshore Wind Power Limited (OWPL), hereafter referred to as 'the Applicant' in support of a Section.36 application to Scottish Ministers under the Electricity Act 1989 to construct and operate the West of Orkney Windfarm ('the Project') and the applications for Marine Licences in accordance with the Marine and Coastal Access Act 2009 and the Marine (Scotland) Act 2010. The application is accompanied by an Environmental Impact Assessment (EIA) Report and a Report to Inform Appropriate Assessment (RIAA).

Crown Estate Scotland (CES) awarded the Applicant the Option Agreement Area (OAA) within the N1 Plan Option (PO) to the West of Orkney in January 2022 for the development of the Project following the ScotWind Leasing round. The ScotWind Leasing round was launched in June 2020 and resulted in 17 projects being awarded OAAs in January 2022. A further three projects were awarded OAAs in April 2022 as part of the ScotWind clearing process. The ScotWind Leasing round brings a new potential energy supply of 27.6 Gigawatts (GW) from the 20 projects.

The Project has a connection agreement with National Grid for a connection to the grid network in Caithness on mainland Scotland. Connection will be to a new onshore Scottish Hydro Electric Transmission Limited (SHET-L) substation located at or near Spittal. Applications for the offshore and onshore components of the Project will be submitted separately by the Applicant to Marine Directorate and The Highland Council (THC), respectively. Therefore, this Planning Statement addresses only Project infrastructure seaward of Mean High Water Springs (MHWS).

As the following Planning Statement will demonstrate in detail, the delivery of this Project aligns with United Kingdom (UK) and Scottish Net Zero policies whilst meeting the requirements of Scotland's marine and National planning policies. In terms of satisfying the requirements set out in Schedule 8 and 9 of the Electricity Act 1989, the Marine (Scotland) Act 2010 and the Marine and Coastal Access Act 2009, the following Planning Statement demonstrates and provides confidence that the offshore Project would be undertaken in an environmentally and socially acceptable way. Details of the substantial socio-economic benefits, including significant supply chain benefits, that will arise from this Project are described throughout this statement and these should be afforded substantial weight in the planning balance.

# 2. THE APPLICANT

OWPL is a joint venture arrangement comprising Corio Generation, TotalEnergies and Renewable Infrastructure Development Group (RIDG). The Applicant brings together a unique combination of financial, technical and project development capability, with deep Scottish roots, a commitment to delivery, and a clear vision for the Project.

**Corio Generation** is a specialist offshore wind business dedicated to harnessing renewable energy worldwide. Corio commenced operations in 2022 and is already one of the world's largest specialist offshore wind developers with over 20 GW of projects in its global portfolio. Corio is a Green Investment Group (GIG) portfolio company, operating on a standalone basis. GIG, a leading renewable energy developer with a mission to accelerate the green transition, has invested around £625 million in Scotland since 2012. Macquarie Group, GIG's parent company, has supported almost half of the UK's offshore wind capacity currently in operation and is also supporting the Acorn project at St Fergus, a leading Scottish carbon capture and storage project.

**TotalEnergies** is a broad energy company and one of the largest offshore operators on the UK continental shelf with a significant track record of successfully delivering complex projects in harsh sea conditions. With an ambition to be a world-class player in the energy transition, the company develops and operates renewable projects worldwide. In Scotland, it has a majority stake in the 1,140 Megawatts (MW)) Seagreen 1 offshore windfarm located off the east coast of Scotland, which is currently under construction. Some of its recent developments also include the £3.2 billion (bn) Culzean gas project, delivered with 52% UK local content. Over the last five years, TotalEnergies has invested around £2.5 bn in projects in Scotland.

**RIDG** is a Scottish offshore wind developer with decades of sector experience. RIDG was established as an independent, specialised offshore wind project development company with the knowledge and experience to identify, design and deliver high quality consented assets for strategic partners to build and operate. RIDG presents a simpler, leaner and more flexible approach to project development, one that draws upon the strengths of both established and emerging suppliers to deliver projects safely, efficiently and cost effectively.

## 3. STRUCTURE OF THIS PLANNING STATEMENT

The remainder of this Planning Statement has been structured as follows:

- Chapter 4 provides details of the offshore Project;
- Chapter 5 addresses the relevant statutory and legislative provisions applicable to the offshore Project;
- Chapter 6 presents the renewable energy and climate change policy framework at international and national levels;
- Chapter 7 sets out additional planning policy considerations, including the National Planning Framework and statutory development plans;
- Chapter 8 assesses the offshore Project's compliance with relevant policies and evaluates its predicted significant environmental effects;
- Chapter 9 assesses the offshore Project's compliance with other relevant considerations including Habitat Regulations;
- Chapter 10 outlines the key benefits associated with the offshore Project, including renewable generation, emission savings, security of supply, and socio-economic considerations; and
- Chapter 11 presents the overall conclusions of this Planning Statement.



# 4. THE OFFSHORE PROJECT

#### 4.1 Background

The offshore Project will comprise of up to 125 Wind Turbine Generators (WTGs) aiming to achieve a supply of around 2 GW of wind energy, and related infrastructure required to transmit the power generated by the WTGs to shore. An overview of the key offshore Project components and boundary is provided in Figure 4-1 and chapter 5: Project description Figure 5-2 of the EIA Offshore Report.

The key components of the offshore Project include:

- Up to 125 WTGs with fixed-bottom foundations (monopile, piled jacket or suction bucket jacket);
- Up to five High Voltage Alternating Current (HVAC) Offshore Substation Platforms (OSP);
- Up to 500 kilometres (km) of inter-array cables;
- Up to 150 km of interconnector cables; and
- Up to five offshore export cables to landfalls at Greeny Geo and/or Crosskirk at Caithness, with a total length of up to 320 km (average of 64 km per offshore export cable).

The key Project milestones are likely to be:

- Commencement of onshore construction 2027;
- Commencement of offshore construction 2028; and
- First power earliest date is 2029.

#### 4.2 The Offshore Project

The development of the offshore Project is located at approximately 23 km from the north coast of Scotland and approximately 28 km from the west coast of Hoy, Orkney. The offshore Project boundary includes the OAA and the offshore Export Cable Corridor (ECC).

The offshore Project boundary encompasses:

- OAA where the WTGs and associated foundations and supporting structures, inter-array cables, interconnector cables and the OSPs (including offshore export cable connections) will be located;
- Offshore ECC where the offshore export cables will be located; and
- Landfalls (up to MHWS) where the offshore export cables come ashore and interface with the onshore Project.

The offshore Project design will not be finalised until post-consent. Therefore, a 'Project Design Envelope' approach has been used for the EIA. The Project Design Envelope consists of a range of design parameters for each offshore Project aspect, providing flexibility for further refinement of the offshore Project design in order to accommodate technological advancements and more detailed site information.





Figure 4-1 Offshore Project Boundary



# 5. STATUTORY CONSIDERATIONS

#### 5.1 Introduction

This section provides an overview of the statutory considerations that are pertinent to the offshore Project. It outlines the legislative provisions and directives which are directly applicable to the determination of the applications for Section 36 Consent and the associated Marine Licence(s).

In determining the applications, the decision maker must have regard to the following pieces of legislation:

- The Electricity Act 1989 (as amended);
- The Marine (Scotland) Act 2010 and the Marine and Coastal Access Act 2009;
- EIA Regulations which comprise: 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;
- The Marine Licensing (Pre-application Consultation) (Scotland) Regulations 2013;
- The Energy Act 2004;
- Islands (Scotland) Act 2018;
- Habitats Regulations which comprise: the Conservation (Natural Habitats &c.) Regulations 1994 (as amended), The Conservation of Habitats and Species Regulations 2017 and The Conservation of Offshore Marine Habitats and Species Regulations 2017. These regulations transpose the requirements of Directive 92/43/EEC (the 'Habitats Directive') and Directive (2009/147/EC) on the conservation of wild birds (the 'Birds Directive') into domestic legislation regulating developments in Scottish Waters;
- Marine Strategy Framework Directive; and
- Water Framework Directive Regulations.

#### 5.2 The Electricity Act 1989 (as amended)

The Electricity Act 1989 (as amended) establishes the regulatory framework for electricity generation, transmission, and supply in the UK. Consent from Scottish Ministers under Section 36 of this legislation is required for generating stations above 50 MW in the Scottish offshore region and above 1 MW in the Scottish inshore region.

A consent under Section 36 of the Electricity Act 1989 is required to construct and operate a generating station. This is required for the offshore Project and will allow for the installation, operation and maintenance, and decommissioning of the WTGs and inter-array cables associated with the Project. A declaration under Section 36A of the Electricity Act 1989 is required to allow WTGs and other structures to interfere with the rights of navigation. In line with Section 36B of the Electricity Act 1989, Ministers may not grant a consent in relation to offshore generating activities if it would interfere with 'recognised sea lanes essential to international navigation'. In determining what interference or obstruction is likely and its extent, the Scottish Ministers must consider how they will exercise their powers in relation to a declaration to extinguish rights of navigation and applications for safety zones.

Schedule 8 of the Electricity Act 1989 sets out requirements and procedures in relation to applications for Section 36 consents and Schedule 9 within the Act requires consideration to be given to the preservation of amenity and fisheries, specifically:

"In formulating any relevant proposals, a licence holder or a person authorised by an exemption to generate, distribute, supply or participate in the transmission of electricity:



- (a) shall have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest; and
- (b) shall do what he reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects".

The Section 36 and Marine Licence applications for this Project are supported by the offshore EIA Report, prepared in accordance with the EIA Regulations (see below). A RIAA has been prepared in accordance with the applicable Habitat Regulations (see below).

#### 5.3 The Marine and Coastal Access Act 2009 and the Marine (Scotland) Act 2010

The Marine and Coastal Access Act 2009 (MCAA) and the Marine (Scotland) Act 2010 (MSA) establish the legal framework for marine planning and licensing. The 2009 Act established provisions for the management and protection of the marine environment. In relation to Scotland, the Act applies to the offshore marine region (12 -200 nautical miles (nm)). It sets out requirements for a UK Marine Policy Statement, a marine licensing regime, powers to designate marine protected areas, a duty to contribute to a UK network of marine sites, and associated enforcement powers. Under the Marine and Coastal Access Act 2009 Scottish Ministers have responsibility for licensing and enforcement in the Scottish offshore marine region.

The UK Marine Policy Statement established under the MCAA 2009, facilitates an integrated approach to marine planning across the UK and sets out the high-level framework for preparing marine plans and taking decisions affecting the marine environment. The UK Marine Policy Statement outlines the requirement for marine plans within UK waters to set out environmental, social, and economic objectives. The MSA 2010, together with the MCAA 2009, establishes the marine planning framework in Scotland, including the requirement for a National Marine Plan and Regional Marine Plans.

The Scottish Ministers are responsible for granting licences in both the Scottish Inshore region (0-12 nm) under the MSA and the Scottish Offshore Region (12-200 nm) under the MCAA. Public authorities must consider marine policy documents and plans when making authorisation decisions. These documents aim to protect the environment, human health, and prevent interference with other sea users. Marine Licences under the MSA 2010 and the MCAA 2009 are required for the offshore infrastructure of the Project. The EIA Report addresses these considerations, and this Planning Statement summarises its findings within the legislative framework.

Section 15 of the MSA 2010 requires decisions of the Scottish Ministers on Marine Licence applications to be in accordance with the specified marine plans and policy documents unless 'relevant considerations indicate otherwise'.

Section 27 of the MSA 2010 requires that in determining an application for a Marine Licence (including the terms on which it is to be granted and what conditions, if any, are to be attached to it), the Scottish Ministers must have regard to:

- The need to protect the environment;
- The need to protect human health;
- The need to prevent interference with legitimate users of the sea;
- Any representations received from any person having an interest in the outcome of the application;
- Such other matters as the Scottish Ministers consider relevant;
- The practical availability of alternative methods;



- The effects of any use intended to be made of the works; and
- Giving the applicant the opportunity to make representations to them about observations made by consultees.

Under section 82 of the MSA 2010, Marine Directorate – Licensing Operations Team (MD-LOT) is required to consider whether a licensable activity is capable of affecting (other than insignificantly) a protected feature in a Nature Conservation Marine Protected Area (NCMPA) or a historic marine asset in a Historic Marine Protected Area (MPA). As such, the accompanying EIA Report includes an assessment of any effects on NCMPAs or MPAs from the offshore Project, where relevant, within the applicable topic-specific chapters to aid MD-LOT's assessment.

When authorisations are sought for activities with potential impacts on NCMPAs, they can only be granted if the applicant can demonstrate to the authority that either there is no significant risk to the achievement of conservation objectives for the NCMPA, or there is no alternative approach with substantially lower risk that outweighs the environmental damage caused by the proposed activity. Additionally, the applicant must commit to undertaking measures of equivalent environmental benefit to mitigate any potential damage to the NCMPA.

If the authority identifies or suspects a significant risk, they are required to notify the appropriate statutory conservation bodies, such as NatureScot or the Joint Nature Conservation Committee (JNCC), depending on the location of the NCMPA.

#### 5.4 Marine Licensing (Pre-application Consultation) (Scotland) Regulations 2013

Sections 22, 23 and 24 of the Marine (Scotland) Act 2010 provide that Scottish Ministers may prescribe, by regulations, that certain classes or descriptions of licensable marine activity are subject to the pre-application consultation procedure and, together with the Marine Licensing (Pre-application Consultation) (Scotland) Regulations 2013, set out what that process entails.

The Project is a marine activity subject to pre-application consultation.

#### 5.5 EIA Regulations

The EIA Regulations applicable to the Project include:

- The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended). The requirements of the EIA Directive are enacted through relevant UK legislation for electricity generation projects requiring consent under Schedule 36 of the Electricity Act 1989 by the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended);
- The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended). These EIA Regulations apply to applications for a Marine Licence out to the 12 nm limit. An EIA is specifically required under Schedule 2 of the Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017 for installations for the harnessing of wind power for energy production (windfarms) if the development involves the installation of more than two WTGs or the hub height of any WTG or height of any other structure exceeds 15 metres (m). As this offshore Project exceeds these requirements, an EIA has been undertaken; and
- The Marine Works (Environmental Impact Assessment) Regulations 2007. These EIA Regulations apply to applications for a Marine Licence from 12 to 200 nm. Schedule A1 and A2 list the types of projects which may require an EIA. Schedule A2 includes "Installations for the harnessing of wind power for energy production". Schedule 1 of these regulations is then used to understand whether an EIA is required for a Schedule A2 project



by considering whether the project is likely to have significant effects on the environment. Matters requiring consideration include the characteristics (e.g., size, design, waste, pollution, risks etc.) and location (e.g., environmental sensitive areas) of the project as well as the types and characteristics of the potential impact (e.g., magnitude and spatial extent). Given the nature and scale of the Project, an EIA has been undertaken.

#### 5.6 The Energy Act 2004

The Energy Act 2004 introduced a safety zone scheme and a statutory scheme for the decommissioning of Offshore Renewable Energy Installations (OREI). The safety zone scheme, outlined in the Energy Act 2004 and the Electricity (Offshore Generating Stations) (Safety Zones) (Applications Procedures and Control of Access) Regulations 2007, applies to territorial waters within 12 nm in Scotland and UK Renewable Energy Zones (REZ). However, it does not cover cables.

The Energy Act 2004 also includes provisions for the decommissioning of OREI, with Scottish Ministers having the authority to require a costed decommissioning programme to be submitted and approved prior to construction. The offshore EIA Report contains additional information regarding the content and scope of requirements for the decommissioning programme.

Energy policy in Scotland is a matter that has been specifically reserved to the UK parliament under the terms of the Scotland Act 2016 that created the devolved Scottish Parliament. However, since planning is a matter that has been devolved, the Scottish Government has delegated powers under the Energy Act 2004.

#### 5.7 Island (Scotland) Act 2018

The Islands (Scotland) Act 2018 introduced measures to help create the right environment for sustainable growth in and around Scotland's islands, through creation of a licensing scheme in relation to any works in or under the sea in the coastal waters surrounding islands for up to 12 nm.

Part 7 of the Act describes Delegation of functions relating to Regional Marine Plans (RMP). This Part amends the MSA 2010 to allow Ministers to delegate regional marine planning to a single local authority in any of the three Scottish marine regions of the Orkney Islands, the Outer Hebrides and the Shetland Isles, in order that the single authority can carry out the functions related to preparing a regional marine plan.

Ahead of the formal adoption of the Orkney Islands RMP, the Pilot Pentland Firth and Orkney Waters Marine Spatial Plan (Scottish Government, 2016), developed by Marine Scotland, Orkney Islands Council (OIC) and THC, sets out an integrated planning policy framework to guide marine development and activities and management decisions, whilst ensuring the quality of the marine environment is protected. Given the Orkney Islands RMP is not yet adopted and also that it reflects policies in the NMP, this planning statement will focus on assessing the Project against policies in the NATION TRUE (NMP).

The Islands (Scotland) Act 2018 has an associated plan, 'The National Plan for Scotland's Islands'. This is relevant to this Project for which 45% of the OAA is within the identified 'Scottish Island Marine Area'. The National Plan outlines strategic objectives in relation Climate Change and Energy including Strategic Objective 9 – To contribute to climate change mitigation and adaptation and promote clean, affordable and secure energy.



#### 5.8 Habitat Regulations

Both the Habitats Directive and the Birds Directive form a network of designated 'European Sites'. Under this legislation, these sites include Special Areas of Conservation (SACs), Special Protected Areas (SPAs), and Ramsar sites. As these directives aim to maintain the biodiversity of European Sites to a favourable conservation status, European Union (EU) Member States must afford these sites robust protection measures.

Following Brexit, the Habitats Regulations, detailed below, which transpose the requirements of the Habitats and Birds Directives into Scottish Law, remain in force. This includes the general provisions for the protection of European Sites, policy and standards, and the procedural requirements to undertake a Habitat Regulation Appraisal (HRA) to assess the implications of plans or projects for European sites.

The Conservation (Natural Habitats &c.) Regulations 1994 (as amended), The Conservation of Habitats and Species Regulations 2017 and The Conservation of Offshore Marine Habitats and Species Regulations 2017 ('The Habitat Regulations'), transpose the requirements of Directive 92/43/EEC (the 'Habitats Directive') and Directive (2009/147/EC) on the conservation of wild birds (the 'Birds Directive') into domestic legislation regulating developments in Scottish Waters.

Where there is potential for a project to have an adverse effect on a SAC, SPA, or Ramsar site, including proposed or candidate sites (e.g., Candidate SACs), an Appropriate Assessment to ascertain whether a project will adversely affect the integrity of a site given the conservation objectives of the site. In accordance with the Habitat Regulations, and as part of the HRA process, where it is identified that there is potential for a Likely Significant Effect (LSE) on a designated site, the applicant is required to provide a RIAA. The RIAA details information on the effects of the Project on the integrity of a European Site to the Competent Authority (i.e., Marine Directorate) to enable them to undertake an AA of the Project.

European Protected Species (EPS) are those listed in Annex IV of the Habitats Directive that are afforded protection under The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) and the Offshore Marine Regions (OMRs) 2017. This includes all cetacean species such as whales, dolphins, and porpoises. To undertake activities that may disturb or harm EPS, a licence must be obtained. Obtaining EPS Licences is a separate process from the Section 36 and Marine Licence applications. These licences cover activities such as subsea noise disturbance caused by piling construction. If necessary, EPS Licences will be sought for the offshore Project at a later stage.

#### 5.9 Marine Strategy Framework Directive

The EU Marine Strategy Framework Directive (MSFD) required Member States to achieve Good (marine) Environmental Status (GES) by 2020 in their marine waters by enacting a marine strategy. Adopted in 2008, the MSFD was incorporated into UK law through the enactment of the Marine Strategy Regulations 2010.

#### 5.10 Water Framework Directive Regulations

The Water Framework Directive Regulations refer to the legislative framework implemented in Scotland to comply with the requirements of the EU's Water Framework Directive (WFD). The WFD became law in Scotland through the Water Environment and Water Services (Scotland) Act 2003. The Scottish Ministers are required to consider the requirements of the WFD and the associated regulations to ensure that the proposed offshore Project meets the necessary environmental standards and does not adversely impact water quality or the achievement of GES.



## 6. POLICY FRAMEWORK

#### 6.1 Introduction

This section provides an overview of the policy framework relevant to the offshore Project. It highlights the key policies and international commitments that shape the decision-making process for marine development projects and explores how the offshore Project contributes to these policies.

#### 6.2 The Marine Policy Framework

The Marine Policy Statement (MPS) (2011) is a joint policy adopted by all UK Governments, including the Scottish Government, to guide Marine Plans and decision-making in the marine environment. It emphasises sustainable development, low-carbon economy, marine protection, and societal benefits. The MPS requires compliance, integration, coexistence, and collaboration between marine and terrestrial planning. It sets high-level marine objectives and principles for decision-making, considering climate change, good design, and mitigation. The MPS also highlights the importance of assessing impacts, such as biodiversity, air and water quality, and coastal change. It recognises offshore wind's role in meeting renewable energy targets as follows: "offshore wind is expected to provide the largest single renewable electricity contribution as we move towards 2020 and beyond" and "increasing the generation of low carbon energy will mitigate against climate change, lessen the UK's dependence on fossil fuels and improve energy security by increasing the diversity of electricity supply.

The Project will contribute to the UK low carbon energy mix, mitigating against climate change and reducing the UK's dependence on fossil fuels to improve energy security.

Scotland's **National Marine Plan (NMP)** was adopted in 2015, reviewed in 2018 and 2021 and an announcement was made in October 2022 on the development of the National Marine Plan 2. It outlines a national strategy for sustainable economic growth of marine industries, taking into account environmental protection and states "*The presumption in favour of sustainable development and use is presented as an overarching general planning principle of this Plan*". The plan covers Scottish inshore and offshore waters, setting policies with economic, social, and marine ecosystem objectives. The NMP emphasises the sustainable development of economic benefits, contribution to renewable energy, alignment of marine and terrestrial planning, maximisation of economic benefits, and coordinated monitoring.

Chapter 11 of the NMP identifies key objectives of the marine planning policy for offshore wind, including: Sustainable development of offshore wind in the most suitable locations; economic benefits from offshore wind, maximised by securing a competitive local supply chain in Scotland; contribute to achieving the renewables target to generate electricity equivalent to 100% of Scotland's gross annual electricity consumption from renewable sources by 2020; and contributing to achieving the decarbonisation target.

# The Project location was identified through the Sectoral Marine Plan (SMP) process as being in a suitable Plan Option area, and positive socio-economic benefits including significant supply chain benefits are expected.

Policies of relevance from the NMP to the Project include:

- **RENEWABLES 1:** Proposals for commercial scale offshore wind and marine renewable energy development should be sited in the Plan Option areas identified through the Sectoral Marine Plan process;
- **RENEWABLES 4**: Applications for Marine Licences and consents relating to offshore wind and marine renewable energy projects should be made in accordance with the Marine Licensing Manual and Marine Scotland's Licensing Policy Guidance;

- **RENEWABLES 5:** Marine planners and decision makers must ensure that renewable energy projects demonstrate compliance with Environmental Impact Assessment and Habitats Regulations Appraisal legislative requirements;
- **RENEWABLES 8:** Developers bringing forward proposals for new developments must actively engage at an early stage with the general public and interested stakeholders of the area to which the proposal relates and of adjoining areas which may be affected;
- **RENEWABLES 10:** Good practice guidance for community benefit from offshore wind and renewable energy development should be followed by developers;
- **GEN 2** Economic benefit: Sustainable development and use which provides economic benefit to Scottish communities is encouraged when consistent with the objectives and policies of this Plan;
- **GEN 4** Co-existence: Proposals which enable coexistence with other development sectors and activities within the Scottish marine area are encouraged;
- GEN 5 Climate change: Marine planners and decision makers must act in the way best calculated to mitigate, and adapt to, climate change;
- **GEN 6** Historic environment: Development and use of the marine environment should protect and, where appropriate, enhance heritage assets in a manner proportionate to their significance;
- **GEN 7** Landscape/seascape: Marine planners and decision makers should ensure that development and use of the marine environment take seascape, landscape and visual impacts into account;
- GEN 8 Coastal process and flooding: Developments and activities in the marine environment should be resilient to coastal change and flooding, and not have unacceptable adverse impact on coastal processes or contribute to coastal flooding;
- **GEN 9** Natural heritage: Development and use of the marine environment must: (a) Comply with legal requirements for protected areas and protected species. (b) Not result in significant impact on the national status of Priority Marine Feature<sup>1</sup>s. (c) Protect and, where appropriate, enhance the health of the marine area;
- GEN 10 Invasive non-native species: Opportunities to reduce the introduction of invasive non-native species to a minimum or proactively improve the practice of existing activity should be taken when decisions are being made;
- GEN 12 Water quality and resource: Developments and activities should not result in a deterioration of the quality of waters to which the Water Framework Directive, Marine Strategy Framework Directive or other related Directives apply;
- GEN 13 Noise: Development and use in the marine environment should avoid significant adverse effects of manmade noise and vibration, especially on species sensitive to such effects;
- **GEN 18** Engagement: Early and effective engagement should be undertaken with the general public and all interested stakeholders to facilitate planning and consenting processes;
- **GEN 21** Cumulative impacts: Cumulative impacts affecting the ecosystem of the marine plan area should be addressed in decision making and plan implementation;
- FISHERIES 1: Taking account of the EU's Common Fisheries Policy, Habitats Directive, Birds Directive and Marine Strategy Framework Directive, marine planners and decision makers should aim to ensure: Existing fishing opportunities and activities are safeguarded wherever possible and mechanisms for managing conflicts between fishermen and/or between the fishing sector and other users of the marine environment;
- FISHERIES 2: The following key factors should be taken into account when deciding on uses of the marine environment and the potential impact on fishing: the cultural and economic importance of fishing, in particular to vulnerable coastal communities. The potential impact (positive and negative) of marine developments on the sustainability of fish and shellfish stocks and resultant fishing opportunities in any given area. The environmental impact on fishing grounds (such as nursery, spawning areas), commercially fished species, habitats and species

<sup>&</sup>lt;sup>1</sup> Priority Marine Features are species and habitats which have been identified as being of conservation importance to Scotland



more generally. The potential effect of displacement on fish stocks; the wider environment; use of fuel; socioeconomic costs to fishers and their communities and other marine users;

- FISHERIES 3: Where existing fishing opportunities or activity cannot be safeguarded, a Fisheries Management and Mitigation Strategy should be prepared by the proposer of development or use, involving full engagement with local fishing interests (and other interests as appropriate) in the development of the Strategy;
- WILD FISH 1: The impact of development and use of the marine environment on diadromous fish species should be considered in marine planning and decision making processes. Where evidence of impacts on salmon and other diadromous species is inconclusive, mitigation should be adopted where possible and information on impacts on diadromous species from monitoring of developments should be used to inform subsequent marine decision making;
- REC & TOURISM 2: The following key factors should be taken into account when deciding on uses of the marine environment and the potential impact on recreation and tourism: the extent to which the proposal is likely to adversely affect the qualities important to recreational users, including the extent to which proposals may interfere with the physical infrastructure that underpins a recreational activity, the extent to which any proposal interferes with access to and along the shore, to the water, use of the resource for recreation or tourism purposes and existing navigational routes or navigational safety. Where significant impacts are likely, whether reasonable alternatives can be identified for the proposed activity or development. Where significant impacts are likely and there are no reasonable alternatives, whether mitigation, through recognised and effective measures, can be achieved at no significant cost to the marine recreation or tourism sector interests;
- REC & TOURISM 4: Marine and terrestrial planners, marine decision makers and developers should give consideration to the facility requirements of marine recreation and tourism activities, including a focus on support for participation and development in sport. Co-operation and sharing infrastructure and/or facilities, where appropriate, with complementary sectors should be supported as should provision of low carbon transport options;
- REC & TOURISM 6: Codes of practice for invasive non-native species and Marine Wildlife Watching should be complied with;
- **TRANSPORT 1:** Navigational safety in relevant areas used by shipping now and in the future will be protected, adhering to the rights of innocent passage and freedom of navigation contained in United Nations (UN) Convention on the Law of the Sea (UNCLOS);
- **TRANSPORT 3**: Ferry routes and maritime transport to island and remote mainland areas provide essential connections and should be safeguarded from inappropriate marine development and use that would significantly interfere with their operation.
- TRANSPORT 6: Marine planners and decision makers and developers should ensure displacement of shipping is avoided where possible to mitigate against potential increased journey lengths (and associated fuel costs, emissions and impact on journey frequency) and potential impacts on other users and ecologically sensitive areas.
- CABLES 1: Cable and network owners should engage with decision makers at the early planning stage to notify of any intention to lay, repair or replace cables before routes are selected and agreed. When making proposals, cable and network owners and marine users should evidence that they have taken a joined-up approach to development and activity to minimise impacts, where possible, on the marine historic and natural environment, the assets, infrastructures and other users. Appropriate and proportionate environmental consideration and risk assessments should be provided which may include cable protection measures and mitigation plans. Any deposit, removal or dredging carried out for the purpose of executing emergency inspection or repair works to any cable is exempt from the marine licensing regime with approval by Scottish Ministers. However, cable replacement requires a marine licence. Marine Licensing Guidance should be followed when considering any cable development and activity;



- CABLES 2: The following factors will be taken into account on a case by case basis when reaching decisions regarding submarine cable development and activities: Cables should be suitably routed to provide sufficient requirements for installation and cable protection. New cables should implement methods to minimise impacts on the environment, seabed and other users, where operationally possible and in accordance with relevant industry practice. Cables should be buried to maximise protection where there are safety or seabed stability risks and to reduce conflict with other marine users and to protect the assets and infrastructure. Where burial is demonstrated not to be feasible, cables may be suitably protected through recognised and approved measures (such as rock or mattress placement or cable armouring) where practicable and cost-effective and as risk assessments direct. There should be consideration of the need to reinstate the seabed, undertake post-lay surveys and monitoring and carry out remedial action, where required;
- CABLES 4: When selecting locations for landfall of power and telecommunications equipment and cabling, developers and decision makers should consider the policies pertaining to flooding and coastal protection; and
- DEFENCE 1: To maintain operational effectiveness in Scottish waters used by the armed services, development and use will be managed in these areas. This includes naval areas including bases and ports and maintaining safety of navigation and access to naval bases and ports. Proposals for development and use should be discussed with the Ministry of Defence (MoD) at an early stage in the process. Firing Danger Areas (Map 13): Development of new permanent infrastructure is unlikely to be compatible with the use of Firing Danger Areas by the MoD. Permitted activities may have temporal restrictions imposed. Proposals for development and use should be discussed with the MoD at an early stage in the process. Exercise Areas (Map 13): Within Exercise Areas, activities may be subject to temporal restrictions. Development and use that either individually or cumulatively obstructs or otherwise prevents the defence activities supported by an exercise area may not be permitted. Proposals for development and use should be discussed with the MoD at an early stage in the MoD at an early stage in the process. Navigations and surveillance including radar: development and use which causes unacceptable interference with radar and other systems necessary for national defence may be prohibited if mitigation cannot be determined. Proposals for development and use should be discussed with the MoD at an early stage in the process.

The above is not an exhaustive list of all the policies within the NMP but selects those of most relevance to this Project.

In summary, the NMP provides a strategic framework for marine planning, promoting sustainable economic growth while considering environmental factors and aligning with renewable energy targets. The Applicant has used the NMP to guide development of the Project to ensure marine policy objectives are met. Specific marine and National policies are considered and discussed further in the policy assessment of this document, in terms of how the Project meets policy objectives (Section 8).

The Sectoral Marine Plan for Offshore Wind Energy in Scotland (2020) (SMP) aims to identify sustainable options for the future development of commercial-scale offshore wind energy in Scotlish waters, including deep water offshore wind technologies. It seeks to minimise adverse effects on marine users, economic sectors, and the environment while maximising opportunities for economic development and employment. The plan established 15 POs across four regions, capable of generating significant renewable energy. Feedback from consultation led to boundary amendments and the exclusion of certain options to mitigate negative impacts. The plan served as the basis for the ScotWind Leasing cycles and is reviewed periodically. It aligns with the strategic aims of the NMP and the development of RMPs. The plan acknowledges the potential for cumulative positive effects, contributes to decarbonisation, and highlights the importance of in-combination assessments and regional surveys. The iterative nature of the plan allows for adaptation as new information becomes available.



The Project falls within one of the established SMP PO areas which has been identified as a sustainable option for future commercial-scale wind energy.

#### 6.3 International Climate Change and Renewable Energy Policy

The United Nations Framework Convention on Climate Change (UNFCCC), established in 1992, serves as the foundation for international climate change policy. Its primary objective is to stabilise greenhouse gas concentrations in the atmosphere at a level that prevents dangerous human interference with the climate system. The UNFCCC was primarily designed to support the development of future agreements, protocols, and amendments that would impose obligations and enforceable requirements to reduce Greenhouse Gas (GHG) emissions on state parties.

The **Kyoto Protocol** 'operationalised' the UNFCCC by committing state parties to reduce GHG emissions. The UK is a signatory to the Kyoto Protocol, which is a legally binding international agreement that commits state parties to specific emissions reduction targets. The protocol came into effect in 2005 and its commitments were transposed into UK law by the Climate Change Act 2008 and the Climate Change (Scotland) Act 2009. The Paris Agreement (see below) has superseded the Kyoto protocol.

The **Paris Agreement** (in full, Paris Agreement Under the United Nations Framework Convention on Climate Change) is a legally binding international treaty on climate change. It was adopted by 196 Parties at the UN Climate Change Conference (COP21) in Paris, France, on 12<sup>th</sup> December 2015. It entered into force on 4<sup>th</sup> November 2016. Nationally Determined Contributions (NDCs) are at the heart of the Paris Agreement, and sets out frameworks, commitments and actions underway to reduce emissions in line with limiting global warming to well below 2°C above pre-industrial levels (with pursuit of efforts to limit it to 1.5°C) and adapt to the impacts of climate change. In order to contribute towards delivering the targets under the Paris Agreement, the Climate Change (Emissions Reduction Targets (Scotland) Act 2019 introduced binding targets for the reduction in emissions by 100% below 1990 levels by 2045 in Scotland and the Climate Change Act 2008 (2050 Target Amendment) Order 2019 sets a similar reduction target for the rest of the UK by 2050. The UK's **Net Zero Strategy: Build Back Greener (2022)** policy paper sets out policies and proposals for decarbonising all sectors of the UK economy to stay on track for UK carbon budgets, 2030 NDC, and net zero by 2050. The Net Zero Strategy will be submitted to the UNFCCC as the UK's second Long-Term Low Greenhouse Gas Emission Development Strategy under the Paris Agreement.

The 26<sup>th</sup> UN **Climate Change Conference of the Parties (COP26)** focused on accelerating action towards achieving the goals of the Paris Agreement and the UNFCCC. The principal outcome of COP26 was the Glasgow Climate Pact, a series of decisions and resolutions that build on the Paris Agreement and establish what needs to be done to accelerate action on climate change within the current decade. Whilst every Party at COP26 – representing almost 200 countries – agreed to the Glasgow Climate Pact, the pact itself is not legally binding.

The **27<sup>th</sup> climate change COP (COP27)** key aim was to ensure full implementation of the Paris Agreement and to put negotiations into concrete actions. After a period of intense negotiations, countries reached agreement on establishing a fund to compensate vulnerable nations for 'loss and damage' from climate change induced disasters.

The Intergovernmental Panel on Climate Change (IPCC) plays a vital role in informing international climate change policy and decision-making. The IPCC conducts scientific assessments and produces reports on the state of climate change and its impacts. Policymakers rely on these reports to access the latest scientific knowledge and inform their actions. The final instalment of the IPCC Sixth Assessment Report (AR6) was published on 20<sup>th</sup> March 2023. The AR6 Synthesis Report concludes that despite progress in climate mitigation policies and legislation since 2014, it is highly likely that global warming will exceed 1.5°C during the 21<sup>st</sup> century. To remain within the 1.5°C limit, emissions must be reduced by at least 43% by 2030 compared to 2019 levels, and at least 60% by 2035. These targets emphasise the urgent need for significant emission reductions to effectively address climate change.



The Project supports the Climate Change (Emissions Reduction Targets (Scotland) Act 2019 and the Climate Change Act 2008 (2050 Target Amendment) Order 2019 through providing a low carbon energy source that can help reduce emissions and contribute to carbon targets, as discussed further in section 6.4.

#### 6.4 Scotland Climate Change & Renewable Energy Policy

Scotland has the power to influence energy developments through its devolved powers, including transport and planning policy, in addition to publishing energy strategies and roadmaps that provide important market and policy signals.

To meet its emissions reduction targets, the Scottish Government publishes statutory strategy delivery plans every five years. The 2018 Climate Change Plan was updated in December 2020 in response to the global climate emergency. In direct response to the International Paris Agreement, the Climate Change (Scotland) Act 2009 was amended by the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019, increasing the ambition of Scotland's emissions reduction targets to net zero by 2045.

The **Scottish Energy Strategy (SES)**, released in December 2017, sets a goal for 50% of Scotland's energy consumption in heat, transport, and electricity to be supplied by renewable sources by 2030. This builds upon the earlier target of 30% set in 2009.

In accordance with the 2017 Strategy, Scotland's Energy Strategy Position Statement was published in 2021 (Scottish Government, 2021). The Position Statement notes that:

"Since the publication of the 2017 strategy, the Scottish Government has committed to achieving our ambitious targets of net zero greenhouse gas emissions by 2045 and a 75% reduction by 2030. In light of the economic crisis created by the COVID-19 pandemic, the Scottish Government is now striving to deliver a green economic recovery aligned to those net zero ambitions."

The Position Statement sets out the programme of work required across the energy sector to support the energy targets and outlines key energy priorities for Scotland, including priorities for renewable energy. It also states that the 2017 Strategy will remain in place until an Energy Strategy refresh is adopted by the Scottish Ministers.

# The Project strongly aligns with the ambitions of the SES as a renewable project that can help deliver a green economic recovery aligned to net zero ambitions.

In January 2023, the Scottish Government published its draft Energy Strategy and Just Transition Plan, inviting consultation until May 2023. The Plan aims to "*deliver a fair and secure zero carbon energy system for Scotland*" (Scottish Government, 2023). Key themes in relation to new energy infrastructure required for Scotland are apparent in the draft which emphasises the need for Scotland to ensure systems are put in place to allow for net zero emissions by 2045 and provides a road map of how this can be accomplished. The draft heavily references a need to reduce reliance on fossil fuel consumption, in particular those produced from the oil and gas sector. The draft sets out key ambitions for Scotland including producing more than 20 GW of additional renewable electricity both on and offshore by 2030 and energy security through the development of Scotland's own resources and additional energy storage.

# The Project strongly supports the net zero ambitions of the draft Energy Strategy and Just Transition Plan as a renewable project that can help deliver around 2 GW of additional renewable energy through the development of Scotland's own resources.

Current economic development strategies, policies and statements produced by the Scottish Government that are most relevant to the development of the renewable energy sector in Scotland include the following:



**Energy Strategy (2017)** emphasises the development of the renewable energy sector to generate socio-economic benefits for Scotland. The Strategy includes a specific commitment to growing and supporting the further development of the offshore wind sector in Scotland, emphasising both the development of a stronger industrial supply chain and a highly skilled and competitive workforce;

**Climate Change Plan Update (2020)** further emphasises the important role that Ministers place on offshore renewable energy as a source of high-quality green jobs, with additional emphasis on the role that the sector can play in harnessing the industrial and workforce skills already available in the declining offshore oil and gas sector;

**Climate Emergency Skills Action Plan (2020)** identifies renewable energy as being key to the future creation of additional high quality, green jobs for Scotland and sets out priorities for public policy actions and investment to assist people to access these employment opportunities;

Sectoral Marine Plan for Offshore Wind Energy in Scotland (2020) provides a strategic spatial framework for the development of the offshore renewables sector in Scotland. They also set out indicative targets and ambitions for the development of the renewables sector;

The Scotland Offshore Wind Policy Statement (2021) provided an update and reinforcement of the objectives set out in the 2017 Energy Strategy. The Statement indicates that there is frustration amongst the Scottish Government and key stakeholders that the renewable energy supply chain in Scotland has been missing out on offshore wind manufacturing contracts and identifies several actions being taken by the Scottish Government and industry to help address this issue; and

Scotland's National Strategy for Economic Transformation (March 2022) emphasises the role that the offshore renewables sector is expected to play in helping drive future prosperity and sustainability for the Scottish economy. The strategy highlights in particular the potential for substantial supply chain benefits and opportunities for new high-value jobs, as well as replacing jobs expected to be lost in the fossil fuels sector. The strategy also highlights the role that the offshore renewables sector is expected to play in supporting the objectives of the Regional Economic Partnership operating in the Highland and Islands region.

In support of the above plans and policies, a Supply Chain Development Statement (SCDS) was prepared for the Project and submitted to CES in July 2021 as part of the ScotWind Leasing process. The SCDS sets out the commitment by OWPL to a £105 million investment in developing supply chain capacity within the UK. This includes over £9 million expected to be invested in upgrading ports and harbours in Caithness and Orkney. OWPL has set a target of 40% Project content sourced from Scotland, with a further 20% elsewhere in the UK.

#### 6.5 UK Climate Change & Energy Legislation and Policy

The **Climate Change Act 2008** forms the cornerstone of the UK's approach to combatting and responding to climate change. This legislation legally binds the UK government to reduce GHG emissions to at least 100% of 1990 levels (net zero) by 2050. This commitment encompasses emissions from the devolved administrations of Scotland, Wales, and Northern Ireland, which presently contribute approximately 20% of the UK's overall emissions.



Under the Climate Change Act 2008, governments are required to establish binding carbon budgets. These budgets, proposed by the Climate Change Committee (CCC) established by the Act, provide a clear framework for emissions reduction. To date, six carbon budgets have been set, covering the period from 2008 to 2037 (

Table 6-1). The Climate Change Committee Sixth Carbon Budget report recommends: "*Expansion of low-carbon energy supplies*. *UK electricity production is zero carbon by 2035*. Offshore wind becomes the backbone of the whole UK energy system, growing from the Prime Minister's promised 40GW in 2030 to 100GW or more by 2050" (CCC, 2020).

Table 6-1 Carbon budgets recommended by the CCC and accepted by the UK Government

CARBON BUDGET	CARBON BUDGET LEVEL (EMISSIONS OVER 5 YEARS, MTCO2E)	% REDUCTION BELOW BASE YEAR
1 <sup>st</sup> (2008-12)	3,018	23%
2 <sup>nd</sup> (2013-17)	2,782	29%
3 <sup>rd</sup> (2018-22)	2,544	35%
4 <sup>th</sup> (2023-27)	1,950	50%
5 <sup>th</sup> (2028-32)	1,765	57%
6 <sup>th</sup> (2033-37)	965	78%

The Act mandates the production of a UK Climate Change Risk Assessment (CCRA) by the UK Government every five years. The CCRA evaluates current and future risks and opportunities associated with climate change in the UK. In response to the CCRA, the UK government is also obligated to develop a National Adaptation Programme (NAP), specific to England, while the devolved administrations create their own programmes and policies in alignment with the Act.

# The Project will contribute to emissions reductions targets and the 5<sup>th</sup> and 6<sup>th</sup> Carbon Budget during wind farm operation, the earliest date from which could be 2028.

The **Energy Act 2013** outlines the UK's commitment to a low carbon energy industry and investments in low carbon electricity generation. The Act establishes the legislative framework to enable secure, affordable, low-carbon energy. It includes provisions for the following:

- The Secretary of State is granted authority to set a 2030 decarbonisation target range for electricity in secondary legislation; and
- Electricity Market Reform, which consists of measures aimed at attracting the £110 bn investment needed for the low-carbon transition. It introduces Contracts for Difference (CfD), which are long-term contracts that are designed to encourage investment in low-carbon electricity generation.

The **UK Energy White Paper** Powering our Net Zero Future (2020) follows on from the Ten Point Plan, providing further clarity on the Prime Minister's measure to Transform energy, support a green recovery and create a fair deal for consumers. With a commitment over the next decade to cut emissions, while supporting up to 220,000 jobs.



The **Offshore Wind Sector Deal (2020)** seeks to ensure the UK can significantly increase renewable generation while reducing carbon emissions. It also aims to ensure further investment in the supply chain with the aim of increasing UK content of UK offshore windfarms to 60% by 2030, providing greater certainty over CfD, and creating jobs in coastal communities, where economic regeneration is needed.

The **British Energy Security Strategy (2022)** outlines how the UK Government plans to bring clean, affordable, secure power to future generations. Specifically, in relation to renewables it states "Accelerating the transition from fossil fuels depends critically on how quickly we can roll out new renewables. Our 'Ten point plan for a green industrial revolution' has already put the UK at the forefront of many renewable technologies, delivering £40 billion of private investment in under two years. By the end of 2023 we are set to increase our capacity by a further 15%. But now we must go further and faster, building on our global leadership in offshore wind".

The **Offshore Wind Investment Roadmap Policy** (2023) summarises the UK government's offshore wind policies and investment opportunities available and highlights the significant opportunities for private sector investment offered by the established offshore wind sector in the UK, ranging from site development to construction, and across a diverse supply chain. It states, "*The UK's leading ambitions to reach up to 50 GW of offshore wind deployment by 2030, including up to 5 GW of floating offshore wind, are supported by a strong pipeline of investment-ready projects*".

The 2 GW Project which will be operational before 2030 aligns with key Net Zero policy including the British Energy Security Strategy, which advocates for deployment for up to 50 GW by 2030 and the Offshore Wind Investment Policy Roadmap which advocates for faster deployment of offshore wind energy and global leadership.

#### 6.6 Key Zero Carbon Targets

Table 6-2 outlines the key emissions targets in the UK and Scotland. If consented, the Project will contribute to decarbonising the UK's electricity generation and emissions reductions targets for the UK and Scotland between 2030 and 2050.

YEAR	GOVERNMENT	TARGET DESCRIPTION
2030	UK	Cut emissions by 68% compared with 1990 levels.
2030	Scotland	Interim target of a 75% reduction in emissions by 2030, relative to 1990 levels of carbon dioxide, methane and nitrous oxide and 1995 levels of hydrofluorocarbons, perfluorocarbons, sulphur hexafluoride and nitrogen trifluoride.
2035	UK	Decarbonise the UK's electricity generation fully.
2040	Scotland	Interim target of 90% reduction in emissions by 2040, relative to the 1990/1995 baseline
2045	Scotland	Net zero target.
2050	UK	Net zero target.

Table 6-2 Key zero carbon targets in the UK and Scotland



#### 6.7 Conclusions

The Project, as a large scale renewable low carbon energy source, aligns to UK and Scottish emissions reductions targets and targets for Net Zero between 2030 and 2050. If consented, the Project will contribute around 2 GW of low carbon energy to the delivery of UK and Scottish targets whilst also contributing to domestic security of supply.

In terms of contribution to Scotland's economic strategy the Project demonstrates strong alignment. The SCDS developed by the Project sets out the commitment by OWPL to a £105 million investment in developing supply chain capacity within the UK. This includes over £9 million expected to be invested in upgrading ports and harbours in Caithness and Orkney. OWPL has set a target of 40% Project content sourced from Scotland, with a further 20% elsewhere in the UK.



# 7. OTHER RELEVANT POLICY CONSIDERATIONS

#### 7.1 Introduction

This section sets out additional policy considerations that bear significance in the evaluation and determination of the Project. While these policy aspects do not directly fall under the umbrella of renewables or climate change policy, they hold relevance in informing the assessment process.

#### 7.2 National Planning Framework 4

The National Planning Framework (NPF) is a long-term plan for Scotland that identifies development and infrastructure needs. The fourth iteration, NPF4, guides spatial development until 2045, outlining national planning policies, designating national developments, and emphasising regional spatial priorities. Adopted by the Scottish Ministers in February 2023, NPF4 replaces NPF3 and incorporates updated Scottish Planning Policy, consolidating spatial and thematic planning policies.

Although NPF4 does not cover marine areas, it recognises the role of onshore development in facilitating offshore renewable energy projects. Part 2 of NPF4 focuses on National Planning Policy, with several policies relevant to the onshore elements of the Project. Notably, Policy 1 highlights the urgency of addressing the global climate crisis, ensuring it remains a priority in all plans and decisions. Policy 11 specifically aims to "encourage, promote and facilitate all forms of renewable energy development onshore and offshore". The policy supports opportunities for renewable energy development, encompassing onshore generation, storage, transmission, and distribution infrastructure.

Renewable energy is also a main theme within Annex B – National Developments Statements of Need, which describes the developments to be considered as national developments for consent handling purposes. Key national developments include:

- 1. Energy Innovation Development on the Islands which supports proposed developments in the Outer Hebrides, Shetland and Orkney Island groups, for renewable energy generation, renewable hydrogen production, infrastructure and shipping, and associated opportunities in the supply chain for fabrication, research and development; and
- 3. Strategic Renewable Electricity Generation and Transmission Infrastructure which supports renewable electricity generation, repowering, and expansion of the electricity grid.

The Spatial Planning Priorities (Annex C) for the North and the North and West Coast and Islands areas state the importance of maximising the benefits of renewable energy and the internationally significant role assets in the region will play, noting that more onshore and offshore renewable energy will be needed to significantly reduce GHG emissions.

The Project aligns with NPF4 policies which describe the urgency of addressing the climate crisis and encourage all forms of renewable energy development onshore and offshore through provision of a large scale, low carbon offshore wind farm. The Project is located off the North coast of Scotland and 45% of the OAA is located in the Scottish Island Marine Area; the need for offshore renewable energy and therefore this Project is supported by Spatial Planning Priorities for Scottish Islands, which note the requirement for more offshore renewable energy.

The Project aims to maximise opportunities for the North coast and Orkney. This includes a commitment in the Project SCDS to over £9 million expected investment in upgrading ports and harbours in Caithness and Orkney.



#### 7.3 National Policy Statements

National Policy Statements (NPS) are produced by Government. They set out the Government's policy for the delivery of Nationally Significant Infrastructure Projects (NSIPs) for particular sectors within England and Wales and provide the legal framework for planning decisions. They were first designated and published in 2011 (DESNZ, 2011).

The Project does not comprise a NSIP, on the basis that it is located in Scottish Waters, and therefore does not require development consent under the Planning Act 2008. However, EN-1 (2011) notes that although the NPSs are of direct relevance to the development of NSIPs in England energy policy is generally a matter reserved to UK Ministers and *"may be a relevant consideration in planning decisions in Wales and Scotland"* (paragraph 1.4.2 of EN-1 and 2.4.5 of EN-3).

There are 12 NPSs setting out government policy on different types of national infrastructure including energy, transport, water, wastewater and waste. Of the six NPSs for energy, three are relevant to renewable energy projects (Planning Inspectorate, 2012):

- The Overarching NPS for Energy (EN-1);
- NPS for Renewable Energy Infrastructure (EN-3); and
- NPS for Electricity Networks Infrastructure (EN-5).

Revised drafts of NPS EN-1 and NPS-EN3 have recently been consulted on and within the revised drafts they state that the Government has concluded that there is a Critical National Priority (CNP) for the provision of nationally significant new offshore wind infrastructure (and supporting onshore and offshore network infrastructure) (para 3.3.59 of NPS EN-1 and para 3.8.12 of NPS EN-3). NPS EN-1 goes on to say at 3.3.60 "As set out in EN-3, subject to any legal requirements, the urgent need for CNP Infrastructure to achieving our energy objectives, together with the national security, economic, commercial, and net zero benefits, will in general outweigh any other residual impacts not capable of being addressed by application of the mitigation hierarchy. Government strongly supports the delivery of CNP Infrastructure, and it should be progressed as quickly as possible."

The Project aligns with the draft NPS EN-1 and NPS-EN3 policies through provision of nationally significant offshore wind infrastructure in the form of a 2 GW offshore wind development.

#### 7.4 Statutory Development Plans (onshore)

The statutory Development Plans may not have direct authority in determining a Section 36 application or applications for Marine Licences. However, they hold some relevance due to potential onshore impacts of the Project. These impacts may include landscape and visual effects, traffic, and transport during construction, impacts on archaeology and cultural heritage, natural heritage and environment, and socio-economic effects on tourism and recreation.

The relevant Development Plans are:

- Highland-wide Local Development Plan (HwLDP) (2016);
- Caithness and Sutherland LDP (CaSPlan) (2018); and
- Orkney LDP (2017 2022).



The HwLDP outlines the planning policy for THC area and contains general policies for the THC area that planning applications are assessed against. The vision of the HwLDP involves enabling sustainable Highland communities, safeguarding the environment, creating a competitive, sustainable and adaptable Highland economy, achieving a healthier Highlands and providing better and fairer opportunities. Within Chapter 6 - Caithness and Sutherland, THC outline a spatial strategy and vision for the Caithness and Sutherland area. The specific aims for the region include being a centre of excellence for energy and engineering and becoming an international centre of excellence for marine renewables by 2030.

The CaSPlan builds upon the HwLDP broad vision to provide a guide for future development in Highland. The CaSPlan focuses on growing communities, employment, connectivity and transport and environment and heritage. Maximising opportunities from offshore renewables is a key focus in relation to employment and climate change (environment and heritage). The plan notes that investment in renewable energy generation in North Highland is not only helping to meet THC and national climate change targets but it has also delivered economic benefits for the area. It also states that THC is committed to maximising renewable energy contributions.

The 2017 Orkney LDP sets out the vision and spatial strategy for the next ten to twenty years. Policy 7 Energy in the Orkney LDP notes that renewable and low carbon technologies are supported throughout the area and identifies core policies relating to developments of this nature. The Orkney LDP seeks to ensure that Orkney's full potential for electricity and heat from renewable sources is achieved.

A separate onshore Planning Statement has been prepared for the onshore Project, which is scheduled to be submitted in October 2023.

#### 7.5 Non Statutory Guidance

The Pentland Firth and Orkney Waters Marine Spatial Plan 2016 (PFOW MSP) put in place a planning policy framework in advance of statutory regional marine planning to support sustainable decision making on marine use and management.

THC and OIC have adopted the PFOW MSP as non-statutory planning guidance. MD-LOT will also use the plan when considering Marine Licence and Section 36 applications in the Pentland Firth and Orkney waters area.



# 8. POLICY ASSESSMENT

#### 8.1 Introduction

In accordance with 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, collectively known as the EIA Regulations, an EIA is specifically required for the offshore Project. The offshore EIA Report contains specific information on the offshore Project's potential environmental effects as identified through the EIA. It presents such information for the offshore Project, describing its potential environmental effects during the pre-construction, construction, operation and maintenance, and decommissioning stages.

This section provides a summary of the findings of the EIA, RIAA and stakeholder consultation and engagement. These findings have been categorised and assessed overall against the relevant statutory and policy considerations at the end of each category (Table 8-1).

CATEGORY	EIA CHAPTER OR SUPPORTING STUDY
Physical Environment	Offshore EIA Report, chapter 8: Marine physical and coastal processes
	Offshore EIA Report, chapter 9: Water and sediment quality
	Supporting Study (SS)1: Climate and carbon assessment
Biological Environment	Offshore EIA Report, chapter 10: Benthic, intertidal and subtidal ecology
	Offshore EIA Report, chapter 11: Fish and shellfish ecology
	Offshore EIA Report, chapter 12: Marine mammals and megafauna
	Offshore EIA Report, chapter 13: Offshore and intertidal ornithology
	RIAA
Human Environment	Offshore EIA Report, chapter 14: Commercial fisheries
	Offshore EIA Report, chapter 15: Shipping and navigation
	Offshore EIA Report, chapter 16: Marine archaeology and cultural heritage
	Offshore EIA Report, chapter 17: Military and aviation
	Offshore EIA Report, chapter 18: Seascape, landscape and visual assessment
	Offshore EIA Report, chapter 19: Socio-economics
	Offshore EIA Report, chapter 20: Other sea users
	SS2: Major accidents and disasters

Table 8-1 Category headings and related EIA chapter or Study



The Project, offshore EIA Report and RIAA have been developed and produced in accordance with NMP Renewable Policies 1, 4, 5, 8, 10 and GEN policy 21, as highlighted in Section 6. The other remaining policies are met and highlighted in the following sections.

#### 8.2 Stakeholder Engagement

Early and ongoing engagement with stakeholders is an important part of EIA best practice and the development of any project. It allows the integration of public and stakeholder concerns, opinions and data to inform decisions about the Project. The Project is committed to significantly exceeding its statutory obligations as it sees to build effective and long-term working relationships with the Project's stakeholders, including local communities. To this end they pro-actively engaged with all key stakeholders and the public, and as such, have undertaken a significant volume of engagement since the early stages of the Project which has continued throughout the EIA.

Seeking to build long-term and effective working relationships with all of the stakeholders, the Project fully recognises the need for openness and transparency during engagement. They have been consulted through a wide variety of traditional and innovative stakeholder activities, including virtual exhibitions, live webinars, mobile exhibitions, village hall events, an information session at a festival, presentations at conferences and supply chain seminars. Ahead of the applications, public and community engagement has been achieved through public consultation events (including the Pre-Application Consultation (PAC) events), Project presence at informal public events and through the Community Panels.

In order to gather views and feedback on the Project in a systematic way, a questionnaire was designed. Attendees at all events have been encouraged to fill out a complete the community questionnaire, which was available to participants who attended public consultation events, on QR codes located on the leaflets, on the website, and hard copies could be sent and returned by post, if requested. The community questionnaire was also promoted via posters, press activity, and was circulated through the Community Panels and Technical Working Groups. Further questionnaires were launched during the first PAC event in May 2023: one focusing on the onshore infrastructure associated with the Project and a second seeking ideas around the proposed West of Orkney Windfarm community benefit fund.

In addition to the PAC events, OWPL organised additional public consultation events and were present at informal public events through Caithness, Sutherland and Orkney. Various other methods of communication were used to engage with the wider community and to advertise upcoming events, such as leaflet drops, newspaper adverts, newsletters, posters in local venues, press releases, and radio segments.

Given the above, the Project aligns with the Marine Licensing (Pre-application Consultation) (Scotland) Regulations 2013 and RENEWABLES 8 and GEN 18 Engagement marine policies which describe that early and effective engagement should be undertaken with the general public and all interested stakeholders to facilitate planning and consenting processes.



#### 8.3 Embedded Mitigation

Embedded mitigation measures are identified and adopted as part of the evolution of the design for the offshore Project, which reduces the potential for impacts to the environment. They are assumed to form part of the design of the offshore Project prior to any EIA. The below considers embedded mitigation measures of relevance to this planning statement which reflect how potential offshore Project impacts were avoided or reduced through design.

A plan-led approach was applied to the ScotWind Leasing round, which identified 15 PO areas that were informed by Regional Locational Guidance and subject to the following:

- Strategic Environmental Assessment (SEA);
- Plan level HRA;
- Social and Economic Impact Assessment (SEIA);
- Sustainability Appraisal;
- Island Communities Impact Assessment; and
- Equalities Impact Assessment.

Applications from developers were required to be sited within these PO areas as identified in the Adopted SMP. OWPL were awarded an OAA from within the N1 PO (an area of 1,163 km<sup>2</sup>) to the west of Orkney. OWPL then went through a series of environmental and technical constraint studies which resulted in a reduction in the PO area to the OAA of 657 km<sup>2</sup>.

Potential impacts from the offshore Project were reduced through this redesign of the OAA on the following receptors:

**Shipping and navigation:** Analysis of Automatic Identification System (AIS) vessel data from 2015 and 2017, together with consultation with shipping organisations highlighted the importance of the direct yachting route between the west coast of Scotland and Stromness, Orkney, due to tidal restrictions in the approach to Stromness through Hoy Sound. To retain a direct yachting route, the southeastern corner of the N1 PO was removed from consideration for the OAA.

Seascape, landscape and visual impact: Pre-application advice from THC highlighted the need to maintain key sightlines between key landscape / seascape designations on Sutherland and Orkney. The OAA selected mitigates this concern as detailed in the offshore EIA Report chapter 18: Seascape, landscape and visual assessment.

Scottish Natural Heritage (SNH) guidance 'Assessment of Potential Seascape, Landscape and Visual Impacts and Provision of Design Guidance' (2020) was used to inform the initial siting and design within the N1 PO. This guidance has been taken into account as part of the site selection refinement.

**Military and aviation:** The Yankee Helicopter Main Route (HMR) intersects the eastern boundary of the PO. The OAA was selected to avoid any overlap with the HMR and in line with Civil Aviation Authority (CAA) guidelines, allowed for a buffer of 4 km (2 nm) either side of the HMR. In addition, consultation with Space Hub Sutherland highlighted a potential Launch Exclusion Zone (LEZ), not identified in the SMP which could overlap the western extents of the N1 PO.

**Commercial fisheries:** Existing fishing data indicated the need to avoid development activities east of the 4-degree line.

Further detail on embedded mitigation measures is described in the offshore EIA Report chapter 4: Site selection and alternatives and offshore EIA report chapter 5: Project description.



#### 8.4 Residual and Cumulative Environmental Effects

The EIA Regulations require that the EIA should consider the likely significant environmental impacts of the offshore Project. The decision process that defines whether or not a project is likely to significantly impact the environment is the core principle of the EIA process. The regulations themselves do not provide a specific definition of "significance". However, the methods used for identifying and assessing impacts should be transparent and verifiable. The method used to define significance of environmental impacts for this offshore Project are detailed in the offshore EIA Report chapter 7: EIA methodology.

Where the impact assessment identifies that an aspect of the offshore Project is likely to give rise to significant environmental effects, secondary mitigation measures, above and beyond any embedded mitigation will be incorporated into the assessment process to avoid impacts or reduce them to acceptable levels, where practicable. At this point, the impact is reassessed, considering all mitigations to determine the residual effect. This planning statement presents a summary of the offshore Project residual effects in relation to relevant statutory and policy considerations.

As well as considering impacts from the offshore Project alone, the EIA Regulations require a consideration of potential impacts that could occur cumulatively with other relevant projects, plans and activities, that could result in a cumulative effect. This planning statement presents a summary of the offshore Project cumulative effects in relation to relevant statutory and policy considerations. The consideration of cumulative impacts is in line with GEN 21 Cumulative impacts of the NMP.

It should be noted that the following section presents a high-level summary of residual effects, and more detail is contained in the offshore EIA Report topic specific chapters and in the Non-Technical Summary for the offshore Project.

#### 8.5 The Need to Protect the Physical Environment

This section summarises the residual effects on the physical environment identified within the offshore EIA Report, as shown in Table 8-2. These effects are assessed within the context of legislative and policy requirements as identified within Section 6. A summary of compliance with relevant policies is provided following each table.

Table 8-2 Physical Environment Residual Effects

RECEPTOR	DESCRIPTION OF EFFECTS	RESIDUAL SIGNIFICANT EFFECT?	RESIDUAL SIGNIFICANT CUMULATIVE EFFECT?	RELEVANT POLICY
Marine Physical and Coastal Processes	The presence of the Project has the potential to affect the physical environment; this encompasses the marine physical and coastal processes. The potential processes which may be affected includes tidal currents, wave climate and the sediment transport regime. The physical processes of the offshore Project were numerically modelled using datasets collected from	No	No	GEN 8 CABLES 2 CABLES 4



RECEPTOR	DESCRIPTION OF EFFECTS	RESIDUAL SIGNIFICANT EFFECT?	RESIDUAL SIGNIFICANT CUMULATIVE EFFECT?	RELEVANT POLICY
	a series of site-specific bathymetric surveys, including grab sampling and a detailed desktop review of existing studies and datasets.			
	Significance of effect: With mitigation, best practice and monitoring, no significant effects are predicted as a result of construction, operation and maintenance or decommissioning. Cumulative: No significant effects are predicted. Transboundary: No transboundary effects are predicted.			
Water and Sediment Quality	The presence of the Project has the potential to affect the water quality. Impacts to the water quality have the potential to effect ecological and human receptors, including the release of contaminated sediment, impacts to water quality status, risk from marine Invasive Non-Native Species (INNS), and increases in suspended sediment.	No	No	GEN 10 GEN 12 CABLES 1 CABLES 2 CABLES 4
	Significance of Effect: With mitigation, best practice and monitoring, no significant effects are predicted as a result of construction, operation and maintenance or decommissioning. Cumulative: No significant cumulative effects are predicted. Transboundary: No transboundary effects are predicted.			
Climate and Carbon Assessment	The carbon savings and climate change benefits that would result from the Project are summarised at section 9.2 below in relation to Project benefits. The Project would result in a significant beneficial effect on climate. The detailed assessment is set out in SS1: Climate and Carbon Assessment.	Yes	N/A	GEN 5

The EIA on physical environment receptors has concluded that no significant residual effects are anticipated to occur. As such this demonstrates that the Project meets the requirements of the NMP and specifically policies **GEN 5 (Climate** 



change), GEN 8 (Coastal process and flooding), GEN 10 (Invasive non-native species), GEN 12 (Water quality and resource), GEN 21 (Cumulative impacts), CABLES 1 and CABLES 2 of the NMP. In particular, the Project EIA mitigation put forward should not result in a deterioration of the quality of waters to which the WFD, MSFD or other related Directives apply and will not have unacceptable adverse impact on coastal processes or contribute to coastal flooding.

#### 8.6 The Need to Protect the Biological Environment

This section summarises the residual effects on the biological environment identified within the offshore EIA Report in Table 8-3 to Table 8-6. These effects are assessed within the context of legislative and policy requirements as identified within Section 6. A summary of compliance with relevant policies is provided following each table.

Table 8-3 Benthic Intertidal and Subtidal Ecology Effects

RECEPTOR	DESCRIPTION OF EFFECTS	RESIDUAL SIGNIFICANT EFFECT?	RESIDUAL SIGNIFICANT CUMULATIVE EFFECT?	RELEVANT POLICY
	Seabed preparation, construction, and Operation & Maintenance (O&M) stages will temporarily disturb seabed habitats and communities and result in temporary habitat loss / disturbance.	No	No	GEN 9 GEN 10
All benthic receptors - Stony and bedrock reef, Sands and	Clogging of feeding and respiratory structures of benthic invertebrates; re-burrowing and alteration of habitat; reduced light availability; increased water turbidity.	No	No	GEN 9 GEN 10
gravels, Ocean quahog, Kelp and seaweed communities	Physical change to another seabed type; smothering.	No	No	GEN 9 GEN 10
	The introduction of hard infrastructure may alter soft sediment habitat areas which can attract new species with a preference for hard substrates, increasing the habitat complexity biodiversity of the area. The installed infrastructure will represent a long-term / permanent introduction of additional hard	No	No	GEN 9 GEN 10



DESCRIPTION OF EFFECTS	RESIDUAL	RESIDUAL	RELEVANT
	CICALITICANIT	CICALITICANIT	DOLLOV
	SIGNIFICANT	SIGNIFICANT	POLICY
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		EFFECT?	
	DESCRIPTION OF EFFECTS	DESCRIPTION OF EFFECTS RESIDUAL SIGNIFICANT EFFECT?	DESCRIPTION OF EFFECTS SIGNIFICANT EFFECT? RESIDUAL SIGNIFICANT CUMULATIVE EFFECT?

substrate and the loss of the natural sediment beneath.

There is potential for marine INNS to be introduced or transferred by construction vessels, particularly for vessels working within an international market. This can happen through biofouling (e.g., attachment of organisms to boat hulls) or discharge of ballast water. Another potential pathway for the INNS is the towing of infrastructure to the offshore Project area introducing or transferring marine INNS.	No	No	GEN 10
Electromagnetic Fields (EMF) have the potential to alter the behaviour of marine organisms that can detect electric or magnetic components of the fields. There is the potential that the offshore cables have the potential to emit heat energy into the surrounding sediment.			GEN 9
Significance of effect: With mitigation, best practice and monitoring, no significant effects are predicted for all benthic receptors during construction, O&M or decommissioning stages. Cumulative effect: No significant effects are predicted. Transboundary effect: No transboundary effects are predicted.	No	No	



Table 8-4 Fish and shellfish Effects

RECEPTOR	DESCRIPTION OF EFFECTS	RESIDUAL SIGNIFICANT EFFECT?	RESIDUAL SIGNIFICANT CUMULATIVE EFFECT?	RELEVANT POLICY
Sandeel, herring, shellfish, flapper skate, spotted ray, thornback ray, spurdog, blue skate	Temporary habitat disturbance or loss may affect individuals directly through injury or physical harm and also indirectly through the disturbance or loss of nursery and spawning habitats.	No	No	FISHERIES 1 FISHERIES 2 FISHERIES 3
Sandeel, group 3 <sup>2</sup> & 4 <sup>3</sup> marine finfish, eggs and larvae, shellfish, Atlantic salmon, sea trout, European eel	An increase in noise can have mortality, physical injury or behavioural effects (e.g., displacement or avoidance), which may impact acoustic communication in fish, reproductive success, foraging, predator avoidance and navigation.	No	No	FISHERIES 1 FISHERIES 2 FISHERIES 3 GEN 13
Atlantic salmon, sea trout, European eel, flapper skate	Changes in the availability or distribution of these species may indirectly affect those species that feed on them.	No	No	FISHERIES 1 FISHERIES 2 FISHERIES 3 WILD FISH 1
Sandeel, herring, shellfish, flapper skate, spotted ray, thornback ray, spurdog, blue skate	Long-term habitat loss may affect species dependent on the seabed during their lifecycle, causing loss of spawning or burrowing habitat.	No	No	FISHERIES 1 FISHERIES 2 FISHERIES 3
Elasmobranchs, diadromous fish	The introduction of anthropogenic EMF into the marine environment has the potential to alter behaviour, such as migration and foraging, potentially resulting in increased energy expenditure.	No	No	FISHERIES 1 FISHERIES 2 FISHERIES 3 WILD FISH 1
Diadromous fish	Subsea infrastructure can act as artificial reefs, which can attract new species. Fish aggregations may change the abundance of predators	No	No	FISHERIES 1 FISHERIES 2 FISHERIES 3

<sup>&</sup>lt;sup>2</sup>*Fishes with swim bladders that are connected to the ear but not intimately connected. These species are sensitive to both particle motion and sound pressure extending up to around 500 Hertz (Hz).* 

<sup>&</sup>lt;sup>3</sup> Herring species have structures mechanically linking the swim bladder to their ear. Therefore, they are sensitive primarily to sound pressure, but they can also detect particle motion. Their frequency range is much wider, extending to several kHz and they generally show higher sensitivity to sound pressure than the other groups.



RECEPTOR	DESCRIPTION OF EFFECTS	RESIDUAL SIGNIFICANT EFFECT?	RESIDUAL SIGNIFICANT CUMULATIVE EFFECT?	RELEVANT POLICY
	which could increase predation of diadromous fish as they migrate through the offshore Project area.			WILD FISH 1
	There is the potential for any impact that could result in avoidance behaviours by diadromous fish to act as a barrier effect to migration.			
	<ul> <li>Significance of effect: With mitigation, best practice and monitoring, no significant effects on fish and shellfish are predicted for construction, O&amp;M or decommissioning stages.</li> <li>Cumulative effect: No significant effects on fish and shellfish are predicted.</li> <li>Transboundary effect: Transboundary effects are predicted, as diadromous fish are highly mobile and may extend beyond Scottish or UK waters. Potential impacts include habitat loss and disturbance, underwater noise, potential fish or predator aggregations, EMF, barrier effects to diadromous fish, and indirect effects related to changes in availability or distribution of prey species.</li> </ul>			

#### Table 8-5 Marine Mammals and Megafauna Effects

RECEPTOR	DESCRIPTION EFFECTS	OF	RESIDUAL SIGNIFICANT EFFECT?	RESIDUAL SIGNIFICANT CUMULATIVE EFFECT?	RELEVANT POLICY
Harbour porpoise, white- beaked dolphin, common dolphin, Risso's dolphin, white-sided dolphin, minke whale, killer whale, humpback whale, harbour seal, grey seal	Pile installation has potential to gene underwater noise wh could result in injury disturbance to ma mammals during construction stage.	the rate hich or rine the	No	No	GEN 9 GEN 13


CRIPTION OF CTS	RESIDUAL SIGNIFICANT EFFECT?	RESIDUAL SIGNIFICANT CUMULATIVE EFFECT?	RELEVANT POLICY
sound pressure levels luced by some ohysical survey pment has the ntial to cause injury disturbance to marine mals. The underwater osions associated with cploded Ordnance 0) clearance generate broadband acoustic e of very high peak sure, which can result iditory injury (assessed as Permanent shold Shift (PTS)- it), or behavioural irbance.	No	No	GEN 9 GEN 13
physical presence of els and associated erwater noise may t in an increase in inbance to marine mals and megafauna, as through avoidance displacement as well behavioural and lisation changes. ificance of effect: With gation, best practice monitoring, no ficant effects on ne mammals and afauna are predicted ng construction, O&M decommissioning es. ulative effect: No ficant effects on	No	No	GEN 9 GEN 13
	erwater noise may t in an increase in irbance to marine mals and megafauna, as through avoidance displacement as well behavioural and lisation changes. ificance of effect: With gation, best practice monitoring, no ficant effects on ne mammals and afauna are predicted ng construction, O&M decommissioning es. pulative effect: No ficant effects on ne mammals and decommissioning	erwater noise may It in an increase in Irbance to marine mals and megafauna, as through avoidance displacement as well behavioural and lisation changes. <b>ificance of effect:</b> With gation, best practice monitoring, no ficant effects on ne mammals and afauna are predicted ng construction, O&M decommissioning es. <b>nulative effect:</b> No ficant effects on ne mammals and afauna and afauna and afauna and ficant effects on ne mammals and afauna and afau	erwater noise may It in an increase in Irbance to marine mals and megafauna, as through avoidance displacement as well behavioural and lisation changes. <b>ificance of effect:</b> With gation, best practice monitoring, no ficant effects on ne mammals and afauna are predicted ng construction, O&M decommissioning es. <b>nulative effect:</b> No ficant effects on ne mammals and afauna are predicted ng construction, O&M decommissioning es. <b>nulative effect:</b> No ficant effects on ne mammals and afauna are predicted



RECEPTOR	DESCRIPTION EFFECTS	OF	RESIDUAL SIGNIFICANT EFFECT?	RESIDUAL SIGNIFICANT CUMULATIVE EFFECT?	RELEVANT POLICY
	Transboundary effect: transboundary effects predicted.	No are			

Table 8-6 Offshore and Intertidal Ornithology Effects

RECEPTOR	DESCRIPTION OF EFFECTS	RESIDUAL SIGNIFICANT EFFECT?	RESIDUAL SIGNIFICANT CUMULATIVE EFFECT?	RELEVANT POLICY
All Important Ornithological Features (IOF) <sup>4</sup> – breeding and non-breeding.	Construction and the presence of WTGs can cause disturbance through the presence of artificial light, as lights cause attraction which may lead to collisions. Vessel presence during construction could cause avoidance of some discrete areas by sensitive bird species.	No	No	GEN 9 GEN 13
	Barrier effects are also expected as a result of the presence of structure and the displacement of prey species, which could impact migrating birds.			
	Underwater noise, EMF, temporary habitat loss and disturbance may cause prey species to avoid the construction area and affect their physiology and behaviour. Habitat loss and disturbance may reduce suitable spawning or burrowing habitats, and suspended sediments may cause prey to avoid the area and may smother and hide immobile benthic prey. This may result in less prey being available.			

<sup>&</sup>lt;sup>4</sup> Important Ornithological Features are species recorded during surveys which are considered to be at potential risk either due to their abundance, potential sensitivity to windfarm impacts or due to biological characteristics which make them potentially susceptible (e.g., commonly fly at rotor heights).



Kittiwake, Razorbill – non-breeding eastern region Biologically Defined Minimum Population Scales (BDMPS) Great black-backed gull – breeding & non- breeding eastern	The O&M activities may have temporary and localised disturbance and displacement impacts. Birds flying through offshore windfarms may collide with turning rotor blades whilst foraging for food or commuting between breeding sites and foraging areas, assumed to result in fatality or injury to birds.	No	No	GEN 9 GEN 13
region BDMPS	Significance of effect: With best practice and monitoring, no significant effects on ornithology receptors are predicted during construction, O&M or decommissioning stages, mainly due to the Project location in relation to key bird populations. Cumulative effect: No significant effects on ornithology is predicted. Transboundary effect: No significant transboundary effects are predicted.			

The EIA on biological environment receptors has concluded that no significant residual effects are anticipated to occur with the implantation of appropriate mitigation. As such this demonstrates that the Project meets the requirements of the NMP and specifically policies GEN 9 Natural Heritage, GEN 10 Invasive non-native species, GEN 13 Noise, GEN 21 Cumulative assessment, FISHERIES 1, FISHERIES 2, and WILD FISH 1. In addition, the RIAA for the Project concludes that by applying scientific knowledge and using existing empirical data available, it is possible to conclude no adverse effects under the Habitat Regulations. Mitigation put forward will also reduce the introduction of INNS to a minimum.

### 8.7 The Need to Protect Human Environment

This section summarises the residual effects on maritime users identified within the offshore EIA Report in Table 8-7 to Table 8-13. These effects are assessed within the context of legislative and policy requirements as identified within Section 6. A summary of compliance with relevant policies is provided following each table.

Furthermore, amenity considerations relating to seascape, landscape and visual matters and potential for indirect impacts to visual receptors are considered. Finally, socio-economic effects are also considered in this section.



Table 8-7 Commercial Fisheries Effects

RECEPTOR	DESCRIPTION OF EFFECTS	RESIDUAL SIGNIFIC ANT EFFECT?	RESIDUAL SIGNIFICANT CUMULATIVE EFFECT?	RELEVANT POLICY
Creelers; Scallop dredgers Demersal trawlers (construction and decommissioning only)	Displacement of fishing activity can cause competition for space and gear conflict both within a fleet and between fleets. This will directly impact vessels being displaced from the offshore Project area and indirectly impact vessels in established fishing grounds that vessels from the offshore Project area are displaced to.	No	No	FISHERIES 1 FISHERIES 2
Creelers; Demersal trawlers; Scallop dredgers	500 m statutory safety zones will be implemented causing loss of access to fishing grounds however with embedded mitigation measures, the consequence is reduced.	No	No	FISHERIES 1 FISHERIES 2
Socio-economic effects	The loss of access to fishing grounds and displacement of fishing effort may result in socio-economic impacts, such as changes in landings, increased steaming times to alternative fishing grounds, or increased potential for gear conflict. Vessels may also have to invest in adaptations to their gear.	No	No	FISHERIES 1 FISHERIES 2
All fleets	Increased vessel traffic associated with construction works may lead to interference with fishing activity or damage to gear / loss of gear. This may have economic impacts on the fishers as it may take time to replace damaged / lost gear.	No	No	FISHERIES 1 FISHERIES 2



RECEPTOR	DESCRIPTION OF EFFECTS	RESIDUAL SIGNIFIC ANT EFFECT?	RESIDUAL SIGNIFICANT CUMULATIVE EFFECT?	RELEVANT POLICY
Other vessels (Larger vessels, including local and non-local)	Temporary loss or restricted access to fishing grounds, displacement of fishing effort and increased vessel traffic may result in a requirement for vessels to alter transit routes to fishing grounds and potentially increase steaming times to their fishing grounds.	No	No	FISHERIES 1 FISHERIES 2
Vessels operating mobile demersal gear	Structures on or near the seabed present a potential snagging risk to fishing gear which is towed along the seabed.	No	No	FISHERIES 1 FISHERIES 2
Small local vessels	The loss of access to fishing grounds and displacement of fishing effort may result in socio-economic impacts, such as changes in landings, increased steaming times to alternative fishing grounds, or increased potential for gear conflict. Vessels may also have to invest in adaptations to their gear.			FISHERIES 1 FISHERIES 2
	Significanceofeffect:Withmitigation, best practice andmonitoring,nosignificantresidual effects on commercialfisheriesreceptorsarepredicted during construction,O&Mordecommissioningstages.Cumulativeeffect:NoSignificanteffectsoncommercialfisheriesispredicted.Transboundaryeffect:Notransboundaryeffectsarepredicted.No	No	No	



#### Table 8-8 Shipping and Navigation Effects

RECEPTOR	DESCRIPTION OF EFFECTS	RESIDUAL SIGNIFIC ANT EFFECT?	RESIDUAL SIGNIFICANT CUMULATIVE EFFECT?	RELEVANT POLICY
Commercial, fishing, and recreational vessels	Construction and the structures may displace existing routes / activity, increase encounters and collision risk with third-party vessels, vessel displacement and increased journey times and distances. Deviations could lead to increased vessel densities, increasing vessel to vessel encounters and collision risk.	No	No	FISHERIES 1 FISHERIES 2 TRANSPORT 1 REC AND TOURISM 2 CABLE 1 CABLE 2
	Presence of Project vessels may increase encounters and collision risk for vessels, leading to minor contact between the vessels and resulting in minor damage and no injuries. As an unlikely worst case, one or more of the vessels could be foundered.	No	No	FISHERIES 1 FISHERIES 2 TRANSPORT 1 REC AND TOURISM 2
	Presence of structures within the construction area will lead to creation of powered, drifting and internal allision risk for vessels.	No	No	FISHERIES 1 FISHERIES 2 TRANSPORT 1 REC AND TOURISM 2
	The presence of protection over subsea cables may reduce charted water depths leading to increased risk of under keel interaction. Minor damage incurred during an allision is the most likely consequence and foundering of the vessel resulting in a Potential Loss of Life (PLL) and pollution the unlikely worst- case consequences.	No	No	FISHERIES 1 FISHERIES 2 TRANSPORT 1 REC AND TOURISM 2



RECEPTOR	DESCRIPTION OF EFFECTS	RESIDUAL SIGNIFIC ANT EFFECT?	RESIDUAL SIGNIFICANT CUMULATIVE EFFECT?	RELEVANT POLICY
	Anchors could interact with subsea cables, with an unlikely worst case of a snagging incident and/or the vessel's anchor and the cable could be damaged, and lead to risk of loss of stability of a small vessel.	No	No	
Emergency response vessels	Presence of structures, increased vessel activity and personnel numbers may reduce emergency response capability by increasing the number of incidents, increase consequences or reducing access for the responders.	No	No	TRANSPORT 1
Commercial vessels Fishing and recreational vessels (O&M only)	Adverse weather can hinder a vessel's standard route, its speed of navigation and its ability to enter the destination port. It may lead to severe roll motions, causing damage to cargo, equipment and discomfort and danger to persons on board.	No	N/a	TRANSPORT 1 TRANSPORT 3 TRANSPORT 6 FISHERIES 1 FISHERIES 2
Commercial, fishing, and recreational vessels	Vessels will have to deviate to avoid the OAA, causing increased journey times and distances due to the presence of the buoyed construction area and Project vessels. Significance of effect: With mitigation, best practice and monitoring, no significant residual effects on shipping and navigation receptors are predicted during construction, O&M or decommissioning stages. Cumulative effect: No significant effects on shipping	No	N/a	TRANSPORT 1 TRANSPORT 3 TRANSPORT 6 FISHERIES 1 FISHERIES 2



RECEPTOR	DESCRIPTION OF EFFECTS	RESIDUAL SIGNIFIC ANT EFFECT?	RESIDUAL SIGNIFICANT CUMULATIVE EFFECT?	RELEVANT POLICY
	Transboundary effect: Transboundary effects are predicted given the international nature of routeing by commercial vessels.			

Table 8-9 Archaeology and Cultural Heritage Effects

RECEPTOR	DESCRIPTION OF EFFECTS	RESIDUAL SIGNIFIC ANT EFFECT?	RESIDUAL SIGNIFICANT CUMULATIVE EFFECT?	RELEVANT POLICY
Known assets	Changes to marine processes brought about by the introduction of offshore cables, foundations and scour protection itself, any cable re- burial works, or remedial cable protection works have the potential to result in the loss of / damage to marine historic environment assets lying on the seabed.	No	N/a	GEN 6 CABLE 1 CABLE 2
Unknown assets		No	No	GEN 6
Submerged prehistoric landscapes	Any aspects of the offshore infrastructure on the seabed and Project vessels have the potential to result in the damage / loss of submerged prehistoric landscape deposits or features, if any are present. Although the likelihood of impact is low, effects are considered to be permanent.	No	No	GEN 6

RECEPTOR	DESCRIPTION OF EFFECTS	RESIDUAL SIGNIFIC ANT EFFECT?	RESIDUAL SIGNIFICANT CUMULATIVE EFFECT?	RELEVANT POLICY
Marine archaeology and cultural heritage associated viewpoints and wirelines <sup>5</sup>	The presence of WTGs offshore could have long- term effects on the setting of an onshore historic environment asset, impacting the way in which the asset is understood, appreciated and experienced, and thus the significance / importance of the historic asset. The sites and areas chosen are likely to have the most visibility of and impact from the OAA. Significance of effect: With mitigation, best practice and monitoring, no significant direct residual effects are predicted on archaeology and cultural heritage features during construction, O&M or decommissioning stages. Cumulative effect: No significant effects on archaeology and cultural heritage features are predicted. Transboundary effect: No transboundary effects are predicted.	No	No	GEN 6

Table 8-10 Military and Aviation Effects

RECEPTOR	DESCRIPTION OF EFFECTS	RESIDUAL SIGNIFICA NT EFFECT?	RESIDUAL SIGNIFICANT CUMULATIVE EFFECT?	RELEVANT POLICY
Military low flying aircraft, Search And Rescue (SAR) and helicopter operations	The installation and presence of WTGs pose physical obstructions to aviation operations carried out in the vicinity of windfarms. WTGs	No	No	DEFENCE 1

<sup>5</sup> Details of viewpoints can be found in the Offshore EIA chapter 16: Marine archaeology and cultural heritage, Section 16.6.2.4.



RECEPTOR	DESCRIPTION OF EFFECTS	RESIDUAL SIGNIFICA NT EFFECT?	RESIDUAL SIGNIFICANT CUMULATIVE EFFECT?	RELEVANT POLICY
	can be difficult to see from the air, particularly in poor meteorological conditions, leading to a potential increase in obstacle collision risk.			
	Significance of effect: With mitigation, best practice and monitoring, no significant residual effects are predicted on military and aviation receptors. Cumulative effect: No significant cumulative effects are predicted for military and aviation receptors. Transboundary effect: No transboundary effects are predicted.			
Civil airports	The nearest civil airports to the OAA are Kirkwall Airport at 31 nm (56 km) and Wick Airport at 38 nm (69 km), both of which are operated by Highland and Islands Airports Limited (HIAL). The offshore Project's WTGs are outside the safeguarding area for both airports and the sub-sea nature of the offshore export cables (located within the offshore ECC), means that the offshore Project itself will not impact on these airports' Instrument Flight Procedures (IFPs).	No	No	DEFENCE 1



#### Table 8-11 Seascape, Landscape, and Visual Impact Assessment (SLVIA) Effects

RECEPTOR	DESCRIPTION OF EFFECTS	RESIDUAL SIGNIFICANT EFFECT?	RESIDUAL SIGNIFICANT CUMULATIVE EFFECT?	RELEVANT POLICY
Seascape, Coastal and Landscape Character	The offshore Project can alter the seascape / coastal character of the area within the OAA and the perceived character of the wider seascape. The offshore Project impact on character type 7: Kyles and Sea Lochs (Kyle of Tongue) and Regional Coastal Character Areas (RCCA) 37 (overlapped with Rugged Hills Landscape Character Type (LCT) (316) and Enclosed Bays LCT (305) could be a significant effect in terms of EIA Regulations. The WTGs would appear in wide views across the open sea horizon and contrast with the visual composition of sky and could alter or affect the landscape character of sandy beaches and dunes and could be a significant effect in terms of EIA Regulations.	Yes	No	GEN 7 NPF4 (POLICY 11)
Designated heritage sites / assets	The offshore Project is not located within any designated heritage assets / sites. Orkney Mainland and the northern part of Orkney located within the Heart of Neolithic Orkney World Heritage Site (HoNO WHS) Sensitive Area, which contains the HoNO WHS within a Buffer Zone. The Buffer Zone and Sensitive Area indicate areas where the potential effects on the WHS and its Setting should be taken into account by developers and decision- makers, and act as a trigger	No	No	GEN 7 NPF4 (POLICY 11)



RECEPTOR	DESCRIPTION OF EFFECTS	RESIDUAL SIGNIFICANT EFFECT?	RESIDUAL SIGNIFICANT CUMULATIVE EFFECT?	RELEVANT POLICY
	for consultation. The HoNO WHS consists of the group of four Neolithic monuments <sup>6</sup> . Although the four monuments which make up the Heart of Neolithic Orkney do not fall within the Zone of Theoretical Visibility (ZTV), visibility is indicated within the WHS Buffer Zone. As in this case the offshore Project is located at a considerable distance from the shore (over 27 km) and cannot be attributable to any direct effects. The HoNO WHS is therefore excluded from further assessment. Therefore, there can be no physical or direct impact on these designations within the SLVIA Study Area <sup>7</sup> .			
Landscape Planning Designations	The offshore Project is not located within any landscape planning designations. Therefore, there are no physical or direct impacts on landscape designations within the SLVIA Study Area.	No	No	gen 7 NPF4 (Policy 11)
National Scenic Areas (NSA)	The WTGs would come into views along the shores of the Kyle of Tongue NSA and could be a significant effect in terms of EIA Regulations.	Yes	No	gen 7 NPF4 (Policy 11)
Scrabster and Stromness Ferry Route	The route comes closest to the offshore Project at 24.4 km distance from its south-east corner. The Foss group WTGs are seen on the backdrop of the coastal landform, and several Limeklin WTGs would be distinguishable above the	Yes	Yes	gen 7 NPF4 (Policy 11)

 $<sup>^{\</sup>rm 6}$  The four HoNO WHS are the Ring of Brodgar, Stones of Stenness, Maeshowe and Skara Brae

<sup>&</sup>lt;sup>7</sup> Receptor specific area used to characterise the baseline. Each topic specific chapter will define what is considered to be the offshore study area.



RECEPTOR	DESCRIPTION OF EFFECTS	RESIDUAL SIGNIFICANT EFFECT?	RESIDUAL SIGNIFICANT CUMULATIVE EFFECT?	RELEVANT POLICY
	shallow coastal landform. The main visual attraction of the route is the impressive cliff profile of Hoy, in views of which the offshore Project would not intervene.			
The North Coast 500 (overlapped with Sustrans National Cycle Route 1, A838 and A836), Caithness	Significant visual effects could be experienced from these recreational routes, some of which are designated landscapes and are considered to have High susceptibility from the people using these routes while walking and cycling. The nature of these effects would be direct, cumulative, long-term (reversible) and adverse.	Yes	No	GEN 7 NPF4 (POLICY 11)
Old Man of Hoy, Orkney	Significant visual effects could be experienced from these recreational routes, some of which are designated landscapes and are considered to have High susceptibility from the people using these routes while walking and cycling. The nature of these effects would be direct, cumulative, long-term (reversible) and adverse.	Yes	No	GEN 7 NPF4 (POLICY 11)
Rackwick Beach, Orkney	Significant visual effects could be experienced from these recreational routes, some of which are designated landscapes and are considered to have High susceptibility from the people using these routes while walking and cycling. The nature of these effects would be direct, cumulative, long-term (reversible) and adverse.	Yes	N/a	GEN 7 NPF 4 (POLICY 11)



RECEPTOR	DESCRIPTION OF EFFECTS	RESIDUAL SIGNIFICANT EFFECT?	RESIDUAL SIGNIFICANT CUMULATIVE EFFECT?	RELEVANT POLICY
West Coast Path, Orkney	Significant visual effects could be experienced from these recreational routes, some of which are designated landscapes and are considered to have High susceptibility from the people using these routes while walking and cycling. The nature of these effects would be direct, cumulative, long-term (reversible) and adverse.	No	N/a	gen 7 NPF4 (Policy 11)
Sustrans National Cycle Route 1 Burwick to Kirkwall and Stromness (including A966 and B9056), Orkney	Significant visual effects could be experienced from these recreational routes, some of which are designated landscapes and are considered to have High susceptibility from the people using these routes while walking and cycling. The nature of these effects would be direct, cumulative, long-term (reversible) and adverse.	No	N/a	GEN 7 NPF4 (POLICY 11)
Settlements (with significant residual effects)	The visual effects likely to be experienced from settlements include consideration of residential areas, the public realm and public open spaces within the settlement boundaries that would be frequented by people. The nature of these effects would be direct, cumulative, long- term (reversible) and adverse. Residual significant effects are likely at the following receptors: Durness; Midfield to Midtown; Kyle of Tongue (includes Core Paths around settlement and Talmine Bay and campsite); Skullomie and Coldbackie, Kyle of Tongue; Bettyhill; Kirtomy; Portskerra,	Yes	No	GEN 7 NPF4 (POLICY 11)



RECEPTOR	DESCRIPTION OF EFFECTS	RESIDUAL SIGNIFICANT EFFECT?	RESIDUAL SIGNIFICANT CUMULATIVE EFFECT?	RELEVANT POLICY
	Melvich, Sutherland Crosskirk, Caithness; Armadale; Lednagullin.			
Settlements (without significant residual effects)	The visual effects likely to be experienced from settlements include consideration of residential areas, the public realm and public open spaces within the settlement boundaries that would be frequented by people. The nature of these effects would be direct, cumulative, long- term (reversible) and adverse. The following receptors are unlikely to have a significant residual effect: Reay, Caithness, The St Magnus Way Tongue; Graemsay; Outertown; Northdyke / Quoyloo; Marwick, Sutherland, Skerray; Strathy (includes Core Path north of settlement) Buldoo, Thurso Petertown Clestrain; The Barony / Northside; Quoyscottie / Dounby / Miribister, West Orkney Murkle, Caithness	No	No	GEN 7 NPF4 (POLICY 11)
Routes				
A836 Between Thurso and Castletown	The views from these routes could be experienced transiently by road users (mainly drivers and where appropriate cyclists or walkers) who would experience the offshore Project as part of the changing sequence of views experienced from the road.	Yes	No	gen 7 NPF4 (Policy 11)
A986; A964	The views from these routes could be experienced transiently by road users (mainly drivers and where	No	No	gen 7 NPF4 (Policy 11)



RECEPTOR	DESCRIPTION OF EFFECTS	RESIDUAL SIGNIFICANT EFFECT?	RESIDUAL SIGNIFICANT CUMULATIVE EFFECT?	RELEVANT POLICY
	appropriate cyclists or walkers) who would experience the offshore Project as part of the changing sequence of views experienced from the road.			
Destinations				
Armadale Bay, Orkney	All of the destinations have been assessed as of High sensitivity on account of their High to Medium value as recreational and tourist destinations, some located within designated landscapes and the High susceptibility of the people visiting these destinations, whose attention would be focused on the landscape around them.	Yes	No	GEN 7 NPF4 (POLICY 11)
Stromness Citadel	All of the destinations have been assessed as of High sensitivity on account of their High to Medium value as recreational and tourist destinations, some located within designated landscapes and the High susceptibility of the people visiting these destinations, whose attention would be focused on the landscape around them.	No	No	gen 7 NPF4 (Policy 11)
Strathy Bay, Sutherland	All of the destinations have been assessed as of High sensitivity on account of their High to Medium value as recreational and tourist destinations, some located within designated landscapes and the High susceptibility of the people visiting these destinations, whose attention would be focused on the landscape around them.	No	No	GEN 7 NPF 4 (POLICY 11)



RECEPTOR	DESCRIPTION OF EFFECTS	RESIDUAL SIGNIFICANT EFFECT?	RESIDUAL SIGNIFICANT CUMULATIVE EFFECT?	RELEVANT POLICY
	Significance of effect: The assessment of effects on seascape, landscape and visual receptors has predicted residual effects resulting from the presence of the offshore Project ranging from negligible to major. The assessment has been based upon the worst-case scenario and it is anticipated that effects will be less than predicted. Cumulative effects. Significant cumulative effects are identified to affect the Scrabster and Stromness Ferry Route due to the presence of WTGs and the potential for visual impacts from planned windfarms. Secondary mitigation measures will be implemented in the form of an iterative design process during the post-consent development of the Development Specification and Layout Plan (DSLP). Transboundary effect: No transboundary effects are predicted.	No	No	GEN 7 NPF 4 (POLICY 11)

Table 8-12 Socioeconomics effects

RECEPTOR	DESCRIPTION OF EFFECTS	RESIDUAL SIGNIFICA NT EFFECT?	RESIDUAL SIGNIFICANT CUMULATIVE EFFECT?	RELEVANT POLICY
Orkney	Increased demand for housing can increase demand for other services such as education (i.e., school places for workers' children and	Yes, beneficial	Yes, beneficial	GEN 2



RECEPTOR	DESCRIPTION OF EFFECTS	RESIDUAL SIGNIFICA NT EFFECT?	RESIDUAL SIGNIFICANT CUMULATIVE EFFECT?	RELEVANT POLICY
	for healthcare). Additional demand for school places could help support the continued case for provision of a primary school or childcare facility. Additional demand for services could help to ensure that service delivery continues in an area.			
Caithness and Sutherland	Increased demand for housing can increase demand for other services such as education (i.e., school places for workers' children and for healthcare). Additional demand for school places could help support the continued case for provision of a primary school or childcare facility. Additional demand for services could help to ensure that service delivery continues in an area.	No	Yes, beneficial	GEN 2
Highland (construction only)	Increased demand for housing can increase demand for other services such as education (i.e., school places for workers' children and for healthcare). Additional demand for school places could help support the continued case for provision of a primary school or childcare facility. Additional demand for services could help to ensure that service delivery continues in an area.	No	Yes, beneficial	GEN 2
Highland (O&M only), Scotland	Increased demand for housing can increase demand for other services such as education (i.e., school places for workers' children and for healthcare). Additional demand for school places could help support the continued case for provision of a primary school or childcare facility. Additional demand for services could help to ensure that service delivery continues in an area.	No	No	GEN 2
Caithness and Sutherland	Job creation is a strategic priority for the Scottish Government (and also for the UK Government), and there are a number of jobs expected to be created in the manufacture and installation of Project structures and components.	Yes, beneficial	Yes, beneficial	GEN 2



RECEPTOR	DESCRIPTION OF EFFECTS	RESIDUAL SIGNIFICA NT EFFECT?	RESIDUAL SIGNIFICANT CUMULATIVE EFFECT?	RELEVANT POLICY
Highland; Orkney (construction only)	Job creation is a strategic priority for the Scottish Government (and also for the UK Government), and there are a number of jobs expected to be created in the manufacture and installation of Project structures and components.	Yes, beneficial	Yes, beneficial	GEN 2
Highland (O&M only)	Job creation is a strategic priority for the Scottish Government (and also for the UK Government), and there are a number of jobs expected to be created in the manufacture and installation of Project structures and components.	No	No	GEN 2
Caithness and Sutherland	The effects considered include the additional value added created directly and indirectly associated with the manufacture, supply, marshalling, and installation of Project structures and components, plus the additional Gross Value Added (GVA) generated through supply chain and income expenditure effects.	Yes, beneficial	Yes, beneficial	GEN 2
Orkney	The effects considered include the additional value added created directly and indirectly associated with the manufacture, supply, marshalling, and installation of Project structures and components, plus the additional GVA generated through supply chain and income expenditure effects.	Yes, beneficial	Yes, beneficial	GEN 2
Highland (construction only)	The effects considered include the additional value added created directly and indirectly associated with the manufacture, supply, marshalling, and installation of Project structures and components, plus the additional GVA generated through supply chain and income expenditure effects.	No	Yes, beneficial	GEN 2
Highland (O&M only)	The effects considered include the additional value added created directly and indirectly associated with the manufacture, supply, marshalling, and installation of Project structures and components, plus the	Yes, beneficial	No	GEN 2



RECEPTOR	DESCRIPTION OF EFFECTS	RESIDUAL SIGNIFICA NT EFFECT?	RESIDUAL SIGNIFICANT CUMULATIVE EFFECT?	RELEVANT POLICY
	additional GVA generated through supply chain and income expenditure effects.			
Orkney; Caithness; North Sutherland	The Project has the potential to generate socio-cultural effects, including the potential exacerbation of existing social problems such as crime and deprivation; by providing an additional source of disruption to community cohesion; and by providing a source of change for existing community character. Engagement from Three Community Panels established to set up community benefit fund	No	No	GEN 2
Caithness and Sutherland; Highland; Orkney	The Project may generate indirect socio- economic effects experienced by businesses that supply services to locally based commercial fishing vessels or fleets and/or businesses that process or add value to fish caught and landed locally.	No	No	GEN 2
Caithness and Sutherland; Orkney	The sensitivity of people to the presence of offshore WTGs and related infrastructure that are visible from shore with respect to their day trip and holidaying behaviour may cause a reduction of visitors. There is also the potential for displacement of localised activity due to competition for tourism bedspaces by workers that may need to be accommodated locally.	No	No	
Orkney; North Sutherland	Generating additional demand for housing could increase temporarily the cost of housing, which in turn has the potential to negatively affect the affordability of housing for local people. The creation of additional, well-paid local jobs could exacerbate local inequalities, if opportunities to access these employment opportunities are not readily available and could also exacerbate gender income inequalities.	No	No	GEN 2
	Significance of effect: With mitigation, best practice and monitoring, i.e., implementation of the SCDS, most socio- economic effects will be beneficial, ranging			



RECEPTOR	DESCRIPTION OF EFFECTS	RESIDUAL SIGNIFICA NT EFFECT?	RESIDUAL SIGNIFICANT CUMULATIVE EFFECT?	RELEVANT POLICY
	from minor to major significance. Where there are potential adverse effects, mitigation will ensure impacts are not significant. <b>Cumulative effect:</b> Cumulative impacts from offshore energy developments were assessed and predicted as likely to result in no adverse change to the levels of significance assessed when considering the offshore Project in isolation. <b>Transboundary effect:</b> No transboundary effects are predicted.			

#### Table 8-13 Other Sea Users

RECEPTOR	DESCRIPTION OF EFFECTS	RESIDUAL SIGNIFICANT EFFECT?	RESIDUAL SIGNIFICANT CUMULATIVE EFFECT?	RELEVAN T POLICY
Pentland Floating Offshore Windfarm; Subsea cables – SHET-L Caithness to Orkney HVAC Link	Activities associated with the offshore Project have the potential to temporarily obstruct access to the sites, limiting movements of third-party vessels and obstruct access for the operation and maintenance activities.	No	No	GEN 4
Space Hub Sutherland	There is potential for overlap with temporary exclusion zones placed over the air and sea during launches. OWPL will be required to develop internal procedures to ensure that personnel working within the offshore Project remain outside temporary exclusion zones or take appropriate safety measures during launch sequences. Significance of effect: With mitigation, best practice and monitoring, With mitigation no significant effects are predicted on other sea users.	No	N/a	GEN 4



RECEPTOR	DESCRIPTION OF EFFECTS	RESIDUAL SIGNIFICANT EFFECT?	RESIDUAL SIGNIFICANT CUMULATIVE EFFECT?	RELEVAN T POLICY
	Cumulativeeffect:nosignificantcumulative effects are predicted on othersea users.Transboundary effect:No transboundaryeffects are predicted			

Aside from the assessment on SLVIA receptors, the EIA on human environment receptors has concluded that with the appropriate mitigation, no significant residual effects are anticipated to occur. As such this demonstrates that the Project meets the requirements of the NMP and specifically policies FISHERIES 1, FISHERIES 2, TRANSPORT 1, REC AND TOURISM 2, DEFENCE 1, GEN 2 (Economic benefit), GEN 4 (Co-existence) and GEN 6 (Historic environment) of the NMP.

The SLVIA has predicted significant residual effects resulting from the presence of the offshore Project ranging from negligible to major / moderate. The assessment has been based upon the worst-case scenario and it is anticipated that effects will be less than predicted.

Scotland's NMP states under policy GEN 7 Landscape/seascape "The Scottish Government is committed to implementing the principles of the European Landscape Convention, which includes seascapes and applies an 'all landscapes approach' that addresses developed, altered and cultural landscapes as well as more natural scenic areas. This does not preclude development or change but recommends that it is carried out appropriately for the area's landscape character and visual amenity".

Policy 11 of NPF4 states that "In addition, project design and mitigation will demonstrate how the following impacts are addressed: ii. significant landscape and visual impacts, recognising that such impacts are to be expected for some forms of renewable energy. Where impacts are localised and/or appropriate design mitigation has been applied, they will generally be considered to be acceptable."

It is acknowledged that traditional methods of landscape and visual mitigation, such as screen planting, are ineffective for offshore windfarm development, therefore the reduction of potential effects will be through detailed layout design. As such secondary mitigation will be implemented in the form of the iterative design process during the post-consent development of the array layout, including consideration of key SLVIA receptors as well as other constraints such as shipping and navigation. Following consultation, the final design of the offshore Project will be produced and secured within the Design Specification Layout Plan (DSLP) as required by condition of consent.

### 8.8 Habitats Regulations

While ultimately it is the duty of the Scottish Ministers to apply the HRA process and to carry out an Appropriate Assessment, the Applicant has compiled the necessary evidence and information to support an Appropriate Assessment decision by the Scottish Ministers and this information is contained in the RIAA.

As set out in the offshore Project's RIAA prepared as part of the Application it concludes that the Project would not have an adverse effect on the integrity (AEOI) of any SACs or SPAs.



# 9. BENEFITS OF THE PROJECT

#### 9.1 Introduction

This section describes the benefits of the offshore Project, the key elements of which relate to the generation of renewable energy, climate change, security of supply and socio-economics. The conclusion of this section summarises the benefits of the Offshore Project in relation to relevant climate change and renewable energy policy objectives as set out in Section 6.

The UK requires new energy transmission infrastructure in order to:

- Reduce the carbon footprint of electricity generation capacity in order to achieve net zero climate change targets;
- Enable the transition from fossil fuels to renewable energy sources;
- Ensure adequate supply due to changes in the demands on transmission infrastructure; and
- Ensure security of supply through replacing and upgrading infrastructure systems to meet increased demands.

#### 9.2 Renewable Generation and Emission Savings

The Project has an expected capacity of around 2 GW and will be capable of powering the equivalent of more than two million homes with clean electricity. As such, it will provide a reliable source of energy and be a significant contribution to domestically sourced low carbon energy.

The UK Government has introduced a series of carbon 'budgets' for five-year periods, which function as interim targets to achieve the overall reduction in GHG emissions by 2050. The five-year budgets are currently set up to 2037. The CCC in 2022 outlined concerns that "current programmes will not deliver Net Zero" and the UK will be unable to meet carbon targets at the current rate of climate action, urging the UK Government to act urgently (CCC, 2022). It further goes onto state "The areas of strongest progress are backed and led by well-designed Government policy: Deployment of renewable electricity. Emissions from electricity generation have fallen by nearly 70% in the last decade. With offshore wind, business has shown that given the right market conditions and support it can cut costs dramatically and deploy low-carbon solutions rapidly".

This Project will help contribute to these urgent climate targets by generating approximately 332,499,816 Megawatt hours (MWh) of low carbon electricity during its 30-year operation and maintenance stage and will avoid emitting 16,489,285 tonnes Carbon Dioxide Equivalent ( $CO_2E^8$ ) into the atmosphere that would otherwise have been emitted from conventional, higher carbon emitting forms of energy generation (i.e., fossil fuels).

Due to the carbon savings that the operation and maintenance stage will produce from low carbon electricity generation, the Project is assessed in the offshore EIA Report Climate and carbon assessment as having a **significant beneficial effect on the climate**.

<sup>&</sup>lt;sup>8</sup> To calculate the emissions which do not occur as a result of the electricity generated by the Project, assumptions are required around the future carbon intensity of the national grid in the absence of the Project. Such assumptions depend on how the UK energy and emissions system will evolve. This assessment has used the reference scenario projections from BEIS (2023) which exist up to 2040.



## 9.3 Security of Supply

Reducing Scotland and the wider UK's dependency on fossil fuels and increasing domestic renewable energy generation has important security of supply, electricity cost and fuel poverty avoidance benefits. The need for urgent action is now critical for global political stability.

The British Energy Security Strategy (2022) states "as the global economy reopened in the aftermath of the pandemic, the sudden surge in demand for everything from new cars to foreign holidays drove a massive spike in demand for oil and gas, dramatically increasing the price of these essential fuels. This has been compounded by Russia's abhorrent and illegal invasion of Ukraine" and then goes on to discuss that "the long-term solution is to address our underlying vulnerability to international oil and gas prices by reducing our dependence on imported oil and gas" and "accelerating the transition away from oil and gas then depends critically on how quickly we can roll out new renewables".

This Project will help accelerate the transition away from oil and gas and contribute to a secure supply of domestic energy.

## 9.4 Socio-Economic Considerations

The construction and O&M stages of the Project will have a minor to major significant beneficial effect on the local economy and employment throughout Orkney, Highlands and Caithness and Sutherland. A summary of these beneficial effects is provided below. **Scotland's National Strategy for Economic Transformation (March 2022)** emphasises the role that the offshore renewables sector is expected to play in helping drive future prosperity and sustainability for the Scottish economy. The strategy highlights in particular the potential for substantial supply chain benefits and opportunities for new high-value jobs, as well as replacing jobs expected to be lost in the fossil fuels sector. The strategy also highlights the role that the offshore renewables sector is expected to play in supporting the objectives of the Regional Economic Partnership operating in the Highland and Islands region.

### 9.4.1 Supply Chain

Business sub-sectors have the potential to contribute to the supply chain for the Project, including the provision of civil engineering, transport services, and professional services.

A SCDS was prepared for the Project and submitted to CES in July 2021 as part of the ScotWind Leasing process. The SCDS sets out the commitment by OWPL to a £105 million investment in developing supply chain capacity within the UK. This includes over £9 million expected to be invested in upgrading ports and harbours in Caithness and Orkney. OWPL has set a target of 40% Project content sourced from Scotland, with a further 20% elsewhere in the UK.

### 9.4.2 Job Creation

During the construction stage, the Project in the spatial area of Caithness and Sutherland is estimated to generate an average annual total of 81 to 200 direct / indirect jobs, representing a temporary increase of 3.4% to 8.3% to the baseline employment figure. In the spatial area of Highland, the Project is expected to create an average total of 167 to 453 annual direct / indirect workforce jobs, resulting in a temporary increase of 0.71% to 1.9% to the baseline employment figure. In Orkney, the Project is anticipated to generate an average total of 123 to 281 direct / indirect workforce jobs during construction, representing a temporary increase of 7.7% to 17.6% to the baseline employment figure.



For the O&M stage, in Caithness and Sutherland, the Project would require an average permanent workforce of 93 to 115 workers per year. This would represent an increase of 3.9% to the baseline employment figure. In Orkney, the average annual operational stage expenditure would necessitate a local workforce of 13 to 15 jobs, resulting in a permanent increase of 0.79% to 0.96% to the baseline employment figure.

## 9.4.3 Gross Value Added (GVA)

During the construction stage, in the spatial area of Caithness and Sutherland, **the Project's annual expenditure is expected to contribute an average annual total of £13.8 million to £29.7 million of GVA**, representing a temporary increase of 2.6% to 5.5% to the baseline GVA figure. In Orkney, the Project's construction expenditure would result in an average annual GVA of £19.6 million to £40.8 million, representing a temporary increase of 3.1% to 6.4% to the baseline GVA figure.

For the O&M stage, **in Caithness and Sutherland**, **the Project's expected annual operational expenditure would result in an overall average annual GVA of £28.8 million to £36.4 million**, representing a permanent increase of 5.3% to 6.7% to the baseline GVA figure. In Highland, the expected overall average annual GVA during the operational stage would range from £34.6 million to £39.7 million, corresponding to an increase of 0.54% to 0.62% to the baseline GVA figure. In Orkney, the overall annual average increase in GVA during the operational stage is expected to be £3.5 million to £5.3 million, representing an increase of 0.55% to 0.83% to the baseline GVA figure.

#### 9.4.4 Housing

During the construction stage, based on the housing strategy produced by the OIC, the average annual demand for dwellings in Orkney is predicted to be 63 over the period of 2017-2032. The low-case scenario for the Project estimates a need for 123 local workers during construction, with 10% requiring private rented housing and the rest being accommodated in different types of tourist accommodation. This would result in a requirement of approximately 12 dwellings per year to house the Project workforce, representing a temporary increase of around 19% to the baseline demand in Orkney.

During the O&M stage, the housing strategy predicts an annual average demand of 63 dwellings in Orkney. The lowcase scenario for the Project suggests that recruitment of the local workforce during the operational stage could reach up to 16 workers over a 10-year period. This additional demand for 16 dwellings during the operational stage represents an increase of 2.5% to the predicted total demand for Orkney over the same 10-year period.

During the construction stage, according to the draft Housing Needs Demand Assessment (HNDA) produced by THC (draft HNDA, p92), there is expected to be a need for 385 additional dwellings in the Caithness local housing market area over the 10-year period to 2028/29 (i.e., an average of 38.5 p.a.). Adding extra demand for up to eight dwellings to this total would represent a temporary increase of around 21% to the baseline demand total.

During the O&M stage, there is expected to be a need for 385 additional dwellings in the Caithness local housing market area over the 10-year period to 2028/29. Adding extra demand for up to 114 dwellings to this total would represent an increase in demand of around 30% to the predicted future demand over this period. The magnitude of impact for housing demand during the operation and maintenance stage is therefore concluded to be High for Caithness under the worst case scenario.

The socio-economic considerations by the Project has been summarised in the sections above. Table 8-12 and sections 9.4.1 to 9.4.4 highlight that only beneficial significant socio-economic effects are likely to occur from the Project through supply chain benefits, jobs and GVA.



## 9.5 Community Benefit Fund

The Scottish Government are currently updating their 'Good Practice Principles for Community Benefit from Offshore Renewable Energy Developments' (Scottish Government, 2018), and consultation on new draft guidance will be ongoing throughout 2023 (Scottish Government, 2023).

OWPL are establishing a Community Benefit Fund (CBF) to be shared across communities in Caithness, Sutherland and Orkney. Short and long-term priorities have been identified, that will continue to evolve as the Project progresses. Following successful consent award, the Socio-Economic Working Group (or equivalent) will continue. OWPL will work with the Working Group (or equivalent) to support wider development initiatives such as implementation of the SCDS and development of a community benefit fund.

#### 9.6 Conclusions

The offshore Project benefits include making an important and timely contribution to decarbonisation targets, security of supply and having a beneficial significant effect on local and national socioeconomics thereby addressing all key aspects of Scotland and the UK's legal obligations and existing and emerging Government policy.



# 10. CONCLUSIONS

#### 10.1 Introduction

This section outlines conclusions on the general accordance of the offshore Project with statutory considerations that Scottish Ministers will need to consider when determining the Section 36 and Marine Licence applications as follows:

- Section 15 of the Marine (Scotland) Act 2010, which requires decisions of the Scottish Ministers on Marine Licence applications to be in accordance with the specified marine plans and policy documents unless 'relevant considerations indicate otherwise';
- Section 27 of the Marine (Scotland) Act 2010 which requires that in determining an application for a Marine Licence the Scottish Ministers must have regard to:
  - The need to protect the environment;
  - The need to protect human health;
  - The need to prevent interference with legitimate users of the sea;
  - Any representations received from any person having an interest in the outcome of the application;
  - Such other matters as the Scottish Ministers consider relevant;
  - The practical availability of alternative methods;
  - The effects of any use intended to be made of the works; and
  - Giving the applicant the opportunity to make representations to them about observations made by consultees.
- Under section 82 of the Marine (Scotland) Act 2010, MD-LOT is required to consider whether a licensable activity
  is capable of affecting (other than insignificantly) a protected feature in a NCMPA or a historic marine asset in a
  Historic MPA. As such, the accompanying offshore EIA Report includes an assessment of any effects on NCMPAs
  or MPAs from the offshore Project, where relevant, within the applicable topic-specific chapters to aid MD-LOT's
  assessment.

#### 10.2 The Electricity Act 1989 and Policy Considerations

Schedule 8 of the Electricity Act 1989 sets out requirements and procedures in relation to applications for Section 36 consents and Schedule 9 within the Act requires consideration to be given to the preservation of amenity and fisheries, specifically:

"In formulating any relevant proposals, a licence holder or a person authorised by an exemption to generate, distribute, supply or participate in the transmission of electricity

- (a) shall have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest; and
- (b) shall do what he reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects".

With regard to the aforementioned considerations by Scottish Ministers when making a decision to grant a Section 36 consent for the Project:

- The Project accords with the NMP and supports UK and Scottish policies as considered in Sections 6, 7 and 8: policy assessment;
- No NCMPAs or MPAs overlap with the OAA; the North-west Orkney NCMPA is 11.5 km North West of the OAA;



- In terms of the Need to Protect the Environment, no significant residual effects in terms of the EIA Regulations are predicted (as detailed in Section 8);
- As set out in the offshore Project's RIAA prepared as part of the Application under the Habitat Regulations it concludes that the Project would not have an AEOI on any SACs or SPAs;
- In terms of the Need to protect Human Health, no significant residual effects in terms of the EIA Regulations are predicted with the exception of seascape, landscape and visual impacts at discrete locations. In this regard, the Project has demonstrated accordance with GEN 7 Landscape/seascape which states "the Scottish Government is committed to implementing the principles of the European Landscape Convention, which includes seascapes and applies an 'all landscapes approach' that addresses developed, altered and cultural landscapes as well as more natural scenic areas. This does not preclude development or change but recommends that it is carried out appropriately for the area's landscape character and visual amenity". In this regard, the Applicant sought pre-application advice from THC. Advice given included the need to maintain key sightlines between key landscape / seascape designations on Sutherland and Orkney and following SNH guidance. The OAA selected mitigates this concern as further detailed in the offshore EIA Report chapter 18: Seascape, landscape and visual assessment. In further support, Policy 11 (e) of NPF4 states that "In addition, project design and mitigation will demonstrate how the following impacts are addressed: ii. significant landscape and visual impacts, recognising that such impacts are to be expected for some forms of renewable energy. Where impacts are localised and/ or appropriate design mitigation has been applied, they will generally be considered to be acceptable."; and
- In terms of the need to prevent interference with legitimate users of the sea the EIA demonstrates that with secondary mitigation measures that meet NMP policies, no significant residual effects in terms of the EIA Regulations are predicted for shipping and navigation, commercial fisheries, aviation or recreational users.

In conclusion, the aforementioned enables Scottish Ministers to be satisfied in relation to Schedule 8 and 9 of the Electricity Act 1989 and the Marine (Scotland) Act 2010 and provides confidence the offshore Project would be undertaken in an environmentally acceptable way. In addition, the Project aligns with the Marine Licensing (Pre-application Consultation) (Scotland) Regulations 2013 and RENEWABLES 8 and GEN 18 Engagement marine policies which describe that early and effective engagement should be undertaken with the general public and all interested stakeholders to facilitate planning and consenting processes.

### 10.3 Energy and Climate Change Policy and Legislative Requirements

The urgent need for offshore wind has been set out clearly within the Scottish Government's Offshore Wind Policy Statement and the British Energy Security Strategy. The declaration of a Climate Emergency by the Scottish Government reflected both the seriousness of climate change and its current and likely future effects. It outlined the need for urgent action to cut carbon dioxide and other GHG emissions now, a means by which renewable energy generation can significantly contribute.

Net zero emissions targets are now legally binding for UK and Scottish Governments by way of amendments to the Climate Change Act 2008 and in Scotland with the provisions of the Climate Change (Scotland) Act 2009 and the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019.

This Project will help contribute to these urgent climate targets by generating approximately 332,499,816 MWh of low carbon electricity during its 30-year operation and maintenance stage and will avoid emitting 16,489,285 tonnes



Carbon Dioxide Equivalent (TCO<sub>2</sub>E<sup>9</sup>) into the atmosphere that would otherwise have been emitted from conventional, higher carbon emitting forms of energy generation (i.e., fossil fuels).

The climate emergency is a material consideration and the need for the offshore Project should therefore be afforded substantial weight in the planning balance. The urgency for an electricity system which is domestically generated and not reliant on fossil fuels is a critical consideration for the UK and Scottish governments in recent years as detailed in the British Energy Strategy (UK Government, 2022). The Project has an expected capacity of around 2 GW and will be capable of powering the equivalent of more than two million homes with clean electricity and as such will provide significant contributions to domestically sourced low carbon energy.

### 10.4 Socio-Economic Considerations

The Project supports Scotland's National Strategy for Economic Transformation (March 2022), which emphasises the role that the offshore renewables sector is expected to play in helping drive future prosperity and sustainability for the Scottish economy. Of note, a SCDS was prepared for the Project and submitted to CES in July 2021 as part of the ScotWind Leasing process. The SCDS sets out the commitment by OWPL to a £105 million investment in developing supply chain capacity within the UK. This includes over £9 million expected to be invested in upgrading ports and harbours in Caithness and Orkney. OWPL has set a target of 40% Project content sourced from Scotland, with a further 20% elsewhere in the UK.

In addition, the Scottish Government are currently updating their 'Good Practice Principles for Community Benefit from Offshore Renewable Energy Developments' (Scottish Government, 2018), and consultation on new draft guidance will be ongoing throughout 2023 (Scottish Government, 2023). OWPL are in the process of developing a Community Benefit Fund with input from local communities to ensure the benefits of the Project meet the local public needs. This Fund will be available once the Project is operational.

### 10.5 Overall Conclusions

This Planning Statement has demonstrated in detail that the delivery of this Project aligns with UK and Scottish Climate and Energy Net Zero policies whilst meeting the requirements of Scotland's marine and National planning policies. In terms of satisfying the requirements set out in Schedule 8 and 9 of the Electricity Act 1989, the Marine (Scotland) Act 2010 and the Marine and Coastal Access Act 2009, the Planning Statement has demonstrated and provides confidence that the offshore Project would be undertaken in an environmentally and socially acceptable way. Details of the substantial socio-economic benefits, including significant supply chain benefits, that will arise from this Project are described throughout this statement and these should be afforded substantial weight in the planning balance.

<sup>&</sup>lt;sup>9</sup> To calculate the emissions which do not occur as a result of the electricity generated by the Project, assumptions are required around the future carbon intensity of the national grid in the absence of the Project. Such assumptions depend on how the UK energy and emissions system will evolve. This assessment has used the reference scenario projections from BEIS (2023) which exist up to 2040.



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# 12. ABBREVIATIONS

ACRONYM	DEFINITION
AEOI	Adverse Effect on the Integrity
AIS	Automatic Identification System
AR6	Sixth Assessment Report
BEIS	Department For Business, Energy & Industrial Strategy
BDMPS	Biologically Defined Minimum Population Scales
Bn	Billion
САА	Civil Aviation Authority
CaSPlan	Caithness and Sutherland Local Development Plan
CBF	Community Benefit Fund
ССС	Climate Change Committee
CCRA	Climate Change Risk Assessment
CES	Crown Estate Scotland
CfD	Contracts for Difference
CNP	Critical National Priority
CO <sub>2</sub> E	Carbon Dioxide Equivalent
СОР	Conference of the Parties
cSAC	Candidate Special Area of Conservation
DSLP	Development Specification and Layout Plan
ECC	Export Cable Corridor
EIA	Environmental Impact Assessment
EMF	Electromagnetic Fields
EPS	European Protected Species
EU	European Union



ACRONYM	DEFINITION
GES	Good Environmental Status
GHG	Greenhouse Gas
GIG	Green Investment Group
GVA	Gross Value Added
GW	Gigawatt
HIAL	Highland and Islands Airports Limited
HMR	Helicopter Main Route
HNDA	Housing Needs Demand Assessment
HoNOWHS	Heart of Neolithic Orkney World Heritage Site
HRA	Habitat Regulations Appraisal
HVAC	High Voltage Alternating Current
HwLDP	Highland-wide Local Development Plan
IFP	Instrument Flight Procedures
INNS	Invasive Non-Native Species
IOF	Important Ornithological Features
IPCC	Intergovernmental Panel on Climate Change
JNCC	Joint Nature Conservation Committee
km	Kilometre
LCT	Landscape Character Type
LDP	Local Development Plan
LEZ	Launch Exclusion Zone
LSE	Likely Significant Effect
m	Metre
MCAA	Marine and Coastal Access Act
MD-LOT	Marine Directorate – Licensing Operations Team



ACRONYM	DEFINITION
MHWS	Mean High Water Springs
MoD	Ministry of Defence
МРА	Marine Protected Area
MPS	Marine Policy Statement
MSA	Marine (Scotland) Act
MSFD	Marine Strategy Framework Directive
MSP	Marine Spatial Plan
MW	Megawatt
MWh	Megawatt hours
NAP	National Adaptation Programme
NCMPA	Nature Conservation Marine Protected Area
NDC	Nationally Determined Contributions
nm	Nautical Mile
NMP	National Marine Plan
NPF	National Planning Framework
NPS	National Policy Statements
NSA	National Scenic Areas
NSIP	Nationally Significant Infrastructure Project
O&M	Operations and Maintenance
ΟΑΑ	Option Agreement Area
OIC	Orkney Islands Council
OMR	Offshore Marine Region
OREI	Offshore Renewable Energy Installations
OSP	Offshore Substation Platform
OWPL	Offshore Wind Power Limited



ACRONYM	DEFINITION
РАС	Pre-Application Consultation
PFOW MSP	Pentland Firth and Orkney Waters Marine Spatial Plan
PLL	Potential Loss of Life
РО	Plan Option
PTS	Permanent Threshold Shift
RCCA	Regional Coastal Character Areas
REZ	Renewable Energy Zones
RIAA	Report to Inform Appropriate Assessment
RIDG	Renewable Infrastructure Development Group
RMP	Regional Marine Plan
SAC	Special Areas of Conservation
SAR	Search and Rescue
SCDS	Supply Chain Development Statement
SEA	Strategic Environmental Assessment
SEIA	Social and Economic Impact Assessment
SES	Scottish Energy Strategy
SHET-L	Scottish Hydro Electric Transmission Limited
SLVIA	Seascape, Landscape And Visual Impact Assessment
SMP	Sectoral Marine Plan
SNH	Scottish Natural Heritage
SPA	Special Protected Areas
SS	Supporting Study
ТНС	The Highland Council
UK	United Kingdom
UN	United Nations



ACRONYM	DEFINITION
UNCLOS	UN Convention on the Law of the Sea
UNFCCC	United Nations Framework Convention On Climate Change
UXO	Unexploded Ordnance
WFD	Water Framework Directive
WHS	World Heritage Site
WTG	Wind Turbine Generator
ZTV	Zone of Theoretical Visibility