Cerulean Winds Aspen Project Limited

Aspen Offshore Wind Farm

Offshore Environmental Impact Assessment Report

Volume 2, Chapter 17: Socioeconomics, Tourism and Recreation

August 2025

COMMERCIAL IN CONFIDENCE

Revision	Date	Status	Author:	Checked by:	Approved by:
01	August 2025	Final	BiGGAR Economics Ltd.	GoBe Consultants Ltd.	Cerulean Winds (UKCS) Ltd.

Contents

Annexes

Figures

Tables

Defined Terms

Term	Definition
Applicant	Cerulean Winds Aspen Project Limited.
Aspen Array Area	The area in which the generation infrastructure for Aspen Offshore Wind Farm (OWF), including Wind Turbine Generators (WTGs) and Offshore Substation Platforms (OSPs) will be located.
Cumulative Effects	The combined effect of the Proposed Development in combination with the effects from a number of different projects, on the same single receptor/resource.
Cumulative Effects Assessment (CEA)	A CEA is a quantification and evaluation of potential effects by taking into consideration any other plans or projects proposed or existing, and where sufficient information is available, which, together with the Proposed Development have a likely significant effect on a receptor due to a common impact pathway and/or temporal or spatial overlap.
Cumulative Impacts	Impacts that result from changes caused by other past, present or reasonably foreseeable actions together with the Proposed Development.
Design Envelope	A description of the range of possible elements that make up the Proposed Development's design options under consideration, as set out in detail in the project description. This envelope is used to define the Proposed Development for Environmental Impact Assessment (EIA) and Habitats Regulation Appraisal (HRA) purposes when the exact engineering parameters are not yet known. This is also known as the "Rochdale Envelope" approach.
EIA Regulations	The collective term used to refer to the following: ▪ 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.
Environmental Impact Assessment (EIA)	A statutory process whereby planned projects must be assessed before a formal decision to proceed can be made. It involves assessment requirements outlined in the EIA Regulations, including the collection and consideration of environmental information, which fulfils the publication of an Environmental Impact Assessment Report (EIAR).
Floating Foundations	The foundations on which the Wind Turbine Generators (WTGs) are installed.
Inter-array Cables (IACs)	Cables which link the Wind Turbine Generators (WTGs) to each other and to the Offshore Substation Platforms (OSPs) within the Aspen Array Area.
Inter-link Cables	Cables that will link Offshore Substation Platforms (OSPs) within the Aspen Array Area.
Landfall	The area between Mean Low Water Spring (MLWS) and Mean High Water Spring (MHWS) where the Offshore Transmission Cables (OTCs) will connect onshore to offshore.
Likely Significant Effect (LSE)	In the context of Environmental Impact Assessment (EIA), a Likely Significant Effect (LSE) refers to a predicted environmental impact of a proposed development that, by its nature, magnitude, duration or likelihood, has the potential to be significant in the context of the EIA

Term	Definition
	Regulations. This determination is made during the EIA screening and scoping stages and helps establish whether a full EIA is required and what topics should be assessed in detail.
Local Authority	The body empowered by law to exercise various statutory functions for a particular area of the United Kingdom. Aberdeenshire Council is expected to be the Local Authority for the entirety of the onshore project footprint (subject to confirmation of the grid connection point).
Marine Directorate - Licensing Operations Team (MD-LOT)	The Marine Directorate responsible for Section 36 Consents, and marine licensing within the Scottish inshore region (between 0 and 12 nautical miles (nm)) and in the Scottish offshore region (between 12 and 200 nm). MD-LOT acts on behalf of the Scottish Ministers.
Non-statutory Consultee	Organisations that the Local Authorities and/or Marine Directorate may choose to engage (if, for example, there are planning policy reasons to do so) who are not designated in law but are likely to have an interest in the Proposed Development.
North Sea Renewables Grid (NSRG)	Comprises three Offshore Wind Farms (OWFs) (Aspen, Beech and Cedar) and all associated offshore components and the NSRG transmission system.
North Sea Transition Deal (NSTD)	A UK government framework supporting the transition of the offshore energy sector from oil and gas to low-carbon energy, including offshore wind, while promoting investment, reducing emissions, and safeguarding jobs in the industry.
Offshore Environmental Impact Assessment Report (Offshore EIAR)	The published report of the EIA that will be undertaken for the Proposed Development.
Offshore Scoping Opinion	The document issued by MD-LOT on 12 May 2025 to the Applicant under the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017, the Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2007 and the Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017, setting out the Scottish Ministers' opinion on the content of the Offshore Environmental Impact Assessment Report (Offshore EIAR) including those issues that will or will not need to be addressed in the Offshore EIAR.
Offshore Scoping Report	The document submitted by the Applicant on 31 January 2025 setting out the proposed contents of the Offshore Environmental Impact Assessment Report (Offshore EIAR) and provided to MD-LOT to support the request for an Offshore Scoping Opinion.
Offshore Substation Platform (OSP)	Offshore platform consisting of High Voltage Alternating Current (HVAC) substations or High Voltage Direct Current (HVDC) substations.
Offshore Transmission Cable Corridor (OTC Corridor)	The area within which the Offshore Transmission Cables (OTCs) will be installed.
Offshore Transmission Cables (OTCs)	The subsea electricity cables running from Landfall in the region of Stonehaven to the Offshore Substation Platform(s) (OSP(s)) in Aspen Array Area. The OTCs will act as both a demand and supply cable. The OTCs will provide both traditional supply of power to grid but also ensures robust secure power supply to oil and gas assets when the Aspen Array

Term	Definition
	Area is not generating sufficient renewable power to support their demand.
Offshore Wind Farm (OWF)	The proposed generation infrastructure comprising of Wind Turbine Generators (WTGs) and associated, Offshore Substation Platform(s) (OSP(s)), foundations and substructures and Inter-array Cables (IACs).
Project	Aspen Offshore Wind Farm (OWF)- comprises the wind farm and all associated offshore and onshore components.
Proposed Development	The offshore components of the Project (Aspen Offshore Wind Farm) which include all offshore infrastructure associated with Aspen Array Area and the Offshore Transmission Cables (OTCs).
Scottish Ministers	Ministers of the devolved Scottish Government, who exercise statutory functions transferred from the UK Government. The Scottish Ministers support the First Minister in leading the Scottish Government.
Section 36 Consent	Consent under Section 36 of the Electricity Act 1989 for the construction, or extension, and operation of electricity generating stations.
Wind Turbine Generator (WTG)	The wind turbine that generates electricity consisting of tubular towers and blades attached to a nacelle housing mechanical and electrical generating equipment.
Worst-case Design Scenario	The maximum design parameters of each offshore asset of the Proposed Development considered to be a worst case for any given assessment.
Years of Employment	A measure of employment which is equivalent to one person being employed for a year and is typically used when considering short-term employment impact, such as those associated with construction employment.

Abbreviations

Abbreviation	Definition
BEIS	Department for Business, Energy and Industrial Strategy
CEA	Cumulative Effects Assessment
CES	Crown Estate Scotland
CfD	Contracts for Difference
CMS	Construction Method Statement
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
GBDVS	Great Britain Day Visitor Survey
GBTS	Great Britain Tourism Survey
GDP	Gross Domestic Product
GVA	Gross Value Added
GW	Gigawatt
HRA	Habitats Regulations Appraisal
HVAC	High Voltage Alternating Current
HVDC	High Voltage Direct Current
LSE	Likely Significant Effect
MD-LOT	Marine Directorate Licensing Operations Team
NISRA	Northern Ireland Statistics and Research Agency
NPF4	National Planning Framework 4
NPV	Net Present Value
NRS	National Records of Scotland
NSTD	North Sea Transition Deal
O&M	Operation and Maintenance
ONS	Office for National Statistics
OSP	Offshore Substation Platform
OTC	Offshore Transmission Cable
OWF	Offshore Wind Farm
OWIC	Offshore Wind Industry Council
PAC	Pre Application Consultation
PDE	Project Design Envelope
RIAA	Report to Inform Appropriate Assessment

Abbreviation	Definition
RYA	Royal Yachting Association
SEIA	Socio-Economic Impact Assessment
TRSA	Tourism and Recreation Study Area
UK	United Kingdom
WTG	Wind Turbine Generator
ZoI	Zone of Influence

Units

Unit	Definition
%	Percent
£	GBP
GW	Gigawatt
km	Kilometres
km2	Kilometres squared (measure of area)
mn	Million

17 Socioeconomics, Tourism and Recreation

17.1 Introduction

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

17.1.2 The Aspen Array Area covers an area of approximately 333 km2 and is located approximately 84 km east of Peterhead on the east coast of Scotland. The offshore infrastructure of the Proposed Development includes Wind Turbine Generators (WTGs) and associated floating foundations, Offshore Substation Platform(s) (OSP(s)) and associated foundations, the Inter-array Cables (IACs), Inter-link Cables, Offshore Transmission Cables (OTCs) and Landfall.

17.1.3 This Chapter of the Offshore EIAR presents an assessment of the potential impacts and associated Likely Significant Effects (LSE) on socioeconomics, tourism and recreation receptors from the Proposed Development and discusses appropriate mitigation and monitoring as required to address any significant effects. As per the Environmental Impact Assessment (EIA) Regulations, this Chapter specifically refers to the assessment of LSE on socioeconomics, tourism and recreation receptors, seaward of MHWS, during pre-construction, construction, operation and maintenance (O&M), and decommissioning phases.

17.1.4 The term 'Likely Significant Effect' is used in both the EIA Regulations and the Habitat Regulations. The Offshore EIAR is accompanied by a Report to Inform Assessment (RIAA) (Cerulean Winds Aspen Project Limited, 2025) which uses the term as defined by the Habitat Regulations Appraisal (HRA) Regulations. The Offshore EIAR uses the term as defined in the 'EIA Regulations'.

17.1.5 This Chapter should be read alongside the following other Chapters and their technical appendices:

- Volume 2, Chapter 13: Commercial Fisheries;
- Volume 2, Chapter 14: Shipping and Navigation;
- Volume 2, Chapter 19: Infrastructure and Other Marine Users.

17.1.6 This Chapter refers to the design of the Proposed Development as described in Volume 1, Chapter 3: Project Description of the Offshore EIAR.

17.1.7 This Chapter has been prepared by BiGGAR Economics Ltd. on behalf of the Applicant.

17.2 Purpose of the Chapter

17.2.1 The primary purpose of the Offshore EIAR is defined in **Volume 1, Chapter 1: Introduction**.

17.2.2 The key objective of this Chapter is to provide Scottish Ministers, statutory and non-statutory stakeholders, and local communities the information required to assess for LSE upon socioeconomics, tourism and recreation due to the Proposed Development.

17.2.3 The topic of socioeconomics, tourism and recreation includes an assessment of effects from:

- Increase in employment and Gross Value Added (GVA);
- Demographic changes;
- Changes to housing demand;
- Changes to other local public and private services;
- Changes to marine recreation;
- Changes to onshore recreation;
- Changes to commercial fisheries; and
- Changes to shipping.

17.2.4 This Chapter presents the following:

- A detailed description of current environmental baseline conditions relevant to socioeconomics, tourism and recreation. These have been established from desk studies, and consultation with stakeholders;
- Discussion of assumptions and any limitations with respect to the information used to define the baseline;
- Identification of potential impacts and any resulting LSE on socioeconomics, tourism and recreation related to activities from the Proposed Development. This process is informed by the application of embedded commitments;
- Consideration of the need for any 'secondary' mitigation measures (in addition to embedded commitments) to reduce, or offset LSE on socioeconomics, tourism and recreation from the Proposed Development;
- Consideration of any residual effects following application of secondary mitigation; and
- Identification of monitoring measures to support proposed mitigation.

17.3 Legislation and Policy Context

17.3.1 Overarching legislation, policy, and guidance in relation to the Offshore EIAR for the Proposed Development is provided in **Volume 1, Chapter 2: Policy and Legislative Context** of the Offshore EIAR. A summary of policies (Table 17.1), legislation and guidance directly relevant to socioeconomics, tourism and recreation is provided in the following sections.

Legislation and Policy

17.3.2 There are no relevant legislative controls directly applicable to socioeconomics, tourism, and recreation.

17.3.3 A summary of any relevant policy directly applicable to socioeconomics, tourism and recreation is provided below within Table 17.1.

Table 17.1 Table of Relevant Policy for Socioeconomics, Tourism and Recreation

Legislation	Summary	How/Where This Chapter has Considered This
Aberdeenshire Council (2023), 'Aberdeenshire Local Development Plan'.	Aberdeenshire Council's Policy C2 on renewable energy states that the council will support renewable energy developments at appropriate sites and of the appropriate design. Assessments should consider effects on socioeconomics, tourism and recreation.	An assessment of effects on socioeconomics, tourism and recreation is considered in Section 17.7.
Aberdeen City Council, Aberdeenshire Council, ONE (2024), 'Regional Economic Strategy: A Sustainable Economic Future for the North East of Scotland'.	Aberdeenshire Council's Economic Strategy sets out a long-term plan for the North East Scotland to transform its economy over the next decade. The document outlines the need for the North East to capitalise on its land use and natural assets and resources to pioneer low-carbon energy solutions, including offshore wind and floating structures.	Considered in the Annex to this Chapter.
UK Government (2025), The UK's Modern Industrial Strategy	The UK's Modern Industrial Strategy aims to seize on the most important sectoral opportunities available to the UK and create favourable conditions for the attraction of business investment. The Strategy identifies eight key sectors, including Clean Energy.	Considered in the Annex to this Chapter.
BEIS (2021), 'North Sea Transition Deal'(NSTD).	The NSTD sets out an agreement between industry and government to support workers, businesses, and the supply chain, as the region transitions to a net zero future. The document highlights the importance of building on the UK's existing capabilities, infrastructure, and private investment potential to deliver the skills, innovation and new infrastructure required to decarbonise the North Sea and support the growth of new sectors such as offshore wind.	Considered in the Annex to this Chapter.
Highlands and Islands Regional Economic Partnership (HIREP) (2025), 'Regional Economic Strategy 2025 – 2035'.	HIREP's Regional Economic Strategy sets out a ten year plan for the Highlands and Islands, outlining the unique opportunity for the Highlands and Islands to capitalise on its land use and natural assets to support Scotland's journey to Net Zero. The document highlights the requirement for transformational change and action to ensure that economic and social benefits for people, communities and businesses are harnessed within the region.	Considered in the Annex to this Chapter.

Legislation	Summary	How/Where This Chapter has Considered This
Scottish Government (2015), 'National Marine Plan'.	The National Marine Plan is the overarching guidance for the planning and consenting of offshore wind projects in Scotland. This plan is currently being updated, but the 2015 document is currently the latest version. The Plan sets out objectives for offshore wind, including securing a competitive local supply chain, alignment of marine planning and grid planning, and coordinated approach to government and industry-wide monitoring.	Considered in the Annex to this Chapter.
Scottish Government (2022), 'National Strategy for Economic Transformation'.	The National Strategy for Economic Transformation sets out the Scottish Government's vision to create a wellbeing economy where society thrives across economic, social and environmental dimensions, and the opportunity the transition to net zero presents.	Considered in the Annex to this Chapter.
Scottish Government (2023), 'National Planning Framework 4' (NPF4).	NPF4 sets out a national and strategic approach to planning and development in support of achieving net zero in Scotland by 2045.	Considered in the Annex to this Chapter.
Scottish Government (2024), 'Green Industrial Strategy'.	The Green Industrial Strategy highlights Scotland's strengths, opportunities, and resources and aims to help Scotland maximise the economic benefit from the opportunities created by the global transition to Net Zero. The strategy highlights the need for working collaboratively with partners.	Considered in the Annex to this Chapter.
Scottish Government (2024), 'Offshore Wind Focus'.	This document highlights that offshore wind has been identified as the single most important opportunity for attracting financial capital to Scotland and raising the wider investment profile. The document outlines the key public sector investment opportunities to enable the economic benefits from the offshore wind opportunity to be realised in Scotland.	Considered in the Annex to this Chapter.
UK Government (2024), 'Clean Action Power Plan (CPAP) 2030'.	CPAP sets out a series of targets for the deployment of different renewable energy technologies to 2030, with the aim of delivering clean energy and increasing energy security. For offshore wind, the CPAP establishes a target of between 43-50 GW operational by 2030. To support the delivery of CPAP, the UK Government is pursuing a series of initiatives, including grid connection reform, reform of the	Considered in the Annex to this Chapter.

Legislation	Summary	How/Where This Chapter has Considered This
	current planning and consenting system, changes to the Contracts for Difference (CfD) framework, and electricity market reform.	
UK Government (2024), 'Offshore Wind Industrial Growth Plan (IGP)'.	The IGP highlights the opportunities arising from growth in the UK's offshore wind supply chain, and sets out two key aims, to grow supply chain capacity to accelerate delivery and grow market share through a focus on key technologies.	Considered in the Annex to this Chapter.

17.3.4 All guidance directly applicable to socioeconomics, tourism and recreation includes the following documents:

- Defining 'local areas' for assessing the economic impact of offshore renewables and other marine developments: guidance principles (Scottish Government, 2022a);
- General Advice for Offshore Socio-Economic Impact Assessment (SEIA), Marine Analytical Unit (MAU) (Marine Analytical Unit, 2022); and
- Green Book: Appraisal and Evaluation in Central Government (UK Government, 2022).

17.4 Consultation

17.4.1 Continuous consultation (statutory and non-statutory) and incorporation of feedback is critical in developing a robust EIAR. The Offshore Scoping Report for the Proposed Development (**Volume 3, Appendix 6.1: Offshore Scoping Report**) was submitted to the Marine Directorate - Licensing Operations Team (MD-LOT) in January 2025. MD-LOT issued a detailed response to the Offshore Scoping Report in the May 2025 Offshore Scoping Opinion (**Volume 3, Appendix 6.2: Offshore Scoping Opinion**), covering its own opinion on the Offshore Scoping Report as well as the statutory and non-statutory consultees' advice on each topic.

17.4.2 A summary of the stakeholder consultation activities specific to socioeconomics, tourism and recreation is provided in Table 17.2 in which the issues are raised and the actions to address them are incorporated throughout the Offshore EIAR.

17.4.3 Further detail on the Proposed Development's overall EIA stakeholder consultation process is presented in **Volume 1, Chapter 6: Consultation** of the Offshore EIAR. In particular, the Applicant has engaged with stakeholders through a Pre Application Consultation (PAC) event held in June 2025.

Table 17.2 Consultation Relevant to Socioeconomics, Tourism and Recreation

Date	Consultee and Type of Consultation	Description/Issues Raised	How This has Been Considered in This Chapter
May 2025	Scottish Ministers - Offshore Scoping Opinion (via MD-LOT)	"The Developers presents the relevant study area for socioeconomics, tourism and recreation in Section 18.2 of the Scoping Report. The Scottish Ministers are largely content with the study area outlined, however draw attention to the MAU advice in this regard and request that it is fully considered in the EIA Report. The Scottish Ministers also advise that the most up-to-date data sources must be used for all analysis. The Scottish Ministers additionally advise that MAU's points regarding the use of consultation, stakeholder engagement, and primary data collection must be fully considered by the Developer in the EIA Report."	Since submission of the Offshore Scoping Report, initial decisions on port selection and short-listing have been made. This has been reflected in the inclusion of two additional Socioeconomics Study Areas: Highland and the North of Scotland (Highland, Aberdeenshire and Moray). These have been considered in the assessment at Section 17.7. To avoid survey fatigue and ensure meaningful interactions, stakeholder engagement will occur post application as decisions are made regarding the location of key activities, such as ports which will feed the development, and will be completed in collaboration with other offshore wind developers in Scotland.
May 2025	Scottish Ministers - Offshore Scoping Opinion (via MD-LOT)	"In relation to economic impacts, the Scottish Ministers are broadly content with the proposed approach to assessment as detailed in Section 18.9 of the Scoping Report and agree with the Developer's proposal to include direct, indirect and induced impacts for all phases of the Proposed Development. The Scottish Ministers direct the Developer further to the MAU advice and recommend that this is fully considered when compiling the EIA Report."	Direct, indirect and induced impacts are considered in the assessment of economic impacts in Section in Section 17.7. MAU advice on the assessment of economic impacts was considered, and the full methodology for economic impacts is outlined in Section 17.5 and Section 17.7.
May 2025	Scottish Ministers - Offshore Scoping Opinion (via MD-LOT)	"The Scottish Ministers additionally direct the Developer to the MAU advice in terms of employment impacts and the methodology used to assess economic impacts and request that this is fully considered and implemented by the Developer in the EIA Report."	MAU advice on the assessment of economic impacts such as employment impacts was considered. The full methodology for economic impacts is outlined in Section 17.5 and Section 17.7.

Date	Consultee and Type of Consultation	Description/Issues Raised	How This has Been Considered in This Chapter
May 2025	Scottish Ministers - Offshore Scoping Opinion (via MD-LOT)	"In line with the MAU advice, the Scottish Ministers advise that a full Socio-Economic Impact Assessment ("SEIA") must be included with the EIA Report and should be transparent in its methodological choices for assessment of socioeconomic impacts. The Scottish Ministers highlight Annex 1 of the MAU advice which may be of assistance to the Developer in developing the SEIA."	An assessment of the impacts associated with the whole project relevant to socio-economics are included in Section 17.7. The methodology for this assessment is outlined in Section 17.5 and Section 17.7.
May 2025	Scottish Ministers - Offshore Scoping Opinion (via MD-LOT)	"Table 18-9 of the Scoping Report outlines the impacts the Developer proposes to scope in for further assessment in the EIA Report for different phases of the Proposed Development, while Table 18-10 presents the impact proposed to be scoped out. The Scottish Ministers broadly agree with the impacts proposed to be scoped in, however disagree with the scoping out of socio-cultural impacts and instead advise that these must be scoped in for further assessment in the EIA Report during all phases of the Proposed Development. This view is supported by the MAU advice."	The assessment of social effects, such as the impact on demographics and the demand for services such as housing are considered in are included in Section 17.7. Other potential socio-cultural impacts, including changes to community character or image and quality of life, will require primary stakeholder research in the communities around the key epicentres of impact. Details of stakeholder engagement, including with community groups is described in more detail in **Volume 4, Appendix 1: Pre-Application Consultation Report**, which did not identify any likely significant socio-cultural effects. To avoid survey fatigue and ensure meaningful interactions, this engagement will occur post consent as decisions are made regarding the location of key activities, such as ports. In the interim, the Applicant will support sector wide primary research on socio-cultural impacts of the development of offshore wind that may be commissioned by sector bodies such as the Scottish Offshore Wind Energy Council (SOWEC). As a result, the socio-cultural effects which would require primary social research to undertake an assessment have not been considered in this chapter.

Date	Consultee and Type of Consultation	Description/Issues Raised	How This has Been Considered in This Chapter
May 2025	Scottish Ministers - Offshore Scoping Opinion (via MD-LOT)	"In terms of social impacts, the Scottish Ministers advise that their current position is that the Developer should consider potential local communities as a result of the Proposed Developments and outline how baseline data will be collected to assess impacts in future. The Scottish Ministers are considering this position and, should this develop or change in future, the Developers will be notified."	Baseline information has been included for Highland and the North of Scotland, where construction and O&M ports will be located, and are presented at Section 17.5.
May 2025	Cenos Offshore Wind Farm Limited and Green Volt Offshore Wind Farm Limited (via MD-LOT)	"A Scotland wide study area is suggested for socioeconomic impacts based on a lack of certainty on the ports and harbours to be utilized for the project. This seems to be a very large study area, which begs the question whether a more meaningful regional assessment should be pursued."	Two additional Socioeconomics Study Areas, Highland and the North of Scotland (Highland, Aberdeenshire and Moray) have been included. These have been considered in the assessment at Section 17.7.
May 2025	Marine Analytical Unit - Offshore Scoping Opinion (via MD-LOT)	"We broadly agree with the proposed approach for assessing economic and social impacts. However, the developer has stated that areas of impact cannot be assessed at this time, due to port and harbour locations not being known. MAU would suggest that Stonehaven and LowerDeeside are added as a local study area to robustly assess socioeconomic impacts, with Aberdeenshire used as an approximation if this is not possible."	Information on Aberdeenshire has been included as part of a North of Scotland Socioeconomics Study Area. Regarding port selection, the construction port is expected to be at Ardersier, which is why Highland has now been included in the assessment. Given that an O&M port has not been chosen yet, any epicenters of activity during that phase are considered as part of the North of Scotland. A list of potential O&M ports in this area have been included as part of the assessment in Section 17.5. These considerations have informed the assessment at Section 17.7.
May 2025	Marine Analytical Unit - Offshore Scoping Opinion (via MD-LOT)	"MAU recommended a stakeholder mapping exercise to identify all potential stakeholders who might be affects by the development. These stakeholders may need to be engaged for identification and assessment of potential impacts (e.g. creation of a working group with local	The socioeconomics, tourism and recreation baseline has been compiled based on a desk-based research exercise and the study team's experience of working across similar developments in the North East of Scotland.

Date	Consultee and Type of Consultation	Description/Issues Raised	How This has Been Considered in This Chapter
		community councils where magnitude and sensitivity of socio-economic impacts is discussed).	The Applicant have hosted events and engaged with local councils in order to understand local issues and assure that these can be reflected where relevant in the assessment of social and economic impacts. The Applicant has also engaged with stakeholders as part of a PAC event held in June 2025.
May 2025	Marine Analytical Unit - Offshore Scoping Opinion (via MD-LOT)	”If it is possible to supply additional information about the types of jobs that are expected to be created (e.g. part-time, full-time, skilled, unskilled etc.) and how these compare to the existing jobs in the study area, which will add further depth to the analysis.”	Details on the type of jobs supported by the Proposed Development, where available, have been included at Section 17.7.

17.5 Baseline Environment

17.5.1 This section presents a summary of the socioeconomics, tourism and recreation baseline environment study area, the methodology, limitations and assumptions underpinning the data used.

Study Area

Socioeconomic Study Area

17.5.2 The offshore socioeconomics study areas for the assessment of effects on employment, the economy and socioeconomics are defined in line with the guidance on identification of 'local areas' for offshore developments published by the Scottish Government (Marine Scotland, 2022).

17.5.3 This guidance identified six principles for identifying local study areas for offshore development:

- Principle 1 (Dual Geographies): The local area for the supply chain and investment impacts should be separate from the local area(s) for wider offshore socio-economics economic impacts, including tourism and recreation;
- Principle 2 (Appropriate Impacts): The appropriate impacts to be considered for assessments should be identified before defining the local areas;
- Principle 3 (Epicentres): The local areas should include all the epicentres of the appropriate impacts;
- Principle 4 (Accountability): The local areas used in the assessment should comprise of pre-existing economic or political geographies (community councils, local authorities, development agencies) to enhance accountability;
- Principle 5 (Understandable): The local areas should be defined in such a way that they are understandable to the communities they describe; and
- Principle 6 (Connected Geography): The local area for the supply chain and investment impacts should consist of connected (including coastal) pre-existing economic or political geographies

17.5.4 The main local epicentres of socioeconomic impact are expected to be the ports used during the construction and O&M for the Proposed Development.

17.5.5 The Applicant has selected Ardersier Port in Highland as the construction port for the Proposed Development. As set out in Section 17.6, the use of only this port represents a Worst-case Scenario. Alongside Ardersier Port, Highland has a series of other ports that may be involved in the construction of the Proposed Development. As economic data at lower levels of geographical aggregation is less reliable, the analysis focuses on the local authority where economic activity is expected to occur.

17.5.6 Regarding O&M activity, it is expected a port in the North of Scotland (Highland, Aberdeenshire or Moray) will be used. Based on a study carried out by engineering consultancy Arup on behalf of Crown Estate Scotland (CES) (Crown Estate Scotland, 2020) and a O&M strategy using Service Operation Vessels, there are a series of ports that could support O&M activity. For instance, Scrabster, Nigg, Cromarty Firth/Invergordon, Fraserburgh and Peterhead.

17.5.7 Based on likely port locations for construction and O&M activity, the following Socioeconomic study areas have been considered:

- Highland;
- The North of Scotland (defined as the local authorities of Highland, Aberdeenshire, and Moray);
- Scotland; and
- The UK.

Tourism and Recreation Study Area

17.5.8 The Tourism and Recreation study area has been identified based on where the epicentres of impact would be that could impact on tourism and recreation receptors. These would mostly be localised around the nearshore construction activities by the landfall area. On this basis, the following study area has been identified:

- The electoral ward of Stonehaven and Lower Deeside in Aberdeenshire.

Methodology

17.5.9 Baseline data to inform the socioeconomics, tourism and recreation assessment was collected based on a desktop study. Available statistical evidence was complemented by the study team's experience in carrying out similar assessments in the east coast of Scotland.

Desktop Study

17.5.10 For the purposes of this Chapter, a desk-based review was undertaken using relevant socioeconomics and tourism data sources. These existing data sets and literature are presented in Table 17.3. Some data sources included are specific to the different countries of the UK. This is because where UK figures were not available, country level figures were aggregated to produce equivalent UK statistics.

Site Specific Surveys

17.5.11 No site-specific surveys have been undertaken to inform the EIA for socioeconomics, tourism and recreation. This is because the study team's experience and strong understanding of the economic structure of the study areas, alongside publicly available statistics, were sufficient to form a view on the baseline environment.

Table 17.3 Key Sources of Socioeconomics, Tourism and Recreation Literature and Data

Source, Author and Year	Summary	Coverage of Study Area
National Records of Scotland (NRS) (2024), 'Mid-2023 Population Estimates – local authority'.	Population estimates for Scotland for 2023, broken down by age.	Annual publication covering Scotland and each of its local authorities and electoral wards (including the TRSA).
Office for National Statistics (ONS) (2024a), 'Population estimates - local authority based by single year of age'	Population estimates provided for England and Wales for 2023, broken down by age.	Annual publication focusing on England, Scotland, Wales, and Northern Ireland. Data for 2023 are only available for England and Wales.
Northern Ireland Statistics Research Agency (NISRA) (2024), 'Mid-2023 Population Estimates: Single year of age and sex'	Population estimates for Northern Ireland for 2023, broken down by age and sex.	Annual publication focusing on Northern Ireland.
ONS (2024b), 'Annual Population Survey'.	Provides statistics on characteristics of populations, educational attainment, including economic activity rate, unemployment rate and employment by occupation.	Annual publication covering the UK, Scotland and local authorities.
ONS (2024c), 'Annual Survey of Hours and Earnings 2024'.	Provides average and median residential and workplace earnings.	Annual publication covering the UK, Scotland and local authorities.
ONS (2024d), 'Business Register and Employment Survey 2023'.	Provides a breakdown of employment by sector.	Annual publication covering Great Britain, Scotland, local authorities and electoral wards.
ONS (2015), 'Business Register and Employment Survey 2013'.	Provides a breakdown of employment by sector.	Annual publication covering Great Britain, Scotland, local authorities and electoral wards.
NISRA (2023), 'Business Register and Employment Survey, Northern Ireland, 2022'	Provides a breakdown of employment by sector.	Annual publication covering Northern Ireland, district council areas, and parliamentary constituency areas.
NISRA (2015), 'Northern Ireland Business Register And Employment Survey 2012 Employee Jobs'	Provides a breakdown of employment by sector.	Annual publication covering Northern Ireland, district council areas, and parliamentary constituency areas.
Scottish Government (2024a), 'Pupil Census Supplementary Statistics 2024'.	Statistics on school pupil characteristics from data collected through the annual school pupil census.	Annual publication covering Scotland and local authorities.

Source, Author and Year	Summary	Coverage of Study Area
Scottish Government (2024b), 'Teacher Census Supplementary Statistics 2024'.	Statistics on teacher characteristics from data collected through the annual school staff census.	Annual publication covering Scotland and local authorities.
UK Government (2024a), 'Education and Training Statistics for the UK'.	Provides statistics on the education systems across the United Kingdom.	Annual publication covering the UK.
ONS (2023), 'Stock Estimates by Tenure'.	Provides statistics on the number of dwellings owned by local authorities in Scotland.	Annual publication covering Scotland and local authorities.
UK Government (2024b), 'Dwelling Stock by Tenure'	The number of dwellings in the UK, and dwelling stock data by tenure for the UK's constituent countries, where available.	Annual publication covering the UK.
Registers of Scotland (ROS) (2025), 'House Price Statistics'.	Publication providing monthly, quarterly and calendar year statistics, including the median, mean, volume and value of all residential market value property sales for each local authority in Scotland.	Monthly publication covering Scotland and local authorities.
ONS (2024e), 'House Price Simple Averages'	Publication of transactions with a mortgage covering the UK, providing data from 1991 to 2023.	Annual publication covering the UK.
Public Health Scotland (PHS) (2022), 'General Practice – GP workforce and practice list sizes'.	Publication provides statistics on the General Practitioner (GP) workforce contracted to work in Scottish practices in the years 2012 to 2022, including information about the number of GP practices and patients registered.	Annual publication covering Scotland and local authorities.
Business Services Organisation (BSO) (2024), 'General Medical Services for Northern Ireland'.	Publication providing the number of GPs per 100,000 registered patients by UK region by year.	Annual publication covering the UK.
Kantar (2023), 'Great Britain Day Visitor Survey'(GBDVS)	Annual publication of domestic overnight tourism visits and nights by number, value and purpose for 2022. Earlier data for local authorities comes from 2019, the latest year not affected by Covid-19.	Annual publication covering the Great Britain, Scotland and local authorities.
ONS (2023), 'International Passenger Survey'	Annual publication of international overnight tourism visits and nights by number, value and purpose for 2022. Earlier data for local	Annual publication covering the UK, Scotland and selected regions, such as Grampian.

Source, Author and Year	Summary	Coverage of Study Area
	authorities comes from 2019, the latest year not affected by Covid-19.	
Scottish Government (2023), 'Industry Statistics – Local Authority Areas'.	Provides economic statistics for six key growth sectors in Scotland, including sustainable tourism. Data for local authorities is available from 2008 to 2022.	Annual publication covering Scotland and local authorities.
NRS (2020), '2018-based Principal Population Projections'	Population projections for Scotland and each of its 32 local authorities, broken down by age.	Bi-annual publication covering Scotland.
ONS (2022), 'Principal Population Projections 2020-Based'	Population projections for the UK, broken down by age.	Bi-annual publication covering the UK.

17.5.12 A summary of the Socio-Economics, Tourism and Recreation baseline environment is provided in the following sections.

Population

17.5.13 In 2023, Highland had a population of 236,330, accounting for 39.7% of the population in the North of Scotland (595,320), and 4.3% of the total population of Scotland (5,490,100) (NRS, 2024). The share of the working age population (those aged 16-64 years old) across Highland and the North of Scotland was 60.2%. This is a smaller proportion than that across Scotland (63.4%) and the UK (62.8%) (ONS, 2024a) (NISRA, 2024).

17.5.14 At the same time, the share of the population aged 65+ in Highland (24.2%) is higher than that accounted for by this demographic group across the North of Scotland (22.9%), Scotland (20.3%), and the UK (18.9%). This suggests Highland and the North of Scotland have an older population than Scotland and the UK, supported by a relatively smaller population of working age.

17.5.15 Information of the demographics of the Socioeconomics Study Areas is summarised in Table 17.4.

Table 17.4 Population by Age Group, 2023

	Highland	North of Scotland	Scotland	UK
Aged 0-15	15.6%	16.9%	16.3%	18.3%
Aged 16-64	60.2%	60.2%	63.4%	62.8%
Aged 65+	24.2%	22.9%	20.3%	18.9%
Total	**236,330**	**595,320**	**5,490,100**	**68,265,209**

Economic Activity

17.5.16 In 2024, the economic activity rate in Highland was 81.5%, broadly similar to that of the North of Scotland (81.2%), and larger than that of Scotland (77.0%), and the UK (78.4%) (ONS,2024a). The unemployment rate in Highland (2.3%) was slightly lower than that of the North of Scotland (2.5%), Scotland (3.3%), and the UK average of 3.8% (ONS,2024b).

17.5.17 At £38,823, the median annual income of Highland's residents (ONS,2024c) is slightly below that of those living in the North of Scotland (£38,876), but higher than for Scotland (£38,286) and the UK (£37,430). Overall, the labour market in Highland and the North of Scotland is characterised by relatively high economic activity and low unemployment.

17.5.18 Information on economic activity and the labour market is summarised in Table 17.5.

Table 17.5 Economic Activity Rate, 2024; Median Annual Income, 2024

	Highland	North of Scotland	Scotland	UK
Economic Activity Rate	81.5%	81.2%	77.0%	78.4%
Unemployment Rate	2.3%	2.5%	3.3%	3.8%
Median Annual Income	£38,823	£38,876	£38,286	£37,430

Industrial Structure

17.5.19 Table 17.6 provides the most recent data from the Business Register and Employment Survey, an employer survey. The latest available information for Scotland, England and Wales is based on 2023 figures, whilst figures for Northern Ireland are based on 2022 data.

17.5.20 In 2023, there were 128,450 jobs in Highland, representing 4.8% of the 2.7 million jobs in the Scottish economy (ONS, 2024d). Scotland accounts for 8.0% of total jobs across the UK (ONS,2024d) (NISRA,2023).

17.5.21 During the development stage of the Proposed Development, which includes project management, project design and environmental impact assessments, there will be opportunities for the professional, scientific and technical sector, which accounts for around 6,000 jobs in Highland, or 4.7% of employment in the region. This is lower than average compared to the North of Scotland (6.6%), Scotland (7.2%) and the UK (9.2%).

17.5.22 Employment in the electricity, gas, steam and air conditioning supply sector accounts for 0.8% of employment in Highland, similar to the proportion across Scotland (0.8%) and greater than that of the UK (0.4%). There are 20,000 jobs associated with this sector in Scotland, accounting for 16.7% of UK's employment in the sector, indicating that relative to the UK, Scotland has a stronger renewable energy sector. This conclusion finds additional backing in ONS estimates of green jobs across the UK (ONS, 2024e). These suggest that 21% (9,900) of the 47,900 jobs supported by renewable energy in 2022 were based in Scotland, a larger share of employment than that suggested by Scotland's relative share of the UK's population.

17.5.23 Sectors relevant to the construction phase of the Proposed Development include manufacturing and construction. Manufacturing accounts for around 6,000 jobs in Highland, accounting for 4.7% of total employment. This is below average compared to the wider North of Scotland (8.9%) and Scotland, where manufacturing accounts for 6.7% of employment. There are approximately 178,000 manufacturing jobs in Scotland, accounting for 7.2% of the UK's manufacturing employment.

17.5.24 Construction accounts for 6.2% of employment in Highland, with approximately 8,000 jobs in the sector, larger than the proportion across Scotland as a whole, where construction accounts for 5.1% of employment and approximately 136,000 jobs. This proportion is above average compared to the UK, where construction accounts for 4.9% of total employment.

17.5.25 In Highland, 12.5% of jobs are accounted for by accommodation and food service activities, a sector associated with tourism, relatively higher than the proportion across Scotland (8.6%) and the UK (7.9%).

Table 17.6 Industrial Structure, 2023

Economic Sectors	Highland	North of Scotland	Scotland	UK
Human health and social work activities	15.6%	12.9%	15.6%	13.7%
Wholesale and retail trade; repair of motor vehicles and motorcycles	13.3%	13.9%	13.2%	13.7%
Accommodation and food service activities	12.5%	9.3%	8.6%	7.9%
Agriculture, forestry and fishing	10.9%	11.1%	3.4%	1.4%
Education	7.0%	7.3%	8.2%	8.4%
Construction	6.2%	6.5%	5.1%	4.9%
Manufacturing	4.7%	8.9%	6.7%	7.4%
Transportation and storage	4.7%	4.6%	4.5%	4.9%
Professional, scientific and technical activities	4.7%	6.6%	7.2%	9.2%
Administrative and support service activities	4.7%	4.3%	6.8%	8.5%
Public administration and defence; compulsory social security	4.7%	4.3%	6.2%	4.6%
Arts, entertainment and recreation	3.1%	2.7%	2.7%	2.6%
Water supply; sewerage, waste management and remediation activities	2.0%	1.2%	0.8%	0.7%
Information and communication	1.8%	1.5%	3.1%	4.4%
Real estate activities	1.4%	1.1%	1.5%	2.0%
Other service activities	1.4%	1.4%	1.7%	2.0%
Electricity, gas, steam and air conditioning supply	0.8%	0.6%	0.8%	0.4%
Financial and insurance activities	0.6%	0.6%	3.2%	3.3%
Mining and quarrying	0.3%	1.3%	0.9%	0.1%
Total	**128,500**	**279,900**	**2,657,000**	**33,052,200**

17.5.26 Table 17.7 illustrates the change in employment figures between 2013 and 2023. Given the availability of data, the figures for Northern Ireland are based on 2012 and 2022 data.

17.5.27 The number of jobs in Highland increased by 6.7% (ONS, 2015) (ONS, 2024d), a higher rate of growth than the North of Scotland (5.6%), but slightly lower than Scotland (7.9%) and the UK (14.4%) (NISRA, 2015) (ONS, 2015) (ONS, 2024d).

Table 17.7 Change in Employment (2013-2023)

	Highland	North of Scotland	Scotland	UK
Change in Employment	6.7%	5.6%	7.9%	14.4%

Employment by Occupation Type

17.5.28 As set out in Table 17.8, Highland has a higher share of its population employed in skilled trades (12%), process, machine and plant operatives (11%) and elementary occupations (13%) than Scotland and the UK (ONS, 2025). At the same time, Highland features a relatively lower share of its workforce employed in professional occupations (20%) than across Scotland and the UK.

17.5.29 The North of Scotland features similar trends in terms of its relative shares of employment by occupation as Highland.

Table 17.8 Employment by Occupation

Occupation	Highland	North of Scotland	Scotland	UK
Managers, Directors and Senior Officials	8%	9%	9%	11%
Professional Occupations	20%	21%	25%	27%
Associate Prof & Technical Occupations	9%	13%	15%	15%
Administrative and Secretarial Occupations	10%	10%	10%	9%
Skilled Trades Occupations	12%	14%	10%	9%
Caring, Leisure and other service Occupations	11%	9%	10%	8%
Sales and Customer Service Occupations	5%	4%	6%	6%
Process, Plant and Machine Operatives	11%	9%	6%	5%
Elementary Occupations	13%	10%	10%	9%

Education

17.5.30 The population of Highland aged 16-64 years old with a degree-level education (RQF4+) is 49.2%, slightly lower than that of the North of Scotland (52.8%), Scotland (54.5%), but it is higher than the UK (47.4%) (ONS, 2024b). However, there are relatively fewer people without a qualification in Highland (6.6%) than in the North of Scotland (6.9%), Scotland (8.0%) and the UK (6.8%).

Table 17.9 Education Levels (16-64 years old), 2024

Qualification Level	Highland	North of Scotland	Scotland	UK
% with RQF4+	49.2%	52.8%	54.5%	47.4%
% with RQF3+	72.5%	72.2%	72.5%	67.8%
% with RQF2+	89.2%	89.2%	87.4%	86.6%

Qualification Level	Highland	North of Scotland	Scotland	UK
% with RQF1+	89.2%	90.3%	88.6%	89.0%
% with other qualification	4.2%	4.9%	3.4%	4.2%
% with no qualifications	6.6%	6.9%	8.0%	6.8%

Pupil to Teacher Ratio

17.5.31 As a measure of class size and existing pressure on educational provision, the analysis considered the Pupil to Teacher Ratio for each Study Area. As shown in Table 17.10, the average Pupil to Teacher Ratio for Highland in 2024 was 13.1, slightly lower than that of the North of Scotland (13.4) and the Scottish average of 13.3 (Scottish Government, 2024a) (Scottish Government, 2024b). This is significantly lower than that of the UK, which has a Pupil to Teacher Ratio of 17.7 (UK Government, 2024a). Data on the pupil to teacher ratio suggest that Highland could be better placed to accommodate changes in its student population than other areas across Scotland and the UK.

Table 17.10 Pupil to Teacher Ratio, 2024

	Highland	North of Scotland	Scotland	UK
Pupil to Teacher Ratio	13.1	13.4	13.3	17.7

Housing

17.5.32 The availability and affordability of housing in an economy affects its ability to accommodate new people, including any temporary and long-term workers linked to the Proposed Development.

17.5.33 In 2022, the total housing stock in Highland was 121,510, equivalent to 42.0% of the total housing stock across the North of Scotland, and 4.5% of the Scottish total (2.7 million) (ONS, 2023). Scotland represents 8.9% of the total stock across the UK (30.1 million) (UK Government, 2024b).

17.5.34 The proportion of private housing (including owner-occupied, or rented privately or with a job or business) in Highland is 75.0%, a slightly smaller proportion than that across the North of Scotland (77.2%), but greater than that for Scotland as a whole (73.3%) (ONS, 2023). Whilst housing stock tenure data was unavailable for Northern Ireland, the proportion of private housing across the rest of the UK was 80.7% (UK Government, 2024b). The proportion of local authority housing in Highland (12.1%) is slightly larger than that across the North of Scotland (8.7%) and Scotland (11.9%).

17.5.35 This proportion of local authority housing indicates that the housing market in Highland is under greater pressure than elsewhere in Scotland.

Table 17.11 Housing Stock by Tenure

	Highland	North of Scotland	Scotland	UK
Total	121,510	289,032	2,687,186	30,141,000
Private	75.0%	77.2%	73.3%	80.7%*
Local Authority	12.1%	8.7%	11.9%	8.8%*
Other	12.9%	14.1%	14.7%	10.5%*

* Figures on tenure by type are based on data for Great Britain.

17.5.36 In 2024, a total 4,000 residential properties were sold in Highland, 76 units below the 2014 figures (ROS, 2025). The average mean house price paid in Highland in 2024 was £233,644, which is higher than that of the North of Scotland (£229,383) and the average for Scotland (£225,641) (ROS, 2025). This suggests housing tends to be on average more expensive in Highland than elsewhere in Scotland.

17.5.37 The mean house price value between 2014 and 2024 increased by 43.7% across Highland, almost 23 percentage points more than that across the North of Scotland, and 6 percentage points greater than that across Scotland as a whole. This further indicates that the Highland housing market is under greater pressure than elsewhere in Scotland.

17.5.38 The average house price paid in Highland in 2024 is more than six times the average annual gross income of residents. This is slightly higher than the average for the North of Scotland, and Scotland as a whole, where the average house price paid is 5.9 times the average annual income (ONS,2024e) (ROS,2025). The 2024 average house price in Highland, the North of Scotland, and Scotland, are significantly lower than the UK average house price in 2023 (£330,000) (ONS, 2024f). Overall, housing in Highland is relatively more expensive on average and less affordable in relation to local incomes than it is on average across Scotland.

Table 17.12 Mean House Price Values and Changes, 2014 to 2024; 2013 – 2023 for UK.

Year	Highland	North of Scotland	Scotland	UK
2014 Average	£162,584	£192,416	£164,323	£267,000
2024 Average	£233,644	£229,383	£225,641	£330,000
% Change	43.7%	19.2%	37.3%	64.6%

Healthcare Provision

17.5.39 Data on the General Practitioners (GP) Workforce in Scotland collected by the NHS, indicates that, as of 2022/23, there were 307 GPs in Highland, 5.9% of the 5,209 GPs across Scotland (PHS, 2022). In the same year, there were 43,147 GPs across the UK (BSO, 2024).

17.5.40 Given that the number of registered patients in Highland is 245,258, there were approximately 799 patients per GP (PHS, 2022). This was lower than in the North of Scotland, where there were approximately 982 patients per GP, and Scotland, where on average there were 1,132 patients per GP across the country (PHS, 2022). Across the UK, there were approximately 1,706 patients per GP (BSO, 2024).

17.5.41 Based on this data, there is less pressure on GP services, in terms of the number of patients per GP, in Highland and the North of Scotland, than across Scotland and the UK.

Table 17.13 Patients per General Practitioners, 2022/23

Indicator	Highland	North of Scotland	Scotland	UK
Patients per GP	799	982	1,132	1,706

Tourism and Recreation

Visitors

17.5.42 The tourism and recreation baseline in this section identifies the scale of the tourism economy and provides an overview of marine recreation. This includes an overview of visitor numbers and their spending. Since this information is not available at the electoral ward level of Stonehaven and Lower Deeside (the TRSA), data on Grampian has been used to form a view of more localised trends. This includes Aberdeenshire, Aberdeen City and Moray. Overall, this is representative of activity in the TRSA since the TRSA and Grampian rely on similar drivers of tourism, including cultural heritage and food and drink.

17.5.43 A range of statistics are available on visitor numbers and visitor spend in Grampian and Scotland, including the Great Britain Tourism Survey (GBTS) (Kantar, 2023) and the International Passenger Survey (ONS, 2023), which provide averages over a three-year period (2017-2019).

17.5.44 The latest figures show that in 2023, Grampian attracted 1.1 million domestic overnight visitors, who spent an average of approximately £230 per visit, amounting to a total of £252 million. This accounted for 8% of the total spend in Scotland from domestic overnight visits in 2023 (Table 17.14).

17.5.45 Grampian also attracted 278,000 international overnight visitors in 2023, or 8% of all international overnight visitors to Scotland. These visitors contributed a total £158 million in spending.

Table 17.14 Visits and Visitor Spending, 2023

	Grampian	Scotland
Visitor Numbers (million)		
Domestic Overnight Visitors	1.1	12.4
International Overnight Visitors	0.3	4.0
Spend (£ million)		
Domestic Overnight Visitors	252	3,189
International Overnight Visitors	158	3,593

Sustainable Tourism

17.5.46 In 2015, the Scottish Government identified six sectors as growth sectors in Scotland's Economic Strategy (Scottish Government, 2015). These are economic sectors where Scotland had a comparative advantage. Sustainable tourism was one of the sectors identified.

17.5.47 In 2022, the sector generated £169.9 million GVA in Aberdeenshire, equivalent to 3.5% of the total £4.8 billion GVA generated by the sector across Scotland that year (Table 17.15).

17.5.48 The sector employed 8,000 people in Aberdeenshire, accounting for 3.5% of the total employment of 229,000 in sustainable tourism across Scotland (Scottish Government, 2023).

Table 17.15 Sustainable Tourism: GVA and Employment, 2022

	Aberdeenshire	Scotland
GVA (£ million)	169.9	4,803.3
Employment	8,000	229,000

17.5.49 In 2023, employment in tourism related sectors accounted for 8.5% of total employment in Aberdeenshire, a smaller proportion than that across Scotland (11.3%), and the UK (10.5%) (ONS, 2024b). This suggests that Aberdeenshire is less dependent on tourism than the average local authority across Scotland and the UK (Table 17.16).

Table 17.16 Employment in Tourism Related Sectors, 2023

	Aberdeenshire	Scotland
Tourism Related Sectors*	8.5%	11.3%

**An aggregate of Standard Industrial Classification codes 'I: Accommodation and food service activities' and 'R: Arts, entertainment and recreation'.*

Marine Recreation

17.5.50 It is assumed that most of the vessel movement that has a potential to impact marine recreation will happen around the main construction port. Whilst the facilities at Ardersier Port are not designed for leisure purposes, the coastline nearby hosts a range of marine recreational activities.

17.5.51 Chanonry and Nairn Sailing Clubs, located in Fortrose and Nairn respectively, offer dinghy and yacht cruising and racing. Several training centres are also located around Inverness, including the Seaport Marina, Highlands & Islands University Sailing Club, Compass Sea School Ltd, and SCC Inverness (Royal Yachting Association (RYA), 2025).

17.5.52 Inverness Sub Aqua Club (ISAC), a scuba diving club, is also located in Inverness, offering regular dives for most of the year, and providing access to dive sites along the coastline (ISAC, 2025).

17.5.53 The assessment has also considered baseline activity as identified in **Volume 2, Chapter 19: Infrastructure and Other Users**, especially in and around Stonehaven. Regarding recreational vessel movement, this is highly seasonal, due to the less favourable weather conditions during the winter.

17.5.54 Activity around Stonehaven includes Aberdeen and Stonehaven RYA, with dingy sailing. Stonehaven Harbour also offers paddleboarding trips. Surfing spots along the coast include Fraserborough, some stretches between Stonehaven and St Cyrus, and the coastal area around Peterhead. Boat trips and paddleboarding from Stonehaven also supports seabird watching taking place at the RSPB Fowlsheugh Nature Reserve. Similarly, dolphin watching tours are provided leaving from Stonehaven.

17.5.55 In line with the EIA regulations, this EIAR requires a *"description of the relevant aspects of the current state of the environment (baseline scenario) and an outline of the likely evolution thereof without implementation of the Project as far as natural changes from the baseline scenario can be assessed with reasonable effort, on the basis of the availability of environmental information and scientific knowledge"*. This reflects how the baseline relevant to socioeconomics, tourism and recreation is expected to evolve without the Proposed Development.

Population Projections

17.5.56 From 2023 to 2043, the population of Highland is expected to decrease by 1.3%, from 236,330 to 233,250. This projected loss of population is over six times greater than the 0.2% population decline projected for the North of Scotland over the same period. In contrast, the total population of Scotland is projected to increase by 5.1% by 2043, whilst the population of the UK is expected to grow by 10.7% (ONS, 2025). This is summarised in Table 17.17.

17.5.57 An important aspect of these demographic changes is the shift in the population of individuals aged 16 to 64 years old. During the period to 2043, the share of the population aged 16-64 years old in Highland is expected to reduce by 4.2%, equivalent to the overall reduction of approximately 11,650 working age people. Similarly, the share of the working age population across the North of Scotland is projected to decline by 3.8%, equivalent to the reduction of more than 23,350 working age people. Over the same period, this population demographic is projected to decrease by 2.4% and 0.6% percent across Scotland, and the UK, respectively.

17.5.58 The anticipated reduction in the 16–64-year-old population of Highland and the North of Scotland presents a challenge to economic and labour market stability. Without effective measures to attract and retain a skilled workforce, Highland and the North of Scotland may face workforce shortage. The opportunities for employment within the oil and gas sector are likely to decline (Robert Gordon University, 2022) and unless this is matched by a growth in employment opportunities from the renewables sector it is likely to exasperate projected population decline in the working age population. Since 2015, the number of people employed in the oil and gas sector has decreased by a third and the working age population of the North East of Scotland has declined by 5%. The growth of sectors that provide high quality jobs will therefore be an important driver of the population trends and economic performance of Highland and the North of Scotland.

Table 17.17 Population Projections, 2023-2043; Highland and North of Scotland 2018-based; Scotland and UK 2022-based projections

	Highland		North of Scotland		Scotland		UK	
	2023	2043	2023	2043	2023	2043	2023	2024
Total	236,330	233,250	595,320	594,012	5,490,100	5,770,152	68,265,209	75,585,236
Aged 0-15	15.6%	14.3%	16.9%	15.0%	16.3%	14%	18.3%	15.2%
Aged 16-64	60.2%	56.0%	60.2%	56.4%	63.4%	61%	62.8%	62.2%
Aged 65+	24.2%	29.8%	22.9%	28.5%	20.3%	25%	18.9%	22.6%

Data Limitations and Assumptions

17.5.59 Most of the data in the baseline assessment is based on surveys carried out by national statistical agencies and sectoral organisations. Given the process required to produce reliable statistics, between the time when data is collected and published, there is often a lag. This means that the latest available data on a given socio-economic indicator may not fully reflect baseline conditions at the time of writing.

17.5.60 To ensure as accurate a characterisation of the existing environment as possible, data was collected close to the time of submission. Furthermore, even if the latest available evidence does not reflect current conditions, most of the socio-economic and tourism dimensions considered present a degree of dependence on past performance. On that basis, the latest available data provides a relatively good approximation of the current environment.

17.5.61 The accuracy of survey-based statistics is dependent on the sample they draw upon and on response rates. Consequently, data reflective of smaller geographies, such as local authorities and electoral wards, may be less robust than those for larger geographies. This is, for instance, the case for the Annual Population Survey (ONS, 2024b).

17.5.62 The use of a range of statistics to characterise each of the geographies considered as part of the baseline environment reduces the risk conclusions may be affected by issues arising within any individual statistical survey.

17.5.63 Overall, the data limitations described above are not expected to have implications for the conclusions of the assessment.

17.6 Socioeconomics, Tourism and Recreation Assessment Methodology

17.6.1 Assessment of effects in this Chapter will follow the general approach outlined in **Volume 1, Chapter 4: Environmental Impact Assessment Methodology** of the Offshore EIAR.

17.6.2 Socioeconomics, tourism and recreation specific assessment criteria and recognised guidance on assessing socioeconomics, tourism and recreation are provided below.

Guidance

17.6.3 In addition to the general approach and guidance outlined in **Volume 1, Chapter 4: Environmental Impact Assessment Methodology**, the socioeconomics, tourism and recreation assessment also considers the guidance documents presented in Section 17.3.

Economic Impact Assessment

17.6.4 The economic impacts considered for each study area are reported in terms of:

- GVA: this a measure of economic output, the economic value added by an organisation, industry or region and is typically estimated by subtracting the non-staff operational costs from the turnover of an organisation;
- Years of Employment: this is a measure of employment which is equivalent to one person being employed for a year and is typically used when considering short-term employment impact, such as those associated with construction employment; and
- Employment (Jobs): a measure of employment which considers the headcount employment in an organisation or industry. This is used as the measure of employment when considering long-term impacts, such as those associated with operations and maintenance.

17.6.5 The focus of the economic impact assessment has been on the direct and indirect (supply chain) effects, in line with the UK Offshore Wind Sector Deal (UK Government, 2020). In addition to this, the assessment considers the effects of staff spending and the economic impact that this subsequent increase in demand stimulates (the induced effect). These types of economic impact are outlined in Figure 17.1.

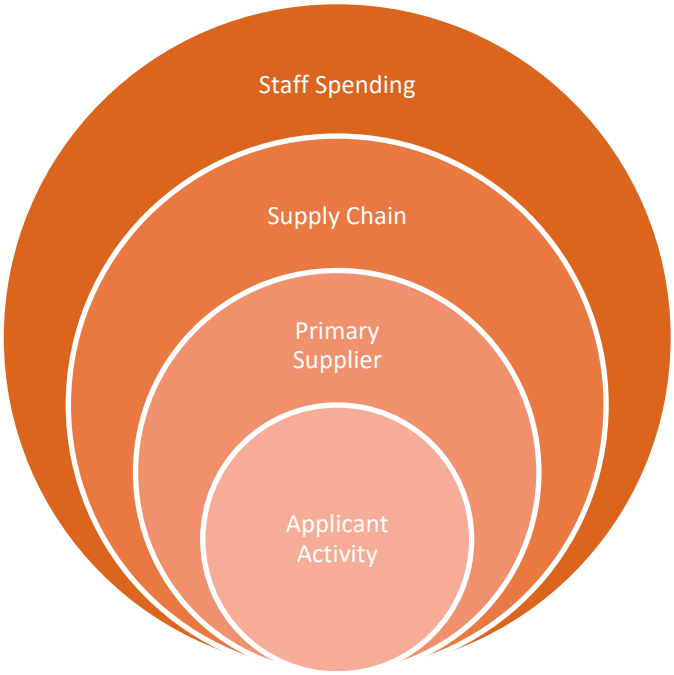


Figure 17.1 Types of Economic Impacts

17.6.6 In line with best practice, the economic analysis considers the net economic impact from the Proposed Development. This requires accounting for additionality, the extent to which economic activity would not occur without the Proposed Development. There are four dimensions of additionality:

- displacement: the extent to which activity associated with the Proposed Development displaces existing economic activity in the Socioeconomic study areas;
- leakage: the extent to which spending on the Proposed Development benefits businesses outside the Socioeconomic study areas;
- deadweight: the extent to which economic activity would occur even without the Proposed Development; and
- substitution: the effects arising when a business substitutes one activity for a similar one to benefit from public sector assistance.

17.6.7 The assessment for the Proposed Development considers three phases:

- Construction (including development, manufacturing and fabrication, and installation);
- Operation and maintenance (O&M); and
- Decommissioning.

17.6.8 The impacts during the construction phase have been based on the estimated expenditure associated with this phase. In addition to the total impact over the period, the assessment considers the timings of impacts during this phase to understand the peaks and troughs of this activity.

17.6.9 The impacts during the operational phase for the Proposed Development have been based on projected O&M expenditure.

17.6.10 The impact associated with decommissioning has been based on the analysis by BVG Associates (BVG Associates, 2023) (BVG Associates, 2021).

17.6.11 In line with HM Treasury guidance (HM Treasury, 2022), the total and decommissioning impact have been presented as the total GVA and Net Present Value (NPV) impacts. NPV is a method for discounting impacts in the future compared to impacts that are expected to occur sooner.

Social Impact Assessment

17.6.12 As well as generating economic impacts in each of the Socioeconomic Study Areas, the Proposed Development may have social impacts on the communities where economic activity takes place. The magnitude of these social impacts is expected to result from the level of economic impact associated with the Proposed Development.

17.6.13 Therefore, the social impact assessment aims to outline the primary pathways through which the Proposed Development could lead to social impacts. It focuses on the following key areas:

- Demographic changes;
- Housing demand; and
- Impacts on other local public and private services.

17.6.14 It is expected that the construction port will be located in Highland and the O&M port will be located either in Highland or Aberdeenshire. As such, the assessment considers potential social impacts on these areas.

Tourism and Recreation Impact Assessment

17.6.15 Impacts will occur on tourism and recreation receptors if they are sensitive to changes in environmental factors that will occur because of the Proposed Development and the receptor is considered to experience a significant impact because of changes to these environmental factors.

17.6.16 The impacts considered on tourism and recreation assets are changes to visitor or user behaviour and outcomes. Any environmental impact on these receptors will therefore be assessed against how it will change behaviour compared to the current baseline of visitor or user behaviour of the receptor.

Criteria for Assessment

17.6.17 The process for determining the significance of effects is a two-stage process that involves defining the magnitude of the potential impacts and the sensitivity of the receptors. This section describes the criteria applied in this chapter to assign values to the magnitude of potential impacts and the sensitivity of the receptors.

17.6.18 The terms used to define impact magnitude and receptor sensitivity for socioeconomics, tourism and recreation are based on those described in further detail in **Volume 1, Chapter 4: Environmental Impact Assessment Methodology** of the Offshore EIAR.

17.6.19 The magnitude criteria for socioeconomics, tourism and recreation are provided in Table 17.18 and Table 17.20, and are based upon the technical expert's experience and judgement. In determining magnitude, each assessment considered the spatial extent, duration, frequency, and reversibility of impact and these are outlined within the magnitude section of each assessment of impact (e.g., a duration of hours or days would be considered for most receptors to be of short-term duration, which is likely to result in a low magnitude of impact).

Magnitude of Economic Impacts

17.6.20 Between 2000 and 2024, the average level of Gross Domestic Product (GDP) per capita growth in the UK was 1% per annum (ONS, 2025). Similarly, between 2000 and 2023, the number of jobs increased by an average 1% per annum (IMF, 2025). The magnitude of any change in an economy should be considered within this context and in relation to the levels of economic activity within a study area.

17.6.21 In addition to the change in the overall GVA or employment of an area, changes to those sectors of the economy contributing to its economic sensitivity are considered. For example, in the context of offshore wind, the relative importance of the construction, manufacturing and professional services sectors in a study area are likely to contribute towards its overall sensitivity. The definitions of the magnitude of economic impacts are provided in Table 17.18.

Table 17.18 Impact Magnitude Criteria for an Economy/Economic Sector

Magnitude Value	Description
High	An impact would be considered to have a high magnitude if it was equivalent to all the typical economic growth per capita. Specifically, for each study area: ▪ Peak annual GVA impact is greater than, or equal to, 1% of the economy; or ▪ Peak employment supported is greater than, or equal to, 1% of the total number of jobs.
Medium	An impact would be considered to have a medium magnitude if it was equivalent to half of the typical economic growth per capita. Specifically, for each study area: ▪ Peak annual GVA impact is greater than, or equal to, 0.5% of the economy; or ▪ Peak employment supported is greater than, or equal to, 0.5% of the total number of jobs.
Low	An impact would be considered to have a low magnitude if it was equivalent to a quarter of the typical economic growth per capita. Specifically, for each study area: ▪ Peak annual GVA impact is greater than, or equal to, 0.25% of the economy; or ▪ Peak employment supported is greater than, or equal to, 0.25% of the total number of jobs.
Negligible	An impact would be considered to have a negligible magnitude if it was equivalent to less than a quarter of the typical economic growth per capita. Therefore, for each study area: ▪ Peak annual GVA impact is less than 0.25% of the economy; or ▪ Peak employment supported is less than 0.25% of the total number of jobs.

Magnitude of Community and Social Impacts

17.6.22 The magnitude of Community and Social Impacts is dependent on the demographic changes that will occur in each of the study areas as a result of the Proposed Development.

17.6.23 The magnitude for any change in demographics is measured against the level of annual change that is typical in the study area that it serves.

Table 17.19 Definitions of Magnitude for Community and Social Impacts

Magnitude Value	Description
High	The effect on community and social assets would be considered to have a high magnitude if the change in residual population was equivalent to 100% or more of the average annual growth rate for the study area.
Medium	The effect on community and social assets would be considered to have a medium magnitude if the change in residual population was equivalent to between 50% and 100% of the average annual growth rate for the study area.
Low	The effect on community and social assets would be considered to have a low magnitude if the change in residual population was equivalent to between 25% and 50% of the average annual growth rate for the study area.
Negligible	The effect on community and social assets would be considered to have a negligible magnitude if the change in residual population was equivalent to less than 25% of the average annual growth rate for the study area.

Magnitude of Tourism and Recreation Impacts

17.6.24 The impacts considered in relation to tourism and recreation assets are changes to visitor or user behaviour and outcomes. Any environmental impact on these receptors will therefore be assessed against how it will change behaviour compared to the current baseline of visitor or user behaviour of the receptor.

17.6.25 The definitions of the magnitude of impacts on tourism and recreation assets are provided in Table 17.20.

Table 17.20 Impact Magnitude Criteria for Tourism and Recreation Impacts

Magnitude Value	Description
High	The impact on a tourism and recreation asset would be considered of high magnitude if it is predicted to experience a major change in the behaviour of visitors or users.
Medium	The impact on a tourism and recreation asset would be considered of medium magnitude if it is predicted to experience a moderate change in the behaviour of visitors or users.
Low	The impact on a tourism and recreation asset would be considered of low magnitude if it is predicted to experience a minor change in the behaviour of visitors or users.
Negligible	The impact on a tourism and recreation asset would be considered of negligible magnitude if it is predicted to experience an undetectable change in the behaviour of visitors or users.

Sensitivity

Sensitivity of Economic Receptors

17.6.26 The sensitivity of an economy is linked to how well it can accommodate change. To establish the sensitivity of an economy, or a sector within that economy, it is necessary to consider both its resilience and agility. There are several factors that contribute to an assessment of resilience and agility, including:

- The scale of the economy;
- The diversity of sectors in the economy;
- The level of economic activity;
- The level of skills and education; and
- The level of economic potential from utilising capital (natural, human, social, economic).

17.6.27 The sensitivity criteria for economic receptors are provided in Table 17.21.

Table 17.21 Sensitivity Criteria for Economic Receptors

Sensitivity Value	Description
High	A highly sensitive economy will not be able to absorb changes without fundamentally altering its present character or value. Factors that would contribute to an economy being considered of high sensitivity include: ▪ The economy is particularly reliant on one single sector; ▪ The number of jobs in the economy has been declining over multiple years; and ▪ The share of people with no qualifications is significantly above the average for the wider economy.
Medium	An economy with medium sensitivity has a moderate capacity to absorb changes without fundamentally altering its present character or value, however, it would be less resilient than the wider economy. Factors that would contribute to an economy being considered of medium sensitivity include: ▪ The economy is particularly reliant on a small number of sectors; ▪ The number of jobs in the economy has grown less than the wider economy; and ▪ The share of people with no qualifications is above the average for the wider economy.
Low	A low sensitive economy is tolerant to changes without fundamentally altering its present character or value. Factors that would contribute to an economy being considered of low sensitivity include: ▪ Most sectors of the economy are well represented; ▪ The number of jobs in the economy has grown in line with the wider economy; and ▪ The level of educational attainment is in line with the wider economy.
Negligible	An economy with negligible sensitivity is very agile and will be able to accommodate changes without affecting its character or overall value. Factors that would contribute to an economy having negligible sensitivity include: ▪ The economy is well balanced between sectors; ▪ The number of jobs in the economy has grown at a quicker rate than the wider UK economy; and ▪ The share of people with no qualifications is below average for the wider economy.

17.6.28 The effect on community and social assets is scoped into this assessment. This includes the demand for housing, health services and education services.

17.6.29 The adaptability and tolerance of the housing market to accommodate change in each study area is implied by the relative change in the price of housing stock compared to the wider economy. If prices have increased significantly more within a study area, this would suggest that the housing market has not been able to adapt to a change in demand.

17.6.30 The sensitivity of the public assets such as health services or schools will be dependent on the concentration of resources that are allocated to these assets. It is assumed that the ability of these assets to adapt to change will not vary by geography. Therefore, the key factor of sensitivity is tolerance to change. It is assumed that this is linked to the relative size of the community that is served by these assets. If a teacher or doctor has less students or patients than the national average, they are more likely to be able to tolerate changes, specifically increases, in these numbers. As a result, these assets will be less sensitive to change.

17.6.31 In the long term, services will adapt to serve the communities they are in. Hospitals and education facilities are planned based on the demographic demands in a particular area.

17.6.32 A summary of the definitions and contributing factors for the sensitivity of community and social assets are shown in Table 17.22.

Table 17.22 Definitions of Sensitivity for Community and Social Assets

Sensitivity Value	Description
High	Community and social assets with high sensitivity will not be able to tolerate or adapt to impacts as these will result in a fundamental change in the ability of these assets to meet the needs of the community. Factors that will contribute to a community or social asset being considered of high sensitivity include: ▪ House prices have increased at a notably faster rate than the national average; ▪ The number of GPs per capita is much lower than the national average; and ▪ The number of pupils per teacher is much higher than the national average.
Medium	Community and social assets with medium sensitivity will have a limited capacity to tolerate or adapt to impacts as these will result in a moderate change in the ability of these assets to meet the needs of the community. Factors that will contribute to a community or social asset being considered of medium sensitivity include: ▪ House prices have increased at a faster rate than the national average; ▪ The number of GPs per capita is lower than the national average; and ▪ The number of pupils per teacher is higher than the national average.
Low	Community and social assets with low sensitivity will be able to tolerate or adapt to impacts without a change in the ability of these assets to meet the needs of the community. Factors that will contribute to a community or social asset being considered of low sensitivity include: ▪ House prices have increased at a similar rate than the national average; ▪ The number of GPs per capita is similar to the national average; and ▪ The number of pupils per teacher is similar to the national average.
Negligible	Community and social assets with a negligible sensitivity will be resistant to change as they will have a greater capacity to tolerate changes than the wider area. Factors that will contribute to a community or social asset being considered of negligible sensitivity include: ▪ House prices have increased at a slower rate than the national average; ▪ The number of GPs per capita is higher than the national average; and ▪ The number of pupils per teacher is lower than the national average.

Sensitivity of Tourism and Recreation Assets

17.6.33 The sensitivity of a tourism or recreation asset is determined by how reactive visitors, or users, of this asset are to a change in the environment. The sensitivity may change depending on which environmental factor is being considered. For example, an asset may be highly sensitive to changes in shipping and navigation but have negligible sensitivity to seascape and visual impacts.

17.6.34 The sensitivity of these assets will also depend on the ability of the asset to react to any change. Assets that provide a fixed offering, such as a monument or nature-based attraction, will be, other things remaining equal, more sensitive to change.

17.6.35 The sensitivity criteria for Tourism and Recreation receptors are provided in Table 17.23.

Table 17.23 Sensitivity Criteria for Tourism and Recreation Receptors

Sensitivity Value	Description
High	A tourism or recreational asset with a high sensitivity will not be able to tolerate or adapt to impacts as these will result in a fundamental change in visitor behaviour. Factors that will contribute to a tourism or recreational asset being considered of high sensitivity include: ▪ Being dependent on a single environmental condition to attract or accommodate visitors and users; and ▪ Being unable to adapt or adjust in response to changes in visitor or user behaviour.
Medium	A tourism or recreational asset with a medium sensitivity will have limited capacity to tolerate or adapt to impacts as these will result in a moderate change in visitor behaviour. Factors that will contribute to a tourism or recreational asset being considered of medium sensitivity include: ▪ Being influenced by a single environmental condition to attract or accommodate visitors and users; and ▪ Have a limited ability to adapt or adjust in response to changes in visitor or user behaviour.
Low	A tourism or recreational asset with a low sensitivity will have the ability to tolerate or adapt to impacts as these will result in an incidental change in visitor behaviour. Factors that will contribute to a tourism or recreational asset being considered of low sensitivity include: ▪ Environmental conditions have a minor influence on the ability of the asset to attract or accommodate visitors and users; and ▪ Being able to adapt or adjust the asset in response to changes in visitor or user behaviour.
Negligible	A tourism or recreational asset with a negligible sensitivity will be resistant to changes in environmental factors. Factors that will contribute to a tourism or recreational asset being considered of negligible sensitivity include: ▪ Environmental conditions have a negligible influence on the ability of the asset to attract or accommodate visitors and users; and ▪ Having substantial ability to adapt or adjust the asset in response to changes in visitor or user behaviour.

Significance Criteria

17.6.36 By assigning and combining magnitude and sensitivity criteria, overall effect significance upon socioeconomic, tourism and recreation receptors can be determined (Table 17.24).

17.6.37 The magnitude of the impact and the sensitivity of the receptor are combined when determining the significance of the effect upon offshore socio-economics. The particular method employed for this assessment is presented in Table 17.24.

17.6.38 For the purposes of this assessment:

- A level of residual effect of moderate or major will be considered a 'significant' effect in terms of the EIA Regulations; and
- A level of residual effect of minor or negligible will be considered 'not significant' in terms of the EIA Regulations.

Table 17.24 Matrix Used for the Assessment of Significance of the Effect

Sensitivity of Receptor	Magnitude of Impact			
	Negligible	Low	Medium	High
Negligible	Negligible	Negligible	Negligible	Negligible
Low	Negligible	Minor	Minor	Minor
Medium	Negligible	Minor	Moderate	Moderate
High	Minor	Minor	Moderate	Major

17.6.39 A level of effect of moderate or more will be considered a 'significant' effect for the purpose of the EIA. A level of effect of minor or less will be considered 'not significant'.

Embedded Commitments

17.6.40 As part of the project design process, several designed-in measures have been proposed to reduce the potential for impacts on environmental receptors. As there is a commitment to implementing these measures, they are considered inherently part of the design of the Proposed Development and have therefore been considered in the assessment (i.e., the determination of magnitude and therefore significance assumes implementation of these measures). These measures are considered standard industry practice for this type of development. The embedded commitments relevant to socioeconomics, tourism and recreation are presented in Table 17.25. **Volume 3, Appendix 4.2: Commitments Register**, provides additional information on how these commitments are secured.

17.6.41 The Embedded Commitments (C-OFF-02, C-OFF-07, C-OFF-18) collectively aim to mitigate the impact of offshore infrastructure on socioeconomics, tourism and recreation.

Table 17.25 Embedded Commitment Measures of Relevance to Socioeconomics, Tourism and Recreation

Code	Commitment	Commitment Type	How Commitment is Secured
C-OFF-02	WTGs will have a maximum blade tip height of 310 m above Highest Astronomical Tide (HAT), the rotor diameter will not exceed 260 m and have a minimum blade clearance of 23 m above HAT.	Primary	Secured through Section 36 and/or Marine Licence conditions. Details to be provided in the Design Statement.
C-OFF-07	A Construction Method Statement (CMS) will be developed, which details the proposed construction methods and roles and responsibilities of parties involved.	Tertiary	Secured through Section 36 and/or Marine Licence conditions. Details to be provided in the CMS.
C-OFF-18	Development of and adherence to a Piling Strategy (PS) (applicable where piling is undertaken). The PS will detail the method of pile installation and associated noise levels. It will describe any mitigation measures to be put in place (e.g., soft starts and ramp ups, use of Acoustic Deterrent Devices) during piling to manage the effects of underwater noise on sensitive receptors.	Tertiary	Secured through Section 36 and/or Marine Licence conditions. Details to be provided in the Piling Strategy.
C-OFF-40	Adherence to the Supply Chain Development Statement in relation to local manufacturers and contractors.	Tertiary	Secured through Section 36 and/or Marine Licence conditions. Details to be provided in the Supply Chain Development Statemen

Impacts Scoped out of the Assessment

17.6.42 The impacts that have been scoped out of this socioeconomics, tourism and recreation assessment are presented in Table 17.26.

Table 17.26 Impacts Scoped out of the Socioeconomics, Tourism and Recreation Assessment

Impact Scoped Out	Justification
Construction, O&M and Decommissioning	
Socio-cultural Impacts	The assessment of social effects, such as the impact on demographics and the demand for services such as housing are considered in are included in Section 17.7. Other potential socio-cultural impacts, including changes to community character or image and quality of life, will require primary stakeholder research in the communities around the key epicentres of impact. Details of stakeholder engagement, including with community groups is described in more detail in **Volume 4, Appendix 1: Pre-Application Consultation Report**, which did not identify any likely significant socio-cultural effects. To avoid survey fatigue and ensure meaningful interactions, this engagement will occur post consent as decisions are made regarding the location of key activities, such as ports. In the interim, the Applicant will support sector wide primary research on socio-cultural impacts of the development of offshore wind that may be commissioned by sector bodies such as the Scottish Offshore Wind Energy Council (SOWEC). As a result, the socio-cultural effects which would require primary social research to undertake an assessment have not been considered in this chapter.

Worst-case Design Scenario

17.6.43 The Applicant has adopted a design envelope approach to impact assessment (also known as a 'Rochdale Envelope'). In line with guidance from the Scottish Government (2022), the design envelope approach offers flexibility in the EIA process by enabling impact assessment to be carried out against several potential design options.

17.6.44 The assessment of socioeconomic, tourism and recreation impacts has been undertaken with respect to the details provided in **Volume 1, Chapter 3: Project Description**. A worst-case design scenario has been selected for each impact which would lead to the greatest impact for all receptors or receptor groups, when selected from a range of values. Effects of greater adverse significance are not predicted to arise should any other development scenario, based on details within **Volume 1, Chapter 3: Project Description** (e.g., different infrastructure layout), to that assessed here, be taken forward in the final design scheme.

17.6.45 Table 17.27 presents the worst-case design scenario for each impact associated with LSE assessment on socioeconomics, tourism and recreation, along with justification.

Table 17.27 Worst-case Design Scenario with Respect to the Socioeconomics, Tourism and Recreation Assessment

Impact	Embedded Commitment	Worst-case Design Scenario	Justification
Construction			
Impact 1: Increase in employment and GVA	C-OFF-40	The spending from development and construction activity has been estimated based on data from the National Renewable Energy Laboratory (NREL, 2024) and information on the capacity of the Proposed Development. Spending has then been allocated across the socioeconomics study areas, drawing on available information from agreements made by the Applicant with supply chain businesses. Where no commitments were made, conservative content estimates have been adopted. As a worst-case design scenario the assessment assumes that Ardersier Port is the main construction port used by the Proposed Development. Using a port outside Highland would not constitute a realistic worst-case scenario. This is because the risks, constraints (e.g., distance from the Proposed Development) and costs make it highly unlikely a port elsewhere (e.g., Far East or Europe) would be used.	The use of economic content estimates specifically based on supply chain commitments provides a baseline position for the increase in GVA and employment from the construction of the Proposed Development.
Impact 2: Demographic Changes	N/A	The increased employment and GVA at the main construction port may lead to a temporary increase in the local population as people move to the area for job opportunities. The demographic assessment has been based on the estimated employment impacts around the main construction port. In particular, it was assumed population increase would be equivalent to twice the number of workers required at peak construction, on account of some of the employees moving with family members.	Employment impacts arising from the economic analysis have been used as the basis for the demographic impact assessment to maintain consistency with the economic impact assessment.
Impact 3: Changes to housing demand	N/A	The increased employment and GVA at the main construction port may lead to an increase in the demand for temporary housing as people move to the area for job opportunities. The assessment has been based on the estimated employment impacts around the main construction port and their effects on housing demand in Highland.	Employment impacts arising from the economic analysis have been used as the basis for the impact on housing to maintain consistency with the economic impact assessment. Whether these impacts are experienced as positive or negative will depend on the construction port chosen.
Impact 4: Changes to other local public and private services	N/A	The increased employment and GVA at the main construction port may lead to a temporary increase in the demand for services as people move to the area for job opportunities. The assessment has been based on the estimated employment impacts around the main construction port and their effects on access to public and private services in Highland.	Employment impacts arising from the economic analysis have been used as the basis for the impact on demand for services to maintain consistency with the economic impact assessment. Whether these impacts are experienced as positive or negative will depend on the construction port chosen.
Impact 5: Changes to marine recreation	N/A	The changes to marine recreation will be determined by impacts identified in other chapters, such as Shipping and Navigation (**Volume 2, Chapter 14: Shipping and Navigation**) and Infrastructure and Other Users (**Volume 2, Chapter 19: Infrastructure and Other Marine Users**). Therefore, the worst-case design scenario for socioeconomics, tourism and recreation is equivalent to the worst-case design scenarios in each of these assessments.	May lead to changes in marine recreation, which are likely to be mitigated by embedded commitments.
Impact 6: Changes to onshore recreation	N/A	The assessment considers any significant effects identified in other chapters (e.g. infrastructure and other marine users (**Volume 2, Chapter 19: Infrastructure and Other Marine Users**) of the Offshore EIAR that will occur at onshore recreation receptors (beaches and surfing, and sea cliff climbing). It will then be determined how sensitive these receptors are to these effects, and therefore any likely change to recreational user behaviour.	May lead to changes in recreational activity.
Impact 7: Changes to commercial fisheries	C-OFF-04, C-OFF-05, C-OFF-09, C-OFF-10, C-OFF-11, C-OFF-13, C-OFF-14, C-OFF-17, C-OFF-20, C-OFF-22, C-OFF-23, C-OFF-24, C-OFF-29, C-OFF-30, C-OFF-46, C-OFF-39, C-	The assessment of socio-economic effects arising from any changes to commercial fisheries has been based on the findings of the commercial fisheries assessment (**Volume 2, Chapter 13: Commercial Fisheries**).	May lead to reduced activity associated with commercial fisheries.

Impact	Embedded Commitment	Worst-case Design Scenario	Justification
	OFF-42, C-OFF-52, C-OFF-55, C-OFF-57, C-OFF-61, C-OFF-62		
Impact 8: Changes to shipping	C-OFF-01, C-OFF-02, C-OFF-04 , C-OFF-05 , C-OFF-07 , C-OFF-08 , C-OFF-09 , C-OFF-11 , C-OFF-12 , C-OFF-13 , C-OFF-14 , C-OFF-15 , C-OFF-16 , C-OFF-20 , C-OFF-23 , C-OFF-24 , C-OFF-25 , C-OFF-26, C-OFF-27, C-OFF-28, C-OFF-29, C-OFF-30, C-OFF-31, C-OFF-39, C-OFF-47, C-OFF-50 , C-OFF-51, C-OFF-52, C-OFF-56	The assessment of socio-economic effects arising from any changes to shipping has been based on the findings of the shipping and navigation assessment (**Volume 2, Chapter 14: Shipping and Navigation**), taking account of embedded commitments.	May lead to changes in behaviour in this sector, which are likely to be mitigated by embedded commitments.
O&M			
Impact 9: Increase in employment and GVA	C-OFF-40	Spending during the O&M phase has then been allocated across the socioeconomics study areas, drawing on available information from agreements made by the Applicant with supply chain businesses. Where no commitments were made, conservative content estimates have been adopted.	The worst-case scenario is based on any commitments made by the Applicant alongside conservative content estimates, where no evidence was available. This provides a realistic baseline position for the increase in GVA and employment from the O&M of the Proposed Development.
Impact 10: Demographic Changes	N/A	The increased employment and GVA from O&M activity may lead to an increase in local population as people move to the area for job opportunities. The demographic assessment has been based on the estimated employment impacts in the region hosting the potential O&M ports that could be used by the Proposed Development. In particular, it was assumed population increase would be equivalent to twice the number of workers required during O&M, on account of some of the employees moving with family members.	Employment impacts arising from the economic analysis have been used as the basis for the demographic impact assessment to maintain consistency with the economic impact assessment.
Impact 11: Changes to housing demand	N/A	The increased employment and GVA at the from O&M activity may lead to a temporary increase in the local employment as people move to the area for job opportunities. Changes to housing demand have been based on the estimated employment impacts in the region hosting the potential O&M ports.	Employment impacts arising from the economic analysis have been used as the basis for the impact on housing to maintain consistency with the economic impact assessment. Whether these impacts are experienced as positive or negative will depend on the O&M port chosen.
Impact 12: Changes to other local public and private services	N/A	The increased employment and GVA from O&M activity may lead to a temporary increase in the local employment as people move to the area for job opportunities. Changes in the demand for other local public and private services has been based on the estimated employment impacts in the region hosting the potential O&M ports.	Employment impacts arising from the economic analysis have been used as the basis for the changes in demand for other local and public services to maintain consistency with the economic impact assessment. Whether these impacts are experienced as positive or negative will depend on the O&M port chosen.
Impact 13: Changes to Marine Recreation	N/A	The changes to marine recreation will be determined by impacts identified in other chapters such as Shipping and Navigation (**Volume 2, Chapter 14: Shipping and Navigation**) and Infrastructure and Other Users (**Volume 2, Chapter 19: Infrastructure and Other Marine Users**). Therefore, the worst-case design scenario for socioeconomics, tourism and recreation is equivalent to the worst-case design scenarios in each of these assessments.	May lead to changes in marine recreation, which are likely to be mitigated by embedded commitments.
Impact 14: Changes to onshore recreation	N/A	The assessment considers any significant effects identified in other chapters (e.g. infrastructure and other users (**Volume 2, Chapter 19: Infrastructure and Other Marine Users**) of the Offshore EIAR that will occur at onshore recreation receptors (beaches and surfing, and sea cliff climbing). It will then be determined how sensitive these receptors are to these effects, and therefore any likely change to recreational user behaviour.	May lead to changes in recreational activity, which are likely to be mitigated by embedded commitments.
Impact 15: Changes to commercial fisheries	C-OFF-04, C-OFF-05, C-OFF-09, C-OFF-10, C-OFF-11, C-OFF-13, C-OFF-14, C-OFF-17, C-OFF-20, C-OFF-22, C-OFF-23, C-OFF-24, C-OFF-29, C-OFF-30, C-OFF-46, C-OFF-39, C-	The assessment of socio-economic effects arising from any changes to commercial fisheries has been based on the findings of the commercial fisheries assessment (**Volume 2, Chapter 13: Commercial Fisheries**).	May lead to reduced activity associated with commercial fisheries.

Impact	Embedded Commitment	Worst-case Design Scenario	Justification
	OFF-42, C-OFF-52, C-OFF-55, C-OFF-57, C-OFF-61, C-OFF-62		
Impact 16: Changes to shipping	C-OFF-01, C-OFF-02, C-OFF-04 , C-OFF-05 , C-OFF-07 , C-OFF-08 , C-OFF-09 , C-OFF-11 , C-OFF-12 , C-OFF-13 , C-OFF-14 , C-OFF-15 , C-OFF-16 , C-OFF-20 , C-OFF-23 , C-OFF-24 , C-OFF-25 , C-OFF-26, C-OFF-27, C-OFF-28, C-OFF-29, C-OFF-30, C-OFF-31, C-OFF-39, C-OFF-47, C-OFF-50 , C-OFF-51, C-OFF-52, C-OFF-56	The assessment of socio-economic effects arising from any changes to shipping has been based on the findings of the shipping and navigation assessment (**Volume 2, Chapter 14: Shipping and Navigation**), taking account of embedded commitments.	May lead to changes in behaviour in this sector, which are likely to be mitigated by embedded commitments.
Decommissioning			
Impact 17: Increase in employment and GVA	C-OFF-40	The analysis of decommissioning spending draws on guidance from BVG Associated (BVG Associates, 2023). A worst-case design scenario was devised by applying conservative assumptions that have been made regarding spending by study area, given the higher degree of uncertainty associated with this phase.	The use of conservative estimates of spending aligns with the requirements for a worst-case design scenario.
Impact 18: Demographic Changes	N/A	Demographic changes would be highest if decommissioning impacts are geographically concentrated, e.g. around a specific port. This impact is based on the economic impact assessment.	The demographic impact is based on the economic impacts associated with decommissioning.
Impact 19: Changes to housing demand	N/A	Changes to housing demand would be largest if decommissioning impacts are geographically concentrated, e.g. around a specific port. This impact is based on the economic impact assessment.	The housing demand impact is based on the economic impacts associated with decommissioning.
Impact 20: Changes to other local public and private services	N/A	Changes to demand for services will occur if decommissioning impacts are geographically concentrated, e.g. around a specific port. This impact is based on the economic impact assessment.	The impact on services is based on the economic impacts associated with decommissioning.
Impact 21: Changes to Marine Recreation	N/A	The changes to marine recreation will be determined by impacts identified in other chapters, such as Shipping and Navigation (**Volume 2, Chapter 14: Shipping and Navigation**) and Infrastructure and Other Users (**Volume 2, Chapter 19: Infrastructure and Other Marine Users**). Therefore, the worst-case design scenario for socioeconomics, tourism and recreation is equivalent to the worst-case design scenarios in each of these assessments.	May lead to changes in marine recreation, which are likely to be mitigated by embedded commitments.
Impact 22: Changes to onshore recreation	N/A	The assessment considers any significant effects identified in other chapters (e.g. infrastructure and other users (**Volume 2, Chapter 19: Infrastructure and Other Marine Users**) of the Offshore EIAR that will occur at onshore recreation receptors (beaches and surfing, and sea cliff climbing). It will then be determined how sensitive these receptors are to these effects, and therefore any likely change to recreational user behaviour.	May lead to changes in recreational activity, which are likely to be mitigated by embedded commitments.
Impact 23: Changes to commercial fisheries	C-OFF-04, C-OFF-05, C-OFF-09, C-OFF-10, C-OFF-11, C-OFF-13, C-OFF-14, C-OFF-17, C-OFF-20, C-OFF-22, C-OFF-23, C-OFF-24, C-OFF-29, C-OFF-30, C-OFF-46, C-OFF-39, C-OFF-42, C-OFF-52, C-OFF-55, C-OFF-57, C-OFF-61, C-OFF-62	The assessment of socio-economic effects arising from any changes to commercial fisheries has been based on the findings of the commercial fisheries assessment (**Volume 2, Chapter 13: Commercial Fisheries**).	May lead to reduced activity associated with commercial fisheries.
Impact 24: Changes to shipping	C-OFF-01, C-OFF-02, C-OFF-04 , C-OFF-05 , C-OFF-07 , C-OFF-08 , C-OFF-09 , C-OFF-11 , C-OFF-12 , C-OFF-13 , C-OFF-14 , C-OFF-15 , C-OFF-16 , C-OFF-20 , C-OFF-23 , C-OFF-24 , C-OFF-25 , C-OFF-26, C-OFF-27, C-OFF-28, C-OFF-29, C-OFF-30, C-OFF-31, C-	The assessment of socio-economic effects arising from any changes to shipping has been based on the findings of the Shipping and Navigation assessment (**Volume 2, Chapter 14: Shipping and Navigation**), taking account of designed in measures.	May lead to changes in behaviour in these sectors, which are likely to be mitigated by embedded commitments.

Impact	Embedded Commitment	Worst-case Design Scenario	Justification
	OFF-39, C-OFF-47, C-OFF-50 , C-OFF-51, C-OFF-52, C-OFF-56		

17.7 Assessment of Likely Significant Effects

17.7.1 Assessment of LSE on socio-economics, tourism and recreation has been undertaken for all phases of the Proposed Development. A detailed description of each impact, informed by **Volume 1, Chapter 3: Project Description**, baseline information and various analytical methods including modelling is provided below.

Construction Phase

Increase in Employment and GVA

17.7.2 The economic impact of the construction phase is generated by the increased spend in the economy required to develop and build the Proposed Development. This supports increased employment and GVA.

Magnitude of Impact

17.7.3 The first step in estimating the economic impact associated with the Project was identifying the total level of expenditure associated with it, and then identifying the elements associated with the Proposed Development (i.e., the offshore elements) specifically.

17.7.4 Estimates of expenditure were developed using evidence from the National Renewable Energy Laboratory (NREL) 2024 Cost of Wind Energy Review (NREL, 2024), alongside information on the capacity of the Proposed Development. The NREL analysis estimates an approximate spend of $6.0 billion per GW on floating offshore wind projects. On that basis, it was estimated that the total cost associated with the Proposed Development could be £4.5 billion .

17.7.5 This spending was further broken into categories and sub-categories, based on BiGGAR Economics analysis and work undertaken by BVG Associates on the costs associated with offshore wind farms (BVG Associates, 2023). It was therefore estimated that the expenditure associated with the Project's offshore infrastructure could amount to £4.3 billion.

17.7.6 The share of spend secured in each study area was assumed based on information provided by the Applicant and BiGGAR Economics analysis. All figures, unless stated otherwise, are inclusive (i.e., spending in the North of Scotland includes spending in Highland).

17.7.7 As shown in Table 17.28, it is expected that Highland could secure contracts worth £1,256 million. It was estimated that the North of Scotland could secure contracts worth £1,319 million. The biggest opportunity for both Highland and the North of Scotland would be in manufacturing and fabrication, with contracts worth £1,245 million and £1,254 million, respectively.

17.7.8 It was estimated that Scotland could secure contracts worth £1,366 million and the UK could secure contracts worth £1,602 million. Manufacturing and fabrication would also be the largest opportunity for Scotland and the UK, with contracts associated with this amounting to £1,295 million in Scotland and £1,496 million in the UK. The remaining £2,718 million across manufacturing and construction contracts will go to businesses located outside the UK, including in Europe. It is expected turbine manufacturing will occur outside the UK.

Table 17.28 Construction Expenditure

Contracts	Highland	North of Scotland	Scotland	UK	Total
Development	£2 m	£46 m	£51 m	£62 m	£91 m
Manufacturing and Fabrication	£1,245 m	£1,254 m	£1,295 m	£1,496 m	£3,513 m
Installation	£9 m	£19 m	£19 m	£43 m	£716 m
Total Construction	**£1,256 m**	**£1,319 m**	**£1,366 m**	**£1,602 m**	**£4,320 m**

Note: Totals may not sum due to rounding.

17.7.9 To estimate the economic impact associated with expenditure in each category and sub-category, each contract was assigned to one or more sectors of the economy. Data on turnover, employment and GVA was then used to assess turnover/GVA and turnover per employee ratios (ONS, 2023b). These were then applied to contract-level expenditure to estimate the direct economic impact by study area.

17.7.10 On this basis, it was estimated that the direct economic impact of the Proposed Development would be £449 million GVA and 6,040 years of employment in Highland, £480 million GVA and 6,430 years of employment in the North of Scotland, £499 million GVA and 6,670 years of employment in Scotland and £577 million GVA and 7,630 years of employment in the UK. Direct GVA and direct years of employment are shown in Table 17.29 and in Table 17.30.

Table 17.29 Offshore Construction Direct Impact, GVA (£ million)

Contracts	Highland	North of Scotland	Scotland	UK
Floating Foundation Manufacturing	£434 mn	£434 mn	£442 mn	£451 mn
Turbine	£10 mn	£11 mn	£11 mn	£32 mn
Offshore Substation	£-	£7 mn	£10 mn	£24 mn
Offshore Cable Installation	£-	£-	£-	£8 mn
Floating Mooring Systems	£-	£-	£4 mn	£21 mn
Cables Supply	£-	£-	£-	£3 mn
Floating Foundations Installation	£4 mn	£4 mn	£4 mn	£4 mn
Development and Consenting Services	£1 mn	£24 mn	£27 mn	£33 mn
Operations and Maintenance Base	£-	£-	£0.6 mn	£1 mn
Total	**£449 mn**	**£480 mn**	**£499 mn**	**£577 mn**

Note: Totals may not sum due to rounding.

Table 17.30 Offshore Construction Direct Impact, Years of Employment

Contracts	Highland	North of Scotland	Scotland	UK
Floating Foundation Manufacturing	5,860	5,860	5,960	6,070
Turbine	110	120	120	390
Cables Supply	-	90	130	290
Offshore Substation	-	-	-	70
Floating Mooring Systems	-	-	50	280
Development and Consenting Services	-	-	-	40
Offshore Cable Installation	50	50	50	50
Operations and Maintenance Base	10	310	350	430
Floating Foundations Installation	-	-	10	10
Total Years of Employment	**6,040**	**6,430**	**6,670**	**7,630**

Note: Totals may not sum due to rounding.

17.7.11 In addition to the direct economic impact associated with expenditure on the contracts for the Proposed Development, wider economic impacts will be supported by spending in the supply chain (indirect effects) and staff spending (induced effects). These were estimated using GVA and employment multipliers (ONS, 2023c) (Scottish Government, 2024c) that capture linkages between sectors of the economy.

17.7.12 Applying these multipliers and summing the direct, indirect and induced impacts, it was estimated that the total economic impact from the Proposed Development would be £570 million GVA and 7,890 years of employment in Highland (peaking at 490 jobs), £658 million GVA and 9,080 years of employment (peaking at 510 jobs), £831 million GVA and 11,740 years of employment in Scotland (peaking at 650 jobs) and £1,430 million GVA and 18,610 years of employment in the UK (peaking at 1,040 jobs), as shown in Table 17.31 and Table 17.32.

17.7.13 Peak employment supported in Highland is equal to 490 jobs which is equivalent to 6.1% of employment in the construction sector. Therefore, the magnitude of impact has been assessed as high.

17.7.14 Peak employment supported in the North of Scotland is equal to 510jobs which is equivalent to 2.8% of employment in the construction sector. Therefore, the magnitude of impact has been assessed as high.

17.7.15 Peak employment supported in Scotland is equal to 650 jobs which is equivalent to 0.5% of employment in the construction sector. Therefore, the magnitude of impact has been assessed as medium.

17.7.16 Peak employment supported in the UK is equal to 1,040 jobs, which is equivalent to 0.1% of employment in the construction sector. Therefore, the magnitude of impact has been assessed as negligible.

Table 17.31 Offshore Construction GVA, £ million

Parameters	Highland	North of Scotland	Scotland	UK
Direct GVA	£449 mn	£480 mn	£499 mn	£577 mn
Indirect GVA	£54 mn	£71 mn	£183 mn	£440 mn
Total GVA	**£503 mn**	**£551 mn**	**£682 mn**	**£1,017 mn**
Peak GVA	£36 mn	£37 mn	£46 mn	£80 mn
Induced GVA	£67 mn	£107 mn	£149 mn	£414 mn
Total GVA (with Induced)	**£570 mn**	**£658 mn**	**£831 mn**	**£1,430 mn**

Note: Totals may not sum due to rounding.

Table 17.32 Offshore Construction Employment, Years of Employment

Parameters	Highland	North of Scotland	Scotland	UK
Direct Years of Employment	6,040	6,430	6,670	7,630
Indirect Years of Employment	920	1,170	3,020	5,590
Total Years of Employment	**6,950**	**7,600**	**9,690**	**13,230**
Peak Employment (Jobs)	490	510	650	1,040
Induced Years of Employment	940	1,480	2,040	5,390
Total Years of Employment (with Induced)	**7,890**	**9,080**	**11,740**	**18,610**

Note: Totals may not sum due to rounding.

Sensitivity of Receptor

17.7.17 The sensitivity of an economy is based on its responsiveness to change, its relative diversity (i.e., more diverse economies are less sensitive) and growth trajectory (for example, whether the number of jobs is increasing or decreasing).

17.7.18 Given the size and diversity of the Highland economy, which employs 128,500 people, an increase of 6.7% in the number of jobs compared to 2013 (ONS, 2015) (ONS, 2024d), it has been assessed as medium sensitivity.

17.7.19 Given the size and diversity of the North of Scotland economy, which employs 279,900 people, an increase of 5.6% in the number of jobs compared to 2013, it has been assessed as medium sensitivity.

17.7.20 Considering the size and diversity of the Scottish economy, which employs 2.7 million people, an increase of 7.9% in the number of jobs compared to 2013, it has been assessed as low sensitivity.

17.7.21 Similarly, the UK economy, which employs 33.1 million people and has witnessed an increase of 14.4% in the number of jobs it supports compared to 2013, has been assessed as negligible sensitivity.

Significance of Effect

17.7.22 The magnitude of the impact on the Highland economy is assessed as high and the sensitivity of the economy is assessed as medium. The effect will therefore be of moderate significance (beneficial), which is significant in EIA terms.

17.7.23 The magnitude of the impact on the North of Scotland economy is assessed as high and the sensitivity of the economy is assessed as medium. The effect will therefore be of moderate significance (beneficial), which is significant in EIA terms.

17.7.24 The magnitude of the impact on the Scottish economy is deemed to be medium. The sensitivity of the Scottish economy was assessed as low. The effect will therefore be of minor significance (beneficial), which is not significant in EIA terms.

17.7.25 The magnitude of the impact on the UK economy is deemed to be medium and the sensitivity of the receptor is negligible. The effect will therefore be of negligible significance (beneficial), which is not significant in EIA terms.

17.7.26 A summary of the impact magnitude, receptor sensitivity and significance of effect for the receptors affected by an increase in Employment and GVA is presented in

17.7.27 Table 17.33.

Table 17.33 Significance of Impact 1: Increase in Employment and GVA

Receptor/Location	Magnitude	Sensitivity	Significance
Highland	High	Medium	Moderate (Beneficial) Significant
North of Scotland	High	Medium	Moderate (Beneficial) Significant
Scotland	Medium	Low	Minor (Beneficial) Not Significant
UK	Negligible	Negligible	Negligible (Beneficial) Not Significant

Secondary Mitigation and Residual Effect

17.7.28 No additional socio-economics mitigation is considered necessary because the likely effect in the absence of further mitigation is beneficial.

17.7.29 This section provides an assessment of the effects associated with the social impacts (changes in population, housing demand and other local public and private services) arising from the construction of the Proposed Development. The assessment is introduced by consideration for each social dimension of the channels leading to impact and of the factors affecting how recipients perceive changes. This allows the identifications of demographic changes as being the key driver of other social impacts.

Demographic Changes

17.7.30 Demographic changes are one of the primary pathways through which the Proposed Development could lead to social impacts.

17.7.31 It is not anticipated that the construction of the Proposed Development will lead to changes at the Scottish or UK level, so the assessment of demographic changes and subsequent social impacts (changes in housing demand, changes to other local public and private services and socio-cultural impacts) is focused on changes related to the impact on the construction port, which is expected to be located in Highland.

17.7.32 The magnitude of impacts on the social or community assets will be dependent on the scale of the demographic changes that occur in each of the study areas and how these affect demand for services, such as housing, education and health.

17.7.33 Population growth, including short-term workers, depends on the number of employees needed, and the length of contracts. It will also depend on the local economy's capacity to provide additional services, as more local workers with expertise will reduce reliance on transient workers and short-term changes in population. There are distinct differences between ports in urban and rural areas. As a result, the impact on demographic structures will depend on the location of the construction port.

17.7.34 It is expected that, during the construction phase, the activities expected to require transient workers are those taking place at the construction port, namely a share of marshalling activity and turbine assembly. Based on BiGGAR Economics analysis and work undertaken by BVG Associates on the costs associated with offshore wind farms (BVG Associates, 2023), it was estimated that, at its peak, this work would result in a workforce of 60 people will be required to fulfil contracts at the construction port. Industry data suggests that these are expected to be primarily men aged 30 to 44, though the industry is making efforts to diversify this demographic and increase female representation to 33% by 2030 (Offshore Wind Industry Council (OWIC), 2023). This may attract individuals and families, affecting the demographic composition near the construction port.

17.7.35 The factors that determine the demographic impact are outlined in Figure 17.2, based on analysis by BiGGAR Economics.

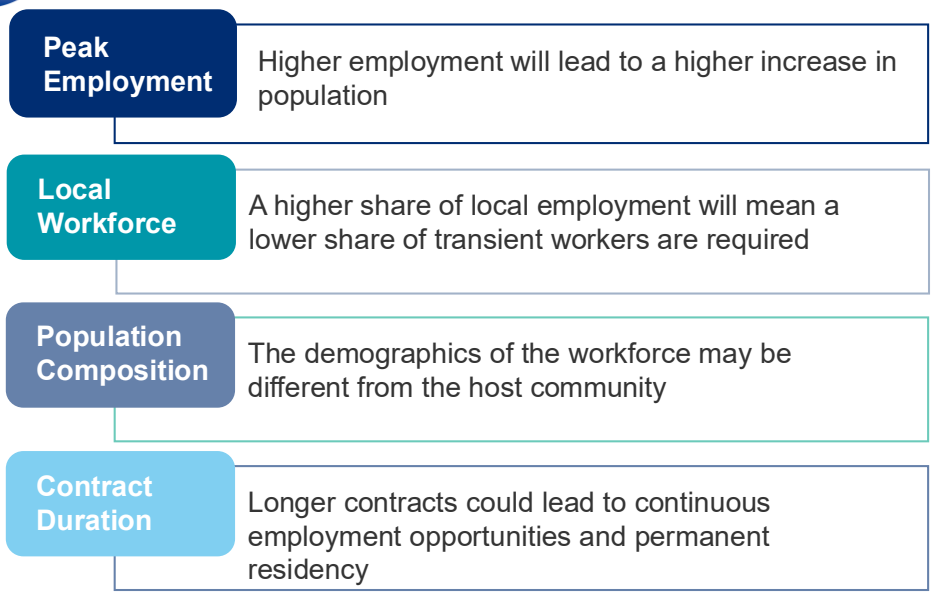


Figure 17.2 Factors Affecting Magnitude of Change to Community Populations

17.7.36 How this increase in population will be experienced will depend on the size and demographics of the population surrounding the construction port. The demographic distribution varies across Scotland including the urban and rural locations where potential key port locations are based. This is shown in Figure 17.3, which highlights the differences in demographics across Scotland's rural and urban areas. Remote rural areas have an older population, with 12% aged 75 and over, compared to large urban areas which have a much greater share of people aged under 45. This is likely to influence how demographic changes are felt in each type of area (NRS, 2022) (OWIC, 2023).

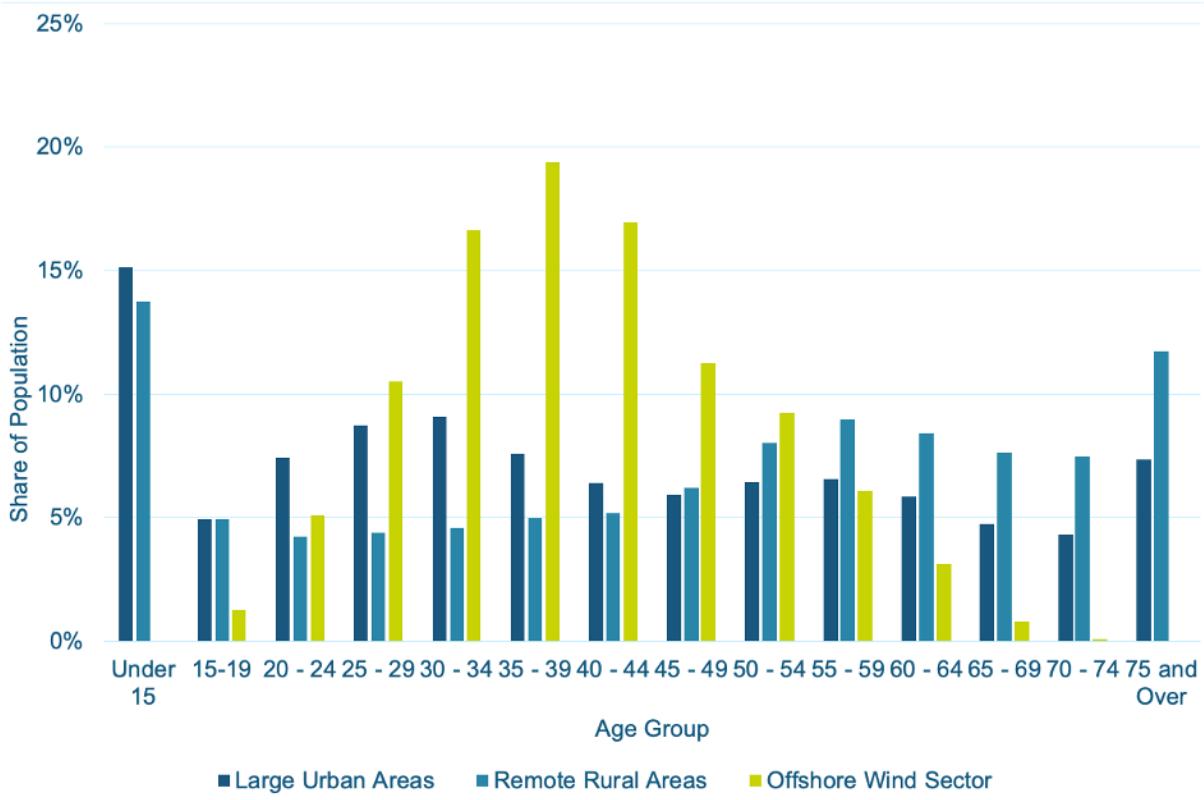


Figure 17.3 Demographic Distribution

17.7.37 There is evidence (Highlands and Islands Enterprise (HIE), 2018) that in rural communities in Scotland, the opportunity to capture high quality local employment may draw people back to the area who have previously left to find work elsewhere. This would be considered an important demographic benefit from increasing the working age population in rural communities, including for short term opportunities like construction activity on the Proposed Development.

17.7.38 The sensitivity of the area around the construction port will depend on the size of the existing population and its demographics. A larger population (e.g. a port located close to a large population) as well as a population that has a larger share of people who are working age will be less sensitive to population change compared to a community with less balanced demographics (e.g. a high number of people aged over 65).

17.7.39 Figure 17.4 provides details on the factors that influence how a community might respond to changes in demographics and other population impacts.

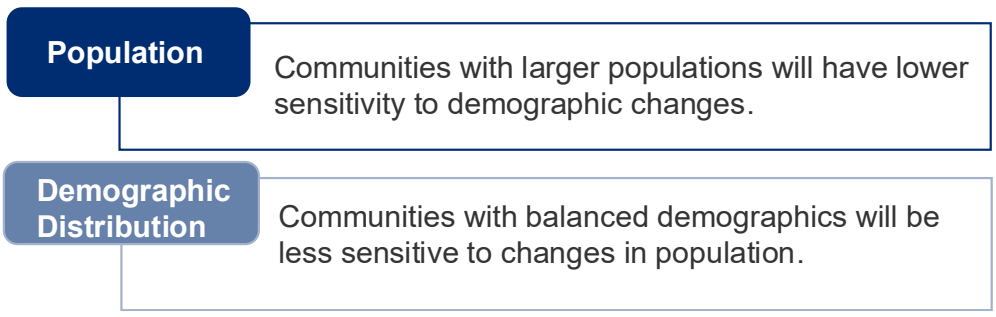


Figure 17.4 Factors Affecting Sensitivity of Community Populations

17.7.40 Housing demand and availability is a primary pathway through which the Proposed Development could lead to social impacts. This assessment is focused on the construction port.

17.7.41 The main driver of accommodation demand is expected to be the increased population required to meet the requirements of the construction port. During the peak of the construction period, the Proposed Development is expected to require increased demand for short-term accommodation, such as hotels, bed and breakfasts, and caravan parks.

17.7.42 The heightened demand for temporary housing is expected to benefit local accommodation providers. Increased trade and occupancy rates can provide a vital lifeline for these businesses, helping them remain operational year-round and offering sustained employment opportunities in rural areas.

17.7.43 However, if the local accommodation sector is nearing or at total capacity and cannot expand rapidly to accommodate the workers, this could adversely impact tourism. Visitors may face difficulties securing accommodation, particularly during peak seasons, potentially leading to a downturn in tourism-related activities.

17.7.44 The factors that determine housing demand and availability are outlined in Figure 17.5.

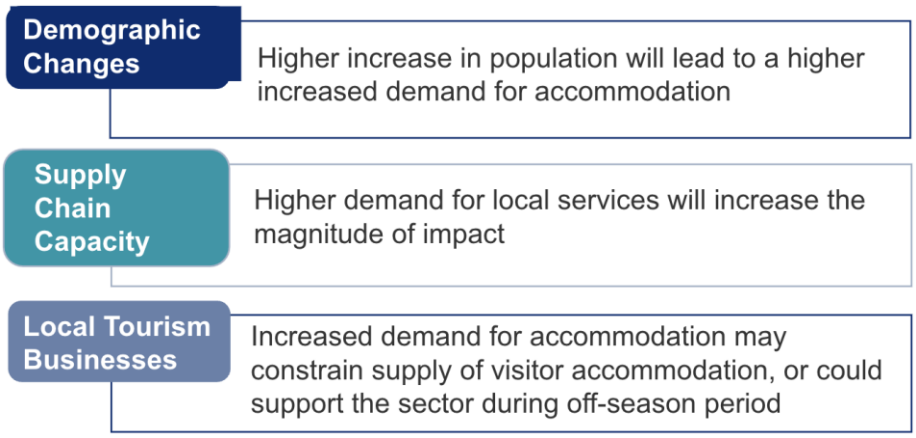


Figure 17.5 Factors Affecting Magnitude of Change to Housing Demand and Availability

17.7.45 The impact of housing on communities depends on how well the housing supply can adjust to changes in demand over short and long periods of time. The sensitivity of local areas to these impacts is influenced by factors such as the size of the nearby population, the availability of accommodation options like hotels and adaptable living spaces, the ability of the housing sector to meet increased demand and affordability of accommodation.

17.7.46 Research undertaken for the Scottish Government suggests that coastal communities face a number of housing constraints, particularly in terms of high-quality options (Scottish Government and Diffley Partnership, 2022).

17.7.47 The importance of overnight tourism, where visitors use temporary accommodation, also affects how vulnerable an area is to these changes.

17.7.48 Figure 17.6 provides details on the factors that influence how a community might respond to changes in housing demand and availability impacts.

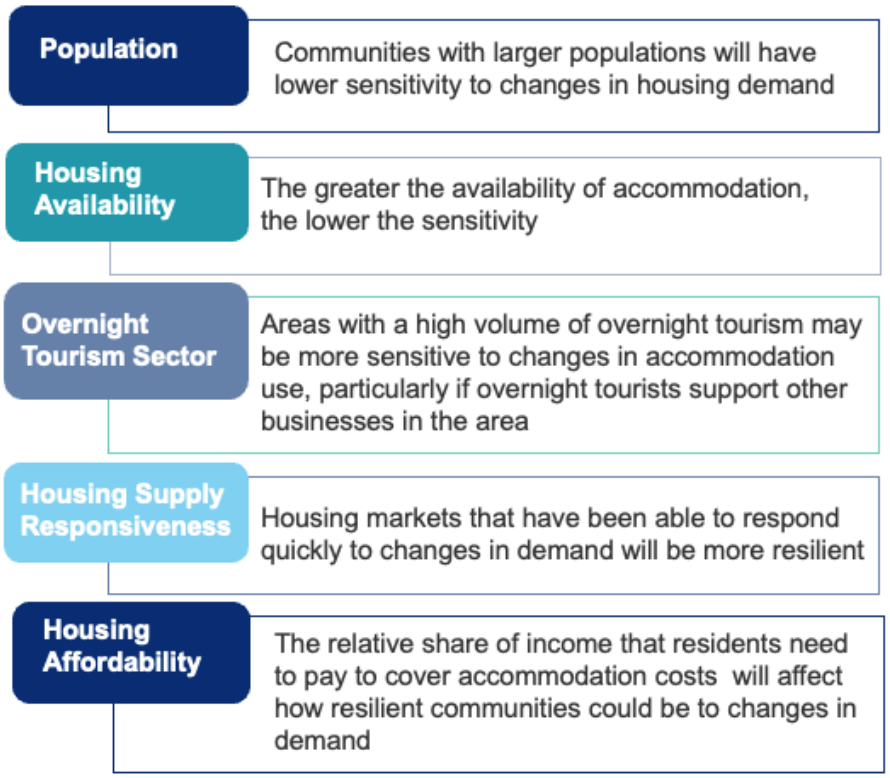


Figure 17.6 Factors Affecting Sensitivity of Community Populations

Changes to Other Local Public and Private Services

17.7.49 The Proposed Development has the potential to affect the labour market of the area around epicentres of impact, such as the main construction port, with wider effects on the local population, which may in turn affect other local services.

17.7.50 The anticipated population increase around the construction port is likely to increase demand for healthcare, educational, and private services. These include:

- Educational services;
- Healthcare services;
- Social support;
- Police and fire services;
- Other local authority services; and
- Recreation and transport.

17.7.51 The main influences on demand for healthcare services are expected to be a temporary population increase and the health of that population. Specifically, individuals involved in port activities are generally working-age adults in good health, which means they are expected to be less likely to access public health services such as general practitioners, hospitals, and social care than the population as a whole (which is likely to include a higher share of older people who are more likely to need health services).

17.7.52 The distinct differences between the demographic structure of rural and urban areas will affect a community's dependency on local services. For example, within rural communities with a smaller and older baseline population, there is likely a greater demand for local services designed to support the elderly.

17.7.53 The demand for schools and educational services depends on the number of children in the under-18 population, especially if transient workers bring their children. This is more likely if employment opportunities are seen as long term, while short term employment opportunities are unlikely to result in a large increase in educational demand.

17.7.54 A larger population is likely to result in a rise in demand for personal services such as cafes, restaurants, and supermarkets. This is expected to boost the commercial vitality of towns and villages, leading to benefits for local businesses and the economy. It may also contribute to increased use of public transport and more traffic on local road networks.

17.7.55 The factors that determine the impact of demand for services are outlined in Figure 17.7.

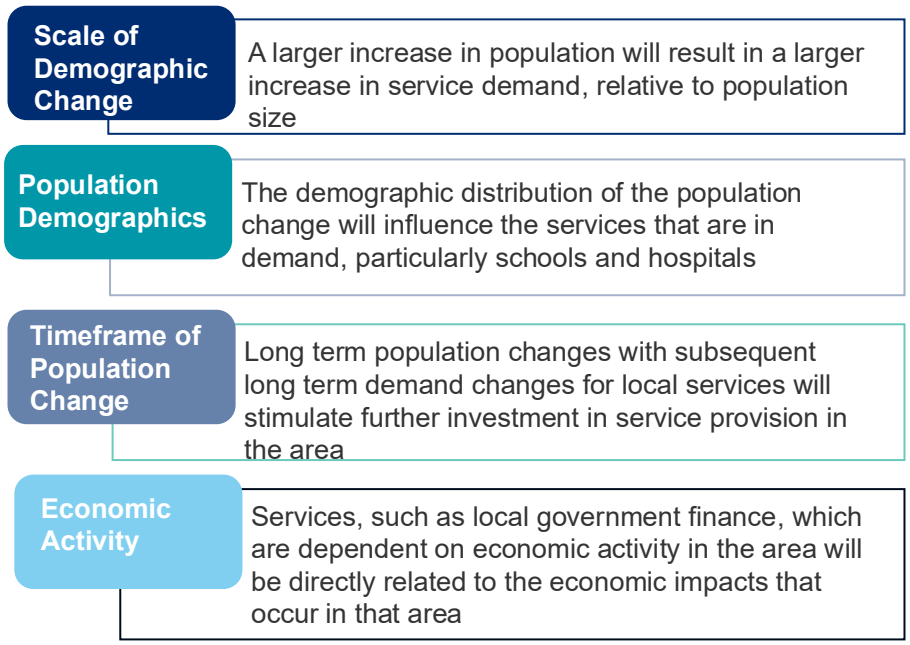


Figure 17.7 Factors Affecting Magnitude of Change to Local Services

17.7.56 The sensitivity of the above services will primarily be determined by the level of capacity within each of them, and how quickly they are able to respond to changing demand (e.g. hire more staff).

17.7.57 Figure 17.8 provides details on the factors that influence the sensitivity of local services.

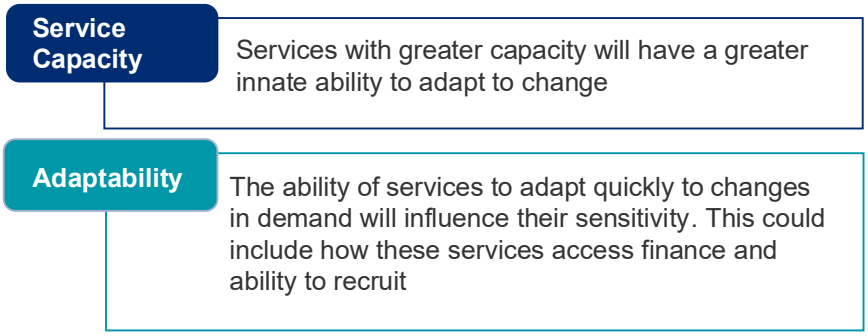


Figure 17.8 Factors Affecting Sensitivity of Local Services

Population Change and Social Impacts

17.7.58 Population change is considered the primary driver of social impacts (including demographics, housing demand and availability, local services, and socio-cultural factors). Therefore, the magnitude of these social impacts will be linked to the expected increase in population.

17.7.59 The extent to which the economic impacts lead to noticeable population changes will be related to the proportion of employment taken up by those already resident in Highland and the proportion taken up by those moving to Highland.

17.7.60 The greatest change would be in the circumstances where all of the employment was taken by new residents and where a substantial proportion of these residents also moved with family members.

Social Impacts During Construction

Magnitude of Impact

17.7.61 During the construction phase, a peak workforce of 30 people will be required to fulfil contracts at the construction port. Based on an assumption of a change in population of two for every job, to allow for some employees moving with family members, that would imply an increase in population of up to 60 during peak construction.

17.7.62 As shown in Table 17.17, the population of Highland is expected to fall from 236,330 in 2023 to 233,250 in 2043, equivalent to an average annual change of -0.1%. On this basis, the magnitude on social impacts is assessed as high.

Sensitivity of Receptor

17.7.63 As set out in Section 17.5, Highland is characterised by a relatively smaller share of its population being of working age (60.2%) compared to Scotland (63.4%) and the UK (62.8%). While public and private services feature relatively lower levels of pressure, house prices over the past ten years have growth faster (+43.7%) than across Scotland (37.3%).

17.7.64 Based on these considerations, the sensitivity of Highland with regards to social impacts has been assessed as high.

Significance of Effect

17.7.65 The magnitude of change in population was assessed as high, and the sensitivity of Highland to social impacts was assessed as high. The effect will therefore be of major significance, which is significant in EIA terms.

17.7.66 While there is potential for adverse impacts resulting from population change, such as pressure on housing and services, population growth in Highland is a strategic goal of the Scottish Government (Scottish Government, 2024d), and it is expected that the ongoing population decline and aging population in Highland is itself likely to cause pressures on infrastructure. In the long term, projects such as the Proposed Development are likely to result in improved housing availability as rural areas where large projects are taking place become more attractive to developers with an increase in demand from working age people. The resulting effects from population growth are likely to be beneficial, rather than adverse.

17.7.67 A summary of the impact magnitude, receptor sensitivity and significance of effect for Social Impacts is presented in Table 17.34.

Table 17.34 Significance of Impact 2: Social Impacts

Receptor/Location	Magnitude	Sensitivity	Significance
Highland	High	High	Major (beneficial) Significant

Secondary Mitigation and Residual Effect

17.7.68 The significance of social impacts in Highland has been assessed as major. While in the long term it is expected that this will contribute to the goals of the Scottish Government in increasing the working age population of Highland, to mitigate potential short term adverse impacts, a worker accommodation plan should be produced to reduce potential strain on housing and accommodation resulting from transient workers.

17.7.69 With this secondary mitigation, the magnitude of short term adverse impacts is assessed as low. The sensitivity of the receptor is high. Therefore, the residual effect is assessed as minor, which is not significant in EIA terms.

17.7.70 The assessment considers whether the construction of the Proposed Development would affect any of the recreational assets identified in Section 17.5, accounting for any significant effects identified in other chapters.

17.7.71 The following draft chapters have been reviewed:

- **Volume 2, Chapter 14: Shipping and Navigation**; and
- **Volume 2, Chapter 19: Infrastructure and Other Users**.

17.7.72 As shown in Table 17.35, where no significant effects have been identified, this is indicated with an X. Where a potential significant effect has been identified, this is indicated with a ✓.

Table 17.35 Significant Effects Identified On Recreational Assets

Asset	Shipping and Navigation	Infrastructure and Other Users
Ardersier Port	X	X
Chanonry Sailing Club	X	X
Nairn Sailing Club	X	X
Seaport Marine	X	X
Highlands & Islands University Sailing Club	X	X
Compass Sea School Ltd	X	X
SCC Inverness	X	X
ISAC	X	X
Aberdeen and Stonehaven RYA	X	X

17.7.73 There were no potential significant effects identified by **Volume 2, Chapter 14: Shipping and Navigation** and **Volume 2, Chapter 19: Infrastructure and Other Users**.

Magnitude of Impact

17.7.74 The magnitude of the effect on the recreational assets has been assessed after consideration of other potential environmental factors identified in other chapters. As no potential significant effects on the recreational assets identified in Section 17.5 were identified in other chapters during the construction phase, it is not expected that the recreational assets will experience a change in activity. Therefore, the magnitude of the impacts on these assets have been assessed as negligible.

Sensitivity of Receptor

17.7.75 The sensitives of the recreational assets have been outlined in Table 17.36 in accordance with the definitions of sensitivity outlined in Table 17.23.

Table 17.36 Marine Recreation Asset Sensitivities

Asset	Sensitivity
Ardersier Port	Negligible
Chanonry Sailing Club	Low
Nairn Sailing Club	Low
Seaport Marina	Low
Highlands & Islands University Sailing Club	Low
Compass Sea School Ltd	Low
SCC Inverness	Low
ISAC	Medium
Aberdeen and Stonehaven RYA	Medium

Significance of Effect

17.7.76 A summary of the impact magnitude, receptor sensitivity and significance of effect for marine recreation receptors is presented in Table 17.37.

Table 17.37 Significance of Impact 5: Changes to Marine Recreation

Receptor	Magnitude	Sensitivity	Significance
Ardersier Port	Negligible	Negligible	Negligible Not Significant
Chanonry Sailing Club	Negligible	Low	Negligible Not Significant
Nairn Sailing Club	Negligible	Low	Negligible Not Significant
Seaport Marine	Negligible	Low	Negligible Not Significant
Highlands & Islands University Sailing Club	Negligible	Low	Negligible Not Significant
Compass Sea School Ltd	Negligible	Low	Negligible Not Significant
SCC Inverness	Negligible	Low	Negligible Not Significant
ISAC	Negligible	Medium	Negligible Not Significant
Aberdeen and Stonehaven RYA	Negligible	Medium	Negligible, Not Significant

Secondary Mitigation and Residual Effect

17.7.77 No additional socio-economics mitigation is considered necessary because the likely effect in the absence of further mitigation (beyond the commitments outlined in Section 17.6) is not significant in EIA terms.

17.7.78 The construction of the Proposed Development has the potential to result in disruption to onshore recreational assets, such as trails and beaches. This assessment is carried out with reference to the findings from **Volume 2, Chapter 14: Shipping and Navigation** and **Volume 2, Chapter 19: Infrastructure and Other Users**. The receptors for changes to onshore recreation are determined by receptors for which significant adverse effects have been identified by these chapters.

17.7.79 There were no significant adverse effects on onshore recreational assets identified by these chapters. It is therefore not expected that there will be any significant secondary socio-economic effects on onshore recreation due to the Proposed Development.

Changes to Commercial Fisheries

17.7.80 The construction of the Proposed Development has the potential to result in disruption to commercial fisheries. This assessment is carried out with reference to the findings from **Volume 2, Chapter 13: Commercial Fisheries**, which, following mitigation, identified no significant adverse impacts. It is therefore not expected that there will be any significant secondary socio-economic effects on commercial fisheries due to the Proposed Development.

Changes to Shipping

17.7.81 The construction of the Proposed Development has the potential to result in disruption to the shipping sector. This assessment is carried out with reference to the findings from **Volume 2, Chapter 14: Shipping and Navigation** and **Volume 2, Chapter 19: Infrastructure and Other Users**, which identified no significant adverse impacts. It is therefore not expected that there will be any significant secondary socio-economic effects on shipping due to the Proposed Development.

Operation and Maintenance

Increase in Employment and GVA

17.7.82 The economic impact during the O&M phase is generated by the increased spend in the economy required to operate and maintain the Proposed Development. This generates increased GVA and employment.

Magnitude of Impact

17.7.83 Information from BiGGAR Economics' model of offshore wind farm economic impacts was used to assess the total spend by category in each study area. At this stage, the primary O&M port location has not been determined and the Applicant is considering locations across the North of Scotland. This is in line with the worst-case scenario adopted as part **Volume 2, Chapter 14: Shipping and Navigation** and **Volume 2, Chapter 19: Infrastructure and Other Users**.

17.7.84 On this basis, it was assumed that spending associated with the operations and maintenance of the Proposed Development would be £49 million, of which £24 million could be spent in the North of Scotland, £27 million could be spent in Scotland and £42 million could be spent in the UK.

17.7.85 As shown in Table 17.38, the largest contracts are expected to be associated with turbine maintenance and service (£11 million in Scotland and £17 million the UK). Estimates for Highland are not included in this section since, at this stage, there is no agreement in place with any specific port in the North of Scotland. Were a port in Highland to be chosen, impacts would likely be similar as those identified for the North of Scotland.

Table 17.38 Total Annual Offshore Operations and Maintenance Spending by Category

Contracts	Highland	North of Scotland	Scotland	UK	Total
Operational Training	£-	£1 mn	£1 mn	£2 mn	£2 mn
Operational Offshore Logistics	£-	£3 mn	£3 mn	£4 mn	£4 mn
Health and Safety Inspections	£-	<£1 mn	<£1 mn	<£1 mn	<£1 mn
Operational Insurance	£-	£-	£-	£4 mn	£4 mn
Operations Control Centre	£-	£6 mn	£6 mn	£6 mn	£6 mn
Turbine Maintenance and Service	£-	£9 mn	£11 mn	£17 mn	£22 mn
Balance of Plant Maintenance and Service	£-	£4 mn	£5 mn	£7 mn	£9 mn
Maintenance Vessels	£-	£1 mn	£1 mn	£1 mn	£2 mn
Maintenance Port	£-	<£1 mn	<£1 mn	<£1 mn	<£1 mn
Total O&M	**£-**	**£24 mn**	**£27 mn**	**£42 mm**	**£49 mn**

Note: Totals may not sum due to rounding.

17.7.86 Applying turnover per employee and turnover/GVA ratios for the relevant sectors, it was estimated that the direct annual economic impact could be £10 million GVA and 100 jobs in the North of Scotland, £11 million GVA and 110 jobs in Scotland, and £16 million GVA and 150 jobs in the UK. This is shown in Table 17.39 and Table 17.40.

Table 17.39 Annual Offshore Operations and Maintenance Direct Impact, GVA (£ million)

Contracts	Highland	North of Scotland	Scotland	UK
Operational Training	£-	<£1 mn	<£1 mn	£1 mn
Operational Offshore Logistics	£-	£1 mn	£1 mn	£1 mn
Health and Safety Inspections	£-	<£1 mn	<£1 mn	<£1 mn
Operational Insurance	£-	£-	£-	£1 mn
Operations Control Centre	£-	£3 mn	£3 mn	£3 mn
Turbine Maintenance and Service	£-	£3 mn	£4 mn	£6 mn
Balance of Plant Maintenance and Service	£-	£2 mn	£2 mn	£3 mn
Maintenance Vessels	£-	£1 mn	£1 mn	£1 mn

Contracts	Highland	North of Scotland	Scotland	UK
Maintenance Port	£-	<£1 mn	<£1 mn	£<1 mn
Total GVA	**£- mn**	**£10 mn**	**£11 mn**	**£16 mn**

Note: Totals may not sum due to rounding.

Table 17.40 Annual Offshore Operations and Maintenance Direct Impact, Employment (Jobs)

Contracts	Highland	North of Scotland	Scotland	UK
Operational Training	-	10	10	20
Operational Offshore Logistics	-	<10	<10	10
Health and Safety Inspections	-	<10	<10	<10
Operational Insurance	-	-	-	10
Operations Control Centre	-	40	40	40
Turbine Maintenance and Service	-	20	20	40
Balance of Plant Maintenance and Service	-	20	20	40
Maintenance Vessels	-	10	10	10
Maintenance Port	-	<10	<10	<10
Total Employment	**-**	**100**	**110**	**150**

Note: Totals may not sum due to rounding.

17.7.87 Applying GVA and employment multipliers it was therefore estimated that the Proposed Development's annual economic impact could £13 million GVA and 130 jobs in the North of Scotland, £18 million GVA and 180 jobs in Scotland, and £45 million GVA and 410 jobs in the UK (Table 17.41 and Table 17.42).

Table 17.41 Annual Offshore Operations and Maintenance GVA, £ million

Parameters	Highland	North of Scotland	Scotland	UK
Direct GVA	-	£10 mn	£11 mn	£16 mn
Indirect GVA	-	£1 mn	£4 mn	£15 mn
Total GVA	**-**	**£11 mn**	**£14 mn**	**£32 mn**
Induced GVA	-	£2 mn	£3 mn	£14 mn
Total GVA (with Induced)	**-**	**£13 mn**	**£18 mn**	**£45 mn**

Note: Totals may not sum due to rounding.

Table 17.42 Annual Offshore Operations and Maintenance Employment, Jobs

	Highland	North of Scotland	Scotland	UK
Direct Employment	-	100	110	150
Indirect Employment	-	20	40	130
Total Employment	-	**110**	**150**	**280**
Induced Employment	-	10	20	80
Total Employment (with Induced)	-	**130**	**180**	**410**

Note: Totals may not sum due to rounding.

17.7.88 This impact is expected to take place across the 35-year lifetime of the Proposed Development. As shown in Table 17.43, over this period, the total impact was estimated to be £391 million GVA, or £177 million NPV (where future impacts are discounted more heavily than current impacts) in the North of Scotland, £530 million GVA (£239 million NPV) in Scotland and £1,082 million GVA (£496 million NPV) in the UK.

Table 17.43 Offshore Operations and Maintenance Impact (Lifetime)

Parameters	Highland	North of Scotland	Scotland	UK
Total GVA	-	£391 mn	£530 mn	£1,082 mn
Total GVA (NPV)	-	£177 mn	£239 mn	£496 mn

17.7.89 The annual O&M impact in the North of Scotland is expected to account for less than 0.1% of total employment and the magnitude has therefore been assessed as negligible.

17.7.90 The annual O&M impact in Scotland is expected to account for less than 0.1% of total employment and the magnitude has therefore been assessed as negligible.

17.7.91 The annual O&M impact in the UK is expected to account for less than 0.1% of total employment and the magnitude has therefore been assessed as negligible.

Sensitivity of Receptor

17.7.92 As with the assessment of economic impacts during construction, the sensitivity of the Highland economy was assessed as medium, the sensitivity of the North of Scotland economy was assessed as medium, the assessment of the Scottish economy was assessed as low, and the sensitivity of the UK economy was assessed as negligible.

Significance of Effect

17.7.93 The magnitude of impact on the North of Scotland economy was assessed as negligible, and its sensitivity as medium. The effect will, therefore, be of negligible significance (beneficial), which is not significant in EIA terms.

17.7.94 The magnitude of impact on the Scottish economy was assessed as negligible, and its sensitivity as low. The effect will, therefore, be of negligible significance (beneficial), which is not significant in EIA terms.

17.7.95 The magnitude of impact on the UK economy was assessed as negligible, and its sensitivity as negligible. The effect will, therefore, be of negligible significance (beneficial), which is not significant in EIA terms.

17.7.96 A summary of the impact magnitude, receptor sensitivity and significance of effect for economic impact receptors is presented in Table 17.44.

Table 17.44 Significance of Impact 1: Increase in Employment and GVA

Receptor/Location	Magnitude	Sensitivity	Significance
North of Scotland	Negligible	Medium	Negligible (Beneficial), Not Significant
Scotland	Negligible	Low	Negligible (Beneficial), Not Significant
UK	Negligible	Negligible	Negligible (Beneficial), Not Significant

Secondary Mitigation and Residual Effect

17.7.97 No additional socio-economics mitigation is considered necessary because the likely effect in the absence of further mitigation is beneficial.

Social Impacts (Changes in Population, Housing Demand and Other Local Public and Private Services at the Operation and Maintenance Port)

Demographic Changes

17.7.98 Population change is considered the primary driver of social impacts (including demographics, housing demand and availability, local services, and socio-cultural factors). Therefore, the magnitude of these social impacts will be linked to the expected increase in population.

17.7.99 It is not anticipated that this will lead to changes at the Scottish or UK level, so the assessment of demographic changes and subsequent social impacts (changes in housing demand, changes to other local public and private services and socio-cultural impacts) are focused on changes related to the impact from the O&M port, which is expected to be located in the North of Scotland.

Changes to Housing Demand

17.7.100 The increase in employment at the O&M port may result in an increase in demand for housing. This housing required will be long-term.

Changes to Other Local Public and Private Services

17.7.101 The employment supported at the O&M port is expected to result in a stable workforce of around 100 people and may increase demand for schools and educational services. It may also increase demand for health services, as well as local cafes, supermarkets and transport networks.

Magnitude of Impact

17.7.102 During the O&M phase, a workforce of approximately 100 people will be required to fulfil contracts at the O&M port, including activities such as offshore logistics, operations control centre, turbine maintenance and service, balance of plant maintenance and service, and other maintenance port activities. Based on an assumption of a change in population of two for every job, to allow for some employees moving with family members, that would imply an increase in population of up to 200 during operation and maintenance. This would be considered the maximum impact, or worst-case design scenario, as this implies that nobody in the local area was employed at the O&M base.

17.7.103 It is expected that the O&M port will be located in the North of Scotland, for which the population is expected to fall by 0.01% between 2023 and 2043. The magnitude of impact would therefore be considered to be high. As changes in population levels determine changes in demand for housing, as well as for other public and private services, the magnitude of impact on housing demand and access to other public and private services is also assessed as high.

Sensitivity of Receptor

17.7.104 Given the composition of the population of the North of Scotland, the higher than average ratio of patients to GPs, and the lower than average change in house prices, the sensitivity has been assessed as medium.

Significance of Effect

17.7.105 The magnitude of social impacts (changes in population, housing demand and other local public and private services) was assessed as high, and the sensitivity of the North of Scotland to social impacts was assessed as medium. The effect will therefore be of moderate significance, which is significant in EIA terms.

17.7.106 This assessment is based on the assumption that new people will move to the area to work at the O&M port. However, given the overlap in skill set required between the oil and gas sector, and the offshore renewables sector and the likely decline in oil and gas employment in the North of Scotland, it is likely that many of the people who will be employed during the O&M phase will be those who had previously worked in the oil and gas sector and are not new to the area.

17.7.107 While there is potential for adverse impacts resulting from population change, such as pressure on housing and services, as with Highland, population growth in the North of Scotland is a strategic goal of the Scottish Government (Scottish Government, 2024d). This goal is largely driven by the fact that, as the population of the North of Scotland declines and ages, this presents problems for social infrastructure such as GPs.

17.7.108 The operational impact represents a long term impact which is less likely to cause notable changes to services as they adapt to long term population growth. Hospitals and education facilities are planned on the demographic demands in a particular area, so it is expected that these services will be able to adapt to a long term change in the population.

17.7.109 A summary of the impact magnitude, receptor sensitivity and significance of effect for Social Impacts is presented in Table 17.45.

Table 17.45 Significance of Impact 2: Social Impacts

Receptor/Location	Magnitude	Sensitivity	Significance
North of Scotland	High	Medium	Moderate, Significant

Secondary Mitigation and Residual Effect

17.7.110 The significance of social impacts in Highland has been assessed as moderate. While in the long term it is expected that this will contribute to the goals of the Scottish Government in increasing the working age population of the North of Scotland, to mitigate any initial short term adverse impacts, a worker accommodation plan should be produced to reduce potential strain on housing and accommodation resulting from an increase in population.

17.7.111 With secondary mitigation, the magnitude of short term adverse impacts was assessed as low. The sensitivity of the receptor was high. Therefore, the residual effect is assessed as minor, which is not significant in EIA terms.

Changes to Marine Recreation

17.7.112 The assessment considers whether the O&M phase of the Proposed Development would affect any of the recreational assets identified in Section 17.5, accounting for any significant effects identified in other chapters.

17.7.113 The following draft chapters have been reviewed:

- **Volume 2, Chapter 14: Shipping and Navigation**; and
- **Volume 2, Chapter 19: Infrastructure and Other Users**.

17.7.114 As shown in Table 17.46, where no significant effects have been identified during the O&M phase, this is indicated with an X. Where a potential significant effect has been identified, this is indicated with a ✓.

Table 17.46 Significant Effects Identified On Recreational Assets

Asset	Shipping and Navigation	Infrastructure and Other Users
Ardersier Port	X	X
Chanonry Sailing Club	X	X
Nairn Sailing Club	X	X
Seaport Marine	X	X
Highlands & Islands University Sailing Club	X	X
Compass Sea School Ltd	X	X
SCC Inverness	X	X
ISAC	X	X
Aberdeen and Stonehaven RYA	X	X

17.7.115 There were no potential significant effects identified by **Volume 2, Chapter 14: Shipping and Navigation** and **Volume 2, Chapter 19: Infrastructure and Other Users**.

Magnitude of Impact

17.7.116 The magnitude of the effect on the recreational assets has been assessed after consideration of other potential environmental factors identified in other chapters. As no potential significant effects on the recreational assets identified in Section 17.5 were identified in other chapters, it is not expected that the recreational assets will experience a change in activity. Therefore, the magnitude of the impacts on these assets have been assessed as negligible.

Sensitivity of Receptor

17.7.117 The sensitives of the recreational assets have been outlined in Table 17.36 in accordance with the definitions of sensitivity outlined in Table 17.23.

Significance of Effect

17.7.118 A summary of the impact magnitude, receptor sensitivity and significance of effect for marine recreation receptors during the O&M phase is presented in Table 17.47.

Table 17.47 Significance of Impact 5: Changes to Marine Recreation

Receptor	Magnitude	Sensitivity	Significance
Ardersier Port	Negligible	Negligible	Negligible, Not Significant
Chanonry Sailing Club	Negligible	Low	Negligible, Not Significant
Nairn Sailing Club	Negligible	Low	Negligible, Not Significant
Seaport Marine	Negligible	Low	Negligible, Not Significant
Highlands & Islands University Sailing Club	Negligible	Low	Negligible, Not Significant
Compass Sea School Ltd	Negligible	Low	Negligible, Not Significant
SCC Inverness	Negligible	Low	Negligible, Not Significant
ISAC	Negligible	Medium	Negligible, Not Significant
Aberdeen and Stonehaven RYA	Negligible	Medium	Negligible, Not Significant

Secondary Mitigation and Residual Effect

17.7.119 No additional socio-economics mitigation is considered necessary because the likely effect in the absence of further mitigation (beyond the commitments outlined in Section 17.6) is not significant in EIA terms.

17.7.120 The operation and maintenance of the Proposed Development has the potential to result in disruption to onshore recreational assets, such as trails and beaches. This assessment is carried out with reference to the findings from **Volume 2, Chapter 14: Shipping and Navigation** and **Volume 2, Chapter 19: Infrastructure and Other Users**. The receptors for changes to onshore recreation are determined by receptors for which significant adverse effects have been identified by these chapters.

17.7.121 There were no significant adverse effects on onshore recreational assets during the O&M phase identified by these chapters. It is therefore not expected that there will be any significant secondary socio-economic effects on onshore recreation due to the Proposed Development.

Changes to Commercial Fisheries

17.7.122 The O&M of the Proposed Development has the potential to result in disruption to commercial fisheries. This assessment is carried out with reference to the findings from **Volume 2, Chapter 13: Commercial Fisheries**, which, following mitigation, identified no significant adverse impacts. It is therefore not expected that there will be any significant secondary socio-economic effects on commercial fisheries due to the Proposed Development.

Changes to Shipping

17.7.123 The O&M phase of the Proposed Development has the potential to result in disruption to the shipping sector. This assessment is carried out with reference to the findings from **Volume 2, Chapter 14: Shipping and Navigation** and **Volume 2, Chapter 19: Infrastructure and Other Users**, which identified no significant adverse impacts. It is therefore not expected that there will be any significant secondary socio-economic effects on shipping due to the Proposed Development.

Decommissioning

Increase in Employment and GVA

17.7.124 The economic impact during the decommissioning phase is generated by the increased spend in the economy required to decommission the Proposed Development at the end of its operational life. This will result in increased GVA and employment.

Magnitude of Impact

17.7.125 Decommissioning would be expected to take place after the operational lifespan of the Proposed Development, which means that there is a high degree of uncertainty about the level of expenditure associated with it, as well as the share that could be secured in Scotland and the UK.

17.7.126 BVG Associates has undertaken work to determine the potential spend (BVG Associates, 2024) and share of spend (BVG Associates, 2021), which has informed the assessment. On this basis, it was assumed that the spend associated with decommissioning the Proposed Development would be £184 million, of which 30% (£55 million) could be secured in both Scotland and the UK, and 5% (£9 million) could be secured in both Highland and the North of Scotland. This is shown in Table 17.48.

Table 17.48 Total Offshore Decommissioning Spend by Category

Contracts	Highland	North of Scotland	Scotland	UK	Total
Substructure and Turbine Decommissioning	£-	£-	£13 mn	£13 mn	£44 mn
Mooring and Anchoring decommissioning	£-	£-	£16 mn	£16 mn	£52 mn
Cable Decommissioning	£7 mn	£7 mn	£21 mn	£21 mn	£71 mn
Substation Decommissioning	£2 mn	£2 mn	£5 mn	£5 mn	£17 mn
Total Impact	**£9 mn**	**£9 mn**	**£55 mn**	**£55 mn**	**£184 mn**

Note: Totals may not sum due to rounding.

Applying turnover per employee and turnover/GVA ratios for the relevant sectors it was estimated that the direct economic impact could be £15 million GVA and 90 years of employment in Scotland and the UK. This is shown in Table 17.49 and

17.7.127 Table 17.50.

Table 17.49 Offshore Decommissioning Direct Impact, GVA (£ million)

Contracts	Highland	North of Scotland	Scotland	UK
Substructure and Turbine Decommissioning	£-	£-	£4 mn	£4 mn
Mooring and Anchoring decommissioning	£-	£-	£5 mn	£5 mn
Cable Decommissioning	£2 mn	£2 mn	£7 mn	£7 mn
Substation Decommissioning	£1 mn	£1 mn	£2 mn	£2 mn
Total GVA	**£3 mn**	**£3 mn**	**£19 mn**	**£19 mn**

Note: Totals may not sum due to rounding.

Table 17.50 Offshore Decommissioning Direct Impact, Employment (Years of Employment)

Contracts	Highland	North of Scotland	Scotland	UK
Substructure and Turbine Decommissioning	-	-	30	30
Mooring and Anchoring decommissioning	-	-	30	30
Cable Decommissioning	20	20	50	50
Substation Decommissioning	-	-	10	10
Total Years of Employment	**20**	**20**	**120**	**120**

Note: Totals may not sum due to rounding.

17.7.128 Applying GVA and employment multipliers, it was estimated that the Proposed Development's economic impact could be £4 million GVA (£1 million NPV) and 30 years of employment in Highland, £4 million GVA (£1 million NPV) and 30 years of employment in the North of Scotland, £32 million GVA (£6 million NPV) and 220 years of employment in Scotland, and £54 million GVA (£9 million NPV) and 340 years of employment in the UK, as shown in Table 17.51 and Table 17.52.

17.7.129 The decommissioning impact in Highland is expected to account for 0.4% of the construction sector's total employment and the magnitude has therefore been assessed as low.

17.7.130 The decommissioning impact in the North of Scotland is expected to account for 0.2% of the construction sector's total employment and the magnitude has therefore been assessed as negligible.

17.7.131 The decommissioning impact in Scotland is expected to account for 0.2% of the construction sector's total employment and the magnitude has therefore been assessed as negligible.

17.7.132 The decommissioning impact in the UK is expected to account for less than 0.1% of the construction sector's total employment and the magnitude has therefore been assessed as negligible.

Table 17.51 Offshore Decommissioning GVA

Parameters	Highland	North of Scotland	Scotland	UK
Direct GVA	£3 mn	£3 mn	£19 mn	£19 mn
Indirect GVA	<£1 mn	£1 mn	£8 mn	£21 mn
Total GVA	**£3 mn**	**£3 mn**	**£27 mn**	**£39 mn**
NPV GVA	*£1 mn*	*£1 mn*	*£6 mn*	*£9 mn*
Induced GVA	<£1 mn	£1 mn	£6 mn	£15 mn
Total GVA (with Induced)	**£4 mn**	**£4 mn**	**£32 mn**	**£54 mn**

Note: Totals may not sum due to rounding.

Table 17.52 Offshore Decommissioning Employment (Years of Employment)

Parameters	Highland	North of Scotland	Scotland	UK
Direct Years of Employment	20	20	120	120
Indirect Years of Employment	-	-	60	130
Total Years of Employment	**20**	**20**	**180**	**250**
Induced Years of Employment	-	-	40	90
Total Years of Employment (with Induced)	**30**	**30**	**220**	**340**

Note: Totals may not sum due to rounding.

Sensitivity of Receptor

17.7.133 As with the construction and operational impact, the sensitivity of the Highland economy was assessed as medium, the sensitivity of the North of Scotland economy was assessed as medium, the sensitivity of the Scottish economy was assessed as low and the sensitivity of the UK economy was assessed as negligible.

Significance of Effect

17.7.134 The magnitude of the impact on the Highland economy is deemed to be low and its sensitivity as medium. The effect will, therefore, be of minor significance (beneficial), which is not significant in EIA terms.

17.7.135 The magnitude of the impact on the North of Scotland economy is deemed to be negligible and its sensitivity as medium. The effect will, therefore, be of negligible significance (beneficial), which is not significant in EIA terms.

17.7.136 The magnitude of the impact on the Scottish economy is deemed to be negligible and its sensitivity as low. The effect will, therefore, be of negligible significance (beneficial), which is not significant in EIA terms.

17.7.137 The magnitude of the impact on the UK economy is deemed to be negligible and its sensitivity as negligible. The effect will, therefore, be of negligible significance (beneficial), which is not significant in EIA terms.

17.7.138 A summary of the impact magnitude, receptor sensitivity and significance of effect for an Increase in Employment and GVA is presented in Table 17.53.

Table 17.53 Significance of Impact 1: Increase in Employment and GVA

Receptor/Location	Magnitude	Sensitivity	Significance
Highland	Low	Medium	Minor (Beneficial) Not Significant
North of Scotland	Negligible	Medium	Negligible (Beneficial) Not Significant
Scotland	Negligible	Low	Negligible (Beneficial) Not Significant
UK	Negligible	Negligible	Negligible (Beneficial) Not Significant

Secondary Mitigation and Residual Effect

17.7.139 No additional socio-economics mitigation is considered necessary because the likely effect in the absence of further mitigation is considered to be beneficial.

Population Change and Social Impacts

17.7.140 As well as generating economic impacts in each of the study areas considered, the Proposed Development may have economic impacts on the decommissioning port. The demographic impacts during decommissioning are likely to be similar in nature to the construction phase, but smaller in magnitude.

17.7.141 Given that no significant effects were identified during the construction and O&M phases following mitigation, it is not anticipated that there will be any significant effects on population and social impacts during the decommissioning phase.

Changes to Marine Recreation

17.7.142 The assessment considers whether the decommissioning of the Proposed Development would affect any of the recreational assets identified in Section 17.5, accounting for any significant effects identified in other chapters.

17.7.143 The following draft chapters have been reviewed:

- **Volume 2, Chapter 14: Shipping and Navigation**; and
- **Volume 2, Chapter 19: Infrastructure and Other Users**.

17.7.144 As shown in Table 17.54, where no significant effects have been identified during the decommissioning phase, this is indicated with an X. Where a potential significant effect has been identified, this is indicated with a ✓.

Table 17.54 Significant Effects Identified On Recreational Assets

Asset	Shipping and Navigation	Infrastructure and Other Users
Ardersier Port	X	X
Chanonry Sailing Club	X	X
Nairn Sailing Club	X	X
Seaport Marine	X	X
Highlands & Islands University Sailing Club	X	X
Compass Sea School Ltd	X	X
SCC Inverness	X	X
ISAC	X	X
Aberdeen and Stonehaven RYA	X	X

17.7.145 There were no potential significant effects identified by **Volume 2, Chapter 14: Shipping and Navigation** and **Volume 2, Chapter 19: Infrastructure and Other Users**.

Magnitude of Impact

17.7.146 The magnitude of the effect on the recreational assets during the decommissioning phase has been assessed after consideration of other potential environmental factors identified in other chapters. As no potential significant effects on the recreational assets identified in Section 17.5 were identified in other chapters, it is not expected that the recreational assets will experience a change in activity. Therefore, the magnitude of the impacts on these assets have been assessed as negligible.

Sensitivity of Receptor

17.7.147 The sensitives of the recreational assets have been outlined in Table 17.36 in accordance with the definitions of sensitivity outlined in Table 17.23.

Significance of Effect

17.7.148 A summary of the impact magnitude, receptor sensitivity and significance of effect for marine recreation receptors during the decommissioning phase is presented in Table 17.55.

Table 17.55 Significance of Impact 5: Changes to Marine Recreation

Receptor	Magnitude	Sensitivity	Significance
Ardersier Port	Negligible	Negligible	Negligible, Not Significant
Chanonry Sailing Club	Negligible	Low	Negligible, Not Significant
Nairn Sailing Club	Negligible	Low	Negligible, Not Significant
Seaport Marine	Negligible	Low	Negligible, Not Significant
Highlands & Islands University Sailing Club	Negligible	Low	Negligible, Not Significant
Compass Sea School Ltd	Negligible	Low	Negligible, Not Significant
SCC Inverness	Negligible	Low	Negligible, Not Significant
ISAC	Negligible	Medium	Negligible, Not Significant
Aberdeen and Stonehaven RYA	Negligible	Medium	Negligible, Not Significant

Secondary Mitigation and Residual Effect

17.7.149 No additional socio-economics mitigation is considered necessary because the likely effect in the absence of further mitigation (beyond the commitments outlined in Section 17.6) is not significant in EIA terms.

Changes to Onshore Recreation

17.7.150 The decommissioning of the Proposed Development has the potential to result in disruption to onshore recreational assets, such as trails and beaches. This assessment is carried out with reference to the findings from **Volume 2, Chapter 14: Shipping and Navigation** and **Volume 2, Chapter 19: Infrastructure and Other Users**. The receptors for changes to onshore recreation are determined by receptors for which significant adverse effects have been identified by these chapters.

17.7.151 There were no significant adverse effects on onshore recreational assets during the decommissioning phase identified by these chapters. It is therefore not expected that there will be any significant secondary socio-economic effects on onshore recreation due to the Proposed Development.

Changes to Commercial Fisheries

17.7.152 The decommissioning of the Proposed Development has the potential to result in disruption to commercial fisheries. This assessment is carried out with reference to the findings from **Volume 2, Chapter 13: Commercial Fisheries**, which, following mitigation, identified no significant adverse impacts. It is therefore not expected that there will be any significant secondary socio-economic effects on commercial fisheries due to the Proposed Development.

17.7.153 The decommissioning of the Proposed Development has the potential to result in disruption to the shipping sector. This assessment is carried out with reference to the findings from **Volume 2, Chapter 14: Shipping and Navigation** and **Volume 2, Chapter 19: Infrastructure and Other Users**, which identified no significant adverse impacts. It is therefore not expected that there will be any significant secondary socio-economic effects on shipping due to the Proposed Development.

Proposed Monitoring

17.7.154 Table 17.56 describes proposed monitoring in support of secondary mitigation discussed above.

Table 17.56 Recommended Monitoring and Implementation for Socio-Economics, Tourism and Recreation Effects

Effect	Proposed Monitoring	Implementation Method
Social Impacts	Engage with the communities around construction and O&M ports to understand the nature of potential social impacts	Detailed monitoring commitments will be agreed post consent and are likely to include community engagement events.

17.8 Cumulative Effects Assessment

Cumulative Effects Assessment Methodology

17.8.1 The effects of the Proposed Development alone are generally limited to areas near the Aspen Array Area and OTC Corridor. However, some impacts may extend over a wider area. Cumulative effects arise when the Proposed Development combines with other projects, affecting the same receptor or group of receptors.

17.8.2 **Volume 1, Chapter 4: Environmental Impact Assessment Methodology** outlines how cumulative effects will be assessed through a Cumulative Effects Assessment (CEA). A screening process has identified relevant plans, projects, and activities to be included. Figure 17.9 illustrates those relevant to socioeconomics, tourism and recreation, with further details provided in Table 17.57.

17.8.3 The assessment uses the most up-to-date publicly available project parameters for each relevant plan or project.

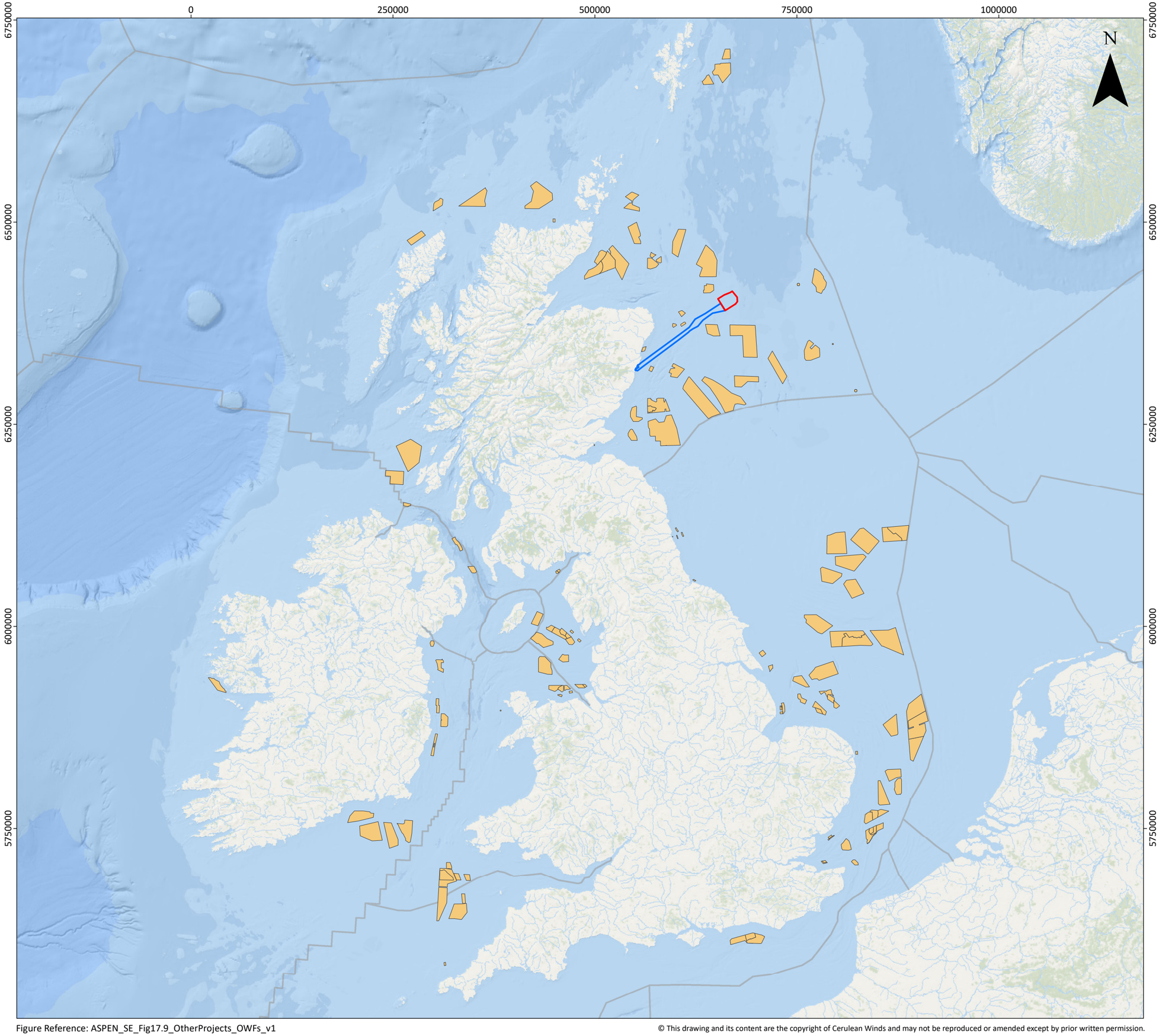
17.8.4 Different plans and projects may contribute to cumulative effects to varying degrees, depending on their progress and likelihood of operation. A tiered approach is used to weight the assessment accordingly:

- Tier 1: The Proposed Development (onshore and offshore), combined with projects that have become operational since the baseline characterisation, ongoing operational projects, and those consented but not yet built or under construction.
- Tier 2: All Tier 1 projects, plus those that have submitted a Scoping Report or are awaiting determination following an application.
- Tier 3: All Tier 2 projects, plus those not yet in the planning system but expected to enter soon (e.g., Agreement for Lease (AfL) projects or those in feasibility/early design stages), where sufficient data is available.

17.8.5 The CIA for Socioeconomics considers the worst-case design scenario for each project, plan, and activity, following the methodology in **Volume 1, Chapter 4: Environmental Impact Assessment Methodology**. Projects were included in the assessment based on a screening range covering both the spatial and temporal scope of the Proposed Development, defined by construction and decommissioning timelines and study area. As the cumulative assessment includes a discussion of impacts on supply chains, all offshore wind projects in Scotland and the UK have been considered.

17.8.6 Potential cumulative impacts on socioeconomic, tourism and recreation receptors have been evaluated using project-specific modelling and other analytical methods.

17.8.7 The cumulative assessment is considering how the Proposed Development will interact with a total 134 offshore wind projects across the UK (within Tier 1-3). To ensure the overall readability of Table 17.57, projects have been grouped together based on shared characteristics.



CERULEAN WINDS

Aspen Offshore Wind Farm
Environmental Impact Assessment

Other Plans/Projects included in the Socioeconomics, Tourism and Recreation CEA

Legend

- Aspen Array Area
- Offshore Transmission Cable Corridor
- Offshore Wind Farm Project

Notes

Esri, Garmin, GEBCO, NOAA NGDC, and other contributors
Contains Ordnance Survey data © Crown copyright and database rights (2024). OS OpenData.

Coordinate System:
WGS 1984 UTM Zone 30N

0 100 200 km

0 50 100 nm

Scale	Date	Drawn by	Checked by	Approved by
1:4,500,000@A3	20/06/2025	BPHB	NH	SB

Cerulean Winds
24/25 The Shard,
32 London Bridge Street,
London
SE1 9SG

www.ceruleanwinds.com
+44 203 457 0614

GoBe
APEM Group

Figure 17.9

Figure Reference: ASPEN_SE_Fig17.9_OtherProjects_OWFs_v1

Table 17.57 Other Plans/Projects included in the Socioeconomics, Tourism and Recreation CEA

Plan/Project	Summary	Status	Distance From Aspen Array Area (km)	Distance From OTC Corridor (km)	Construction Dates (if relevant)	Operational by (if relevant)	Summary of Interaction with Proposed Development
Tier 1							
Aspen Offshore Wind Farm	Whole project including the offshore array	n/a	n/a	n/a	2027-2029	2030	Will generate the power connecting to the onshore grid infrastructure.
Operational Offshore Windfarms							
Scotland	10 offshore windfarms	Operational	n/a	n/a	n/a	2025 onwards	O&M phase interacts with construction and O&M phase of Proposed Development
England and Wales	38 offshore windfarms	Operational	n/a	n/a	n/a	2025 onwards	O&M phase interacts with construction and O&M phase of Proposed Development
Republic of Ireland	1 offshore windfarm	Operational	n/a	n/a	n/a	2025 onwards	O&M phase interacts with construction and O&M phase of Proposed Development
Under Construction Offshore Windfarms							
Scotland	2 offshore windfarms	Under Construction	n/a	n/a	2025	2026 onwards	O&M phase interacts with construction and O&M phase of Proposed Development
England and Wales	6 offshore windfarms	Under Construction	n/a	n/a	2025-2027	2028 onwards	Construction and O&M phase interacts with construction and O&M phase of Proposed Development
Consented Offshore Windfarms							
Scotland	5 offshore windfarms	Consented	n/a	n/a	2027-2028	2029 onwards	Construction and O&M phase interacts with construction and O&M phase of Proposed Development
England and Wales	13 offshore windfarms	Consented	n/a	n/a	2026-2029	2030 onwards	Construction and O&M phase interacts with construction and O&M phase of Proposed Development
Republic of Ireland	1 offshore windfarm	Consented	n/a	n/a	2027-2029	2030 onwards	Construction and O&M phase interacts with construction and O&M phase of Proposed Development
Tier 2							
In Planning Offshore Windfarms							
Scotland	5 offshore windfarms	In Planning	n/a	n/a	2029-2033	2034 onwards	Construction and O&M phase interacts with construction and O&M phase of Proposed Development
England and Wales	11 offshore windfarms	In Planning	n/a	n/a	2026-2030	2031 onwards	Construction and O&M phase interacts with construction and O&M phase of Proposed Development
Republic of Ireland	3 offshore windfarms	In Planning	n/a	n/a	2030s	2030s	Construction and O&M phase interacts with O&M phase of Proposed Development
Tier 3							
Early Planning Offshore Windfarms							
Beech Offshore Wind Farm	n/a	Early Planning	n/a	n/a	n/a	n/a	Construction and O&M phase is likely to interact with O&M phase of Proposed Development
Cedar Offshore Wind Farm	n/a	Early Planning	n/a	n/a	n/a	n/a	Construction and O&M phase is likely to interact with O&M phase of Proposed Development

Plan/Project	Summary	Status	Distance From Aspen Array Area (km)	Distance From OTC Corridor (km)	Construction Dates (if relevant)	Operational by (if relevant)	Summary of Interaction with Proposed Development
Scotland	24 offshore windfarms	Early Planning	n/a	n/a	n/a	n/a	Construction and O&M phase is likely to interact with O&M phase of Proposed Development
England and Wales	7 offshore windfarms	Early Planning	n/a	n/a	n/a	n/a	Construction and O&M phase is likely to interact with O&M phase of Proposed Development
Republic of Ireland	6 offshore windfarms	Early Planning	n/a	n/a	n/a	n/a	Construction and O&M phase is likely to interact with O&M phase of Proposed Development
Northern Ireland	2 offshore wind farms	Early Planning	n/a	n/a	n/a	n/a	Construction and O&M phase is likely to interact with O&M phase of Proposed Development

17.8.8 The socioeconomics, tourism and recreation CEA has been undertaken with respect to the details provided in **Volume 1, Chapter 3: Project Description**. A worst-case design scenario has been selected for each Cumulative Effect which would lead to the greatest adverse impact for all receptors or receptor groups, when selected from a range of values. Effects of greater adverse significance are not predicted to arise should any other development scenario, based on details within **Volume 1, Chapter 3: Project Description** (e.g., different infrastructure layout), to that assessed here, be taken forward in the final design scheme.

17.8.9 Table 17.58 presents the worst-case design scenario for each Cumulative Impact associated with the socioeconomics, tourism and recreation CEA, along with justification.

Table 17.58 Worst-case Design Scenario with respect to the Socioeconomics, Tourism and Recreation CEA

Cumulative Impact	Tier	Worst-case Design Scenario
Construction		
Increase in employment and Gross Value Added	Tiers 1-3	Increased Offshore Wind Supply Chain in Scotland and the rest of the UK. In addition to the economic impact generated by the expenditure associated with the Proposed Development, it may have cumulative effects associated with its interaction with other projects, such as increasing the critical mass of the offshore wind sector and attracting manufacturers etc. The worst-case design scenario is based on only the developments (e.g. new manufacturing facilities) that have been secured to date. Increased Competition for Resources. Expenditure associated with the Proposed Development may result in increased competition for limited resources, delaying other projects. This may lead to increased capacity in the sector.
Demographics changes Changes to housing demand Changes to other local public and private services	Tiers 1-3	Temporary changes to demographics and increased demand for services in the area around the construction port are likely to be made more permanent in conjunction with other projects on the east coast of Scotland.
Changes to marine recreation	Tiers 1-3	The assessment considers whether any changes to marine recreation could arise from any changes to shipping and marine navigation (e.g. cruise ships). This has been based on the worst-case design scenario of the shipping and navigation assessment, taking account of designed in measures.

Cumulative Impact	Tier	Worst-case Design Scenario
Changes to onshore recreation	Tiers 1-3	The assessment considers whether cumulative construction activity could affect onshore recreation receptors (beaches and surfing, and sea cliff climbing). The effects considered are secondary to other environmental impacts. Therefore, it is based on the worst-case design scenarios identified in **Volume 2, Chapter 14: Shipping and Navigation** and **Volume 2, Chapter 19: Infrastructure and Other Users**.
Changes to commercial fisheries	Tiers 1-3	The assessment of socio-economic effects arising from changes to commercial fisheries has been based on the worst-case design scenario of the commercial fisheries assessment as set out in **Volume 2, Chapter 13: Commercial Fisheries**.
Changes to shipping	Tiers 1-3	The assessment of socio-economic effects arising from changes to shipping has been based on the worst-case design scenario of the shipping and navigation assessment as set out in **Volume 2, Chapter 14: Shipping and Navigation**.
O&M		
Increase in employment and Gross Value Added	Tiers 1-3	In addition to the economic impact generated by the expenditure associated with the Proposed Development, it may have cumulative effects associated with its interaction with other projects, such as increasing economies of scale and competition for resources.
Demographics changes	Tiers 1-3	The creation of O&M clusters constitutes a worst case scenario. This would mean that changes to demographics and increased demand for services in the area around the O&M port may increase as ports specialise in offshore wind farm maintenance, attracting other similar developments.
Changes to housing demand		
Changes to other local public and private services		
Changes to marine recreation	Tiers 1-3	The assessment considers whether any changes to marine recreation could arise from any changes to shipping and marine navigation (e.g. cruise ships). This has been based on the worst-case design scenario of the shipping and navigation assessment, as set out in **Volume 2, Chapter 14: Shipping and Navigation**, whilst taking account of designed in measures.
Changes to onshore recreation	Tiers 1-3	The assessment considers whether cumulative O&M activity could affect onshore recreation receptors (beaches and surfing, and sea cliff climbing).
Changes to commercial fisheries	Tiers 1-3	The assessment of socio-economic effects arising from changes to commercial fisheries has been based on the worst-case design scenario of the

Cumulative Impact	Tier	Worst-case Design Scenario
		commercial fisheries assessment, as set out in **Volume 2, Chapter 13: Commercial Fisheries**.
Changes to shipping	Tiers 1-3	The assessment of socio-economic effects arising from changes to shipping has been based on the worst-case design scenario of the shipping and navigation assessment, as set out in **Volume 2, Chapter 14: Shipping and Navigation**.

Construction Cumulative Effects Assessment

17.8.10 The construction of the Proposed Development in conjunction with that of other offshore windfarms could result in a series of temporary cumulative effects. These will arise only during the years when construction activity occurs.

Impact 1 – Increase in Employment and GVA

17.8.11 An assessment of the likely significance of the cumulative effects of the Proposed Development on the Socioeconomics Study Areas, arising from each identified impact is given below. The Cumulative Effect on employment and gross value added during the construction phase will be dependent on how two competing forces interact as the sector develops. These are:

- increased offshore wind supply chains; and
- increased competition for resources.

Impact 1a - Increased Offshore Wind Supply Chain

17.8.12 There are a number of offshore wind developments that are being developed across the UK, particularly on the east coast of Scotland (e.g. ScotWind and INTOG). There is potential for this to create a critical mass of opportunities that attract manufacturers and other industries.

Magnitude of Cumulative Impact

17.8.13 As set out in Section 17.7 offshore wind has substantial potential to generate economic impact in Scotland and the UK. For example, the critical mass created by the high number of offshore wind developments may attract multinational companies who manufacture critical components such as blades and cables, increasing economic impact in Scotland and the UK.

17.8.14 The Proposed Development is expected to account for around 1 GW of floating offshore wind and to be one of the earlier INTOG and Scotwind projects to be built. As a result, it could play a role in providing investor confidence about the scale of the opportunity in Scotland, generating more substantial economic impacts on Scotland and the UK. The Proposed Development could in this way contribute towards the development of the floating offshore wind supply chain.

17.8.15 The most adverse / conservative scenario has been considered based on already committed investments, though further investments are likely as the supply chain develops. These projects require certainty that projects will be developed, and orders will be forthcoming, which is why early-stage projects are important in securing the investment.

17.8.16 This includes a factory proposed by Sumitomo, a Japanese multinational, to manufacture subsea cables in Highland which is expected to directly employ over 150 people, and a factory proposed by XLCC to manufacture subsea cables in Ayrshire, which is expected to employ 900 people. The Applicant has also committed to using Ardersier Port in Highland, where works are underway to develop a 450-acre site with infrastructure suitable for marshalling, integration, manufacturing and assembly activity (The Scottish National Investment Bank, 2024).

17.8.17 Based on this level of activity, the magnitude of impact in Highland has been assessed as high, in the North of Scotland as high, in Scotland as high and in the UK as negligible.

Sensitivity of Receptor

17.8.18 As for the impacts arising solely from the Proposed Development, the sensitivity of the Highland economy is assessed as medium, the sensitivity of the North of Scotland economy as medium sensitivity, that of the Scottish economy as low and that of the UK economy as negligible.

Significance of Cumulative Effect

17.8.19 Overall, the magnitude of the impact in Highland is deemed to be high and the sensitivity of the economy is considered medium. The effect will, therefore, be of moderate beneficial significance, which is significant in EIA terms.

17.8.20 Overall, the magnitude of the impact in the North of Scotland is deemed to be high and the sensitivity of the economy is considered medium. The effect will, therefore, be of moderate beneficial significance, which is significant in EIA terms.

17.8.21 Overall, the magnitude of the impact in Scotland is deemed to be high and the sensitivity of the economy is considered low. The effect will, therefore, be of minor beneficial significance, which is not significant in EIA terms.

17.8.22 Overall, the magnitude of the impact in the UK is deemed to be negligible and the sensitivity of the economy is considered negligible. The effect will, therefore, be of negligible beneficial significance, which is not significant in EIA terms.

17.8.23 A summary of the Cumulative Impact magnitude, receptor sensitivity and significance of effect for economic receptors is presented in Table 17.59.

Table 17.59 Significance of Impact 1a: Increased Offshore Wind Supply Chain

Receptor/Location	Magnitude	Sensitivity	Significance
Highland	High	Medium	Moderate
North of Scotland	High	Medium	Moderate
Scotland	High	Low	Minor
UK	Negligible	Negligible	Negligible

17.8.24 No additional socioeconomic mitigation is envisaged since the effects are beneficial.

Impact 1b - Increased Competition

17.8.25 The large number of offshore wind farms will require similar resources, leading to increased competition. The contribution of the Proposed Development to increased competition for construction supply chain resources will be temporary and limited to the period when construction will take place.

Magnitude of Cumulative Impact

17.8.26 Due to the size of the planned offshore wind expansion, including ScotWind and INTOG, some resources such as ports, manufacturing facilities and skilled workers are likely to be in high demand.

17.8.27 Without co-ordination between developers and suppliers, competitive pressure on resources may lead to delays to less developed projects and a slower build out of offshore wind capacity. However, it is also likely to lead to increased investment in the sector to meet the demand for services. For example, it may lead to new port capacity and manufacturing facilities, or increased efficiency in the sector.

17.8.28 Under the most adverse scenario, it is anticipated that there will be a slower build out of offshore wind, though the total activity is expected to be the same. It is also anticipated that the demand for ports and other services will lead to increased investment and government response to increase supply, which will lead to a faster build out.

17.8.29 Therefore, the magnitude of impact has been assessed a low for Highland and the North of Scotland, and as negligible for the Scottish and UK economies.

Sensitivity of Receptor

17.8.30 As for the impacts arising solely from the Proposed Development, the sensitivity of the Highland economy has been assessed as medium, that of the North of Scotland economy as medium, that of Scotland's economy as low, and that of the UK economy as negligible.

Significance of Cumulative Effect

17.8.31 Overall, the magnitude of the impact in Highland is deemed to be low and the sensitivity of the economy is considered medium. The effect will, therefore, be of minor adverse significance, which is not significant in EIA terms.

17.8.32 Overall, the magnitude of the impact in the North of Scotland is deemed to be low and the sensitivity of the economy is considered medium. The effect will, therefore, be of minor adverse significance, which is not significant in EIA terms.

17.8.33 Overall, the magnitude of the impact in Scotland is deemed to be negligible and the sensitivity of the economy is considered low. The effect will, therefore, be of negligible adverse significance, which is not significant in EIA terms.

17.8.34 Overall, the magnitude of the impact in the UK is deemed to be negligible and the sensitivity of the economy is considered negligible. The effect will, therefore, be of negligible adverse significance, which is not significant in EIA terms.

17.8.35 A summary of the Cumulative Impact magnitude, receptor sensitivity and significance of effect for economic receptors is presented in Table 17.60.

Table 17.60 Significance of Impact 1b: Increased Competition

Receptor/Location	Magnitude	Sensitivity	Significance
Highland	Low	Medium	Minor
North of Scotland	Low	Medium	Minor
Scotland	Negligible	Low	Negligible
UK	Negligible	Negligible	Negligible

Secondary Mitigation and Residual Cumulative Effects

17.8.36 No additional socioeconomic mitigation is envisaged since the cumulative effects are not significant.

Impact 2 - Demographic Changes

17.8.37 There are several developments on the east coast of Scotland, which may use similar ports and skilled labour, which may have a cumulative demographic effect. This could result in temporary cumulative effects.

Magnitude of Cumulative Impact

17.8.38 Construction impacts related to single projects, such as the Proposed Development, are likely to be short-term. However, given the other ScotWind and INTOG projects that are under development it is likely that when taken together, these impacts are likely to be experienced as long-term and relatively stable.

17.8.39 As discussed in Section 17.7, the Proposed Development is likely to result in changes to demographics, higher demand for housing and other services. However, as this is one of several projects that are being developed, there will be sustained work for skilled workers for several years (likely to be more than a decade). Due to this increased job security, it is expected that they and their families are more likely to settle in the areas around ports and other facilities permanently. This is expected to result in a sustained population increase.

17.8.40 The assumed population increase associated with supply chain activity was based on the existing investments in Highland from offshore wind activity considered earlier. On this basis the magnitude of impact on population change was assessed as high.

Sensitivity of Receptor

17.8.41 Overall, the sensitivity of Highland to population changes has been assessed as high.

Significance of Cumulative Effect

17.8.42 A summary of the Cumulative Impact magnitude, receptor sensitivity and significance of effect for economic receptors is presented in Table 17.61. Table 17.57

17.8.43 Overall, the magnitude of the impact in Highland is deemed to be high and the sensitivity to population changes is considered high. The effect will, therefore, be of major beneficial significance, which is significant in EIA terms.

Table 17.61 Significance of Impact 2: Demographic Changes

Receptor/Location	Magnitude	Sensitivity	Significance
Highland	High	High	Major

Secondary Mitigation and Residual Cumulative Effects

17.8.44 No additional socioeconomic mitigation is envisaged since the effects are beneficial.

Impact 3 – Changes to Housing Demand

17.8.45 A sustained increase in population across the east coast associated with the offshore wind sector is likely to affect housing demand. The assessment of cumulative effects on housing demand focuses on Highland. This is because, unless population changes (the primary driver of housing demand) in Scotland and the UK are to come from international migration, offshore wind activity will result in changes in the relative concentration of population, rather than in its net levels.

Magnitude of Cumulative Impact

17.8.46 In isolation, the Proposed Development may lead to an increase in demand for temporary housing. In combination with other east coast projects, the Proposed Development may result in a long-term increase in population and a long-term increase in demand for housing for skilled workers and their families.

17.8.47 Based on the magnitude of population change, the magnitude of impact is assessed as high.

Sensitivity of Receptor

17.8.48 Overall, the sensitivity of Highland to changes in housing has been assessed as high.

Significance of Cumulative Effect

17.8.49 A summary of the Cumulative Impact magnitude, receptor sensitivity and significance of effect for economic receptors is presented in Table 17.62. Table 17.57

17.8.50 Overall, the magnitude of the impact in Highland is deemed to be high and the sensitivity to housing changes is considered high. The effect will, therefore, be of major beneficial significance, which is significant in EIA terms.

Table 17.62 Significance of Impact 3: Changes to Housing Demand

Receptor/Location	Magnitude	Sensitivity	Significance
Highland	High	High	Major

Secondary Mitigation and Residual Cumulative Effects

17.8.51 The increasing demand for accommodation in Highland, particularly in the Inner Moray firth area around the Inverness and Cromarty Firth Green Freeport is an issue that is being addressed collaboratively. The primary approach to this is through the development and implementation of the Inner Moray Firth Local Development Plan (IMFLDP), which was published by Highland Council in 2024 (Highland Council, 2024). This plan seeks to enable the delivery of the objectives of the Inverness and Cromarty Firth Green Freeport Visions, including the fabrication and manufacturing of renewable energy components. As a result of input from the renewables energy sector, including key partners of the Project such as the Ardersier Energy Transition Facility, the housing land requirement in this plan has increased from 6,790 houses, as identified in the 2020 Housing Need and Demand Assessment, to 8,463 houses to take into account the economic growth connected to the renewables industry. The process for identifying the land for these additional houses is currently underway.

17.8.52 If the level of additional housing were to grow in line with the IMFLDP this would indicate that the sensitivity of the housing market is Low because the market will have demonstrated that it is able to tolerate or adapt to impacts without a change in the ability of these assets to meet the needs of the community. This would therefore result in the significance of the impact on housing being Minor (Not Significant). However, at this stage it is too early to determine whether or not the objectives of the plan will be achieved and therefore the residual effect has been retained as **Major (significant).**

Impact 4 – Changes to Other Local Public and Private Services

17.8.53 A sustained increase in economic activity and employment will result in a long-term increase in demand for public and private services. The assessment of cumulative effects on demand for public and private services focuses on Highland. This is because, unless population changes (the primary driver of demand for public and private services) in Scotland and the UK are to come from international migration, offshore wind activity will result in changes in the relative concentration of population, rather than in its net levels.

Magnitude of Cumulative Impact

17.8.54 In combination with other projects, the Proposed Development is expected to result in an increased long-term demand for public and private services. This includes demand for local businesses, such as supermarkets and restaurants, as well as public services such as education and healthcare.

17.8.55 The magnitude of change will depend on the factors outlined in 17.7, including the capacity of local service providers and the ability of the local area to respond to change. Based on the magnitude of population change, the magnitude of impact is assessed as high.

Sensitivity of Receptor

17.8.56 As set out in Section 17.5, Highland is characterised by a relatively smaller share of its population being of working age (60.2%) compared to Scotland (63.4%) and the UK (62.8%). While public and private services feature relatively lower levels of pressure, house prices over the past ten years have growth faster (+43.7%) than across Scotland (37.3%).

17.8.57 Overall, the sensitivity of Highland to changes in social infrastructure has been assessed as high.

Significance of Cumulative Effect

17.8.58 A summary of the Cumulative Impact magnitude, receptor sensitivity and significance of effect for economic receptors is presented in Table 17.63.

17.8.59 Overall, the magnitude of the impact in Highland is deemed to be high and the sensitivity to changes to other local and public services is considered high. The effect will, therefore, be of major beneficial significance, which is significant in EIA terms.

Table 17.63 Significance of Impact 4: Changes to Other Local Public and Private Services

Receptor/Location	Magnitude	Sensitivity	Significance
Highland	High	High	Major

Secondary Mitigation and Residual Cumulative Effects

Impact 5 – Changes to Marine Recreation

17.8.60 The assessment considers whether the construction phase of the Proposed Development would affect any of the recreational assets identified in Section 17.5, accounting for any significant effects identified in **Volume 2, Chapter 14: Shipping and Navigation** and **Volume 2, Chapter 19: Infrastructure and Other Users.**

17.8.61 There were no significant cumulative effects associated with the Proposed Development identified by other chapters.

Impact 6 – Changes to Onshore Recreation

17.8.62 The assessment considers whether the construction phase of the Proposed Development would affect any of the onshore recreational assets identified in Section 17.5, accounting for any significant effects identified in **Volume 2, Chapter 14: Shipping and Navigation and Volume 2, Chapter 19: Infrastructure and Other Users**.

17.8.63 There were no significant cumulative effects associated with the Proposed Development identified by other chapters. Therefore, no significant cumulative secondary socio-economic effects on the onshore recreation sector will occur because of the Proposed Development.

17.8.64 **Volume 2, Chapter 13 Commercial Fisheries** has considered the potential for cumulative effects associated with the construction of the Proposed Development. Such effects could have socio-economic consequences if the value of fish caught by commercial fisheries was reduced. Any changes in fish catches could also have implications for downstream activity, such as food processing.

17.8.65 **Volume 2, Chapter 13 Commercial Fisheries** finds the following significant cumulative effects:

- Moderate adverse effects from reduction in access to, or exclusion from established fishing grounds in relation to UK demersal otter trawl, demersal seine, dredge fisheries and pelagic trawl; and
- Moderate adverse effects from displacement leading to gear conflict and increased fishing pressure on adjacent grounds across UK demersal otter trawl, demersal seine, pelagic otter trawl and purse seine, scallop dredge, potting and gear with hooks; as well as non-UK pelagic otter trawl and purse seine

17.8.66 These effects take already account of mitigations implemented by the Applicant, with strategic mitigation not currently proposed across multiple offshore wind projects.

17.8.67 Based on this analysis, it is likely there will be moderate significant cumulative adverse socio-economic effects on commercials fisheries. However, the contribution of the Project to this cumulative effect will not be significant.

Impact 8 – Changes to Shipping

17.8.68 The assessments presented in **Volume 2, Chapter 14: Shipping and Navigation** and **Volume 2, Chapter 19: Infrastructure and Other Users** have not identified any significant cumulative effects on shipping. Therefore, no significant cumulative secondary socio-economic effects on the shipping sector will occur because of the Proposed Development.

Operation and Maintenance Cumulative Effects Assessment

Impact 9 – Increased in Employment and GVA

17.8.69 This section considers the cumulative effects of the Proposed Development upon the Socioeconomics Study Areas arising from each identified impact. As with the construction phase, the Cumulative Effect on employment and gross value added during the operational phase will be dependent on how two competing forces interact as the sector develops. These are:

- Increased offshore wind supply chains in Scotland and the rest of the UK; and
- Increased competition for resources.

17.8.70 There are several offshore wind developments that are being developed across the UK, particularly on the east coast of Scotland (e.g. ScotWind and INTOG). There is potential for this to create a critical mass of opportunities that attract clusters to support servicing, maintenance and associated logistics. There is also the possibility of the development of a critical mass attracting training providers and enhancing the current skills base.

Magnitude of Cumulative Impact

17.8.71 The size of the offshore wind sector may lead to economies of scale and the development of operations and maintenance hubs, including on the east coast of Scotland. It is expected the O&M port servicing the Proposed Development will be in the North of Scotland. However, its exact location has not yet been decided.

17.8.72 Across the North of Scotland, there are several ports that could provide O&M services with potential for servicing multiple offshore wind projects. As the exact location of the O&M port has not been decided, it is not possible to assess the extent of the Proposed Development's interaction with other projects and the potential for the establishment of O&M hubs. Therefore, it was not feasible to assess the magnitude of impact in Highland and the North of Scotland.

17.8.73 While there is potential for future investment and the creation of O&M hubs, at Scottish and UK level, to date there has been limited investment in operations and maintenance capacity. As the worst case scenario for cumulative economic impacts during the O&M phase is based on committed investment, the impact on both the Scottish and UK economy has been assessed as negligible.

Sensitivity of Receptor

17.8.74 As for the impacts arising solely from the Proposed Development, the sensitivity of the of the Highland economy has been assessed as medium, that of the North of Scotland economy as medium, that of Scotland's economy as low, and that of the UK economy as negligible.

Significance of Cumulative Effect

17.8.75 Overall, the magnitude of the impact in Scotland is deemed to be negligible and the sensitivity of the economy is considered low. The effect will, therefore, be of negligible beneficial significance, which is not significant in EIA terms.

17.8.76 Overall, the magnitude of the impact in the UK is deemed to be negligible and the sensitivity of the economy is considered negligible. The effect will, therefore, be of negligible beneficial significance, which is not significant in EIA terms.

17.8.77 A summary of the Cumulative Impact magnitude, receptor sensitivity and significance of effect for economic receptors is presented in Table 17.64.

Table 17.64 Significance of Impact 9a: Increased Offshore Wind Supply Chain in Scotland and the Rest of the UK

Receptor/Location	Magnitude	Sensitivity	Significance
Highland	n/a	Medium	n/a
North of Scotland	n/a	Medium	n/a
Scotland	Negligible	Low	Negligible
UK	Negligible	Negligible	Negligible

Secondary Mitigation and Residual Cumulative Effects

17.8.78 No additional socioeconomic mitigation is envisaged since the effects are beneficial.

Increased Competition for Resources

17.8.79 The size of the offshore wind sector may lead to competition for resources, which may incentivise investment in increased capacity and efficiency, and spur co-ordination in the sector.

Magnitude of Cumulative Impact

17.8.80 The O&M port for the Proposed Development is expected to be in the North of Scotland. However, no decision has been made yet on its location. As the Proposed Development is expected to become operational in 2030, it is likely to be one of the earlier operational projects and as such not to be affected by competition for resources at the outset. Over time, as more offshore wind projects become operational, it is expected that any capacity constraints will be filled as supply responds to increased demand for infrastructure and labour with a suitable skillset.

17.8.81 Based on the limited information available, it is not possible to assess the magnitude of impact from increased competition for resources during the O&M phase.

Sensitivity of Receptor

17.8.82 As for the impacts arising solely from the Proposed Development, the sensitivity of the of the Highland economy has been assessed as medium, that of the North of Scotland economy as medium, that of Scotland's economy as low, and that of the UK economy as negligible.

Significance of Cumulative Effect

17.8.83 As the location and scale of potential O&M facilities is not known, it is not possible to assess the magnitude and significance of these impacts. This is shown in Table 17.65.

Table 17.65 Significance of Impact 9b: Increased Competition for Resources

Receptor/Location	Magnitude	Sensitivity	Significance
Highland	n/a	Medium	n/a
North of Scotland	n/a	Medium	n/a
Scotland	n/a	Low	n/a
UK	n/a	Negligible	n/a

Secondary Mitigation and Residual Cumulative Effects

17.8.84 No additional socioeconomic mitigation is envisaged.

Impact 10 - Demographic Changes

17.8.85 There are several developments on the east coast of Scotland, which may use similar ports and skilled labour, which may have a cumulative demographic effect.

Magnitude of Cumulative Impact

17.8.86 The development of several projects may lead to port specialisation and an increase in economic impact, leading to an increase in population around the O&M port.

17.8.87 As the exact location of the O&M port is not yet known, it is not possible to establish the potential for cumulative effects on population. Any long-term changes in population could also be affected by the overall O&M strategy followed by different projects and the demographics of the workers involved.

Sensitivity of Receptor

17.8.88 As for the impacts arising solely from the Proposed Development, the sensitivity of the North of Scotland has been assessed as high.

Significance of Cumulative Effect

17.8.89 It is not possible to determine the magnitude of impact, and therefore it is not possible to assess the significance of the effect. However, given the existing demographic profile of the North of Scotland, it is expected that the effect on population levels because of long-term activity from the O&M of offshore wind projects will be beneficial. This is shown in Table 17.66.

Table 17.66 Significance of Impact 10: Demographic Changes

Receptor/Location	Magnitude	Sensitivity	Significance
North of Scotland	n/a	High	n/a

Secondary Mitigation and Residual Cumulative Effects

17.8.90 No additional socioeconomic mitigation is envisaged.

Impact 11 – Changes to Housing Demand

17.8.91 An increase in population across the east coast of Scotland, including the North of Scotland, associated with operation and maintenance activity is likely to influence housing demand.

Magnitude of Cumulative Impact

17.8.92 Adjustments in housing demand associated with operations and maintenance activity are expected to result in long-term impacts as opposed to the short-term demand associated with construction activity. Due to the lack of information on the exact location of the O&M port alongside decisions from future developments, it is not possible to reach an assessment as to the magnitude of this impact.

Sensitivity of Receptor

17.8.93 As for the impacts arising solely from the Proposed Development, the sensitivity of the North of Scotland has been assessed as high.

Significance of Cumulative Effect

17.8.94 It is not possible to determine the magnitude of impact, and therefore it is not possible to assess the significance of the effect. The overall expectation is that in the long-term housing supply is better able to accommodate changes in demand, and meet the needs from an expanded population within the region hosting the Proposed Development's O&M port. This is shown in Table 17.67.

Table 17.67 Significance of Impact 11: Changes to Housing Demand

Receptor/Location	Magnitude	Sensitivity	Significance
North of Scotland	n/a	High	n/a

Secondary Mitigation and Residual Cumulative Effects

17.8.95 No additional socioeconomic mitigation is envisaged.

Impact 12 – Changes to Other Local Public and Private Services

17.8.96 An increase in economic activity and employment will result in a long-term increase in demand for public and private services.

Magnitude of Cumulative Impact

17.8.97 The magnitude of change will depend on the factors outlined in section 17.7, including the capacity of local service providers and the ability of the local area to respond to change. As the location of the O&M port is not known, it is not possible to assess the magnitude of impact.

Sensitivity of Receptor

17.8.98 As for the impacts arising solely from the Proposed Development, the sensitivity of the North of Scotland has been assessed as high.

Significance of Cumulative Effect

17.8.99 As shown in Table 17.68, is not possible to determine the magnitude of the adverse or beneficial impact, and therefore it is not possible to assess the significance of the effect.

17.8.100 The extent to which effects would be beneficial or adverse is likely to depend on the type of service considered and whether it is currently operating at capacity. The expectation is that over the long-term timeframe of operations and maintenance, the provision of local public and private services would be able to respond to demand, as for instance, a larger working population increases the resources available for local public sector investment in key services such as health and educational provision.

Table 17.68 Significance of Impact 12: Changes to Other Local Public and Private Services

Receptor/Location	Magnitude	Sensitivity	Significance
North of Scotland	n/a	High	n/a

Secondary Mitigation and Residual Cumulative Effects

17.8.101 No additional socioeconomic mitigation is envisaged.

Impact 13 – Changes to Marine Recreation

17.8.102 The assessment considers whether the O&M phase of the Proposed Development would affect any of the recreational assets identified in Section 17.5, accounting for any significant cumulative effects identified in **Volume 2, Chapter 14: Shipping and Navigation** and **Volume 2, Chapter 19: Infrastructure and Other Users.**

17.8.103 There were no significant cumulative effects associated with the Proposed Development identified by other chapters. Therefore, no significant effects on visitor behaviour are expected.

Impact 14 – Changes to Onshore Recreation

17.8.104 The assessments presented in **Volume 2, Chapter 14: Shipping and Navigation** and **Volume 2, Chapter 19: Infrastructure and Other Users** have not identified any significant cumulative effects on marine recreation assets. Therefore, no significant cumulative secondary socio-economic effects on the onshore recreation sector will occur because of the Proposed Development.

Impact 15 – Changes to Commercial Fisheries

17.8.105 **Volume 2, Chapter 13 Commercial Fisheries** has considered the potential for cumulative effects associated with the O&M of the Proposed Development. Such effects could have socio-economic consequences if the value of fish caught by commercial fisheries was reduced. Any changes in fish catches could also have implications for downstream activity, such as food processing.

17.8.106 Effects are expected to be similar to those arising during construction. In particular, **Volume 2, Chapter 13 Commercial Fisheries** finds the following significant cumulative effects:

- Moderate adverse effects from reduction in access to, or exclusion from established fishing grounds in relation to UK demersal otter trawl, demersal seine, dredge fisheries and pelagic trawl; and
- Moderate adverse effects from displacement leading to gear conflict and increased fishing pressure on adjacent grounds across UK demersal otter trawl, demersal seine, dredge fisheries and pelagic trawl.

17.8.107 These effects take already account of mitigations implemented by the Applicant, with strategic mitigation not currently proposed across multiple offshore wind projects.

17.8.108 Based on this analysis, it is likely there will be moderate significant cumulative adverse socio-economic effects on commercials fisheries. However, the contribution of the Project to this Cumulative Effect will not be significant.

Impact 16 – Changes to Shipping

17.8.109 The assessments presented in **Volume 2, Chapter 14: Shipping and Navigation** and **Volume 2, Chapter 19: Infrastructure and Other Users** have not identified any significant cumulative effects on shipping. Therefore, no significant cumulative secondary socio-economic effects on the shipping sector will occur because of the Proposed Development.

Proposed Monitoring for Cumulative Effects

17.8.110 Proposed monitoring measures for cumulative effects are set out in Table 17.69.

Table 17.69 Recommended Monitoring and Implementation for Socio-Economics, Tourism and Recreation Effects

Effect	Proposed Monitoring	Implementation Method
Social Impacts	Engage with the communities around construction and O&M ports to understand the nature of potential social impacts	Detailed monitoring commitments will be agreed post consent and are likely to include community engagement events.

17.9 Transboundary Effects

17.9.1 A transboundary effect assessment assesses the potential Technical Topic effects from the Proposed Development upon the interests of European Economic Areas (EEA States).

17.9.2 It is expected the construction, operations and maintenance, and decommissioning of the Proposed Development will result in some expenditure benefitting businesses located outside the UK, including in EEA States and elsewhere in the world. Based on available information, it is not possible to estimate the overall level of economic activity across each of these two study areas.

17.9.3 Similarly, it was not possible to estimate the total economic impact from construction, operations and maintenance, and decommissioning. Any impacts on the EEA States from spending associated with the Proposed Development will be beneficial in nature. Given the scale of the transboundary economy considered, it is expected any economic impacts from the Proposed Development are unlikely to result in significant effects.

17.10 Inter-related Effects

17.10.1 Inter-related effects may occur due to multiple impacts on a receptor or a group of receptors from the Proposed Development. This includes the following:

- **Project Lifecycle Effects** - Interactions between impacts across different phases of the Proposed Development i.e., interaction of impacts across construction, operation and maintenance and decommissioning; and
- **Inter-related Receptor Effects** - Interactions between impacts on a receptor or group of receptors within an offshore Project stage (Inter-related Receptor Effects).

17.10.2 Project Lifecycle and Receptor led inter-related effects from socioeconomics, tourism and recreation are presented in Table 17.70.

17.10.3 Regarding socioeconomics, tourism and recreation, there is no expectation for significant project lifecycle effects. The relative interaction between the economic activity associated with construction, operations and maintenance and decommissioning, is expected to be limited. This is because of the different roles and skills associated with each of these phases.

17.10.4 The assessment in section 17.7 considering effects on GVA and employment across the Proposed Development's construction, operations and maintenance and decommissioning included the net impact from any changes in the economic activity from commercial fisheries, and shipping and navigation. This was based on a review of **Volume 2, Chapter 13: Commercial Fisheries**; and **Volume 2, Chapter 14: Shipping and Navigation**. No significant effects are expected from these interactions.

Table 17.70 Inter-related Effects of Socioeconomics, Tourism and Recreation

Impact	Significant Inter-related Effect
Project Lifecycle Effects	
GVA and Employment	Not significant
Inter-related Receptor Effects	
GVA and employment effects from changes in commercial fisheries	Not significant
GVA and employment effects from changes in shipping and navigation	Not significant
GVA and employment effects from changes in marine recreation	Not significant

17.10.5 The effects on tourism and recreation are themselves secondary to the effects on other environmental issues. On that basis, the assessment in section 17.7 has accounted for the findings within the following chapters:

- **Volume 2, Chapter 19: Infrastructure and Other Marine Users**.

17.11.1 A summary of the findings of the effects and CEA undertaken in Section 17.7 and Section 17.1 is provided in Table 17.71 and Table 17.72, respectively. This includes residual effect significance after any required secondary mitigation and proposed monitoring.

Table 17.71 Summary of Assessment of Effects on Socioeconomics, Tourism and Recreation

Impact	Receptor	Magnitude of Impact	Sensitivity of Receptor	Effect Significance	Secondary Mitigation	Residual Effect	Proposed Monitoring
Construction							
Impact 1: Increase in Employment and GVA	Highland	High	Medium	Moderate (Beneficial)	n/a	Moderate (Beneficial)	n/a
	North of Scotland	High	Medium	Moderate (Beneficial)	n/a	Moderate (Beneficial)	n/a
	Scotland	Medium	Low	Minor (Beneficial)	n/a	Minor (Beneficial)	n/a
	UK	Negligible	Negligible	Negligible (Beneficial)	n/a	Negligible (Beneficial)	n/a
Impact 2: Demographic Changes	Highland	High	High	Major	A worker accommodation plan should be produced to reduce short term potential strain on housing and accommodation resulting from transient workers.	Minor	n/a
Impact 3: Changes to Housing Demand	Highland	High	High	Major	A worker accommodation plan should be produced to reduce short term potential strain on housing and accommodation resulting from transient workers.	Minor	n/a
Impact 4: Changes to Other Local Public and Private Services	Highland	High	High	Major	A worker accommodation plan should be produced to	Minor	n/a

Impact	Receptor	Magnitude of Impact	Sensitivity of Receptor	Effect Significance	Secondary Mitigation	Residual Effect	Proposed Monitoring
					reduce short term potential strain on housing and accommodation resulting from transient workers.		
Impact 5: Changes to Marine Recreation	Ardersier Port	Negligible	Negligible	Negligible	n/a	Negligible	n/a
	Chanonry Sailing Club	Negligible	Low	Negligible	n/a	Negligible	n/a
	Nairn Sailing Club	Negligible	Low	Negligible	n/a	Negligible	n/a
	Seaport Marine	Negligible	Low	Negligible	n/a	Negligible	n/a
	Highlands & Islands University Sailing Club	Negligible	Low	Negligible	n/a	Negligible	n/a
	Compass Sea School Ltd	Negligible	Low	Negligible	n/a	Negligible	n/a
	SCC Inverness	Negligible	Low	Negligible	n/a	Negligible	n/a
	ISAC	Negligible	Medium	Negligible	n/a	Negligible	n/a
	Aberdeen and Stonehaven RYA	Negligible	Medium	Negligible	n/a	Negligible	n/a
O&M							
Impact 6: Increase in Employment and GVA	North of Scotland	Negligible	Medium	Negligible (Beneficial)	n/a	Negligible (Beneficial)	n/a
	Scotland	Negligible	Low	Negligible (Beneficial)	n/a	Negligible (Beneficial)	n/a
	UK	Negligible	Negligible	Negligible (Beneficial)	n/a	Negligible (Beneficial)	n/a

Impact	Receptor	Magnitude of Impact	Sensitivity of Receptor	Effect Significance	Secondary Mitigation	Residual Effect	Proposed Monitoring
Impact 7: Demographic Changes	North of Scotland	High	Medium	Moderate	A worker accommodation plan should be produced to reduce short term potential strain on housing and accommodation resulting from an increase in population.	Minor	n/a
Impact 8: Changes to Housing Demand	North of Scotland	High	Medium	Moderate	A worker accommodation plan should be produced to reduce short term potential strain on housing and accommodation resulting from an increase in population.	Minor	n/a
Impact 9: Changes to Other Local Public and Private Services	North of Scotland	High	Medium	Moderate	A worker accommodation plan should be produced to reduce short term potential strain on housing and accommodation resulting from an increase in population.	Minor	n/a
Impact 10: Changes to Marine Recreation	Ardersier Port	Negligible	Negligible	Negligible	n/a	Negligible	n/a
	Chanonry Sailing Club	Negligible	Low	Negligible	n/a	Negligible	n/a

Impact	Receptor	Magnitude of Impact	Sensitivity of Receptor	Effect Significance	Secondary Mitigation	Residual Effect	Proposed Monitoring
	Nairn Sailing Club	Negligible	Low	Negligible	n/a	Negligible	n/a
	Seaport Marine	Negligible	Low	Negligible	n/a	Negligible	n/a
	Highlands & Islands University Sailing Club	Negligible	Low	Negligible	n/a	Negligible	n/a
	Compass Sea School Ltd	Negligible	Low	Negligible	n/a	Negligible	n/a
	SCC Inverness	Negligible	Low	Negligible	n/a	Negligible	n/a
	ISAC	Negligible	Medium	Negligible	n/a	Negligible	n/a
	Aberdeen and Stonehaven RYA	Negligible	Medium	Negligible	n/a	Negligible	n/a
Decommissioning							
Impact 11: Increase in Employment and GVA	Highland	Low	Medium	Minor (Beneficial)	n/a	Minor (Beneficial)	n/a
	North of Scotland	Negligible	Medium	Negligible (Beneficial)	n/a	Negligible (Beneficial)	n/a
	Scotland	Negligible	Low	Negligible (Beneficial)	n/a	Negligible (Beneficial)	n/a
	UK	Negligible	Negligible	Negligible (Beneficial)	n/a	Negligible (Beneficial)	n/a
Impact 12: Demographic Changes	North of Scotland	Negligible	High	Minor	n/a	Minor	n/a
Impact 13: Changes to Housing Demand	North of Scotland	Negligible	High	Minor	n/a	Minor	n/a
Impact 14: Changes to Other Local Public and Private Services	North of Scotland	Negligible	High	Minor	n/a	Minor	n/a

Impact	Receptor	Magnitude of Impact	Sensitivity of Receptor	Effect Significance	Secondary Mitigation	Residual Effect	Proposed Monitoring
Impact 15: Changes to Marine Recreation	Ardersier Port	Negligible	Negligible	Negligible	n/a	Negligible	n/a
	Chanonry Sailing Club	Negligible	Low	Negligible	n/a	Negligible	n/a
	Nairn Sailing Club	Negligible	Low	Negligible	n/a	Negligible	n/a
	Seaport Marine	Negligible	Low	Negligible	n/a	Negligible	n/a
	Highlands & Islands University Sailing Club	Negligible	Low	Negligible	n/a	Negligible	n/a
	Compass Sea School Ltd	Negligible	Low	Negligible	n/a	Negligible	n/a
	SCC Inverness	Negligible	Low	Negligible	n/a	Negligible	n/a
	ISAC	Negligible	Medium	Negligible	n/a	Negligible	n/a

Table 17.72 Summary of Assessment of Cumulative Effects on Socioeconomics, Tourism and Recreation

Impact	Receptor	Magnitude of Impact	Sensitivity of Receptor	Effect Significance	Secondary Mitigation	Residual Effect	Proposed Monitoring
Construction							
Impact 16: Increase in Employment and Gross Value Added - Increased Offshore Wind Supply Chain in Scotland and the rest of the UK	Highland	High	Medium	Moderate (Beneficial)	n/a	Moderate (Beneficial)	n/a
	North of Scotland	High	Medium	Moderate (Beneficial)	n/a	Moderate (Beneficial)	n/a
	Scotland	High	Low	Minor (Beneficial)	n/a	Minor (Beneficial)	n/a
	UK	Negligible	Negligible	Negligible (Beneficial)	n/a	Negligible (Beneficial)	n/a
Impact 17: Increase in Employment and Gross Value Added - Increased Competition for Resources	Highland	Low	Medium	Minor	n/a	Minor	n/a
	North of Scotland	Low	Medium	Minor	n/a	Minor	n/a
	Scotland	Negligible	Low	Negligible	n/a	Negligible	n/a
	UK	Negligible	Negligible	Negligible	n/a	Negligible	n/a
Impact 18: Demographic Changes	Highland	High	High	Major	n/a	Major	n/a
Impact 19: Changes to Housing Demand	Highland	High	High	Major	Inner Moray Firth Local Development Plan 2	Major	n/a
Impact 20: Changes to Other Local Public and Private Services	Highland	High	High	Major	Inner Moray Firth Local Development Plan 2	Major	n/a
Impact 21: Changes to Marine Recreation	Ardersier Port	Negligible	Negligible	Negligible	n/a	Negligible	n/a
	Chanonry Sailing Club	Negligible	Low	Negligible	n/a	Negligible	n/a

Impact	Receptor	Magnitude of Impact	Sensitivity of Receptor	Effect Significance	Secondary Mitigation	Residual Effect	Proposed Monitoring
	Nairn Sailing Club	Negligible	Low	Negligible	n/a	Negligible	n/a
	Seaport Marine	Negligible	Low	Negligible	n/a	Negligible	n/a
	Highlands & Islands University Sailing Club	Negligible	Low	Negligible	n/a	Negligible	n/a
	Compass Sea School Ltd	Negligible	Low	Negligible	n/a	Negligible	n/a
	SCC Inverness	Negligible	Low	Negligible	n/a	Negligible	n/a
	ISAC	Negligible	Medium	Negligible	n/a	Negligible	n/a
	Aberdeen and Stonehaven RYA	Negligible	Medium	Negligible	n/a	Negligible	n/a
Impact 22: Changes to Commercial Fisheries	Fishing vessels	Low	Medium	Moderate (Adverse)	n/a	Moderate (Adverse)	n/a
O&M							
Impact 23: Increase in Employment and Gross Value Added - Increased Offshore Wind Supply Chain in Scotland and the rest of the UK	Highland	n/a	Medium	n/a	n/a	n/a	n/a
	North of Scotland	n/a	Medium	n/a	n/a	n/a	n/a
	Scotland	Negligible	Low	Negligible	n/a	Negligible	n/a
	UK	Negligible	Negligible	Negligible	n/a	Negligible	n/a
Impact 24: Increase in Employment and Gross Value Added - Increased Competition for Resources	Highland	n/a	Medium	n/a	n/a	n/a	n/a
	North of Scotland	n/a	Medium	n/a	n/a	n/a	n/a
	Scotland	n/a	Low	n/a	n/a	n/a	n/a
	UK	n/a	Negligible	n/a	n/a	n/a	n/a
Impact 25: Demographics Changes	North of Scotland	n/a	High	n/a	n/a	n/a	n/a

Impact	Receptor	Magnitude of Impact	Sensitivity of Receptor	Effect Significance	Secondary Mitigation	Residual Effect	Proposed Monitoring
Impact 26: Changes to Housing Demand	North of Scotland	n/a	High	n/a	n/a	n/a	n/a
Impact 27: Changes to Other Local Public and Private Services	North of Scotland	n/a	High	n/a	n/a	n/a	n/a
Impact 28: Changes to Marine Recreation	Ardersier Port	Negligible	Negligible	Negligible	n/a	Negligible	n/a
	Chanonry Sailing Club	Negligible	Low	Negligible	n/a	Negligible	n/a
	Nairn Sailing Club	Negligible	Low	Negligible	n/a	Negligible	n/a
	Seaport Marine	Negligible	Low	Negligible	n/a	Negligible	n/a
	Highlands & Islands University Sailing Club	Negligible	Low	Negligible	n/a	Negligible	n/a
	Compass Sea School Ltd	Negligible	Low	Negligible	n/a	Negligible	n/a
	SCC Inverness	Negligible	Low	Negligible	n/a	Negligible	n/a
	ISAC	Negligible	Medium	Negligible	n/a	Negligible	n/a
	Aberdeen and Stonehaven RYA	Negligible	Medium	Negligible	n/a	Negligible	n/a
Impact 29: Changes to Commercial Fisheries	Fishing vessels	Low	Medium	Moderate (Adverse)	n/a	Moderate (Adverse)	n/a

17.12 References

Aberdeen City Council, Aberdeenshire Council, ONE (2024), 'Regional Economic Strategy, A sustainable economic future for the North East of Scotland', https://investaberdeen.co.uk/uploads/Regional%20Economic%20Strategy%202035%20FINAL.pdf [Accessed: May 2025].

Aberdeenshire Council (2023), 'Aberdeenshire Local Development Plan', https://online.aberdeenshire.gov.uk/ldpmedia/LDP2021/AberdeenshireLocalDevelopmentPlan2023IntroductionAndPolicies.pdf [Accessed: May 2025].

BEIS (2021), 'North Sea Transition Deal', https://assets.publishing.service.gov.uk/media/605b148ce90e0724c7d30c2b/north-sea-transition-deal_A_FINAL.pdf [Accessed: May 2025].

BVG Associates (2021), 'UK and Scottish content baseline and roadmap', https://www.offshorewindscotland.org.uk/media/11937/bvga-local-content-roadmap.pdf [Accessed: May 2025].

BVG Associates (2023), 'Guide to a Floating Wind Farm', https://guidetofloatingoffshorewind.com [Accessed: May 2025].

BSO (2024), 'General Medical Services for Northern Ireland'.

Crown Estate Scotland (2020), 'Ports for offshore wind: a review of the net-zero opportunity for ports in Scotland, chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.crownestatescotland.com/sites/default/files/2023-07/ports-for-offshore-wind-report.pdf [Accessed: July 2025].

HIE (2018), 'Enabling Our Next Generation. Young People and the Highlands and Islands: Maximising Opportunities' https://www.hie.co.uk/media/3007/youngpluspeopleplusandplustheplushighlandsplusandplusislandsplus-plusmaximisingplusopportunitiesplus-plusreport.pdf [Accessed July 2025]

ISAC (2025), 'Contact Us': www.invernessdivers.org.uk. [Accessed May 2025]

Kantar (2023), 'Great Britain Day Visitor Survey'.

NISRA (2015), 'Northern Ireland Business Register And Employment Survey 2012 Employee Jobs' https://www.nisra.gov.uk/ [Accessed May 2025].

NISRA (2023), 'Business Register and Employment Survey, Northern Ireland, 2022' https://www.nisra.gov.uk/ [Accessed May 2025].

NISRA (2024), 'Mid-2023 Population Estimates: Single year of age and sex' https://www.nisra.gov.uk/ [Accessed May 2025].

NREL (2024), 'Cost of Wind Energy Review: 2024 Edition', https://docs.nrel.gov/docs/fy25osti/91775.pdf [Accessed May 2025].

NRS (2020), '2018-based Principal Population Projections' https://www.nrscotland.gov.uk/ [Accessed May 2025].

NRS (2022), 'Population Estimates by Urban Rural Classification 2011 (Data Zone Based)' https://www.nrscotland.gov.uk/ [Accessed May 2025].

NRS (2024), 'Mid-2023 Population Estimates – local authority' https://www.nrscotland.gov.uk/ [Accessed May 2025].

OWIC (2023), 'Offshore Wind Skills Intelligence Report'.

ONS (2015), 'Business Register and Employment Survey 2013' https://www.nomisweb.co.uk/ [Accessed May 2025].

ONS (2022), 'Principal Population Projections 2020-Based' https://www.nomisweb.co.uk/ [Accessed May 2025].

ONS (2023), 'International Passenger Survey'.

ONS (2023), 'Stock Estimates by Tenure'.

ONS (2023b), 'Annual Business Survey 2021' https://www.nomisweb.co.uk/ [Accessed May 2025].

ONS (2023c), 'GVA and employment multipliers'.

ONS (2024a), 'Population estimates - local authority based by single year of age' https://www.nomisweb.co.uk/ [Accessed May 2025].

ONS (2024b), 'Annual Population Survey' https://www.nomisweb.co.uk/ [Accessed May 2025].

ONS (2024c), 'Annual Survey of Hours and Earnings 2024' https://www.nomisweb.co.uk/ [Accessed May 2025]

ONS (2024d), 'Business Register and Employment Survey 2023' https://www.nomisweb.co.uk/ [Accessed May 2025].

ONS (2024e), 'Experimental estimates of green jobs, UK: 2024'.

ONS (2024f), 'House Price Simple Averages'.

PHS (2022), 'General Practice – GP workforce and practice list sizes' https://publichealthscotland.scot/healthcare-system/primary-care/general-practice/general-practice-data/general-practice-list-size-and-demographics-information/ [Accessed May 2025]
RenewableUK, Offshore Wind Industry Council, the Crown Estate and Crown Estate Scotland (2024), '2024 Offshore Wind Industrial Growth Plan: Expanding the Horizon of the UK's Offshore Wind Supply Chain', https://www.owic.org.uk/media/2tfauy2z/offshore-wind-industrial-growth-plan-2024.pdf [Accessed: May 2025].

ROS (2025), 'House Price Statistics' https://www.ros.gov.uk/data-and-statistics/property-market-statistics/house-price-statistics [Accessed May 2025].

RYA (2025), available at: www.rya.org.uk [Accessed May 2025].

Scottish Government. (2015), 'National Marine Plan', https://www.gov.scot/publications/scotlands-national-marine-plan/documents/ Scottish Government. (2015). National Marine Plan. Available at: https://www.gov.scot/publications/scotlands-national-marine-plan/documents/ (Accessed: 27/01/2025).

Scottish Government (2022), 'National Strategy for Economic Transformation', https://www.gov.scot/publications/scotlands-national-strategy-economic-transformation-delivery-plans-october-2022/ [Accessed: May 2025].

Scottish Government (2023a), 'National Planning Framework 4', https://www.gov.scot/publications/national-planning-framework-4/ [Accessed: May 2025]
Scottish Government (2023b), 'Industry Statistics – Local Authority Areas' https://www.gov.scot/publications/industry-statistics/ [Accessed May 2025].

Scottish Government (2024a), 'Pupil Census Supplementary Statistics 2024' https://www.gov.scot/publications/pupil-census-supplementary-statistics/ [Accessed May 2025].

Scottish Government (2024b), 'Teacher Census Supplementary Statistics 2024' https://www.gov.scot/publications/teacher-census-supplementary-statistics/ [Accessed May 2025].

Scottish Government (2024c), 'Supply, Use and Input-Output Tables'.

Scottish Government (2024d), 'Supporting and enabling sustainable communities: action plan to address depopulation', https://www.gov.scot/publications/supporting-enabling-sustainable-communities-action-plan-address-depopulation/ [Accessed May 2025].

Scottish Government (2024), 'Green Industrial Strategy', https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2024/09/green-industrial-strategy/documents/green-industrial-strategy/green-industrial-strategy/govscot%3Adocument/green-industrial-strategy.pdf [Accessed: May 2025].

Scottish Government (2024), 'Offshore Wind Focus', https://www.gov.scot/binaries/content/documents/govscot/publications/research-and-analysis/2024/09/offshore-wind-focus/documents/offshore-wind-focus/offshore-wind-focus/govscot%3Adocument/offshore-wind-focus.pdf [Accessed: May 2025].

Scottish Government (2025), 'Programme for Government 2025 – 26: Building the Best Future for Scotland', https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2025/05/programme-government-2025-26/documents/programme-government-2025-26/programme-government-2025-26/govscot%3Adocument/programme-government-2025-26.pdf [Accessed: May 2025].

Scottish Government and Diffley Partnership (2022), 'Public Perceptions of Offshore Wind Farm Developments in Scotland'.

UK Government. (2020), 'The Offshore Wind Sector Deal', https://www.gov.uk/government/publications/offshore-wind-sector-deal/offshore-wind-sector-deal [Accessed: May 2025].

UK Government. (2021), 'UK Net Zero Strategy: Build Back Greener', https://assets.publishing.service.gov.uk/media/6194dfa4d3bf7f0555071b1b/net-zero-strategy-beis.pdf [Accessed: May 2025].

UK Government. (2022), 'British Energy Security Strategy', https://www.gov.uk/government/publications/british-energy-security-strategy/british-energy-security-strategy [Accessed: May 2025].

UK Government (2024), 'Clean Power 2030 Action Plan: A new era of clean electricity', https://assets.publishing.service.gov.uk/media/677bc80399c93b7286a396d6/clean-power-2030-action-plan-main-report.pdf [Accessed: May 2025]

UK Government (2024a), 'Education and Training Statistics for the UK'.

UK Government (2024b), 'Dwelling Stock by Tenure'.

Annex 1 Socio-Economics, Tourism and Recreation Technical Report

A Socio-Economics, Tourism and Recreation Technical Report

A.1 Introduction

A.1.1 This Socio-Economics, Tourism and Recreation Technical Report presents a detailed methodology for the economic impact assessment of the offshore elements for the Proposed Development. The Aspen Array Area covers an area of approximately 333 km2 and is located approximately 100 km east of Peterhead on the east coast of Scotland. The offshore infrastructure of the Proposed Development includes Wind Turbine Generators (WTGs) and associated floating foundations, Offshore Substation Platform(s) (OSP(s)) and associated foundations, the Inter-array Cables (IACs), Inter-link Cables, Offshore Transmission Cables (OTCs) and Landfall.

A.1.2 This Technical Report first provides some background on the guidance followed in the definition of the Socioeconomics and Tourism and Recreation Study Areas. It then provides an overview of key strategies relevant to socioeconomics, tourism and recreation. Finally, it sets out the Input-Output methodology underpinning the analysis of the economic impacts from the Proposed Development. This includes reference to the sources for key assumptions, such as on total project costs and spending by study area.

A.1.3 The information from this Technical Report informs the assessment of the likely significant environmental effects of the Proposed Development on socio-economics. This Technical Report accompanies the Environmental Impact Assessment (EIA) provided in **Volume 2, Chapter 17: Socio-Economics, Tourism and Recreation** to support the consent application for the Proposed Development.

A.1.4 The aim of this Socio-Economics, Tourism and Recreation Technical Report is to:

- define the study areas considered in the assessment;
- set out relevant policies and strategies; and
- provide more detail on the methodology used to quantify the economic impacts associated with the Proposed Development.

A.2 Socio-Economics, Tourism and Recreation Study Area

A.2.1 While a considerable proportion of the activity associated with the Proposed Development is expected to take place offshore, the relevant study areas for the socio-economic assessment are located onshore.

A.2.2 The Socio-Economics Study Areas for the assessment of effects on employment and the economy are defined in line with the guidance on the identification of 'local areas' for offshore developments published by the Scottish Government (Scottish Government, 2022a). This guidance identified six principles for identifying local study areas for offshore development:

- Principle 1 (Dual Geographies): The local area for the supply chain and investment impacts should be separate from the local area(s) for wider socio-economic impacts, including tourism and recreation.
- Principle 2 (Appropriate Impacts): The appropriate impacts to be considered for assessments should be identified before defining the local areas.
- Principle 3 (Epicentres): The local areas should include all the epicentres of the appropriate impacts.
- Principle 4 (Accountability): The local areas used in the assessment should comprise pre-existing economic or political geographies (community councils, local authorities, development agencies) to enhance accountability.
- Principle 5 (Understandable): The local areas should be defined in such a way that they are understandable to the communities they describe.
- Principle 6 (Connected Geography): The local area for the supply chain and investment impacts should consist of connected (including coastal) pre-existing economic or political geographies.

A.2.3 The main local epicentres of impact for the Proposed Development are expected to be the ports that will be used during its construction and operation. It is expected that the primary construction port will be located in Highland, and the primary O&M port will either be located in Highland or Aberdeenshire. Therefore, the Socio-Economics Study Areas are defined as:

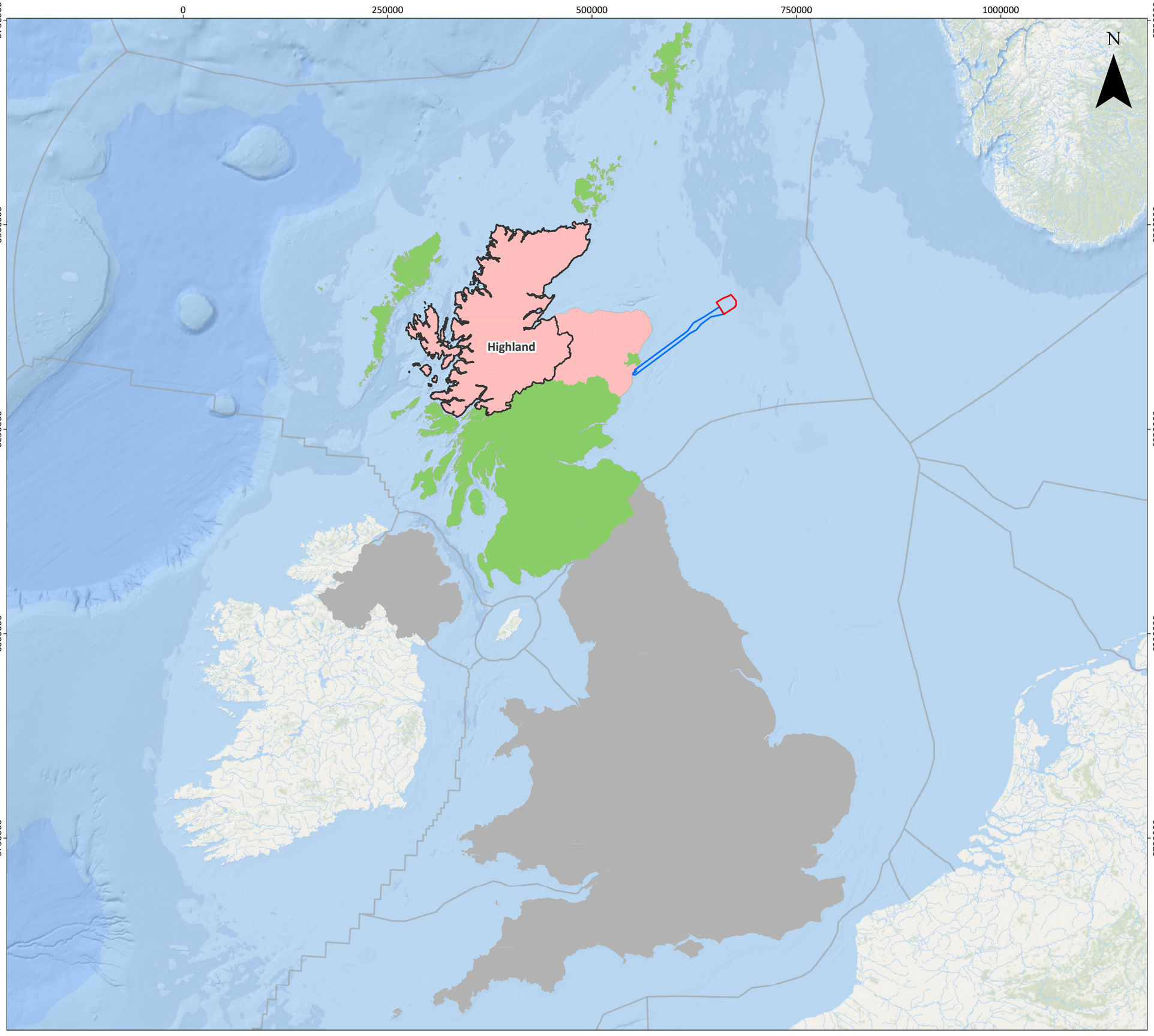
- The local authority area of Highland;
- The North of Scotland, comprised of the local authority areas of Highland, Aberdeenshire and Moray;
- Scotland; and
- the United Kingdom (UK).

A.2.4 The Tourism and Recreation Study Area is defined as comprising:

- The electoral ward of Stonehaven and Lower Deeside.

A.2.5 The Socio-Economics Study Areas are shown in Figure 17.10, whereas the Tourism and Recreation Study Area is shown in Figure 17.11.

A.2.6 The remainder of this Technical Report focuses on providing more detail regarding the approach towards modelling socio-economics benefits. The qualitative methodology adopted in carrying out the tourism and recreation analysis is fully detailed within the Socio-Economics, Tourism and Recreation chapter of the Offshore EIAR.



CERULEAN WINDS

Aspen Offshore Wind Farm
Environmental Impact Assessment

Socio-Economics Study Area

Legend

- Aspen Array Area
- Offshore Transmission Cable Corridor
- United Kingdom
- Scotland
- The North of Scotland
- Highland Local Authority Area

Notes

Esri, Garmin, GEBCO, NOAA NGDC, and other contributors
Contains Ordnance Survey data © Crown copyright and database rights (2024). OS OpenData.

Coordinate System:
WGS 1984 UTM Zone 30N

0 100 200 km

0 50 100 nm

Scale	Date	Drawn by	Checked by	Approved by
1:4,500,000@A3	30/06/2025	BPHB	NH	SB

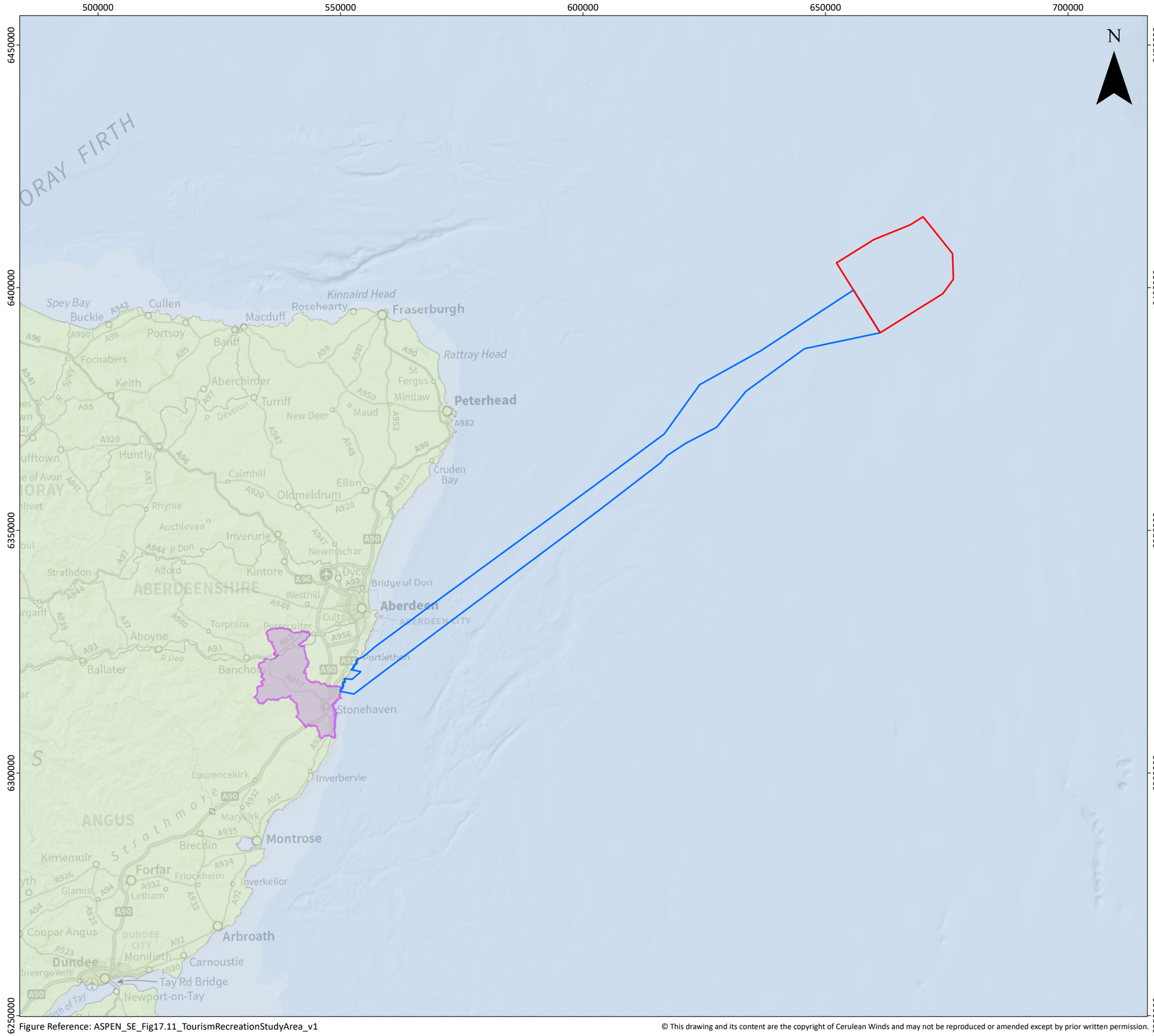
Cerulean Winds
24/25 The Shard,
32 London Bridge Street,
London
SE1 9SG

www.ceruleanwinds.com
+44 203 457 0614

GoBe
APEM Group

Figure 17.10

Figure Reference: ASPEN_SE_Fig17.10_SocioEconomicsStudyArea_v1



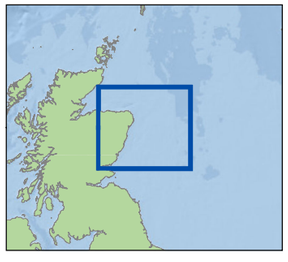
CERULEAN WINDS

Aspen Offshore Wind Farm
Environmental Impact Assessment

Tourism and Recreation Study Area

Legend

- Aspen Array Area
- Offshore Transmission Cable Corridor
- Stonehaven and Lower Deeside Electoral Ward



Notes

Esri, Garmin, GEBCO, NOAA NGDC, and other contributors
Contains Ordnance Survey data © Crown copyright and database rights (2024). OS OpenData.

Coordinate System:
WGS 1984 UTM Zone 30N

0 25 50 km

0 10 20 nm

Scale	Date	Drawn by	Checked by	Approved by
1:750,000 @A3	30/06/2025	BPHB	NH	SB

Cerulean Winds
24/25 The Shard,
32 London Bridge Street,
London
SE1 9SG

www.ceruleanwinds.com
+44 203 457 0614

GoBe APEMGroup

Figure 17.11

Figure Reference: ASPEN_SE_Fig17.11_TourismRecreationStudyArea_v1

A.3 Relevant Socio-Economic, Tourism and Recreation Policies

UK Government Policies

Offshore Wind Industrial Growth Plan

A.3.1 The 2024 Offshore Wind Industrial Growth Plan (IGP) sets out the opportunities arising from growth in the UK's offshore wind supply chain (RenewableUK, OWIC, Crown Estate and CES, 2024). In the context of a global market worth £8,000 billion to 2050, including a £270 billion serviceable domestic market to 2035, the IGP has two aims:

- grow supply chain capacity to accelerate and de-risk delivery; and
- grow market share at home and abroad through a focus on key technologies.

A.3.2 The IGP builds on an assessment of supply chain capabilities and opportunities, which identifies a series of opportunities for the UK supply chain: advanced turbine technology; industrialised foundations and substructures; future electrical systems and cables; smart environment services; and next generation installation and O&M. Seizing upon these could result in an economic opportunity worth £25 billion GVA to 2035 and 10,000 jobs.

A.3.3 This activity will be supported by the establishment of an Industrial Growth Fund, a National Innovation Hub and a New Advanced Turbine Technology Institute, which will contribute to enable technology development. In addition, the delivery of the IGP is built around partnership and collaboration between industry, Government and other stakeholders.

Clean Action Power Plan 2030

A.3.4 At the end of 2024, the Department for Energy Security and Net Zero (DESNZ) launched its Clean Power Action Plan (CPAP) 2030 (UK Government, 2024). This built on advice provided to the UK Government by the National Energy System Operator (NESO, 2024). CPAP sets out a series of targets for the deployment of different renewable energy technologies to 2030, with the aim of delivering clean energy and increasing energy security. For offshore wind, CPAP establishes a target of between 43-50 GW operational by 2030. To support the delivery of CPAP, the UK Government is pursuing a series of initiatives, including around: grid connection reform; planning and consenting; changes to the CfD framework and electricity market reform.

A.3.5 The aim of CfD reform is to ensure high levels of renewable energy generation are secured at the best price for consumers. Following consultations with industry, the UK Government is planning to bring forward secondary legislation to implement a series of changes, including (DESNZ, 2025a):

- changes to when a contract budget notice is published;
- removal of restrictions on seeing auction information;
- amendments to the contract allocation framework by not allowing flexible bids for fixed-bottom offshore wind; and
- inclusion of Clean Industry Bonus costs as part of Ofgem's price cap methodology.

A.3.6 CPAP has also informed the wider UK Government agenda for reform of the electricity market through the Review of Electricity Market Arrangements (REMA). There are currently no finalised proposals with regards to REMA, with policy development to be completed by mid-2025 (DESNZ, 2025b). The latest REMA consultations in 2024 (DESNZ, 2024) focussed on finding the mechanisms to address four challenges:

- Challenge 1: Passing through the value of a renewables-based system to consumers;
- Challenge 2: Investing to create a renewables-based system at pace;
- Challenge 3: Transitioning away from an unabated gas-based system to a flexible, resilient, decarbonised electricity system; and
- Challenge 4: Operating and optimising a renewables-based system, cost-effectively.

UK Offshore Wind Sector Deal

A.3.7 The Offshore Wind Sector Deal (UK Government, 2020), sets out the UK Government's aim to support the development of offshore wind energy generation in the UK, making the sector a significant part of a low-cost, low-carbon flexible grid system. The Deal also emphasises how UK companies can benefit from the opportunities presented by the expansion of the offshore wind sector, enhancing the competitiveness of UK firms internationally and sustaining the UK's role as a global leader in offshore wind generation.

A.3.8 The UK Government highlighted that some estimates suggest that offshore wind capacity globally will grow by 17% annually from 22 GW to 154 GW by 2030.

A.3.9 The UK Government aims to reach this capacity in a sustainable, timely way (UK Government, 2020) and commits to working with the offshore wind sector and wider stakeholders to deliver the expansion of the sector, addressing strategic deployment issues, transmission issues and environmental impacts. Reaching this level of capacity could support up to 27,000 jobs in the UK, while the sector will work with government, existing institutions, and universities to increase job mobility between energy sectors, increase apprenticeship opportunities and coordinate local efforts, further developing the benefits to the UK economy.

A.3.10 The UK Government has also highlighted the role that offshore wind can play in the transition to a net zero economy by 2050 (UK Government, 2021). Based on existing technology, electrification remains the main route to reach carbon neutrality. To make this change possible, the supply of electricity will need to increase significantly to match demand and the UK Government aims to decarbonise the power sector by 2035. The UK Government had initially set targets for offshore wind to contribute up to 40 GW of generating capacity. In 2022, this was increased to 50 GW by 2030 (UK Government, 2022) and recently to 60 GW. The expansion in offshore wind activity also has the potential to create many new green jobs, as part of the UK Government's Build Back Greener agenda.

North Sea Transition Deal

A.3.11 The North Sea Transition Deal (BEIS, 2021) builds on existing activity and skills in the UK's offshore oil and gas industry and seeks to maximise the benefits from the energy transition. This will be done in a range of ways, including through targets for reduction in carbon emissions, development at scale of Carbon Capture Usage and Storage and hydrogen, and supporting supply chain content and job creation. To achieve this, the Deal builds on five outcomes:

- supply decarbonisation;
- carbon capture usage and storage;
- hydrogen;
- supply chain transformation; and
- people and skills.

A.3.12 Being part of the INTOG leasing round, the Proposed Development is expected to support the decarbonisation of existing oil and gas activity and, in this way, to support the first outcome. By contributing towards the creation of employment in renewables, the Proposed Development is also expected to contribute to the Deal's priority around people and skills.

UK Modern Industrial Strategy

A.3.13 In 2025, the UK Government published The UK's Modern Industrial Strategy (UK Government, 2025), a ten-year plan designed to make the UK attractive to investors, improve the business environment, and support "growth-driving" sectors. In order to do this, the strategy outlines interventions to help deliver against four main priorities:

- Ease, speed, and long-term stability for business;
- Supporting the UK's city regions and clusters;
- Supporting frontier industries; and
- Creating an enduring partnership with business.

A.3.14 Clean energy is identified as one of the eight sectors with the potential to increase national productivity, strengthen economic security and resilience, as well as support the transition to net zero. The strategy reinforces the UK Government's commitment to support clean energy projects, and identifies offshore wind as a key part of the wider sector's potential to deliver growth.

Scottish Government Policies

National Marine Plan

A.3.15 The overarching guidance for the planning and consenting of offshore wind projects in Scotland is the National Marine Plan (NMP) (Scottish Government, 2015). This is currently being updated, but the 2015 document is currently the latest version of the NMP. The main policies within the NMP that are relevant to this study are listed as the objectives for Offshore Wind and Marine Energy. These are:

- Objective 2 – Economic benefits from offshore wind, wave and tidal energy developments maximised by securing a competitive local supply chain in Scotland;
- Objective 3 – Alignment of marine and terrestrial planning and efficient consenting and licensing processes including, but not limited to, data sharing, engagement and timings, where possible;
- Objective 4 – Aligned marine and terrestrial electricity transmission grid planning and development in Scottish waters; and
- Objective 8 – Co-ordinated government and industry-wide monitoring.

A.3.16 In addition, there are general objectives outlined in the NMP which are relevant to this, including:

- General Objective 2 – Sustainable development and use which provides economic benefit to Scottish communities, is encouraged when consistent with the objectives and policies of this Plan;
- General Objective 3 – Sustainable development and use which provides social benefits is encouraged when consistent with the objectives and policies of this Plan;
- General Objective 18 – Early and effective engagement should be undertaken with the general public and all interested stakeholders to facilitate planning and consenting processes; and
- General Objective 19 – Decision making in the marine environment will be based on sound scientific and socioeconomics evidence.

National Planning Framework 4

A.3.17 National Planning Framework 4 (NPF4) is Scotland's national spatial strategy, outlining how to improve people's lives through sustainable, liveable, and productive places (Scottish Government, 2023a).

A.3.18 The Scottish Government identifies net zero energy solutions as a key contributor to net zero emissions by 2045 and includes National Planning Policies to achieve this aim, such as a Climate Emergency Policy (1) which encourages and promotes development that addresses the global climate emergency and a Green Energy Policy (11) which encourages and promotes all forms of renewable energy development, both onshore and offshore.

A.3.19 As part of the Policy 11(a), all forms of renewable technologies, including offshore wind, will be supported. This is subject to the test outlined in Policy 11(c), which states that: “development proposals will only be supported where they maximise net economic impact, including local and community socio-economic benefits such as employment, associated business and supply chain opportunities”. The Proposed Development will support employment and create opportunities for local businesses at both the construction, and O&M phases.

Green Industrial Strategy

A.3.20 In September 2024, the Scottish Government published its Green Industrial Strategy (Scottish Government 2024a). This strategy aims to help Scotland realise the economic benefits of the global transition to Net Zero. The strategy highlights Scotland's strengths and opportunities during the transition and outlines six key enabling factors that the Scottish Government and partners will do to foster a positive environment for investment and growth. These include:

- supporting investment, ensuring an investment-friendly ecosystem;
- investing in strong research and development foundations;
- supporting the development of a skilled workforce;
- helping supply chain businesses to seize opportunities;
- delivering an agile planning and consenting system; and
- delivering required housing and enabling infrastructure.

A.3.21 The strategy provides a clear direction and focus, highlighting the importance of prioritising resources and investment. The strategy also emphasises the need for coordinated policies to create the right environment and working collaboratively with partners to maximise economic benefit from the opportunities created by the transition to Net Zero.

A.3.22 As part of this strategy, the wind energy sector is highlighted as the first opportunity. The Scottish Government has highlighted the scale of the investible offshore wind project pipeline in Scotland and the role that this pipeline will have in attracting investment in enabling infrastructure, such as ports, and supply chain companies.

Offshore Wind Focus

17.12.1 The Scottish Government's Offshore Wind Focus (Scottish Government, 2024b) document highlights that offshore wind has been identified as the single most important opportunity for attracting financial capital to Scotland and raising the wider investment profile. This document outlines the key public sector investment opportunities to enable the economic benefits from the offshore wind opportunity to be realised in Scotland.

17.12.2 The assessment used to inform the investment priorities highlighted that clustering and capturing large scale opportunities are the key ways in which public investment can be a catalyst for wider supply chain development. The assessment split the support options between ports and other supply chain investments, and has found that the public investment in these facilities will have benefits up to 13 times greater than the original cost to the public purse.

Programme for Government 2025 - 26

A.3.23 The role of the energy transition in supporting economic growth is also highlighted in the Programme for Government 2025 – 2026 (Scottish Government, 2025). In particular, the Programme for Government references the Green Industrial Strategy and the activities that the Scottish Government will take to enable the transition and support the maximisation of socio-economic benefits to Scotland. This includes support for skills initiatives focused on the offshore wind sector and leveraging private sector investment in the supply chain

National Strategy for Economic Transformation

A.3.24 In March 2022, the Scottish Government published the National Strategy for Economic Transformation (Scottish Government, 2022b), which set out its ambition for Scotland's economy over the next ten years. The Scottish Government's vision is to create a wellbeing economy where society thrives across economic, social and environmental dimensions, and which delivers prosperity for all Scotland's people and places. Of particular importance is the ambition to be greener, with a just transition to net zero, a nature-beneficial economy and a rebuilding of natural capital.

A.3.25 A key longer-term challenge identified in the strategy is to address deep-seated regional inequality, including in rural and island areas that face problems such as a falling labour supply, poorer access to infrastructure and housing. The transition to net zero presents a further challenge of delivering beneficial employment, revenue and community benefits.

A.3.26 To deliver its vision and address the economy's challenges, five programmes of action have been identified (with a sixth priority of creating a culture of delivery), including:

- establishing Scotland as a world-class entrepreneurial nation;
- strengthening Scotland's position in new markets and industries, generating new, well-paid jobs from a just transition to net zero;
- making Scotland's businesses, industries, regions, communities and public services more productive and innovative;
- ensuring that people have the skills they need to meet the demands of the economy, and that employers invest in their skilled employees; and
- reorienting the economy towards wellbeing and fair work.

A.3.27 The strategy notes that Scotland has substantial energy potential and that it has developed a growing green industrial base. This provides a strong foundation for securing new market opportunities arising from the transition to net zero. Renewable energy also has a role to play in supporting productive businesses and regions across Scotland.

Regional Policies

Regional Economic Strategy 2025-2035

A.3.28 In 2025, the Highlands and Islands Regional Economic Partnership (HIREP), partnership of public, private sector, third sector and academic organisations, issued its Regional Economic Strategy 2025-2035 (HIREP, 2025). This provides an overall framework for collaboration across the Highlands and Islands so that the economic and social benefits from the region's role in providing green energy are captured by its people, communities and businesses.

A.3.29 The strategy seeks to realise the following vision for the Highlands and Islands: "The Highlands and Islands is a dynamic, connected, resilient and prosperous region with a balanced and growing population and a vibrant economy, embedding community wealth building, leading Scotland's transition to net zero, and enhancing our natural environment".

A.3.30 Based on the consideration of five key drivers of change at regional level (climate change, political and societal change, land ownership and land use, technology and innovation and demographics), and a SWOT analysis, renewable energy was identified as the primary opportunity for the region.

A.3.31 To meet its vision, the strategy identifies the following six priorities;

- increase the profile and understanding of the Highlands and Islands to support effective policy and unlock regional investment;
- become a region which delivers high quality and affordable housing for residents;
- enhance the region's transport and digital infrastructure to become an exemplar of efficient rural connectivity;
- build resilience and competitiveness through place-based opportunities and stimulating an active culture of entrepreneurship and innovation;
- maximise the economic and community benefits from renewable energy investments and drive the region's move to net zero and climate resilience/adaptation; and
- develop a coordinated response to skills and labour requirements across the region.

Regional Economic Strategy: A Sustainable Economic Future for the North East of Scotland

A.3.32 This strategy, developed by Aberdeen City and Aberdeenshire Council, highlights how the economic future of the region is likely to lie in the transition to offshore renewable energy (Aberdeen City Council, Aberdeenshire Council, ONE, 2024). In doing so, it builds on five objectives:

- to establish the North East as pioneer of the energy transition, by delivering an 80% reduction in carbon emissions per head
- to maintain regional GVA as a share of Scotland's overall GVA while increasing the share of regional employment from the region's growth sectors;
- to maintain a healthy, sustainable, working age population through increasing economic participation rates;

- to become a Real Living Wage region with 95% of overall employment offering a real living wage or higher;
- to protect and enhance the natural capital of the region by aligning to national ambitions to manage 30% of the region for people and nature by 2030.

A.3.33 The first goal involves a commitment towards the creation of renewable energy jobs within the region. This will also involve collaboration with partners like Skills Development Scotland to ensure the skill needs required for a just transition are met. The strategy also refers to offshore wind in the context of maximising green energy production within the region.

Aberdeenshire Local Development Plan

A.3.34 The Aberdeenshire Local Development Plan (Aberdeenshire Council, 2023) seeks to achieve the following objectives:

- to promote sustainable mixed communities with the highest standards of design;
- to take on the challenges of sustainable development and climate change;
- to protect and improve assets and resources;
- to increase and diversify the economy;
- to protect, enhance and promote green-blue networks within and between settlements;
- to make efficient use of the transport network, reduce the need to travel and promote walking, cycling, wheeling and public transport.

A.3.35 Policy 13c considers the local approach to renewable energy developments. The policy supports renewable energy development in “appropriate sites and of the appropriate design”. With regards to wind farms, the policy states that: “All wind farms must be appropriately sited and designed and avoid unacceptable environmental effects, taking into account the cumulative effects of existing and approved wind turbines”.

A.4 Economic Impact Methodology

Approach to Impacts from Offshore Wind

Key Steps in Assessing the Contribution of the Proposed Development

A.4.1 Before the analysis of economic impacts is undertaken, it is necessary to select the study areas for inclusion in the assessment of the Proposed Development, as set out in Section 2. This process is based on separate guidance that BiGGAR Economics developed on behalf of the Scottish Government (Scottish Government, 2022a).

A.4.2 Having selected the study areas for which GVA and employment impacts are considered, it is then possible to gather relevant information and estimate economic impacts. The estimation of the economic benefits from the Proposed Development is based on a purposedly-built tool developed by BiGGAR Economics. As set out in Figure 17.12, the analysis is based on an Input-Output methodology built upon the following steps:

- estimation of the total investment associated with the Project (development, construction, Operation and Maintenance (O&M) and decommissioning);
- estimation of contract value by type;
- estimation of contract content by geographical area;
- conversion of contracts into the direct employment supported by the Project;
- estimation of direct GVA based on direct employment supported;
- estimation of supply chain (indirect) impacts on GVA and employment; and
- estimation of induced impacts on GVA and employment.

A.4.3 While data on decommissioning spending may not be available early on in a project's development, the analysis provides an estimate of economic activity during this phase. This assumes that decommissioning would take place in reverse of construction and would involve the performance of similar contracts.

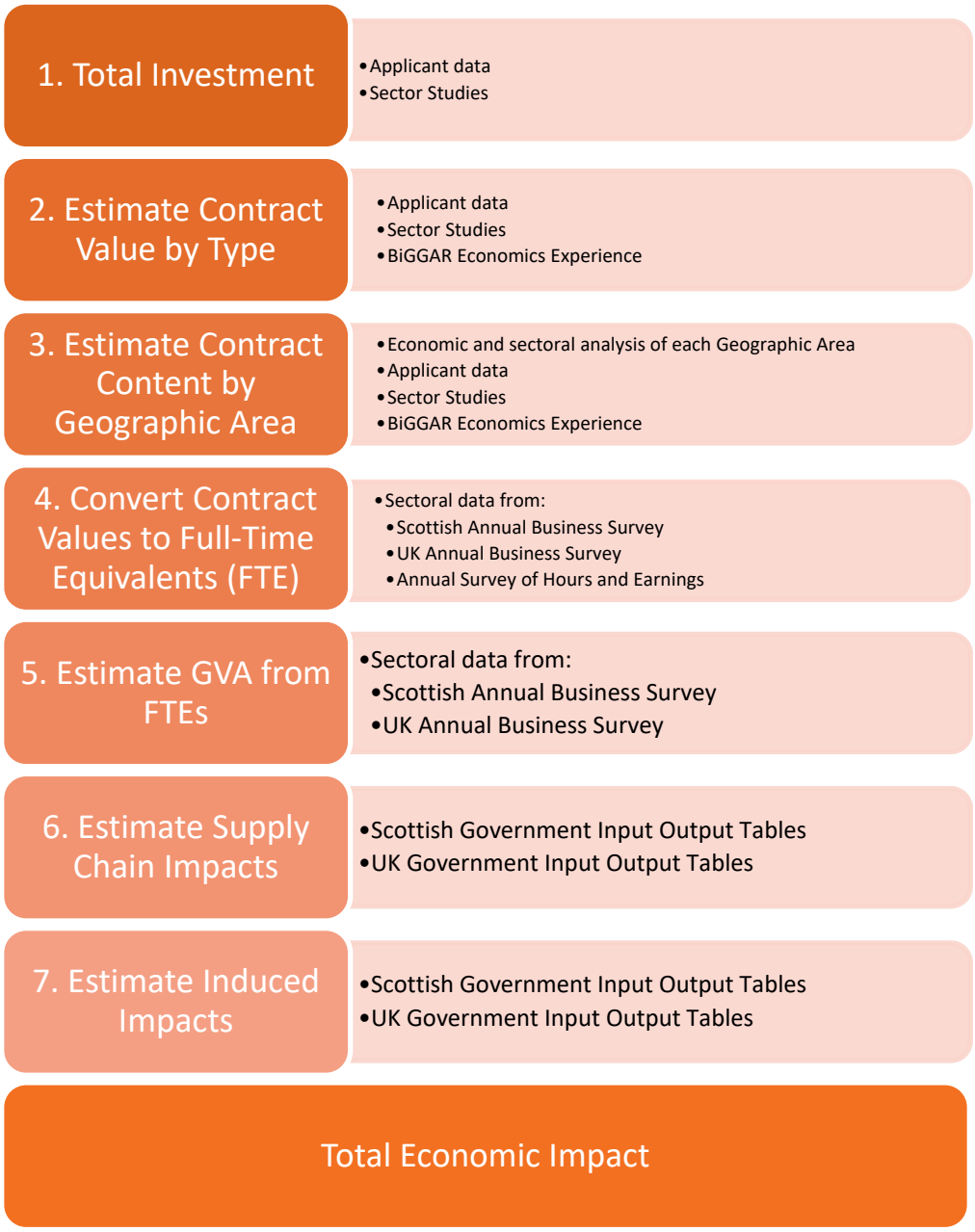


Figure 17.12 Economic Impact Methodology and Data Sources

Information Requirements and Data Sources

A.4.4 The assessment requires knowledge of a series of parameters including:

- number of wind turbines and their capacity;
- foundations type (floating or fixed);
- costs by project element;
- estimates of content by study area; and
- timescales of activity.

A.4.5 Key sources of information, include:

- Offshore Project Design Envelope (PDE);

- publicly available information as presented in the Aspen Offshore Scoping Report (APEM Group, 2024);
- NREL report on the costs of offshore wind (NREL, 2024);
- BVG Associates reports on offshore wind expenditure (BVG Associates, 2021 and BVG Associates, 2023)
- classification of economic activity from the ONS 'Standard Industrial Classification of Economic Activity' (ONS, 2022);
- Scottish Annual Business Statistics for data on GVA, turnover and employment across Scotland (Scottish Government, 2023b);
- UK Annual Business Survey for data on GVA, turnover and employment across the UK (ONS, 2024a);
- Scottish Government Input-Output GVA and employment multipliers for Type 1 impacts (supply chain spending) and Type 2 impacts (supply chain spending and staff spending) (Scottish Government, 2023c); and
- UK Input-Output GVA and employment multipliers for Type 1 and Type 2 impacts (ONS, 2023a).

A.4.6 These data sources are complemented by BiGGAR Economics experience working with developers in the offshore wind sector and by using sectoral reports.

Pricing and Discounting

A.4.7 All prices considered as part of the assessment are real prices (i.e. they reflect cost estimates as expressed in 2025 prices).

A.4.8 The analysis, where appropriate, also provides estimates based on the Net Present Value (NPV) of activity. This is based on His Majesty Treasury's (HMTs) guidance on economic appraisal as included in the Green Book (HM Treasury, 2022), where it is recommended that impacts occurring over long periods of time are discounted to account for the different value people give to present compared to future consumption. The HMT's suggested discount rate of 3.5% is applied.

Net Economic Impact

A.4.9 In line with best practice, the economic analysis considers the net economic impact from the Proposed Development. This requires accounting for additionality, the extent to which economic activity would not occur without the Proposed Development. There are four dimensions of additionality:

- displacement: the extent to which activity associated with the Proposed Development displaces existing economic activity in the Socioeconomic study areas;
- leakage: the extent to which spending on the Proposed Development benefits businesses outside the Socioeconomic study areas;
- deadweight: the extent to which economic activity would occur even without the Proposed Development; and

- substitution: the effects arising when a business substitutes one activity for a similar one to benefit from public sector assistance.

Economic Impact Modelling

A.4.10 This section provides some details on the Input-Output methodology applied.

A.4.11 Having gathered data on spending by project element and assigned to offshore or onshore, the first step involves estimating the total spending supported by the contracts performed in each study area. Based on the turnover supported, it is then possible to estimate the direct employment and direct GVA supported by the Proposed Development by applying the relevant turnover per GVA and turnover per job ratios from the ONS Annual Business Survey. This is illustrated in Figure 17.13.

Figure 17.13 Direct GVA

A.4.12 Alongside the direct impact generated by the Project, there will be an impact on the supply chain of those businesses being awarded project-related contracts. To estimate indirect impacts, it was necessary to apply to the direct GVA and direct employment, Type 1 employment and GVA multipliers as sourced from the UK Input-Output Tables. How Type 1 multipliers are applied is shown in Figure 17.14.

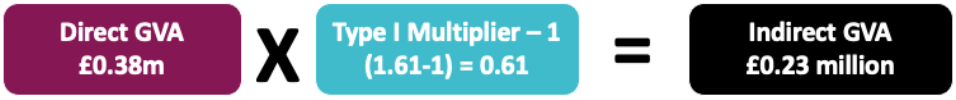


Figure 17.14 Indirect GVA

A.4.13 In line with industry best practice, for the assessment of GVA and employment impacts, the analysis focuses on the direct and indirect impacts. In addition, the analysis also reports on induced impacts, which are the result of those employed to carry out project-related work, spending their salaries and wages across the economy. To estimate induced impacts, it was necessary to apply Type 2 UK Employment and GVA multipliers to the direct GVA and employment supported by the Proposed Development, as shown in Figure 17.15.

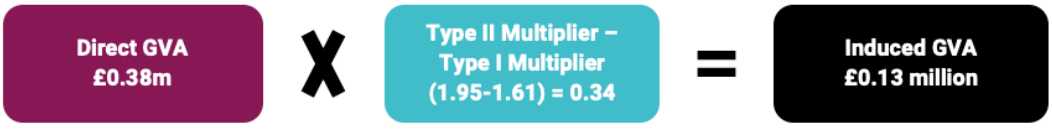


Figure 17.15 Induced GVA

A.4.14 As the economic impact multipliers reflect activity occurring within the UK economy, it is necessary to adjust multipliers to reflect activity occurring in each of the Socio-Economics Study Areas. This is based on an analysis of household spending patterns and knowledge of supply chains at the regional level.

Summary

A.4.15 This Socio-economics, tourism and recreation technical report provides details on the methodology that has informed the economic analysis in **Volume 2, Chapter 17: Socio-Economics, Tourism and Recreation**.

A.4.16 A review of key policy documents and strategies highlights the importance for both the Scottish and UK Government of maximising the socio-economic opportunities from offshore wind.

A.4.17 The economic impact from the Proposed Development is estimated across the Socio-Economics Study Areas of:

- Highland;
- The North of Scotland;
- Scotland; and
- the UK.

A.4.18 **Volume 2, Chapter 17: Socio-Economics, Tourism and Recreation** provides a characterisation of the socio-economic conditions within these Socio-Economics Study Areas. This was based on a desk-based exercise, including the review of relevant statistical publications and reports.

A.4.19 The economic impact analysis draws on evidence on the total spending from the Project, as estimated using a report produced by NREL on the cost of offshore wind (NREL, 2024). Activity across the development, construction, and O&M phase has then been allocated to the Proposed Development based on a breakdown of spending by contract. In this way, it was possible to focus on the Proposed Development.

A.4.20 The economic impact analysis is based on an Input-Output methodology. On this basis, the employment and GVA supported by the Proposed Development have been estimated using sectoral economic ratios and multipliers. Finally, in line with industry best practice, the assessment has focussed on the net economic impact from the Proposed Development, which required consideration of its additionality.

A.5 References

Aberdeen City Council, Aberdeenshire Council, ONE (2024), 'Regional Economic Strategy, A sustainable economic future for the North East of Scotland', https://investaberdeen.co.uk/uploads/Regional%20Economic%20Strategy%202035%20FINAL.pdf [Accessed: May 2025].

Aberdeenshire Council (2023), 'Aberdeenshire Local Development Plan', https://online.aberdeenshire.gov.uk/ldpmedia/LDP2021/AberdeenshireLocalDevelopmentPlan2023IntroductionAndPolicies.pdf [Accessed: May 2025].

BEIS (2021), 'North Sea Transition Deal', https://assets.publishing.service.gov.uk/media/605b148ce90e0724c7d30c2b/north-sea-transition-deal_A_FINAL.pdf [Accessed: May 2025].

BVG Associates (2021), 'UK and Scottish content baseline and roadmap', https://www.offshorewindscotland.org.uk/media/11937/bvga-local-content-roadmap.pdf [Accessed: May 2025].

BVG Associates (2023), 'The Online Guide to a Floating Wind Farm', https://guidetofloatingoffshorewind.com [Accessed: May 2025].

DESNZ (2024), 'Review of Electricity Market Arrangements. Summary of responses to second consultation', https://assets.publishing.service.gov.uk/media/675afaa0a3e5a798955a01b1/rema-summary-of-consultation-responses.pdf [Accessed: May 2025].

DESNZ (2025a), 'Consultation outcome: Further reforms to the CfD scheme for AR7: government response to legislative proposals', https://www.gov.uk/government/consultations/further-reforms-to-the-contracts-for-difference-scheme-for-allocation-round-7/outcome/further-reforms-to-the-cfd-scheme-for-ar7-government-response-to-legislative-proposals [Accessed: May 2025].

DESNZ (2025b), 'Review of Electricity Market Arrangements (REMA)', Available at: https://www.gov.uk/government/collections/review-of-electricity-market-arrangements-rema [Accessed: May 2025].

Highlands and Islands Regional Economic Partnership (2025),'Regional Economic Strategy 2025-2035' https://www.highlandsandislandsrep.scot/media/ub0guoyh/hirep-strategy-2025-2035.pdf [Accessed: May 2025].

Highland Council (2024), 'Inner Moray Firth Local Development Plan 2: Adopted Plan', https://www.highland.gov.uk/downloads/file/28837/inner_moray_firth_local_development_plan_2_strategy_and_general_policies [Accessed: July 2025]

HM Treasury (2022), 'The Green Book: Appraisal and Evaluation in Central Government', https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-government/the-green-book-2020 [Accessed: May 2025].

NREL (2024), 'Cost of Wind Energy Review: 2024 Edition', https://docs.nrel.gov/docs/fy25osti/91775.pdf [Accessed May 2025].

National Energy System Operator (2024), 'Clean Power 2030. Advice on achieving clean power for Great Britain by 2030', https://www.neso.energy/document/346651/download [Accessed: May 2025]
ONS (2022), 'UK SIC 2007', Available at: https://www.ons.gov.uk/methodology/classificationsandstandards/ukstandardindustrialclassificationofeconomicactivities/uksic2007 [Accessed: May 2025].

ONS (2023a), 'UK Input Output Tables 2020', https://www.ons.gov.uk/economy/nationalaccounts/supplyandusetables/datasets/ukinputoutputanalyticaltablesdetailed [Accessed: May 2025].

ONS (2024a), 'Annual Business Survey', https://www.ons.gov.uk/businessindustryandtrade/business/businessservices/bulletins/nonfinancialbusinesseconomyukandregionalannualbusinesssurvey/2022results [Accessed: May 2025].

RenewableUK, Offshore Wind Industry Council, the Crown Estate and Crown Estate Scotland (2024), '2024 Offshore Wind Industrial Growth Plan: Expanding the Horizon of the UK's Offshore Wind Supply Chain', https://www.owic.org.uk/media/2tfauy2z/offshore-wind-industrial-growth-plan-2024.pdf [Accessed: May 2025].

Scottish Government. (2015), 'National Marine Plan', https://www.gov.scot/publications/scotlands-national-marine-plan/documents/ Scottish Government. (2015). National Marine Plan. Available at: https://www.gov.scot/publications/scotlands-national-marine-plan/documents/ (Accessed: 27/01/2025).

Scottish Government (2022a), 'Defining 'local area' for assessing impact of offshore renewables and other marine developments: guidance principles', https://www.gov.scot/publications/defining-local-area-assessing-impact-offshore-renewables-marine-developments-guidance-principles/documents/ [Accessed: May 2025].

Scottish Government (2022b), 'National Strategy for Economic Transformation', https://www.gov.scot/publications/scotlands-national-strategy-economic-transformation-delivery-plans-october-2022/ [Accessed: May 2025].

Scottish Government (2023a), 'National Planning Framework 4', https://www.gov.scot/publications/national-planning-framework-4/ [Accessed: May 2025].

Scottish Government. (2023b), 'Scottish Annual Business Statistics 2021', https://www.gov.scot/publications/scottish-annual-business-statistics-2021/ [Accessed: May 2025].

Scottish Government (2023c),'Scottish Input Output Tables 2020', https://www.gov.scot/publications/about-supply-use-input-output-tables/ [Accessed: May 2025].

Scottish Government (2024a), 'Green Industrial Strategy', https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2024/09/green-industrial-strategy/documents/green-industrial-strategy/green-industrial-strategy/govscot%3Adocument/green-industrial-strategy.pdf [Accessed: May 2025].

Scottish Government (2024b), 'Offshore Wind Focus', https://www.gov.scot/binaries/content/documents/govscot/publications/research-and-analysis/2024/09/offshore-wind-focus/documents/offshore-wind-focus/offshore-wind-focus/govscot%3Adocument/offshore-wind-focus.pdf [Accessed: May 2025].

Scottish Government (2025), 'Programme for Government 2025 – 26: Building the Best Future for Scotland', https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2025/05/programme-government-2025-26/documents/programme-government-2025-26/programme-government-2025-26/govscot%3Adocument/programme-government-2025-26.pdf [Accessed: May 2025].

UK Government. (2020), 'The Offshore Wind Sector Deal', https://www.gov.uk/government/publications/offshore-wind-sector-deal/offshore-wind-sector-deal [Accessed: May 2025].

UK Government. (2021), 'UK Net Zero Strategy: Build Back Greener', https://assets.publishing.service.gov.uk/media/6194dfa4d3bf7f0555071b1b/net-zero-strategy-beis.pdf [Accessed: May 2025].

UK Government. (2022), 'British Energy Security Strategy', https://www.gov.uk/government/publications/british-energy-security-strategy/british-energy-security-strategy [Accessed: May 2025].

UK Government (2024), 'Clean Power 2030 Action Plan: A new era of clean electricity', https://assets.publishing.service.gov.uk/media/677bc80399c93b7286a396d6/clean-power-2030-action-plan-main-report.pdf [Accessed: May 2025].

UK Government (2025), 'The UK's Modern Industrial Strategy' https://assets.publishing.service.gov.uk/media/68595e56db8e139f95652dc6/industrial_strategy_policy_paper.pdf [Accessed: July 2025].

GoBe Consultants Ltd
Suites B2 & C2, Higher Mill
Higher Mill Lane
Buckfastleigh
Devon
TQ11 0EN

www.gobeconsultants.com