

Bellrock Offshore Wind Farm

Wind Farm Development Area

Environmental Impact Assessment Report - Volume II

Chapter 16: Socioeconomics, Tourism and Recreation

Date: April 2026

Document Number: RHDV_BEL_CST_REP_0002_016

Revision Number: 1

Classification: Public

Revision History

Rev.	Prepared By	Checked By	Approved By	Date
1	BiGGAR Economics	ES	BMcG	01/04/2026

This page is intentionally blank

Contents

16 Socioeconomics, Tourism and Recreation.....	1
16.1 Introduction.....	1
16.2 Legislation, Policy and Guidance.....	3
16.3 Consultation.....	6
16.3.1 Consultation to Date.....	6
16.3.2 Future Consultation.....	13
16.4 Assessment Methodology.....	13
16.4.1 Impact Assessment Methodology.....	13
16.4.2 Definitions of Sensitivity and Magnitude.....	16
16.4.3 Effect Significance.....	23
16.4.4 Cumulative Effects Assessment Methodology.....	24
16.4.5 Transboundary Effects Assessment Methodology.....	25
16.5 Scope of the Assessment.....	26
16.5.1 Study Area.....	26
16.5.2 Data and Information Sources.....	29
16.6 Existing Environment.....	32
16.6.1 Socioeconomics Baseline.....	32
16.6.2 Predicted Future Baseline.....	38
16.7 Potential Impacts.....	40
16.7.1 Scope.....	40
16.7.2 Realistic Worst-case Scenario.....	43
16.7.3 Embedded Mitigation Measures.....	51
16.8 Assessment of Effects.....	57
16.8.1 Construction.....	57
16.8.2 Operation and Maintenance.....	84
16.8.3 Decommissioning.....	98
16.9 Cumulative Effects Assessment.....	105
16.9.1 Realistic Worst-case Scenario.....	105
16.9.2 Construction Phase.....	109
16.9.3 Operation and Maintenance Phase.....	113
16.9.4 Decommissioning Phase.....	117
16.10 Inter-related and Interacting Impacts.....	119
16.10.1 Inter-relationships.....	119
16.10.2 Interactions.....	121
16.11 Summary.....	131
16.12 References.....	141

List of Tables

Table 16.1:	Summary of Relevant Policy and Guidance for Socioeconomics, Tourism and Recreation	3
Table 16.2:	Consultation Relevant to Socioeconomics, Tourism and Recreation	7
Table 16.3:	Definition of the Sensitivity Levels for Economic Receptors	18
Table 16.4:	Definition of the Magnitude Levels for Economic Receptors	19
Table 16.5:	Definition of the Sensitivity Levels for Social Impacts	20
Table 16.6:	Definition of the Magnitude Levels for Social Impacts	20
Table 16.7:	Definition of the Sensitivity Levels for Tourism and Recreation Receptors	21
Table 16.8:	Definition of the Magnitude Levels for Tourism and Recreation Receptors	22
Table 16.9:	Matrix for Evaluating the Significance of an Effect (Adverse or Beneficial)	23
Table 16.10:	Definitions of Effect Significance (Adverse)	24
Table 16.11:	Definitions of Effect Significance (Beneficial)	24
Table 16.12:	Indicative Port Locations (and Corresponding Local Socioeconomic Study Areas)	27
Table 16.13:	Key Data and Information Sources for Socioeconomics, Tourism and Recreation Baseline	29
Table 16.14:	Scotland and UK Population by Age Group in 2024	32
Table 16.15:	Scotland and UK Economic Activity Rate in 2024; Median Annual Income in 2024	32
Table 16.16:	Scotland and UK Industrial Structure in 2024	33
Table 16.17:	Scotland and UK Education Levels (16 to 64 Years Old) in 2024	34
Table 16.18:	Scotland and UK Class Sizes in 2024	35
Table 16.19:	Mean House Price Values and Changes from 2013 to 2023 (ROS, 2024; ONS, 2024c)	35
Table 16.20:	Patients per General Practitioners in 2023 for Scotland and UK (BSO, 2024)	35
Table 16.21:	Baseline Data on Population and Employment (Existing Environment)	36
Table 16.22:	Peterhead Port, Value of Landings by Species 2022	37
Table 16.23:	Fisher Employment 2022	37
Table 16.24:	Scotland and UK Population Projections, 2024 to 2043; 2022 Based Projections	39
Table 16.25:	Potential Impacts Scoped In and Scoped Out of the EIA for Socioeconomics, Tourism and Recreation	41
Table 16.26:	Realistic Worst-case Scenarios for Impacts on Socioeconomic, Tourism and Recreation	45
Table 16.27:	Embedded Mitigation Measures Relevant to Socioeconomics, Tourism and Recreation	53
Table 16.28:	BiGGAR’s Economic Analysis of the Supply Chain Development Statement Outlook - Bellrock Wind Farm Development Area Construction Expenditure Commitment	58
Table 16.29:	Bellrock Wind Farm Development Area Construction Direct Economic Impact in Scotland and UK	58
Table 16.30:	Bellrock Wind Farm Development Area Construction Total Gross Value Added Impact in Scotland and UK	60
Table 16.31:	Bellrock Wind Farm Development Area Construction Total Employment Impact in Scotland and UK	60
Table 16.32:	Magnitude of Impact – Increase in Employment and Gross Value Added During Construction	61
Table 16.33:	Bellrock Wind Farm Development Area Assembly and Integration Port(s) Economic Impact	61

Table 16.34: Bellrock Wind Farm Development Area Construction Port Economic Impact.....	62
Table 16.35: Bellrock Wind Farm Development Area Assembly and Integration Ports Social Impacts.....	68
Table 16.36: Significance of Social Impacts at Assembly and Integration Ports.....	69
Table 16.37: Bellrock Wind Farm Development Area Assembly and Integration Ports Social Impacts.....	72
Table 16.38: Significance of Social Impacts at Assembly and Integration Ports.....	73
Table 16.39: Bellrock Wind Farm Development Area Assembly and Integration Ports Social Impacts.....	77
Table 16.40: Significance of Social Impacts at Assembly and Integration Ports.....	78
Table 16.41: Bellrock Wind Farm Development Area Assembly and Integration Ports Social Impacts.....	82
Table 16.42: Significance of Social Impacts at Assembly and Integration Ports.....	83
Table 16.43: Annual Bellrock Wind Farm Development Area Operation and Maintenance Spending in Scotland and UK by Category.....	85
Table 16.44: Bellrock Wind Farm Development Area Operation and Maintenance Direct Economic Impact in Scotland and UK.....	85
Table 16.45: Bellrock Wind Farm Development Area Operation and Maintenance Annual Gross Value Added (GVA) Impact in Scotland and UK.....	86
Table 16.46: Bellrock Wind Farm Development Area Operation and Maintenance Annual Employment Impact, Scotland and UK (Jobs).....	86
Table 16.47: Bellrock Wind Farm Development Area Operation and Maintenance Impact (Over Lifetime) in Scotland and UK.....	86
Table 16.48: Magnitude of Impact – Increase in Employment and Gross Value Added (GVA) (Operation and Maintenance) in Scotland and UK.....	87
Table 16.49: Bellrock Wind Farm Development Area Operation and Maintenance Port Economic Impact...87	87
Table 16.50: Bellrock Wind Farm Development Area Operation and Maintenance Port Economic Impact...88	88
Table 16.51: Bellrock Wind Farm Development Area Operation and Maintenance Port Social Impacts.....	90
Table 16.52: Significance of Social Impacts at Operation and Maintenance Port.....	91
Table 16.53: Bellrock Wind Farm Development Area Operation and Maintenance Port Social Impacts.....	93
Table 16.54: Bellrock Wind Farm Development Area Operation and Maintenance Port Social Impacts.....	95
Table 16.55: Significance of Social Impacts at Operation and Maintenance Port.....	96
Table 16.56: Bellrock Wind Farm Development Area Operation and Maintenance Port Social Impacts.....	97
Table 16.57: Bellrock Wind Farm Development Area Total Decommissioning Expenditure in Scotland and the UK.....	99
Table 16.58: Bellrock Wind Farm Development Area Total Decommissioning Direct Impact in Scotland and UK.....	99
Table 16.59: Bellrock Wind Farm Development Area Decommissioning Gross Value Added (GVA) Impact in Scotland and UK.....	100
Table 16.60: Bellrock Wind Farm Development Area Decommissioning Employment Impact in Scotland and UK (Years of Employment).....	100
Table 16.61: Magnitude of Impact – Increase in Employment and Gross Value Added (GVA) (Decommissioning) in Scotland and UK.....	100
Table 16.62: Realistic Worst-case Scenarios for Impacts on Socioeconomic, Tourism and Recreation.....	105
Table 16.63: Socioeconomics, Tourism and Recreation Inter-relationships.....	119
Table 16.64: Potential Interaction Between Impacts - Construction.....	123

Table 16.65: Potential Interaction Between Impacts - Operation and Maintenance.....	124
Table 16.66: Potential Interaction Between Impacts - Decommissioning.....	125
Table 16.67: Potential Interactions Between Impacts - Phase and Lifetime Assessment.....	126
Table 16.68: Summary of Potential Effects for Socioeconomics, Tourism and Recreation	133

List of Plates

Plate 16.1: Indicative Port Locations and Corresponding Socioeconomic Local Study Areas	28
Plate 16.2: Levels of Economic Activity and Impact in Scotland and UK.....	59
Plate 16.3: Factors Affecting Magnitude of Change to Community Populations	65
Plate 16.4: Share of Population Estimates by Urban Rural Classification	66
Plate 16.5: Factors Affecting Sensitivity of Community Populations.....	67
Plate 16.6: Factors Affecting Magnitude of Change to Housing Demand and Availability	71
Plate 16.7: Factors Affecting Sensitivity of Community Populations.....	71
Plate 16.8: Factors Affecting Magnitude of Change to Local Services	75
Plate 16.9: Factors Affecting Sensitivity of Local Services	76
Plate 16.10: Community Perceptions of Offshore Wind Impacts on Quality of Life	80
Plate 16.11: Community Perceptions of Offshore Wind Impacts on Community Relations.....	80
Plate 16.12: Community Perceptions of Offshore Wind Impacts on Community Character.....	81

List of Appendices (Volume IV)

Appendix 16.1: Socioeconomics, Tourism and Recreation Technical Report
Appendix 16.2: Economic Impact of the Bellrock Project
Appendix 16.3: Socioeconomics Consultation Correspondence

Glossary of Terminology

Term	Definition
Applicant	Bellrock Offshore Wind Farm Limited, the legal entity submitting Section 36 Consent and Marine Licence applications for Bellrock Wind Farm Development Area
Assembly port	A port at which floating substructures are assembled.
Bellrock Offshore Wind Farm (Bellrock Project)	<p>An offshore wind farm capable of exporting around 1.8 GW of renewable energy to the National Electricity Transmission System.</p> <p>The Wind Farm Development Area is located 120 km east of Stonehaven and will connect to the National Electricity Transmission System at the SSEN Transmission Hurlie substation, west of Stonehaven in Aberdeenshire. The Bellrock Offshore Wind Farm comprises of the following Development Areas:</p> <ul style="list-style-type: none"> ▪ Wind Farm Development Area; ▪ Offshore Transmission Development Area; and ▪ Onshore Transmission Development Area.
Cable protection	Protective measure to minimise the effects of scour and hazards along the inter-array cables, and protecting these cables at infrastructure crossing points.
Construction port(s)	Port(s) that may be used during the construction of the Wind Farm Infrastructure and include integration port(s) and assembly port(s).
Construction works	<p>Works to install the Wind Farm Infrastructure as authorised by the Wind Farm Development Area Section 36 Consent and Marine Licence, such as:</p> <ul style="list-style-type: none"> ▪ Site preparation works undertaken after commencement of construction; ▪ Pre-installation surveys (intrusive and/or non-intrusive); ▪ Placement on or installation in the seabed of anchors and associated scour protection, and mooring lines; ▪ Towing or transportation of the floating offshore unit to the Wind Farm Development Area from a port or wet storage facility; ▪ Floating offshore unit installation and commissioning, including hooking-up to the pre-installed mooring system; ▪ Trench excavation for inter-array cables; ▪ Laying of inter-array cables in or on the seabed and associated cable protection; ▪ Final commissioning following cable connections and snagging; and ▪ Post installation surveys.
Development Area	<p>For consenting purposes, the area for which separate consents and/or Marine Licences will be sought by the Applicant, comprising:</p> <ul style="list-style-type: none"> ▪ Wind Farm Development Area; ▪ Offshore Transmission Development Area; and ▪ Onshore Transmission Development Area.

Term	Definition
Environmental mitigation area	Area within which mitigating measures are deployed to reduce the environmental impact of the Bellrock Project.
Floating offshore substation	The combined offshore substation, floating substructure and station keeping system.
Floating substructure	A floating structure which provides buoyancy and, in conjunction with the station keeping system, supports a superstructure (e.g. wind turbine generator or offshore substation), and maintaining its position within the structure's excursion limit.
Integration port	A port at which wind turbine generators are integrated with floating substructures.
Inter-array cables	Armoured cable containing electrical and fibre optic cores, which link the wind turbine generators to each other and to the subsea cable hubs and/or the offshore substations and include dynamic inter-array cable and static inter-array cable sections.
Interconnector cable	Armoured cable containing electrical and fibre optic cores which link two or more offshore substations.
National Electricity Transmission System	The high-voltage electricity power transmission network serving Great Britain which receives electricity from generators (such as offshore wind farms) and transmits that electricity to anywhere on the National Electricity Transmission System to satisfy demand.
Offshore export cable	Armoured cable containing electrical and fibre optic cores between the offshore substation(s) and the transition bay(s).
Offshore substation	An offshore platform which houses electrical equipment such as transformers, switchgear, and protection and control systems, enabling the wind farm's renewable electricity to be received via inter-array cables and exported via the offshore export cables.
Offshore Transmission Development Area	The boundary within which the Offshore Transmission Infrastructure will be constructed, operated and maintained, and decommissioned (and includes the whole of the Wind Farm Development Area).
Offshore Transmission Infrastructure	Infrastructure located within the Offshore Transmission Development Area including fixed bottom and/or floating offshore substations, offshore reactive compensation station(s) and associated scour protection; interconnector cables and associated cable protection; and offshore export cables and associated cable protection (including activities associated with the Offshore Transmission Infrastructure construction, operation and maintenance, and decommissioning).
Onshore substation	Onshore substation which will be fenced and house electrical equipment (such as transformers, switchgear, and protection and control systems), thereby enabling renewable electricity from the wind farm to be received via the onshore export cables and exported to the National Electricity Transmission System.
Onshore Transmission Development Area	The boundary within which the Onshore Transmission Infrastructure will be constructed, operated and maintained, and decommissioned.

Term	Definition
Onshore Transmission Infrastructure	Infrastructure located within the Onshore Transmission Development Area including transition bay(s); onshore export cables; onshore substation; temporary construction compounds; temporary working areas; environmental mitigation areas; drainage/irrigation infrastructure; access works; and any other associated infrastructure (including activities associated with the Onshore Transmission Infrastructure construction, operation and maintenance, and decommissioning).
Operational life	The expected operational life of the Wind Farm Infrastructure from the Commercial Operation Date to the first floating offshore unit being decommissioned.
Overplanting	The installation of additional capacity over and above that which the wind farm can supply to the National Electricity Transmission System, to allow additional renewable energy to be generated and supplied during times of lower wind speed or during wind turbine generator maintenance, than would otherwise have been the case.
ScotWind	A Crown Estate Scotland leasing round for offshore wind projects in which the process enabled developers to apply for seabed rights to plan and build wind farms in Scottish waters.
Scour protection	Protective material positioned around anchors to avoid sediment being eroded as a result of the flow of water.
Site preparation works	<p>Preparatory activities undertaken within the Wind Farm Development Area prior to the commencement of construction of the Wind Farm Infrastructure, which may comprise (and which may require separate consents):</p> <ul style="list-style-type: none"> ▪ Geophysical surveys, geotechnical surveys, and non-archaeological/archaeological diver/ remotely operated vehicle surveys; ▪ Seabed preparation including sand wave levelling, slope levelling for gravity based anchors (if selected), boulder clearance, and pre-lay grapnel runs; ▪ Unexploded ordnance survey and/or clearance; ▪ Debris clearance; and ▪ Out of service cable/pipeline removal.
SSEN Transmission Hurlie substation	The onshore substation to be developed by SSEN Transmission, which will receive renewable electricity from the Bellrock Project onshore substation and allow supply of renewable electricity from the wind farm to the National Electricity Transmission System.
Static inter-array cable	The section of inter-array cable that is not designed to move.
Station keeping system	The system (including mooring lines and anchors) used to hold a floating substructure within its excursion limit and maintain the intended orientation of the floating substructure.
Subsea cable hub	A subsea device, with a gravel pad foundation, which allows the connection of multiple inter-array cables.
Switchgear	Electrical equipment used to control, protect, and isolate electrical circuits and equipment.

Term	Definition
Project design envelope	Includes all relevant technical, spatial and temporal elements of the Wind Farm Infrastructure, and the proposed methodology to be employed for construction, operations and maintenance, and decommissioning.
Temporary construction compound	Area within the Onshore Transmission Development Area used temporarily to support the construction and commissioning, which may include (but not limited to) office, welfare and workshop facilities; vehicle parking; spoil, material and equipment laydown and/or storage; drainage infrastructure; wheel washing facilities; and lighting, fencing and security.
Towing	Transportation of a floating offshore unit or floating substructure between a port, and/or wet storage and/or the Wind Farm Development Area.
Transition bay	An underground structure at the landfall accessed by manhole or other means which accommodates the jointing of the offshore export cables and the onshore export cables. A fence may be installed around the access manhole for protection.
Wet storage	The temporary storage/anchorage of floating substructures and/or floating offshore units prior to their transportation to the relevant Wind Farm Development Area/Offshore Transmission Development Area.
Wind Farm Development Area	The boundary within which the Wind Farm Infrastructure will be constructed, operated and maintained, and decommissioned.
Wind Farm Infrastructure	Infrastructure located within the Wind Farm Development Area including wind turbine generators; floating substructures, station keeping systems and associated scour protection; inter-array cables and associated cable protection; subsea cable hubs; and ancillary infrastructure including buoys (including activities associated with the Wind Farm Infrastructure construction, operation and maintenance, and decommissioning).
Wind turbine generator	A wind turbine generator converts wind energy into electrical energy. The main components include rotor assembly (composed of three blades and a hub); nacelle (containing the generator, shaft and gearbox, power electronic converter and transformer); and a tower (containing lifting equipment and switchgear).

Glossary of Abbreviations

Term	Definition
CES	Crown Estate Scotland
CEA	Cumulative Effects Assessment
CMS	Construction Method Statement
DP	Decommissioning Programme
EEA	European Economic Area
EIA	Environmental impact assessment
GB	Great Britain
GP	General Practitioner
GVA	Gross value added
GW	Gigawatt
H&S	Health and safety
INTOG	Innovation and Targeted Oil and Gas
MARPOL	International Convention for the Prevention of Pollution from Ships
MAU	Marine Analytical Unit
MD-LOT	Marine Directorate – Licensing and Operations Team
NPV	Net present value
NRS	National Records of Scotland
OTDA	Offshore transmission development area
ONS	Office for National Statistics
OnTDA	Onshore Transmission Development Area
OWIC	Offshore Wind Industry Council
rUK	Rest of the UK
SCDS	Supply Chain Development Statement
SEIA	Socioeconomic Impact Assessment
SKS	Station keeping systems
UK	United Kingdom
WFDA	Wind Farm Development Area

This page is intentionally blank

16 Socioeconomics, Tourism and Recreation

16.1 Introduction

1. This Chapter of the Bellrock Wind Farm Development Area (WFDA) Environmental Impact Assessment (EIA) Report presents an assessment of potential effects on socioeconomics, tourism and recreation arising from the construction, operation and maintenance (O&M), and decommissioning of the Bellrock Wind Farm Infrastructure.
2. The Bellrock Project is being delivered by Bellrock Offshore Wind Farm Limited (the Applicant) and comprises three Development Areas, for which separate consents and/or licences will be sought:
 - The Bellrock WFDA, within which the Bellrock Wind Farm Infrastructure will be constructed, operated and maintained, and decommissioned. This includes wind turbine generators (WTGs); floating substructures (FSS), station keeping systems (SKSs) and associated scour protection; inter-array cables (IACs) and associated cable protection; subsea cable hubs; and ancillary infrastructure including buoys. Further details on the Bellrock Wind Farm Infrastructure is provided in **Chapter 4: Project Description (Volume II)**.
 - The Bellrock Offshore Transmission Development Area (OfTDA), within which the Offshore Transmission Infrastructure will be constructed, operated and maintained, and decommissioned. This includes fixed bottom and/or FSS offshore substation(s) and associated scour protection; interconnector cables and associated cable protection; offshore export cable(s) and associated cable protection; and a reactive compensation station(s).
 - The Bellrock Onshore Transmission Development Area (OnTDA), within which the Onshore Transmission Infrastructure will be constructed, operated and maintained, and decommissioned. This includes transition bay(s); onshore export cables; onshore substation; temporary construction compounds; temporary working areas; environmental mitigation areas; drainage/irrigation infrastructure; and road/footpath improvements and/or diversions.
3. The Bellrock Project will connect into the National Electricity Transmission System at the proposed SSEN Transmission Hurlie substation, west of Stonehaven, Aberdeenshire.
4. **Chapter 16: Socioeconomics, Tourism and Recreation** considers the potential impacts of the Bellrock Wind Farm Infrastructure alone, with the whole Bellrock Project considered in **Appendix 16.2: Economic Impact of the Bellrock Project (Volume IV)**. This approach was agreed with Aberdeenshire Council, whilst MD-LOT confirmed a nil response (**Table 16.2**). Sufficient worst-case information concerning the proposed Bellrock OfTDA and Bellrock OnTDA has been included in this Bellrock WFDA EIA Report (see **Chapter 4: Project Description (Volume II)**) to understand the potential effects of the Bellrock Project as a whole for these receptors.

5. Specifically, this Chapter includes assessments of:
 - Socioeconomics, tourism, and recreation, quantifying the increase in employment and gross value added (GVA) generated by the Bellrock Wind Farm Infrastructure, and assessing associated social impacts (e.g. demographics and local services, as set out in **Section 16.7**) and potential effects on tourism and recreation receptors; and
 - Whole-project economic impact, providing a high-level assessment of the combined economic contribution of the Bellrock Project (i.e. WFDA, OfTDA, and OnTDA). This is presented in detail in **Appendix 16.2: Economic Impact of the Bellrock Project (Volume IV)**. The Cumulative Effects Assessment (CEA) is presented in **Section 16.9** of this Chapter.
6. The whole project assessment for these receptors will be updated in the future OfTDA and OnTDA EIA Reports, taking account the OfTDA and OnTDA project design envelope at the time of the OfTDA and OnTDA consent applications, and any project design envelope refinements to the Bellrock WFDA EIA Report.
7. This Chapter should be read alongside the following chapters of the Bellrock WFDA EIA Report:
 - **Chapter 11: Commercial Fisheries (Volume II)**;
 - **Chapter 12: Shipping and Navigation (Volume II)**;
 - **Chapter 14: Marine Infrastructure and Other Users (Volume II)**; and
 - **Chapter 15: Marine Archaeology and Cultural Heritage (Volume II)**.
8. The socioeconomics, tourism and recreation assessment is likely to have inter-relationships with the above chapters, which have been considered where relevant throughout this Bellrock WFDA EIA Report.
9. Additional information to support this socioeconomics, tourism and recreation assessment includes:
 - **Appendix 16.1: Socioeconomics, Tourism and Recreation Technical Report (Volume IV)** which provides more detail on the methodology used to develop the baseline, and the methodology used to quantify the economic impacts associated with the Bellrock Wind Farm Infrastructure; and
 - **Appendix 16.2: Economic Impact of the Bellrock Project (Volume IV)** which presents the combined economic impacts of the Bellrock Wind Farm Infrastructure, the Offshore Transmission Infrastructure located within the Bellrock OfTDA, and the Onshore Transmission Infrastructure located within the Bellrock OnTDA, considered together as the Bellrock Project.
 - **Appendix 16.3: Socioeconomics Consultation Correspondence (Volume IV)** which presents the full consultation correspondence regarding the agreement of the assessment methodology with Aberdeenshire Council.
10. This Chapter and associated appendices were prepared by BiGGAR Economics Limited.

16.2 Legislation, Policy and Guidance

11. There is no legislation directly relevant to socioeconomics, tourism and recreation assessments. **Table 16.1** describes the policy and guidance which have been considered in the preparation of this Chapter. The overarching policy and legislation relevant to the Bellrock WFDA is described in **Chapter 2: Policy and Legislative Context (Volume II)**.
12. Legislation referred to in this EIA Report includes subsequent amendments in force as at the date of writing this EIA Report.

Table 16.1: Summary of Relevant Policy and Guidance for Socioeconomics, Tourism and Recreation

Relevant Policy/Guidance	Relevance to the Assessment
UK Level Policy	
<p>The Offshore Wind Industrial Growth Plan (Renewable UK, OWIC, Crown Estate Scotland (CES), 2024)</p> <p>Sets out the supply chain opportunities arising from the growth in the United Kingdom's (UK) offshore wind supply chain. It also includes a series of initiatives to support technology development and collaboration across the sector.</p>	<p>This plan sets out the strategic opportunities for the UK supply chain, which directly informs the assessment of potential economic impacts from the Wind Farm Infrastructure (Section 16.7.3) and the cumulative effects from the wider project pipeline (Section 16.9).</p>
<p>Clean Action Power Plan 2030 (UK Government 2024)</p> <p>Sets out targets for the development of offshore wind across the UK of between 43 and 50 gigawatts (GW).</p>	<p>The expansion in offshore wind capacity to 2030 will contribute to supply chain development, with potential benefits for the development of the Bellrock WFDA.</p>
<p>The Offshore Wind Sector Deal (UK Government, 2020)</p> <p>Sets out the UK Government's aim to support the development of offshore wind energy generation in the UK and emphasise the benefit from the opportunities presented by the expansion of the sector.</p>	<p>The Offshore Wind Sector Deal is linked to the development of a supply chain for offshore wind projects, which informs the assessment in Section 16.7.3.</p>
Scottish Government Policy	
<p>Scotland's National Marine Plan (Scottish Government, 2015)</p> <p>The overarching guidance for the planning and consenting of offshore wind projects in Scotland. With regards to socioeconomics, it sets out a series of objectives, including around maximising economic benefits through a competitive local supply chain in Scotland.</p>	<p>The economic impacts from the Wind Farm Infrastructure in Scotland are set out as part of Section 16.7.3.</p> <p>It should be noted that this plan is currently under review (see 'National Marine Plan 2' below).</p>
<p>The National Marine Plan 2 Planning Position Statement (Scottish Government, 2024g)</p> <p>Sets out the proposed high-level objectives and policy ideas for the new National Marine Plan. It</p>	<p>While NMP2 is not yet adopted, this statement signals the future direction of marine planning policy in Scotland. The assessment acknowledges these emerging priorities, particularly regarding the co-existence of marine users and the maximisation of</p>

Relevant Policy/Guidance	Relevance to the Assessment
<p>outlines a 'Blue Economy' approach, focusing on climate change mitigation, nature recovery, and sustainable economic growth.</p>	<p>sustainable economic benefits outlined in Section 16.7.3 of this Chapter.</p>
<p>Scottish Government Offshore Wind Policy Statement (Scottish Government, 2020a)</p>	<p>This statement sets out the Scottish Government's specific policy for the sector. It is a material consideration for demonstrating how the Bellrock WFDA contributes to Scotland's strategic energy and economic goals.</p>
<p>Scottish Government Update to the 2020 Offshore Wind Policy Statement: Scotland's Offshore Wind Ambition (Scottish Government, 2026)</p>	<p>In January 2026, the Scottish Government significantly increased its offshore wind ambition to 40 GW of new offshore wind capacity by 2040, in addition to the already operational or consented capacity emphasising energy security and a £100 billion economic opportunity driven largely by floating wind technology.</p> <p>This updated ambition:</p> <ul style="list-style-type: none"> • Reaffirms our commitment to supporting the delivery of the existing project pipeline, including ScotWind and INTOG projects. • Clarifies that no further offshore wind leasing rounds are planned in the near term. • Establishes a clear and realistic timescale – 2040 – rather than 2035-2040. <p>The update reaffirms the government's commitment to supporting the delivery of the existing project pipeline, which includes the Bellrock Project (listed as a project with a lease awarded for 1.8 GW).</p>
<p>Sectoral Marine Plan for Offshore Wind Energy (Scottish Government, 2020b)</p>	<p>The Sectoral Marine Plan provides the spatial planning framework for offshore wind in Scottish waters. It is a key planning document for identifying areas of opportunity and managing potential conflicts with other marine users, such as commercial fisheries.</p> <p>The 2020 SMP is undergoing review to reflect the ScotWind and Innovation and Targeted Oil and Gas (INTOG) leasing rounds and is anticipated to be published in summer 2026.</p>
<p>The Draft Updated Sectoral Marine Plan for Offshore Wind Energy (Scottish Government, 2025b)</p> <p>On adoption, will update the 2020 Plan. It will provide the strategic spatial plan for offshore wind in Scotland.</p>	<p>This plan will (on adoption) confirm the strategic designation of the Bellrock site as a commercial offshore wind development area (identified as Option Area E1B). It provides the context for the 'Need for the Project' and establishes the national baseline for assessing cumulative socio-economic effects in Section 16.9.</p>
<p>National Planning Framework 4 (Scottish Government, 2023a)</p> <p>Sets out a national and strategic approach to planning and development in support of achieving net zero in Scotland by 2045.</p>	<p>Policy 11 (Energy) encourages renewable energy developments that maximise net economic impact, including supply chain opportunities. Policy 25 (Community Wealth Building) supports developments that contribute to local economic priorities. These policies directly inform the assessment of economic and social effects in Section 16.7.3.</p>

Relevant Policy/Guidance	Relevance to the Assessment
<p>The Green Industrial Strategy (Scottish Government, 2024a)</p> <p>Aims to help Scotland realise the economic benefits of the global transition to net zero. The strategy highlights offshore wind as the first opportunity and the role that the existing pipeline of projects will have in attracting supply chain investment.</p>	<p>The economic impacts from the Wind Farm Infrastructure in Scotland are set out as part of Section 16.7.3. Potential cumulative impacts from the existing pipeline of projects are set out in Section 16.9.</p>
<p>The Scottish Government's Offshore Wind Focus (Scottish Government, 2024b)</p> <p>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.</p>	<p>The economic impacts from Wind Farm Infrastructure in Scotland are set out as part of Section 16.7.3. Potential cumulative impacts from the existing pipeline of projects are set out in Section 16.9.</p>
<p>The Programme for Government 2025-26 (Scottish Government, 2025a)</p> <p>References the Green Industrial Strategy and the activities that the Scottish Government will take to enable the transition and support the maximisation of socioeconomic benefits to Scotland.</p>	<p>The impact from the Wind Farm Infrastructure on the Scottish economy is set out in Section 16.7.3.</p>
<p>The National Strategy for Economic Transformation (Scottish Government, 2022b)</p> <p>Sets out the Scottish Government's vision to create a wellbeing economy where society thrives across economic, social and environmental dimensions, and benefits from the opportunity the transition to net zero presents.</p>	<p>How the Wind Farm Infrastructure supports economic activity is included in Section 16.7.3.</p>
Local/Regional Policy	
<p>Aberdeenshire Energy Developments Community Wealth Building Charter (2025).</p> <p>This Charter sets out the expectations for developers to contribute to the local economy and community wealth, emphasising the importance of supply chain engagement and shared benefits.</p>	<p>The assessment considers how the impact from the Bellrock Project aligns with some of principles of community wealth building, particularly in the assessment of supply chain impacts Appendix 16.2.</p>
Guidance	
<p>Defining 'local areas' for assessing the economic impact of offshore renewables and other marine developments: guidance principles (Scottish Government, 2022a).</p> <p>This Scottish Government guidance provides a set of principles for defining appropriate geographic "local areas" to ensure a consistent</p>	<p>This guidance is directly relevant as it provides the official Scottish Government methodology for defining the local study areas that must be used in the socioeconomic impact assessment (SEIA).</p>

Relevant Policy/Guidance	Relevance to the Assessment
<p>and proportionate approach when assessing the economic impacts of marine developments.</p>	
<p>General Advice for Offshore SEIA, Marine Analytical Unit (MAU) (Marine Management Organisation, 2022).</p> <p>This document offers technical advice from the UK Government's MAU on best practices for conducting SEIAs for offshore developments, covering topics like data sources, methodologies, and presentation of results.</p>	<p>This guidance is relevant as it outlines the expected technical standards and analytical approaches that should be followed to ensure the assessment is robust and credible.</p>
<p>Annex 1: General Advice for Socio-Economic Impact Assessment (MAU), Marine Directorate, December 2023)</p> <p>Provided as part of the Scoping Opinion, this advice sets out the Scottish Ministers' specific requirements for SEIA. It covers best practice for defining study areas, establishing a 'do nothing' baseline, and engaging with communities to verify social impacts.</p>	<p>This guidance is the primary methodological standard for this assessment. It directly informs the approach taken to defining the local study areas and the requirement to consider both quantitative economic data and qualitative social impacts in Section 16.8.</p>
<p>The Green Book: Appraisal and Evaluation in Central Government (HM Treasury, 2022).</p> <p>The Green Book is the UK Government's official guidance on how to appraise and evaluate policies, projects, and programmes to ensure a consistent and rigorous approach to determining public value.</p>	<p>This guidance is relevant as it provides the best practice methodology for economic appraisal, including the standard discount rates that should be used when calculating the net present value (NPV) of long-term economic impacts.</p>

16.3 Consultation

16.3.1 Consultation to Date

13. Consultation undertaken to date for the Bellrock WFDA relevant to socioeconomics, tourism and recreation has been undertaken in line with the general process described in **Chapter 5: EIA Methodology (Volume II)**. Key consultation pertinent to this Chapter is provided in **Table 16.2** below.

Table 16.2: Consultation Relevant to Socioeconomics, Tourism and Recreation

Consultee	Date/Document	Comment	How/Where Comment is Addressed
MD-LOT	Bellrock WFDA Scoping Opinion (2024)	The Scottish Ministers advise that they are broadly content with the study areas as detailed in Section 16.4.1 of Appendix 1.1: Bellrock WFDA Scoping Report (Volume IV) (Bellrock Offshore Wind Ltd, 2024) however in line with MD-SEDD socioeconomics advice, they advise that the assessment of socio-economic impacts would benefit from the inclusions of a short list of potential epicentres of impact. In addition, the MD-SEDD socioeconomics advice in relation to scenario mapping must be fully addressed in the Bellrock WFDA EIA Report.	Given that the Bellrock Project is in the early stage of construction and O&M port selection, the assessment of socioeconomic impacts, in Section 16.8 has included a description of potential impacts for a number of indicative port locations, which are the potential epicentres of impact.
	Bellrock WFDA Scoping Opinion (2024)	The Scottish Ministers advise that the most up to date data sources must be used for all analysis and direct the Developer to the MD-SEDD socioeconomics advice in this regard.	The most up-to-date data sources have been used for the baseline and assessment of effects and are listed in Section 16.5.2 .
	Bellrock WFDA Scoping Opinion (2024)	In line with the MD-SEDD socioeconomics advice, the Scottish Ministers advise that a full Socio-Economic Impact Assessment (“SEIA”) must be included with the Bellrock WFDA EIA Report and should be transparent in its methodological choices for assessment of socioeconomic impacts. The Scottish Ministers draw attention to Annex 1 of the MD-SEDD socioeconomics advice which may be of assistance when developing the SEIA.	An assessment has been undertaken and is presented in Section 16.8 . This assessment aligns with the methodological advice provided in Annex 1 of the MD-SEDD guidance. The specific methodological choices, including the definition of study areas and significance criteria, are transparently set out in Section 16.4 and detailed further in Appendix 16.1: Socioeconomics, Tourism and Recreation Technical Report (Volume IV) .
	Bellrock WFDA Scoping Opinion (2024)	In Table 16.5 of the Bellrock WFDA Scoping Report the Developer summarises the potential impacts to Offshore Socio-Economics during the different phases of the Proposed Development. The Scottish Ministers broadly agree with the impacts scoped in and out however, advise that socio-cultural impacts, tourism and recreation must be scoped in and fully assessed in the Bellrock WFDA EIA Report. This is in line with the MD-SEDD socioeconomics advice.	The socio-cultural impacts and tourism and recreation impacts have been assessed in Section 16.8 .

Consultee	Date/Document	Comment	How/Where Comment is Addressed
	Bellrock WFDA Scoping Opinion (2024)	In relation to social impacts, the Scottish Ministers advise that their current position is that the Developer should consider potential impacts on local communities as a result of the Proposed Development and outline how baseline data will be collected to assess impacts in the future. The Scottish Ministers are considering this position and, should this develop or change, the Developer will be notified.	<p>Given that the Bellrock Project is in the early stage of construction and O&M port selection, the assessment of socioeconomic impacts in Section 16.8 has included a description of potential impacts for a list of indicative port locations. For each of these indicative port locations, a specific local study area has been defined, and the potential impacts on the host communities within those study areas will be assessed.</p> <p>Additionally, the impacts on employment and GVA are assessed by considering any significant impacts on commercial fisheries and shipping found within the following chapters:</p> <ul style="list-style-type: none"> ▪ Chapter 11: Commercial Fisheries (Volume II); and ▪ Chapter 12: Shipping and Navigation (Volume II). <p>The baseline data for each of these indicative local study areas has been compiled using established, publicly available sources, primarily from the National Records of Scotland (NRS) and the Office for National Statistics (ONS). This desk-based approach provides the necessary evidence to undertake a proportionate and robust assessment of the potential social impacts for each of the possible scenarios.</p>

Consultee	Date/Document	Comment	How/Where Comment is Addressed
	Bellrock WFDA Scoping Opinion (2024)	In relation to economic impacts, the Scottish Ministers are broadly content with the proposed assessment approach as detailed in Section 16.7 of the Scoping Report, however, recommend that the Developer include additional analysis regarding potential job creation in comparison to existing jobs in the study area, as outlined in the MD-SEDD socioeconomics advice. In addition, the Scottish Ministers agree with the MD-SEDD socioeconomics advice that a detailed description of the methodology used to assess economic impacts must be included in the EIA, outlining the methodological approach taken and any key assumptions that underpin any estimates.	The assessment at Section 16.8 considers the creation of employment in relation to existing employment within the socioeconomic study areas. A detailed description of the economic impact methodology is given in Appendix 16.1: Socioeconomics, Tourism and Recreation Technical Report (Volume IV) .
Marine Directorate SEDD Advice	Representation on the Bellrock WFDA Scoping Report (2024)	<p>Study Areas</p> <p>The assessment should include a short-list of potential "epicentres of impact" (e.g. ports) to help define affected communities.</p>	Given that the Bellrock Project is in the early stage of construction and O&M port selection, the assessment of socioeconomic impacts at Section 16.8 has included a description of potential impacts for a list of indicative port locations, which are the potential epicentres of impact.
	Representation on the Bellrock WFDA Scoping Report (2024)	<p>Consultation and Primary Data Collection</p> <p>The MAU strongly recommends direct engagement and primary data collection with local communities, businesses, and other stakeholders, rather than limiting consultation to local authorities. This is crucial for assessing social impacts and should be undertaken by trained social researchers.</p>	<p>Regarding potential social impacts on port communities and given that the Bellrock Project is in the early stage of construction and O&M port selection, gathering primary data gathering is not practical at every potential port location and could result in stakeholder fatigue.</p> <p>However, the Applicant is supporting an industry wide primary research data gathering programme that is in the process of being commissioned by Crown Estate Scotland and the Scottish Offshore Wind Energy Council.</p>
	Representation on the Bellrock WFDA Scoping Report (2024)	<p>Data Sources</p> <p>The EIA should provide a list of all data sources used. The assessment should not rely on external literature in place of project-specific primary social research.</p>	A full list of data sources is provided throughout this Chapter and in Appendix 16.1: Socioeconomics, Tourism and Recreation Technical Report (Volume IV) and in Section 16.5.2 . The assessment is based on the most up-to-date secondary data available.

Consultee	Date/Document	Comment	How/Where Comment is Addressed
	Representation on the Bellrock WFDA Scoping Report (2024)	<p>Scoping of Social Impacts</p> <p>The MAU disagrees with the scoping out of socio-cultural impacts. These should be scoped into the assessment. Collaborative approaches with other developers are encouraged to mitigate survey fatigue.</p>	In line with this advice, an assessment of the significance of effects at a list of indicative port locations is given in Section 16.8 .
	Representation on the Bellrock WFDA Scoping Report (2024)	<p>Scoping of Tourism Impacts</p> <p>The MAU disagrees with the scoping out of tourism and recreation impacts related to increased activity at ports and harbours. These should be scoped in.</p>	In line with this advice, the assessment of effects on tourism and recreation is considered in Section 16.8 .
	Representation on the Bellrock WFDA Scoping Report (2024)	<p>Economic Impacts Methodology</p> <p>The MAU agrees with the proposed economic impact methodology (direct, indirect, induced, and additionality). The assessment would be enhanced by providing additional detail on the <i>types</i> of jobs created (e.g. skilled, full-time). The full methodology should be detailed in the report or a technical annex.</p>	The economic impact assessment in Section 16.8 includes an analysis of the jobs expected to be generated. A detailed description of the economic impact methodology is given in Appendix 16.1: Socioeconomics, Tourism and Recreation Technical Report (Volume IV) .
MD-LOT	<p>July 2025</p> <p>Letter: Consultation for the Bellrock Offshore Wind Farm - Wind Farm Development Area environmental impact assessment - Methodology for the Socioeconomics, Tourism and Recreation Assessment (Bellrock Offshore Wind Farm Limited, 2025)</p>	MD-MAU confirmed a nil response as it does not provide advice post-scoping.	Noted.

Consultee	Date/Document	Comment	How/Where Comment is Addressed
<p>Aberdeenshire Council</p>	<p>July 2025 Letter: Consultation for the Bellrock Offshore Wind Farm - Wind Farm Development Area environmental impact assessment - Methodology for the Socioeconomics, Tourism and Recreation Assessment (Bellrock Offshore Wind Farm Limited, 2025)</p>	<p>Aberdeenshire Council confirmed agreement with the proposed methodology</p>	<p>As outlined in Chapter 4: Site Selection and Alternatives (Volume II), the Bellrock Project was required to change its grid connection from an offshore coordinated hub to an onshore radial connection (connecting to the Hurlie substation) resulting in the addition of Onshore Transmission Infrastructure. Consequently, the approach to this SEIA was revised from what was presented within the Bellrock WFDA Scoping Report (Bellrock Offshore Wind Farm, 2024). To ensure 'whole project' assessments, the socioeconomic assessment includes the OnTDA, in addition to the OfTDA. The Applicant consulted with the MAU and Aberdeenshire Council regarding the revised approach to the socioeconomics assessment. No stakeholders have raised any concerns with regards to these changes in approach.</p> <p>The proposed methodology outlined in the consultation letter has been described in more detail in Section 16.4 and then applied in Section 16.7.3. The consultation correspondence regarding this is provided in Appendix 16.3: Socioeconomics Consultation Correspondence (Volume IV).</p>

This page is intentionally blank

16.3.2 Future Consultation

14. The Applicant will develop the Vessel Management and Navigational Safety Plan (VMNSP). The Outline VMNSP (**Volume V**) sets out the mechanism of engagement required with mariners prior to the site preparation works, construction, O&M and decommissioning. Communication will be carried out primarily through the Local Notifications to Mariners (NtMs) which will be issued in advance of any activity associated with the Bellrock Wind Farm Infrastructure and may impact upon navigational safety. The Applicant will issue Local Notice to Mariners (Local NtM) to a list of relevant local and national stakeholders. The list will be regularly updated to ensure contact details remain up to date.
15. The Applicant will develop the Stakeholder Engagement Plan, which will set out the framework for ongoing communication with local authorities, community councils, and other relevant stakeholders throughout the project lifecycle. This plan will ensure the timely dissemination of information regarding project activities, particularly within the communities hosting the construction and O&M port(s), to facilitate the collaborative management of potential social impacts and opportunities.
16. The Applicant will proactively engage with potential suppliers to build local supply chain capacity. The Applicant will work with other developers, the Scottish Government, and key stakeholders to assist in addressing barriers to local supply chain participation, with the aim of supporting and enhancing the participation of local businesses.
17. The Energy Pathfinder¹ (or similar initiative) will be utilised to ensure visibility of relevant opportunities for Scottish and UK suppliers to bid for work. This measure will ensure opportunities for supply chain spending in Scotland and the UK are maximised.
18. The Applicant will also collaborate with local and national agencies on enterprise and skills development programmes to train and upskill the workforce and ensure local residents have access to the opportunities created.

16.4 Assessment Methodology

16.4.1 Impact Assessment Methodology

19. The socioeconomics, tourism and recreation assessment of effects has followed the general methodology set out in **Chapter 5: EIA Methodology (Volume II)**. This assessment uses the conceptual 'source-pathway-receptor' model to identify potential impacts resulting from the proposed activities on the environment and sensitive receptors within it. The remainder of this section provides specific details on the assessment methodology that has been adopted for this Chapter.

¹ Energy Pathfinder (<https://energypathfinder.nstauthority.co.uk/projects>) is a searchable database of upcoming construction and O&M contracts for North Sea oil and gas and renewable energy projects.

20. It should be noted that the methodology outlined in this Chapter represents a refinement to the approach presented in the **Appendix 1.1: Bellrock WFDA Scoping Report (Volume IV)**. This refinement was necessary to account for the inclusion of Onshore Transmission Infrastructure within the scope of this assessment. This amended approach was agreed with Aberdeenshire Council. MD-LOT was also consulted regarding this refinement and did not raise any issues, as detailed in **Section 16.3.1**.

16.4.1.1 Economic Impact Assessment

21. The economic impacts considered for each study area (defined in **Section 16.5.1**) 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 impacts, such as those associated with construction employment; and
 - **Employment (Jobs):** a measure of employment which considers the headcount employment in an organisation or industry.
22. 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).
23. Deadweight (i.e. what would have happened without the Bellrock WFDA), leakage (i.e. economic impacts occurring outside of the study areas considered) and displacement (i.e. economic activity that is being displaced by the development of the Wind Farm Infrastructure) have been considered and are discussed in **Appendix 16.1: Socioeconomics, Tourism and Recreation Technical Report (Volume IV)**.
24. The assessment for the Bellrock WFDA considers three phases:
- Construction (including development, manufacturing and fabrication, and installation);
 - O&M; and
 - Decommissioning.
25. The impacts during the construction phase have been based on the planned 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.
26. The impacts during the O&M phase of the Wind Farm Infrastructure have been based on projected O&M expenditure.

27. The employment and GVA impacts during the construction phase and, O&M phase are based on the estimate of Scottish and UK supply chain expenditure outlined in the Supply Chain Development Statement (SCDS) Outlook (Bellrock Offshore Wind Farm, 2023). The SCDS Outlook provides the commitment and ambition spend for the full Bellrock Project (i.e. Wind Farm Infrastructure, Offshore Transmission Infrastructure and Onshore Transmission Infrastructure combined) within Scotland; the rest of the UK; European Union; and the rest of the world. It should be noted that the SCDS is an iterative document that will be reviewed and amended by the Applicant throughout the development of the Bellrock Project. The 2023 SCDS is based on an installed capacity of 1.2 GW and is the latest commitment on expenditure for the Bellrock Project. It therefore presents a conservative and appropriate basis for estimating the economic impacts. More detail is provided in **Appendix 16.1: Socioeconomics, Tourism and Recreation Technical Report (Volume IV)**.
28. The impact associated with decommissioning has been based on the analysis by BVG Associates (BVG Associates, 2023 and BVG Associates, 2021). In line with His Majesty's Treasury guidance (HM Treasury, 2022), the long-term economic impacts (for the O&M, and decommissioning phases) have been presented as both total cumulative GVA (undiscounted) and NPV.
29. This Chapter assesses the economic impacts of the Wind Farm Infrastructure only. A separate assessment of the combined economic contribution of the Bellrock Project as a whole (i.e. WFDA, OfTDA and OnTDA) is provided in **Appendix 16.2: Economic impact of the Bellrock Project (Volume IV)**, using the same methodology.
30. Finally, following the primary assessment of employment and GVA impacts, the analysis further considers potential inter-related effects by referring to the significant findings identified within:
- **Chapter 11: Commercial Fisheries (Volume II)**; and
 - **Chapter 12: Shipping and Navigation (Volume II)**.

16.4.1.2 Social Impact Assessment

31. As well as generating economic impacts in each of the socioeconomic study areas (defined in **Section 16.5.1**), the Bellrock WFDA 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 Wind Farm Infrastructure.
32. Therefore, the social impact assessment aims to outline the primary pathways through which the Wind Farm Infrastructure could lead to social impacts. It focuses on the following key areas:
- Demographic changes;
 - Housing demand;
 - Impacts on other local public and private services; and
 - Socio-cultural impacts.

33. It is important to note that at this stage, predicting the precise nature and extent of the community impacts associated with the Wind Farm Infrastructure is not feasible, since the assembly, integration, O&M and decommissioning port(s) are not yet known. However, the social impacts have been assessed for the list of indicative port locations presented in **Table 16.3**.
34. The social impact assessment has focused on how communities could be affected by economic changes, and how different characteristics (such as the size of the settlement, its economic characteristics and social dynamics) will inform the types of social impacts that are experienced as well as their sensitivity to change. This is expected to vary depending on the different phases considered, e.g. in any given area a temporary increase in workers during construction will have different effects compared to a long-term increase in employment.

16.4.1.3 Tourism and Recreation Impact Assessment

35. The assessment of effects on tourism and recreation is focused on identifying potential secondary effects. These are indirect effects that occur when a primary environmental change, such as an increase in noise or a change in the landscape, influences visitor behaviour or the viability of a tourism business.
36. To identify these potential secondary effects, the findings of the following primary technical assessments will be reviewed:
- **Chapter 12: Shipping and Navigation (Volume II);**
 - **Chapter 14: Marine Infrastructure and Other Users (Volume II); and**
 - **Chapter 15: Marine Archaeology and Cultural Heritage (Volume II).**
37. Where a significant primary effect is identified in one of these chapters, this assessment will then determine whether that effect is likely to result in a significant change to tourism and recreation, relative to the baseline conditions.

16.4.2 Definitions of Sensitivity and Magnitude

38. When determining the significance of effects, a process is used which 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. Criteria for magnitude and sensitivity are considered in turn with reference to the potential impacts scoped into the assessment.
39. The socioeconomic impacts have been considered over the socioeconomic study areas to capture the spatial extent of impacts. The magnitude of impact is then considered in relation to the baseline conditions within the socioeconomic study areas.
40. Impacts on tourism and recreation activity and individual assets have been considered with reference to the tourism and recreation study areas. The magnitude of impact in relation to baseline levels of activity.

41. The frequency and temporal extent of impacts have been considered and those which occur over a short period of time (i.e. construction and decommissioning) have been described as temporary and those which occur over a longer period (i.e. O&M) have been described as permanent, though in practice this will be over the lifetime of the Wind Farm Infrastructure.

16.4.2.1 Economic Impacts

42. Between 2002 and 2024, the average level of Gross Domestic Product (GDP) per capita growth in the UK was 1% per annum (IMF, 2024). Similarly, between 2000 and 2023 the number of jobs increased by 1% per annum (ONS, 2024f).
43. The magnitude of any change in an economy should be considered within this context and in relation to the levels of economic activity within the socioeconomic study areas.
44. In addition to the change in the overall GVA or employment of an area, consideration can be made for the sectors of the economy which contribute to the economic sensitivity of the area.
45. For example, in the context of offshore wind, the construction, manufacturing and professional services sectors in an area are likely to contribute towards its sensitivity.
46. The criteria for defining the sensitivity of an economy are outlined in **Table 16.3**.
47. The sensitivity of an economy is linked to how well it can absorb change. To consider 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, these include:
- 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 and economic).

Table 16.3: Definition of the Sensitivity Levels for Economic Receptors

Value	Definition
High	<p>A highly sensitive economy that would 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:</p> <ul style="list-style-type: none"> ▪ The economy is particularly reliant on one 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	<p>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:</p> <ul style="list-style-type: none"> ▪ 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	<p>A low sensitive economy is tolerant of changes without fundamentally altering its present character or value. Factors that would contribute to an economy being considered of low sensitivity include:</p> <ul style="list-style-type: none"> ▪ 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	<p>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:</p> <ul style="list-style-type: none"> ▪ 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.

48. In the context of economic receptors, impacts are defined as:

- Beneficial, whereby they result in an increase in employment and GVA; and
- Adverse, whereby they result in a reduction in employment and GVA.

49. The criteria for defining the magnitude of beneficial or adverse impacts are outlined in **Table 16.4**.

Table 16.4: Definition of the Magnitude Levels for Economic Receptors

Sensitivity	Definition
High	<p>An impact considered to have a high magnitude if it resulted in a change in economic activity equivalent in scale to the UK's typical economic growth per capita. Specifically, for each study area:</p> <ul style="list-style-type: none"> ▪ Peak annual GVA impact is greater than, or equal to, 1% of the economy or sector; or ▪ Peak employment supported is greater than, or equal to, 1% of the total number of jobs in the area or sector.
Medium	<p>An impact considered to have a medium magnitude if it was equivalent to half of the typical economic growth per capita. Specifically, for each study area:</p> <ul style="list-style-type: none"> ▪ Peak annual GVA impact is greater than, or equal to, 0.5% but less than 1% of the economy; or ▪ Peak employment supported is greater than, or equal to, 0.5% but less than 1% of the total number of jobs.
Low	<p>An impact 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:</p> <ul style="list-style-type: none"> ▪ Peak annual GVA impact is greater than, or equal to, 0.25% but less than 0.5% of the economy; or ▪ Peak employment supported is greater than, or equal to, 0.25% but less than 0.5% of the total number of jobs.
Negligible	<p>An impact 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:</p> <ul style="list-style-type: none"> ▪ 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.
No change	<p>No measurable or discernible change from baseline conditions. The impact does not result in any alternation to the receptor.</p>

16.4.2.2 Social Impacts

50. The significance of social impacts (on demographics, changes to housing demand, changes to other local public and private services, and socio-cultural effects) is determined by assessing the magnitude of the change against the sensitivity of the receiving community.
51. The sensitivity of a community to social impacts is determined by its ability to absorb project-related change without negative effects on its population, services, and local character. This is influenced by both the demographic profile of the existing population and the capacity of local assets and services.
52. Key factors determining sensitivity include the size and current trends of the population. For instance, a large, growing community with a balanced age profile is typically less sensitive to change than a small, declining community with a higher proportion of older residents.

53. Sensitivity is also dependent on the capacity of local infrastructure to meet increased demand. A community is considered less sensitive if there is existing capacity in its housing market, schools, and other public services. The criteria for defining sensitivity of the social impacts are outlined in **Table 16.5**.

Table 16.5: Definition of the Sensitivity Levels for Social Impacts

Value	Definition
High	A community with high sensitivity will not be able to tolerate or adapt to impacts as these will result in a fundamental change in the nature of the community.
Medium	A community with medium sensitivity will have limited capacity to tolerate or adapt to impacts as these will result in a moderate change in the nature of the community.
Low	A community with low sensitivity will be able to tolerate or adapt to impacts without a change in the nature of the community.
Negligible	A community with a negligible sensitivity will be resistant to change as they will have a greater capacity to tolerate changes than the wider country.

54. The criteria for defining magnitude of the social impacts are outlined in **Table 16.6**.

Table 16.6: Definition of the Magnitude Levels for Social Impacts

Value	Definition
High	The social impact would be considered to have a high magnitude if the change in residual population was equivalent to 100% or more of the projected annual growth.
Medium	The social impact would be considered to have a medium magnitude if the change in residual population was equivalent to between 50% and 100% of the projected annual growth.
Low	The social impact would be considered to have a low magnitude if the change in residual population was equivalent to between 25% and 50% of the projected annual growth.
Negligible	The social impact would be considered to have a negligible magnitude if the change in residual population was equivalent to less than 25% of the projected annual growth.
No change	No measurable or discernible change from baseline conditions. The impact does not result in any alternation to the receptor.

55. Additional details on factors that affect magnitude and sensitivity as part of this assessment are set out in **Section 16.7**.

16.4.2.3 Tourism and Recreation Impacts

56. The impacts considered on tourism and recreation assets are changes to visitor or user behaviour and outcomes within the tourism and recreation study areas (see **Section 16.5.1**). These are the result of environmental impacts on tourism and recreation receptors, as set out in the following chapters:
- **Chapter 12: Shipping and Navigation (Volume II);**
 - **Chapter 14: Marine Infrastructure and Other Users (Volume II);** and
 - **Chapter 15: Marine Archaeology and Cultural Heritage (Volume II).**
57. Consequently, changes in visitors' behaviour and their effect on the tourism economy are secondary.
58. Impacts on tourism and recreation assets are defined as:
- Beneficial, whereby the activities associated with the construction, O&M and decommissioning of the Wind Farm Infrastructure and its associated activities results in an increase in visitor activities, either through a larger number of visits or higher spending per visit; and
 - Adverse, whereby the activities associated with the construction, O&M and decommissioning of the Wind Farm Infrastructure and its associated activities results in lower visitor activity, either through less visits or lower spending per visit.
59. The sensitivity of a tourism or recreation asset is determined by how reactive visitors, or users, of this asset are to a change in its environment (**Table 16.7**). The sensitivity may change depending on which environmental factor is being considered. For example, an asset may be highly sensitive to changes in shipping routes but have negligible sensitivity to seascape, landscape and visual impacts.
60. 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 (**Table 16.8**).

Table 16.7: Definition of the Sensitivity Levels for Tourism and Recreation Receptors

Value	Definition
High	<p>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:</p> <ul style="list-style-type: none"> ▪ 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.

Value	Definition
Medium	<p>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:</p> <ul style="list-style-type: none"> ▪ 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	<p>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:</p> <ul style="list-style-type: none"> ▪ 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 assets in response to changes in visitor or user behaviour.
Negligible	<p>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:</p> <ul style="list-style-type: none"> ▪ 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 assets in response to changes in visitor or user behaviour.

Table 16.8: Definition of the Magnitude Levels for Tourism and Recreation Receptors

Value	Definition
High	The impact on a tourism and recreation asset would be considered to have a high magnitude if it is predicted to result in a major change on the behaviour of visitors or users.
Medium	The impact on a tourism and recreation asset would be considered to have a medium magnitude if it is predicted to result in a moderate change on the behaviour of visitors or users.
Low	The impact on a tourism and recreation asset would be considered to have a low magnitude if it is predicted to result in a minor change on the behaviour of visitors or users.
Negligible	The impact on a tourism and recreation asset would be considered to have a negligible magnitude if it is predicted to result in a marginal change on the behaviour of visitors or users.
No change	No measurable or discernible change from baseline conditions. The impact does not result in any alternation to the receptor.

16.4.3 Effect Significance

61. The potential significance of effect for a given impact, is a function of the overall sensitivity and the magnitude of the impact (see **Chapter 5: EIA Methodology (Volume II)** for further details).
62. The sensitivity of the receptor and the magnitude of the impact are combined when determining the significance of the effect upon socioeconomics, tourism and recreation receptors. The particular method employed for this assessment is presented in **Table 16.9**, **Table 16.10**, and **Table 16.11**.
63. Where a range is suggested for the significance of effect, for example, minor to moderate, it is possible that this may span the significance threshold. The technical specialist's professional judgement has been applied to determine which outcome defines the most likely effect, which takes in to account the sensitivity of the receptor and the magnitude of impact. Where professional judgement is applied to quantify final significance from a range, the assessment will set out the factors that result in the final assessment of effects. These factors may include the likelihood that an effect will occur, data certainty and relevant information about the wider environmental context.
64. The EIA Regulations require the identification and reporting of significant environmental effects. For the purposes of this assessment:
 - A level of moderate or more will be considered a 'significant' effect in terms of the EIA Regulations; and
 - A level of minor or less will be considered 'not significant' in terms of the EIA Regulations.

Table 16.9: Matrix for Evaluating the Significance of an Effect (Adverse or Beneficial)

Sensitivity	Magnitude				
	High	Medium	Low	Negligible	No Change
High	Major	Major	Moderate	Minor	No effect
Medium	Major	Moderate	Minor	Negligible	No effect
Low	Moderate	Minor	Minor	Negligible	No effect
Negligible	Minor	Negligible	Negligible	Negligible	No effect

Table 16.10: Definitions of Effect Significance (Adverse)

Effect Significance	Definition
Major	Effects of the greatest magnitude on receptors of highest sensitivity. These effects represent a fundamental change to the baseline condition and are considered significant in terms of the EIA Regulations.
Moderate	Effects of considerable magnitude on receptors of high or medium sensitivity. These effects represent a material change to the baseline condition and are considered significant in terms of the EIA Regulations.
Minor	Effects of slight magnitude on receptors of lower sensitivity. These effects are detectable but generally localised or temporary. They are considered not significant in terms of the EIA Regulations.
Negligible	Effects that are imperceptible, within normal bounds of variation, or within the margin of forecasting error. These are considered not significant in terms of the EIA Regulations.
No Effect	There is no change to the baseline conditions.

Table 16.11: Definitions of Effect Significance (Beneficial)

Effect Significance	Definition
Major	Beneficial effects of the greatest magnitude on receptors of highest sensitivity. These effects represent a fundamental improvement to the baseline condition and are considered significant in terms of the EIA Regulations.
Moderate	Beneficial effects of considerable magnitude on receptors of high or medium sensitivity. These effects represent a material improvement to the baseline condition and are considered significant in terms of the EIA Regulations.
Minor	Beneficial effects of slight magnitude on receptors of lower sensitivity. These effects are detectable but generally localised or temporary. They are considered not significant in terms of the EIA Regulations.
Negligible	Beneficial effects that are imperceptible, within normal bounds of variation, or within the margin of forecasting error. These are considered not significant in terms of the EIA Regulations.
No Effect	There is no change to the baseline conditions.

16.4.4 Cumulative Effects Assessment Methodology

16.4.4.1 Methodology

65. The CEA considers the likely significant effects of impacts arising from the Bellrock Wind Farm Infrastructure cumulatively with other relevant plans, projects and activities.
66. In line with the methodology set out in **Chapter 5: EIA Methodology (Volume II)**, three tiers have been applied to the Bellrock WFDA CEA. As the site selection process for the Bellrock OfTDA and

OnTDA is ongoing (see **Chapter 4: Project Description (Volume II)** for details), activities and infrastructure associated with the Bellrock OfTDA and Bellrock OnTDA will be treated as 'other projects' for the purposes of the CEA, but have been considered within Tier 1 where relevant, due to their essential requirement for the function of the Bellrock Project.

67. It is noted that for the socioeconomics, tourism and recreation cumulative impact assessment, the combined economic impact of the WFDA, OfTDA and OnTDA has also been presented as a 'whole project' assessment in **Appendix 16.2: Economic Impact of the Bellrock Project (Volume IV)** to provide context on the total economic scale of the entire Bellrock Project. This reflects the fact that each component part is integral to the delivery of the Bellrock Project and would not be taken forward in isolation. However, to ensure consistency with the wider Bellrock WFDA EIA Report, the CEA presented in **Section 16.9** follows the tiered approach defined below.
68. The three tiers for CEA are:
- Tier 1 assessment: The Bellrock WFDA plus plans/projects which are operational, under construction, those with consent and with a consent application submitted but not yet determined, plus the Bellrock OfTDA and Bellrock OnTDA;
 - Tier 2 assessment: The Bellrock WFDA plus all plans/projects assessed under Tier 1, plus those projects with a Scoping Report and/or Scoping Opinion; and
 - Tier 3 assessment: The Bellrock WFDA plus all plans/projects assessed under Tier 1 and Tier 2, plus those projects likely to come forward where a CES Option to Lease Agreement or equivalent has been granted.
69. The specific projects considered within the CEA for socioeconomics, tourism and recreation have been identified from the project-wide cumulative long list. Reference is made to **Table 7.4: CEA Long List of Projects and Plans** within the **Cumulative Effect Assessment: Project Long List (Volume II)**. Specifically, this assessment considers all offshore wind energy development projects within Scottish and UK waters.

16.4.5 Transboundary Effects Assessment Methodology

70. The transboundary effects assessment considers the potential for effects to occur as a result of the Wind Farm Infrastructure on socioeconomics, tourism and recreation receptors within the Exclusive Economic Zone of other European Economic Area (EEA) member states or other interests of EEA member states.
71. For socioeconomics, tourism and recreation, there is no potential for impacts on transboundary receptors, and therefore, transboundary effects have been scoped out.

16.5 Scope of the Assessment

16.5.1 Study Area

72. The socioeconomics, tourism and recreation study areas used within this Chapter have been defined in line with the guidance on identification of 'local areas' for offshore developments published by Marine Scotland (Scottish Government, 2022a).
73. This guidance identifies six principles for identifying study areas for offshore renewables and other marine developments. The principles consider the main locations where socioeconomic impacts will occur and have been applied to the assessment. The principles are:
- **Principle 1 (Dual Geographies)** - The local area for the supply chain and investment impacts should be separate from the local area(s) for wider socioeconomic 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.
74. In line with this guidance, the study areas for the socioeconomic impacts are different from those used for the assessment of tourism and recreation impacts.
75. The tourism and recreation study area is defined functionally based on the extent of secondary effects, rather than as a fixed geographical boundary. Due to the distance from shore (>120 km), there cannot be a visual effect on coastal tourism. And, as detailed in **Section 16.4.1**, the study area corresponds to the physical scope of the primary effects identified in other chapters (e.g. Shipping, Fisheries). If no significant effect is found in those chapters (as confirmed in **Section 16.8.1.6**), the study area for tourism effects is effectively null.
76. For socioeconomics study area, the main local epicentres of impact are expected to be the port(s) used during the construction, O&M, and decommissioning of the Wind Farm Infrastructure. However, as the specific port(s) have not yet been confirmed by the Applicant, a suite of socioeconomic study areas have been defined at two distinct geographic scales to ensure both strategic and local impacts are assessed.

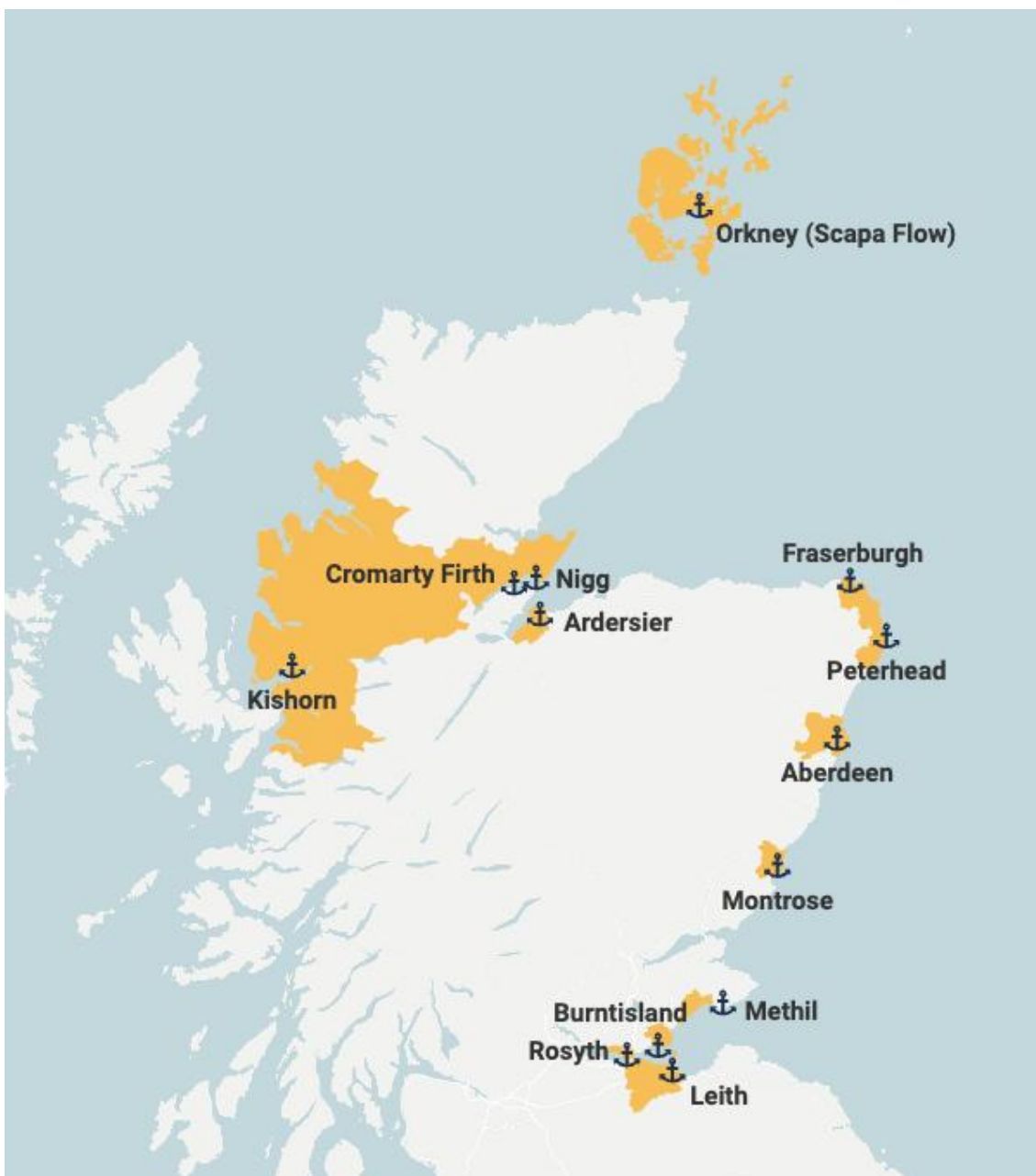
77. Firstly, to capture wider supply chain and labour market effects, the analysis considers the following broad socioeconomic study areas:
- Scotland; and
 - The UK.
78. Secondly, to illustrate the potential range of local effects, a socioeconomic study area has been defined for each of the indicative port locations presented in **Table 16.12**. As detailed in the table, these local study areas are defined as the electoral ward in which the port is located – or the local authority area in the case of ports situated within cities. This list of indicative ports is not exhaustive and is intended to illustrate the potential range of local effects.

Table 16.12: Indicative Port Locations (and Corresponding Local Socioeconomic Study Areas)

Ports	Study Area
Indicative List of Construction Port Locations	
Aberdeen	Aberdeen City (local authority)
Ardersier	Culloden and Ardersier (electoral ward)
Burntisland	Burntisland, Kinghorn and Western Kirkcaldy (electoral ward)
Cromarty Firth	Cromarty Firth (electoral ward)
Kishorn	Wester Ross, Strathpeffer and Lochalsh (electoral ward)
Leith	City of Edinburgh (local authority)
Methil	Buckhaven, Methil and Wemyss Villages, Leven, Kennoway and Largo (electoral ward)
Nigg	Tain and Easter Ross (electoral ward)
Orkney (Scapa Flow)	Orkney Islands (local authority)
Peterhead	Peterhead South and Cruden, Peterhead North and Rattray (electoral ward)
Rosyth	Rosyth (electoral ward)
Indicative List of Operations and Maintenance Port Locations	
Burntisland	Burntisland, Kinghorn and Western Kirkcaldy (electoral ward)
Cromarty Firth	Cromarty Firth (electoral ward)
Nigg	Tain and Easter Ross (electoral ward)
Ardersier	Culloden and Ardersier (electoral ward)
Aberdeen	Aberdeen City (local authority)
Leith	City of Edinburgh (local authority)

Ports	Study Area
Montrose	Montrose and District (electoral ward)
Peterhead	Peterhead South and Cruden, Peterhead North and Rattray (electoral ward)
Fraserburgh	Fraserburgh and District (electoral ward)

Plate 16.1: Indicative Port Locations and Corresponding Socioeconomic Local Study Areas



16.5.2 Data and Information Sources

79. Socioeconomic, tourism and recreation-specific information has been reviewed and analysed to inform this socioeconomics, tourism and recreation baseline.
80. Information on socioeconomics within the socioeconomics study areas, and tourism and recreation within the tourism and recreation study areas was collected through a detailed desktop review of existing studies and datasets which are summarised in **Table 16.13**.
81. Some data sources included are specific to the constituent countries of the UK. This is because, where UK figures were not available, country level figures were aggregated to produce equivalent UK statistics. This is particularly relevant to those data sources focussing on Great Britain (GB), as opposed to the UK.

Table 16.13: Key Data and Information Sources for Socioeconomics, Tourism and Recreation Baseline

Dataset	Source	Year(s)	Description
Principal Population Projections 2022-based	ONS	2025	Scotland and UK-level population projections
Northern Ireland Annual General Medical Services Statistics	Business Services Organisation	2024	Number of General Practitioners (GPs) across the UK's countries
Guide to an Offshore Windfarm	BVG Associates	2024	Information on the contracts required for an offshore windfarm
Northern Ireland Housing Statistics	Department for Communities	2024	Housing in Northern Ireland used to define the UK baseline
Mid-2024 Population Estimates – local authority	NRS	2025	Population estimates
Business Register and Employment Survey 2023	ONS	2024	Sectoral employment across GB
Annual Business Survey	ONS	2024	Information on economic activity in the UK
Annual Population Survey	ONS	2024	Employment, unemployment rates, and qualifications across the UK
Annual Survey of Hours and Earnings 2024	ONS	2024	Earnings across the UK
Population Estimates - local authority based by five-year age band	ONS	2025	Population estimates by local authority
Dwelling Stock by Tenure, UK	ONS	2024	Housing stock in the UK
House Price Statistics	Registers of Scotland	2024	Housing prices in Scotland

Dataset	Source	Year(s)	Description
Housing Statistics: Stock by tenure	Scottish Government	2024	Housing stock in Scotland
Pupil Census Supplementary Statistics 2024	Scottish Government	2024	Pupil numbers across Scotland
Teacher Census Supplementary Statistics 2024	Scottish Government	2024	Teacher numbers across Scotland
Industry Statistics Database 2024	Scottish Government	2024	Information on sustainable tourism activity
VisitScotland – Research and Insights	VisitScotland	2024	Information on tourism activity
Education and Training Statistics for the UK	UK Government	2024	Teacher per pupil numbers
Offshore Wind Skills Intelligence Report	Offshore Wind Industry Council (OWIC)	2023	Skills evidence for the offshore wind sector
International Passenger Survey 2022	ONS	2023	Overnight visitors and spending for international visitors
Job Density	ONS	2023	Employment over time across the UK
Annual Growth Sector Statistics	Scottish Government	2023	Evidence on tourism employment and GVA across Scotland
General Practice – GP workforce and practice list sizes	Public Health Scotland	2022	GPs in Scotland
GB Day Visitor Survey 2022	Kantar	2020	Day visitor trips and spending across GB
The GB Tourism Survey 2022	Kantar	2020	Overnight visitor trips and spending across GB
2018-based principal population projections for council areas	NRS	2020	Population projections
Collaborating for Growth: Strategies for Expanding the UK Offshore Wind Supply Chain	OWIC	2020	Information on the UK Offshore Wind Supply Chain
Guidance on assessing the socioeconomic impacts of offshore wind farms	Oxford Brookes University	2020	Guidance on SEIAs of offshore wind farms

16.5.2.1 Site-specific Surveys and Primary Research

82. The baseline for this socioeconomic, tourism, and recreation assessment has been established through desk-based research, utilising publicly available statistics and the study team's extensive experience in the sector. Given the broad nature of the study areas and the adequate availability of high-quality secondary data, this approach is considered sufficient and proportionate, and therefore no site-specific primary surveys were undertaken for the main assessment.
83. Given the existing uncertainty on the exact location of the construction and O&M and decommissioning port(s) gathering primary data gathering is not practical at every potential port location and could result in stakeholder fatigue.

16.5.2.2 Assumptions and Limitations

84. 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 time lag. This means that the latest available data on a given socioeconomic or tourism indicator may not fully reflect baseline conditions at the time of writing.
85. To ensure as accurate a characterisation of the existing environment, data was collected close to the time of Application submission. Furthermore, even if the latest available evidence does not reflect current conditions, most of the socioeconomic and tourism dimensions considered, present a degree of dependence on past performance. On that basis, the latest available data provides the best possible approximation of the current environment.
86. 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 ONS Annual Population Survey (ONS, 2024b).
87. 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.
88. Overall, the data limitations described above are not expected to have implications for the conclusions of the assessment.

16.6 Existing Environment

16.6.1 Socioeconomics Baseline

16.6.1.1 Population

89. In 2024, Scotland had a population of 5,546,900 (NRS, 2024), accounting for approximately 8% of the total UK population of 68,265,209 (ONS, 2024b) (**Table 16.14**). The working-age population (aged 16 to 64) made up 63.3% of Scotland's total population, which is slightly above the UK average. Meanwhile, the proportion of the population aged 65 and over was higher in Scotland (20.5%) than in the UK as a whole (19.0%), reflecting Scotland's relatively older population profile.

Table 16.14: Scotland and UK Population by Age Group in 2024

Age Group	Scotland	UK (Including Scotland)
Aged 0 -15	16.2%	18.2%
Aged 16 – 64	63.3%	62.8%
Aged 65+	20.5%	19.0%
Total	5,546,900	69,281,437

16.6.1.2 Economic Activity

90. In 2024, the economic activity rate in Scotland was 77.0% (ONS, 2024b), slightly below the UK average of 78.5%. However, the unemployment rate in Scotland (3.2%) was lower than that of the UK overall (3.8%). The median annual income in Scotland was £31,891 (ONS, 2024b), marginally higher than the UK median of £31,602 (**Table 16.15**). Overall, Scotland's economic performance is broadly in line with that of the UK, with no significant differences.

Table 16.15: Scotland and UK Economic Activity Rate in 2024; Median Annual Income in 2024

Category	Scotland	UK (Including Scotland)
Economic Activity Rate	77.0%	78.5%
Unemployment Rate	3.2%	3.8%
Median Annual Income	£31,891	£31,602

16.6.1.3 Industrial Structure

91. In 2024, there were approximately 2.7 million jobs in Scotland, accounting for around 8% of total UK employment (33 million) (ONS, 2024d). The largest employment sector in Scotland is human health and social work activities, which makes up 15.6% of the workforce – higher than the UK average of 13.7%.

92. During the development phase of offshore wind projects – generally covering project management, design, and environmental assessment but prior to commencement of construction – there are likely to be opportunities in the professional, scientific and technical services sector. In Scotland, this sector employs 190,500 people (7.2% of the workforce), which is below the UK average of 9.2%. Employment in the ‘electricity, gas, steam and air conditioning supply sector’ represents 0.7% of total employment in Scotland – almost double the UK proportion of 0.4%. This equates to over 19,500 jobs in Scotland and partly reflects Scotland’s advanced renewable energy sector. This may also indicate that the Scottish construction and utility sectors are relatively well-positioned to support further offshore renewable developments.
93. Key sectors for the construction phase of the Bellrock WFDA include manufacturing and construction. In Scotland, construction accounts for around 136,000 jobs (5.1% of total employment), which is above the UK average of 4.9%. Similarly, manufacturing represents 6.7% of Scotland’s workforce (approximately 178,000 jobs), which is below the UK average of 7.5%.
94. Overall, Scotland’s industrial structure is broadly aligned with the UK, though slightly more specialised in sectors relevant to renewable energy infrastructure, such as electricity generation, manufacturing, and construction.

Table 16.16: Scotland and UK Industrial Structure in 2024

Industry	Scotland	UK (Inc. Scotland)
Human health and social work activities	15.6%	13.7%
Wholesale and retail trade; repair of motor vehicles and motorcycles	13.2%	13.7%
Accommodation and food service activities	8.6%	7.9%
Education	8.2%	8.4%
Professional, scientific and technical activities	7.2%	9.2%
Administrative and support service activities	6.8%	8.5%
Manufacturing	6.7%	7.5%
Public administration and defence; compulsory social security	6.2%	4.6%
Construction	5.1%	4.9%
Transportation and storage	4.5%	4.9%
Agriculture, forestry and fishing	3.4%	1.4%
Financial and insurance activities	3.2%	3.3%
Information and communication	3.1%	4.4%
Arts, entertainment and recreation	2.7%	2.6%
Other service activities	1.7%	2.0%

Industry	Scotland	UK (Inc. Scotland)
Real estate activities	1.5%	2.0%
Mining and quarrying	0.9%	0.1%
Water supply, sewerage, waste management and remediation activities	0.8%	0.7%
Electricity, gas, steam and air conditioning supply	0.7%	0.4%
Total Employment	2,655,000	33,082,504

16.6.1.4 Education

95. In 2024, 54.5% of Scotland's working-age population (aged 16 to 64) held qualifications at Regulated Qualifications Framework (RQF) Level 4 or above (degree level), compared to 47.4% across the UK (ONS, 2025b). This indicates a relatively high level of graduate attainment in Scotland.
96. A greater proportion of Scotland's population also held qualifications at RQF Level 3 or above (72.5%) compared to the UK average (67.8%). Similarly, 87.4% held RQF Level 2 qualifications or higher, broadly in line with the UK average of 86.6%. However, Scotland had a slightly higher share of people with no formal qualifications (8.0%) than the UK as a whole (6.8%). Overall, this suggests that while Scotland performs well in terms of higher-level qualifications, there remains a slightly larger cohort without any formal qualifications.

Table 16.17: Scotland and UK Education Levels (16 to 64 Years Old) in 2024

Education Levels	Scotland	UK (Including Scotland)
% with RQF4+ - aged 16 to 64	54.5%	47.4%
% with RQF3+ - aged 16 to 64	72.5%	67.8%
% with RQF2+ - aged 16 to 64	87.4%	86.6%
% with RQF1+ - aged 16 to 64	88.6%	89.0%
% with other qualifications (RQF) - aged 16 to 64	3.4%	4.2%
% with no qualifications (RQF) - aged 16 to 64	8.0%	6.8%

16.6.1.5 Class Sizes

97. Average class size can provide an indication of the existing pressure on educational provision. In 2024, the pupil-to-teacher ratio in Scotland was 13.3, compared to 17.7 across the UK (Scottish Government, 2024a and 2024b; UK Government, 2024b). This suggests that, on average, schools

in Scotland have smaller class sizes and may therefore have greater capacity to accommodate changes in pupil numbers.

Table 16.18: Scotland and UK Class Sizes in 2024

Category	Scotland	UK (Including Scotland)
Pupil to Teacher Ratio	13.3	17.7

16.6.1.6 Housing

98. Housing affordability and availability are key indicators of a region's sensitivity to change and its capacity to accommodate population growth.
99. Scotland's total housing stock in 2024 was 2.7 million dwellings, representing approximately 9.1% of the UK's total housing stock (30 million). The proportion of private housing in Scotland (77.0%) is slightly lower than the UK average (85.4%) (ONS, 2024e).
100. In 2023, the average house price in Scotland was £221,143, which is significantly lower than the UK average of £330,000 (ROS, 2024). Over the ten-year period from 2013 to 2023, average house prices in Scotland rose by 39.8%, compared to a 64.6% increase across the UK (ONS, 2024c). While housing availability remains a sensitivity (note the declared housing emergency by the Scottish Government), this data indicates that housing in Scotland remains comparatively more affordable than the UK average.

Table 16.19: Mean House Price Values and Changes from 2013 to 2023 (ROS, 2024; ONS, 2024c)

Category	Scotland	UK (Including Scotland)
2013	158,224	251,000
2023	221,143	330,000
Change from 2013 to 2023	39.8%	64.6%

16.6.1.7 Healthcare Provision

101. Healthcare capacity can also be considered when assessing a region's ability to accommodate demographic change. In 2023, there were 4,449 GPs in Scotland, resulting in an average of 1,341 patients per GP (BSO, 2024). This compares favourably to the UK average of 1,694 patients per GP, suggesting that Scotland's healthcare system may have relatively more capacity to absorb changes in patient numbers.

Table 16.20: Patients per General Practitioners in 2023 for Scotland and UK (BSO, 2024)

Category	Scotland	UK (Including Scotland)
Patients per GP	1,341	1,694

16.6.1.8 Indicative Port Locations (Existing Environment)

102. **Table 16.21** presents baseline data on population and employment for the local study areas (see **Table 16.13**) of each of the indicative port locations (study areas defined in **Section 16.5.1**), including specific data for the construction sector. The analysis highlights a wide range of local conditions across these potential sites. For example, Leith has the largest population and highest existing construction employment. In contrast, Nigg has the smallest population, while Cromarty Firth has the lowest level of construction employment.

Table 16.21: Baseline Data on Population and Employment (Existing Environment)

Ports	Population in 2024	Workforce (Total Employment in 2024)	Construction Sector Employment in 2024
Ports in Urban Areas			
Aberdeen	227,750	160,525	6,000
Leith	523,250	372,425	9,500
Ports in Rural Areas			
Ardersier	10,567	3,725	275
Burntisland	15,012	3,040	300
Cromarty Firth	12,515	5,230	250
Fraserburgh	15,779	9,325	300
Kishorn	12,225	4,985	325
Methil	37,888	9,375	400
Montrose	15,686	5,540	275
Nigg	9,114	2,895	250
Orkney (Scapa Flow)	22,000	13,625	800
Peterhead	27,557	13,710	575
Rosyth	15,723	6,495	300

16.6.1.9 Commercial Fisheries Baseline

103. Peterhead Port is considered in this assessment because it is the principal port linked to fishing activity within the commercial fisheries local study area. Approximately 70% of landings from the Commercial Fisheries Local Study Area (ICES rectangles 42E9 and 42F0; see **Chapter 11: Commercial Fisheries (Volume II)**) are landed into Peterhead, making it the most important port for receiving fisheries landings in relation to the Bellrock WFDA.

104. Fishers who use Peterhead Port catch a variety of fish and shellfish, and in 2022 the most significant species were mackerel (£76.3 million) followed by Nephrops, often known as langoustine, (£22.3 million), haddock (£18.1 million) and herring (£17.2 million) (**Table 16.22**).

Table 16.22: Peterhead Port, Value of Landings by Species 2022

Species	Size of Landings (tonnes)	Value (£m)	Share of Value (%)
Mackerel	63,959	76,300	40%
Nephrops	4,471	22,988	12%
Haddock	18,111	18,073	9%
Herring	27,321	17,185	9%
Cod	4,122	15,881	8%
Whiting	6,537	8,543	4%
Other demersal	11,889	26,697	14%
Other pelagic	17,648	4,084	2%
Other shellfish	993	2,968	2%
Total	155,051	192,719	-

105. According to Marine Scotland (Marine Scotland, 2025), there were 356 people employed as fishers at Peterhead (**Table 16.23**), which is equivalent to 8.6% of fisher employment in Scotland, a much smaller share of employment than its share of landings. However, many vessels which land catch at Peterhead are based elsewhere on the east coast.

106. The average value of landings per fisher for all Scottish fishers was £153,700. Vessels based in and around Peterhead use larger and more technologically sophisticated ships than other ports, which enable larger catches with fewer fishers. In particular, 20% of the fishing fleet based in Peterhead is longer than 24 metres, compared to 6% for the whole Scottish fleet (Marine Scotland, 2025).

Table 16.23: Fisher Employment 2022

Employment Type	Peterhead	Scotland
Regularly employed	301	3,364
Irregularly employed	55	753
Total	356	4,117

107. In addition to the number of people employed as fishers in Peterhead, there are also people employed in the fish processing sector, which takes whole fish and shellfish and processes them into fillets and other fish products. In 2022, there were an estimated 850 people employed in Peterhead's fish processing sector (ONS, 2024d).
108. The primary input is fish caught by the Peterhead fishing sector, and companies in Peterhead process high volumes of white fish such as haddock and cod, as well as pelagic fish such as mackerel and herring. Processed fish are mainly exported. The sector has invested significantly in specialist machinery and technology to increase efficiency, including Denholm Seafoods' investment in a £30 million processing facility and cold-store upgrade (Denholm Seafoods, 2023). Most processors use fish processing machinery that can be used across different species.

16.6.2 Predicted Future Baseline

109. The following sections provide a summary of the socioeconomics, tourism and recreation baseline environment. The EIA Regulations require that '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' is included within the Bellrock WDFEA EIA Report.
110. If the Bellrock WDFEA does not come forward, the 'without development' future baseline is represented by the trends and projections described in **Section 16.6.2.1**. These reflect the likely evolution of the socio-economic environment in the absence of the Bellrock WDFEA.

16.6.2.1 Socioeconomics Future Baseline

16.6.2.1.1 Population Projections

111. From 2024 to 2043, Scotland's population is projected to grow by 4.0%, from 5,546,900 to 5,770,152, which is an average annual population growth rate of 0.21% (ONS, 2025b). This is a lower growth rate compared to the UK as a whole, where the population is expected to grow by 9.1%. Future population projections for Scotland and the UK are summarised in **Table 16.24**.
112. 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, Scotland is projected to witness an increase in its 16- to 64-year-old population of around 14,375 individuals, representing a 0.4% change. While this upward change is in line with the upward trend at UK level, the growth of this demographic group is expected to be faster (8.1%).
113. Population changes over the period to 2043, with slower population growth in Scotland and a more marked increase in its population aged 65+ are likely to make Scotland's socio-economy relatively less resilient than the UK's.

Table 16.24: Scotland and UK Population Projections, 2024 to 2043; 2022 Based Projections

Category	Scotland		UK (Including Scotland)	
	2024	2043	2024	2043
Population	5,546,900	5,770,152	69,281,437	75,585,236
Aged 0-15	16.2%	14.1%	18.2%	15.2%
Aged 16-64	63.3%	61.1%	62.8%	62.2%
Aged 65+	20.5%	24.8%	19.0%	22.6%

16.6.2.1.2 Implications of Climate Change for Existing Conditions

114. The predicted effects of climate change may have a bearing on future socioeconomics, tourism and recreation conditions.
115. In accordance with the UK Climate Projections, the climate change projections for the north of Scotland are:
- Temperatures are projected to increase, particularly in summer;
 - Winter rainfall is projected to increase and summer rainfall is most likely to decrease;
 - Near surface wind speeds are expected to increase in the second half of the 21st century with winter months experiencing more significant effects of winds, however, the increase in wind speeds is projected to be modest;
 - An increase in frequency of winter storms over the UK is expected; and
 - Sea level rise is projected to increase and there is potential for changes in the severity of future storm surge events which will result in prolonged high sea levels.
116. Climate change is likely to influence the future baseline of socioeconomics, tourism and recreation conditions. The effect of the climate change projections is considered in the UK Climate Change Risk Assessment (Sniffer, 2023). This found that climate change has the potential to have some beneficial effects on the current socioeconomic conditions and recreational activity, but that these would be outweighed by the adverse effects. In particular, it found that beneficial impacts included:
- Higher temperatures and reduced rainfall in the summer months are likely to result in an increase in outdoor recreation, with associated mental health and wellbeing impacts; and
 - Increased temperatures and lower rainfall in the summer months could create new opportunities for agriculture to grow different crops that require a warmer climate to thrive.

117. The adverse effects were greater in number and magnitude, particularly for agriculture and industry. This Climate Change Risk Assessment (Sniffer, 2023) found that:
- For businesses, increased flood risk will increase the costs of doing business through higher insurance costs and time for business closure;
 - Extreme weather events are frequently cited as reasons for delays in the supply chain, particularly with the delivery of goods and the reliance of some island or rural communities on single transport links that are vulnerable to extreme weather. Increased instances of extreme weather would increase the number of supply chain issues and therefore, the costs of doing business; and
 - Extreme weather events would be particularly detrimental to agricultural producers. There would be greater instances of crop losses, and the insurance costs associated with this would also increase.
118. Overall, the primary effect of climate change on the socioeconomic characteristics of the socioeconomic study areas would be a reduction in productivity, particularly in agriculture. This would be driven by the increased costs of business associated with mitigation of environmental effects caused by climate change.
119. This effect has not been quantified, however as shown in **Table 16.16**, the agriculture sector in tourism and recreation study area is a larger share of the economy than the Scottish average. Therefore, any adverse effects are likely to be felt more in the tourism and recreation study areas.

16.7 Potential Impacts

16.7.1 Scope

120. **Table 16.25** sets out the impacts that have been scoped in to and out of the Bellrock WFDA EIA Report, in line with the Scoping Opinion (**Appendix 1.2: Bellrock WFDA Scoping Opinion (Volume IV)**).

Table 16.25: Potential Impacts Scoped In and Scoped Out of the EIA for Socioeconomics, Tourism and Recreation

Potential Impact	Construction	Operation and Maintenance	Decommissioning
	Advised within the Bellrock WFDA Scoping Opinion		
Increase in employment and GVA	✓	✓	✓
Demographic changes	✓	✓	✓
Changes to housing demand	✓	✓	✓
Changes to other local public and private services	✓	✓	✓
Socio-cultural effects	✓	✓	✓
Changes to tourism and recreation receptors	✓	✓	✓
Transboundary impacts	x	x	x

This page is intentionally blank

16.7.2 Realistic Worst-case Scenario

121. The final design of the Wind Farm Infrastructure will be confirmed during detailed engineering studies undertaken post-consent. To undertake a robust and precautionary impact assessment, the realistic worst-case design scenario has been defined. The realistic worst-case scenarios (i.e. those that have potential to cause the greatest impact) are derived from the project design envelope to ensure that all other design scenarios would have equal or less impact. **Chapter 5: EIA Methodology (Volume II)** provides further details on the design envelope approach.
122. The realistic worst-case scenarios for the socioeconomics, tourism and recreation assessment are summarised in **Table 16.26** below. These are based on the project design as described in **Chapter 3: Site Selection and Consideration of Alternatives (Volume II)**.
123. The assessment of changes to tourism and recreation receptors depends on environmental effects considered across other chapters of the Bellrock WFDA EIA Report. On that basis, the relevant realistic worst-case scenario parameters rely on those identified in the following chapters:
- **Chapter 11: Commercial Fisheries (Volume II);**
 - **Chapter 12: Shipping and Navigation (Volume II);**
 - **Chapter 14: Marine Infrastructure and Other Users (Volume II);** and
 - **Chapter 15: Marine Archaeology and Cultural Heritage (Volume II).**

This page is intentionally blank

Table 16.26: Realistic Worst-case Scenarios for Impacts on Socioeconomic, Tourism and Recreation

Impact	Phase			Realistic Worst-case Scenario	Rationale
	Construction	O&M	Decommissioning		
Increase in employment and GVA	✓	✓	✓	<p>Construction Phase</p> <p>The spending from the construction of the Wind Farm Infrastructure is expected to result in a temporary increase in employment and GVA across the socioeconomic study areas. This will also support impacts from wider supply chain (indirect effects) and spending by staff (induced effects).</p> <p>The employment and GVA impacts are based on the estimate of Scottish and UK supply chain expenditure outlined in the Bellrock SCDS Outlook (Bellrock Offshore Wind Farm, 2023). The SCDS includes both a 'commitment' scenario and an 'ambition' scenario for supply chain expenditure in Scotland, the rUK, the European Union, and the rest of the world.</p> <p>The SCDS Outlook provides total estimates of spending for the full Bellrock Project (i.e. Wind Farm Infrastructure, Offshore Transmission Infrastructure and Onshore Transmission Infrastructure combined).</p> <p>Operation and Maintenance Phase</p> <p>Employment and GVA impacts are based on estimates for O&M activity as included in the SCDS Outlook commitment scenario.</p> <p>The SCDS Outlook provides total estimates of spending for the Bellrock Project (i.e. Wind Farm Infrastructure, Offshore Transmission Infrastructure and Onshore Transmission Infrastructure combined).</p>	<p>The commitment scenario underpins the socioeconomic assessment of impacts during construction, O&M, and decommissioning, since this represents lower Scottish and UK supply chain content than the ambition scenario, and therefore lower beneficial employment and GVA impacts.</p> <p>On that basis, the commitment scenario represents a realistic worst-case scenario from a socioeconomics perspective.</p>

Impact	Phase			Realistic Worst-case Scenario	Rationale
	Construction	O&M	Decommissioning		
				<p>Decommissioning Phase</p> <p>Decommissioning costs are not included as part of the SCDS Outlook. Consequently, they were estimated based on guidance from BVG (BVG Associates, 2023).</p> <p>Decommissioning is assumed to be undertaken in reverse of construction and over a similar period.</p> <p>Inter-related Effects</p> <p>Impacts on employment and GVA are assessed by considering any significant impacts on commercial fisheries and shipping found within the following chapters:</p> <ul style="list-style-type: none"> ▪ Chapter 11: Commercial Fisheries (Volume II); and ▪ Chapter 12: Shipping and Navigation (Volume II). 	
Demographic changes	✓	✓	✓	<p>The realistic worst-case scenarios across construction, O&M, and decommissioning are defined using a consistent approach.</p> <p>The increased employment at the assembly, integration, O&M, and decommissioning port(s) may lead to a temporary increase in the local population, as people move to the area for job opportunities.</p> <p>At this stage, port(s) for the construction, O&M, and decommissioning phases have not been identified. However, a list of indicative port locations has been identified in Table 16.12.</p> <p>The demographic assessment has been based on the estimated employment impacts under the SCDS Outlook commitment scenario. The parameters affecting SCDS Outlook estimates are set out above in the realistic worst-case scenario for an increase in employment and GVA.</p>	<p>The employment supported during the construction, O&M, and decommissioning of the Wind Farm Infrastructure may attract permanent or transient workers to port locations.</p> <p>Given that the final port selection has not yet been made, the assessment considers activity in the context of what may occur at the list of indicative port locations.</p>

Impact	Phase			Realistic Worst-case Scenario	Rationale
	Construction	O&M	Decommissioning		
				<p>Furthermore, the worst-case scenario assumes the lower local content levels associated with the 'Commitment' scenario. This necessitates a higher reliance on a transient workforce (as opposed to hiring locals), thereby generating the maximum potential demand for temporary housing and local services.</p> <p>Impacts are assessed at the list of indicative port locations shown in Table 16.12.</p>	
Changes to housing demand	✓	✓	✓	<p>The realistic worst-case scenarios across construction, O&M, and decommissioning are defined using a consistent approach.</p> <p>The increased employment associated with the activities associated with the Wind Farm Infrastructure may lead to an increase in the demand for housing, as people move to the area in search of or to fulfil job opportunities.</p> <p>The impact on changes to housing demand draws on the realistic worst-case scenario assumptions for demographic changes across the three phases (i.e. SCDS commitment scenario figures and maximum transient workforce).</p> <p>It is further assumed that housing demand will be equal to the number of transient workers in any given year.</p> <p>As port(s) have not been identified, the impacts of demographic changes have been assessed at the list of indicative port locations shown in Table 16.12.</p>	<p>Any demographic changes during the construction, O&M, and decommissioning of the Wind Farm Infrastructure may cause changes to housing market demand.</p> <p>Given that the final port selection has not yet been made, the assessment considers activity in the context of what may occur at the list of indicative port locations.</p>

Impact	Phase			Realistic Worst-case Scenario	Rationale
	Construction	O&M	Decommissioning		
Changes to other local public and private services	✓	✓	✓	<p>The realistic worst-case scenarios across construction, O&M, and decommissioning are defined using a consistent approach.</p> <p>Increased employment may lead to an increase in the demand for services as people move in search of or to fulfil job opportunities. The assessment has been based on the estimated employment impacts from the activities associated with the Wind Farm Infrastructure, as arising under the commitment scenario.</p> <p>It is further assumed that demand for local public services will be equal to the number of transient workers in any given year.</p> <p>As port(s) have not been identified, the impacts of demographic changes have been assessed drawing on a modelled at the list of indicative port locations shown in Table 16.12.</p>	<p>Any demographic changes during the construction, O&M, and decommissioning of the Wind Farm Infrastructure may cause changes to demand for local public and private services.</p> <p>Given that the final port selection has not yet been made, the assessment considers activity in the context of what may occur at the list of indicative port locations.</p>
Socio-cultural effects	✓	✓	✓	<p>The potential impacts have been considered based on baseline data, the project description and shall be discussed qualitatively.</p> <p>Given the distance to shore, it is considered any socio-cultural impacts may arise mainly because of an increase in activity at the construction, O&M, and decommissioning port locations.</p> <p>This has been modelled based on the activities associated with each phase (the construction, O&M, and decommissioning) that occur at the respective port locations. The analysis drew on the SCDS commitment scenario estimates of spending. As port(s) have not been identified, the assessment has developed logic chains of social impacts and potential effects on communities at the list of indicative port locations shown in Table 16.12.</p>	<p>Changes in demographics may led to changes in community character, quality of life and community stress.</p> <p>Based on the Bellrock WFDA's distance to shore, it is expected any of these changes may come from the increased activity at assembly, integration, O&M, and decommissioning port(s).</p> <p>Given that the final port selection has not yet been made, the assessment considers activity in the context of what may occur at the list of indicative port locations.</p>

Impact	Phase			Realistic Worst-case Scenario	Rationale
	Construction	O&M	Decommissioning		
Changes to tourism and recreation receptors	✓	✓	✓	<p>Tourism and recreation impacts are determined by significant environmental effects identified in other chapters; therefore, the design parameters that determine these impacts will vary depending on which environmental effect is driving the impacts on tourism and recreation assets.</p> <p>The environmental effects that may affect tourism and recreation receptors are covered within the following chapters:</p> <ul style="list-style-type: none"> ▪ Chapter 12: Shipping and Navigation (Volume II); ▪ Chapter 14: Marine Infrastructure and Other Users (Volume II); and ▪ Chapter 15: Marine Archaeology and Cultural Heritage (Volume II). <p>Refer to those chapters for additional details on topic specific realistic worst-case scenarios.</p>	<p>The construction, O&M, and decommissioning of the Wind Farm Infrastructure has the potential to influence visitor behaviour, depending on the other environmental impacts that are generated.</p> <p>As impacts on tourism are indirect, relevant realistic worst-case scenarios come from those environmental effects with a potential to affect visitor behaviour.</p>

This page is intentionally blank

16.7.3 Embedded Mitigation Measures

124. This section outlines the embedded (primary and tertiary) mitigation relevant to the socioeconomics, tourism and recreation assessment (as shown in **Table 16.27** below). **Appendix 5.1: Mitigation and Monitoring Register (Volume IV)** sets out all mitigation measures.
125. The Applicant has made several commitments to avoid, prevent, reduce or, if possible, offset potential adverse environmental effects through mitigation measures embedded into the evolution of the design envelope. These embedded mitigation measures include actions that will be undertaken to meet other existing legislative requirements and those considered to be standard or best practice to manage commonly occurring environmental effects.

This page is intentionally blank

Table 16.27: Embedded Mitigation Measures Relevant to Socioeconomics, Tourism and Recreation

Measure ID	Embedded Mitigation Measure(s)	Mitigation Type	Means of Implementation
WFDA-30	Participation in a Regional Commercial Fisheries Working Group (subject to a Commercial Fisheries Working Group being established and operating effectively) to assist with liaison between the Applicant and the fishing community.	Tertiary	Secured in the Section 36 (s.36) Consent and Marine Licence via a condition requiring a Fisheries Mitigation, Monitoring and Communication Plan to be developed and submitted to the Scottish Ministers for approval before commencement of construction. The Fisheries Mitigation, Monitoring and Communication Plan (Volume V) is submitted alongside the s.36 Consent application and Marine Licence application for the Bellrock Wind Farm Infrastructure.
WFDA-34	Adherence to the following international and national regulations and guidance, namely: <ul style="list-style-type: none"> ▪ International Convention for the Prevention of Pollution from Ships (MARPOL), which sets out requirements, including appropriate vessel maintenance; ▪ The International Convention for the Control and Management of Ships' Ballast Water and Sediments, which provides an international framework for the control of transfer of potentially invasive species from ballast water; and ▪ Consideration of guidance from the International Maritime Organisation (2023) on the control and management of ships' biofouling to minimise the transfer of invasive aquatic species. 	Tertiary	Secured in the s.36 Consent and Marine Licence via a condition requiring a VMNSP to be developed and submitted to the Scottish Ministers for approval before commencement of construction. An Outline VMNSP (Volume V) is submitted alongside the s.36 Consent application and Marine Licence application for the Bellrock Wind Farm Infrastructure.
WFDA-47	Development of, and adherence to, a Decommissioning Programme (DP). The DP will set out the framework for the safe, orderly, and environmentally acceptable decommissioning and removal of the Bellrock Wind Farm Infrastructure, in the interests of safety and environmental protection. Climate change risk measures will be included in the DP to be developed prior to the commencement of construction and will include a review of site-specific weather and metocean conditions, recent extreme weather events and up-to-date climate change projection data will be undertaken to ensure risk assessments, health and safety (H&S) protocols and guidelines on safe working practices are suitable for future climate conditions at the time of	Tertiary	Secured in the s.36 Consent and Marine Licence, via a condition requiring a DP to be developed and submitted to the Scottish Ministers for approval before commencement of construction.

Measure ID	Embedded Mitigation Measure(s)	Mitigation Type	Means of Implementation
	<p>decommissioning works. The DP will be refreshed prior to decommissioning activities commencing.</p> <p>The DP will mitigate the risk of climate change impacts on decommissioning site personnel, plant and equipment and other assets and the risk of delays to the decommissioning programme due to extreme weather events, which are becoming more frequent and intense due to climate change.</p>		
WFDA-48	<p>A workforce mental health management plan will be implemented through the project-specific H&S plan. This will include site inductions, access to support services, and procedures to identify and manage fatigue and stress, thereby reducing potential adverse effects on workforce wellbeing.</p>	Tertiary	<p>Mental health management shall be captured in the project specific H&S plan, which will include reference to appointed mental health first aiders. The approved Construction Method Statement (CMS) will cross reference to relevant H&S documentation where such measures are detailed. Contracted parties may, depending on scope of works, be required to provide their business specific plans which refer to mental health.</p>
WFDA-60	<p>Development of, and adherence to, a CMS.</p> <p>The CMS will describe the methods for construction for all consented Wind Farm Infrastructure and set out the measures to be implemented to avoid or reduce adverse effects on the environment and legitimate users of the sea during the construction phase. This will include a clear definition of roles and responsibilities and reference to relevant H&S protocols.</p> <p>In relation to climate change, the CMS will incorporate measures to ensure construction activities are resilient to current and projected extreme weather and metocean conditions. This will include, as appropriate:</p> <ul style="list-style-type: none"> ▪ Monitoring of site-specific weather and metocean conditions, including use of recognised forecasting and severe weather alert services; ▪ Programming and phasing of construction activities with regard to seasonality and short- to medium-term forecasts; ▪ Definition of safe working limits for vessel, lifting, and installation operations and procedures for suspension of works where thresholds are exceeded; ▪ Measures to secure plant, equipment, and materials during adverse weather; and 	Tertiary	<p>Secured in the s.36 Consent and Marine Licence via a condition requiring a CMS to be developed and submitted to the Scottish Ministers for approval before commencement of construction.</p>

Measure ID	Embedded Mitigation Measure(s)	Mitigation Type	Means of Implementation
	<ul style="list-style-type: none"> Risk assessments and safety procedures that account for site-specific extreme weather risks. <p>Through these measures, the CMS will mitigate risks to construction personnel, plant, and equipment, and reduce the potential for programme disruptions arising from extreme weather events.</p>		
WFDA-61	<p>Regular and periodic inspections and maintenance of all components of the Wind Farm Infrastructure will be undertaken over their operational lifetime to identify and remediate any damage and deterioration and maintain good working conditions. These will be included in the Operation and Maintenance Plan.</p> <p>Monitoring of site-specific weather and metocean conditions, recent extreme weather events and up-to-date climate change projection data will be undertaken to provide a dynamic risk assessment of climate change impacts and inform operation and maintenance planning.</p> <p>The Operation and Maintenance Plan will mitigate the risks of climate change impacts on the conditions and performance of the Wind Farm Infrastructure and ensures that it is adaptable to future climate conditions and remains resilient over its operational life. The O&M strategy will be adaptive, with the frequency of maintenance, repair and replacement activities being adjusted based on need (i.e. increasing planned O&M visits for components with higher deterioration rates than anticipated).</p>	Tertiary	Secured in the s.36 Consent and Marine Licence via a condition requiring an Operation and Maintenance Plan to be developed and submitted to the Scottish Ministers for approval prior to the commissioning of the first WTG.
WFDA-65	<p>Proactively engage with potential suppliers to build local supply chain capacity. Work with other developers, the Scottish Government, and key stakeholders to assist in addressing barriers to local supply chain participation, with the aim of supporting and enhancing the participation of local businesses.</p> <p>Alongside this, the Energy Pathfinder¹ (or similar initiative) will be utilised to ensure visibility of relevant opportunities for Scottish and UK suppliers to bid for work. This measure will ensure opportunities for supply chain spending in Scotland and the UK are maximised.</p>	Tertiary	Secured in the s.36 Consent and Marine Licence at the Scottish Ministers discretion.
WFDA-66	<p>Collaborate with local and national agencies on enterprise and skills development programmes to train and upskill the workforce and ensure local residents have access to the opportunities created.</p>	Tertiary	Secured in the s.36 Consent and Marine Licence at the Scottish Ministers discretion.

Measure ID	Embedded Mitigation Measure(s)	Mitigation Type	Means of Implementation
<p>Notes:</p> <p>¹ Energy Pathfinder (https://energypathfinder.nstauthority.co.uk/projects) is a searchable database of upcoming construction and O&M contracts for North Sea oil and gas and renewable energy projects.</p>			

16.8 Assessment of Effects

126. The potential effects to socioeconomics, tourism and recreation that may occur during construction, O&M, and decommissioning of the Wind Farm Infrastructure are assessed in the following sections. The assessment follows the methodology set out in **Section 16.4.1** and is based on the realistic worst-case scenarios defined in **Section 16.7.2**.

16.8.1 Construction

16.8.1.1 Impact C1: Increase in Employment and Gross Value Added (GVA)

127. The construction of the Wind Farm Infrastructure will result in spending across the economy of Scotland and the UK. This expenditure benefits primary contractors, their suppliers, and those businesses supported by further rounds of spending, enabled by the employment and salaries associated with the construction of Wind Farm Infrastructure. In turn, such spending generates economic activity in the form of increased employment and GVA.

16.8.1.1.1 Sensitivity

128. The sensitivity of an economy is based on its responsiveness to change, its relative diversity (more diverse economies are less sensitive) and growth trajectory (for example is the number of jobs increasing or decreasing).
129. Given the significant size and diversity of the Scottish economy, which employs 2.7 million people and has a well-represented mix of industrial sectors, it is considered to have a **low** sensitivity to the effects of the construction of Wind Farm Infrastructure.
130. Similarly, the UK economy, which employs 33.1 million people, is a very large and diverse economy that is highly resilient to project-specific impacts. Its sensitivity is therefore assessed as **negligible**.
131. The sensitivity of the indicative port locations (see **Table 16.13**) to project-related impacts varies from **medium** to **high**, primarily based on the size and diversity of their local labour markets. The analysis shows a wide range of economic conditions, with total employment in the local study areas ranging from approximately 2,900 in the Nigg area to over 372,000 in Leith. Reflecting their large, diverse, and resilient economies, the urban port locations of Leith and Aberdeen have been assessed as having **medium** sensitivity. All other indicative port locations, which are situated in more rural areas with smaller populations and less diverse economies, have been assessed as having **high** sensitivity.

16.8.1.1.2 Magnitude of Impact

132. The first step in estimating the economic impact associated with the construction of Wind Farm Infrastructure, was considering the total level of expenditure associated with Bellrock Project (i.e. WFDA, OfTDA and OnTDA), and then identifying the elements associated with the Wind Farm Infrastructure specifically.
133. As part of the ScotWind leasing process, the Applicant provided estimates of the minimum share of spending that they expect to occur in Scotland and across the UK. The SCDS Outlook covered

all elements of the Bellrock Project, including the Wind Farm Infrastructure, Offshore Transmission Infrastructure and Onshore Transmission Infrastructure combined.

134. The expenditure attributable to the construction of Wind Farm Infrastructure was estimated by BiGGAR Economics based on those overall costs and the share of activity expected to involve offshore activity. This is based on BiGGAR Economics' extensive industry experience. The estimated values for spend in Scotland and the UK (relating to the WFDA) are shown in **Table 16.28**. The UK is inclusive of Scotland throughout the assessment.

Table 16.28: BiGGAR's Economic Analysis of the Supply Chain Development Statement Outlook - Bellrock Wind Farm Development Area Construction Expenditure Commitment

Parameters	Scotland	UK (Including Scotland)	Total
Development	£100 m	£151 m	£157 m
Manufacturing and Fabrication	£962 m	£1,266 m	£2,458 m
Installation	£211 m	£218 m	£433 m
Total Construction	£1,273 m	£1,635 m	£3,048 m

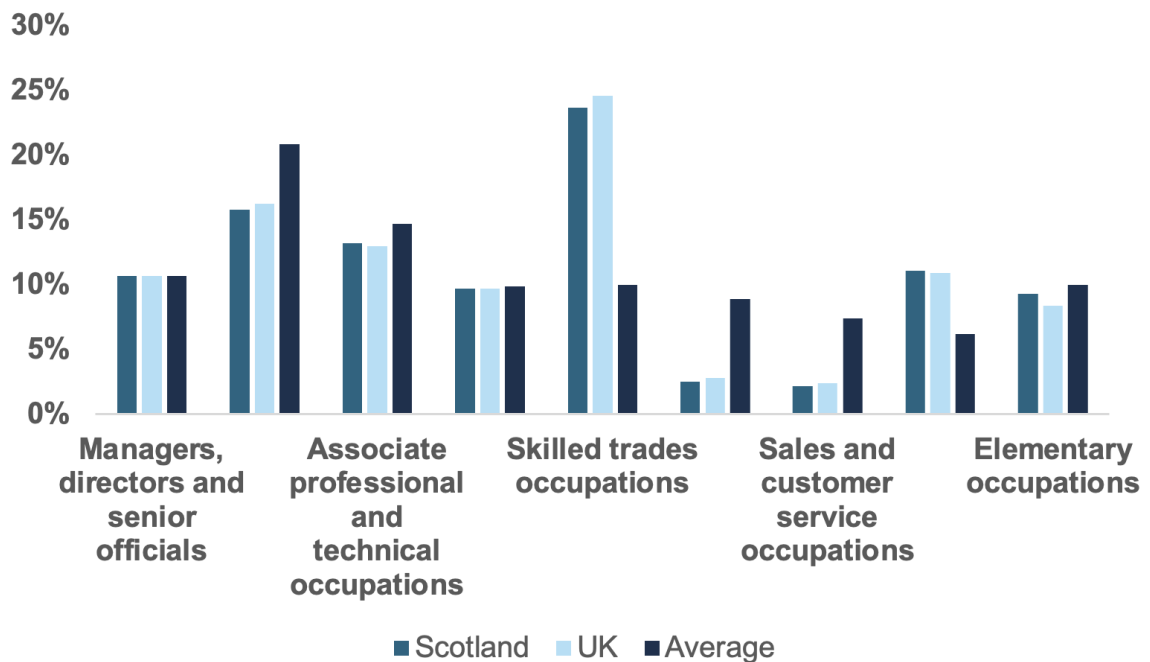
135. This spending is further broken into categories and sub-categories, based on BiGGAR Economics' analysis and work undertaken by BVG Associates on the costs associated with OWFs (BVG Associates, 2023). The share of spend secured in each study area was estimated based on information provided in the SCDS Outlook.
136. 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, 2024g). This was then applied to the expenditure across the socioeconomic study areas to estimate the direct economic impact in Scotland and the UK.
137. On this basis, it was estimated that the direct economic impact of the construction of Wind Farm Infrastructure would be £514 million GVA and 7,590 years of employment in Scotland and £665 million GVA and 9,860 years of employment in the UK (as shown in **Table 16.29**).

Table 16.29: Bellrock Wind Farm Development Area Construction Direct Economic Impact in Scotland and UK

Parameters	Scotland		UK (Including Scotland)	
	GVA	Years of Employment	GVA	Years of Employment
Total Construction	£514 m	7,590	£665 m	9,860

138. As can be seen below, compared to the economy as a whole, a higher proportion of jobs directly supported by the construction of the Wind Farm Infrastructure are expected to be in skilled trades and process, plant and machine operatives (mainly associated with manufacturing and construction related employment). This is higher in Scotland than the UK. In contrast, a lower share of employment will be in professional occupations, caring, leisure and other occupations (based on indirect spending), in sales and customer service occupations and in elementary occupations.

Plate 16.2: Levels of Economic Activity and Impact in Scotland and UK



139. In addition to the direct economic impact associated with expenditure during the construction of the Wind Farm Infrastructure, 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, 2024h) (Scottish Government, 2023b) that capture linkages between sectors of the economy.

140. Applying these multipliers and summing the direct, indirect and induced impacts it was estimated that the total economic impact of construction the Wind Farm Infrastructure would be £860 million GVA and 12,800 years of employment in Scotland and £1,711 million GVA and 24,720 years of employment in the UK (including Scotland), as shown in **Table 16.30** and **Table 16.31**.

Table 16.30: Bellrock Wind Farm Development Area Construction Total Gross Value Added Impact in Scotland and UK

Parameters	Scotland	UK (Including Scotland)
Direct GVA	£514 m	£665 m
Indirect GVA	£189 m	£519 m
Total GVA	£703 m	£1,184 m
Peak GVA	£167 m	£268 m
Induced GVA	£157 m	£526 m
Total GVA (inc. induced impacts)	£860 m	£1,711 m

Table 16.31: Bellrock Wind Farm Development Area Construction Total Employment Impact in Scotland and UK

Parameters	Scotland (Years of Employment)	UK (Including Scotland) (Years of Employment)
Direct Employment	7,590	9,860
Indirect Employment	3,100	7,270
Total Employment	10,700	17,120
Peak Employment	2,520	3,830
Induced Employment	2,110	7,600
Total Employment (inc. induced impacts)	12,800	24,720

141. Impacts associated with construction activity are considered as direct, short term and occur throughout the construction phase (noting that while port-based assembly is expected to be continuous, offshore installation campaigns will be seasonal). The figures presented in **Table 16.30** and **Table 16.31** represent the total cumulative impact over the entire construction period (seven year construction period (plus 1 year site preparation works). However, as construction activity occurs over a multi-year period, to determine the magnitude of the impact on the labour market, it is necessary to consider peak annual activity.
142. On that basis, it was estimated that at its peak the Wind Farm Infrastructure could support through its construction 2,520 jobs in Scotland and 3,830 jobs across the UK (including Scotland) (**Table 16.32**).

Table 16.32: Magnitude of Impact – Increase in Employment and Gross Value Added During Construction

Parameters	Scotland	UK (Including Scotland)
Peak Employment (jobs)	2,520	3,830
% of Construction Sector Employment in Socioeconomic Study Area	1.85%	0.24%
Magnitude of Impact	High	Negligible

143. Peak employment supported in Scotland is equal to 2,520 jobs which is equivalent to 1.85% of employment in the construction sector. Therefore, the magnitude has been assessed as **high**.

144. Peak employment supported in the UK is equal to 3,830 jobs, which is equivalent to 0.24% of employment in the construction sector. Therefore, the magnitude has been assessed as **negligible**.

145. Significant local economic impacts are expected to be concentrated at the assembly and integration port(s) for the Wind Farm Infrastructure. As the assembly and integration port(s) have not yet been confirmed, a scenario-based approach has been adopted. This involves defining a conservative but realistic level of economic activity for a hypothetical port for use during construction and then assessing the magnitude of this impact against the baseline conditions of several indicative port locations (as listed in **Table 16.33**).

146. Based on the Bellrock Project's SCDS Outlook and BiGGAR Economics' extensive industry experience, a scenario has been developed assuming the main assembly and integration port could secure contracts worth approximately £223 million. While in reality different ports have varying capabilities, for this conservative assessment, this single activity scenario has been applied consistently to all indicative port locations.

147. Applying the relevant economic ratios to this £223 million expenditure, it is estimated that the assembly and integration port activities could support approximately 1,590 years of employment over the construction phase. This would involve a peak employment of 320 jobs at the chosen port.

Table 16.33: Bellrock Wind Farm Development Area Assembly and Integration Port(s) Economic Impact

	Total Expenditure	Assembly and Integration Port(s) Spend	Years of Employment	Peak Employment
Total	£3,048 m	£223 m	1,590	320

148. To determine the significance of this impact, the peak employment figure (320 jobs) was compared to the existing construction sector employment in each of the indicative port study areas. The

baseline employment ranges from a low of approximately 250 in Nigg and Cromarty Firth to a high of 9,500 in Leith.

149. The introduction of 320 peak jobs would represent a very substantial increase relative to the existing workforce in all cases. On this basis, the magnitude of the economic impact at the assembly and integration port is assessed as **high** for all indicative port locations (**Table 16.34**).

Table 16.34: Bellrock Wind Farm Development Area Construction Port Economic Impact

Ports	Construction Sector Employment (Years)	Change in Employment	Magnitude
Ports in Urban Areas			
Aberdeen	6,000	5%	High
Leith	9,500	3%	High
Ports in Rural Areas			
Ardersier	275	116%	High
Burntisland	300	107%	High
Cromarty Firth	250	128%	High
Kishorn	325	98%	High
Methil	400	80%	High
Nigg	250	128%	High
Orkney (Scapa Flow)	800	40%	High
Peterhead	575	56%	High
Rosyth	300	107%	High

16.8.1.1.3 Significance of Effect

150. Overall, it is predicted that the sensitivity of the Scottish economy is **low**, and the magnitude of the impact is **high**. The effect is therefore of **moderate significance (beneficial)**, which is **significant** in EIA terms.
151. Overall, it is predicted that the sensitivity of the UK economy is **negligible**, and the magnitude of the impact is **negligible**. The effect is therefore of **negligible significance (beneficial)**, which is **not significant** in EIA terms.
152. Overall, it is predicted that the sensitivity of the indicative assembly and fabrication port locations ranges from **medium** to **high**, and the magnitude of the impact is **high**. The effect is therefore of **major significance (beneficial)**, which is **significant** in EIA terms.
153. No additional mitigation is required as effects identified are beneficial.

16.8.1.1.4 *Changes in Commercial Fisheries, and Shipping and Navigation*

154. A review of the relevant technical EIA chapters has been undertaken to determine if any significant adverse effects on commercial activities, such as displacement of fishing vessels or obstruction of shipping routes, were identified:
- **Chapter 11: Commercial Fisheries (Volume II):** significant effects were identified based on potential disruption to the UK Nephrops demersal otter trawl fleet; and
 - **Chapter 12: Shipping and Navigation (Volume II):** No significant effects were identified.
155. As no significant adverse effects on shipping and navigation were identified in **Chapter 12: Shipping and Navigation (Volume II)**, there is no impact pathway that would lead to a corresponding reduction in employment or GVA. Consequently, no significant negative economic effects are anticipated.
156. In **Chapter 11: Commercial Fisheries (Volume II)** significant residual effects were identified based on potential disruption to the UK Nephrops demersal otter trawl fleet. As part of **Chapter 11: Commercial Fisheries (Volume II)**, a local study area was defined based on International Council for the Exploration of the Sea (ICES) rectangles. For the purposes of the EIA, the commercial fisheries local study area comprises these two ICES rectangles (42E9 and 42F0).
157. For the UK demersal otter trawl fleet targeting Nephrops, the total value of Nephrops landed by UK vessels from the North Sea in 2023 was approximately £49.72 million, of which £1.2 million originated from the commercial fisheries local study area, representing 2.42% of the total UK landed value of Nephrops. The Devil's Hole grounds, located further offshore than other Nephrops fishing areas, are targeted by a select number of vessels with the capability and commitment to operate in deeper waters. Within the Bellrock WFDA, Nephrops grounds comprise only a small proportion of the regularly targeted Devil's Hole fishing area (approximately 4% of total Devil's Hole landings), equating to less than 0.5% of total Nephrops landed by UK vessels from the North Sea.
158. Consequently, based on the spatial overlap and landing proportions identified, the maximum potential annual impact is estimated to be a £248,600 reduction in turnover for the affected fishery.
159. However, it is likely that fishers will respond to a reduction in access to Nephrops fishing grounds by changing their behaviour and fishing elsewhere (known as displacement). While limited evidence exists on the effects of offshore wind farms, studies on Marine Protected Areas (MPAs), which prevent fishing in certain areas, have found that the overall reduction in activity due to MPA is around 12% (Marine Directorate, 2020). Conversely, some studies suggest that offshore wind farms can increase biomass in the ocean and result in larger fish (Bicknell, Gierhart, & Witt, 2025), which may increase landings.
160. While there is limited evidence to suggest large decreases in activity, it is not possible to know the counterfactual with certainty. Therefore, it has been assumed conservatively that the reduction would be equal to 25% (a 75% displacement rate). On this basis, turnover would be expected to reduce by £62,150.

161. The value of fish landed at Peterhead in 2022 was £192.7 million. The net reduction in the value of fish landings because of the Bellrock WFDA would be equivalent to less than 0.1% of the value of the total landings at Peterhead Port. Based on turnover of average £153,700 per employee, the reduction in catch would reduce employment of fishers by the equivalent of 0.4 jobs, which is less than 0.1% of employment. Because the catch is distributed across several vessels it is likely that this would not result in any changes to employment.
162. Impacts on the fish processing sector, supply chain and further upstream impacts would be expected to be similarly minimal. Estimates of the number of onshore jobs supported per one fisher at sea ranges from 0.63 (Anderson Solutions Ltd., 2017) to 5 (Scottish Fishermen's Federation, 2025). If the highest multiplier was considered, the employment effects would be the equivalent of an additional 2 jobs across the economy. On this basis, the magnitude of impact on Peterhead's fishing sector would be **negligible**.
163. In 2022, the value of the fish and shellfish landed at Peterhead was £192.7 million. Based on the Business Register and Employment Survey (ONS, 2025), in this year there were 850 people who worked in the fish processing sector in Peterhead (compared to around 7,000 in Scotland). These people tend to work for bulk fish processing companies.
164. Given the size of and diversity of landings at Peterhead (**Table 16.22**) and the size and sophistication of its fish processing sector, Peterhead fishing and fish processing sector is likely to be resistant to changes and therefore its sensitivity has been assessed as **low**.
165. Overall, the magnitude of the impact on the Peterhead fishing and fish processing sector is deemed to be **negligible** and the sensitivity of the receptor is **low**. The effect is therefore of **negligible significance (adverse)**, which is **not significant** in EIA terms.

16.8.1.2 Impact C2: Demographic Changes

166. Demographic changes are one of the primary pathways through which construction of the Wind Farm Infrastructure could lead to social impacts.
167. It is not anticipated that this will lead to changes at the Scottish or UK level as they are very large populations and economies able to absorb change, therefore the assessment of demographic changes and subsequent social impacts (i.e. changes in housing demand, changes to other local public and private services and socio-cultural impacts) are focused on changes related to the impact on the assembly and integrations port(s).

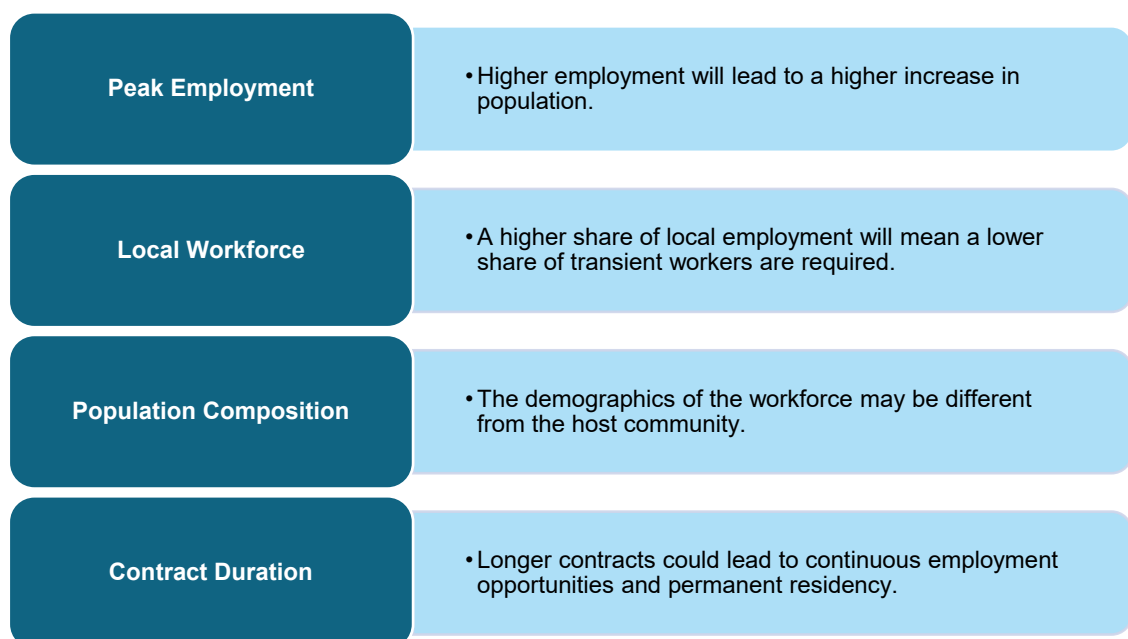
16.8.1.2.1 Sensitivity

168. The sensitivity of the indicative port locations to project-related impacts varies from **medium** to **high**, primarily based on the size of their population and local labour markets. The analysis shows a wide range of economic conditions, with total employment in the local study areas ranging from approximately 2,900 in the Nigg area to over 372,000 in Leith. Reflecting their larger populations and labour markets, the urban port locations of Leith and Aberdeen have been assessed as having **medium** sensitivity. All other indicative port locations (shown in **Table 16.13**), which are situated in more rural areas with smaller populations and workforces, have been assessed as having **high** sensitivity.

16.8.1.2.2 Magnitude of Impact

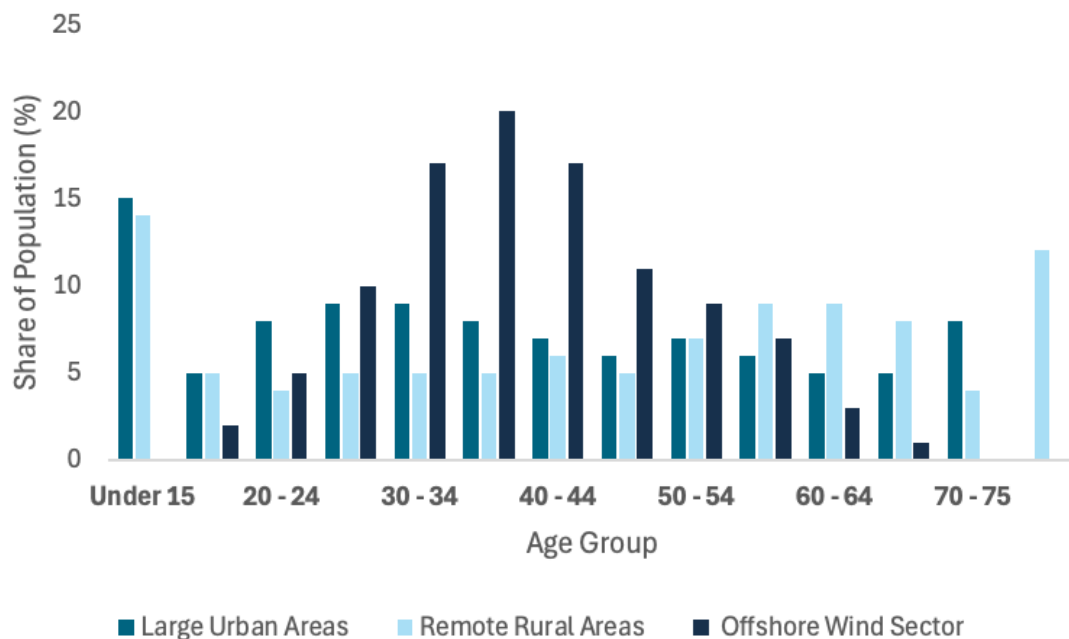
169. The magnitude of impact on the social or community assets will be dependent on the scale of the demographic changes that occur in each of the local study areas and how these affect demand for services, such as housing, education and health.
170. Population growth, including short-term workers, depends 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 assembly and integration port.
171. During the construction phase, a workforce will be required to fulfil contracts at the assembly and integration port(s). Industry data suggests that these are expected to be primarily males aged 30 to 44, though the industry is making efforts to diversify this demographic and increase female representation to 33% by 2030 (OWIC, 2023). This may attract individuals and families, affecting the demographic composition near the assembly and integration port(s).
172. In Scotland's rural areas, it would be expected that the opportunity for high-level local jobs could encourage individuals that had left the area for economic opportunities elsewhere to return and encourage those already there to remain. This could increase the number of working-age residents in rural areas and benefit long-term demographics.
173. The factors that determine the demographic impact are outlined in **Plate 16.3**.

Plate 16.3: Factors Affecting Magnitude of Change to Community Populations



174. How this increase in population will be experienced will depend on the size and demographics of the population surrounding the assembly and integration port(s). The demographic distribution varies across Scotland including the urban and rural locations where potential key port locations are based. This is shown in **Plate 16.4**, 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, 2024).

Plate 16.4: Share of Population Estimates by Urban Rural Classification

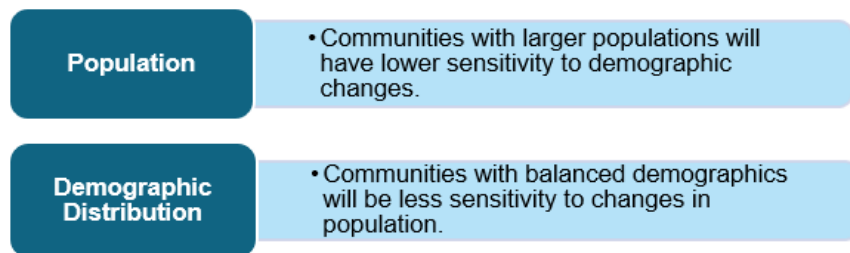


175. There is anecdotal evidence that in rural communities in Scotland, the opportunity to capture high quality local employment may draw people back to the area who have previously left to find work elsewhere. This would be considered a demographic benefit from increasing the working age population in rural communities, including for short term opportunities such as during the construction phase of the Wind Farm Infrastructure.

176. The sensitivity of the area around the assembly and integration port(s) 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).

177. **Plate 16.5** provides details on the factors that influence how a community might respond to changes in demographics and other population impacts.

Plate 16.5: Factors Affecting Sensitivity of Community Populations



178. 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 the local study areas and the proportion taken up by those moving to the local study areas.
179. 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-in with family members.
180. During the construction phase, it is estimated that a peak workforce of 320 people will be required to fulfil contracts at the assembly and integration port(s) to support the construction of the Wind Farm Infrastructure. Based on an assumption of a change in population of two for every job, to allow for some employees moving-in with family members, that would imply an increase in population of up to 640 during peak construction.
181. The method adopted for assessing the magnitude of social impacts is based on a comparison to national population growth projections. According to NRS, the projected average annual population growth in Scotland between 2023 and 2043 is 0.26% (**Section 16.6**). This figure has been used as a benchmark for defining magnitude thresholds in this assessment. An impact is considered:
- High magnitude if the population change is greater than or equal to 100% of the projected annual growth ($\geq 0.26\%$);
 - Medium magnitude if the change is $\geq 50\%$ but $< 100\%$ of the projected growth (0.13% to 0.25%);
 - Low magnitude if the change is $\geq 25\%$ but $< 50\%$ of the projected growth (0.065% to 0.12%); and
 - Negligible if the change is $< 25\%$ of the projected growth ($< 0.065\%$).
182. Although the final assembly and integration port(s) have not yet been confirmed, the potential impact of a temporary population increase of 640 people has been assessed against a range of indicative port locations. The analysis shows the magnitude of this impact varies significantly depending on the size of the local community. For example, at a small port such as Nigg (population: 9,114), the change would be of **high** magnitude (representing 7.02% of the baseline population), while at a large port like Leith (population: 523,250), it would be of **low** magnitude (0.12%) (**Table 16.35**).

Table 16.35: Bellrock Wind Farm Development Area Assembly and Integration Ports Social Impacts

Ports	Population	Change in Population	Magnitude
Ports in Urban Areas			
Aberdeen	227,750	0.28%	High
Leith	523,250	0.12%	Low
Ports in Rural Areas			
Ardersier	10,567	6.06%	High
Burntisland	15,012	4.26%	High
Cromarty Firth	12,515	5.11%	High
Kishorn	12,225	5.24%	High
Methil	37,888	1.69%	High
Nigg	9,114	7.02%	High
Orkney (Scapa Flow)	22,000	2.91%	High
Peterhead	27,557	2.32%	High
Rosyth	15,723	4.07%	High

16.8.1.2.3 Significance of Effect

183. In line with the assessment methodology (as set out in **Section 16.3.2**), a **high** magnitude impact on a community of **high** sensitivity would result in a **major** significant effect, which is **significant** in EIA terms. A **low** magnitude impact on a community of **medium** sensitivity would result in a **minor significant** effect, which is **not significant** in EIA terms (**Table 16.36**).

Table 16.36: Significance of Social Impacts at Assembly and Integration Ports

Location	Magnitude	Sensitivity	Significance
Aberdeen	High	Medium	Major
Leith	Low	Medium	Minor
Ardersier	High	High	Major
Burntisland	High	High	Major
Cromarty Firth	High	High	Major
Kishorn	High	High	Major
Methil	High	High	Major
Nigg	High	High	Major
Orkney (Scapa Flow)	High	High	Major
Peterhead	High	High	Major
Rosyth	High	High	Major

184. While the scale of the population change during the construction phase is assessed as having a major significance effect in a majority of cases, it is not inherently adverse or beneficial. Rather, it depends on how local infrastructure, services, local businesses, and communities respond to the increase in population. In some cases, increased population may place short-term pressure on housing, local services, and public infrastructure. In the absence of any planning by the Applicant, local authorities, and the Scottish Government, it is more likely that the effect will be adverse in nature.
185. However, such pressures are typically managed through advance planning and coordination between public authorities and the private sector. Moreover, the population increase can bring potential benefits - particularly in rural areas experiencing long-term demographic decline - by boosting local demand for goods and services and supporting community vitality.
186. As the assembly and integration port(s) are not yet known, it is not possible at this time for the Applicant to engage with all of the communities and local authorities who could potentially be affected. However, it is anticipated that prior to the commencement of construction, the Applicant will engage with local communities and the local authority, port operator and other developers where a significant effect is identified.
187. The Applicant will ensure clear and early communication to manage its construction activities and ensure clear and early communication with local authorities and community stakeholders regarding the expected scale and timing of the construction works. With effective coordination, the population increase could present beneficial effects, including increased local spending and demand for goods and services, which may support local businesses and economic activity.

16.8.1.3 Impact C3: Changes to Housing Demand

188. Housing demand and availability is a primary pathway through which the Wind Farm Infrastructure could lead to social impacts. This section of the assessment focuses on the assembly and integration port(s), as this is where temporary workforce accommodation pressures are most likely to occur. The construction phase typically involves the largest influx of workers in a concentrated period, often requiring non-local labour and placing demand on local housing markets and short-term accommodation.

16.8.1.3.1 Sensitivity

189. The sensitivity of the indicative port locations to project-related impacts varies from **medium** to **high**, primarily based on the size of their population, the capacity of their housing stock, and local labour markets. The analysis shows a wide range of economic conditions, with total employment in the local study areas ranging from approximately 2,900 in the Nigg area to over 372,000 in Leith. Reflecting their larger populations and labour markets, the urban port locations of Leith and Aberdeen have been assessed as having **medium** sensitivity. All other indicative port locations (shown in **Table 16.13**), which are situated in more rural areas with smaller populations and workforces, have been assessed as having **high** sensitivity.

16.8.1.3.2 Magnitude of Impact

190. The main driver of accommodation demand is expected to be the increased population needed to meet the requirements of the assembly and integration port(s). During the peak of construction, increased demand for short-term accommodation is expected, such as hotels, bed and breakfasts, and caravan parks, within the vicinity of the selected assembly and integration port(s).

191. 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 all year-round and offering sustained employment opportunities in rural areas.

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

193. The factors that determine housing demand and availability impact are outlined in **Plate 16.6**.

Plate 16.6: Factors Affecting Magnitude of Change to Housing Demand and Availability

Demographic Changes	<ul style="list-style-type: none"> • Higher increase in population will lead to a higher increased demand for accommodation.
Supply Chain Capacity	<ul style="list-style-type: none"> • Higher demand for local services will increase the magnitude of impact.
Local Tourism Businesses	<ul style="list-style-type: none"> • Increased demand for accommodation may constrain supply of visitor accommodation, or could support the sector during off-season period.

194. 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.

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

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

197. **Plate 16.7** provides details on the factors that influence how a community might respond to changes in housing demand and availability impacts.

Plate 16.7: Factors Affecting Sensitivity of Community Populations

Population	<ul style="list-style-type: none"> • Communities with larger populations will have lower sensitivity to changes in housing demand
Housing Availability	<ul style="list-style-type: none"> • The greater availability of accommodation, the lower the sensitivity.
Overnight Tourism Sector	<ul style="list-style-type: none"> • Increased demand for accommodation may constrain supply of visitor accommodation, or could support the sector during off-season period.
Housing Supply Responsiveness	<ul style="list-style-type: none"> • Housing markets that have been able to respond quickly to changes in demand will be more resilient.
Housing Affordability	<ul style="list-style-type: none"> • The relative share of income that residents need to pay to cover accommodation costs will affect how resilient communities could be to changes in demand.

198. The extent to which the economic impacts lead to noticeable population changes (and changes to housing demand) will be related to the proportion of employment taken up by those already resident in the local study areas and the proportion taken up by those moving to the local study areas.
199. 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 move together with family members.
200. During the construction phase, it is estimated that a peak workforce of 320 people will be required to fulfil contracts at the assembly and integration port(s) to support the construction of the Wind Farm Infrastructure. Based on an assumption of a change in population of two for every job, to allow for some employees moving-in with family members, that would imply an increase in population of up to 640 during peak construction.
201. The method adopted for assessing the magnitude of social impacts is based on a comparison to national population growth projections. According to NRS, the projected average annual population growth in Scotland between 2023 and 2043 is 0.26% (**Section 16.6**). This figure has been used as a benchmark for defining magnitude thresholds in this assessment. An impact is considered:
- High magnitude if the population change is greater than or equal to 100% of the projected annual growth ($\geq 0.26\%$);
 - Medium magnitude if the change is $\geq 50\%$ but $< 100\%$ of the projected growth (0.13% to 0.25%);
 - Low magnitude if the change is $\geq 25\%$ but $< 50\%$ of the projected growth (0.065% to 0.12%); and
 - Negligible if the change is $< 25\%$ of the projected growth ($< 0.065\%$).
202. Although the final assembly and integration port(s) have not yet been confirmed, the potential impact of a temporary population increase of 640 people has been assessed against a range of indicative port locations. The analysis shows the magnitude of this impact varies significantly depending on the size of the local community. For example, at a small port such as Nigg (population: 9,114), the change would be of **high** magnitude (representing 7.02% of the baseline population), while at a large port like Leith (population: 523,250), it would be of **low** magnitude (0.12%) (**Table 16.37**).

Table 16.37: Bellrock Wind Farm Development Area Assembly and Integration Ports Social Impacts

Ports	Population	Change in Population	Magnitude
Ports in Urban Areas			
Aberdeen	227,750	0.28%	High
Leith	523,250	0.12%	Low
Ports in Rural Areas			
Ardersier	10,567	6.06%	High

Ports	Population	Change in Population	Magnitude
Burntisland	15,012	4.26%	High
Cromarty Firth	12,515	5.11%	High
Kishorn	12,225	5.24%	High
Methil	37,888	1.69%	High
Nigg	9,114	7.02%	High
Orkney (Scapa Flow)	22,000	2.91%	High
Peterhead	27,557	2.32%	High
Rosyth	15,723	4.07%	High

16.8.1.3.3 Significance of Effect

203. In line with the assessment methodology (as set out in **Section 16.3.2**), a **high** magnitude impact on a community of **high** sensitivity would result in a **major** significant effect, which is **significant** in EIA terms. A **low** magnitude impact on a community of **medium** sensitivity would result in a **minor significant** effect, which is **not significant** in EIA terms (**Table 16.38**).

Table 16.38: Significance of Social Impacts at Assembly and Integration Ports

Location	Magnitude	Sensitivity	Significance
Aberdeen	High	Medium	Major
Leith	Low	Medium	Minor
Ardersier	High	High	Major
Burntisland	High	High	Major
Cromarty Firth	High	High	Major
Kishorn	High	High	Major
Methil	High	High	Major
Nigg	High	High	Major
Orkney (Scapa Flow)	High	High	Major
Peterhead	High	High	Major
Rosyth	High	High	Major

204. While the scale of the population change during the construction phase is assessed as having a major significance effect in a majority of cases, it is not inherently adverse or beneficial. Rather, it depends on how local infrastructure, services, local businesses, and communities respond to the increase in population. In some cases, increased population may place short-term pressure on housing, local services, and public infrastructure. In the absence of any planning by the Applicant, local authorities, and service providers, it is more likely that the effect will be adverse in nature.
205. However, such pressures are typically managed through advance planning and coordination between public authorities and the private sector. Moreover, the population increase can bring potential benefits - particularly in rural areas experiencing long-term demographic decline - by boosting local demand for goods and services and supporting community vitality.
206. As the assembly and integration port(s) are not yet known, it is not possible at this time for the Applicant to engage with all of the communities and local authorities who could potentially be affected. However, it is anticipated that prior to the commencement of construction, the Applicant will engage with local communities and the local authority, port operator and other developers where a significant effect is identified.
207. The Applicant will ensure clear and early communication to manage its construction activities and ensure clear and early communication with local authorities and community stakeholders regarding the expected scale and timing of the construction works. In general, with effective coordination, any population increase could present beneficial effects, including increased local spending and demand for goods and services, which may support local businesses and economic activity.

16.8.1.4 Impact C4: Changes to Other Local Public and Private Services

208. The construction of the Wind Farm Infrastructure has the potential to affect the labour market of the area around epicentres of impact, such as the assembly and integration port(s), with wider effects on the local population, which may in turn affect other local services.

16.8.1.4.1 Sensitivity

209. The sensitivity of the indicative port locations to project-related impacts varies from **medium** to **high**, primarily based on the size of their population and local labour markets. The analysis shows a wide range of economic conditions, with total employment in the local study areas ranging from approximately 2,900 in the Nigg area to over 372,000 in Leith. Reflecting their larger populations and labour markets, the urban port locations of Leith and Aberdeen have been assessed as having **medium** sensitivity. All other indicative port locations (shown in **Table 16.13**), which are situated in more rural areas with smaller populations and workforces, have been assessed as having **high** sensitivity.

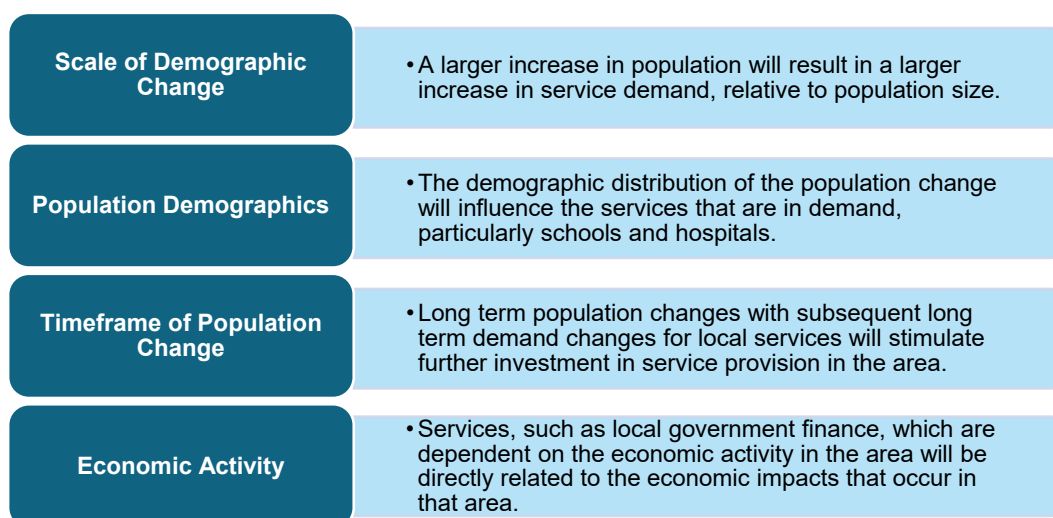
16.8.1.4.2 Magnitude of Impact

210. The anticipated population increase around the assembly and integration port(s) 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.

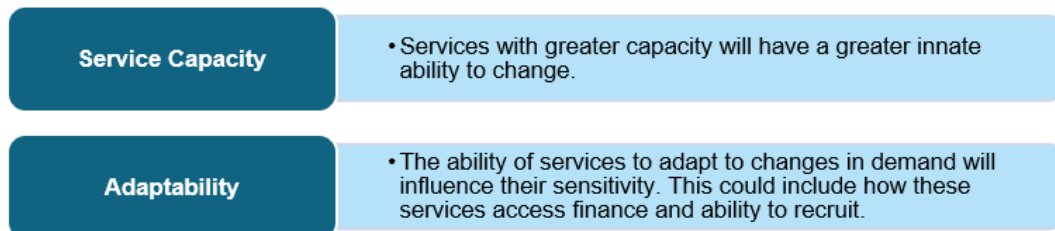
211. The main influences on demand for healthcare services are expected to be a temporary population increase and the health of that population. Specifically, individuals involved in port activities are generally working-age adults in good health, which means they are expected to be less likely to access public health services such as GPs, 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).
212. 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 to be a greater demand for local services designed to support the elderly.
213. The demand for nurseries, 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 as children are considered less likely to travel with transient workers.
214. 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 increased traffic on local road networks.
215. The factors that determine the impact of demand for services are outlined in **Plate 16.8**.

Plate 16.8: Factors Affecting Magnitude of Change to Local Services



216. The sensitivity of the above services will primarily be determined by the level of capacity within each of these services, and how quickly they are able to respond to changing demand (e.g. hire more staff). **Plate 16.9** provides details on the factors that influence the sensitivity of local services.

Plate 16.9: Factors Affecting Sensitivity of Local Services



217. The extent to which the economic impacts lead to noticeable population changes (and changes to the demand for local public and private services) will be related to the proportion of employment taken up by those already resident in the local study areas and the proportion taken up by those moving to the local study areas. 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-in with family members.

218. During the construction phase, it is estimated that a peak workforce of 320 people will be required to fulfil contracts at the assembly and integration port(s) to support the construction of the Wind Farm Infrastructure. Based on an assumption of a change in population of two for every job, to allow for some employees moving-in with family members, that would imply an increase in population of up to 640 during peak construction.

219. The method adopted for assessing the magnitude of social impacts is based on a comparison to national population growth projections. According to NRS, the projected average annual population growth in Scotland between 2023 and 2043 is 0.26% (**Section 16.6**). This figure has been used as a benchmark for defining magnitude thresholds in this assessment. An impact is considered:

- High magnitude if the population change is greater than or equal to 100% of the projected annual growth ($\geq 0.26\%$);
- Medium magnitude if the change is $\geq 50\%$ but $< 100\%$ of the projected growth (0.13% to 0.25%);
- Low magnitude if the change is $\geq 25\%$ but $< 50\%$ of the projected growth (0.065% to 0.12%); and
- Negligible if the change is $< 25\%$ of the projected growth ($< 0.065\%$).

220. Although the final assembly and integration port(s) have not yet been confirmed, the potential impact of a temporary population increase of 640 people has been assessed against a range of indicative port locations. The analysis in **Table 16.39** shows the magnitude of this impact varies significantly depending on the size of the local community. For example, at a small port such as Nigg (population: 9,114), the change would be of **high** magnitude (representing 7.02% of the baseline population), while at a large port like Leith (population: 523,250), it would be of **low** magnitude (0.12%).

Table 16.39: Bellrock Wind Farm Development Area Assembly and Integration Ports Social Impacts

Ports	Population	Change in Population	Magnitude
Ports in Urban Areas			
Aberdeen	227,750	0.28%	High
Leith	523,250	0.12%	Low
Ports in Rural Areas			
Ardersier	10,567	6.06%	High
Burntisland	15,012	4.26%	High
Cromarty Firth	12,515	5.11%	High
Kishorn	12,225	5.24%	High
Methil	37,888	1.69%	High
Nigg	9,114	7.02%	High
Orkney (Scapa Flow)	22,000	2.91%	High
Peterhead	27,557	2.32%	High
Rosyth	15,723	4.07%	High

16.8.1.4.3 Significance of Effect

221. In line with the assessment methodology (as set out in **Section 16.3.2**), a **high** magnitude impact on a community of **high** sensitivity would result in a **major** significant effect, which is **significant** in EIA terms. A **low** magnitude impact on a community of **medium** sensitivity would result in a **minor significant** effect, which is **not significant** in EIA terms (**Table 16.40**).

Table 16.40: Significance of Social Impacts at Assembly and Integration Ports

Location	Magnitude	Sensitivity	Significance
Aberdeen	High	Medium	Major
Leith	Low	Medium	Minor
Ardersier	High	High	Major
Burntisland	High	High	Major
Cromarty Firth	High	High	Major
Kishorn	High	High	Major
Methil	High	High	Major
Nigg	High	High	Major
Orkney (Scapa Flow)	High	High	Major
Peterhead	High	High	Major
Rosyth	High	High	Major

222. While the scale of the population change during the construction phase is assessed as having a major significance effect in a majority of cases, it is not inherently adverse or beneficial. Rather, it depends on how local infrastructure, services, local businesses, and communities respond to the increase in population. In some cases, increased population may place short-term pressure on housing, local services, and public infrastructure. In the absence of any planning by the Applicant, local authorities, and the Scottish Government, it is more likely that the effect will be adverse in nature.
223. However, such pressures are typically managed through advance planning and coordination between public authorities and the private sector. Moreover, the population increase can bring potential benefits - particularly in rural areas experiencing long-term demographic decline - by boosting local demand for goods and services and supporting community vitality.
224. As the assembly and integration port(s) are not yet known, it is not possible at this time for the Applicant to engage with all of the communities and local authorities who could potentially be affected. However, it is anticipated that prior to the commencement of construction, the Applicant will engage with local communities and the local authority, port operator and other developers where a significant effect is identified.
225. The Applicant will ensure clear and early communication to manage its construction activities and ensure clear and early communication with local authorities and community stakeholders regarding the expected scale and timing of the construction works. With effective coordination, the population increase could present beneficial effects, including increased local spending and demand for goods and services, which may support local businesses and economic activity.

16.8.1.5 Impact C5: Socio-cultural Effects

226. Socio-cultural effects relate to changes in the way people live, work, and interact with one another. In the context of this assessment, the primary driver of these effects is the influx of a temporary workforce around the assembly and integration port(s). This increase in population has the potential to influence community cohesion, the distinct character of the local area ('sense of place'), and residents' perception of their quality of life.

16.8.1.5.1 Sensitivity

227. The sensitivity of the indicative port locations to project-related impacts varies from **medium** to **high**, primarily based on the size of their population and local labour markets. The analysis shows a wide range of economic conditions, with total employment in the local study areas ranging from approximately 2,900 in the Nigg area to over 372,000 in Leith. Reflecting their larger populations and labour markets, the urban port locations of Leith and Aberdeen have been assessed as having **medium** sensitivity. All other indicative port locations (shown in **Table 16.13**), which are situated in more rural areas with smaller populations and workforces, have been assessed as having **high** sensitivity.

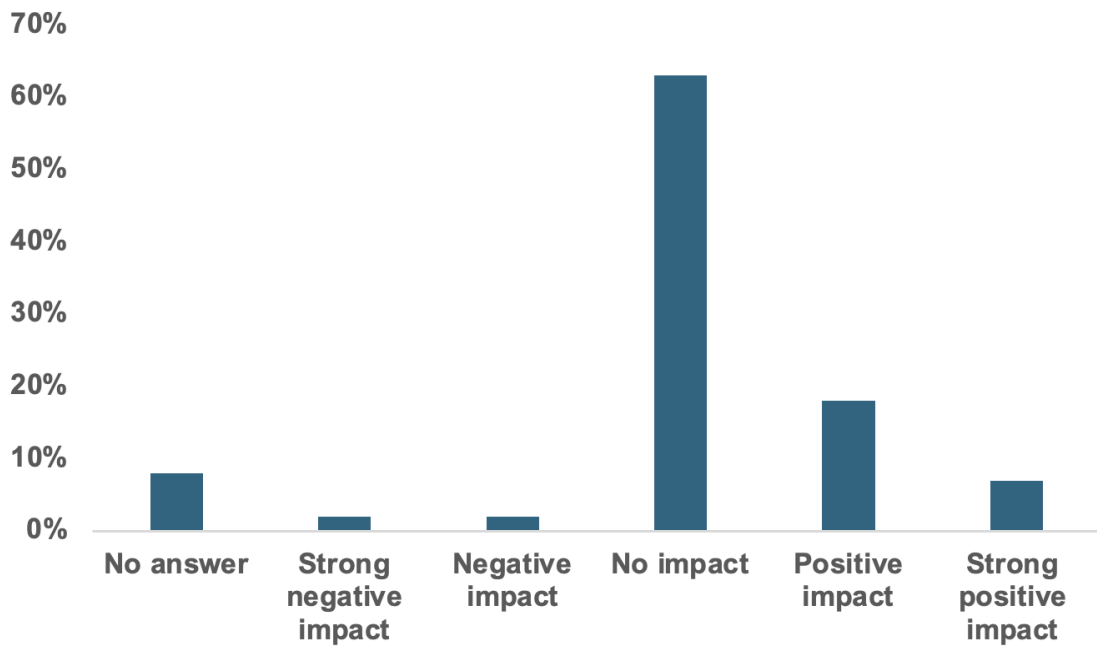
16.8.1.5.2 Magnitude of Impact

228. The social-cultural impact assessment has been undertaken using previous social-cultural research studies that have considered social impacts in communities that have previously experienced construction works associated with offshore wind farm development.

229. The information available is sufficient to undertake a robust assessment of potential social and cultural impacts. This includes previous peer-reviewed research, studies from communities that have experienced offshore wind development, and relevant secondary data sources. These have been used to inform this assessment in line with a proportionate and evidence-based approach.

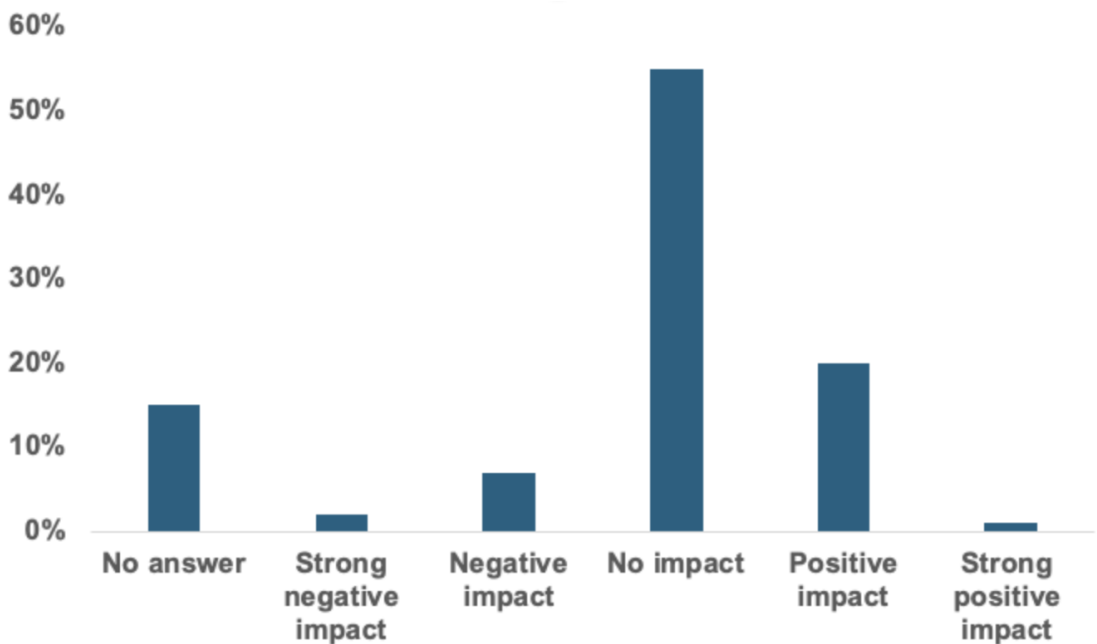
230. The Scottish Government commissioned a survey of people in areas where offshore wind had been developed (Diffley Partnership, 2022) to better understand how local communities perceive the effect of offshore wind development on their area. This survey found that the majority of residents (63%) observed no change in their quality of life, while a 25% reported positive impacts, which is substantially higher than the 4% who felt the impacts were negative (**Plate 16.10**).

Plate 16.10: Community Perceptions of Offshore Wind Impacts on Quality of Life



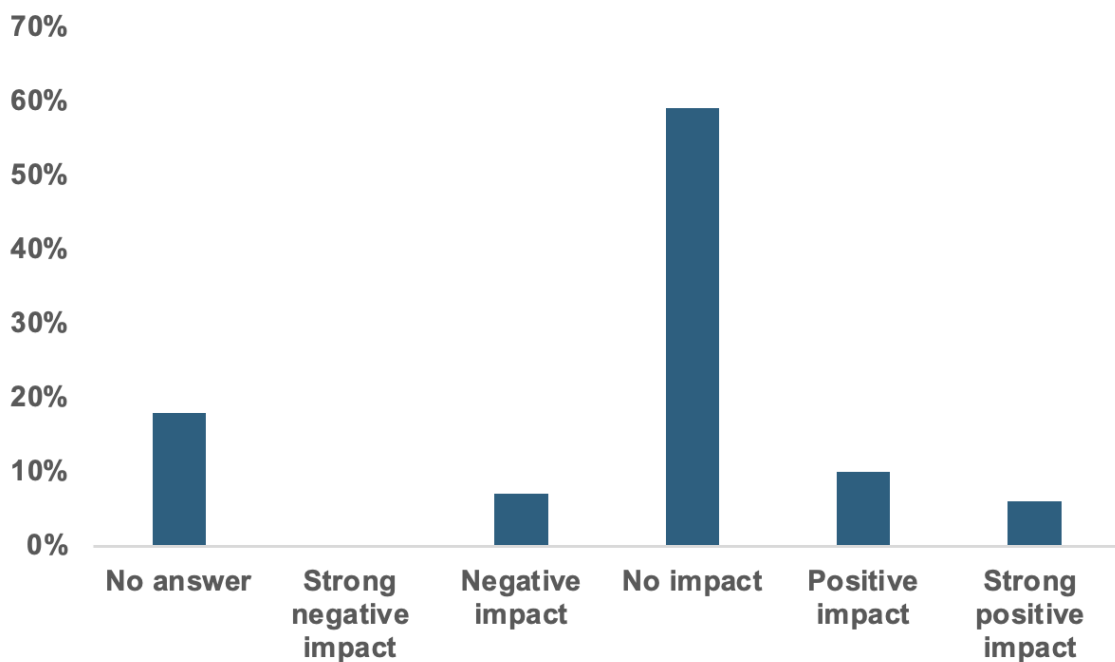
231. In terms of community relations, 55% reported no impact whereas 21% experienced positive impacts, compared to 9% who experienced negative impacts (Plate 16.11).

Plate 16.11: Community Perceptions of Offshore Wind Impacts on Community Relations



232. As shown in **Plate 16.12**, perceptions of the community character remained largely unaffected for most, with a positive impact noted by 16% of respondents, against 7% who perceived a negative impact (Diffley Partnership, 2022). The study found factors that are likely to affect sensitivity will include the size of the area, the sensitivity to demographic changes and local sentiment towards development.

Plate 16.12: Community Perceptions of Offshore Wind Impacts on Community Character



233. The extent to which the economic impacts lead to noticeable population changes (and social-cultural effects) will be related to the proportion of employment taken up by those already resident in the local study areas and the proportion taken up by those moving to the local study areas.

234. 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-in with family members.

235. During the construction phase, it is estimated that a peak workforce of 320 people will be required to fulfil contracts at the assembly and integration port(s) to support the construction of the Wind Farm Infrastructure. Based on an assumption of a change in population of two for every job, to allow for some employees moving-in with family members, that would imply an increase in population of up to 640 during peak construction.

236. The method adopted for assessing the magnitude of social impacts is based on a comparison to national population growth projections. According to NRS, the projected average annual population growth in Scotland between 2023 and 2043 is 0.26% (**Section 16.6**). This figure has been used as a benchmark for defining magnitude thresholds in this assessment. An impact is considered:

- High magnitude if the population change is greater than or equal to 100% of the projected annual growth ($\geq 0.26\%$);
- Medium magnitude if the change is $\geq 50\%$ but $< 100\%$ of the projected growth (0.13% to 0.25%);
- Low magnitude if the change is $\geq 25\%$ but $< 50\%$ of the projected growth (0.065% to 0.12%); and
- Negligible if the change is $< 25\%$ of the projected growth ($< 0.065\%$).

237. Although the final assembly and integration port(s) have not yet been confirmed, the potential impact of a temporary population increase of 640 people has been assessed against a range of indicative port locations. The analysis shows the magnitude of this impact varies significantly depending on the size of the local community. For example, at a small port such as Nigg (population: 9,114), the change would be of **high** magnitude (representing 7.02% of the baseline population), while at a large port like Leith (population: 523,250), it would be of **low** magnitude (0.12%) (Table 16.41).

Table 16.41: Bellrock Wind Farm Development Area Assembly and Integration Ports Social Impacts

Ports	Population	Change in Population	Magnitude
Ports in Urban Areas			
Aberdeen	227,750	0.28%	High
Leith	523,250	0.12%	Low
Ports in Rural Areas			
Ardersier	10,567	6.06%	High
Burntisland	15,012	4.26%	High
Cromarty Firth	12,515	5.11%	High
Kishorn	12,225	5.24%	High
Methil	37,888	1.69%	High
Nigg	9,114	7.02%	High
Orkney (Scapa Flow)	22,000	2.91%	High
Peterhead	27,557	2.32%	High
Rosyth	15,723	4.07%	High

16.8.1.5.3 Significance of Effect

238. In line with the assessment methodology (as set out in **Section 16.3.2**), a **high** magnitude impact on a community of **high** sensitivity would result in a **major** significant effect, which is **significant** in EIA terms. A **low** magnitude impact on a community of **medium** sensitivity would result in a **minor significant** effect, which is **not significant** in EIA terms (**Table 16.42**).

Table 16.42: Significance of Social Impacts at Assembly and Integration Ports

Location	Magnitude	Sensitivity	Significance
Aberdeen	High	Medium	Major
Leith	Low	Medium	Minor
Ardersier	High	High	Major
Burntisland	High	High	Major
Cromarty Firth	High	High	Major
Kishorn	High	High	Major
Methil	High	High	Major
Nigg	High	High	Major
Orkney (Scapa Flow)	High	High	Major
Peterhead	High	High	Major
Rosyth	High	High	Major

239. While the scale of the population change during the construction phase is assessed as having a major significance effect in a majority of cases, it is not inherently adverse or beneficial. Rather, it depends on how local infrastructure, services, local businesses, and communities respond to the increase in population. In some cases, increased population may place short-term pressure on housing, local services, and public infrastructure. In the absence of any planning by the Applicant, local authorities, it is more likely that the effect will be adverse in nature.

240. However, such pressures are typically managed through advance planning and coordination between public authorities and the private sector. Moreover, the population increase can bring potential benefits - particularly in rural areas experiencing long-term demographic decline - by boosting local demand for goods and services and supporting community vitality.

241. As the assembly and integration port(s) are not yet known, it is not possible at this time for the Applicant to engage with all of the communities and local authorities who could potentially be affected. However, it is anticipated that prior to the commencement of construction, the Applicant will engage with local communities and the local authority, port operator and other developers where a significant effect is identified.

242. The Applicant will ensure clear and early communication to manage its construction activities and ensure clear and early communication with local authorities and community stakeholders regarding the expected scale and timing of the construction works. With effective coordination, the population increase could present beneficial effects, including increased local spending and demand for goods and services, which may support local businesses and economic activity. On this basis, and assuming effective planning, good communication and collaborative management, the significant residual effect is assessed as beneficial.

16.8.1.6 Impact C6: Changes to Tourism and Recreation Receptors

243. The potential for changes to tourism and recreation receptors during the construction phase is driven by secondary effects arising from primary impacts on other marine users. Specifically, this assessment considers whether significant environmental effects identified in other technical chapters - such as obstruction to navigation, displacement of activities - could consequentially alter visitor behaviour or the viability of marine recreation.

244. A review of the relevant technical chapters has been undertaken to identify any such significant primary effects:

- **Chapter 12: Shipping and Navigation (Volume II):** No significant effects were identified.
- **Chapter 14: Marine Infrastructure and Other Users (Volume II):** No significant effects were identified.
- **Chapter 15: Marine Archaeology and Cultural Heritage (Volume II):** No significant effects were identified.

245. As no significant primary effects were identified in these Chapters, there is no plausible impact pathway that would lead to a significant secondary effect on tourism and recreation receptors. Consequently, the magnitude of impact on tourism and recreation receptors is assessed as **negligible**. Irrespective of the sensitivity of the receptor, the significance of the effect is therefore **negligible (adverse)**, which is **not significant** in EIA terms.

16.8.2 Operation and Maintenance

16.8.2.1 Impact O1: Increase in Employment and Gross Value Added (GVA)

246. Throughout the O&M phase, the O&M of the Wind Farm Infrastructure will result in spending across the economy. Crucially, the long-term nature of this activity provides a long-term stable revenue stream that can significantly enhance the commercial viability of the selected O&M port, supporting its long-term investment case. This expenditure benefits primary contractors, their suppliers, enabled by the employment and salaries associated with the Bellrock WFDA. Spending on the Wind Farm Infrastructure, in turn, generates economic activity in the form of increased employment and GVA.

16.8.2.1.1 Sensitivity

247. The sensitivity is as for the construction phase (**Section 16.8.1.1.1**):

- Scottish economy – **low**;
- UK economy – **negligible**; and
- Indicative O&M port locations – **medium to high**.

16.8.2.1.2 Magnitude of Impact

248. Information from the SCDS Outlook and BiGGAR Economics model of OWF economic impacts was used to assess the total spend by category in each study area. On this basis, it was assumed that annual spending associated with the Bellrock Wind Farm Infrastructure would be £45 million, of which £20 million could be spent in Scotland, as shown in **Table 16.43**.

Table 16.43: Annual Bellrock Wind Farm Development Area Operation and Maintenance Spending in Scotland and UK by Category

Parameters	Scotland	UK (Including Scotland)	Total
Total O&M	£20 m	£28 m	£45 m

249. Applying turnover per employee and turnover/GVA ratios for the relevant sectors, it was estimated that the direct annual economic impact could be £8 million GVA and 100 jobs in Scotland, and £11 million GVA and 150 jobs in the UK (as shown in **Table 16.44**).

Table 16.44: Bellrock Wind Farm Development Area Operation and Maintenance Direct Economic Impact in Scotland and UK

	Scotland		UK (Including Scotland)	
	GVA	Years of Employment	GVA	Years of Employment
Total O&M	£8 m	100	£11 m	150

250. Applying GVA and employment multipliers it was estimated that the annual economic impact during O&M of the Wind Farm Infrastructure could be £13 million GVA and 170 jobs in Scotland, and £30 million GVA and 390 jobs in the UK (as shown in **Table 16.45** and **Table 16.46**).

Table 16.45: Bellrock Wind Farm Development Area Operation and Maintenance Annual Gross Value Added (GVA) Impact in Scotland and UK

Parameters	Scotland	UK (Including Scotland)
Direct GVA	£8 m	£11 m
Indirect GVA	£3 m	£10 m
Total GVA	£10 m	£20 m
Induced GVA	£2 m	£9 m
Total GVA (with Induced GVA)	£13 m	£30 m

Table 16.46: Bellrock Wind Farm Development Area Operation and Maintenance Annual Employment Impact, Scotland and UK (Jobs)

Parameters	Scotland	UK (Including Scotland)
Direct Employment	100	150
Indirect Employment	40	120
Total Employment	140	270
Induced Employment	20	80
Total Employment (with Induced Employment)	170	390

251. This impact is expected to take place for at least a 35 year lifetime of the Wind Farm Infrastructure. Over this period, the total direct and indirect impact was estimated to be £372 million GVA, or NPV £115 million GVA (where future impacts are discounted more heavily than current impacts) in Scotland and £725 million GVA (NPV £225 million GVA) in the UK (as shown in **Table 16.47**).

Table 16.47: Bellrock Wind Farm Development Area Operation and Maintenance Impact (Over Lifetime) in Scotland and UK

Parameters	Scotland	UK (Including Scotland)
Total GVA	£372 m	£725 m
Total GVA (NPV)	£115 m	£225 m

252. On that basis, it was estimated that the operation of the Wind Farm Infrastructure could annually support 170 jobs in Scotland and 390 jobs across the UK (**Table 16.48**).

Table 16.48: Magnitude of Impact – Increase in Employment and Gross Value Added (GVA) (Operation and Maintenance) in Scotland and UK

Parameters	Scotland	UK (Including Scotland)
Annual Employment (jobs)	170	390
% of Construction Sector Employment in Socioeconomic Study Area	0.13%	0.02%
Magnitude of Impact	Negligible	Negligible

253. The annual O&M impact in Scotland is expected to account for 0.13% of the construction sector's² total employment and the magnitude has therefore been assessed as **negligible**.
254. The annual O&M impact in the UK is expected to account for less than 0.02% of the construction sector's total employment and the magnitude has therefore been assessed as **negligible**.
255. Long-term, local economic impacts are expected to be concentrated at the O&M port for the Bellrock WFDA. As this port has not yet been confirmed, a scenario-based approach has been adopted, mirroring the method used for the assembly and integration port(s) assessment.
256. Based on BiGGAR's expert judgment, a scenario has been developed assuming the main O&M port could secure contracts and activities worth approximately £10 million in revenue annually (**Table 16.49**).
257. Applying the relevant economic ratios to this annual expenditure, it is estimated that the O&M port activities could support approximately 70 long-term jobs each year throughout the operational phase.

Table 16.49: Bellrock Wind Farm Development Area Operation and Maintenance Port Economic Impact

	Total Expenditure	Operation and Maintenance Port Spend	Annual Employment (Jobs)
Total	£45 m	£10 m	70

258. To determine the magnitude of this long-term impact, the creation of 70 stable, annual jobs was assessed relative to the construction sector employment in each indicative port location. The significance of this impact varies by location; for example, in a larger labour market like Leith, the

² Note: While O&M is technically a service activity, the construction sector has been selected as the comparative baseline for determining magnitude. This is because the nature of the work (i.e. engineering, marine logistics, component replacement) draws upon the same industrial skills base as the construction sector. This approach ensures the assessment reflects the capacity of the local industrial labour market to support the Bellrock Project.

70 jobs would represent 0.74% of the construction sector workforce. In contrast, in a smaller labour market like Nigg, the same number of jobs represents 28.00% of the construction sector workforce.

259. Given that even the lower-end impact represents a notable increase, the magnitude of the economic impact at the O&M port has been assessed as **high** across all of the indicative port locations, except Leith where it has been assessed as **medium**.

Table 16.50: Bellrock Wind Farm Development Area Operation and Maintenance Port Economic Impact

Ports	Construction Sector Employment	Change in Employment	Magnitude
Ports in Urban Areas			
Aberdeen	6,000	1%	High
Leith	9,500	0.7%	Medium
Ports in Rural Areas			
Burntisland	300	23%	High
Ardersier	275	25%	High
Cromarty Firth	250	28%	High
Fraserburgh	300	23%	High
Montrose	275	25%	High
Nigg	250	28%	High
Peterhead	575	12%	High

16.8.2.1.3 Significance of Effect

260. Overall, it is predicted that the sensitivity of the Scottish economy is **low**, and the magnitude of the impact is **negligible**. The effect is therefore of **negligible** significance (beneficial), which is **not significant** in EIA terms.
261. Overall, it is predicted that the sensitivity of the UK economy is **negligible**, and the magnitude of the impact is **negligible**. The effect is therefore of **negligible** significance (beneficial), which is **not significant** in EIA terms.
262. Overall, it is predicted that the sensitivity of the indicative O&M port locations ranges from **medium** to **high**, and the magnitude of the impact is **high**. The effect is therefore of **major** significance (beneficial), which is **significant** in EIA terms.
263. No additional mitigation is required as effects identified are beneficial.

16.8.2.1.4 *Changes in Commercial Fisheries, and Shipping and Navigation*

264. A review of the relevant technical EIA chapters has been undertaken to determine if any significant adverse effects on commercial activities, such as displacement of fishing vessels or obstruction of shipping routes, were identified:

- **Chapter 11: Commercial Fisheries (Volume II):** significant effects were identified based on potential disruption to the UK Nephrops demersal otter trawl fleet; and
- **Chapter 12: Shipping and Navigation (Volume II):** No significant effects were identified.

265. As no significant adverse effects on shipping and navigation were identified in **Chapter 12: Shipping and Navigation (Volume II)**, there is no impact pathway that would lead to a corresponding reduction in employment or GVA. Consequently, no significant negative economic effects are anticipated.

266. In **Chapter 11: Commercial Fisheries (Volume II)** significant effects were identified based on potential disruption to the UK Nephrops demersal otter trawl fleet. The magnitude and sensitivity during O&M are identical to that during construction (**Section 16.8.1.1.4**). Overall, however, the magnitude of the impact on the Peterhead fishing and fish processing sector is deemed to be **negligible** and the sensitivity of the receptor is **low**. The effect is therefore of **negligible significance (adverse)**, which is **not significant** in EIA terms.

16.8.2.2 **Impact O2: Demographic Changes**

267. 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.

268. It is not anticipated that this will lead to changes at the Scottish or UK level, therefore 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.

16.8.2.2.1 *Sensitivity*

269. The sensitivity of the indicative port locations to project-related impacts varies from **medium** to **high**, primarily based on the size of their population and local labour markets. The analysis shows a wide range of economic conditions, with total employment in the local study areas ranging from approximately 2,900 in the Nigg area to over 372,000 in Leith. Reflecting their larger populations and labour markets, the urban port locations of Leith and Aberdeen have been assessed as having **medium** sensitivity. All other indicative port locations, which are situated in more rural areas with smaller populations and workforces, have been assessed as having **high** sensitivity.

16.8.2.2.2 *Magnitude of Impact*

270. In Scotland's rural areas, it would be expected that the opportunity for skilled local jobs could encourage individuals that had left the area for economic opportunities elsewhere to return. This could increase the number of working-age residents in rural areas and benefit long-term demographics.

271. During the O&M phase, a workforce of 70 people will be required to fulfil contracts at the O&M port. Based on an assumption of a change in population of two additional people for every job, to allow for some employees moving with family members, that would imply an increase in population of up to 140 during O&M. This would be considered the maximum impact, or worst-case scenario, as this implies that nobody in the local area was employed at the O&M base. In reality, it is likely that some of the employment opportunities will be taken up by local people.
272. The method adopted for assessing the magnitude of social impacts is based on a comparison to national population growth projections. According to NRS, the projected average annual population growth in Scotland between 2023 and 2043 is 0.26% (**Section 16.6**). This figure has been used as a benchmark for defining magnitude thresholds in this assessment. An impact is considered:
- High magnitude if the population change is greater than or equal to 100% of the projected annual growth ($\geq 0.26\%$);
 - Medium magnitude if the change is $\geq 50\%$ but $< 100\%$ of the projected growth (0.13% to 0.25%);
 - Low magnitude if the change is $\geq 25\%$ but $< 50\%$ of the projected growth (0.065% to 0.12%); and
 - Negligible if the change is $< 25\%$ of the projected growth ($< 0.065\%$).
273. A list of indicative O&M port locations have been identified and local Study Areas defined. Among these, Nigg represents the smallest community (population: 9,114), while Leith is the largest (population: 523,250). At Nigg, a population increase of 140 would represent a 1.54% rise – greater than the 0.26% threshold used in this assessment for a **high** magnitude impact. The same increase in Leith would equate to only 0.03%, which would be considered a **negligible** magnitude.

Table 16.51: Bellrock Wind Farm Development Area Operation and Maintenance Port Social Impacts

Ports	Population	Change in Population	Magnitude
Ports in Urban Areas			
Aberdeen	227,750	0.06%	Negligible
Leith	523,250	0.03%	Negligible
Ports in Rural Areas			
Burntisland	15,012	0.93%	High
Ardersier	10,567	1.32%	High
Cromarty Firth	12,515	1.12%	High
Fraserburgh	15,779	0.89%	High
Montrose	15,686	0.89%	High
Nigg	9,114	1.54%	High
Peterhead	27,557	0.51%	High

16.8.2.2.3 Significance of Effect

274. Given the methodology for assessing significance, if the magnitude of change is assessed as **high** and the sensitivity of the local Study Area is **high**, the social impacts at the O&M port would be classified as having **major** significance, which is **significant** in EIA terms. At the least sensitive potential port location - Leith - where the magnitude has been assessed as **negligible** and the sensitivity as **medium**, the resulting social impact would be of **negligible** significance and therefore **is not significant** in EIA terms.

Table 16.52: Significance of Social Impacts at Operation and Maintenance Port

Location	Magnitude	Sensitivity	Significance
Aberdeen	Negligible	Medium	Negligible
Leith	Negligible	Medium	Negligible
Burntisland	High	High	Major
Ardersier	High	High	Major
Cromarty Firth	High	High	Major
Fraserburgh	High	High	Major
Montrose	High	High	Major
Nigg	High	High	Major
Peterhead	High	High	Major

275. As with the construction phase, the significant effect identified at the most sensitive potential O&M port locations is not considered inherently adverse or beneficial; the perception of such changes is often subjective. However, through the proactive engagement and management practices outlined above, the Applicant will work to mitigate potential adverse impacts and maximise opportunities, ensuring that the community outcomes are effectively managed.

16.8.2.3 Impact O3: Changes to Housing Demand

276. The increase in employment at the O&M port is expected to result in an increase in demand for housing. This housing required is anticipated to be long-term, with more family homes likely to be required.

277. The main driver of accommodation demand is expected to be the increased population needed to meet the requirements of the O&M port.

16.8.2.3.1 Sensitivity

278. The sensitivity of the indicative port locations to project-related impacts varies from **medium** to **high**, primarily based on the size of their population and local labour markets. The analysis shows a wide range of economic conditions, with total employment in the local study areas ranging from approximately 2,900 in the Nigg area to over 372,000 in Leith. Reflecting their larger populations

and labour markets, the urban port locations of Leith and Aberdeen have been assessed as having **medium** sensitivity. All other indicative port locations, which are situated in more rural areas with smaller populations and workforces, have been assessed as having **high** sensitivity.

16.8.2.3.2 *Magnitude of Impact*

279. In Scotland's rural areas, it would be expected that the opportunity for skilled local jobs could encourage individuals that had left the area for economic opportunities elsewhere to return. This could increase the number of working-age residents in rural areas and benefit long-term demographics.
280. During the O&M phase, a workforce of 70 people will be required to fulfil contracts at the O&M port. Based on an assumption of a change in population of two additional people for every job, to allow for some employees moving with family members, that would imply an increase in population of up to 140 during O&M. This would be considered the maximum impact, or worst-case scenario, as this implies that nobody in the local area was employed at the O&M base. In reality, it is likely that some of the employment opportunities will be taken up by local people.
281. The method adopted for assessing the magnitude of social impacts is based on a comparison to national population growth projections. According to NRS, the projected average annual population growth in Scotland between 2023 and 2043 is 0.26% (**Section 16.6**). This figure has been used as a benchmark for defining magnitude thresholds in this assessment. An impact is considered:
- High magnitude if the population change is greater than or equal to 100% of the projected annual growth ($\geq 0.26\%$);
 - Medium magnitude if the change is $\geq 50\%$ but $< 100\%$ of the projected growth (0.13% to 0.25%);
 - Low magnitude if the change is $\geq 25\%$ but $< 50\%$ of the projected growth (0.065% to 0.12%); and
 - Negligible if the change is $< 25\%$ of the projected growth ($< 0.065\%$).
282. A list of indicative O&M port locations has been identified and local Study Areas defined. Among these, Nigg represents the smallest community (population: 9,114), while Leith is the largest (population: 523,250). At Nigg, a population increase of 140 would represent a 1.54% rise – greater than the 0.26% threshold used in this assessment for a **high** magnitude impact. In contrast, the same increase in Leith would equate to only 0.03%, which would be considered a **negligible** magnitude.

Table 16.53: Bellrock Wind Farm Development Area Operation and Maintenance Port Social Impacts

Ports	Population	Change in Population	Magnitude
Ports in Urban Areas			
Aberdeen	227,750	0.06%	Negligible
Leith	523,250	0.03%	Negligible
Ports in Rural Areas			
Burntisland	15,012	0.93%	High
Ardersier	10,567	1.32%	High
Cromarty Firth	12,515	1.12%	High
Fraserburgh	15,779	0.89%	High
Montrose	15,686	0.89%	High
Nigg	9,114	1.54%	High
Peterhead	27,557	0.51%	High

283. As with the construction phase, the significant effect identified at the most sensitive potential O&M port locations is not considered inherently adverse or beneficial; the perception of such changes is often subjective. However, through the proactive engagement and management practices outlined above, the Applicant will work to mitigate potential adverse impacts and maximise opportunities, ensuring that the community outcomes are effectively managed.

16.8.2.3.3 Significance of Effect

284. Given the methodology for assessing significance, if the magnitude of change is assessed as **high** and the sensitivity of the local study area is **high**, the social impacts at the O&M port would be classified as having **major** significance, which is **significant** in EIA terms. At the least sensitive potential port location - Leith - where the magnitude has been assessed as **negligible** and the sensitivity as **medium**, the resulting social impact would be of **negligible** significance and therefore is **not significant** in EIA terms.

16.8.2.4 Impact O4: Changes to Other Local Public and Private Services

285. The employment supported at the O&M stage is expected to result in a stable workforce with more families and is expected to increase demand for schools and educational services, health services, as well as local cafes, supermarkets and transport networks.

16.8.2.4.1 Sensitivity

286. The sensitivity of the indicative port locations to project-related impacts varies from **medium** to **high**, primarily based on the size of their population and local labour markets. The analysis shows a wide range of economic conditions, with total employment in the local study areas ranging from

approximately 2,900 in the Nigg area to over 372,000 in Leith. Reflecting their larger populations and labour markets, the urban port locations of Leith and Aberdeen have been assessed as having **medium** sensitivity. All other indicative port locations, which are situated in more rural areas with smaller populations and workforces, have been assessed as having **high** sensitivity.

16.8.2.4.2 *Magnitude of Impact*

287. In Scotland's rural areas, it would be expected that the opportunity for skilled local jobs could encourage individuals that had left the area for economic opportunities elsewhere to return. This could increase the number of working-age residents in rural areas and benefit long-term demographics.
288. During the O&M phase, a workforce of 70 people will be required to fulfil contracts at the O&M port. Based on an assumption of a change in population of two additional people for every job, to allow for some employees moving with family members, that would imply an increase in population of up to 140 during O&M. This would be considered the maximum impact, or worst-case scenario, as this implies that nobody in the local area was employed at the O&M base. In reality, it is likely that some of the employment opportunities will be taken up by local people.
289. The method adopted for assessing the magnitude of social impacts is based on a comparison to national population growth projections. According to NRS, the projected average annual population growth in Scotland between 2023 and 2043 is 0.26% (**Section 16.6**). This figure has been used as a benchmark for defining magnitude thresholds in this assessment. An impact is considered:
- High magnitude if the population change is greater than or equal to 100% of the projected annual growth ($\geq 0.26\%$);
 - Medium magnitude if the change is $\geq 50\%$ but $< 100\%$ of the projected growth (0.13% to 0.25%);
 - Low magnitude if the change is $\geq 25\%$ but $< 50\%$ of the projected growth (0.065% to 0.12%); and
 - Negligible if the change is $< 25\%$ of the projected growth ($< 0.065\%$).
290. A list of indicative O&M port locations has been identified and local Study Areas defined. Among these, Nigg represents the smallest community (population: 9,114), while Leith is the largest (population: 523,250). At Nigg, a population increase of 140 would represent a 1.54% rise – greater than the 0.26% threshold used in this assessment for a **high** magnitude impact. In contrast, the same increase in Leith would equate to only 0.03%, which would be considered a **negligible** magnitude.

Table 16.54: Bellrock Wind Farm Development Area Operation and Maintenance Port Social Impacts

Ports	Population	Change in Population	Magnitude
Ports in Urban Areas			
Aberdeen	227,750	0.06%	Negligible
Leith	523,250	0.03%	Negligible
Ports in Rural Areas			
Burntisland	15,012	0.93%	High
Ardersier	10,567	1.32%	High
Cromarty Firth	12,515	1.12%	High
Fraserburgh	15,779	0.89%	High
Montrose	15,686	0.89%	High
Nigg	9,114	1.54%	High
Peterhead	27,557	0.51%	High

16.8.2.4.3 Significance of Effect

291. Given the methodology for assessing significance, if the magnitude of change is assessed as **high** and the sensitivity of the local study area is **high**, the social impacts at the O&M port would be classified as having **major** significance, which is **significant** in EIA terms. At the least sensitive potential port location - Leith - where the magnitude has been assessed as **negligible** and the sensitivity as **medium**, the resulting social impact would be of **negligible** significance and therefore is **not significant** in EIA terms.

Table 16.55: Significance of Social Impacts at Operation and Maintenance Port

Location	Magnitude	Sensitivity	Significance
Aberdeen	Negligible	Medium	Negligible
Leith	Negligible	Medium	Negligible
Burntisland	High	High	Major
Ardersier	High	High	Major
Cromarty Firth	High	High	Major
Fraserburgh	High	High	Major
Montrose	High	High	Major
Nigg	High	High	Major
Peterhead	High	High	Major

292. As with the construction phase, the significant effect identified at the most sensitive potential O&M port locations is not considered inherently adverse or beneficial; the perception of such changes is often subjective. However, through the proactive engagement and management practices outlined above, the Applicant will work to mitigate potential adverse impacts and maximise opportunities, ensuring that the community outcomes are effectively managed.

16.8.2.5 Impact O5: Socio-cultural Effects

293. The increased population associated with activity around the assembly and integration port may affect how local communities perceive their area.

16.8.2.5.1 Sensitivity

294. The sensitivity of the indicative port locations to project-related impacts varies from **medium** to **high**, primarily based on the size of their population and local labour markets. The analysis shows a wide range of economic conditions, with total employment in the local study areas ranging from approximately 2,900 in the Nigg area to over 372,000 in Leith. Reflecting their larger populations and labour markets, the urban port locations of Leith and Aberdeen have been assessed as having **medium** sensitivity. All other indicative port locations, which are situated in more rural areas with smaller populations and workforces, have been assessed as having **high** sensitivity.

16.8.2.5.2 Magnitude of Impact

295. In Scotland's rural areas, it would be expected that the opportunity for skilled local jobs could encourage individuals that had left the area for economic opportunities elsewhere to return. This could increase the number of working-age residents in rural areas and benefit long-term demographics.

296. During the O&M phase, a workforce of 70 people will be required to fulfil contracts at the O&M port. Based on an assumption of a change in population of two additional people for every job, to allow for some employees moving with family members, that would imply an increase in population of up to 140 during O&M. This would be considered the maximum impact, or worst-case scenario, as this implies that nobody in the local area was employed at the O&M base. In reality, it is likely that some of the employment opportunities will be taken up by local people.
297. The method adopted for assessing the magnitude of social impacts is based on a comparison to national population growth projections. According to NRS, the projected average annual population growth in Scotland between 2023 and 2043 is 0.26% (**Section 16.6**). This figure has been used as a benchmark for defining magnitude thresholds in this assessment. An impact is considered:
- High magnitude if the population change is greater than or equal to 100% of the projected annual growth ($\geq 0.26\%$);
 - Medium magnitude if the change is $\geq 50\%$ but $< 100\%$ of the projected growth (0.13% to 0.25%);
 - Low magnitude if the change is $\geq 25\%$ but $< 50\%$ of the projected growth (0.065% to 0.12%); and
 - Negligible if the change is $< 25\%$ of the projected growth ($< 0.065\%$).
298. A list of indicative O&M port locations have been identified and local study areas defined. Among these, Nigg represents the smallest community (population: 9,114), while Leith is the largest (population: 523,250). At Nigg, a population increase of 140 would represent a 1.54% rise – greater than the 0.26% threshold used in this assessment for a **high** magnitude impact. In contrast, the same increase in Leith would equate to only 0.03%, which would be considered a **negligible** magnitude (**Table 16.56**).

Table 16.56: Bellrock Wind Farm Development Area Operation and Maintenance Port Social Impacts

Ports	Population	Change in Population	Magnitude
Ports in Urban Areas			
Aberdeen	227,750	0.06%	Negligible
Leith	523,250	0.03%	Negligible
Ports in Rural Areas			
Burntisland	15,012	0.93%	High
Ardersier	10,567	1.32%	High
Cromarty Firth	12,515	1.12%	High
Fraserburgh	15,779	0.89%	High
Montrose	15,686	0.89%	High
Nigg	9,114	1.54%	High
Peterhead	27,557	0.51%	High

299. As with the construction phase, the significant effect identified at the most sensitive potential O&M port locations is not considered inherently adverse or beneficial; the perception of such changes is often subjective. However, through the proactive engagement and management practices outlined above, the Applicant will work to mitigate potential adverse impacts and maximise opportunities, ensuring that the community outcomes are effectively managed.

16.8.2.5.3 Significance of Effect

300. Given the methodology for assessing significance, if the magnitude of change is assessed as **high** and the sensitivity of the local Study Area is **high**, the social impacts at the O&M port would be classified as having **major** significance, which is **significant** in EIA terms. At the least sensitive potential port location - Leith - where the magnitude has been assessed as **negligible** and the sensitivity as **medium**, the resulting social impact would be of **negligible significance** and therefore is **not significant** in EIA terms.

16.8.2.6 Impact O6: Changes to Tourism and Recreation Receptors

301. The potential for changes to tourism and recreation receptors during the O&M phase is driven by secondary effects arising from primary impacts on other marine users. Specifically, this assessment considers whether significant environmental effects identified in other technical chapters - such as obstruction to navigation, displacement of activities - could consequentially alter visitor behaviour or the viability of marine recreation.

302. A review of the relevant technical chapters has been undertaken to identify any such significant primary effects:

- **Chapter 12: Shipping and Navigation (Volume II):** No significant effects were identified.
- **Chapter 14: Marine Infrastructure and Other Users (Volume II):** No significant effects were identified.
- **Chapter 15: Marine Archaeology and Cultural Heritage (Volume II):** No significant effects were identified.

303. As no significant primary effects were identified in these chapters, there is no plausible impact pathway that would lead to a significant secondary effect on tourism and recreation receptors. Consequently, the magnitude of impact on tourism and recreation receptors is assessed as **negligible**. Irrespective of the sensitivity of the receptor, the significance of the effect is therefore **negligible (adverse)**, which is **not significant** in EIA terms.

16.8.3 Decommissioning

16.8.3.1 Impact D1: Increase in Employment and Gross Value Added (GVA)

304. The decommissioning of the Wind Farm Infrastructure will result in further spending across the economy. This expenditure benefits primary contractors, their suppliers, and those businesses supported by further rounds of spending, enabled by the employment and salaries associated with the Bellrock WFDA. Spending on the Wind Farm Infrastructure, in turn, generates economic activity in the form of increased employment and GVA.

16.8.3.1.1 Sensitivity

305. The sensitivity is the same as the construction phase (**Section 16.8.1.1.1**):

- Scottish economy – **low**;
- UK economy – **negligible**; and
- Indicative port locations – **medium to high**.

16.8.3.1.2 Magnitude of Impact

306. Decommissioning is expected to take place after the operational lifespan of the Wind Farm Infrastructure, which means that there is a high degree of uncertainty about the level of expenditure associated with this phase, as well as the share of activity that could be secured in Scotland and the UK.

307. The analysis is based on BVG Associates' work to determine the potential spend (BVG Associates, 2023) and contract breakdown (BVG Associates, 2021), of decommissioning activity. On this basis, it was assumed that the spend associated with decommissioning the Wind Farm Infrastructure could be £133 million. Of this, it is estimated that £40 million would be secured in Scotland. As the UK figure is inclusive of Scotland, the total UK content is also estimated at £40 million (implying the activity is concentrated at the Scottish port of decommissioning). These figures are shown in **Table 16.57**.

Table 16.57: Bellrock Wind Farm Development Area Total Decommissioning Expenditure in Scotland and the UK

Parameters	Scotland	UK (Including Scotland)	Total
Total Decommissioning	£40 m	£40 m	£133 m

308. Applying turnover per employee and turnover/GVA ratios for the relevant sectors, it was estimated that the direct economic impact could be £12 million GVA and 140 years of employment in Scotland and the UK (as shown in **Table 16.58**).

Table 16.58: Bellrock Wind Farm Development Area Total Decommissioning Direct Impact in Scotland and UK

Parameters	Scotland		UK (Including Scotland)	
	GVA	Years of Employment	GVA	Years of Employment
Total Impact	£12 m	140	£12 m	140

309. Applying GVA and employment multipliers it is estimated that the economic impact of the Wind Farm Infrastructure could be £21 million GVA and 260 years of employment in Scotland, and £32 million GVA and 390 years of employment in the UK (as shown in **Table 16.59** and **Table 16.60**).

Table 16.59: Bellrock Wind Farm Development Area Decommissioning Gross Value Added (GVA) Impact in Scotland and UK

Parameters	Scotland	UK (Including Scotland)
Direct GVA	£12 m	£12 m
Indirect GVA	£5 m	£11 m
Total GVA	£18 m	£23 m
Induced GVA	£4 m	£9 m
Total GVA (with Induced GVA)	£21 m	£32 m

Table 16.60: Bellrock Wind Farm Development Area Decommissioning Employment Impact in Scotland and UK (Years of Employment)

Parameters	Scotland	UK (Including Scotland)
Direct Employment	140	140
Indirect Employment	70	140
Total Employment	210	280
Induced Employment	40	110
Total Employment (with Induced Employment)	260	390

310. For the purposes of the assessment, it was assumed that decommissioning activity occurs over a seven-year period. On that basis, it was estimated that that at its peak, decommissioning of the Wind Farm Infrastructure could support through its decommissioning, 40 jobs in Scotland and 60 jobs across the UK (**Table 16.61**).

Table 16.61: Magnitude of Impact – Increase in Employment and Gross Value Added (GVA) (Decommissioning) in Scotland and UK

Parameters	Scotland	UK (Including Scotland)
Peak Employment	40	60
% of Construction Sector Employment in Socioeconomic Study Area	0.03%	0.00%
Magnitude of Impact	Negligible	Negligible

311. The decommissioning impact in Scotland is expected to account for 0.03% of employment in the construction sector. Therefore, the magnitude has been assessed as **negligible**.
312. The decommissioning impact in the UK is expected to account 0.00% of employment in the construction sector. Therefore, the magnitude has been assessed as **negligible**.

16.8.3.1.3 Significance of Effect

313. Overall, it is predicted that the sensitivity of the Scottish economy is **low**, and the magnitude of the impact is **negligible**. The effect is therefore of **negligible significance** (beneficial), which is **not significant** in EIA terms.
314. Overall, it is predicted that the sensitivity of the UK economy is **negligible**, and the magnitude of the impact is **negligible**. The effect is therefore of **negligible significance** (beneficial), which is **not significant** in EIA terms.
315. No additional mitigation is required as effects identified are beneficial.

16.8.3.1.4 Changes in Commercial Fisheries, and Shipping and Navigation

316. A review of the relevant technical EIA chapters has been undertaken to determine if any significant adverse effects on commercial activities, such as displacement of fishing vessels or obstruction of shipping routes, were identified:
- **Chapter 11: Commercial Fisheries (Volume II)**: significant effects were identified based on potential disruption to the UK Nephrops demersal otter trawl fleet; and
 - **Chapter 12: Shipping and Navigation (Volume II)**: No significant effects were identified.
317. As no significant adverse effects on shipping and navigation were identified in **Chapter 12: Shipping and Navigation (Volume II)**, there is no impact pathway that would lead to a corresponding reduction in employment or GVA. Consequently, no significant negative economic effects are anticipated.
318. In **Chapter 11: Commercial Fisheries (Volume II)** significant effects were identified based on potential disruption to UK demersal otter trawl fleet targeting Nephrops. The magnitude and sensitivity during decommissioning are identical to that during construction (**Section 16.8.1.1.4**). Overall, the magnitude of the impact on the Peterhead fishing and fish processing sector is deemed to be **negligible** and the sensitivity of the receptor is **low**. The effect is therefore of **negligible significance (adverse)**, which is **not significant** in EIA terms.

16.8.3.2 Impact D2: Demographic Changes

319. The potential for social impacts during the decommissioning phase, including effects on demographics, housing, local services, and socio-cultural aspects, has been considered. However, the decommissioning of the Wind Farm Infrastructure is scheduled to occur at the end of its 35-year operational life.

320. Over such a long time horizon, the baseline social conditions of any potential host communities will have evolved in ways that cannot be accurately predicted at the time of writing. Factors such as the future population size, demographic structure, housing availability, and the capacity of local services are all unknown.
321. Furthermore, social impacts, particularly socio-cultural effects, are fundamentally linked to community perceptions and attitudes. These are dynamic and likely to change significantly over several decades, especially in relation to established industries like offshore wind. Any primary survey evidence on community attitudes gathered now would have no validity for assessing an impact that will occur in 35 years' time.
322. Given these significant uncertainties, it is not possible to undertake a meaningful or robust assessment of the likely significance of these specific social effects during the decommissioning phase. To do so would be speculative.
323. Therefore, in line with standard EIA practice for assessing activities in the distant future, the assessment is based on the nature of the physical works. The activities associated with decommissioning (e.g. vessel movements, workforce numbers, port activity) are expected to be broadly similar to, or less than, those assessed for the construction phase.

16.8.3.3 Impact D3: Changes to Housing Demand

324. The assessment of effects follows identical reasoning to that given in **Section 16.8.1.3**.

16.8.3.4 Impact D4: Changes to Other Local Public and Private Services

325. The assessment of effects follows identical reasoning to that given in **Section 16.8.1.4**.

16.8.3.5 Impact D5: Socio-cultural Effects

326. The assessment of effects follows identical reasoning to that given in **Section 16.8.1.5**.

16.8.3.6 Impact D6: Changes to Tourism and Recreation Receptors

327. The potential for changes to tourism and recreation receptors during the O&M phase is driven by secondary effects arising from primary impacts on other marine users. Specifically, this assessment considers whether significant environmental effects identified in other technical chapters - such as obstruction to navigation, displacement of activities - could consequentially alter visitor behaviour or the viability of marine recreation.
328. A review of the relevant technical chapters has been undertaken to identify any such significant primary effects:
- **Chapter 12: Shipping and Navigation (Volume II):** No significant effects were identified;
 - **Chapter 14: Marine Infrastructure and Other Users (Volume II):** No significant effects were identified; and
 - **Chapter 15: Marine Archaeology and Cultural Heritage (Volume II):** No significant effects were identified.

329. As no significant primary effects were identified in these Chapters, there is no plausible impact pathway that would lead to a significant secondary effect on tourism and recreation receptors. Consequently, the magnitude of impact on tourism and recreation receptors is assessed as **negligible**. Irrespective of the sensitivity of the receptor, the significance of the effect is therefore **negligible (adverse)**, which is **not significant** in EIA terms.

This page is intentionally blank

16.9 Cumulative Effects Assessment

16.9.1 Realistic Worst-case Scenario

Table 16.62: Realistic Worst-case Scenarios for Impacts on Socioeconomic, Tourism and Recreation

Impact	Phase			Tier	Realistic Worst-case Scenario
	Construction	O&M	Decommissioning		
Increase in employment and GVA	✓	✓	X	1 - 3	<p><u>Construction</u></p> <p><u>Increased Offshore Wind Supply Chain in Scotland and the UK</u></p> <p>In addition to the economic impact generated by the expenditure associated with the Bellrock Wind Farm Infrastructure, it may have cumulative effects associated with its interaction with other plans/projects, such as increasing the critical mass of the offshore wind sector and attracting manufacturers etc.</p> <p>To ensure a robust and conservative assessment, the realistic worst-case scenario includes only those supply chain developments (e.g. new manufacturing facilities) that are currently secured or operational. Speculative future capacity is excluded to define the minimum likely economic benefit.</p> <p><u>Increased Competition for Resources</u></p> <p>Expenditure associated with the Bellrock WFDA Wind Farm Infrastructure may result in increased competition for limited resources, delaying other projects and leading to a slower build out.</p> <p><u>Operation and Maintenance</u></p> <p>In addition to the economic impact generated by the expenditure associated with the Bellrock Wind Farm Infrastructure, it may have cumulative effects associated with its interaction with other projects, such as facilitating the development of regional O&M hubs, shared logistics infrastructure, and competition for resources.</p>

Impact	Phase			Tier	Realistic Worst-case Scenario
	Construction	O&M	Decommissioning		
Demographic changes	✓	✓	✓	1 - 3	<p><u>Construction</u></p> <p>Temporary changes to demographics and increased demand for services in the area around the assembly and integration port will be sustained by the sequential construction of multiple projects (e.g. ScotWind and INTOG), creating a period of activity extending over a decade or more.</p> <p>This extends the duration of otherwise temporary effects, potentially encouraging a shift from a transient workforce to a resident one, while overlapping schedules may increase the peak magnitude of demand.</p> <p><u>Operation and Maintenance</u></p> <p>The O&M of multiple projects from individual port locations could result in long term changes in populations with implications for housing, local service provision and socio-culture.</p> <p><u>Decommissioning</u></p> <p>Port-specific changes to demographics and increased demand for services may increase as ports specialise in offshore wind farm maintenance, attracting other similar developments.</p>
Changes to housing demand	✓	✓	✓	1 - 3	<p><u>Construction</u></p> <p>Temporary changes to demographics and increased demand for services in the area around the assembly and integration port will be sustained by the sequential construction of multiple projects (e.g. ScotWind and INTOG), creating a period of activity extending over a decade or more.</p> <p>This extends the duration of otherwise temporary effects, potentially encouraging a shift from a transient workforce to a resident one, while overlapping schedules may increase the peak magnitude of demand.</p>

Impact	Phase			Tier	Realistic Worst-case Scenario
	Construction	O&M	Decommissioning		
					<p><u>Operation and Maintenance</u></p> <p>The O&M of multiple projects from individual port locations could result in long term changes in populations with implications for housing, local service provision and socio-culture.</p> <p><u>Decommissioning</u></p> <p>Port-specific changes to demographics and increased demand for services may increase as ports specialise in offshore wind farm maintenance, attracting other similar developments.</p>
Changes to other local public and private services	✓	✓	✓	1 - 3	<p><u>Construction</u></p> <p>Temporary changes to demographics and increased demand for services in the area around the assembly and integration port will be sustained by the sequential construction of multiple projects (e.g. ScotWind and INTOG), creating a period of activity extending over a decade or more.</p> <p>This extends the duration of otherwise temporary effects, potentially encouraging a shift from a transient workforce to a resident one, while overlapping schedules may increase the peak magnitude of demand.</p> <p><u>Operation and Maintenance</u></p> <p>The O&M of multiple projects from individual port locations could result in long term changes in populations with implications for housing, local service provision and socio-culture.</p> <p><u>Decommissioning</u></p> <p>Port-specific changes to demographics and increased demand for services may increase as ports specialise in offshore wind farm maintenance, attracting other similar developments.</p>

Impact	Phase			Tier	Realistic Worst-case Scenario
	Construction	O&M	Decommissioning		
Socio-cultural effects	✓	✓	✓	1 - 3	<p><u>Construction</u></p> <p>Temporary changes to demographics and increased demand for services in the area around the assembly and integration port will be sustained by the sequential construction of multiple projects (e.g. ScotWind and INTOG), creating a period of activity extending over a decade or more.</p> <p>This extends the duration of otherwise temporary effects, potentially encouraging a shift from a transient workforce to a resident one, while overlapping schedules may increase the peak magnitude of demand.</p> <p><u>Operation and Maintenance</u></p> <p>The O&M of multiple projects from individual port locations could result in long term changes in populations with implications for housing, local service provision and socio-culture.</p> <p><u>Decommissioning</u></p> <p>Port-specific changes to demographics and increased demand for services may increase as ports specialise in offshore wind farm maintenance, attracting other similar developments.</p>

16.9.2 Construction Phase

16.9.2.1 Increase in Employment and Gross Value Added (GVA)

330. An assessment of the likely significance of the cumulative effects of the Bellrock Wind Farm Infrastructure arising from each identified impact is given below. The cumulative effect on employment and GVA during the construction 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 UK; and
- Increased competition for resources.

331. Additionally, this Chapter is supported by **Appendix 16.2: Economic Impact of the Bellrock Project (Volume IV)**, which presents the combined economic impact of the WFDA, OfTDA and OnTDA as a 'whole project' assessment to provide context on the total economic scale of the development.

16.9.2.1.1 Increased Offshore Wind Supply Chain in Scotland and the UK

332. A large number of offshore wind developments are currently being progressed across the UK, particularly on the east coast of Scotland (e.g. ScotWind and INTOG). The cumulative impact being assessed here relates to the potential for these combined developments to generate a level of demand sufficient to support or attract new investment in domestic supply chain infrastructure – for example, the establishment or expansion of fabrication yards, manufacturing facilities, or ports. This potential “critical mass” of offshore wind activity could make the UK, and Scotland, more competitive as a location for supply chain industries. While the socio-economic benefits of the Bellrock Wind Farm Infrastructure are assessed individually, this cumulative assessment considers how the combined demand across multiple developments may enable economic activity (such as a new facility) that would be unlikely to materialise in isolation.

16.9.2.1.1.1 Magnitude of Impact

333. As discussed in **Section 16.7.3**, 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.

334. The worst-case scenario has been considered based on already committed investments, though further investments are likely as the supply chain develops. Investment requires certainty that projects will be developed, and orders will be forthcoming, which is why early stage projects such as the Bellrock Project are important.

335. Committed investments 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.

336. Furthermore, the designation of Green Freeports is catalysing significant port infrastructure upgrades. Key examples include the expanding capabilities at the Port of Cromarty Firth (part of the Inverness and Cromarty Firth Green Freeport) and the Port of Leith (part of the Forth Green Freeport), both of which are securing investment to support the manufacturing and marshalling requirements of the cumulative offshore wind pipeline.
337. The cumulative impact from investment in supply chain development is predicted to be of national spatial extent, and long-term duration. It is predicted that the impact will affect the Scottish and UK economy directly. The magnitude is therefore, considered to be **medium** in Scotland and **negligible** in the UK.

16.9.2.1.1.2 *Sensitivity*

338. For impacts arising solely from the Bellrock Wind Farm Infrastructure, the Scottish economy is assessed as having **low** sensitivity, while the UK economy is assessed as having **negligible** sensitivity.

16.9.2.1.1.3 *Significance of Effect*

339. Overall, the magnitude of the impact in Scotland is deemed to be **medium** and the sensitivity of the economy is considered to be **low**. The effect will, therefore, be of **minor beneficial significance**, which is **not significant** in EIA terms.
340. Overall, the magnitude of the impact in the UK is deemed to be **negligible** and the sensitivity of the economy is considered to be **negligible**. The effect will, therefore, be of **negligible beneficial significance**, which is **not significant** in EIA terms.
341. No mitigation is required as the effects identified are beneficial.

16.9.2.1.2 *Increased Competition for Resources*

342. The large number of offshore wind farms in Scotland and the UK that are planned for construction will require similar resources, leading to increased competition.

16.9.2.1.2.1 *Magnitude of Impact*

343. Due to the size of the planned offshore wind expansion in the UK, including ScotWind and INTOG, some resources such as ports, manufacturing facilities and skilled workers are likely to be in high demand.
344. 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, investment in workforce upskilling and re-skilling, or increased efficiency in the sector.
345. Under the worst-case 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.

346. Therefore, the magnitude of impact has been assessed as **negligible** for the Scottish and UK economies. To assess local impacts would require knowledge of the assembly and integration port(s), which is not known at this stage and therefore the magnitude cannot be assessed at a local scale.

16.9.2.1.2.2 *Sensitivity*

347. As for the impacts arising solely from the Bellrock Wind Farm Infrastructure, the sensitivity of the Scottish economy has been assessed as **low**, and the sensitivity of the UK economy has been assessed as **negligible**.

16.9.2.1.2.3 *Significance of Effect*

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

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

350. No mitigation is required as no significant adverse effects were identified.

16.9.2.2 **Demographic Changes**

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

16.9.2.2.1 *Magnitude of Impact*

352. Construction impacts related to single projects, such as the Bellrock Wind Farm Infrastructure, 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 experienced as long-term and relatively stable.

353. As discussed in **Section 16.7.3**, the Bellrock Wind Farm Infrastructure 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.

354. It is not possible to assess the magnitude of any change, as this is likely to be modulated by characteristics of individual communities, such as capacity and population dynamics.

16.9.2.2.2 *Sensitivity*

355. As the assembly and integration port is not known it is not possible to assess the sensitivity of the area.

16.9.2.2.3 Significance of Effect

356. It is not possible to determine the magnitude of the adverse or beneficial impact or the level of sensitivity, and therefore it is not possible to assess the significance of the effect.
357. No mitigation is proposed at this stage as the magnitude of impact cannot be determined.

16.9.2.3 Changes to Housing Demand

358. A sustained increase in population across the east coast of Scotland associated with the offshore wind sector is likely to have an effect on housing demand.

16.9.2.3.1 Magnitude of Impact

359. In isolation, the Bellrock Wind Farm Infrastructure may lead to an increase in demand for temporary housing. In combination with other east coast projects, the Bellrock Wind Farm Infrastructure may result in a long-term increase in population and a long-term increase in demand for housing for skilled workers and their families.
360. It is not possible to assess the magnitude of any change, as this is likely to be modulated by characteristics of individual communities, as well as how the housing market responds to increased demand.

16.9.2.3.2 Sensitivity

361. As the assembly and integration port(s) is not known it is not possible to assess the sensitivity of the area.

16.9.2.3.3 Significance of Effect

362. It is not possible to determine the magnitude of the adverse or beneficial impact or the level of sensitivity, and therefore it is not possible to assess the significance of the effect.
363. No mitigation is proposed at this stage as the magnitude of impact cannot be determined.

16.9.2.4 Changes to Other Local Public and Private Services

364. A sustained increase in economic activity and employment will result in a long-term increase in demand for public and private services.

16.9.2.4.1 Magnitude of Impact

365. In combination with other projects, the Bellrock Wind Farm Infrastructure 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.
366. The magnitude of change will depend on the factors outlined in **Section 16.7.3**, including the capacity of local service providers and the ability of the local area to respond to change. As the assembly and integration port is not known, it is not possible to assess the magnitude of impact.

16.9.2.4.2 Sensitivity

367. As the assembly and integration port is not known it is not possible to assess the sensitivity of the area.

16.9.2.4.3 Significance of Effect

368. It is not possible to determine the magnitude of the adverse or beneficial impact or the level of sensitivity, and therefore it is not possible to assess the significance of the effect.

369. No mitigation is proposed at this stage as the magnitude of impact cannot be determined.

16.9.2.5 Socio-cultural Effects

370. The development of several offshore wind projects, including the Bellrock Wind Farm Infrastructure, may affect how local communities perceive themselves.

16.9.2.5.1 Magnitude of Impact

371. A sustained increase in economic activity and population may affect how the local area around the assembly and integration port perceives themselves, for example because of better employment prospects. However, as the port is not known, it is not possible to assess the magnitude of any impact.

16.9.2.5.2 Sensitivity

372. As the assembly and integration port is not known it is not possible to assess the sensitivity of the area.

16.9.2.5.3 Significance of Effect

373. It is not possible to determine the magnitude of the adverse or beneficial impact or the level of sensitivity, and therefore it is not possible to assess the significance of the effect.

374. No mitigation is proposed at this stage as the magnitude of impact cannot be determined.

16.9.3 Operation and Maintenance Phase

16.9.3.1 Increase in Employment and GVA

375. This section considers the cumulative effects of the Bellrock Wind Farm Infrastructure upon socio-economic study areas (which is Scotland and the UK) arising from each identified impact. As with the construction phase, the cumulative effect on employment and GVA 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 UK; and
- Increased competition for resources.

16.9.3.1.1 Increased Offshore Wind Supply Chain in Scotland and the UK

16.9.3.1.1.1 Magnitude of Impact

376. There are a number of offshore wind developments that are being developed across the UK, particularly on the east coast of Scotland (i.e. 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 critical mass attracting training providers and enhancing the current skills base.
377. To date, there has been limited investment in operations and maintenance capacity in Scotland and the UK, and therefore the impact has been assessed as **negligible**.
378. The size of the offshore wind sector may lead to economies of scale and the development of operations and maintenance hubs on the east coast of Scotland.
379. As the O&M port is not known, it is not possible to assess the magnitude of impact.

16.9.3.1.1.2 Sensitivity

380. As for the impacts arising solely from the Bellrock Wind Farm Infrastructure, the sensitivity of the Scottish economy has been assessed as **low**, and the sensitivity of the UK economy has been assessed as **negligible**.

16.9.3.1.1.3 Significance of Effect

381. Overall, the magnitude of the impact in Scotland is deemed to be **negligible** and the sensitivity of the economy is considered to be **low**. The effect will, therefore, be of **negligible significance**, which is **not significant** in EIA terms.
382. Overall, the magnitude of the impact in the UK is deemed to be **negligible** and the sensitivity of the economy is considered to be **negligible**. The effect will, therefore, be of **negligible significance**, which is **not significant** in EIA terms.
383. No mitigation is required as the effects identified are beneficial.

16.9.3.1.2 Increased Competition for Resources

16.9.3.1.2.1 Magnitude of Impact

384. Due to the size of the planned offshore wind expansion in the UK, including ScotWind and INTOG, some resources such as ports, manufacturing facilities and skilled workers are likely to be in high demand.
385. Without co-ordination between applicants 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 in order to meet the demand for services. For example, it may lead to new port capacity and manufacturing facilities, investment in workforce upskilling and re-skilling, or increased efficiency in the sector.

386. Under the worst-case 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.
387. Therefore, the magnitude of impact has been assessed as **negligible** for the Scottish and UK economies. To assess local impacts would require knowledge of the assembly and integration port(s), which is not known at this stage and therefore the magnitude cannot be assessed at a local scale.

16.9.3.1.2.2 *Sensitivity*

388. As for the impacts arising solely from the Bellrock Wind Farm Infrastructure, the sensitivity of the Scottish economy has been assessed as **low**, and the sensitivity of the UK economy has been assessed as **negligible**.

16.9.3.1.2.3 *Significance of Effect*

389. Overall, the magnitude of the impact in Scotland is deemed to be **negligible** and the sensitivity of the economy is considered to be **low**. The effect will, therefore, be of **negligible significance**, which is **not significant** in EIA terms.
390. Overall, the magnitude of the impact in the UK is deemed to be **negligible** and the sensitivity of the economy is considered to be **negligible**. The effect will, therefore, be of **negligible significance**, which is **not significant** in EIA terms.
391. No additional socio-economic mitigation has been identified.

16.9.3.2 **Demographic Changes**

392. There are a number of offshore wind farm developments the east coast of Scotland, which may use similar ports and skilled labour, which may have a cumulative demographic effect.

16.9.3.2.1 *Magnitude of Impact*

393. The development of several projects creates sufficient cumulative demand to allow ports to specialise as dedicated O&M hubs. This concentration of activity would result in a greater intensity of economic impact and a potential increase in population around the O&M port.
394. It is not possible to assess the magnitude of any change, as this is likely to be modulated by characteristics of individual communities, such as capacity and population dynamics.

16.9.3.2.2 *Sensitivity*

395. As the O&M port is not known it is not possible to assess the sensitivity of the area.

16.9.3.2.3 *Significance of Effect*

396. It is not possible to determine the magnitude of the adverse or beneficial impact or the level of sensitivity, and therefore it is not possible to assess the significance of the effect.
397. No mitigation is proposed at this stage as the magnitude of impact cannot be determined.

16.9.3.3 Changes to Housing Demand

398. The sustained population increase across the east coast of Scotland associated with the cumulative growth of the offshore wind sector may increase the demand for housing.

16.9.3.3.1 *Magnitude of Impact*

399. It is not possible to assess the magnitude of any change in the area around the O&M port, as this is likely to be modulated by characteristics of individual communities, as well as how the housing market responds to increased demand.

16.9.3.3.2 *Sensitivity*

400. As the O&M port is not known it is not possible to assess the sensitivity of the area.

16.9.3.3.3 *Significance of Effect*

401. It is not possible to determine the magnitude of the adverse or beneficial impact or the level of sensitivity, and therefore it is not possible to assess the significance of the effect.

402. No mitigation is proposed at this stage as the magnitude of impact cannot be determined.

16.9.3.4 Changes to Other Local Public and Private Services

403. An increase in economic activity and employment will result in a long-term increase in demand for public and private services, such as healthcare, education, childcare, and local retail and leisure facilities.

16.9.3.4.1 *Magnitude of Impact*

404. The magnitude of change will depend on the factors outlined in **Section 16.7.3**, including the capacity of local service providers and the ability of the local area to respond to change. As the O&M port is not known, it is not possible to assess the magnitude of impact.

16.9.3.4.2 *Sensitivity*

405. As the O&M port is not known it is not possible to assess the sensitivity of the area.

16.9.3.4.3 *Significance of Effect*

406. It is not possible to determine the magnitude of the adverse or beneficial impact or the level of sensitivity, and therefore it is not possible to assess the significance of the effect.

407. No mitigation is proposed at this stage as the magnitude of impact cannot be determined.

16.9.3.5 Socio-cultural Effects

408. The development of a number of offshore wind projects, including the Bellrock Wind Farm Infrastructure, may affect how local communities perceive themselves.

16.9.3.5.1 *Magnitude of Impact*

409. As the O&M port is not known, it is not possible to assess the magnitude of any impact.

16.9.3.5.2 Sensitivity

410. As the O&M port is not known it is not possible to assess the sensitivity of the area.

16.9.3.5.3 Significance of Effect

411. It is not possible to determine the magnitude of the adverse or beneficial impact or the level of sensitivity, and therefore it is not possible to assess the significance of the effect.

412. No mitigation is proposed at this stage as the magnitude of impact cannot be determined.

16.9.4 Decommissioning Phase

16.9.4.1 Demographic Changes

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

16.9.4.1.1 Magnitude of Impact

414. The development of several projects may lead to port specialisation and an increase in economic impact, leading to an increase in population around the decommissioning port(s).

415. It is not possible to assess the magnitude of any change, as this is likely to be modulated by characteristics of individual communities, such as capacity and population dynamics.

16.9.4.1.2 Sensitivity

416. As the decommissioning port(s) is not known, it is not possible to assess the sensitivity of the area.

16.9.4.1.3 Significance of Effect

417. It is not possible to determine the magnitude of the adverse or beneficial impact or the level of sensitivity, and therefore it is not possible to assess the significance of the effect.

418. No mitigation is proposed at this stage as the magnitude of impact cannot be determined.

16.9.4.2 Changes to Housing Demand

419. An increase in population across the east coast associated with an increased population is likely to have an effect on housing demand.

16.9.4.2.1 Magnitude of Impact

420. It is not possible to assess the magnitude of any change in the area around the decommissioning port(s), as this is likely to be modulated by characteristics of individual communities, as well as how the housing market responds to increased demand.

16.9.4.2.2 Sensitivity

421. As the decommissioning port(s) is not known, it is not possible to assess the sensitivity of the area.

16.9.4.2.3 Significance of Effect

422. It is not possible to determine the magnitude of the adverse or beneficial impact or the level of sensitivity, and therefore it is not possible to assess the significance of the effect.
423. No mitigation is proposed at this stage as the magnitude of impact cannot be determined.

16.9.4.3 Changes to Other Local Public and Private Services

424. An increase in economic activity and employment will result in a long-term increase in demand for public and private services, such as healthcare, education, childcare, and local retail and leisure facilities.

16.9.4.3.1 Magnitude of Impact

425. The magnitude of change will depend on the factors outlined in **Section 16.7.3**, including the capacity of local service providers and the ability of the local area to respond to change. As the decommissioning port(s) is not known, it is not possible to assess the magnitude of impact.

16.9.4.3.2 Sensitivity

426. As the decommissioning port(s) is not known, it is not possible to assess the sensitivity of the area.

16.9.4.3.3 Significance of Effect

427. It is not possible to determine the magnitude of the adverse or beneficial impact or the level of sensitivity, and therefore it is not possible to assess the significance of the effect.
428. No mitigation is proposed at this stage as the magnitude of impact cannot be determined.

16.9.4.4 Socio-cultural Effects

429. The development of a number of offshore wind projects, including the Bellrock Wind Farm Infrastructure, may affect how local communities perceive themselves.

16.9.4.4.1 Magnitude of Impact

430. As the decommissioning port(s) is not known, it is not possible to assess the magnitude of any impact.

16.9.4.4.2 Sensitivity

431. As the decommissioning port(s) is not known, it is not possible to assess the sensitivity of the area.

16.9.4.4.3 Significance of Effect

432. It is not possible to determine the magnitude of the adverse or beneficial impact or the level of sensitivity, and therefore it is not possible to assess the significance of the effect.
433. No mitigation is proposed at this stage as the magnitude of impact cannot be determined.

16.10 Inter-related and Interacting Impacts

16.10.1 Inter-relationships

434. **Table 16.63** below provides a summary of the key inter-relationships between socioeconomics, tourism and recreation and other technical chapters and indicates where those issues have been addressed in the relevant chapters.

Table 16.63: Socioeconomics, Tourism and Recreation Inter-relationships

Topic and Description	Related Chapter(s)	Where Addressed in this Chapter	Rationale
Construction			
Increase in employment and GVA	Chapter 11: Commercial Fisheries (Volume II)	Section 16.7	The residual significant adverse effects identified by these chapters may result in negative employment and GVA impacts in commercial fisheries sector.
Demographic changes	N/A	N/A	N/A
Changes to housing demand	N/A	N/A	N/A
Changes to other local public and private services	N/A	N/A	N/A
Socio-cultural effects	N/A	N/A	N/A
Changes to tourism and recreation receptors	Chapter 12: Shipping and Navigation (Volume II) Chapter 14: Marine Infrastructure and Other Users (Volume II) Chapter 15: Marine Archaeology and Cultural Heritage (Volume II)	Section 16.7	The residual significant adverse effects identified by these chapters may result in negative impacts of tourism and recreation.
Operation and Maintenance			
Increase in employment and GVA	Chapter 11: Commercial Fisheries (Volume II)	Section 16.7	The residual significant adverse effects identified by these chapters may result in negative employment and GVA impacts.
Demographic changes	N/A	N/A	N/A

Topic and Description	Related Chapter(s)	Where Addressed in this Chapter	Rationale
Changes to housing demand	N/A	N/A	N/A
Changes to other local public and private services	N/A	N/A	N/A
Socio-cultural effects	N/A	N/A	N/A
Changes to tourism and recreation receptors	Chapter 12: Shipping and Navigation (Volume II) Chapter 14: Marine Infrastructure and Other Users (Volume II) Chapter 15: Marine Archaeology and Cultural Heritage (Volume II)	Section 16.7	The residual significant adverse effects identified by these chapters may result in negative impacts of tourism and recreation.
Decommissioning			
Increase in employment and GVA	Chapter 11: Commercial Fisheries (Volume II)	Section 16.7	The residual significant adverse effects identified by these chapters may result in negative employment and GVA impacts.
Demographic changes	N/A	N/A	N/A
Changes to housing demand	N/A	N/A	N/A
Changes to other local public and private services	N/A	N/A	N/A
Socio-cultural effects	N/A	N/A	N/A
Changes to tourism and recreation receptors	Chapter 12: Shipping and Navigation (Volume II) Chapter 14: Marine Infrastructure and Other Users (Volume II) Chapter 15: Marine Archaeology and Cultural Heritage (Volume II)	Section 16.7	The residual significant adverse effects identified by these chapters may result in negative impacts of tourism and recreation.

16.10.2 Interactions

435. The impacts identified and assessed in this Chapter have the potential to interact with each other. Areas of potential interaction between impacts are presented in **Table 16.64**, **Table 16.65**, and **Table 16.66** below. The impacts are assessed relative to each development phase (i.e. construction, O&M or decommissioning) to see if (for example) multiple construction impacts affecting the same receptor could increase the magnitude of impact upon that receptor.
436. A subsequent lifetime assessment has been undertaken which considers the impact interactions identified and the potential for impacts to effect receptors relevant to this Chapter across all development phases (**Table 16.67**).

This page is intentionally blank

Table 16.64: Potential Interaction Between Impacts - Construction

Potential Interaction Between Construction Impacts						
Impact	C1: Increase in Employment and GVA	C2: Demographic Changes	C3: Changes to Housing Demand	C4: Changes to other Local Public and Private Services	C5: Socio-cultural Effects	C6: Changes to Tourism and Recreation Receptors
C1: Increase in Employment and GVA		Yes	Yes	Yes	Yes	Yes
C2: Demographic Changes	Yes		Yes	Yes	Yes	Yes
C3: Changes to Housing Demand	Yes	Yes		Yes	Yes	Yes
C4: Changes to Other Local Public and Private Services	Yes	Yes	Yes		Yes	Yes
C5: Socio-cultural Effects	Yes	Yes	Yes	Yes		Yes
C6: Changes to Tourism and Recreation Receptors	Yes	Yes	Yes	Yes	Yes	

Table 16.65: Potential Interaction Between Impacts - Operation and Maintenance

Potential Interaction Between O&M Impacts						
Impact	O1: Increase in Employment and GVA	O2: Demographic Changes	O3: Changes to Housing Demand	O4: Changes to other Local Public and Private Services	O5: Socio-cultural Effects	O6: Changes to Tourism and Recreation Receptors
O1: Increase in Employment and GVA		Yes	Yes	Yes	Yes	Yes
O2: Demographic Changes	Yes		Yes	Yes	Yes	Yes
O3: Changes to Housing Demand	Yes	Yes		Yes	Yes	Yes
O4: Changes to Other Local Public and Private Services	Yes	Yes	Yes		Yes	Yes
O5: Socio-cultural Effects	Yes	Yes	Yes	Yes		Yes
O6: Changes to Tourism and Recreation Receptors	Yes	Yes	Yes	Yes	Yes	

Table 16.66: Potential Interaction Between Impacts - Decommissioning

Potential Interaction Between Decommissioning Impacts						
Impact	D1: Increase in Employment and GVA	D2: Demographic Changes	D3: Changes to Housing Demand	D4: Changes to other Local Public and Private Services	D5: Socio-cultural Effects	D6: Changes to Tourism and Recreation Receptors
D1: Increase in Employment and GVA		Yes	Yes	Yes	Yes	Yes
D2: Demographic Changes	Yes		Yes	Yes	Yes	Yes
D3: Changes to Housing Demand	Yes	Yes		Yes	Yes	Yes
D4: Changes to Other Local Public and Private Services	Yes	Yes	Yes		Yes	Yes
D5: Socio-cultural Effects	Yes	Yes	Yes	Yes		Yes
D6: Changes to Tourism and Recreation Receptors	Yes	Yes	Yes	Yes	Yes	

Table 16.67: Potential Interactions Between Impacts - Phase and Lifetime Assessment

Highest Significance of Effect Level					
Receptor	Construction	O&M	Decommissioning	Phase Assessment	Lifetime Assessment
Port – employment and GVA	Major (beneficial)	Major (beneficial)	N/A	<p>No greater than individually assessed impact for each phase.</p> <p>The beneficial impacts during each phase, such as direct employment, supply chain expenditure, and induced effects, are complementary and mutually reinforcing.</p> <p>The assessed major beneficial effect for both the construction and operational phases reflects this combined positive economic stimulus.</p>	<p>No greater than individually assessed impact.</p> <p>The significant beneficial economic effects generated during the construction phase are succeeded by stable, long-term employment and expenditure during the 35-year operational phase.</p> <p>This creates a sustained, positive economic legacy at the O&M port and in the wider region.</p> <p>If different ports are selected, significant benefits will be distributed across multiple locations.</p> <p>Therefore, the lifetime assessment is concluded to be major beneficial.</p>
Scotland – employment and GVA	Moderate (beneficial)	Minor (beneficial)	Negligible (beneficial)	<p>While the construction phase effect is assessed as Moderate (beneficial) and therefore significant, the effects during O&M and decommissioning are not significant. As these impacts are distinct and driven by different supply chain activities, there is no mechanism for interaction that would increase the magnitude of the effect beyond that of the construction phase alone. Therefore, the combined effect is assessed as no greater than the maximum impact from any single source.</p>	<p>The significant beneficial effects during construction are temporary and distinct from the long-term, lower-intensity benefits of the O&M phase. While the phases follow consecutively, the peak level of economic activity (which determines the magnitude classification) does not increase as a result of this transition. Therefore, the lifetime effect is assessed as no greater than the maximum impact of the construction phase.</p>

Highest Significance of Effect Level					
Receptor	Construction	O&M	Decommissioning	Phase Assessment	Lifetime Assessment
UK – employment and GVA	Negligible (beneficial)	Negligible (beneficial)	Negligible (beneficial)	<p>No greater than individually assessed impact for each phase.</p> <p>The impacts are during each phase are negligible, and the combined effect is assessed as no greater than the maximum impact from any single source.</p>	<p>The beneficial effects during construction are distinct from the long-term benefits of the O&M phase. While the phases follow consecutively, the peak level of economic activity does not increase as a result of this transition. Therefore, the lifetime effect is assessed as no greater than the maximum impact of the construction phase.</p>
Port – population	Major	Major	N/A	<p>No greater than individually assessed impact for each phase.</p> <p>The assessed major effect reflects the scale of the population change and its combined and concurrent influences on the local community during this phase. This includes a significant increase in demand for housing, greater utilisation of public services (e.g. healthcare, schools), and potential shifts in the local socio-cultural character.</p> <p>However, the combined effect is assessed as no greater than the maximum impact from any single source.</p>	<p>The significant, temporary population changes during the construction phase are succeeded by a different, long-term demographic shift from the permanent operational workforce.</p> <p>Where the port locations coincide, this results in a sustained, multi-decade transformation of the community's demographic profile, with no return to the baseline condition between phases. If different ports are utilised, significant effects will be experienced across two distinct communities. In either case, the lifetime effect on housing demand is assessed as major.</p>
Port – housing demand	Major	Major	N/A	<p>No greater than individually assessed impact for each phase.</p> <p>The assessed major effect reflects the scale of the population change and its combined and concurrent influences on the local community during this phase. This includes a significant increase in demand for housing, greater utilisation of public services (e.g. healthcare, schools), and potential shifts in the local socio-cultural character.</p>	<p>The significant, temporary population changes during the construction phase are succeeded by a different, long-term demographic shift from the permanent operational workforce.</p>

Highest Significance of Effect Level					
Receptor	Construction	O&M	Decommissioning	Phase Assessment	Lifetime Assessment
				However, the combined effect is assessed as no greater than the maximum impact from any single source.	Where the port locations coincide, this results in a sustained, multi-decade transformation of the community's demographic profile, with no return to the baseline condition between phases. If different ports are utilised, significant effects will be experienced across two distinct communities. In either case, the lifetime effect on housing demand is assessed as major.
Port – local public and private services	Major	Major	N/A	<p>No greater than individually assessed impact for each phase.</p> <p>The assessed major effect reflects the scale of the population change and its combined and concurrent influences on the local community during this phase. This includes a significant increase in demand for housing, greater utilisation of public services (e.g. healthcare, schools), and potential shifts in the local socio-cultural character.</p> <p>However, the combined effect is assessed as no greater than the maximum impact from any single source.</p>	<p>The significant, temporary population changes during the construction phase are succeeded by a different, long-term demographic shift from the permanent operational workforce.</p> <p>Where the port locations coincide, this results in a sustained, multi-decade transformation of the community's demographic profile, with no return to the baseline condition between phases. If different ports are utilised, significant effects will be experienced across two distinct communities. In either case, the lifetime effect on housing demand is assessed as major.</p>
Port – Socio-cultural effects	Major	Major	N/A	<p>No greater than individually assessed impact for each phase.</p> <p>The assessed major effect reflects the scale of the population change and its combined and concurrent influences on the local community during this phase. This includes a significant increase in demand for housing, greater utilisation of public services (e.g. healthcare,</p>	<p>The significant, temporary population changes during the construction phase are succeeded by a different, long-term demographic shift from the permanent operational workforce.</p> <p>Where the port locations coincide, this results in a sustained, multi-decade transformation of the community's demographic profile, with no return to the baseline condition between phases. If different ports are utilised, significant effects will</p>

Highest Significance of Effect Level					
Receptor	Construction	O&M	Decommissioning	Phase Assessment	Lifetime Assessment
				<p>schools), and potential shifts in the local socio-cultural character.</p> <p>However, the combined effect is assessed as no greater than the maximum impact from any single source.</p>	<p>be experienced across two distinct communities. In either case, the lifetime effect on housing demand is assessed as major.</p>

This page is intentionally blank

16.11 Summary

437. The construction, O&M and decommissioning of the Bellrock Wind Farm Infrastructure would cause a range of effects on socioeconomics, tourism and recreation. The magnitude of these effects has been assessed using professional expert judgement, drawing from a wide science base that includes surveys and numerical modelling activities. A summary of the residual effects of the Bellrock Wind Farm Infrastructure on socioeconomics, tourism and recreation is listed in **Table 16.68**.

This page is intentionally blank

Table 16.68: Summary of Potential Effects for Socioeconomics, Tourism and Recreation

Potential Impact	Receptor(s)	Sensitivity	Magnitude of Impact	Significance of Effect	Secondary Mitigation	Residual Significance of Effect	Cumulative Residual Significance of Effect
Construction							
C1: Increase in employment and GVA	Assembly and Integration Port(s) (Least Sensitive)	Medium	High	Major beneficial	None	Major beneficial (significant)	N/A
	Assembly and Integration Port(s) (Most Sensitive)	High	High	Major beneficial	None	Major beneficial (significant)	N/A
	Scotland	Low	High	Moderate beneficial	None	Moderate beneficial (significant)	Minor beneficial (not significant)
	UK (including Scotland)	Negligible	Negligible	Negligible beneficial	None	Negligible beneficial (not significant)	Negligible beneficial (not significant)
C2: Demographic changes	Assembly and Integration Port(s) (Least Sensitive)	Low	Medium	Minor ¹	None	Minor (not significant)	N/A
	Assembly and Integration Port(s) (Most Sensitive)	High	High	Major ¹	Develop and implement a Stakeholder Engagement Plan to engage with the local community and local authority once assembly and integration port(s)	Major (significant)	N/A – see Section 16.9.2.2.3 for details

Potential Impact	Receptor(s)	Sensitivity	Magnitude of Impact	Significance of Effect	Secondary Mitigation	Residual Significance of Effect	Cumulative Residual Significance of Effect
					have been identified.		
C3: Changes to housing demand	Assembly and Integration Port(s) (Least Sensitive)	Low	Medium	Minor ¹	None	Minor (not significant)	N/A – see Section 16.9.2.3.3 for details
	Assembly and Integration Port(s) (Most Sensitive)	High	High	Major ¹	Develop and implement a Stakeholder Engagement Plan to engage with the local community and local authority once assembly and integration port(s) have been identified.	Major (significant)	N/A – see Section 16.9.2.3.3 for details
C4: Changes to other local public and private services	Assembly and Integration Port(s) (Least Sensitive)	Low	Medium	Minor ¹	None	Minor (not significant)	N/A – see Section 16.9.2.4.3 for details
	Assembly and Integration Port(s) (Most Sensitive)	High	High	Major ¹	Develop and implement a Stakeholder Engagement Plan to engage with the local community and local authority once assembly and integration port(s)	Major (significant)	N/A – see Section 16.9.2.4.3 for details

Potential Impact	Receptor(s)	Sensitivity	Magnitude of Impact	Significance of Effect	Secondary Mitigation	Residual Significance of Effect	Cumulative Residual Significance of Effect
					have been identified.		

Potential Impact	Receptor(s)	Sensitivity	Magnitude of Impact	Significance of Effect	Secondary Mitigation	Residual Significance of Effect	Cumulative Residual Significance of Effect
C5: Socio-cultural effects	Assembly and Integration Port(s) (Least Sensitive)	Low	Medium	Minor ¹	None	Minor (not significant)	N/A – see Section 16.9.2.5.3 for details
	Assembly and Integration Port(s) (Most Sensitive)	High	High	Major ¹	Develop and implement a Stakeholder Engagement Plan to engage with the local community and local authority once assembly and integration port(s) have been identified.	Major (significant)	N/A – see Section 16.9.2.5.3 for details
C6: Changes to tourism and recreation receptors	Tourism and Recreation Receptors	N/A	Negligible	Negligible adverse	None	Negligible adverse (not significant)	N/A
Operation and Maintenance							
O1: Increase in employment and GVA	O&M Port (Least Sensitive)	Medium	High	Major beneficial	None	Major beneficial (significant)	N/A
	O&M Port (Most Sensitive)	High	High	Major beneficial	None	Major beneficial (significant)	N/A
	Scotland	Low	Negligible	Negligible beneficial	None	Negligible beneficial (not significant)	Negligible beneficial

Potential Impact	Receptor(s)	Sensitivity	Magnitude of Impact	Significance of Effect	Secondary Mitigation	Residual Significance of Effect	Cumulative Residual Significance of Effect
							(not significant)
	UK (including Scotland)	Negligible	Negligible	Negligible beneficial	None	Negligible beneficial (not significant)	Negligible beneficial (not significant)
Increased Competition for Resources (cumulative impact only)	Scotland	N/A	N/A	N/A	N/A	N/A	Negligible adverse (not significant)
	UK (including Scotland)	N/A	N/A	N/A	N/A	N/A	Negligible adverse (not significant)
O2: Demographic changes	O&M Port (Least Sensitive)	Negligible	Medium	Negligible ¹	None	Negligible (not significant)	N/A
	O&M Port (Most Sensitive)	High	High	Major ¹	Develop and implement a Stakeholder Engagement Plan to engage with the local community and local authority once assembly and integration ports have been identified.	Major (significant)	N/A
O3: Changes to housing demand	O&M Port (Least Sensitive)	Negligible	Medium	Negligible ¹	None	Negligible (not significant)	N/A

Potential Impact	Receptor(s)	Sensitivity	Magnitude of Impact	Significance of Effect	Secondary Mitigation	Residual Significance of Effect	Cumulative Residual Significance of Effect
	O&M Port (Most Sensitive)	High	High	Major ¹	Develop and implement a Stakeholder Engagement Plan to engage with the local community and local authority once assembly and integration ports have been identified.	Major (significant)	N/A
O4: Changes to other local public and private services	O&M Port (Least Sensitive)	Negligible	Medium	Negligible	None	Negligible (not significant)	N/A
	O&M Port (Most Sensitive)	High	High	Major ¹	Develop and implement a Stakeholder Engagement Plan to engage with the local community and local authority once assembly and integration ports have been identified.	Major (significant)	N/A
O5: Socio-cultural effects	O&M Port (Least Sensitive)	Negligible	Medium	Negligible	None	Negligible (not significant)	N/A
	O&M Port (Most Sensitive)	High	High	Major ¹	Develop and implement a Stakeholder	Major (significant)	N/A

Potential Impact	Receptor(s)	Sensitivity	Magnitude of Impact	Significance of Effect	Secondary Mitigation	Residual Significance of Effect	Cumulative Residual Significance of Effect
					Engagement Plan to engage with the local community and local authority once assembly and integration ports have been identified.		
O6: Changes to tourism and recreation receptors	Tourism and Recreation Receptors	N/A	Negligible	Negligible adverse	N/A	Negligible adverse (not significant)	N/A
Decommissioning							
D1: Increase in employment and GVA	Scotland	Low	Negligible	Negligible beneficial	N/A	Negligible beneficial (not significant)	N/A
	UK (including Scotland)	Negligible	Negligible	Negligible beneficial	N/A	Negligible beneficial (not significant)	N/A
D2: Demographic Changes	Decommissioning Port(s)	N/A ²	N/A	N/A	N/A	N/A	N/A
D3: Changes to housing demand	Decommissioning Port(s)	N/A ²	N/A	N/A	N/A	N/A	N/A
D4: Changes to other local public and private services	Decommissioning Port(s)	N/A ²	N/A	N/A	N/A	N/A	N/A

Potential Impact	Receptor(s)	Sensitivity	Magnitude of Impact	Significance of Effect	Secondary Mitigation	Residual Significance of Effect	Cumulative Residual Significance of Effect
D5: Socio-cultural effects	Decommissioning Port(s)	N/A ²	N/A	N/A	N/A	N/A	N/A
D6: Changes to tourism and recreation receptors	Tourism and Recreation Receptors	N/A	Negligible	Negligible adverse	N/A	Negligible adverse (not significant)	N/A

Notes:

¹ Where the type of significance of effect (beneficial/adverse) is omitted, this is because the impact cannot be considered inherently adverse or beneficial. See the relevant 'Significance of Effect' section within **Section 16.7.3** for further detail.

² A standard assessment of effects cannot be undertaken for impacts D2, D3, D4 and D5. See sections **16.8.3.2**, **16.8.3.3**, **16.8.3.4**, and **16.8.3.5**, respectively, for the rationale.

16.12 References

Aberdeenshire Energy Developments Community Wealth Building Charter (2025). Available at: <https://aberdeenshire.moderngov.co.uk/documents/s33738/Appendix%20%20-%20Energy%20Developments%20Charter%20Community%20Wealth%20Building.pdf>.

Anderson Solutions Consulting Ltd (2017). Analysis of Nephrops industry in Scotland. Available at: <https://www.gov.scot/binaries/content/documents/govscot/publications/foi-eir-release/2018/02-a/foi-17-02544/documents/foi-17-02544-nephrops-final-report-171017-issued-pdf/foi-17-02544-nephrops-final-report-171017-issued-pdf/govscot%3Adocument/FOI-17-02544%2B-%2BAS%2Bnephrops%2BFINAL%2Breport%2B171017%2BISSUED.pdf>.

Bellrock Offshore Wind Farm Limited (2025). Letter: Consultation for the Bellrock Offshore Wind Farm - Wind Farm Development Area Environmental Impact Assessment - Methodology for the Socioeconomics, Tourism and Recreation Assessment.

Bellrock Offshore Wind Farm (2023). Supply Chain Development Statement. Available at: <https://www.crownstatescotland.com/sites/default/files/2023-07/bellrock-offshore-wind-farm-scds-outlook-july-2023-update.pdf>.

Bicknell, A. W. Gierhart, S. & Witt, M. J. (2025). Site and species dependent effects of offshore wind farms on fish populations. Available at: https://tethys.pnnl.gov/sites/default/files/publications/Bicknell_et_al_2025.pdf.

Business Services Organisation (2024). Northern Ireland Annual General Medical Services Statistics. Available at: <https://bso.hscni.net/directorates/operations/family-practitioner-services/directorates-operations-family-practitioner-services-information-unit/1776-2/>.

BVG Associates (2024). The Online Guide to a Floating Wind Farm. Available at: <https://guidetofloatingoffshorewind.com>.

BVG Associates (2021). UK and Scottish content baseline and roadmap. Available at: <https://www.offshorewindscotland.org.uk/media/11937/bvga-local-content-roadmap.pdf>.

Denholm Seafoods (2023). New Processing Facility Will Deliver Net Benefits. Available at: <https://www.denholm-seafoods.com/news/new-processing-facility-will-deliver-net-benefits/>.

Department for Communities (2024). Northern Ireland Housing Statistics. Available at: <https://www.communities-ni.gov.uk/topics/housing-statistics>.

Diffley Partnership (2022). Public Perceptions of Offshore Wind Farm Developments in Scotland. Available at: <https://www.gov.scot/publications/public-perceptions-offshore-wind-farm-developments-scotland/>.

HM Treasury (2022). The Green Book: Appraisal and Evaluation in Central Government. Available at: <https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-government>.

IMF (2024). United Kingdom. Available at: <https://www.imf.org/external/datamapper/profile/GBR>.

International Maritime Organisation (IMO) (2023). Annex 17 Resolution MEPC.378(80): 2023 Guidelines for the control and management of ships' biofouling to minimise the transfer of invasive aquatic species. Adopted 7 July 2023. Available at: <https://www.imo.org/en/ourwork/environment/pages/biofouling.aspx>.

Kantar Taylor Nelson Sofres (TNS) (2020a). GB Day Visitor 2022. Available at: <https://www.visitbritain.org/research-insights/great-britain-domestic-day-visits-latest-results>.

Kantar TNS (2020b). GB Tourism Survey. Available at: <https://www.visitbritain.org/research-insights/great-britain-domestic-overnight-trips-latest-results>.

Marine Directorate (2020). Monitoring the socio-economic impacts of Marine Protected Areas. Available at: <https://www.gov.scot/publications/monitoring-socio-economic-impacts-marine-protected-areas/>.

Marine Management Organisation (2022). General Advice for Offshore Socioeconomic Impact Assessment (SEIA). Available at: <https://www.gov.uk/government/publications/general-advice-for-offshore-socio-economic-impact-assessment-seia-mau0001>.

Marine Scotland (2025). Scottish Sea Fisheries Statistics 2023. Available at: <https://www.gov.scot/publications/scottish-sea-fisheries-statistics-2023/>.

National Records of Scotland (2020). 2018-based Principal Population Projections. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/bulletins/nationalpopulationprojections/2018based#:~:text=Over%20the%20full%20years,that%20for%20Scotland%20is%202.5%25>.

National Records of Scotland (2025). Mid-2024 Population Estimates Scotland. Available at: <https://www.nrscotland.gov.uk/publications/mid-2024-population-estimates/>.

Office for National Statistics (ONS) (2025). Principal Population Projections 2022-based. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/bulletins/nationalpopulationprojections/2022based>.

Offshore Wind Industry Council (2023). Offshore Wind Skills Intelligence Report. Available at: <https://www.owic.org.uk/reports/owic-skills-intelligence-model-2023-2030>.

Offshore Wind Industry Council (OWIC) (2024). Offshore Wind Skills Intelligence Report. Available at: <https://www.owic.org.uk/resources/offshore-wind-skills-intelligence-report-2023/>.

ONS (2023a). International Passenger Survey. Available at: <https://www.ons.gov.uk/surveys/informationforhouseholdsandindividuals/householdandindividualsurveys/internationalpassengersurvey>.

ONS (2023b). Job Density. Available at: <https://www.nomisweb.co.uk/articles/1324.aspx>.

ONS (2024a). Annual Business Survey. Available at:

<https://www.ons.gov.uk/surveys/informationforbusinesses/businesssurveys/annualbusinesssurvey>.

ONS (2024b). Annual Population Survey 2023. Available at:

<https://beta.ukdataservice.ac.uk/datacatalogue/studies/study?id=9248>.

ONS (2024c). Annual Survey of Hours and Earnings 2024. Available at:

<https://www.ons.gov.uk/surveys/informationforbusinesses/businesssurveys/annualsurveyofhoursandearningsashe>.

ONS (2024d). Business Register and Employment Survey 2023. Available at:

<https://www.gov.uk/government/statistics/business-register-and-employment-survey-bres-provisional-results-2023-revised-results-2022>.

ONS (2024e). Dwelling Stock by Tenure, UK. Available at:

<https://www.ons.gov.uk/peoplepopulationandcommunity/housing/datasets/dwellingstockbytenureuk>.

ONS (2025f). Population Estimates - local authority based by five-year age band. Available at:

<https://www.nomisweb.co.uk/datasets/pestnew>.

ONS (2025). UK Input Output Tables 2022. Available at:

<https://www.gov.uk/government/statistics/announcements/uk-input-output-analytical-tables2022>.

OWIC (2020). Collaborating for Growth: Strategies for Expanding the UK Offshore Wind Supply Chain. Available at: <https://www.owic.org.uk/resources/collaborating-for-growth-playbook-strategies-for-expanding-the-uk-offshore-wind-supply-chain/>.

Oxford Brookes University (2020). Guidance on assessing the Socioeconomic impacts of OWFs. Available at: <https://radar.brookes.ac.uk/radar/file/6c7548dd-c768-4db8-9dce-7980c426c7a4/1/Best%20Practice%20Guidance%20-%20Final%20Oct%202020.pdf>.

Public Health Scotland (2022). General Practice – GP workforce and practice list sizes. Available at: <https://publichealthscotland.scot/publications/general-practice-gp-workforce-and-practice-list-sizes/general-practice-gp-workforce-and-practice-list-sizes-2012-2022/>.

Registers of Scotland (2024). House Price Statistics. Available at: <https://www.ros.gov.uk/data-and-statistics/house-price-statistics>.

RenewableUK; OWI; Crown Estate Scotland & CES (2024). Offshore Wind Industrial Growth Plan: Expanding the Horizon of the UK's Offshore Wind Supply Chain. Available at: <https://www.renewableuk.com/media/rqvlqzu0/offshore-wind-industrial-growth-plan.pdf>.

Scottish Fishermen's Federation (2025). Muir Mhor Consultation Response. Available at: https://marine.gov.scot/sites/default/files/muir_mhor_offshore_wind_farm_-_consultation_responses_-_additional_information.pdf.

Scottish Government (2015). Scotland's National Marine Plan. Available at: <https://www.gov.scot/publications/scotlands-national-marine-plan/>.

Scottish Government (2020a). Scottish Government Offshore Wind Policy Statement. Available at: <https://www.gov.scot/publications/update-2020-offshore-wind-policy-statement-scotlands-offshore-wind-ambition/>.

Scottish Government (2020b). Sectoral marine plan for offshore wind energy. Available at: <https://www.gov.scot/publications/sectoral-marine-plan-offshore-wind-energy/>.

Scottish Government (2022). National Strategy for Economic Transformation. Available at: <https://www.gov.scot/publications/scotlands-national-strategy-economic-transformation/>.

Scottish Government (2022a). Defining 'local area' for assessing impact of offshore renewables and other marine developments: guidance principles. Available at: <https://www.gov.scot/publications/defining-local-area-assessing-impact-offshore-renewables-marine-developments-guidance-principles/>.

Scottish Government (2022b). National Strategy for Economic Transformation. Available at: <https://www.gov.scot/publications/scotlands-national-strategy-economic-transformation/>.

Scottish Government (2023a). National Planning Framework 4 (NPF4). Available at: <https://www.gov.scot/publications/national-planning-framework-4-delivery-programme-v3/>.

Scottish Government (2024a). Green Industrial Strategy. Available at: <https://www.gov.scot/publications/green-industrial-strategy/>.

Scottish Government (2024b). Offshore Wind Focus. Available at: <https://www.gov.scot/publications/offshore-wind-focus/>.

Scottish Government (2024b). Industry Statistics Database 2024. Available at: <https://www.gov.scot/publications/industry-statistics/>.

Scottish Government (2024c). Pupil Census Supplementary Statistics 2024. Available at: <https://www.gov.scot/publications/pupil-census-supplementary-statistics/>.

Scottish Government (2024f). National Marine Plan 2 Planning Position Statement. Available at: <https://www.gov.scot/publications/teacher-census-supplementary-statistics/>.

Scottish Government (2024g). Teacher Census Supplementary Statistics 2024. Available at: <file:///Users/duncan/Downloads/national-marine-plan-2-planning-position-statement.pdf>.

Scottish Government (2025a). The Programme for Government 2025-26. Available at: <https://www.gov.scot/publications/programme-government-2025-26/>.

Scottish Government (2025b). Draft Updated Sectoral Marine Plan for Offshore Wind Energy. Available at: <https://www.gov.scot/binaries/content/documents/govscot/publications/consultation-paper/2025/05/draft-updated-sectoral-marine-plan-offshore-wind-energy-2025/documents/draft->

[updated-sectoral-marine-plan-offshore-wind-energy/draft-updated-sectoral-marine-plan-offshore-wind-energy/govscot%3Adocument/draft-updated-sectoral-marine-plan-offshore-wind-energy.pdf](https://www.gov.scot/binaries/content/documents/govscot/publications/speech-statement/2026/01/update-2020-offshore-wind-policy-statement-scotlands-offshore-wind-ambition-2/documents/update-2020-offshore-wind-policy-statement-scotlands-offshore-wind-ambition/update-2020-offshore-wind-policy-statement-scotlands-offshore-wind-ambition/govscot%3Adocument/update-2020-offshore-wind-policy-statement-scotlands-offshore-wind-ambition.pdf).

Scottish Government (2026). Update to the 2020 Offshore Wind Policy Statement. Available at: <https://www.gov.scot/binaries/content/documents/govscot/publications/speech-statement/2026/01/update-2020-offshore-wind-policy-statement-scotlands-offshore-wind-ambition-2/documents/update-2020-offshore-wind-policy-statement-scotlands-offshore-wind-ambition/update-2020-offshore-wind-policy-statement-scotlands-offshore-wind-ambition/govscot%3Adocument/update-2020-offshore-wind-policy-statement-scotlands-offshore-wind-ambition.pdf>.

Sniffer (2023). Evidence for the third UK Climate Change Risk Assessment (CCRA3). Available at: <https://www.ukclimaterisk.org/wp-content/uploads/2021/06/CCRA-Evidence-Report-Scotland-Summary-Final-1.pdf>.

UK Government (2020). The Offshore Wind Sector Deal. Available at: <https://www.gov.uk/government/publications/offshore-wind-sector-deal/offshore-wind-sector-deal>.

UK Government (2024a). Clean Action Power 2030 Action Plan. Available at: <https://www.gov.uk/government/publications/clean-power-2030-action-plan>.

UK Government (2024b). Education and Training Statistics for the UK. Available at: <https://explore-education-statistics.service.gov.uk/find-statistics/education-and-training-statistics-for-the-uk/2024>.

VisitScotland (2024). VisitScotland – Research and Insights. Available at: <https://www.visitscotland.org/research-insights>.

This page is intentionally blank

This page is intentionally blank



Bellrock
OFFSHORE WIND

www.bellrockwind.co.uk