

# **Buchan Offshore Wind**

## **Chapter 17 Socio-Economics, Tourism and Recreation**

## QMS Review

Name	Company	Date	Reviewed	Approved
Biggar Economics	Natural Power	02/07/2025	LJN	SMM
CMO	BOW	08/07/2025	CMO/RML	CDY

## CONTENTS

17	17-1
17.1	Introduction ..... 17-1
17.2	Purpose of This Chapter ..... 17-2
17.3	Legislation and Policy Guidance ..... 17-2
17.3.1	Legislation..... 17-3
17.3.2	Policy..... 17-3
17.3.2.1	UK Offshore Wind Sector Deal..... 17-3
17.3.2.2	Clean Power 2030 Action Plan: A New Era of Clean Electricity..... 17-3
17.3.2.3	National Performance Framework..... 17-4
17.3.2.4	National Planning Framework 4 (NPF4)..... 17-5
17.3.2.5	Draft Energy Strategy and Just Transition Plan ..... 17-5
17.3.2.6	National Marine Plan (NMP) ..... 17-6
17.3.2.7	Sectoral Marine Plan for Offshore Wind Energy..... 17-7
17.3.2.8	National Strategy for Economic Transformation..... 17-8
17.3.2.9	Offshore Wind Policy Statement..... 17-9
17.3.2.10	Legislation and Policy Summary ..... 17-9
17.3.3	Guidance..... 17-11
17.4	Consultation..... 17-11
17.5	Study Area..... 17-15
17.5.1	Approach ..... 17-15
17.5.2	Socio-Economic Study Areas ..... 17-15
17.6	Methodology to Inform Baseline Environment ..... 17-16
17.6.1	Desktop Study ..... 17-17
17.6.2	Baseline Surveys..... 17-18
17.7	Baseline Environment..... 17-19
17.7.1	Socio-Economics..... 17-19
17.7.1.1	Population..... 17-19
17.7.1.2	Industrial Structure and Jobs ..... 17-19
17.7.1.3	Economic Activity and Pay..... 17-21
17.7.1.4	Occupation and Qualifications..... 17-21
17.7.2	Potential Port Locations ..... 17-22
17.7.3	Future Changes..... 17-23

17.7.3.1	Population Projections.....	17-23
17.7.4	Data Limitations and Assumptions .....	17-24
17.8	Impacts Scoped Out of The Assessment.....	17-25
17.9	Method for Assessment.....	17-25
17.9.1	Overview.....	17-25
17.9.1.1	Economic Impact Assessment .....	17-25
17.9.1.2	Social Impact Assessment.....	17-26
17.9.1.3	Tourism and Recreation Impact Assessment .....	17-27
17.9.2	Criteria for Assessment .....	17-27
17.9.2.1	Magnitude.....	17-28
17.9.2.2	Sensitivity.....	17-30
17.9.2.3	Significance of Effect .....	17-33
17.9.3	Economic Impact Methodology .....	17-34
17.9.3.1	Metrics of Assessment.....	17-36
17.9.3.2	Estimating Economic Impact .....	17-36
17.9.3.3	Information Requirement.....	17-38
17.10	Maximum Design Scenario .....	17-39
17.11	Embedded Mitigation as Part of the Proposed Offshore Development ...	17-46
17.12	Assessment of Likely Significant Effects .....	17-49
17.12.1	Construction Phase .....	17-49
17.12.1.1	Impact 1 Increase in Employment and Gross Value Added .....	17-49
17.12.1.2	Impact 2 Demographic Changes.....	17-55
17.12.1.3	Impact 3 Changes to Housing Demand .....	17-58
17.12.1.4	Impact 4 Changes to Other Local Public and Private Services .....	17-60
17.12.1.5	Impact 5 Socio-Cultural Impacts .....	17-62
17.12.1.6	Impact 6 Social Impacts at the Construction Port.....	17-64
17.12.1.7	Impact 7 Changes to Commercial Fisheries.....	17-66
17.12.1.8	Impact 8 Changes to Shipping and Navigation.....	17-66
17.12.2	Operation and Maintenance Phase.....	17-67
17.12.2.1	Impact 9 Increase in Employment and Gross Value Added .....	17-67
17.12.2.2	Impact 10 Demographic Changes.....	17-71
17.12.2.3	Impact 11 Changes to Housing Demand .....	17-71

17.12.2.4	Impact 12 Changes to Other Local Public and Private Services.....	17-71
17.12.2.5	Impact 13 Socio-Cultural Impacts.....	17-72
17.12.2.6	Impact 14 Social Impacts at the O&M Port .....	17-72
17.12.2.7	Impact 15 Changes to Commercial Fisheries .....	17-74
17.12.2.8	Impact 16 Changes to Shipping and Navigation .....	17-74
17.12.3	Decommissioning Phase .....	17-74
17.12.3.1	Impact 17 Increase in Employment and Gross Value Added.....	17-74
17.12.3.2	Impact 18 Changes to Commercial Fisheries.....	17-77
17.12.3.3	Impact 19 Changes to Shipping and Navigation .....	17-77
17.12.4	Proposed Monitoring.....	17-78
17.13	Cumulative Effects Assessment.....	17-78
17.13.1	Methodology.....	17-78
17.13.2	Maximum Design Scenario .....	17-81
17.13.3	Cumulative Effects Assessment.....	17-85
17.13.3.1	Construction Phase.....	17-85
17.13.3.2	Operation and Maintenance Phase .....	17-92
17.13.3.3	Decommissioning Phase.....	17-97
17.13.4	Proposed Monitoring.....	17-100
17.14	Transboundary Effects.....	17-101
17.14.1	Construction.....	17-101
17.14.2	Operation and Maintenance .....	17-101
17.14.3	Decommissioning.....	17-102
17.15	Inter-Related Effects .....	17-102
17.16	Summary .....	17-102
17.17	References .....	17-106
ANNEX A: LIST OF OTHER DEVELOPMENTS CONSIDERED WITHIN THE CEA.....		17-108

## LIST OF TABLES

Table 17-1 Policy Relevant to Socio-Economics, Tourism and Recreation.....	17-10
Table 17-2 Consultation Relevant to Socio-Economics, Tourism and Recreation.....	17-13
Table 17-3 Potential Construction and O&M Ports.....	17-16
Table 17-4 Key Sources of Socio-Economics, Tourism and Recreation Literature and Data .....	17-17

Table 17-5 Population by Age Group, 2023 (ONS, 2024a) (National Records of Scotland, 2024) .....	17-19
Table 17-6 Employment in Selected Industries (ONS, 2024b) .....	17-20
Table 17-7 Selected Labour Market Indicators (ONS, 2025a) .....	17-21
Table 17-8 Employment by Occupation Type (ONS, 2025a).....	17-22
Table 17-9 Employment by Occupation Type (ONS, 2025a).....	17-22
Table 17-10 Potential Port Study Areas Baseline (ONS, 2024a) (National Records of Scotland, 2024) (ONS, 2024b).....	17-23
Table 17-11 Population Projections (ONS, 2025b) (National Records of Scotland, 2025) 17-24	
Table 17-12 Definition of Magnitude for an Economy/Economic Sector .....	17-29
Table 17-13 Definition of Magnitude of Tourism and Recreation Impacts .....	17-30
Table 17-14 Definition of the Sensitivity of Economic Receptors .....	17-31
Table 17-15 Definition of the Sensitivity of Tourism and Recreation Assets .....	17-32
Table 17-16 Effect Significance Matrix .....	17-33
Table 17-17 Effect Significance Definitions.....	17-34
Table 17-18 Maximum Design Scenarios Considered for Impacts for Assessment of Likely Significant Effects on Socio-Economics, Tourism and Recreation .....	17-40
Table 17-19 Embedded Mitigation Measures of Relevance to Socio-Economics, Tourism and Recreation .....	17-47
Table 17-20 Supply Chain Development Statement – Construction (Commitment) (£m) (Buchan Offshore Wind Farm, 2023).....	17-50
Table 17-21 Offshore Construction Direct Impact, Scotland and the UK.....	17-50
Table 17-22 Offshore Construction GVA (£m), Scotland and the UK.....	17-52
Table 17-23 Offshore Construction Employment (Years of Employment), Scotland and the UK.....	17-52
Table 17-24 Significance of Construction Economic Impact, Scotland and the UK.....	17-53
Table 17-25 Proposed Offshore Development Construction Port Economic Impact..	17-54
Table 17-26 Significance of Construction Economic Impact, Construction Port.....	17-55
Table 17-27 Significance of Social Impacts on Construction Ports.....	17-65
Table 17-28 Scotland, UK and Total Annual Offshore Operations and Maintenance Spending by Category .....	17-67
Table 17-29 Annual Offshore Operations and Maintenance Direct Impact, Scotland and the UK .....	17-68
Table 17-30 Annual Offshore Operations and Maintenance GVA, Scotland and the UK. 17-68	
Table 17-31 Annual Offshore Operations and Maintenance Employment Jobs, Scotland and the UK.....	17-68
Table 17-32 Significance of O&M Economic Impact, Scotland and the UK .....	17-69
Table 17-33 Scotland, UK and Total Annual Offshore Operations and Maintenance Spending by Category .....	17-70
Table 17-34 Significance of Construction Economic Impact, O&M Port .....	17-71
Table 17-35 Significance of Social Impacts on O&M Ports .....	17-73

Table 17-36 Scotland, UK and Total Offshore Decommissioning Spending by Category	17-75
Table 17-37 Offshore Decommissioning Direct Impact, Scotland and the UK	17-75
Table 17-38 Offshore Decommissioning GVA (£m), Scotland and the UK	17-76
Table 17-39 Offshore Decommissioning Employment (Years of Employment), Scotland and the UK	17-76
Table 17-40 Significance of Decommissioning Economic Impact	17-77
Table 17-41 Recommended Monitoring and Implementation for Socio-Economics, Tourism and Recreation Effects	17-78
Table 17-42 Maximum Design Scenarios Considered for Assessment of Likely Significant Cumulative Effects on Socio-Economics, Tourism and Recreation	17-82
Table 17-43 Significance of increase in offshore wind supply chain in Scotland and the UK	17-86
Table 17-44 Significance of increased competition for resources	17-87
Table 17-45 Significance of increase in offshore wind supply chain in Scotland and the UK	17-93
Table 17-46 Significance of increased competition for resources	17-94
Table 17-47 Proposed Monitoring for Socio-Economics, Tourism and Recreation Cumulative Effects	17-101
Table 17-48 Summary of the Likely Significant Environmental Effects, Mitigation, Monitoring and Residual Effects for Socio-Economics, Tourism and Recreation	17-103
<b>Table A-1 List of Other Developments Considered Within the CEA for Socio-Economics, Tourism and Recreation</b>	17-108

## LIST OF FIGURES

Figure 17-1 Types of Economic Impacts	17-35
Figure 17-2 Economic Impact Methodology and Data Source	17-38
Figure 17-3 Breakdown of Direct Employment by Occupation	17-51
Figure 17-4 Factors Affecting Magnitude of Change to Community Populations	17-56
Figure 17-5 Share of Population Estimates by Urban Rural Classification	17-57
Figure 17-6 Factors Affecting Sensitivity of Community Populations	17-58
Figure 17-7 Factors Affecting Magnitude of Change to Housing Demand and Availability	17-59
Figure 17-8 Factors Affecting Sensitivity of Community Populations	17-60
Figure 17-9 Factors Affecting Magnitude of Change to Local Services	17-61
Figure 17-10 Factors Affecting Sensitivity of Local Services	17-62
Figure 17-11 Community Perceptions of Offshore Wind Impacts on Quality of Life (Scottish Government and Diffley Partnership, 2022)	17-63
Figure 17-12 Community Perceptions of Offshore Wind Impacts on Community Relations (Scottish Government and Diffley Partnership, 2022)	17-63
Figure 17-13 Community Perceptions of Offshore Wind Impacts on Community Character (Scottish Government and Diffley Partnership, 2022)	17-64

## 17.1 INTRODUCTION

- 17-1. Buchan Offshore Wind Limited (hereafter referred to as 'The Applicant') is proposing to develop the Buchan Offshore Wind Farm (hereafter referred to as 'The Project'). The Project consists of both offshore and onshore components. The offshore components of The Project are referred to as the 'Proposed Offshore Development' and the onshore components of The Project are referred to as the 'Proposed Onshore Development'.
- 17-2. This chapter forms part of the Environmental Impact Assessment Report (EIAR) for the Proposed Offshore Development. The purpose of the EIAR is to provide the decision-maker, stakeholders and all interested parties with the environmental information required to develop an informed view of any impacts and to assess any likely significant effects resulting from the Proposed Offshore Development, as required by the EIA Regulations.
- 17-3. This EIAR chapter describes the potential impacts of the Proposed Offshore Development's infrastructure on socio-economics, tourism and recreation during the construction, operation and maintenance and decommissioning phases and discusses appropriate mitigation and monitoring as required to address any likely significant effects.
- 17-4. **Section 17.16** of this EIAR chapter provides a summary of the impact assessment and confirms the likely significance of residual effects on socio-economics, tourism and recreation after mitigation and/or monitoring measures have been considered.
- 17-5. The assessment should be read in conjunction with following linked and supporting chapters:
- **Volume 1, Chapter 5: EIA Methodology** - provides further details of the general framework and approach to the EIA;
  - **Volume 2, Chapter 11: Commercial Fisheries;** and
  - **Volume 2, Chapter 13: Shipping and Navigation.**
- 17-6. Additionally, this chapter is supported by **Appendix 17.1 (Economic Impact of Buchan Offshore Wind Farm)**, which provides a detailed analysis of the economic impacts of the Project as a whole, including both the Proposed Offshore Development and the Proposed Onshore Development. While **Appendix 17.1** covers the full Project scope, the findings relevant to the Proposed Offshore Development are drawn upon within this chapter to inform the assessment of potential socio-economic, tourism, and recreation effects.



**Appendix 17.1** also outlines the economic impact methodology, data sources, and key assumptions underpinning the analysis presented here.

## **17.2 PURPOSE OF THIS CHAPTER**

17-7. The primary purpose of the EIAR is defined in **Volume 1, Chapter 1: Introduction**.

17-8. The key objective of this chapter is to provide the Scottish Ministers and statutory and non-statutory stakeholders, the information required to assess the likely significant effects of the Proposed Offshore Development on socio-economics, tourism and recreation receptors. This assessment will consider those effects from the Proposed Offshore Development in isolation, and also cumulative effects (the effects of the Proposed Offshore Development combined with the effects from other plans and projects).

17-9. This chapter presents the following:

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

17-10. The Proposed Onshore Development will be subject to a separate assessment and application process under the Town and Country Planning Act 1997, to be determined by Aberdeenshire Council.

## **17.3 LEGISLATION AND POLICY GUIDANCE**

17-11. Overarching legislation, policy, and guidance in relation to the EIAR for the Proposed Offshore Development is provided in **Volume 1, Chapter 2: Legislation and Policy** of the EIAR. Below is a summary of legislation, policy, and guidance directly relevant to socio-economics, tourism and recreation.

### **17.3.1 Legislation**

- 17-12. There are no relevant legislative controls specific to socio-economics, tourism, and recreation.

### **17.3.2 Policy**

#### **17.3.2.1 UK Offshore Wind Sector Deal**

- 17-13. The Offshore Wind Sector Deal (UK Government, 2020), sets out the UK Government's aim to support the development of offshore wind energy generation in the UK, making the sector a significant part of a low-cost, low-carbon flexible grid system. The Deal also emphasises how UK companies can benefit from the opportunities presented by the expansion of the offshore wind sector, enhancing the competitiveness of UK firms internationally and sustaining the UK's role as a global leader in offshore wind generation.
- 17-14. The UK Government highlighted that some estimates suggest that offshore wind capacity will grow globally by 17% annually from 22 Gigawatt (GW) to 154 GW in 2030, which could mean the UK contributing up to 40 GW of generating capacity. In 2022, this was increased to 50 GW by 2030 (UK Government, 2022). In 2024, this was further increased to 55 GW for fixed-bottom and 5 GW for floating offshore wind (UK Government, 2024).
- 17-15. The UK Government aims to reach this capacity in a sustainable, timely way (UK Government, 2020) and commits to working with the offshore wind sector and wider stakeholders to deliver the expansion of the sector, addressing strategic deployment issues, transmission issues and environmental impacts. Reaching this level of capacity could support up to 27,000 jobs in the UK, while the sector will work with government, existing institutions, and universities to increase job mobility between energy sectors, increase apprenticeship opportunities and coordinate local efforts, further developing the benefits to the UK economy.
- 17-16. The UK Government has also highlighted the role that offshore wind can play in the transition to a net zero economy by 2050 (UK Government, 2021). Based on existing technology, electrification remains the main route to reach carbon neutrality. To make this change possible, the supply of electricity will need to increase significantly to match demand, and the Government aims to decarbonise the power sector by 2035. This also has the potential to create many new green jobs, as part of the UK Government's Build Back Greener agenda.

#### **17.3.2.2 Clean Power 2030 Action Plan: A New Era of Clean Electricity**

- 17-17. The Clean Power 2030 Action Plan (UK Government, 2024) outlines the government's comprehensive strategy to achieve a secure, low-cost, and clean electricity system in Great Britain by 2030. The plan defines a 'clean' power system as one where renewable and low-carbon sources, such as wind, solar, and nuclear, generate at least 95% of electricity annually. This initiative aims to establish the UK's energy independence and significantly reduce reliance on volatile global fossil fuel markets.
- 17-18. A central pillar of the Action Plan is the reform of the energy infrastructure, particularly the national grid. It acknowledges that to connect the vast new capacity of renewable generation required, around twice as much transmission network infrastructure must be built by 2030 as has been in the last decade. Key actions include reforming the 'first-come, first-served' grid connections queue to prioritise viable projects that are essential to meeting the 2030 targets and streamlining the planning and consenting process for critical energy infrastructure.
- 17-19. The plan is designed to stimulate significant economic growth and opportunity. The government anticipates that the transition will support hundreds of thousands of skilled jobs across the country, particularly in the UK's industrial heartlands, as part of a wider move to a net-zero economy. To facilitate this, the plan includes initiatives such as the Energy Skills Passport, designed to help workers transfer skills from traditional energy sectors, like oil and gas, into the growing clean energy industry, thereby maximising the economic benefits for the UK.
- 17-20. The UK Government has positioned the Clean Power 2030 Action Plan as the foundational step in the broader journey to achieving a net-zero economy by 2050. By rapidly decarbonising the power sector, the plan enables the widespread electrification of other key areas, including transport and heating. This acceleration is a core component of the government's strategy to build a green economy, fostering innovation, attracting investment, and ensuring long-term energy security and affordability for businesses and consumers.

### **17.3.2.3 National Performance Framework**

- 17-21. Scotland's National Performance Framework (Scottish Government, 2018) sets out the ambitions of the Scottish Government across a range of economic, social and environmental factors. The Framework is designed to give a rounded view of economic performance and progress towards achieving sustainable and inclusive economic growth and wellbeing across Scotland.
- 17-22. The aims for Scotland set out in the National Performance Framework are to:
- create a more successful country;
  - give opportunities to all people living in Scotland;

- increase the wellbeing of people living in Scotland;
- create sustainable and inclusive growth; and
- reduce inequalities and give equal importance to economic, environmental and social progress.

#### **17.3.2.4 National Planning Framework 4 (NPF4)**

17-23. NPF4 is Scotland's national spatial strategy, outlining how to improve people's lives through sustainable, liveable, and productive places (Scottish Government, 2023). This framework has elevated the position of how social and economic impacts are considered for energy projects, such as offshore wind.

17-24. The Scottish Government identifies net zero energy solutions as a key contributor to achieving net zero emissions by 2045. This target underpins national planning and energy policy, providing the context for supporting low-carbon infrastructure — including offshore wind — as a means to reduce emissions at scale. NPF4 includes a range of National Planning Policies to support this ambition, such as Climate Emergency Policy (1), which encourages and promotes development that addresses the global climate emergency, and Green Energy Policy (11), which supports all forms of renewable energy development, both onshore and offshore.

17-25. As part of the policy 11(a), all forms of renewable technologies, including offshore wind, will be supported. This is subject to the test outlined in Policy 11(c), which states that: “development proposals will only be supported where they maximise net economic impact, including local and community socio-economic benefits such as employment, associated business and supply chain opportunities”. The Proposed Offshore Development will support employment and create opportunities for local businesses at both the construction, and operation and maintenance (O&M) phases. An EIA is not designed to show how any development can maximise a benefit. For example, this assessment is focused on a ‘maximum’ design scenario (outlined in **Section 17.10**) in which the economic benefits are assessed using a precautionary approach based on a reasonable work-worst case scenario. However, the Applicant has committed to mitigation and enhancement measures to enhance these socio-economic benefits, as discussed in **Section 17.11**.

#### **17.3.2.5 Draft Energy Strategy and Just Transition Plan**

17-26. The Draft Energy Strategy and Just Transition Plan (Scottish Government, 2023) sets out the Scottish Government's comprehensive vision to accelerate the transition to a net-zero energy system. The strategy's primary aim is to create an affordable, reliable, and clean energy system for Scotland, while ensuring the process is fair for workers and communities, particularly those affected by the

move away from oil and gas. It also emphasises capitalising on the economic opportunities of the transition, establishing Scotland as a renewable energy powerhouse with a globally competitive green energy sector.

- 17-27. The draft strategy outlines significant ambitions for expanding Scotland's renewable energy capacity. It proposes adding at least 20 GW of new low-cost renewable electricity by 2030, which would more than double the existing installed capacity. This includes major growth in offshore and onshore wind, alongside developing emerging technologies like floating wind and green hydrogen, with an ambition for 5 GW of hydrogen production capacity by 2030. These targets are designed to ensure Scotland can meet its own energy needs and become a major exporter of clean energy to Europe.
- 17-28. A central pillar of the strategy is delivering a 'Just Transition', ensuring that the shift to a green economy creates widespread benefits. The plan commits to working with industry, enterprise agencies, and skills bodies to support the energy workforce through the transition. It is estimated that the number of low-carbon jobs in Scotland's energy production sector could rise from 19,000 in 2019 to 77,000 by 2050. The strategy outlines how a £500 million Just Transition Fund will be used to support projects in the North East and Moray, helping the region pivot to become a centre of excellence for renewables and safeguarding high-value jobs.
- 17-29. The Scottish Government positions this strategy as the definitive route map for achieving its legally binding target of a net-zero economy by 2045, a more ambitious timeline than the wider UK goal. The rapid decarbonisation of the energy system is presented as the key enabler for reducing emissions across the entire economy, from transport to heating. By harnessing its natural resources, the strategy asserts that Scotland can achieve energy security, tackle fuel poverty by lowering costs, and build a thriving, sustainable economy for future generations.

#### **17.3.2.6 National Marine Plan (NMP)**

- 17-30. The overarching guidance for the planning and consenting of offshore wind projects in Scotland is the National Marine Plan (NMP), published in 2015. The main policies within the NMP that are relevant to this study are the objectives for Offshore Wind and Marine Renewable Energy. These are:

- Objective 2 - Economic benefits from offshore wind, wave and tidal energy developments maximised by securing a competitive local supply chain in Scotland;
- Objective 3 - Alignment of marine and terrestrial planning and efficient consenting and licensing processes including, but not limited to, data sharing, engagement and timings, where possible;

- Objective 4 - Aligned marine and terrestrial electricity transmission grid planning and development in Scottish waters; and
- Objective 8 - Co-ordinated government and industry-wide monitoring.

17-31. In addition, there are general policies outlined in the NMP which are relevant to this, including:

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

#### **17.3.2.7 Sectoral Marine Plan for Offshore Wind Energy**

17-32. The Sectoral Marine Plan for Offshore Wind Energy (Scottish Government, 2020) establishes a strategic framework to identify the most sustainable areas for commercial-scale offshore wind development in Scottish waters. Its purpose is to guide the leasing process for new projects, ensuring a planned approach that minimises environmental impacts and conflicts with other marine users, while maximising opportunities for investment and economic growth specifically for Scotland.

17-33. The 2020 Plan initially identified 15 'Plan Options' considered capable of generating up to 10 GW of capacity. However, the subsequent and highly successful ScotWind leasing round, which was guided by this plan, far surpassed initial expectations. In 2022, Crown Estate Scotland awarded option agreements for projects with a potential generating capacity of nearly 28 GW, highlighting the enormous scale of Scotland's offshore wind resource and developer appetite.

17-34. The Scottish Government published the plan with the aim of creating significant economic benefits and supporting a Just Transition. The successful ScotWind developers have made substantial supply chain commitments, with an average investment projection of £1.5 billion in Scotland for each project. These commitments are expected to support tens of thousands of skilled jobs across the supply chain, from manufacturing and installation to long-term operations and maintenance, fostering a world-leading offshore wind industry within Scotland.

17-35. The Sectoral Marine Plan is a cornerstone of Scotland's distinct climate change legislation, which sets a legally binding target to achieve a net-zero economy by 2045. The massive expansion of offshore wind enabled by the plan is fundamental to decarbonising Scotland's electricity supply and the wider economy. This growth is central to the Scottish Government's ambition to develop a green economy, ensuring the energy transition delivers lasting benefits and cements Scotland's role as a global leader in renewable energy.

### **17.3.2.8 National Strategy for Economic Transformation**

17-36. In March 2022, the Scottish Government published the National Strategy for Economic Transformation (Scottish Government, 2022a), which set out its ambition for Scotland's economy over the next 10 years. The Scottish Government's vision is to create a wellbeing economy where society thrives across economic, social and environmental dimensions, and which delivers prosperity for all Scotland's people and places. Of particular importance is the ambition to be greener, with a just transition to net zero, a nature-positive economy and a rebuilding of natural capital.

17-37. A key longer-term challenge identified in the strategy is to address deep-seated regional inequality, including in rural and island areas that face problems such as a falling labour supply, poorer access to infrastructure and housing. The transition to net zero presents a further challenge of delivering positive employment, revenue and community benefits.

17-38. To deliver its vision and address the economy's challenges, five programmes of action have been identified (with a sixth priority of creating a culture of delivery), including:

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

17-39. The strategy notes that Scotland has substantial energy potential and that it has developed a growing green industrial base. This provides a strong foundation for securing new market opportunities arising from the transition to net zero. Renewable energy also has a role to play in supporting productive businesses and regions across Scotland.

### **17.3.2.9 Offshore Wind Policy Statement**

- 17-40. The Scottish Government's 2020 Offshore Wind Policy Statement (Scottish Government, 2020) highlights the substantial potential of Scotland's waters for offshore wind and the importance of the sector in the transition to net zero.
- 17-41. When the policy statement was published in October 2020, the ScotWind leasing round set ambitions for 11 GW of offshore wind capacity to be developed in Scottish waters by 2030, generating substantial economic impacts in Scotland's offshore wind supply chain. The ScotWind leasing round is now expected to lead to an additional 27.6 GW of offshore wind capacity (Crown Estate Scotland, 2023), with particular economic opportunities related to floating offshore wind.
- 17-42. The Supply Chain Development Statements (SCDS) submitted as part of the Crown Estate Scotland's ScotWind leasing process, are expected to procure a greater share of operational activities from Scotland, reflecting the growing operations and maintenance capacity in the country. The Applicant's SCDS (**Section 17.9.3**) commits to a minimum level of supply chain expenditure in Scotland and the UK to support local economic growth, by leveraging Scotland's expanding operations and maintenance potential.
- 17-43. The Scottish Government commits to making every effort to maximise the economic benefit from such developments and ensure that the Scottish economy sees the full benefit of these projects.

### **17.3.2.10 Legislation and Policy Summary**

- 17-44. The UK Government aims to ensure that UK companies can benefit from the opportunities presented by the expansion of the offshore wind sector, enhancing the competitiveness of UK firms internationally and sustaining the UK's role as a global leader in offshore wind generation.
- 17-45. The Scottish Government, as outlined in its Offshore Wind Policy Statement (Scottish Government, 2020), expects offshore wind projects to play an important role in transitioning to a net zero economy, while contributing to sustainable economic growth with new, well-paid jobs. In particular, there are expected to be opportunities in Scotland related to offshore wind projects with floating turbine foundations, like the Proposed Offshore Development.
- 17-46. All policy directly applicable to socio-economics, tourism and recreation is summarised in



17-47.

17-48.

17-49.

17-50. Table 17-1.

**Table 17-1 Policy Relevant to Socio-Economics, Tourism and Recreation**

<b>Policy</b>	<b>Summary</b>	<b>How / Where Chapter has considered this</b>
UK Offshore Wind Sector Deal (UK Government, 2020)	The Offshore Wind Sector Deal 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.	Considered in <b>Section 17.3.2.1</b>
Clean Power 2030 Action Plan: A new era of clean electricity (UK Government, 2024)	The Clean Power 2030 Action Plan outlines the government's comprehensive strategy to achieve a secure, low-cost, and clean electricity system in Great Britain by 2030.	Considered in <b>Section 17.3.2.2</b>
National Performance Framework (Scottish Government, 2018)	Scotland's NPF sets out the ambitions of the Scottish Government and provides a framework to give a rounded view of progress towards achieving sustainable and inclusive growth across Scotland.	Considered in <b>Section 17.3.2.3</b>
National Planning Framework 4 (Scottish Government, 2023)	NPF4 sets out a national and strategic approach to planning and development in support of achieving net zero in Scotland by 2045.	Considered in <b>Section 17.3.2.4</b>
Draft Energy Strategy and Just Transition Plan (Scottish Government, 2023)	The Draft Energy Strategy and Just Transition Plan sets out the Scottish Government's comprehensive vision to accelerate the transition to a net-zero energy system.	Considered in <b>Section 17.3.2.5</b>

National Marine Plan (Scottish Government, 2015)	NMP sets out the strategic approach to management of Scottish inshore waters and offshore waters.	Considered in <b>Section 17.3.2.6</b>
Sectoral Marine Plan for Offshore Wind Energy (Scottish Government, 2020)	The Sectoral Marine Plan for Offshore Wind Energy establishes a strategic framework to identify the most sustainable areas for commercial-scale offshore wind development in Scottish waters.	Considered in <b>Section 17.3.2.7</b>
National Strategy for Economic Transformation (Scottish Government, 2022a)	The National Strategy for Economic Transformation sets out the Scottish Government's vision to create a wellbeing economy where society thrives across economic, social and environmental dimensions, and the opportunity the transition to net zero presents.	Considered in <b>Section 17.3.2.8</b>
Offshore Wind Policy Statement (Scottish Government, 2020)	The Offshore Wind Policy Statement highlights the importance of offshore wind in the transition to net zero.	Considered in <b>Section 17.3.2.9</b>

### 17.3.3 Guidance

17-51. All guidance directly applicable to socio-economics, tourism and recreation is provided below:

- Defining 'local areas' for assessing the economic impact of offshore renewables and other marine developments: guidance principles (Scottish Government, 2022a);
- General Advice for Offshore Socio-Economic Impact Assessment (SEIA), Marine Analytical Unit (MAU) (Marine Analytical Unit, 2022);
- UK Offshore Wind Sector Deal (UK Government, 2020); and
- The Green Book: Appraisal and Evaluation in Central Government (HM Treasury, 2022).

## 17.4 CONSULTATION

17-52. Buchan Offshore Wind Ltd ('The Applicant') has sought opinion and advice from key stakeholders through scoping and consultation regarding the EIA Scoping Report for the Proposed Offshore Development (submitted to MD-LOT in October 2023).

- 17-53. **Table 17-2** provides a summary of the key issues raised during the consultation process relevant to socio-economics and tourism and recreation and details how these issues have been considered in the production of this EIAR chapter.
- 17-54. Further detail on the Proposed Offshore Development's overall EIA stakeholder consultation process is presented in **Volume 1, Chapter 5: EIA Methodology**.

**Table 17-2 Consultation Relevant to Socio-Economics, Tourism and Recreation**

Consultee	Date/Document	Summary	Relevance to this Chapter
<b>Buchan Offshore Wind Scoping Opinion (MD-LOT, 2023)</b>			
Marine Directorate		In relation to social impacts, the Scottish Ministers advise that their current position is that the Applicant must assess potential impacts on local communities arising from the Proposed Offshore Development. They request that Applicants outline their methodology for gathering baseline data to evaluate future impacts, while noting that this position is under review and may be subject to change.	Social impacts have been assessed using defined local Study Areas around all potential construction and O&M ports. Due to the number and uncertainty of final locations, primary surveys were not undertaken. Instead, robust desk-based research and expert understanding of local economic conditions informed the assessment. The Applicant is also supporting a sector-level social impact research programme is also being undertaken by Crown Estate Scotland and the Scottish Offshore Wind Energy Council.
		The Marine Directorate emphasises that while stakeholder engagement and primary data collection serve distinct purposes, they can be conducted simultaneously. They expect Applicants to collect primary social data where possible to support their impact assessment, alongside dedicated stakeholder engagement activities, with both processes requiring proper stakeholder mapping.	The approach taken to the local social impacts is considered in <b>Section 17.6.2</b> . Where primary data gathering is not practical, the Applicant is supporting an industry wide primary research data gathering programme.
		The Marine Directorate concurs with the proposed local study area approach and recommends that area profile analyses consider incorporating either the Scottish Government's 6-fold or 10-fold urban/rural classification systems.	A shortlist of all potential construction and operation and maintenance port locations has been considered and assessed in the socio-economic analysis. For each location, the likely scale of population change has been evaluated, and an appropriate range of impact magnitudes and local community sensitivities has been applied. These are presented in <b>Section 17.12</b> , allowing for a clear understanding of the range of potential significance levels across different port scenarios. Rather than using the Scottish Government's 6-fold or 10-fold urban/rural classification systems, the assessment takes a more direct approach by evaluating each potential port location individually and determining the likely significance of social impacts based on location-specific data.
		The Marine Directorate requests assessment of secondary socio-economic effects that may result from any significant changes to commercial fishing activities, including potential displacement impacts.	Impacts on commercial fisheries and tourism have been assessed in <b>Section 17.12</b> , with reference to other chapters, such as <b>Volume 2, Chapter 11: Commercial Fisheries</b>
		The Marine Directorate broadly accepts the proposed economic assessment approach but requires three key additions: a comparative analysis of potential job creation against existing employment in the study area, inclusion of any identified knock-on socio-economic effects from the Proposed Offshore Development's effect on commercial fisheries, and a detailed methodology description including key assumptions that underpin economic impact estimation.	A methodology of the economic impact assessment is provided in <b>Section 17.9</b> , and the effects from commercial fishing impacts is considered in <b>Section 17.12</b> .
<b>Other Relevant Consultation to Date</b>			
Aberdeenshire Council	September 2024	Aberdeenshire Council highlighted the need to include regional context, in particular related to Peterhead. It highlighted the Regional Economic Strategy and the Peterhead Vision and Action Plan Report.	The regional context related to Peterhead has been noted. At present, no specific infrastructure or activities associated with the Proposed Offshore Development are planned to be located at or make use of Peterhead. Any socio-economic impacts arising in Peterhead would therefore be related to the Proposed Onshore Development. As such, the relevant regional context – including the Regional Economic Strategy and the Peterhead Vision and Action Plan Report – will be considered and assessed in full within the Proposed Onshore Development's EIA Report.
		Aberdeenshire Council has stated that submissions will be assessed against policy 11 and policy 25 of the National Planning Framework 4 (NPF 4) using an assessment framework which was provided as an appendix to the written response.	
VisitScotland	July 2024	No response received to consultation letter sent.	N/A

Consultee	Date/Document	Summary	Relevance to this Chapter
Highlands and Islands Enterprise	July 2024	No response received to consultation letter sent.	N/A
Highland Council	July 2024	No response received to consultation letter sent.	N/A
Marine Directorate	July 2024	A letter was sent to Marine Directorate summarising the proposed approach to the social impact assessment. Marine Directorate responded and advised that they have provided their scoping opinion, and it is for the Applicant to decide how they wish to use the advice they were given.	The advice provided in the scoping opinion has been considered where practicable. While primary social research at every potential port location was not undertaken due to uncertainty around final site selection and the impracticality of surveying all possible communities – the assessment has incorporated the principles set out by MAU. This includes applying a consistent methodology across all shortlisted port locations, using publicly available data to assess population change, magnitude, sensitivity, and significance of potential social impacts. This approach ensures the assessment remains proportionate and robust response to the guidance provided.

## **17.5 STUDY AREA**

### **17.5.1 Approach**

17-55. While a significant proportion of the activity associated with the Proposed Offshore Development is expected to take place offshore, the socio-economic impacts arising from that activity – such as employment and supply chain investment – will predominantly be experienced in onshore locations. This is because the onshore economy supports the offshore development through local labour, infrastructure, ports, and businesses involved in construction, operation and maintenance, and decommissioning. As such, the relevant Study Areas for this assessment focus on the onshore geographies where these socio-economic effects are most likely to occur.

17-56. The offshore socio-economics Study Areas for the assessment of likely significant effects on employment and economy are defined in line with the guidance on identification of 'local areas' for offshore developments published by the Scottish Government (Marine Scotland, 2022). This guidance identified six principles for identifying local Study Areas for offshore development:

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

### **17.5.2 Socio-Economic Study Areas**

17-57. The main local epicentres of impact are expected to be the ports used during the construction and O&M for the Proposed Offshore Development. However, at this stage these ports are not known, and therefore the following socio-economic Study Areas have been considered:

- construction port, i.e. the area around the construction port (construction phase only);
- O&M port, i.e. the area around the O&M port (O&M phase only);
- Scotland; and
- the UK.

17-58. While the ports are not yet known, a list of potential ports for the construction and O&M phases have been considered to identify the maximum design scenario, outlined in **Table 17-3**. The potential port locations are also presented in **Volume 1, Chapter 4: Project Description**. The list of potential port locations contains both rural and urban port locations that can be used as indicative examples for the social impact assessment. The Study Areas that will be used to assess the social impacts around these ports will consist of the electoral wards in which each port is located.

**Table 17-3 Potential Construction and O&M Ports**

<b>Ports</b>	<b>Local Study Area (Electoral Wards)</b>
Fraserburgh	Fraserburgh and District (Aberdeenshire)
Peterhead	Peterhead South and Cruden, Peterhead North and Rattray (Aberdeenshire)
Wick	Wick and East Caithness (Highland)
Macduff	Troup, Banff and District (Aberdeenshire)
Buckie	Buckie (Moray)
Aberdeen	Aberdeen City Council
Nigg	Tain and Easter Ross (Highland)
Ardersier	Culloden and Ardersier (Highland)
Cromarty Firth	Cromarty Firth (Highland)
Montrose	Montrose and District (Angus)
Inverness	Inverness Central, Inverness Millburn, Inverness Ness-side, Inverness West, Inverness South (Highland)
Methill	Buckhaven, Methil and Wemyss Villages, Leven, Kennoway and Largo (Fife)
Scapa Flow	Orkney Islands Council
Dundee	Dundee City Council
Kishorn	Wester Ross, Strathpeffer and Lochalsh

## 17.6 METHODOLOGY TO INFORM BASELINE ENVIRONMENT

17-59. Baseline data to inform the socio-economics, tourism and recreation assessment was collected using the following methods:

### 17.6.1 Desktop Study

- 17-60. For the purposes of the socio-economics, tourism and recreation chapter, a desk-based review was undertaken using relevant spatial and economic data sources. This study was aimed at evaluating and assessing the key datasets and statistics related to socio-economics features and supply chain capabilities in the UK and Scotland. It focused on various key statistics, including general population demographics, age group distribution, overall employment levels, and specific employment figures within industries linked to the offshore sector.
- 17-61. These existing data sets and literature encompassing the Proposed Offshore Development Study Areas, are presented in **Table 17-4**.

**Table 17-4 Key Sources of Socio-Economics, Tourism and Recreation Literature and Data**

Source, Author and Year	Summary	Coverage of Project Study Area
Mid-2023 Population Estimates Scotland (National Records of Scotland, 2024)	Population estimates for Scotland, broken down by age.	Annual publication covering Scotland and each of its local authorities and electoral wards.
Mid-Year Population Estimates UK 2023 (Office for National Statistics (ONS), 2024a)	Population estimates for the UK, broken down by age.	Annual publication focusing on the UK.
2022-based Principal Population Projections (National Records of Scotland, 2025)	Population projections for Scotland and each of its 32 local authorities, broken down by age.	Bi-annual publication covering Scotland.
Principal Population Projections 2022-Based (ONS, 2025b)	Population projections for the UK as a whole, broken down by age.	Bi-annual publication covering the United Kingdom.
Annual Survey of Hours and Earnings 2023, (ONS, 2023a)	Provides average and median residential and workplace earning.	Annual publication covering the UK, Scotland and local authorities.
Business Register and Employment Survey 2023, (ONS, 2024b)	Provides a breakdown of employment by sector.	Annual publication covering the UK, Scotland, local authorities and electoral wards.



Source, Author and Year	Summary	Coverage of Project Study Area
Annual Population Survey 2024, (ONS, 2025a)	Provides statistics on characteristics of populations, including economic activity rate and unemployment rate.	Annual publication covering the UK, Scotland and local authorities.
Offshore Wind Skills Intelligence Report 2023 (Offshore Wind Industry Council, 2023)	Provides information on the existing offshore wind labour force across the UK as well as the skills that are expected to be needed up to 2030.	Annual publication covering the UK and individual regions across Scotland.
The Offshore Wind O&M Opportunity (Offshore Renewable Energy Catapult, 2020)	Discusses the potential opportunities in offshore wind by 2030, with a detailed breakdown of annual spending and associated opportunities in the UK.	Single publication considering opportunities in the UK.
GB Day Visitor 2023 (Kantar Taylor Nelson Sofres (TNS), 2024)	Annual publication of domestic day visits by number and value for 2023.	Annual publication covering the UK, Scotland and local authorities.
GB Tourism Survey 2023, (Kantar TNS, 2024)	Annual publication of domestic overnight tourism visits and nights by number, value and purpose for 2023.	Annual publication covering the UK, Scotland and local authorities.

## 17.6.2 Baseline Surveys

17-62. No site-specific surveys have been undertaken to inform the EIAR offshore socio-economics baseline environment.

17-63. The Marine Analytical Unit (MAU) has requested that the Applicant conduct primary social research at all potential locations with the potential for social impacts. This request has been made for all ScotWind and Innovation and Targeted Oil and Gas (INTOG) offshore wind developments in Scotland. However, given that ports used for construction and operations will generally not be known when the socio-economic assessment for each project's EIA is undertaken, as well as the anticipated considerable costs to the local communities affected from all 33 ScotWind and INTOG projects undertaking this research, it is neither practical nor beneficial to conduct this primary social research as requested.

17-64. Whilst primary surveys of social impacts at the community level is impractical if undertaken for all offshore wind farms as part of the consenting process, there is merit in considering them at the sector level. A collaborative approach to social research is being progressed by the Scottish Offshore Wind Energy Council and Crown Estate Scotland. The Applicant is actively supporting the collaborative approach to primary social research on the social impacts of offshore wind. A letter was sent to Marine Directorate summarising the proposed approach to the social impact assessment, listed in **Table 17-2**.

17-65. In the absence of primary surveys, the information gathered through desk-based research, existing data sources, and stakeholder engagement is considered sufficient to inform a robust baseline environment. This includes the use of national and regional statistics, such as those from the Office for National Statistics and the Scottish Government. These sources offer a strong foundation for understanding baseline conditions and assessing the likely significant effects of the Proposed Offshore Development.

## 17.7 BASELINE ENVIRONMENT

17-66. A summary of the socio-economics, tourism and recreation baseline environment is provided in the following sections.

### 17.7.1 Socio-Economics

#### 17.7.1.1 Population

17-67. In 2023, Scotland had a population of almost 5.5 million (**Table 17-5**), 8.0% of the UK population of 67.9 million. The share of the working population (aged 16 to 64) was marginally higher in Scotland at 63.4%, compared to the UK (63.1%). Compared to the UK, Scotland has a lower proportion of younger people (aged 0 to 15) as a share of the population and a higher proportion of older people (aged 65+).

**Table 17-5 Population by Age Group, 2023 (ONS, 2024a) (National Records of Scotland, 2024)**

Population	Scotland	UK
Aged 0-15	16.3%	18.3%
Aged 16-64	63.4%	63.1%
Aged 65+	20.3%	18.6%
Total	5,490,100	67,987,800

#### 17.7.1.2 Industrial Structure and Jobs

17-68. In 2023, there were 2.7 million jobs in the Scottish economy (**Table 17-6**), representing around 8.0% of employment in the UK (33.1 million jobs).

- 17-69. During the development stage of the Proposed Offshore Development , which includes project management, project design and environmental impact assessments, there will be opportunities for the professional, scientific and technical activities sector, which employs 190,500 people in Scotland (6.3% of employment in this sector in the UK).
- 17-70. Employment in electricity, gas, steam, and air conditioning supply sectors in Scotland (19,500) is 16.2% of the UK's employment in the sector, reflecting a proportionately larger renewable energy sector in Scotland. This may also indicate that the Scottish professional services sector has experience in supporting the renewable energy sector.
- 17-71. Sectors relevant to the construction phase of the Proposed Offshore Development include manufacturing, which has total employment in Scotland of 178,000 (7.2% of UK manufacturing employment) and construction (136,000, 8.4% of total construction employment in the UK). Scotland's high share employment in mining and quarrying sectors, which employ 24,500 people (accounting for 51.0% of UK mining and quarrying employment), reflects strengths in offshore oil and gas, which are relevant for the development and construction phases. Scottish employment in transportation and storage of 119,000 (7.3% of UK employment), will also be relevant since the Proposed Offshore Development will require port infrastructure during the construction, operation and maintenance, and decommissioning phases.

**Table 17-6 Employment in Selected Industries (ONS, 2024b)**

<b>Economic Sectors</b>	<b>Scotland</b>	<b>UK</b>	<b>Scotland as % of UK</b>
Professional, scientific & technical	190,500	3,035,000	6.3%
Manufacturing	178,000	2,466,000	7.2%
Construction	136,000	1,613,000	8.4%
Transport & storage	119,000	1,626,000	7.3%
Mining, quarrying & utilities	24,500	48,000	51.0%
Electricity, gas, steam and air conditioning supply	19,500	120,000	16.2%
<b>Total</b>	<b>2,655,000</b>	<b>33,082,500</b>	<b>8.0%</b>

- 17-72. Scotland has almost 30% of the UK's offshore wind workforce population (Offshore Wind Industry Council, 2023). Given its legacy in offshore oil and gas

exploration, the Scottish economy is well-placed to support offshore energy employment.

17-73. The Scottish economy also stands to benefit from an increase in manufacturing employment, which is under-represented compared to its share of the population.

17-74. Between 2012 and 2022, the number of jobs in Scotland grew by 7.5%. This is less than the growth in the wider UK which was 14.2%.

### 17.7.1.3 Economic Activity and Pay

17-75. As shown in **Table 17-7**, the key labour market indicators in Scotland are broadly in line with those of the wider UK. The level of economic activity, that is those of working age that are either in employment or looking for a job is lower in Scotland (77.3%) than the wider UK average (78.4%). However, of those who are economically active, there is a smaller share who are unemployed in Scotland compared to the UK average.

17-76. The average annual pay in Scotland is marginally higher (£31,891) than that of the rest of the UK (£31,752).

**Table 17-7 Selected Labour Market Indicators (ONS, 2025a)**

Economic Variable	Scotland	UK
Economic Activity Rate	77.3%	78.4%
Unemployment Rate	3.5%	3.8%
Median Annual Salary	£31,891	£31,752

### 17.7.1.4 Occupation and Qualifications

17-77. As shown in **Table 17-8**, the occupations of employment in Scotland are also broadly in line with the UK average. Across the UK there are more people employed as Managers, Directors and Senior Officials (9.6%) than in Scotland (11.0%), however for most other occupation categories the level of employment is similar.

**Table 17-8 Employment by Occupation Type (ONS, 2025a)**

Economic Variable	Scotland	UK	Variation
Managers, Directors and Senior Officials	8.6%	11.0%	-2.4%
Professional Occupations	25.2%	26.8%	-1.7%
Associate Prof & Technical Occupations	14.5%	15.2%	-0.6%
Administrative and Secretarial Occupations	9.8%	9.4%	0.4%
Skilled Trades Occupations	9.7%	8.7%	1.0%
Caring, Leisure and other service Occupations	9.6%	8.4%	1.1%
Sales and Customer Service Occupations	6.5%	5.9%	0.5%
Process, Plant and Machine Operatives	6.2%	5.5%	0.7%
Elementary Occupations	9.6%	8.8%	0.8%

17-78. As shown in **Table 17-9**, the population of Scotland aged 16 to 64 years old with a degree-level education (Regulated Qualifications Framework (RQF) 4+) is 55.1% which is larger than the average across the UK (47.1%). While Scotland has a larger share of its working age population with qualifications across most educational levels than across the UK, it has also a larger share of those aged 16 to 64 without any qualification (8.2%) compared to the UK (6.6%).

**Table 17-9 Employment by Occupation Type (ONS, 2025a)**

Economic Variable	Scotland	UK
% with RQF4+ - aged 16 to 64	55.1%	47.1%
% with RQF3+ - aged 16 to 64	73.7%	67.7%
% with RQF2+ - aged 16 to 64	87.1%	86.4%
% with RQF1+ - aged 16 to 64	87.9%	88.8%
% with other qualifications (RQF) - aged 16 to 64	3.9%	4.5%
% with no qualifications (RQF) - aged 16 to 64	8.2%	6.6%

## 17.7.2 Potential Port Locations

17-79. Baseline data on population, employment and construction sector employment for the local Study Areas of the long-listed port locations is presented in **Table 17-10**. This shows that the port with the largest population and highest construction employment is Aberdeen, while Ardersier has the smallest population, and Buckie has the lowest construction employment.

**Table 17-10 Potential Port Study Areas Baseline (ONS, 2024a) (National Records of Scotland, 2024) (ONS, 2024b)**

Ports	Population	Workforce (Total Employment)	Construction Sector Workforce
Fraserburgh	15,779	8,630	350
Peterhead	27,557	12,995	545
Wick	13,290	4,680	425
Macduff	20,003	6,155	600
Buckie	10,929	3,320	180
Aberdeen	227,400	159,900	6,000
Nigg	21,629	8,010	600
Ardersier	10,567	3,620	240
Cromarty Firth	21,629	8,010	600
Montrose	15,686	5,605	325
Inverness	60,146	44,740	2,695
Methil	37,888	9,490	450
Scapa Flow	22,500	13,210	850
Dundee	147,700	78,185	3,500
Kishorn	12,225	4,840	400

### 17.7.3 Future Changes

17-80. 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 EIAR. This reflects how the baseline relevant to socio-economics, tourism and recreation is expected to evolve without the Proposed Offshore Development.

#### 17.7.3.1 Population Projections

17-81. From 2023 to 2043, Scotland's population is projected to grow by 5.1%, from 5,490,100 to 5,770,152. This is a lower growth rate compared to the UK as a whole, where the population is expected to grow by 10.7%.

17-82. 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 44,839 individuals, representing a 1.3% 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 (9.7%).

17-83. 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 17-11 Population Projections (ONS, 2025b) (National Records of Scotland, 2025)**

	Scotland		UK	
	2023	2043	2023	2043
<b>Population</b>	<b>5,490,100</b>	<b>5,770,152</b>	<b>67,987,800</b>	<b>75,585,236</b>
Aged 0-15	16.3%	14.1%	18.3%	15.2%
Age16-64	63.4%	61.1%	63.1%	62.2%
Aged 65+	20.3%	24.8%	18.6%	22.6%

17-84. To deliver the 50 GW target of offshore capacity by 2030, there will be a substantial increase of demand for people and skills (UK Government, 2020). The Offshore Wind Industry Council (OWIC) predicts that there will be 104,401 jobs in the offshore wind industry by 2030, marking a significant increase of nearly 225% from the 32,257 jobs recorded at the beginning of 2023 (Offshore Wind Industry Council, 2023).

17-85. The UK offshore wind operations and maintenance market is expected to grow faster than any other offshore wind subsector market over the next ten years, projected to be valued at £1.3 billion per year by 2030 (Offshore Renewable Energy Catapult, 2020). The operations and maintenance market generates a huge opportunity for the UK, playing to the strengths of the existing services and technologies used for offshore oil and gas, particularly prevalent across the north-east of Scotland.

#### **17.7.4 Data Limitations and Assumptions**

17-86. Most of the data in the baseline assessment is based on surveys carried out by national statistical agencies and sectoral organisations. Given the process required to produce reliable statistics, between the time when data is collected and published, there is often a lag. This means that the latest available data on a given socio-economic indicator may not fully reflect baseline conditions at the time of writing.

17-87. To ensure as accurate a characterisation of the existing environment, data was collected close to the time of submission. Furthermore, even if the latest available evidence does not reflect current conditions, most of the socio-economic dimensions considered present a degree of dependence on past performance. On that basis, the latest available data provides a relatively good approximation of the current environment.

17-88. 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.

17-89. The use of a range of statistics to characterise each of the geographies considered as part of the baseline environment reduces the risk conclusions may be affected by issues arising within any individual statistical survey.

17-90. Overall, the data limitations described above are not expected to have implications for the conclusions of the assessment.

## **17.8 IMPACTS SCOPED OUT OF THE ASSESSMENT**

17-91. There are no impacts that have been scoped out of this socio-economics, tourism and recreation assessment.

## **17.9 METHOD FOR ASSESSMENT**

### **17.9.1 Overview**

17-92. Assessment of likely significant effects in this chapter will follow the general approach outlined in **Volume 1, Chapter 5: EIA Methodology** of the EIAR. In addition, guidance, policy and legislation relevant to socio-economics, tourism and recreation as detailed in **Section 17.3** has been considered in the assessment of effects.

#### **17.9.1.1 Economic Impact Assessment**

17-93. The economic impacts considered for each Study Area are reported in terms of:

- GVA: this is 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 the construction phase employment; and
- Employment (Jobs): a measure of employment which considers the headcount employment in an organisation or industry. This is used to describe the long-employment opportunities during the operational phase.

17-94. 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 also considers the effects of staff spending and the economic impact that this subsequent increase in demand stimulates (the induced effect).



- 17-95. Deadweight (what would have happened without the Proposed Offshore Development), leakage (economic impacts occurring outside of Study Areas considered) and displacement (economic activity that is being displaced by the Proposed Offshore Development) have been considered and are discussed in **Section 17.9.3**.
- 17-96. The Proposed Offshore Development will include the construction and installation of floating foundations and wind turbines, the offshore substation platforms and foundations, and the construction and installation of new inter-array and interconnector cabling. The analysis for the Proposed Offshore Development covers three phases:
- construction (including development, manufacturing and fabrication, and installation);
  - O&M; and
  - decommissioning.
- 17-97. 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 also considers the timings of impacts during this phase to understand the peaks and troughs of this activity.
- 17-98. The impacts during the O&M phase for the Proposed Offshore Development have been based on projected O&M expenditure.
- 17-99. The impact associated with decommissioning has been based on the analysis by BVG Associates (BVG Associates, 2024) (BVG Associates, 2021).
- 17-100. In line with HM Treasury guidance (HM Treasury, 2022), the total and decommissioning impact have been presented as the total GVA and Net Present Value (NPV) impacts. NPV is a method for discounting impacts in the future compared to impacts that are expected to occur sooner.
- 17-101. The economic impact methodology including data sources, key data and information are also discussed in **Appendix 17.1 (Economic Impact of Buchan Offshore Wind Farm)**.

### **17.9.1.2 Social Impact Assessment**

- 17-102. As well as generating economic impacts in each of the socio-economic Study Areas considered, the Proposed Offshore Development may have social impacts on the communities where economic activity takes place. The magnitude of these social impacts is expected to result from the level of economic impact associated with the Proposed Offshore Development.

17-103. Therefore, the social impact assessment aims to outline the primary pathways through which the Proposed Offshore Development could lead to social impacts. It focuses on the following key areas:

- demographic changes;
- housing demand and availability;
- impacts on other local services; and
- socio-cultural impacts.

17-104. It is important to note that at this stage, predicting the precise nature and extent of the community impacts associated with the Proposed Offshore Development is not feasible, since the construction and O&M ports are not yet known. However, an assessment has been undertaken based on the maximum design scenario.

17-105. 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. a temporary increase in workers during construction will have different effects compared to a long term increase in employment in a given area.

### **17.9.1.3 Tourism and Recreation Impact Assessment**

17-106. Impacts will occur on tourism and recreation receptors if they are sensitive to changes in environmental factors that will occur as a result of the Proposed Offshore Development and the receptor is considered to experience a likely significant effect as a result of changes to these environmental factors.

17-107. The impacts considered on tourism and recreation assets are changes to visitor or user behaviour and outcomes. Any environmental impact on these receptors will therefore be assessed against how it will change behaviour compared to the current baseline of visitor or user behaviour of the receptor.

### **17.9.2 Criteria for Assessment**

17-108. The process for determining the significance of effects is a two-stage process that involves defining the magnitude of the potential impacts and the sensitivity of the receptors. This section describes the criteria applied in this chapter to assign values to the magnitude of potential impacts and the sensitivity of the receptors.

- 17-109. The terms used to define impact magnitude and receptor sensitivity for socio-economics, tourism and recreation are based on those described in further detail in **Volume 1, Chapter 5: EIA Methodology**.
- 17-110. The socio-economics impacts have been considered over distinct Study Areas to capture the spatial extent of any impact (**Section 17.5**). The magnitude of any impact is then considered in relation to the baseline conditions within those Study Areas.
- 17-111. The frequency and temporal extent of any impact has been considered and those which occur over a short period of time (e.g. construction, decommissioning) have been described as temporary and those which occur over a longer period (e.g. operation) have been described as permanent, though in practice this will be over the lifetime of the Proposed Offshore Development.
- 17-112. The approach to determining the magnitude of any socio-economic impacts is outlined below in **Section 17.9.2.1**.

#### **17.9.2.1 Magnitude**

##### **Magnitude of Economic Impacts**

- 17-113. The magnitude criteria for socio-economics, tourism and recreation are provided in **Table 17-12**. In determining magnitude, each assessment considered the spatial extent, duration, frequency, and reversibility of impact and these are outlined within the magnitude section of each assessment of impact (e.g., a duration of hours or days would be considered for most receptors to be of short-term duration, which is likely to result in a Low magnitude of impact).
- 17-114. Between 2000 and 2019, the average level of Gross Domestic Product (GDP) per capita growth in the UK was 1% per annum (IMF, 2022). Similarly, between 2000 and 2019 the number of jobs increased by 1% per annum (ONS, 2023b). The magnitude of any change in an economy should be considered within this context and in relation to the levels of economic activity within a Study Area.
- 17-115. In addition to the change in the overall impact in the GVA or employment of an area, consideration can also be made for the sectors of the economy which are considered to contribute to the economic sensitivity of the area. For example, in the context of offshore wind, the construction, manufacturing and professional services sectors present in an area are likely to contribute towards its sensitivity.

**Table 17-12 Definition of Magnitude for an Economy/Economic Sector**

<b>Magnitude</b>	<b>Description</b>
Negligible	An impact would be considered to have a Negligible magnitude if it was equivalent to less than a quarter of the typical economic growth per capita. Therefore, for each Study Area: <ul style="list-style-type: none"> <li>•peak annual GVA impact is less than 0.25% of the economy or specific sector; or</li> <li>•peak employment supported is less than 0.25% of the total number of jobs.</li> </ul>
Low	An impact would be considered to have a Low magnitude if it was equivalent to a quarter of the typical economic growth per capita. Specifically, for each Study Area: <ul style="list-style-type: none"> <li>•peak annual GVA impact is greater than, or equal to, 0.25% but less than 0.5% of the economy or specific sector; or</li> <li>•peak employment supported is greater than, or equal to, 0.25% but less than 0.5% of the total number of jobs.</li> </ul>
Medium	An impact would be considered to have a Medium magnitude if it was equivalent to half of the typical economic growth per capita. Specifically, for each Study Area: <ul style="list-style-type: none"> <li>•peak annual GVA impact is greater than, or equal to, 0.5% but less than 1.0% of the economy or specific sector; or</li> <li>•peak employment supported is greater than, or equal to, 0.5% but less than 1.0% of the total number of jobs.</li> </ul>
High	An impact would be considered to have a High magnitude if it was equivalent to all of the typical economic growth per capita. Specifically, for each Study Area: <ul style="list-style-type: none"> <li>•peak annual GVA impact is greater than, or equal to, 1% of the economy or specific sector; or</li> <li>•peak employment supported is greater than, or equal to, 1% of the total number of jobs.</li> </ul>

### **Magnitude of Social Impacts**

17-116. The magnitude of impacts on the social or community assets will be dependent on the scale of the economic and demographic changes that occur in each of the Study Areas and how these affect demand for services, such as housing, education and health. This is discussed in more detail in **Section 17.12**.

### **Magnitude of Tourism and Recreation Impacts**

17-117. The impacts considered on tourism and recreation assets are changes to visitor or user behaviour and outcomes. Any environmental impact on these receptors will therefore be assessed against how it will change behaviour compared to the current baseline of visitor or user behaviour of the receptor.

17-118. The definitions of the magnitude of impacts on tourism and recreation assets are provided in **Table 17-13**.

**Table 17-13 Definition of Magnitude of Tourism and Recreation Impacts**

<b>Magnitude Value</b>	<b>Description</b>
Negligible	The impact on a tourism and recreation asset would be considered to have a Negligible magnitude if is predicted to experience an undetectable change of behaviour of visitors or users.
Low	The impact on a tourism and recreation asset would be considered to have a Low magnitude if is predicted to experience a minor change of behaviour of visitors or users.
Medium	The impact on a tourism and recreation asset would be considered to have a Medium magnitude if is predicted to experience a moderate change of behaviour of visitors or users.
High	The impact on a tourism and recreation asset would be considered to have a High magnitude if it is predicted to experience a major change of behaviour of visitors or users.

### **17.9.2.2 Sensitivity**

#### **Sensitivity of Economic Receptors**

17-119. The sensitivity of an economy is linked to how well it is able to 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, economic).

17-120. The sensitivity criteria for defining sensitivity for economic receptors in this chapter are outlined in **Table 17-14**.

**Table 17-14 Definition of the Sensitivity of Economic Receptors**

<b>Sensitivity</b>	<b>Description</b>
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"> <li>•the economy is well balanced between sectors;</li> <li>•the number of jobs in the economy has grown at a quicker rate than the wider UK economy; and</li> <li>•the share of people with no qualifications is below average for the wider economy.</li> </ul>
Low	<p>A Low sensitivity 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"> <li>•most sectors of the economy are well represented;</li> <li>•the number of jobs in the economy has grown in line with the wider economy; and</li> <li>•the level of educational attainment is in line with the wider economy.</li> </ul>
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"> <li>•the economy is particularly reliant on a small number of sectors;</li> <li>•the number of jobs in the economy has grown less than the wider economy; and</li> <li>•the share of people with no qualifications is above the average for the wider economy.</li> </ul>
High	<p>A High sensitivity economy will not be able to absorb changes without fundamentally altering its present character or value. Factors that would contribute to an economy being considered of High sensitivity include:</p> <ul style="list-style-type: none"> <li>•the economy is particularly reliant on one single sector;</li> <li>•the number of jobs in the economy has been declining over multiple years; and</li> <li>•the share of people with no qualifications is significantly above the average for the wider economy.</li> </ul>

### **Sensitivity of Social Assets**

17-121. The sensitivity of social assets will depend on their relative capacity to adapt to change and meet increased demand without affecting existing services, e.g.

whether there is additional capacity in the housing market, schools etc. as well as specific local circumstances, such as the composition of the population.

17-122. This is discussed in more detail in **Section 17.11**, considering the factors affecting demographics, housing, access to services and socio-cultural factors.

### **Sensitivity of Tourism and Recreation Assets**

17-123. The sensitivity of a tourism or recreation asset is determined by how reactive visitors, or users, of this asset are to a change in the environment. The sensitivity may change depending on which environmental factor is being considered. For example, an asset may be highly sensitive to changes in traffic and transport activity but have Negligible sensitivity to landscape and visual impacts.

17-124. The sensitivity of these assets will also depend on the ability of the asset to react to any change. Assets that provide a fixed offering, such as a monument or nature-based attraction will be, other things remaining equal, more sensitive to change.

17-125. The sensitivity criteria for defining sensitivity for tourism and recreation receptors are outlined in **Table 17-15**.

**Table 17-15 Definition of the Sensitivity of Tourism and Recreation Assets**

<b>Sensitivity</b>	<b>Description</b>
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"> <li>•environmental conditions have a negligible influence on the ability of the asset to attract or accommodate visitors and users; and</li> <li>•having substantial ability to adapt or adjust the assets in response to changes in visitor or user behaviour.</li> </ul>
Low	<p>A tourism or recreational asset with a Low sensitivity will have the ability to tolerate or adapt to effects 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"> <li>•environmental conditions have a minor influence on the ability of the asset to attract or accommodate visitors and users; and</li> <li>•being able to adapt or adjust the assets in response to changes in visitor or user behaviour.</li> </ul>
Medium	<p>A tourism or recreational asset with a Medium sensitivity will have limited capacity to tolerate or adapt to effects 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>

Sensitivity	Description
	<ul style="list-style-type: none"> <li>•being influenced by a single environmental condition to attract or accommodate visitors and users; and</li> <li>•have a limited ability to adapt or adjust in response to changes in visitor or user behaviour.</li> </ul>
High	<p>A tourism or recreational asset with a High sensitivity will not be able to tolerate or adapt to effects 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"> <li>•being dependent on a single environmental condition to attract or accommodate visitors and users; and</li> <li>•being unable to adapt or adjust in response to changes in visitor or user behaviour.</li> </ul>

### 17.9.2.3 Significance of Effect

17-126. The magnitude of the impact and the sensitivity of the receptor are combined when determining the significance of the effect upon offshore socio-economics. The particular method employed for this assessment is presented in **Table 17-16**.

**Table 17-16 Effect Significance Matrix**

		Adverse Magnitude				Beneficial Magnitude			
		High	Medium	Low	Negligible	Negligible	Low	Medium	High
Sensitivity	High	Major	Major	Moderate	Minor	Minor	Moderate	Major	Major
	Medium	Major	Moderate	Minor	Negligible	Negligible	Minor	Moderate	Major
	Low	Moderate	Minor	Minor	Negligible	Negligible	Minor	Minor	Moderate
	Negligible	Minor	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	Minor

17-127. In cases where a range is suggested for the significance of effect, there remains the possibility that this may span the significance threshold (i.e. the range is given as Minor to Moderate). In such cases the final significance conclusion is based upon the author's professional judgement as to which outcome delineates the most likely effect. 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 significance. These factors may include the likelihood that an effect will occur, data certainty and relevant information about the wider environmental context.

17-128. For the purposes of this assessment:



- a level of residual effect of Moderate or Major will be considered a 'significant' effect in terms of the EIA Regulations; and
- a level of residual effect of Minor or Negligible will be considered 'not significant' in terms of the EIA Regulations.

17-129. Significant effects are therefore considered important in the decision-making process, whilst effects deemed as not significant warrant little, if any, weight in the decision-making process. Effects significance is defined in **Table 17-17**.

**Table 17-17 Effect Significance Definitions**

<b>Effect Significance</b>	<b>Definition</b>
Major	Very large or large changes in receptor condition, both adverse or beneficial, which are likely to be important considerations at a regional or district level as they contribute to achieving national, regional or local objectives, or could result in exceedance of statutory objectives and/or breaches of legislation.
Moderate	Intermediate changes in receptor condition, which are likely to be important considerations at a local level.
Minor	Small changes in receptor condition, which may be raised as local issues but are unlikely to be important in the decision making process.
Negligible	No discernible change in receptor condition.

### 17.9.3 Economic Impact Methodology

17-130. There are three broad phases of the Proposed Offshore Development that are considered as part of the socio-economic impact assessment:

- construction;
- operation and maintenance; and
- decommissioning.

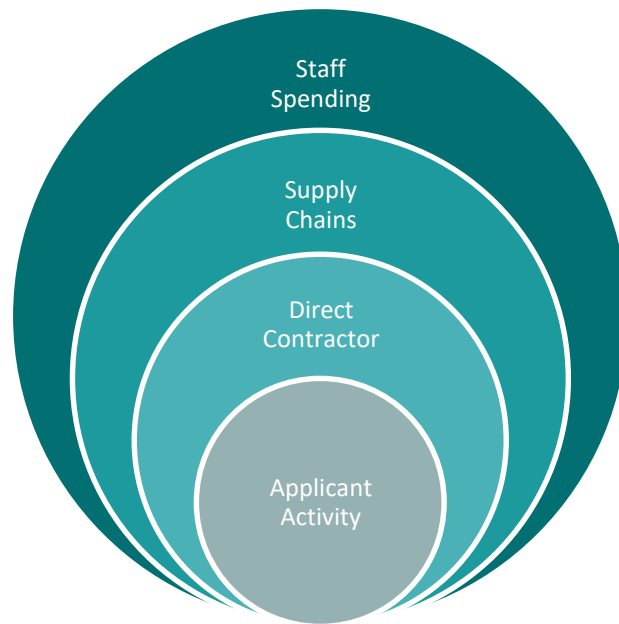
17-131. For each phase there are three types of economic impact, as demonstrated in **Figure 17-1**. These are direct (Applicant activity and primary supplier) impacts, indirect (supply chain) impacts, and induced (staff spending) impacts.

17-132. In line with industry best practice, for the assessment of GVA and employment impacts, the analysis focuses on:

- direct economic impacts: economic impact associated with the activity of the Applicant and primary contractors involved in the development, construction and operations and maintenance of the Proposed Offshore Development; and

- indirect economic impacts: economic impact associated with the spending taking place across the supply chain of those businesses involved in the development, construction and operations and maintenance of the Proposed Offshore Development.

17-133. The assessment also refers to the additional benefits associated with the spending in the economy by those employed to carry out works associated with the Proposed Offshore Development (induced economic impacts).



**Figure 17-1 Types of Economic Impacts**

17-134. In addition to estimating the total economic impact, it was necessary to estimate the net economic impact based on guidance provided by the Marine Analytical Unit (2020), i.e. the impact compared with a counterfactual of the Proposed Offshore Development not proceeding. Factors that were considered include:

- deadweight: this is the activity that would have taken place without the Proposed Offshore Development proceeding. It was assumed that there would be no deadweight (i.e., no impact if the Proposed Offshore Development didn't go ahead);
- leakage: the proportion of activity that might occur outside the socio-economic Study Areas. This is accounted for by considering the share of spend that occurs in each Study Area;
- displacement: the extent to which activity generated by the Proposed Offshore Development might displace existing activity elsewhere in the socio-economic Study Areas. Whilst it is likely that the Proposed Offshore Development would compete for resources with other proposed projects, such effects are more likely to relate to the timing of activity; and

- multipliers: this is the wider activity resulting from spending in the supply chain, in addition to staff spending by employees of the Applicant and primary suppliers. The multiplier effects are included in the analysis.

17-135. The economic impact methodology is further discussed in **Appendix 17.1 (Economic Impact of Buchan Offshore Wind Farm)**.

### **17.9.3.1 Metrics of Assessment**

17-136. The economic impact has been assessed using three common measures of economic activity, as determined by BiGGAR Economics' (hereafter referred to as the 'technical expert') professional judgement and experience:

17-137. Gross Value Added (GVA): this is a measure of economic output; the economic value added by an organisation or industry. It is typically estimated by subtracting the non-staff costs from the revenues of an organisation.

17-138. Years of Employment: this is a measure of employment which is equivalent to one person being employed for an entire year and is typically used when considering short-term employment impact, such as construction employment. This is full-time equivalent (FTE) unless stated otherwise.

17-139. Employment (Jobs): a measure of employment which considers the headcount employment in an organisation or industry. This is FTE unless stated otherwise.

17-140. The metrics of assessment are also discussed in **Appendix 17.1 (Economic Impact of Buchan Offshore Wind Farm)**.

### **17.9.3.2 Estimating Economic Impact**

17-141. An offshore wind economic model has been designed by the technical expert to assess the economic impacts associated with offshore wind farms and applied to the Proposed Offshore Development. The principle of this model has been applied to a number of onshore and offshore wind farm developments and is based on the level of expenditure expected to be associated with construction and with operation and maintenance. An overview of the model is provided in **Figure 17-2**.

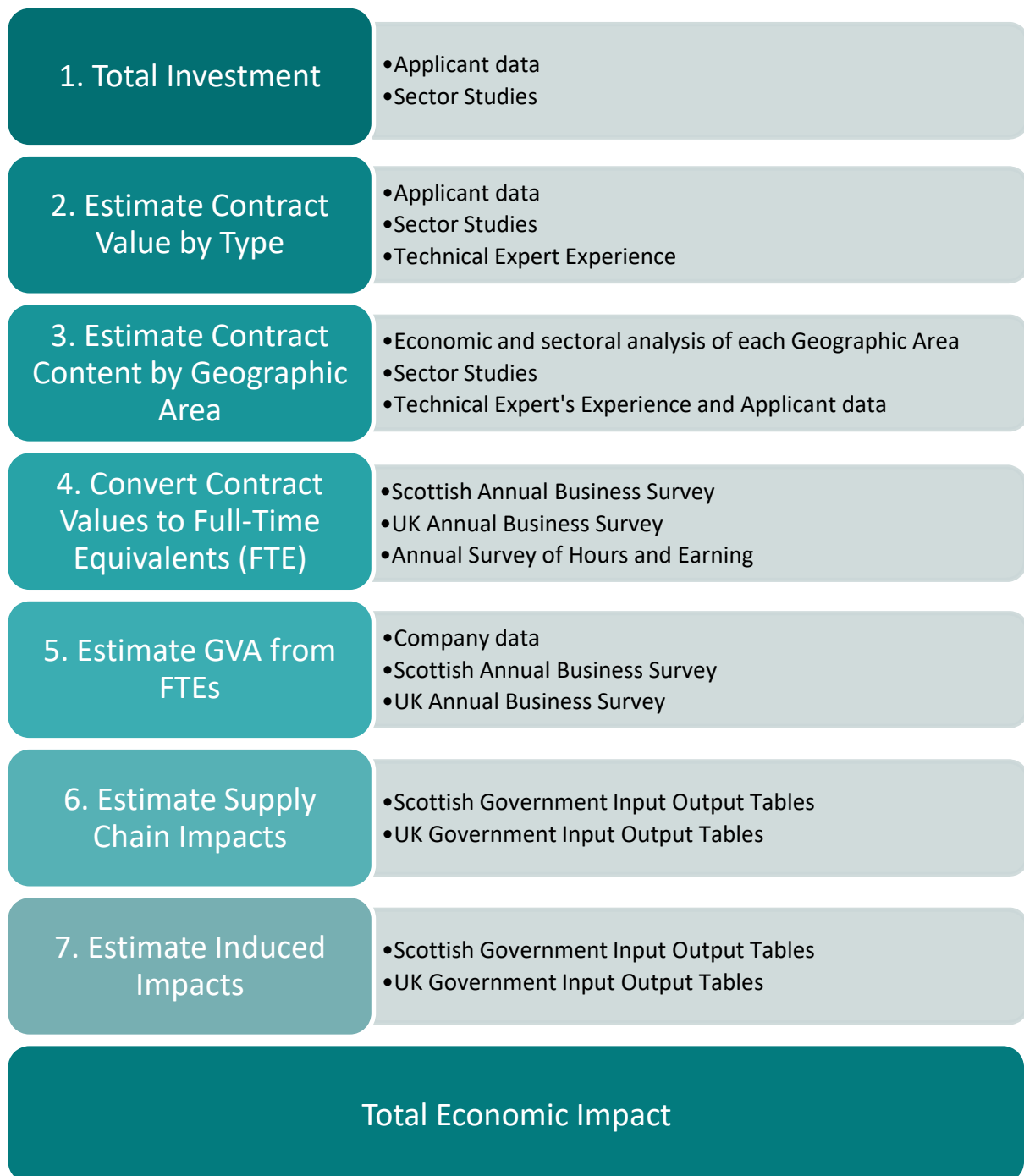
17-142. The first step in assessing the economic impact was estimating the total expenditure, which was based on the Applicant's Supply Chain Development Statement (SCDS), and other information provided by the Applicant.

17-143. Expenditure was broken down into detailed sub-categories, based on information from the Applicant, sector studies such as BVG Associates Guide to an Offshore Wind Farm, and the technical expert's modelling.

17-144. Using data from the SCDS and the technical expert's own experience of the sector, assumptions were then made about the share of spend associated with

each category of expenditure that could be secured in each socio-economic Study Area, which is also known as leakage.

- 17-145. Each contract was also assigned to one or more relevant sectors of the economy. To estimate the direct GVA and direct employment impact, data was used from the UK Annual Business Statistics, which collects data on turnover, employment and GVA by sector. On this basis, it was possible to estimate the expected FTE employment supported by a given level of turnover in a sector (e.g. expenditure divided by the turnover per employee ratio). Similarly, GVA was estimated by dividing turnover by the turnover/GVA ratio.
- 17-146. Indirect (supply chain) and induced (staff spending) impacts were then estimated by applying economic multipliers from the Scottish and UK Input Output Tables. This collects data on the linkages between different sectors of the economy which allows the wider effects in the economy to be captured, e.g. the impact of £1 million GVA in the construction sector may support impacts in the architecture and engineering sector. These figures are applied to the direct GVA and employment estimates.
- 17-147. Direct, indirect, and induced effects are then summed to estimate the total GVA, and employment impacts associated with the Proposed Offshore Development.
- 17-148. The economic impact methodology and further detail on key inputs are further discussed in **Appendix 17.1 (Economic Impact of Buchan Offshore Wind Farm)**.



**Figure 17-2 Economic Impact Methodology and Data Source.**

### 17.9.3.3 Information Requirement

17-149. The assessment requires knowledge of a series of parameters including:

- number of turbines and their capacity;
- foundations type (floating or fixed);
- costs by project element;

- estimates of content by Study Area; and
- timescales of activity.

## 17.10 MAXIMUM DESIGN SCENARIO

17-150. Details of the Proposed Offshore Development activities and key Proposed Offshore Development components are provided in **Volume 1, Chapter 4: Project Description**. As this assessment is using the Design Envelope approach, a maximum design scenario has been selected for each impact which would lead to the greatest impact for all receptors or receptor groups, when selected from a range of values. Effects of greater adverse significance are not predicted to arise should any other development scenario, based on details within **Volume 1, Chapter 4: Project Description**. (e.g., different infrastructure layout), to that assessed here, be taken forward in the final design scheme.

17-151. **Table 17-18** presents the maximum design scenario for each impact associated with impact assessment on socio-economics, tourism and recreation, along with justification.

**Table 17-18 Maximum Design Scenarios Considered for Impacts for Assessment of Likely Significant Effects on Socio-Economics, Tourism and Recreation**

Likely Significant Impact	Phase <sup>1</sup>			Maximum Design Scenario	Justification
	C	O	D		
Increase in employment and Gross Value Added	✓			<p>The employment and GVA impacts are based on the estimate Scottish and UK supply chain expenditure outlined in the SCDS Outlook (Buchan Offshore Wind Farm, 2023). The SCDS (embedded commitment) includes both a commitment scenario and an ambition scenario for supply chain expenditure in Scotland, and the rest of the UK (rUK). Under the commitment scenario, there is expected to be £911 million expenditure (incl. development; manufacturing &amp; fabrication and installation) in Scotland with a total of £1,484 million (incl. development; manufacturing &amp; fabrication and installation) in the UK.</p> <p>The commitment scenario has been the basis for the socio-economic assessment, since this represents lower Scottish and UK supply chain content than the ambition scenario, and therefore lower beneficial employment and GVA impacts. The impact on the area around the main construction port has been assessed based on the SCDS.</p>	The commitment scenario is expected to lead to smaller changes in employment and economic activity in each Study Area. As economic impacts are expected to be beneficial, the effect is less beneficial than under the ambition scenario.
Demographic changes	✓			<p>The increased employment and GVA at the construction port may lead to a temporary increase in the local population, as people move to the area for job opportunities.</p> <p>At this stage, the port has not been confirmed.</p> <p>The demographic assessment has been based on the estimated employment impacts under the SCDS commitment scenario. The parameters affecting SCDS estimates are set out above in the MDS for an increase in employment and GVA.</p> <p>Further, the MDS assumed limited local content associated with activity at port locations. This means that most activity will be performed by a transient workforce.</p> <p>Impacts are assessed for the list of potential port locations listed in <b>Table 17-3</b>.</p>	<p>Employment impacts arising from the commitment scenario have been used as the basis for the demographic impact assessment to maintain consistency with the economic impact assessment.</p> <p>The employment supported during the construction of the Proposed Offshore Development may attract permanent or transient workers to port locations.</p> <p>Given the lack of information on ports that will be used by the Proposed Offshore Development, the assessment considers activity in the context of what may occur for the entire list of potential port locations listed in <b>Table 17-3</b>.</p>
Changes to housing demand	✓			<p>The increased employment and GVA at the construction port may lead to a temporary increase in demand for housing, as people move to the area for job opportunities.</p> <p>At this stage, the port has not been confirmed.</p> <p>The change in housing demand assessment has been based on the estimated employment impacts under the SCDS commitment scenario. The parameters affecting SCDS estimates are set out above in the MDS for an increase in employment and GVA.</p> <p>Further, the MDS assumed limited local content associated with activity at port locations. This means that most activity will be performed by a transient workforce.</p>	<p>Employment impacts arising from the commitment scenario have been used as the basis for the changes to housing demand assessment to maintain consistency with the economic impact assessment.</p> <p>The employment supported during the construction of the Proposed Offshore Development may attract permanent or transient workers to port locations.</p> <p>Given the lack of information on ports that will be used by the Proposed Offshore Development, the assessment considers</p>

<sup>1</sup> C = Construction, O = Operation and Maintenance, D = Decommissioning

Likely Significant Impact	Phase <sup>1</sup>			Maximum Design Scenario	Justification
	C	O	D		
				Impacts are assessed for the list of potential port locations listed in <b>Table 17-3</b> .	activity in the context of what may occur for the entire list of potential port locations listed in <b>Table 17-3</b> .
Changes to other local public and private services	✓			<p>The increased employment and GVA at the construction port may lead to a temporary increase in demand for services, as people move to the area for job opportunities.</p> <p>At this stage, the port has not been confirmed.</p> <p>The change in demand for services assessment has been based on the estimated employment impacts under the SCDS commitment scenario. The parameters affecting SCDS estimates are set out above in the MDS for an increase in employment and GVA.</p> <p>Further, the MDS assumed limited local content associated with activity at port locations. This means that most activity will be performed by a transient workforce.</p> <p>Impacts are assessed for the list of potential port locations listed in <b>Table 17-3</b>.</p>	<p>Employment impacts arising from the commitment scenario have been used as the basis for the change in demand for services assessment to maintain consistency with the economic impact assessment.</p> <p>The employment supported during the construction of the Proposed Offshore Development may attract permanent or transient workers to port locations.</p> <p>Given the lack of information on ports that will be used by the Proposed Offshore Development, the assessment considers activity in the context of what may occur for the entire list of potential port locations listed in <b>Table 17-3</b>.</p>
Socio-cultural impacts	✓			<p>The increased employment and GVA at the construction port may lead to socio-cultural changes, as people move to the area for job opportunities.</p> <p>At this stage, the construction port has not been confirmed.</p> <p>The socio-cultural impact assessment has been based on the estimated employment impacts under the SCDS commitment scenario. The parameters affecting SCDS estimates are set out above in the MDS for an increase in employment and GVA.</p> <p>Further, the MDS assumed limited local content associated with activity at port locations. This means that most activity will be performed by a transient workforce.</p> <p>Impacts are assessed for the list of potential port locations listed in <b>Table 17-3</b>.</p>	<p>Employment impacts arising from the commitment scenario have been used as the basis for the socio-cultural impact assessment to maintain consistency with the economic impact assessment.</p> <p>The employment supported during the construction of the Proposed Offshore Development may attract permanent or transient workers to port locations.</p> <p>Given the lack of information on ports that will be used by the Proposed Offshore Development, the assessment considers activity in the context of what may occur for the entire list of potential port locations listed in <b>Table 17-3</b>.</p>
Changes to commercial fisheries	✓			The assessment of socio-economics, tourism and recreation effects arising from any changes to commercial fisheries has been based on the findings of the assessment in <b>Volume 2, Chapter 11: Commercial Fisheries</b> .	Likely significant effects identified for commercial fishery receptors could lead to changes in socio-economics, tourism and recreation
Changes to shipping and marine recreation	✓			The assessment of socio-economics, tourism and recreation effects arising from any changes to shipping and marine navigation has been based on the findings of assessment in <b>Volume 2, Chapter 13: Shipping and Navigation</b> .	Likely significant effects identified for shipping and marine navigation receptors could lead to changes in socio-economics, tourism and recreation
Increase in employment and Gross Value Added		✓		The commitment scenario outlined in the SCDS includes £545 million in spending in Scotland and a total of £823 million in the UK. This has been the basis for the Socio-Economic Assessment, since this represents lower Scottish and UK supply chain content than the ambition scenario, and therefore lower beneficial employment and GVA	The commitment scenario is expected to lead to smaller changes in employment and economic activity in each Study Area. As economic impacts are expected to be beneficial, the effect is less beneficial than under the ambition scenario.



Likely Significant Impact	Phase <sup>1</sup>			Maximum Design Scenario	Justification
	C	O	D		
				<p>impacts. The impact on the area around the main O&amp;M port has been assessed based on the SCDS.</p> <p>In addition to generating economic activity, the Proposed Offshore Development will contribute to the UK's energy sector, providing a stable source of renewable electricity.</p>	
Demographic changes		✓		<p>The increased employment and GVA at the operation and maintenance port may lead to an increase in the local population, as people move to the area for job opportunities.</p> <p>At this stage, the port has not been confirmed.</p> <p>The demographic assessment has been based on the estimated employment impacts under the SCDS commitment scenario. The parameters affecting SCDS estimates are set out above in the MDS for an increase in employment and GVA.</p> <p>Further, the MDS assumed limited local content associated with activity at port locations. This means that most activity will be performed by a transient workforce.</p> <p>Impacts are assessed for the list of potential port locations listed in <b>Table 17-3</b>.</p>	<p>Employment impacts arising from the commitment scenario have been used as the basis for the demographic impact assessment to maintain consistency with the economic impact assessment.</p> <p>The employment supported during the construction of the Proposed Offshore Development may attract permanent or transient workers to port locations.</p> <p>Given the lack of information on ports that will be used by the Proposed Offshore Development, the assessment considers activity in the context of what may occur for the entire list of potential port locations listed in <b>Table 17-3</b>.</p>
Changes to housing demand		✓		<p>The increased employment and GVA at the operation and maintenance port may lead to an increase in demand for housing, as people move to the area for job opportunities.</p> <p>At this stage, the port has not been confirmed.</p> <p>The change in housing demand assessment has been based on the estimated employment impacts under the SCDS commitment scenario. The parameters affecting SCDS estimates are set out above in the MDS for an increase in employment and GVA.</p> <p>Further, the MDS assumed limited local content associated with activity at port locations. This means that most activity will be performed by a transient workforce.</p> <p>Impacts are assessed for the list of potential port locations listed in <b>Table 17-3</b>.</p>	<p>Employment impacts arising from the commitment scenario have been used as the basis for the changes to housing demand assessment to maintain consistency with the economic impact assessment.</p> <p>The employment supported during the construction of the Proposed Offshore Development may attract permanent or transient workers to port locations.</p> <p>Given the lack of information on ports that will be used by the Proposed Offshore Development, the assessment considers activity in the context of what may occur for the entire list of potential port locations listed in <b>Table 17-3</b>.</p>
Changes to other local public and private services		✓		<p>The increased employment and GVA at the operation and maintenance port may lead to an increase in demand for services, as people move to the area for job opportunities.</p> <p>At this stage, the port has not been confirmed.</p> <p>The change in demand for services assessment has been based on the estimated employment impacts under the SCDS commitment scenario. The parameters affecting SCDS estimates are set out above in the MDS for an increase in employment and GVA.</p> <p>Further, the MDS assumed limited local content associated with activity at port locations. This means that most activity will be performed by a transient workforce.</p>	<p>Employment impacts arising from the commitment scenario have been used as the basis for the change in demand for services assessment to maintain consistency with the economic impact assessment.</p> <p>The employment supported during the construction of the Proposed Offshore Development may attract permanent or transient workers to port locations.</p> <p>Given the lack of information on ports that will be used by the Proposed Offshore Development, the assessment considers</p>

Likely Significant Impact	Phase <sup>1</sup>			Maximum Design Scenario	Justification
	C	O	D		
				Impacts are assessed for the list of potential port locations listed in <b>Table 17-3</b> .	activity in the context of what may occur for the entire list of potential port locations listed in <b>Table 17-3</b> .
Socio-cultural impacts		✓		<p>The increased employment and GVA at the operation and maintenance port may lead to socio-cultural changes, as people move to the area for job opportunities.</p> <p>At this stage, the construction port has not been confirmed.</p> <p>The socio-cultural impact assessment has been based on the estimated employment impacts under the SCDS commitment scenario. The parameters affecting SCDS estimates are set out above in the MDS for an increase in employment and GVA.</p> <p>Further, the MDS assumed limited local content associated with activity at port locations. This means that most activity will be performed by a transient workforce.</p> <p>Impacts are assessed for the list of potential port locations listed in <b>Table 17-3</b>.</p>	<p>Employment impacts arising from the commitment scenario have been used as the basis for the socio-cultural impact assessment to maintain consistency with the economic impact assessment.</p> <p>The employment supported during the construction of the Proposed Offshore Development may attract permanent or transient workers to port locations.</p> <p>Given the lack of information on ports that will be used by the Proposed Offshore Development, the assessment considers activity in the context of what may occur for the entire list of potential port locations listed in <b>Table 17-3</b>.</p>
Changes to commercial fisheries		✓		The assessment of socio-economics, tourism and recreation effects arising from any changes to commercial fisheries has been based on the findings of the assessment in <b>Volume 2, Chapter 11: Commercial Fisheries</b> .	Likely significant effects identified for commercial fishery receptors could lead to changes in socio-economics, tourism and recreation
Changes to shipping and marine recreation		✓		The assessment of socio-economics, tourism and recreation effects arising from any changes to shipping and marine navigation has been based on the findings of assessment in <b>Volume 2, Chapter 13: Shipping and Navigation</b> .	Likely significant effects identified for shipping and marine navigation receptors could lead to changes in socio-economics, tourism and recreation
Increase in employment and Gross Value Added			✓	<p>The scale and duration of decommissioning activity is uncertain, and the exact approach is not yet confirmed, as best practice at the time is not currently known.</p> <p>As a result, the employment and GVA impacts generated in each Study Area are subject to uncertainty and may change in line with the structure of the economy, procurement practice and technology. Therefore, the total spend of £136 million (based on (BVG Associates, 2024) ) and the share of spending in Scotland and the UK (BVG Associates, 2021) has been estimated based on a conservative assumption of 30% Scottish and UK share. As a result, spending in Scotland and the UK is expected to £41 million.</p> <p>It is standard practice in economic assessment to discount future benefits so that they are given less weight than benefits that occur sooner. Using the typical discount rate of 3.5% per annum as recommended by HM Treasury (HM Treasury, 2022) a benefit occurring in 40 years' time will be valued at less than a quarter of a benefit of the same scale occurring now. Decommissioning phase employment and GVA impacts are therefore considered to be considerably less valued than the construction and O&amp;M employment and GVA impacts.</p>	The most conservative assumption of spending in Scotland and the UK has been assessed as this is likely to lead to the lowest beneficial economic impacts.

Likely Significant Impact	Phase <sup>1</sup>			Maximum Design Scenario	Justification
	C	O	D		
Demographic changes			✓	<p>The increased employment and GVA at the decommissioning port may lead to a temporary increase in the local population, as people move to the area for job opportunities.</p> <p>At this stage, the port has not been confirmed.</p> <p>The demographic assessment has been based on the estimated employment impacts under the SCDS commitment scenario. The parameters affecting SCDS estimates are set out above in the MDS for an increase in employment and GVA.</p> <p>Further, the MDS assumed limited local content associated with activity at port locations. This means that most activity will be performed by a transient workforce.</p> <p>Impacts are assessed for the list of potential port locations listed in <b>Table 17-3</b>.</p>	<p>Employment impacts arising from the commitment scenario have been used as the basis for the demographic impact assessment to maintain consistency with the economic impact assessment.</p> <p>The employment supported during the construction of the Proposed Offshore Development may attract permanent or transient workers to port locations.</p> <p>Given the lack of information on ports that will be used by the Proposed Offshore Development, the assessment considers activity in the context of what may occur for the entire list of potential port locations listed in <b>Table 17-3</b>.</p>
Changes to housing demand			✓	<p>The increased employment and GVA at the decommissioning port may lead to a temporary increase in demand for housing, as people move to the area for job opportunities.</p> <p>At this stage, the port has not been confirmed.</p> <p>The change in housing demand assessment has been based on the estimated employment impacts under the SCDS commitment scenario. The parameters affecting SCDS estimates are set out above in the MDS for an increase in employment and GVA.</p> <p>Further, the MDS assumed limited local content associated with activity at port locations. This means that most activity will be performed by a transient workforce.</p> <p>Impacts are assessed for the list of potential port locations listed in <b>Table 17-3</b>.</p>	<p>Employment impacts arising from the commitment scenario have been used as the basis for the changes to housing demand assessment to maintain consistency with the economic impact assessment.</p> <p>The employment supported during the construction of the Proposed Offshore Development may attract permanent or transient workers to port locations.</p> <p>Given the lack of information on ports that will be used by the Proposed Offshore Development, the assessment considers activity in the context of what may occur for the entire list of potential port locations listed in <b>Table 17-3</b>.</p>
Changes to other local public and private services			✓	<p>The increased employment and GVA at the decommissioning port may lead to a temporary increase in demand for services, as people move to the area for job opportunities.</p> <p>At this stage, the port has not been confirmed.</p> <p>The change in demand for services assessment has been based on the estimated employment impacts under the SCDS commitment scenario. The parameters affecting SCDS estimates are set out above in the MDS for an increase in employment and GVA.</p> <p>Further, the MDS assumed limited local content associated with activity at port locations. This means that most activity will be performed by a transient workforce.</p> <p>Impacts are assessed for the list of potential port locations listed in <b>Table 17-3</b>.</p>	<p>Employment impacts arising from the commitment scenario have been used as the basis for the change in demand for services assessment to maintain consistency with the economic impact assessment.</p> <p>The employment supported during the construction of the Proposed Offshore Development may attract permanent or transient workers to port locations.</p> <p>Given the lack of information on ports that will be used by the Proposed Offshore Development, the assessment considers activity in the context of what may occur for the entire list of potential port locations listed in <b>Table 17-3</b>.</p>

Likely Significant Impact	Phase <sup>1</sup>			Maximum Design Scenario	Justification
	C	O	D		
Socio-cultural impacts			✓	<p>The increased employment and GVA at the decommissioning port may lead to socio-cultural changes, as people move to the area for job opportunities.</p> <p>At this stage, the construction port has not been confirmed.</p> <p>The socio-cultural impact assessment has been based on the estimated employment impacts under the SCDS commitment scenario. The parameters affecting SCDS estimates are set out above in the MDS for an increase in employment and GVA.</p> <p>Further, the MDS assumed limited local content associated with activity at port locations. This means that most activity will be performed by a transient workforce.</p> <p>Impacts are assessed for the list of potential port locations listed in <b>Table 17-3</b>.</p>	<p>Employment impacts arising from the commitment scenario have been used as the basis for the socio-cultural impact assessment to maintain consistency with the economic impact assessment.</p> <p>The employment supported during the construction of the Proposed Offshore Development may attract permanent or transient workers to port locations.</p> <p>Given the lack of information on ports that will be used by the Proposed Offshore Development, the assessment considers activity in the context of what may occur for the entire list of potential port locations listed in <b>Table 17-3</b>.</p>
Changes to commercial fisheries			✓	<p>The assessment of socio-economics, tourism and recreation effects arising from any changes to commercial fisheries has been based on the findings of the assessment in <b>Volume 2, Chapter 11: Commercial Fisheries</b>.</p>	<p>Likely significant effects identified for commercial fishery receptors could lead to changes in socio-economics, tourism and recreation</p>
Changes to shipping and marine recreation			✓	<p>The assessment of socio-economics, tourism and recreation effects arising from any changes to shipping and marine navigation has been based on the findings of assessment in <b>Volume 2, Chapter 13: Shipping and Navigation</b>.</p>	<p>Likely significant effects identified for shipping and marine navigation receptors could lead to changes in socio-economics, tourism and recreation</p>

## **17.11 EMBEDDED MITIGATION AS PART OF THE PROPOSED OFFSHORE DEVELOPMENT**

17-152. As part of the project design process, several designed-in (embedded) mitigation measures have been proposed to reduce the potential for impacts on environmental receptors. As there is a commitment to implementing these measures, they are considered inherently part of the design of the Proposed Offshore Development and have therefore been considered in the assessment (i.e., the determination of magnitude and therefore significance assumes implementation of these measures). These measures are considered standard industry practice for this type of development and are presented in **Volume 3, Appendix 1.1 Commitments, Mitigation and Monitoring Register**. The embedded commitments relevant to socio-economics, tourism and recreation are presented in **Table 17-19**.

**Table 17-19 Embedded Mitigation Measures of Relevance to Socio-Economics, Tourism and Recreation**

Reference	Embedded Mitigation Measure	Justification
EM48	Produce and implement a Supply Chain Development Statement (SCDS).	The SCDS sets out the Applicant's commitments to expenditure in the Scottish and UK economies.
EM8	Requirement for a Decommissioning Plan (DP) to be developed.	The DP will reduce disruption and impacts on tourism and recreation receptors.
EM15	Development of and adherence to a Vessel Management Plan (VMP), or equivalent.	The VMP will reduce potential economic impacts on other users of the sea.
EM25	Development of and adherence to a Fisheries Mitigation, Monitoring and Communication Plan (pFMMCP). The pFMMCP will set out the means of ongoing fisheries liaison through construction and O&M phases of the Proposed Offshore Development and detail any mitigation measures to be put in place to limit effects on commercial fisheries activity. This will include the following project policies: Fisheries Liaison Policy and Engagement Schedule, Conflict Avoidance Policy, Incident Response Policy.	The FMMCP will set out measures that will reduce likely significant effects on fisheries.
EM24	Adherence to good practice guidance with regards to fisheries liaison and procedures in the event of interactions between the Proposed Offshore Development and fishing activities (e.g., FLOWW, 2014; 2015).	This will reduce likely significant effects on fisheries.
EM23	Appointment of a Company Fisheries Liaison Officer (CFLO) who will support ongoing liaison and clear communication between the Applicant and the commercial fisheries sector.	This will reduce likely significant effects on fisheries.
EM27	Liaison with Fisheries Industry Representatives (FIRs), as appropriate.	This will reduce likely significant effects on fisheries.
EM17	Development of and adherence to a Navigational Safety Plan (NSP). The NSP will describe measures put in place by the Applicant related to	The NSP will reduce likely significant effects on other users of the sea.

Reference	Embedded Mitigation Measure	Justification
	navigational safety, including information on Safety Zones, charting, construction buoyage, temporary lighting and marking, and means of notification of Proposed Offshore Development activity to other sea users (e.g., via Notice to Mariners).	

## 17.12 ASSESSMENT OF LIKELY SIGNIFICANT EFFECTS

17-153. The potential impacts arising from the construction, operation and maintenance, and decommissioning phases of the Proposed Offshore Development are listed in **Table 17-18**, along with the maximum design scenario against which each impact has been assessed. An assessment of the likely significance of the effects of the Proposed Offshore Development on the socio-economics, tourism, and recreation receptors caused by each identified impact is given below.

### 17.12.1 Construction Phase

#### 17.12.1.1 Impact 1 Increase in Employment and Gross Value Added

17-154. The economic impact during the construction phase is generated by the increased spend in the economy required to develop and build the Proposed Offshore Development. This generates increased GVA and employment.

#### **Magnitude of Impact (Scotland and the UK)**

17-155. The first step in estimating the economic impact associated with the Proposed Offshore Development was identifying the total level of expenditure associated with the Project, and then identifying the elements associated with the Proposed Offshore Development.

17-156. As part of the ScotWind leasing process, the Applicant provided estimates in its SCDS of the minimum share of spending that they expect to take place in Scotland and the rest of the UK (rUK) (the Commitment scenario), which is shown in **Table 17-20**. It should be noted that spending in Scotland is not included within rUK but will be included within the UK as a whole and is included in subsequent tables.

17-157. The spending was further broken into categories and sub-categories, based on the technical expert's previous work with the Applicant (**Section 17.9.3**). The share of spend secured in each Study Area was assumed based on information provided by the Applicant and the technical expert's analysis of the SCDS. Additional information and further analysis on the expenditure data presented in the SCDS is provided in **Appendix 17.1 (Economic Impact of Buchan Offshore Wind Farm)**. More information on the methodology is also provided in **Section 17.9.3**.



**Table 17-20 Supply Chain Development Statement – Construction (Commitment) (£m) (Buchan Offshore Wind Farm, 2023)**

Parameters	Scotland	UK
Development	£70 m	£87 m
Manufacturing and Fabrication	£765 m	£1,152 m
Installation	£76 m	£245 m
<b>Total Construction</b>	<b>£911 m</b>	<b>£1,484 m</b>

17-158. To estimate the economic impact associated with expenditure in each category and sub-category, each associated contract was assigned to one or more sectors of the economy. Data on turnover, employment and GVA was then used to assess turnover/GVA and turnover per employee ratios (ONS, 2023b). This was then applied to the expenditure to estimate the direct economic impacts in Scotland and the UK.

17-159. The direct economic impact of the Proposed Offshore Development was estimated at £305 million GVA and 5,270 years of employment in Scotland, and £532 million GVA and 8,290 years of employment in the UK (as shown in **Table 17-21**).

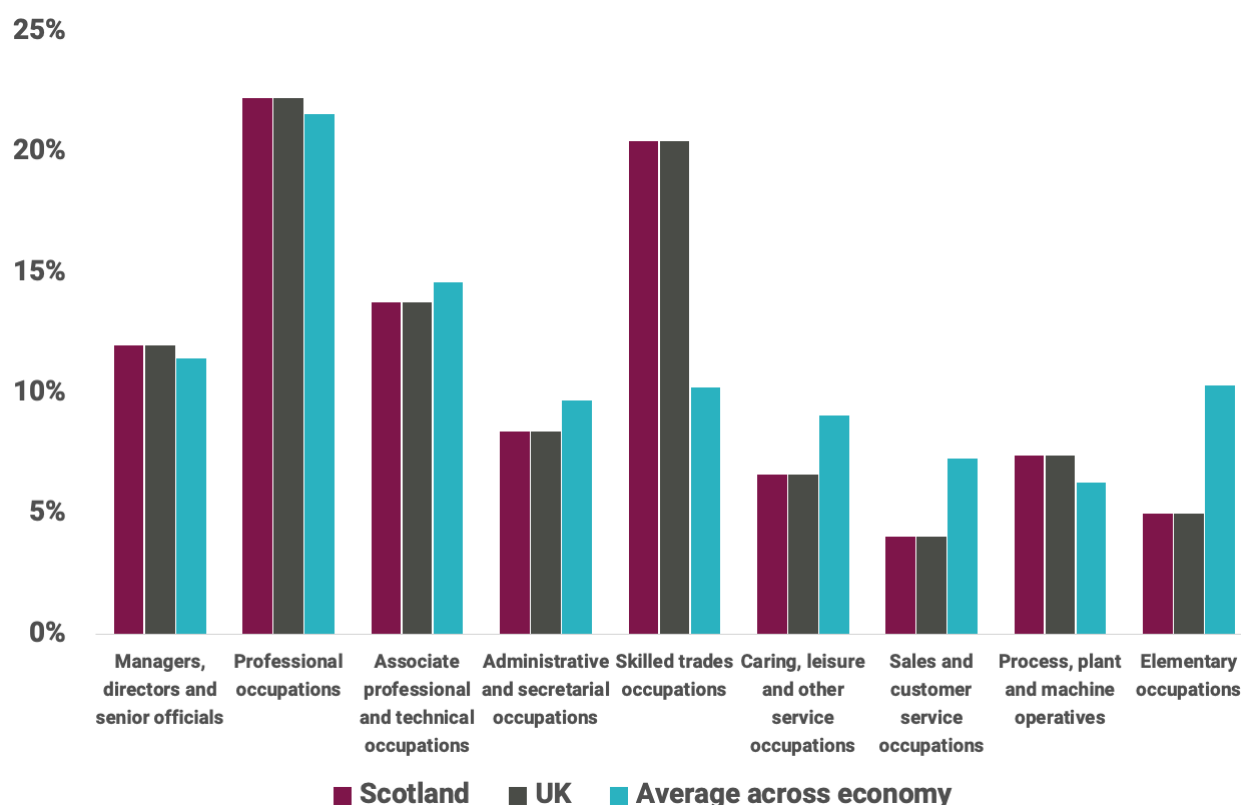
**Table 17-21 Offshore Construction Direct Impact, Scotland and the UK**

Parameters	Scotland		UK	
	GVA	Years of Employment	GVA	Years of Employment
Development	£27 m	450	£34 m	560
Manufacturing and Fabrication	£247 m	4,270	£390 m	6,560
Installation	£31 m	550	£108 m	1,170
<b>Total Construction</b>	<b>£305 m</b>	<b>5,270</b>	<b>£532 m</b>	<b>8,290</b>

17-160. As can be seen in **Figure 17-3**, compared to the economy as a whole, a higher proportion of jobs directly supported by the Proposed Offshore Development are expected to be in skilled trades and process, plant and machine operatives (mainly associated with manufacturing and construction related employment). Similarly, the share of professional occupations is higher in Scotland (where most of the development activity will take place). In contrast, a lower share of employment will be in caring, leisure and other occupations (based on indirect spending), in sales and customer service occupations and in elementary occupations.

17-161. Professional occupations as defined by the ONS within the Standard Occupational Classification (SOC), encompass roles requiring a high degree of

specialised knowledge and expertise. These positions typically demand substantial theoretical understanding, often obtained through higher education or equivalent professional qualifications. Individuals in these occupations engage in complex problem-solving and decision-making within fields such as science, engineering, healthcare, and law. Elementary occupations involve performing routine and straightforward tasks that generally require minimal formal education or prior experience. These roles often involve repetitive physical labour or basic service duties.



**Figure 17-3 Breakdown of Direct Employment by Occupation**

17-162. In addition to the direct economic impact associated with the expenditure, 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, 2023g) (Scottish Government, 2022b) that capture linkages between sectors of the economy.

17-163. Applying these multipliers and summing the direct, indirect and induced impacts, it was estimated that the total economic impact of the Proposed Offshore Development would be £603 million GVA and 9,860 years of employment in Scotland (peaking at 2,910 jobs) and £1,624 million GVA and 24,710 years of employment in the UK (peaking at 7,230 jobs), as shown in **Table 17-22** and **Table 17-23**.

**Table 17-22 Offshore Construction GVA (£m), Scotland and the UK**

Parameters	Scotland	UK
Direct GVA	£305 m	£532 m
Indirect GVA	£190 m	£642 m
<b>Total GVA</b>	<b>£495 m</b>	<b>£1,173 m</b>
Induced GVA	£108 m	£451 m
<b>Total GVA (with induced)</b>	<b>£603 m</b>	<b>£1,624 m</b>

**Table 17-23 Offshore Construction Employment (Years of Employment), Scotland and the UK**

Parameters	Scotland	UK
Direct Years of Employment	5,270	8,290
Indirect Years of Employment	3,140	9,730
<b>Total Years of Employment</b>	<b>8,410</b>	<b>18,020</b>
<b>Peak Employment</b>	<b>2,910</b>	<b>7,230</b>
Induced Years of Employment	1,450	6,690
<b>Total Years of Employment (with induced)</b>	<b>9,860</b>	<b>24,710</b>

17-164. The magnitude of the economic impact during the development and construction phase is measured against the size of the construction sector. This is because it is a construction project, and this is a key sector of both the Scottish and UK economies.

17-165. Peak employment supported in Scotland is equal to 2,910 jobs which is equivalent to 2.14% (2,910 as a proportion of 136,000) of employment in the construction sector. Therefore, the magnitude has been assessed as High.

17-166. Peak employment supported in the UK is equal to 7,230 jobs, which is equivalent to 0.45% (7,230 as a proportion of 1,613,000) of employment in the construction sector. Therefore, the magnitude has been assessed as Low.

### **Sensitivity of Receptor (Scotland and the UK)**

17-167. 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).

17-168. Given the size and diversity of the Scottish economy, which employs 2.7 million people, it has been assessed as Low sensitivity.

17-169. Similarly, the UK economy, which employs 33.1 million people, has been assessed as Negligible sensitivity.

### **Significance of Effect (Scotland and the UK)**

17-170. The magnitude of the impact on the Scottish economy is deemed to be High and the sensitivity of the receptor is Low. The effect will therefore be of Moderate significance (beneficial), which is significant in EIA terms.

17-171. The magnitude of the impact on the UK economy is deemed to be Low and the sensitivity of the receptor is Negligible. The effect will therefore be of Negligible significance (beneficial), which is Not Significant in EIA terms (**Table 17-24**).

**Table 17-24 Significance of Construction Economic Impact, Scotland and the UK**

Location	Magnitude	Sensitivity	Significance
Scotland	High	Low	Moderate
UK	Low	Negligible	Negligible

### **Secondary Mitigation and Residual Effect (Scotland and the UK)**

17-172. No additional socio-economic mitigation is considered necessary because the significant effect identified at the Scotland level is beneficial in nature – relating to increased employment and economic activity – and not an adverse impact requiring mitigation. At the UK level, no additional socio-economics mitigation is considered necessary because the likely effect in the absence of further mitigation (beyond the commitments outlined in **Section 17.11**) is Not Significant in EIA terms.

### **Magnitude of Impact (Construction Port)**

17-173. Some of the economic impacts associated with the construction of the Proposed Offshore Development are likely to be localised to the main construction port.

17-174. The construction port to be used for the Proposed Offshore Development is not yet confirmed and therefore while the potential impact has been quantified, without a Study Area the magnitude of impact has been assessed for the list of potential port locations (**Table 17-3**) (e.g. the proportion of construction employment supported). The construction of the floating foundations and substructures, and turbine installation will be at the primary construction port as part of the commitment outlined in the SCDS.

17-175. Based on the technical expert's experience and the SCDS, it was estimated that the construction port could secure contracts worth £700 million. The largest contracts are expected to relate to the floating foundations (£690 million). Applying economic ratios for the appropriate sector, as was done for the total construction impacts, it was therefore estimated that this could directly support 4,752 years of employment across the construction phase, with a peak employment of 1,550 jobs (see **Table 17-25**).

**Table 17-25 Proposed Offshore Development Construction Port Economic Impact**

	<b>Total Investment</b>	<b>Port Spend</b>	<b>Years of Employment</b>	<b>Peak Employment (jobs)</b>
Turbine Installation	£101 m	£10 m	85	28
Foundations (Floating)	£925 m	£690 m	4,668	1,523
<b>Total</b>	<b>£1,025 m</b>	<b>£700 m</b>	<b>4,752</b>	<b>1,550</b>

17-176. Considering that the construction port with the largest Study Area has construction employment of 6,000 (Aberdeen) and the smallest has employment of 180 people (Buckie), peak employment of 1,550 would represent between 25.83% and 861.11% of employment. On this basis, the magnitude of the economic impact for construction ports has been assessed as High for all of the port locations (**Table 17-3**).

17-177. The activity related to the construction of the floating foundations and substructures, and turbine installation at the primary construction port will be a key driver of the economy within the local area. This will be true for any of the potential port locations used in Scotland.

17-178. There is the potential for the magnitude of the port-side activities to be even greater during the construction period, depending on the port chosen and the level of supply chain development and clustering around this port. For example, there is the potential for suppliers to substructure manufacturing facilities to co-locate to the same area. This could include concrete batching, production of other turbine components, or the manufacturing of cables.

### **Sensitivity of Receptor (Construction Port)**

17-179. 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).

17-180. The sensitivity of the port local Study Areas, which have workforce employment ranging from 3,320 to 159,900 people, has been assessed as Medium to High, depending on the port selected. Aberdeen has an economy which is particularly reliant on a small number of sectors, and the number of jobs in the economy has grown at a slower rate than the national economy. Therefore, the sensitivity of the Aberdeen economy has been assessed as Medium, while all the other port locations have been assessed as High.

### Significance of Effect (Construction Port)

17-181. The most adverse scenario for economic impact at the construction port (the lowest economic benefits) would be where the magnitude of the impact in the local Study Areas is deemed to be High and the sensitivity is Medium, giving an effect of Major beneficial significance, which is significant in EIA terms.

17-182. The most beneficial scenario for economic impact at the construction port (the highest economic benefits) would be where the magnitude of the impacts is considered to be High and the sensitivity of the local economy is deemed to be High, giving an effect of Major beneficial significance, which is significant in EIA terms.

**Table 17-26 Significance of Construction Economic Impact, Construction Port**

Location	Magnitude	Sensitivity	Significance
Least Sensitive	High	Medium	Major
Most Sensitive	High	High	Major

### Secondary Mitigation and Residual Effect (Construction Port)

17-183. No additional socio-economic mitigation is considered necessary because the significant effect identified is beneficial in nature – relating to increased employment and economic activity – and not an adverse impact requiring mitigation.

#### 17.12.1.2 Impact 2 Demographic Changes

17-184. Demographic changes are one of the primary pathways through which the Proposed Offshore Development could lead to social impacts.

17-185. It is not anticipated that this will lead to changes at the Scottish or UK level, so the assessment of demographic changes and subsequent social impacts (changes in housing demand, changes to other local public and private services and socio-cultural impacts) are focused on changes related to the impact on the construction port.

17-186. The magnitude of impacts on the social or community assets will be dependent on the scale of the demographic changes that occur in each of the Study Areas and how these affect demand for services, such as housing, education and health.

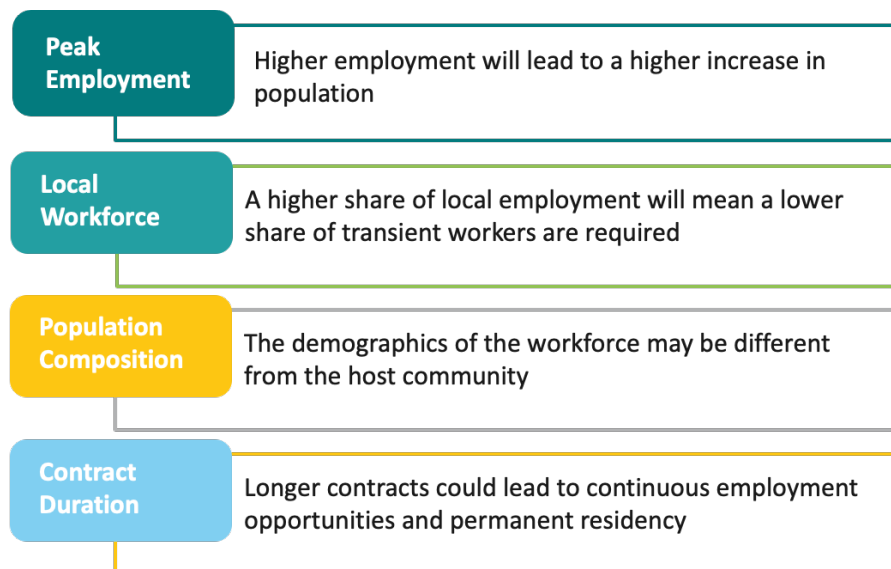
17-187. Population growth, including short-term workers, depends on the number of employees needed, and the length of contracts. It will also depend on the local economy's capacity to provide additional services, as more local workers with expertise will reduce reliance on transient workers and short-term changes in population. There are distinct differences between ports in urban and rural areas.

As a result, the impact on demographic structures will depend on the location of the construction port.

17-188. During the construction phase, a peak workforce of 1,550 people will be required to fulfil contracts at the construction port. 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 (Offshore Wind Industry Council, 2023). This may attract individuals and families, affecting the demographic composition near the construction port.

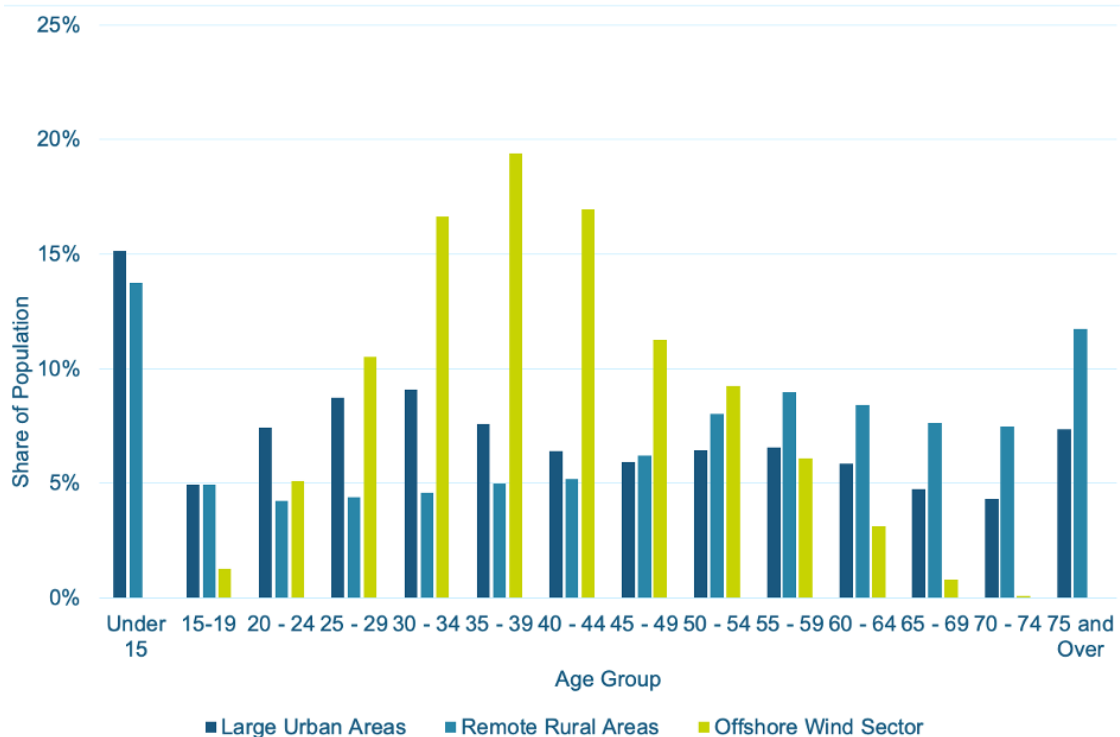
17-189. In Scotland's rural areas, it would be expected that the opportunity for high-level local jobs could encourage individuals that had left the area for economic opportunities elsewhere to return. This could increase the number of working-age residents in rural areas and benefit long-term demographics.

17-190. The factors that determine the demographic impact are outlined in **Figure 17-4**, based on analysis by the technical expert.



**Figure 17-4 Factors Affecting Magnitude of Change to Community Populations**

17-191. How this increase in population will be experienced will depend on the size and demographics of the population surrounding the construction port. The demographic distribution varies across Scotland including the urban and rural locations where potential key port locations are based. This is shown in **Figure 17-5**, 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 (National Records of Scotland, 2022)



Source: (Offshore Wind Industry Council, 2023) *Offshore Wind Skills Intelligence Report*, (National Records of Scotland, 2022) *Population Estimates by Urban Rural Classification 2011 (Data Zone Based)*

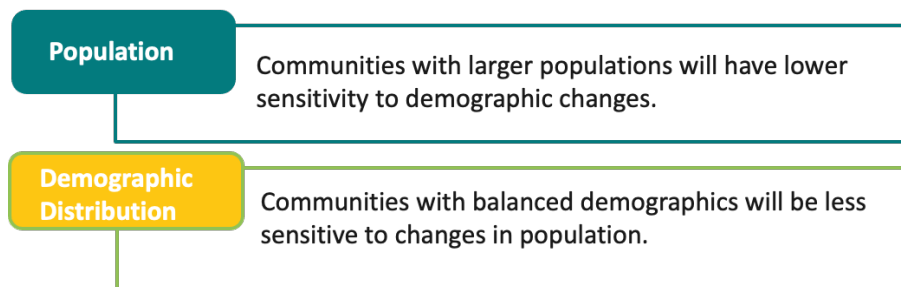
**Figure 17-5 Share of Population Estimates by Urban Rural Classification**

17-192. 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 an important demographic benefit from increasing the working age population in rural communities, including for short term opportunities such as the construction of the Proposed Offshore Development.

17-193. The sensitivity of the area around the construction port will depend on the size of the existing population and its demographics. A larger population (e.g. a port located close to a large population) as well as a population that has a larger share of people who are working age will be less sensitive to population change compared to a community with less balanced demographics (e.g. a high number of people aged over 65).

17-194. **Figure 17-6** provides details on the factors that influence how a community might respond to changes in demographics and other population impacts.

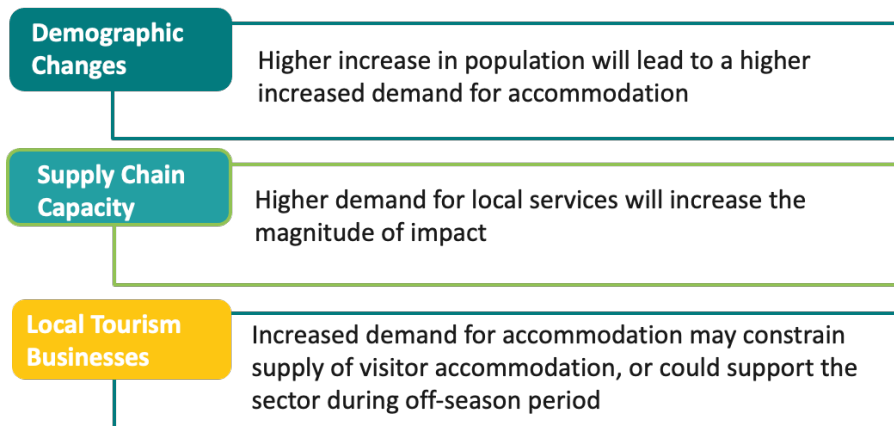




**Figure 17-6 Factors Affecting Sensitivity of Community Populations**

### **17.12.1.3 Impact 3 Changes to Housing Demand**

- 17-195. Housing demand and availability is a primary pathway through which the Proposed Offshore Development could lead to social impacts. This section of the assessment focuses on the construction port, 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.
- 17-196. The main driver of accommodation demand is expected to be the increased population needed to meet the requirements of the construction port. During the peak of construction, the Proposed Offshore Development is expected to require increased demand for short-term accommodation, such as hotels, bed and breakfasts, and caravan parks, within the vicinity of the selected port.
- 17-197. The heightened demand for temporary housing is expected to benefit local accommodation providers. Increased trade and occupancy rates can provide a vital lifeline for these businesses, helping them remain operational year-round and offering sustained employment opportunities in rural areas.
- 17-198. 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.
- 17-199. The factors that determine housing demand and availability impact are outlined in **Figure 17-7**.



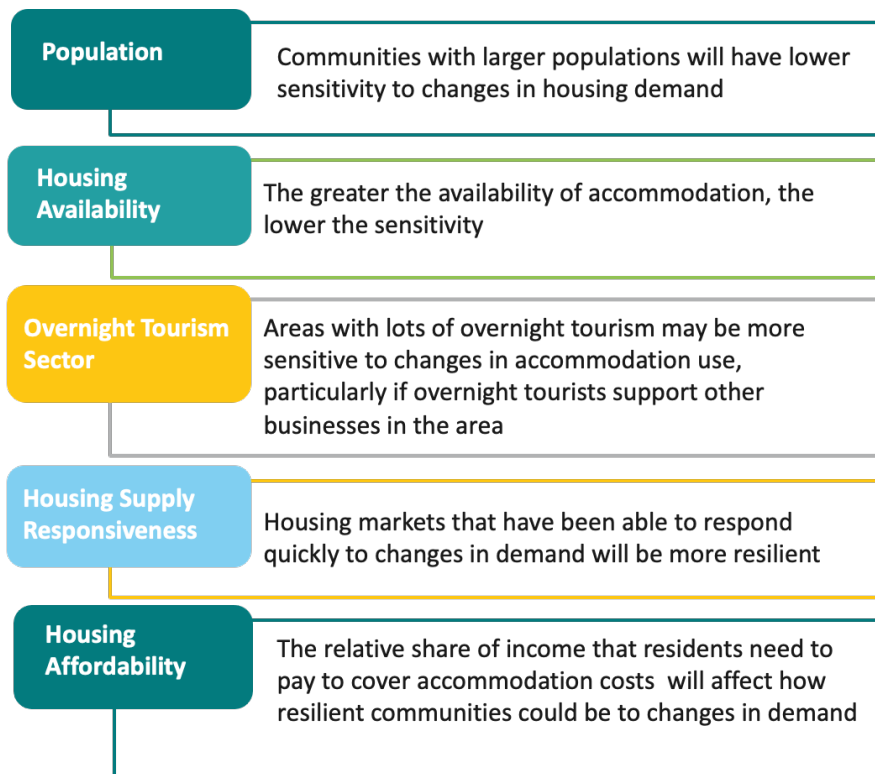
**Figure 17-7 Factors Affecting Magnitude of Change to Housing Demand and Availability**

17-200. The impact of housing on communities depends on how well the housing supply can adjust to changes in demand over short and long periods of time. The sensitivity of local areas to these impacts is influenced by factors such as the size of the nearby population, the availability of accommodation options like hotels and adaptable living spaces, the ability of the housing sector to meet increased demand and affordability of accommodation.

17-201. Research undertaken for the Scottish Government suggests that coastal communities face a number of housing constraints, particularly in terms of high-quality options (Scottish Government and Diffley Partnership, 2022).

17-202. The importance of overnight tourism, where visitors use temporary accommodation, also affects how vulnerable an area is to these changes.

17-203. **Figure 17-8** provides details on the factors that influence how a community might respond to changes in housing demand and availability impacts.



**Figure 17-8 Factors Affecting Sensitivity of Community Populations**

#### **17.12.1.4 Impact 4 Changes to Other Local Public and Private Services**

17-204. The Proposed Offshore Development has the potential to affect the labour market of the area around epicentres of impact, such as the main construction port, with wider effects on the local population, which may in turn affect other local services.

17-205. The anticipated population increase around the construction port is likely to increase demand for healthcare, educational, and private services. These include:

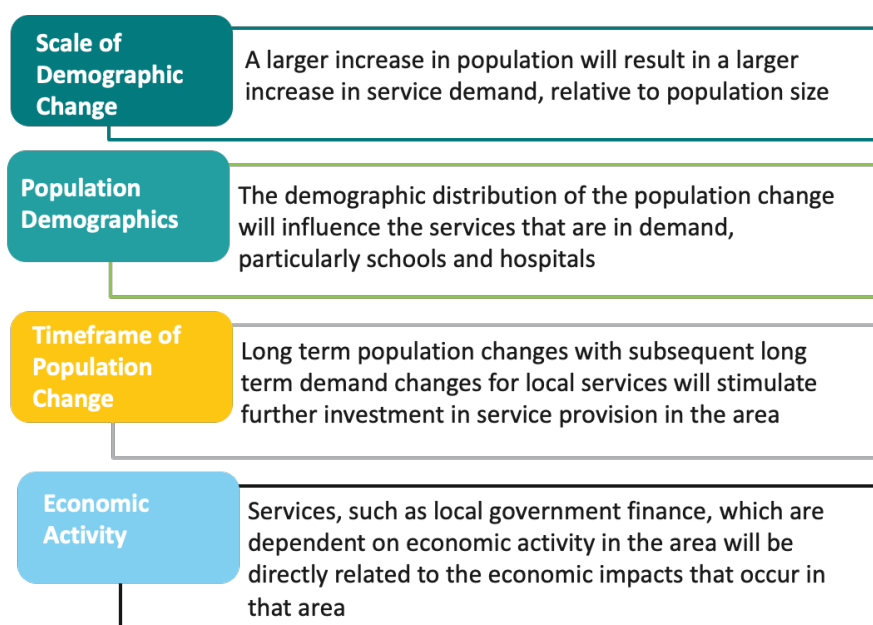
- educational services;
- healthcare services;
- social support;
- police and fire services;
- other local authority services; and
- recreation and transport.

17-206. The main influences on demand for healthcare services are expected to be a temporary population increase and the health of that population. Specifically, individuals involved in port activities are generally working-age

adults in good health, which means they are expected to be less likely to access public health services such as general practitioners, hospitals, and social care than the population as a whole (which is likely to include a higher share of older people who are more likely to need health services).

- 17-207. 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.
- 17-208. 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.
- 17-209. A larger population is likely to result in a rise in demand for personal services such as cafes, restaurants, and supermarkets. This is expected to boost the commercial vitality of towns and villages, leading to benefits for local businesses and the economy. It may also contribute to increased use of public transport and more traffic on local road networks.
- 17-210. The factors that determine the impact of demand for services are outlined in

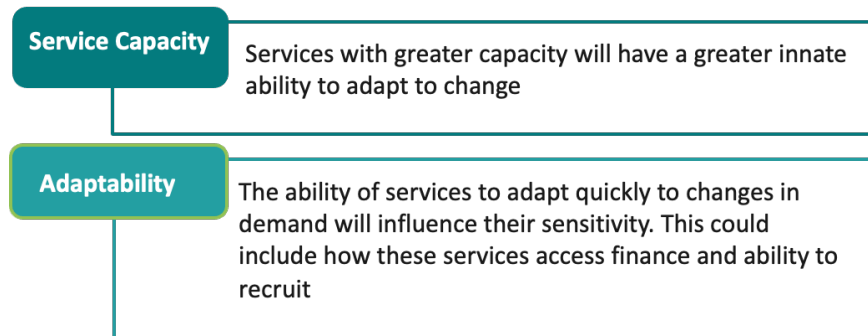
**Figure 17-9.**



**Figure 17-9 Factors Affecting Magnitude of Change to Local Services**

17-211. 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).

17-212. **Figure 17-10** provides details on the factors that influence the sensitivity of local services.



**Figure 17-10 Factors Affecting Sensitivity of Local Services**

#### **17.12.1.5 Impact 5 Socio-Cultural Impacts**

17-213. The increased population associated with activity around the construction port may affect how local communities perceive their area.

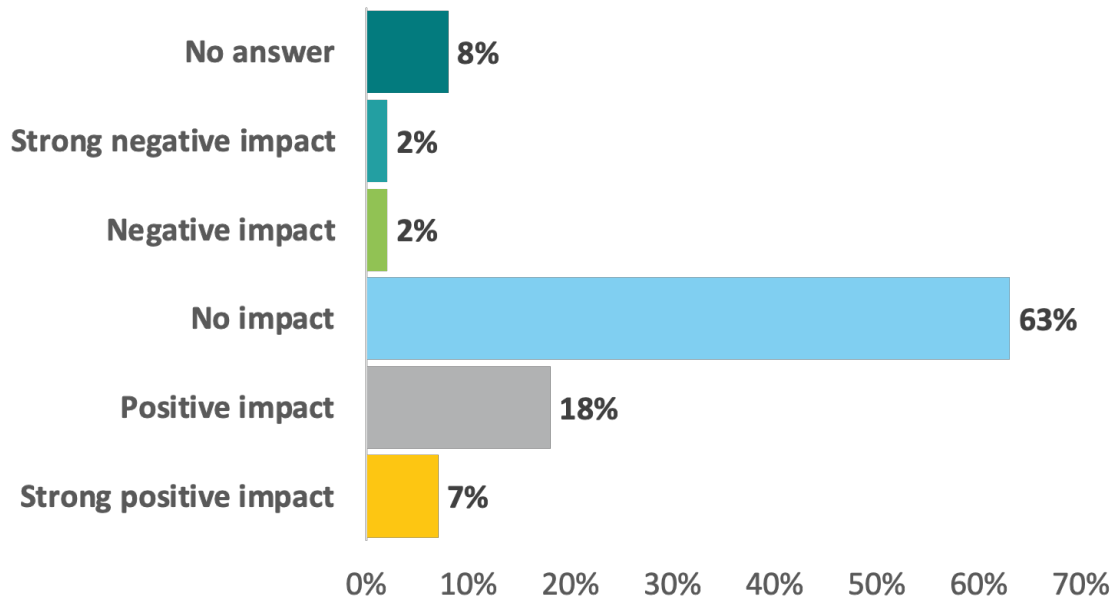
17-214. To understand the potential social and cultural impacts better, the Applicant is supporting the collaborative research project on social impacts that is being commissioned by Crown Estate Scotland and the Scottish Offshore Wind Energy Council. This research project will use primary social research methods to gain an understanding of the key social issues in locations that will experience significant effects from offshore wind developments, and identify how the sector can mitigate, enhance and monitor these impacts.

17-215. At the time of submission, there are no results from this study and therefore the social and cultural impact assessment has been undertaken using previous social research studies that have considered social impacts in communities that have previously experienced offshore wind farm development.

17-216. 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.

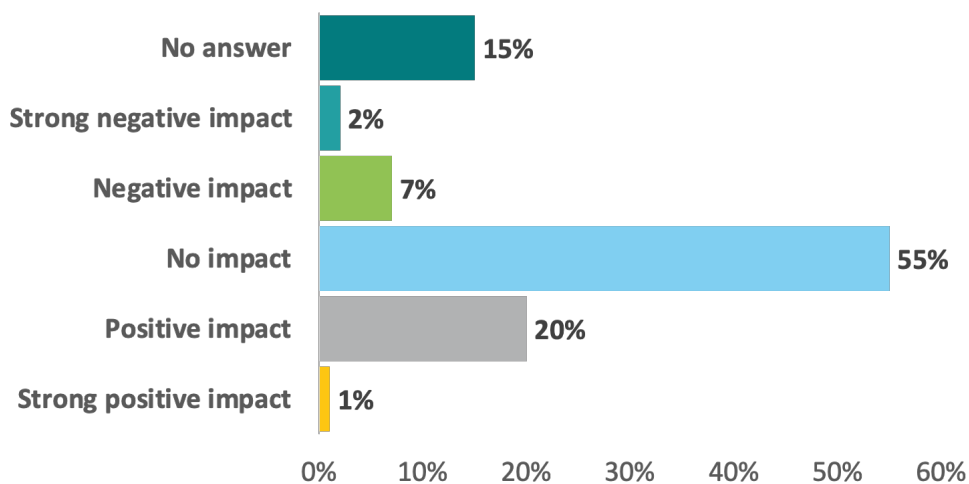
17-217. The Scottish Government commissioned a survey of people in areas where offshore wind had been developed (Scottish Government and Diffley Partnership, 2022) to better understand how local communities perceive the effect of

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 (**Figure 17-11**).



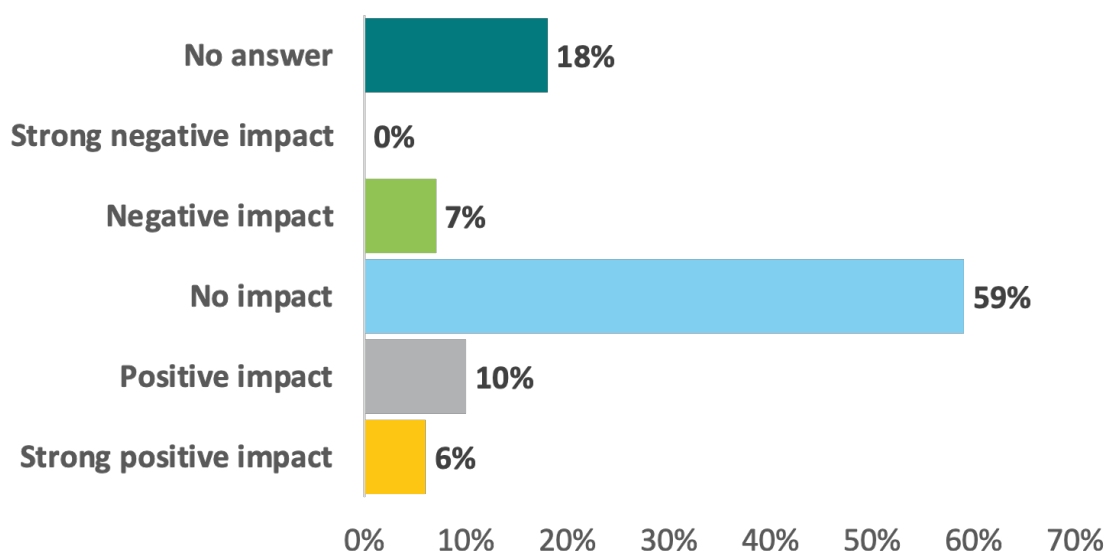
**Figure 17-11 Community Perceptions of Offshore Wind Impacts on Quality of Life (Scottish Government and Diffley Partnership, 2022)**

17-218. In terms of community relations, 55% reported no impact whereas 21% experienced positive impacts, compared to 9% who experienced negative impacts (**Figure 17-12**).



**Figure 17-12 Community Perceptions of Offshore Wind Impacts on Community Relations (Scottish Government and Diffley Partnership, 2022)**

17-219. As shown in **Figure 17-13**, 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 (Scottish Government and 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.



**Figure 17-13 Community Perceptions of Offshore Wind Impacts on Community Character (Scottish Government and Diffley Partnership, 2022)**

#### 17.12.1.6 Impact 6 Social Impacts at the Construction Port

17-220. Population change is considered the primary driver of social impacts (including demographics, housing demand and availability, local services, and socio-cultural factors). Therefore, the magnitude of these social impacts will be linked to the expected increase in population.

17-221. 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.

17-222. 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.

17-223. During the construction phase, a peak workforce of 1,550 people will be required to fulfil contracts at the construction port. Based on an assumption of a change in population of two for every job, to allow for some employees moving with family members, that would imply an increase in population of up to 3,100 during peak construction.

17-224. The method adopted for assessing the magnitude of social impacts is based on a comparison to national population growth projections. According to National Records of Scotland, the projected average annual population growth in Scotland between 2023 and 2043 is 0.26% (**Table 17-11**). 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 ( $0.13\% - 0.25\%$ );
- Low magnitude if the change is  $\geq 25\%$  but  $< 50\%$  of the projected growth ( $0.065\% - 0.12\%$ ); and
- Negligible if the change is  $< 25\%$  of the projected growth ( $< 0.065\%$ ).

17-225. Although the final construction port has not been confirmed, a long list of potential locations has been identified, with associated local Study Areas. Among these, Ardersier represents the smallest community (population: 10,567), while Aberdeen is the largest (population: 227,400). At Ardersier, the population increase of 3,100 would represent 29.34% of the current population; at Aberdeen, it would represent 1.36%. In both cases, this exceeds the 0.26% threshold for a High magnitude impact.

17-226. On that basis, the magnitude of change would be assessed as High, whichever construction port was selected.

17-227. Given the methodology for assessing significance, if the magnitude of change is assessed as High, and the sensitivity is assessed as Medium or High (**Section 17.12.1.1**), the social impacts at construction port would be assessed as Major significance, which is significant in EIA terms.

**Table 17-27 Significance of Social Impacts on Construction Ports**

Location	Magnitude	Sensitivity	Significance
Least Sensitive	High	Medium	Major
Most Sensitive	High	High	Major

17-228. While the scale of the population change during peak construction is assessed as having a Major significance effect, 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, it is more likely that the effect will be adverse in nature.



17-229. 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.

### **Secondary Mitigation and Residual Effect**

17-230. As the construction port is 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 during the pre-construction phase, the Applicant will engage with local communities and the local authority, port operator and other developers where a significant effect is anticipated (please refer to **Table 17-41**).

17-231. It is not reasonable to place sole responsibility for managing these changes on the Applicant. Instead, the Applicant's role is to manage the Project, ensure clear and early communication with local authorities and community stakeholders regarding the expected scale and timing of the change. 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.

#### **17.12.1.7 Impact 7 Changes to Commercial Fisheries**

17-232. The assessment in **Volume 2, Chapter 11: Commercial Fisheries** identified no likely significant effects on commercial fisheries during the construction phase. This conclusion applies to the following receptors:

- Pelagic Fishery (trawling and purse seining) – Mackerel Fishery;
- Demersal Trawling and Seining – *Nephrops* and Whitefish Fisheries;
- Pots and Traps – Crab and Lobster Fisheries; and
- Dredging – Scallop Fishery.

17-233. As no likely significant adverse effects were found during the construction phase, we conclude that there will be no likely significant adverse economic effect on the fisheries sector. Consequently, no economic impacts are required to be assessed for this sector during the construction phase.

#### **17.12.1.8 Impact 8 Changes to Shipping and Navigation**

17-234. The assessment in **Volume 2, Chapter 13: Shipping and Navigation** identified no likely significant effects on shipping and navigation during the construction phase. This conclusion applies to the following receptors:

- Commercial and Ferry Routes;
- Commercial Fishing Activity;
- Recreational Activity; and
- Access to Ports and Harbours.

17-235. As no likely significant adverse effects were found during the construction phase, we conclude that there will be no likely significant adverse effect on tourism and recreation, including tourism activity related to shipping and navigation. Consequently, no economic impacts are required to be assessed for the tourism economy during the construction phase.

### **17.12.2 Operation and Maintenance Phase**

17-236. This section examines the potential impacts occurring during the O&M phase.

#### **17.12.2.1 Impact 9 Increase in Employment and Gross Value Added**

17-237. The economic impact during the O&M phase is generated by the increased spend in the economy required to operate and maintain the Proposed Offshore Development. This generates increased GVA and employment.

#### **Magnitude of Impact (Scotland and the UK)**

17-238. Information from the SCDS and the technical expert's model of offshore wind farm 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 Proposed Offshore Development would be £107 million, of which £52 million could be spent in Scotland and £107 million could be spent in the UK, as shown in Table 17-28. More information on the SCDS expenditure data is provided in **Appendix 17.1 (Economic Impact of Buchan Offshore Wind Farm)**.

**Table 17-28 Scotland, UK and Total Annual Offshore Operations and Maintenance Spending by Category**

	Scotland	UK	Total
<b>Total O&amp;M</b>	<b>£52 m</b>	<b>£79 m</b>	<b>£107 m</b>

17-239. Applying turnover per employee and turnover/GVA ratios for the relevant sectors it was estimated that the direct annual economic impact could be £18 million GVA and 153 jobs in Scotland, and £20 million GVA and 180 jobs in the UK (**Table 17-29**).

**Table 17-29 Annual Offshore Operations and Maintenance Direct Impact, Scotland and the UK**

Parameters	Scotland		UK	
	GVA	Jobs	GVA	Jobs
<b>Total O&amp;M</b>	<b>£18 m</b>	<b>153</b>	<b>£20 m</b>	<b>180</b>

17-240. Applying GVA and employment multipliers it was therefore estimated that the Proposed Offshore Development's annual economic impact could be £31 million GVA and 297 jobs in Scotland, and £63 million GVA and 581 jobs in the UK (Table 17-30 and Table 17-31).

**Table 17-30 Annual Offshore Operations and Maintenance GVA, Scotland and the UK**

Parameters	Scotland	UK
Direct GVA	£18 m	£20 m
Indirect GVA	£9 m	£29 m
<b>Total GVA</b>	<b>£27 m</b>	<b>£49 m</b>
Induced GVA	£5 m	£15 m
<b>Total GVA (with induced)</b>	<b>£31 m</b>	<b>£63 m</b>

**Table 17-31 Annual Offshore Operations and Maintenance Employment Jobs, Scotland and the UK**

Parameters	Scotland	UK
Direct Employment	153	180
Indirect Employment	90	254
<b>Total Employment</b>	<b>243</b>	<b>434</b>
Induced Employment	54	147
<b>Total Employment (with induced)</b>	<b>297</b>	<b>581</b>

17-241. To maintain consistency with the sectoral baseline used in the magnitude assessment in the development and construction phase, the assessment of magnitude of economic impacts in the operations and maintenance phase is measured against the size of the construction sector.

17-242. The annual O&M impact in Scotland is expected to account for 0.18% (243 as a proportion of 136,000) of the construction sector's total employment and the magnitude has therefore been assessed as Negligible.

17-243. The annual O&M impact in the UK is expected to account for less than 0.03% (434 as a proportion of 1,613,000) of the construction sector's total employment and the magnitude has therefore been assessed as Negligible.

### **Sensitivity of Receptor (Scotland and the UK)**

17-244. As for the construction impact, the sensitivity of the Scottish economy, which employs 2.7 million people, has been assessed as Low and the sensitivity of the UK economy, which employs 33.1 million people, has been assessed as Negligible.

### **Significance of Effect (Scotland and the UK)**

17-245. The magnitude of the impact on the Scottish economy is deemed to be Low and the sensitivity of the receptor is Negligible. The effect will therefore be of Negligible significance (beneficial), which is Not Significant in EIA terms.

17-246. The magnitude of the impact on the UK economy is deemed to be Negligible and the sensitivity of the receptor is Negligible. The effect will therefore be of Negligible significance (beneficial), which is Not Significant in EIA terms (**Table 17-32**).

**Table 17-32 Significance of O&M Economic Impact, Scotland and the UK**

<b>Location</b>	<b>Magnitude</b>	<b>Sensitivity</b>	<b>Significance</b>
Scotland	Negligible	Low	Negligible
UK	Negligible	Negligible	Negligible

### **Secondary Mitigation and Residual Effect (Scotland and the UK)**

17-247. No additional socio-economics mitigation is considered necessary because the likely effect in the absence of further mitigation (beyond the commitments outlined in **Section 17.11**) is Not Significant in EIA terms.

### **Magnitude of Impact (O&M Port)**

17-248. Some of the economic impacts associated with the O&M of the Proposed Offshore Development are likely to be localised to the main O&M port.

17-249. The O&M port to be used for the Proposed Offshore Development is not yet confirmed and therefore while the potential impact has been quantified, without a Study Area the magnitude of impact has been assessed for the list of potential port locations (**Table 17-3**) (e.g. the proportion of construction employment supported).

17-250. Based on the technical expert's experience and the SCDS it was estimated that the O&M port could secure contracts worth £15.1 million.

17-251. It was therefore estimated that this could support 54 jobs each year during the O&M phase (**Table 17-33**).

**Table 17-33 Scotland, UK and Total Annual Offshore Operations and Maintenance Spending by Category**

	<b>Total Spend</b>	<b>Port Spend</b>	<b>Employment (jobs)</b>
Personnel	£4.6 m	£4.6 m	19
Maintenance	£44.8 m	£10.6 m	35
<b>Total</b>	<b>£49.4 m</b>	<b>£15.1 m</b>	<b>54</b>

17-252. The activity related to maintenance of the Proposed Offshore Development at primary O&M port will be one of the drivers of the economic activity within the local area. Considering that the O&M port with the largest Study Area has construction employment of 6,000 (Aberdeen) and the smallest has employment of 180 people (Buckie), an employment of 54 would represent between 0.90% and 30.00% of employment. On the basis of the methodology outlined in **Table 17-16**, the magnitude of the economic impact for O&M ports has been assessed from Medium to High for the range of potential port locations.

#### **Sensitivity of Receptor (O&M Port)**

17-253. 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).

17-254. The sensitivity of the port local Study Areas, which have workforce employment ranging from 3,620 to 159,900 people, has been assessed as Medium to High, depending on the port selected. Aberdeen has an economy which is particularly reliant on a small number of sectors, and the number of jobs in the economy has grown at a slower rate the national economy. Therefore, the sensitivity of the Aberdeen economy has been assessed as Medium, while all the other port locations have been assessed as High.

#### **Significance of Effect (O&M Port)**

17-255. The most adverse scenario for economic impact at the O&M port (the lowest economic benefits) would be where the magnitude of the impact in the local Study Areas is deemed to be Medium and the sensitivity is Medium, giving an effect of Moderate beneficial significance, which is significant in EIA terms.

17-256. The most beneficial scenario for economic impact at the O&M port (the highest economic benefits) would be where the magnitude of the impacts is considered to be High and the sensitivity of the local economy is deemed to be High, giving an effect of Major significance, which is significant in EIA terms.

**Table 17-34 Significance of Construction Economic Impact, O&M Port**

Location	Magnitude	Sensitivity	Significance
Least Sensitive	Medium	Medium	Moderate
Most Sensitive	High	High	Major

### **Secondary Mitigation and Residual Effect (O&M Port)**

17-257. No additional socio-economic mitigation is considered necessary because the significant effect identified at the O&M port is beneficial in nature – relating to increased employment and economic activity – and not an adverse impact requiring mitigation.

#### **17.12.2.2 Impact 10 Demographic Changes**

17-258. Population change is considered the primary driver of social impacts (including demographics, housing demand and availability, local services, and socio-cultural factors). Therefore, the magnitude of these social impacts will be linked to the expected increase in population.

17-259. It is not anticipated that this will lead to changes at the Scottish or UK level, so the assessment of demographic changes and subsequent social impacts (changes in housing demand, changes to other local public and private services and socio-cultural impacts) are focused on changes related to the impact on the O&M port.

17-260. During the O&M phase, a workforce of 54 people will be required to fulfil contracts at the O&M port. Based on an assumption of a change in population of two for every job, to allow for some employees moving with family members, that would imply an increase in population of up to 108 during operation and maintenance.

17-261. 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. This could increase the number of working-age residents in rural areas and benefit long-term demographics. The factors that determine the demographic impact are the same as outlined in **Section 17.12.1.2**.

#### **17.12.2.3 Impact 11 Changes to Housing Demand**

17-262. 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.

#### **17.12.2.4 Impact 12 Changes to Other Local Public and Private Services**

17-263. 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. It may also increase demand for health services, as well as local cafes, supermarkets and transport networks.

#### **17.12.2.5 Impact 13 Socio-Cultural Impacts**

17-264. The social and cultural impacts during the O&M phase will be similar to those outlined in the construction phase.

#### **17.12.2.6 Impact 14 Social Impacts at the O&M Port**

17-265. During the O&M phase, a workforce of 54 people will be required to fulfil contracts at the O&M port. Based on an assumption of a change in population of two for every job, to allow for some employees moving with family members, that would imply an increase in population of up to 108 during operation and maintenance. 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.

17-266. The method adopted for assessing the magnitude of social impacts is based on a comparison to national population growth projections. According to National Records of Scotland, the projected average annual population growth in Scotland between 2023 and 2043 is 0.26% (**Table 17-11**). 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 ( $0.13\% - 0.25\%$ );
- Low magnitude if the change is  $\geq 25\%$  but  $< 50\%$  of the projected growth ( $0.065\% - 0.12\%$ ); and
- Negligible if the change is  $< 25\%$  of the projected growth ( $< 0.065\%$ ). Negligible if the change is  $< 25\%$  of the projected growth ( $< 0.065\%$ ).

17-267. A long list of potential operation and maintenance ports have been identified and local Study Areas defined. Among these, Ardersier represents the smallest community (population: 10,567), while Aberdeen is the largest (population: 227,400). At Ardersier, a population increase of 108 would represent a 1.02% rise – greater than the 0.26% threshold used in this assessment for a High magnitude

impact. In contrast, the same increase in Aberdeen would equate to only 0.05%, which would be considered a Negligible magnitude.

- 17-268. Given the methodology for assessing significance, if the magnitude of change is assessed as High and the sensitivity of the local Study Area is Medium or High, the social impacts at the O&M port would be classified as having Major significance, which is considered significant in EIA terms. At the least sensitive potential port location – Aberdeen – where the magnitude has been assessed as Negligible and the sensitivity as Medium, the resulting social impact would be of Minor significance, and therefore Not Significant in EIA terms.

**Table 17-35 Significance of Social Impacts on O&M Ports**

Location	Magnitude	Sensitivity	Significance
Least Sensitive	Negligible	Medium	Minor
Most Sensitive	High	High	Major

- 17-269. While the scale of the population change during peak construction is assessed as having a Major significance effect, it 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, it is more likely that the effect will be adverse in nature.

- 17-270. 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.

### **Secondary Mitigation and Residual Effect**

- 17-271. As the O&M port is not yet known it is not possible for the Applicant to engage with all of the communities and local authorities who could potentially be affected at this time. However, it is anticipated that during the construction phase, the Applicant will engage with local communities and the local authority, port operator and other developers where a significant effect is anticipated.

- 17-272. It is not reasonable to place sole responsibility for managing these changes on the Applicant. Instead, the Applicant's role is to manage the Project, ensure clear and early communication with local authorities and community stakeholders regarding the expected scale and timing of the change. 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.

#### **17.12.2.7 Impact 15 Changes to Commercial Fisheries**

17-273. The assessment in **Volume 2, Chapter 11: Commercial Fisheries** identified no significant effects on commercial fisheries during the O&M phase. This conclusion applies to the following receptors:

- Pelagic Fishery (trawling and purse seining) – Mackerel Fishery;
- Demersal Trawling and Seining – *Nephrops* and Whitefish Fisheries;
- Pots and Traps – Crab and Lobster Fisheries; and
- Dredging – Scallop Fishery.

17-274. As no significant adverse effects were found during the O&M phase, we conclude that there will be no significant adverse effect on the fisheries sector. Consequently, no economic impacts have been assessed for this sector during the O&M phase.

#### **17.12.2.8 Impact 16 Changes to Shipping and Navigation**

17-275. The assessment in **Volume 2, Chapter 13: Shipping and Navigation** identified no significant effects on shipping and navigation during the O&M phase. This conclusion applies to the following receptors:

- Commercial and Ferry Routes;
- Commercial Fishing Activity;
- Recreational Activity; and
- Access to Ports and Harbours.

17-276. As no significant adverse effects were found during the O&M phase, we conclude that there will be no significant adverse effect on tourism and recreation, including tourism activity related to shipping and navigation. Consequently, no economic impacts have been assessed for the tourism economy during the O&M phase.

### **17.12.3 Decommissioning Phase**

#### **17.12.3.1 Impact 17 Increase in Employment and Gross Value Added**

17-277. The economic impact during the decommissioning phase is generated by the increased spend in the economy required to decommission the Proposed Offshore Development at the end of its operational life. This will generate increased GVA and employment.

## Magnitude of Impact

17-278. Decommissioning would be expected to take place after the operational lifespan of the Proposed Offshore Development, which means that there is a high degree of uncertainty about the level of expenditure associated with decommissioning, as well as the share that could be secured in Scotland and the UK.

17-279. BVG Associates has undertaken work to determine the potential spend (BVG Associates, 2024) and share of spend (BVG Associates, 2021), which has informed the assessment. On this basis, it was assumed that the spend associated with decommissioning the Proposed Offshore Development would be £136 million, of which 30% (£41 million) could be secured in both Scotland and the UK (**Table 17-36**), though this estimate is likely to be conservative.

**Table 17-36 Scotland, UK and Total Offshore Decommissioning Spending by Category**

Parameters	Scotland	UK	Total
Substructure and Turbine Decommissioning	£10 m	£10 m	£33 m
Mooring and Anchoring decommissioning	£12 m	£12 m	£38 m
Cable Decommissioning	£16 m	£16 m	£53 m
Substation Decommissioning	£4 m	£4 m	£12 m
<b>Total Impact</b>	<b>£41 m</b>	<b>£41 m</b>	<b>£136 m</b>

17-280. 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 (**Table 17-37**).

**Table 17-37 Offshore Decommissioning Direct Impact, Scotland and the UK**

Parameters	Scotland		UK	
	GVA	Years of Employment	GVA	Years of Employment
Substructure and Turbine Decommissioning	£3 m	30	£3 m	30
Mooring and Anchoring decommissioning	£4 m	40	£4 m	40
Cable Decommissioning	£5 m	60	£5 m	60
Substation Decommissioning	£1 m	10	£1 m	10
<b>Total Impact</b>	<b>£12 m</b>	<b>140</b>	<b>£12 m</b>	<b>140</b>

17-281. Applying GVA and employment multipliers it was therefore estimated that the Proposed Offshore Development's economic impact could be £18 million GVA (£4

million NPV) and 220 years of employment in Scotland, and £23 million GVA (£6 million NPV) and 290 years of employment in the UK (Table 17-38 and Table 17-39).

**Table 17-38 Offshore Decommissioning GVA (£m), Scotland and the UK**

Parameters	Scotland	UK
Direct GVA	£12 m	£12 m
Indirect GVA	£5 m	£11 m
<b>Total GVA</b>	<b>£18 m</b>	<b>£23 m</b>
Induced GVA	£4 m	£9 m
<b>Total GVA (with induced)</b>	<b>£22 m</b>	<b>£33 m</b>

**Table 17-39 Offshore Decommissioning Employment (Years of Employment), Scotland and the UK**

Parameters	Scotland	UK
Direct GVA	140	140
Indirect GVA	70	140
<b>Total GVA</b>	<b>220</b>	<b>290</b>
Induced GVA	40	110
<b>Total GVA (with induced)</b>	<b>260</b>	<b>400</b>

17-282. To maintain consistency with the sectoral baseline used in the magnitude assessment in the development and construction phase, the assessment of magnitude of economic impacts in the operations and maintenance phase is measured against the size of the construction sector.

17-283. The decommissioning impact in Scotland is expected to account for 0.16% (220 as a proportion of 136,000) of employment in the construction sector. Therefore, the magnitude has been assessed as Negligible.

17-284. The decommissioning impact in the UK is expected to account 0.02% (290 as a proportion of 1,613,000) of employment in the construction sector. Therefore, the magnitude has been assessed as Negligible.

### **Sensitivity of Receptor**

17-285. As for the decommissioning impact, the sensitivity of the Scottish economy, which employs 2.7 million people, has been assessed as Low and the sensitivity of the UK economy, which employs 33.1 million people, has been assessed as Negligible.

### **Significance of Effect**

17-286. The magnitude of the impact on the Scottish economy is deemed to be Negligible and its sensitivity as Low. The effect will, therefore, be of Negligible significance (beneficial), which is Not Significant in EIA terms.

17-287. The magnitude of the impact on the UK economy is deemed to be Negligible and its sensitivity as Negligible. The effect will, therefore, be of Negligible significance, which is Not Significant in EIA terms (**Table 17-40**).

**Table 17-40 Significance of Decommissioning Economic Impact**

Location	Magnitude	Sensitivity	Significance
Scotland	Negligible	Low	Negligible
UK	Negligible	Negligible	Negligible

### **Secondary Mitigation and Residual Effect**

17-288. No additional socio-economics mitigation is considered necessary because the likely effect in the absence of further mitigation (beyond the commitments outlined in **Section 17.11**) is Not Significant in EIA terms.

#### **17.12.3.2 Impact 18 Changes to Commercial Fisheries**

17-289. The assessment in **Volume 2, Chapter 11: Commercial Fisheries** identified no significant effects on commercial fisheries during the decommissioning phase. This conclusion applies to the following receptors:

- Pelagic Fishery (trawling and purse seining) – Mackerel Fishery;
- Demersal Trawling and Seining – *Nephrops* and Whitefish Fisheries;
- Pots and Traps – Crab and Lobster Fisheries; and
- Dredging – Scallop Fishery.

17-290. As no likely significant adverse effects were found during the decommissioning phase, we conclude that there will be no economic impact on the fisheries sector. Consequently, no economic impacts have been modelled for this sector during the decommissioning phase.

#### **17.12.3.3 Impact 19 Changes to Shipping and Navigation**

17-291. The assessment in **Volume 2, Chapter 13: Shipping and Navigation** identified no significant effects on shipping and navigation. This conclusion applies to the following receptors:

- Commercial and Ferry Routes;
- Commercial Fishing Activity;
- Recreational Activity; and
- Access to Ports and Harbours.

17-292. As no likely significant adverse effects were found we conclude that there will be no impact on tourism and recreation, including tourism activity related to recreational shipping. Consequently, no impacts have been modelled for the tourism economy.

#### 17.12.4 Proposed Monitoring

17-293. **Table 17-41** describes proposed monitoring of effects discussed above.

**Table 17-41 Recommended Monitoring and Implementation for Socio-Economics, Tourism and Recreation Effects**

Effect	Proposed Monitoring	Implementation Method
Economic Impacts (Increase in employment and GVA)	Monitor expenditure throughout the supply chain to evaluate its impacts and determine whether the commitments outlined in the SCDS are being met. This will also help identify necessary actions to ensure the maximisation of spending commitments as per the SCDS.	Secured through the Option for Lease Agreement.
Social Impacts	Engage with the communities around construction and O&M ports to understand nature of social impacts.	Detailed monitoring commitments will be agreed post consent.

### 17.13 CUMULATIVE EFFECTS ASSESSMENT

#### 17.13.1 Methodology

17-294. The Cumulative Effects Assessment (CEA) assesses the impact associated with the Proposed Offshore Development together with other relevant projects and activities. Cumulative effects are defined as the effect of the Proposed Offshore Development in combination with the effects from a number of different projects, on the same receptor or resource.

17-295. **Volume 1, Chapter 5: EIA Methodology** details how potential cumulative effects will be assessed for the Proposed Offshore Development together with other relevant plans, projects and activities through a CEA. Those plans/projects relevant to the CEA for socio-economics, tourism and recreation are based upon the results of a screening exercise.

17-296. Each existing and/or approved development has been considered on a case-by-case basis for screening in or out of this chapter's assessment based

upon data confidence, impact receptor pathways and the spatial or temporal scales involved.

17-297. These other plans or projects may present different levels of potential cumulative effect when combined with the Proposed Offshore Development, informed by other plan/project's readiness and likelihood for actual operation. A tiered approach to the CEA is therefore applied here, allowing weighted assessment of cumulative effects. A tiered approach provides a framework for placing relative weight on the potential for each project or plan to be included in the CEA to be realised taking into account the project or plans current stage of maturity and certainty in the projects' parameters. The following tiers will be employed in the socio-economic, tourism and recreation CEA:

- Tier 1 – The Proposed Offshore Development, combined with the Proposed Onshore Development of the project;
- Tier 2 – All projects or plans assessed under Tier 1, plus those plans/projects which have become operational since the baseline characterisation of the Proposed Offshore Development, plus those under construction, those with consent, and those pending determination following a submitted application;
- Tier 3 – All projects or plans assessed under Tier 2, plus those projects that have submitted a Scoping Report to MD-LOT; and
- Tier 4 - All projects or plans assessed under Tier 3, projects that are considered reasonably foreseeable, plus those with a granted Agreement for Lease (AfL) or equivalent where information is available to inform the cumulative assessment and there is sufficient data confidence.

17-298. Information on each tiered project considered as part of the socio-economic, tourism and recreation CEA is given in **Annex A, Table A-49**.

17-299. This CEA for socio-economics, tourism and recreation will consider the maximum design scenario for each of the projects, plans and activities in line with the methodology outlined in **Volume 1, Chapter 5: EIA Methodology**.

17-300. The main cumulative effects related to socio-economics, tourism and recreation are expected to relate to the supply chain, as this is shared across the whole offshore wind sector. As a result, developments elsewhere in Scotland, the UK or the Republic of Ireland have the potential to cumulatively affect the Proposed Offshore Development.

17-301. The table listing other developments considered within the CEA is in **Annex A, Table A-49**. The projects included cover a wide geographic area, reflecting the nature of the cumulative impacts under assessment. In particular, supply chain development and competition for resources operate at national and regional levels, rather than being limited by geographic proximity. As such, the CEA

includes developments across Scotland and the wider UK to capture potential interactions within these broader economic systems.

### 17.13.2 Maximum Design Scenario

- 17-302. Details of the Proposed Offshore Development activities and key Proposed Offshore Development components are provided in **Volume 1, Chapter 4: Project Description**. As this assessment is using the Design Envelope approach, a maximum design scenario has been selected for each cumulative impact which would lead to the greatest impact for all receptors or receptor groups, when selected from a range of values.
- 17-303. **Table 17-42** presents the maximum design scenario for each cumulative impact associated with the socio-economics, tourism and recreation CEA, along with justification.



**Table 17-42 Maximum Design Scenarios Considered for Assessment of Likely Significant Cumulative Effects on Socio-Economics, Tourism and Recreation**

Cumulative Impact	Phase <sup>2</sup>			Tier	Maximum Design Scenario
	C	O	D		
Increase in employment and Gross Value Added	✓	✓		1-4	<p><b><u>Construction</u></b></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 Proposed Offshore Development, it may have cumulative effects associated with its interaction with other projects, such as increasing the critical mass of the offshore wind sector and attracting manufacturers etc.</p> <p>The maximum design scenario is based on only the developments such new manufacturing facilities related to the supply chain that have been secured to date.</p> <p><u>Increased Competition for Resources</u></p> <p>Expenditure associated with the Proposed Offshore Development may result in increased competition for limited resources, delaying other projects and leading to a slower build out.</p> <p><b><u>Operation and Maintenance</u></b></p> <p>In addition to the economic impact generated by the expenditure associated with the Proposed Offshore Development, it may have cumulative effects associated with its interaction with other</p>

<sup>2</sup> C = Construction, O = Operation and Maintenance, D = Decommissioning

Cumulative Impact	Phase <sup>2</sup>			Tier	Maximum Design Scenario
	C	O	D		
					<p>projects, such as increasing economies of scale and competition for resources.</p> <p><b><u>Decommissioning</u></b> There may be cumulative effects associated with a critical mass of decommissioning projects.</p>
Social Impacts	✓	✓		1-4	<p><b><u>Construction</u></b> Temporary changes to demographics and increased demand for services in the area around the construction port are likely to be made more permanent in conjunction with other projects across Scotland and the UK. There is also the potential for these to overlap and increase the magnitude of change during peaks in transient labour demand.</p> <p><b><u>Operation and Maintenance</u></b> The O&amp;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><b><u>Decommissioning</u></b> 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 commercial fisheries	✓	✓	✓	1-4	<p>The assessment of socio-economic effects arising from changes to commercial fisheries has been based on the maximum design scenario of the commercial fisheries assessment.</p>

Cumulative Impact	Phase <sup>2</sup>			Tier	Maximum Design Scenario
	C	O	D		
Changes to shipping and marine recreation	✓	✓	✓	1-4	The assessment of socio-economic effects arising from changes to shipping and marine recreation has been based on the maximum design scenario of the shipping and navigation assessment.

### 17.13.3 Cumulative Effects Assessment

#### 17.13.3.1 Construction Phase

##### **Increase in Employment and Gross Value Added**

17-304. An assessment of the likely significance of the cumulative effects of the Proposed Offshore Development on socio-economic Study Areas, 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.

17-305. Additionally, this chapter is supported by **Volume 3, Appendix 17.1: Economic Impact of Buchan Offshore Wind Farm**, which provides a detailed analysis of the economic impacts of the Project as a whole, including both the Proposed Offshore Development and the Proposed Onshore Development.

##### ***Increased Offshore Wind Supply Chain in Scotland and the UK***

17-306. 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 Proposed Offshore Development 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.

##### **Magnitude of Impact**

17-307. As discussed in **Section 17.12**, offshore wind has substantial potential to generate economic impact in Scotland and the UK. For example, the critical mass created by the high number of offshore wind developments may attract multinational companies who manufacture critical components such as blades and cables, increasing economic impact in Scotland and the UK.

17-308. 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 Proposed Offshore Development are important.

17-309. 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.

17-310. 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.

### **Sensitivity of Receptor**

17-311. For impacts arising solely from the Proposed Offshore Development, the Scottish economy is assessed as having Low sensitivity, while the UK economy is assessed as having Negligible sensitivity.

### **Significance of Effect**

17-312. 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 Minor beneficial significance, which is Not Significant in EIA terms.

17-313. 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 (**Table 17-43**).

**Table 17-43 Significance of increase in offshore wind supply chain in Scotland and the UK**

<b>Receptor/Location</b>	<b>Magnitude</b>	<b>Sensitivity</b>	<b>Significance</b>
Scotland	Medium	Low	Minor
UK	Negligible	Negligible	Negligible

### **Secondary Mitigation and Residual Effect**

17-314. No additional socio-economic mitigation has been identified.

### ***Increased Competition for Resources***

17-315. 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.

### **Magnitude of Impact**

17-316. 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.

17-317. 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, or increased efficiency in the sector.

17-318. 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.

17-319. 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 construction port(s), which is not known at this stage and therefore the magnitude cannot be assessed at a local scale.

### **Sensitivity of Receptor**

17-320. As for the impacts arising solely from the Proposed Offshore Development, the sensitivity of the Scottish economy has been assessed as Low, and the sensitivity of the UK economy has been assessed as Negligible.

### **Significance of Effect**

17-321. 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.

17-322. 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 (**Table 17-44**).

**Table 17-44 Significance of increased competition for resources**

<b>Receptor/Location</b>	<b>Magnitude</b>	<b>Sensitivity</b>	<b>Significance</b>
Scotland	Negligible	Low	Negligible
UK	Negligible	Negligible	Negligible

### **Secondary Mitigation and Residual Effect**

17-323. No additional socio-economic mitigation has been identified.

## **Demographic Changes**

- 17-324. 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.

### ***Magnitude of Impact***

- 17-325. Construction impacts related to single projects, such as the Proposed Offshore Development, are likely to be short-term. However, given the other ScotWind and INTOG projects that are under development it is likely that when taken together, these impacts are experienced as long-term and relatively stable.

- 17-326. As discussed in **Section 17.12**, the Proposed Offshore Development is likely to result in changes to demographics, higher demand for housing and other services. However, as this is one of several projects that are being developed, there will be sustained work for skilled workers for several years (likely to be more than a decade). Due to this increased job security, it is expected that they and their families are more likely to settle in the areas around ports and other facilities permanently. This is expected to result in a sustained population increase.

- 17-327. 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.

### ***Sensitivity of Receptor***

- 17-328. As the construction port is not known it is not possible to assess the sensitivity of the area.

### ***Significance of Effect***

- 17-329. 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.

### ***Secondary Mitigation and Residual Effect***

- 17-330. No additional socio-economic mitigation has been identified.

## **Changes to Housing Demand**

- 17-331. 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.

### ***Magnitude of Impact***

17-332. In isolation, the Proposed Offshore Development may lead to an increase in demand for temporary housing. In combination with other east coast projects, the Proposed Offshore Development may result in a long-term increase in population and a long-term increase in demand for housing for skilled workers and their families.

17-333. 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.

#### ***Sensitivity of Receptor***

17-334. As the construction port is not known it is not possible to assess the sensitivity of the area.

#### ***Significance of Effect***

17-335. 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.

#### ***Secondary Mitigation and Residual Effect***

17-336. No additional socio-economic mitigation has been identified.

#### **Changes to Other Local Public and Private Services**

17-337. A sustained increase in economic activity and employment will result in a long-term increase in demand for public and private services.

#### ***Magnitude of Impact***

17-338. In combination with other projects, the Proposed Offshore Development is expected to result in an increased long-term demand for public and private services. This includes demand for local businesses, such as supermarkets and restaurants, as well as public services such as education and healthcare.

17-339. The magnitude of change will depend on the factors outlined in **Section 17.12**, including the capacity of local service providers and the ability of the local area to respond to change. As the construction port is not known, it is not possible to assess the magnitude of impact.

#### ***Sensitivity of Receptor***

17-340. As the construction port is not known it is not possible to assess the sensitivity of the area.

#### ***Significance of Effect***



17-341. 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.

#### ***Secondary Mitigation and Residual Effect***

17-342. No additional socio-economic mitigation has been identified.

#### **Socio-cultural Impacts**

17-343. The development of several offshore wind projects, including the Proposed Offshore Development, may affect how local communities perceive themselves. The cumulative effects of the development of the offshore wind sector in Scotland is the key focus of the ongoing collaborative Socio-economic study that was commissioned by Crown Estate Scotland.

#### ***Magnitude of Impact***

17-344. A sustained increase in economic activity and population may affect how the local area around the construction 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.

#### ***Sensitivity of Receptor***

17-345. As the construction port is not known it is not possible to assess the sensitivity of the area.

#### ***Significance of Effect***

17-346. 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.

#### ***Secondary Mitigation and Residual Effect***

17-347. No additional socio-economic mitigation has been identified.

#### **Social Impacts**

#### ***Magnitude of Impact***

17-348. Construction impacts related to single projects, such as the Proposed Offshore Development, are likely to be short term. However, given the other ScotWind projects that are under development it is likely that when taken together, these impacts are likely to be experienced as long term and relatively stable.

17-349. The Proposed Offshore Development is likely to result in changes to demographics, higher demand for housing and other services around port

locations. However, if this is one of several projects that are developed over a number of years, skilled workers and their families are likely to settle in the areas around ports and other facilities permanently. This is expected to result in a sustained population increase and demand for services, such as education and health, and a greater level of integration.

- 17-350. These impacts are likely to be modulated by characteristics of individual communities, such as capacity and population dynamics. Therefore, it is not possible to assess the potential magnitude of impact.

#### ***Sensitivity of Receptor***

- 17-351. As the construction ports are not known it is not possible to assess the sensitivity of the area.

#### ***Significance of Effect***

- 17-352. 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.

#### ***Secondary Mitigation and Residual Effect***

- 17-353. No additional socio-economic mitigation has been identified.

#### **Changes to Commercial Fisheries**

- 17-354. The cumulative effects assessment in **Volume 2, Chapter 11: Commercial Fisheries** identified no significant cumulative effects on commercial fisheries during the construction phase. This conclusion applies to the following receptors:

- Pelagic Fishery (trawling and purse seining) – Mackerel Fishery;
- Demersal Trawling and Seining – *Nephrops* and Whitefish Fisheries;
- Pots and Traps – Crab and Lobster Fisheries; and
- Dredging – Scallop Fishery.

- 17-355. As no significant cumulative adverse effects were found during the construction phase, we conclude that there will be no cumulative economic impact on the fisheries sector.

#### **Changes to Shipping and Navigation**

- 17-356. The cumulative effects assessment in **Volume 2, Chapter 13: Shipping and Navigation** identified no significant cumulative effects on shipping and navigation during the construction phase. This conclusion applies to the following receptors:

- Commercial and Ferry Routes;
- Commercial Fishing Activity;
- Recreational Activity; and
- Access to Ports and Harbours.

17-357. As no significant cumulative adverse effects were found during the construction phase, we conclude that there will be no cumulative impact on tourism and recreation, including tourism activity related to recreational shipping.

### **17.13.3.2 Operation and Maintenance Phase**

#### **Increase in Employment and Gross Value Added**

17-358. This section considers the cumulative effects of the Proposed Offshore Development upon socio-economic Study Areas arising from each identified impact. As with the construction phase, the cumulative effect on employment and gross value added during the operational phase will be dependent on how two competing forces interact as the sector develops. These are:

- increased offshore wind supply chains in Scotland and the UK; and
- increased competition for resources.

#### ***Increased Offshore Wind Supply Chain in Scotland and the UK***

#### **Magnitude of Impact**

17-359. There are a number of offshore wind developments that are being developed across the UK, particularly on the east coast of Scotland (e.g. ScotWind and INTOG). There is potential for this to create a critical mass of opportunities that attract 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.

17-360. 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.

17-361. 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.

17-362. As the O&M port is not known, it is not possible to assess the magnitude of impact.

#### **Sensitivity of Receptor**

17-363. As for the impacts arising solely from the Proposed Offshore Development, the sensitivity of the Scottish economy has been assessed as Low, and the sensitivity of the UK economy has been assessed as Negligible.

### Significance of Effect

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.

17-364. 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 (Table 17-45).

**Table 17-45 Significance of increase in offshore wind supply chain in Scotland and the UK**

Receptor/Location	Magnitude	Sensitivity	Significance
Scotland	Negligible	Low	Negligible
UK	Negligible	Negligible	Negligible

### Secondary Mitigation and Residual Effect

17-365. No additional socio-economic mitigation has been identified.

### *Increased Competition for Resources*

### Magnitude of Impact

17-366. 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.

17-367. 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, or increased efficiency in the sector.

17-368. 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.

17-369. 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 construction port(s), which is not known at this stage and therefore the magnitude cannot be assessed at a local scale.

### **Sensitivity of Receptor**

17-370. As for the impacts arising solely from the Proposed Offshore Development, the sensitivity of the Scottish economy has been assessed as low, and the sensitivity of the UK economy has been assessed as Negligible.

### **Significance of Effect**

17-371. 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.

17-372. 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 (Table 17-46).

**Table 17-46 Significance of increased competition for resources**

<b>Receptor/Location</b>	<b>Magnitude</b>	<b>Sensitivity</b>	<b>Significance</b>
Scotland	Negligible	Low	Negligible
UK	Negligible	Negligible	Negligible

### **Secondary Mitigation and Residual Effect**

17-373. No additional socio-economic mitigation has been identified.

### **Demographic Changes**

17-374. 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.

### ***Magnitude of Impact***

17-375. The development of several projects may lead to port specialisation and an increase in economic impact, leading to an increase in population around the O&M port.

17-376. 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.

### ***Sensitivity of Receptor***

17-377. As the O&M port is not known it is not possible to assess the sensitivity of the area.

### ***Significance of Effect***

17-378. 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.

### ***Secondary Mitigation and Residual Effect***

17-379. No additional socio-economic mitigation has been identified.

### **Changes to Housing Demand**

17-380. An increase in population across the east coast associated with an increased population is likely to have an effect on housing demand.

### ***Magnitude of Impact***

17-381. 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.

### ***Sensitivity of Receptor***

17-382. As the O&M port is not known it is not possible to assess the sensitivity of the area.

### ***Significance of Effect***

17-383. 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.

### ***Secondary Mitigation and Residual Effect***

17-384. No additional socio-economic mitigation has been identified.

### **Changes to Other Local Public and Private Services**

17-385. An increase in economic activity and employment will result in a long-term increase in demand for public and private services.

### ***Magnitude of Impact***

17-386. The magnitude of change will depend on the factors outlined in **Section 17.12**, 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.

### ***Sensitivity of Receptor***

17-387. As the O&M port is not known it is not possible to assess the sensitivity of the area.

***Significance of Effect***

17-388. 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.

***Secondary Mitigation and Residual Effect***

17-389. No additional socio-economic mitigation has been identified.

**Socio-cultural Impacts**

17-390. The development of a number of offshore wind projects, including the Proposed Offshore Development, may affect how local communities perceive themselves.

***Magnitude of Impact***

17-391. As the O&M port is not known, it is not possible to assess the magnitude of any impact.

***Sensitivity of Receptor***

17-392. As the O&M port is not known it is not possible to assess the sensitivity of the area.

***Significance of Effect***

17-393. 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.

***Secondary Mitigation and Residual Effect***

17-394. No additional socio-economic mitigation has been identified.

**Social Impacts**

***Magnitude of Impact***

17-395. A number of offshore wind farm developments on the east coast of Scotland will generate impacts related to O&M, creating long term jobs. This may lead developers to co-ordinate their actions, developing O&M hubs that will have greater demographic and other impacts.

17-396. Based on the lack of information around the O&M base of the Proposed Development and the port decisions of most future projects, it is not possible to determine the magnitude of the adverse or beneficial impact.

### *Sensitivity of Receptor*

17-397. As the O&M ports are not known it is not possible to assess the sensitivity of the area.

### *Significance of Effect*

17-398. Given the uncertainty around future O&M port decisions, it is not possible to assess the effect significance from social impacts.

### *Secondary Mitigation and Residual Effect*

No additional socio-economic mitigation has been identified.

### **Changes to Commercial Fisheries**

17-399. The cumulative effects assessment in **Volume 2, Chapter 11: Commercial Fisheries** identified no significant cumulative effects on commercial fisheries during the O&M phase. This conclusion applies to the following receptors:

- Pelagic Fishery (trawling and purse seining) – Mackerel Fishery;
- Demersal Trawling and Seining – *Nephrops* and Whitefish Fisheries;
- Pots and Traps – Crab and Lobster Fisheries; and
- Dredging – Scallop Fishery.

17-400. As no significant cumulative adverse effects were found during the O&M phase, we conclude that there will be no cumulative economic impact on the fisheries sector.

### **Changes to Shipping and Navigation**

17-401. The cumulative effects assessment in **Volume 2, Chapter 13: Shipping and Navigation** identified no significant cumulative effects on shipping and navigation during the O&M phase. This conclusion applies to the following receptors:

- Commercial and Ferry Routes;
- Commercial Fishing Activity;
- Recreational Activity; and
- Access to Ports and Harbours.

17-402. As no significant cumulative adverse effects were found during the O&M phase, we conclude that there will be no cumulative impact on tourism and recreation, including tourism activity related to recreational shipping.

### **17.13.3.3 Decommissioning Phase**



### **Demographic Changes**

- 17-403. 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.

#### ***Magnitude of Impact***

- 17-404. 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.
- 17-405. 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.

#### ***Sensitivity of Receptor***

- 17-406. As the decommissioning port is not known it is not possible to assess the sensitivity of the area.

#### ***Significance of Effect***

- 17-407. 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.

#### ***Secondary Mitigation and Residual Effect***

- 17-408. No additional socio-economic mitigation has been identified.

### **Changes to Housing Demand**

- 17-409. An increase in population across the east coast associated with an increased population is likely to have an effect on housing demand.

#### ***Magnitude of Impact***

- 17-410. It is not possible to assess the magnitude of any change in the area around the decommissioning port, as this is likely to be modulated by characteristics of individual communities, as well as how the housing market responds to increased demand.

#### ***Sensitivity of Receptor***

- 17-411. As the decommissioning port is not known it is not possible to assess the sensitivity of the area.

#### ***Significance of Effect***

17-412. 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.

#### ***Secondary Mitigation and Residual Effect***

17-413. No additional socio-economic mitigation has been identified.

#### **Changes to Other Local Public and Private Services**

17-414. An increase in economic activity and employment will result in a long-term increase in demand for public and private services.

#### ***Magnitude of Impact***

17-415. The magnitude of change will depend on the factors outlined in **Section 17.12**, including the capacity of local service providers and the ability of the local area to respond to change. As the decommissioning port is not known, it is not possible to assess the magnitude of impact.

#### ***Sensitivity of Receptor***

17-416. As the decommissioning port is not known it is not possible to assess the sensitivity of the area.

#### ***Significance of Effect***

17-417. 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.

#### ***Secondary Mitigation and Residual Effect***

17-418. No additional socio-economic mitigation has been identified.

#### **Socio-cultural Impacts**

17-419. The development of a number of offshore wind projects, including the Proposed Offshore Development, may affect how local communities perceive themselves.

#### ***Magnitude of Impact***

17-420. As the decommissioning port is not known, it is not possible to assess the magnitude of any impact.

#### ***Sensitivity of Receptor***

17-421. As the decommissioning port is not known it is not possible to assess the sensitivity of the area.

#### ***Significance of Effect***

- 17-422. 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.

### ***Secondary Mitigation and Residual Effect***

- 17-423. No additional socio-economic mitigation has been identified.

### **Changes to Commercial Fisheries**

- 17-424. The cumulative effects assessment in **Volume 2, Chapter 11: Commercial Fisheries** identified no significant cumulative effects on commercial fisheries during the decommissioning phase. This conclusion applies to the following receptors:

- Pelagic Fishery (trawling and purse seining) – Mackerel Fishery;
- Demersal Trawling and Seining – *Nephrops* and Whitefish Fisheries;
- Pots and Traps – Crab and Lobster Fisheries; and
- Dredging – Scallop Fishery.

- 17-425. As no significant cumulative adverse effects were found during the decommissioning phase, we conclude that there will be no cumulative economic impact on the fisheries sector.

### **Changes to Shipping and Navigation**

- 17-426. The cumulative effects assessment in **Volume 2, Chapter 13: Shipping and Navigation** identified no significant cumulative effects on shipping and navigation during the decommissioning phase. This conclusion applies to the following receptors:

- Commercial and Ferry Routes;
- Commercial Fishing Activity;
- Recreational Activity; and
- Access to Ports and Harbours.

- 17-427. As no significant cumulative adverse effects were found during the decommissioning phase, we conclude that there will be no cumulative impact on tourism and recreation, including tourism activity related to recreational shipping.

### **17.13.4 Proposed Monitoring**

- 17-428. Proposed monitoring for cumulative effects associated with socio-economic, tourism and recreation are listed in **Table 17-47** below.

**Table 17-47 Proposed Monitoring for Socio-Economics, Tourism and Recreation Cumulative Effects**

Potential Impact	Proposed Monitoring	Implementation Method
Economic Impacts	Monitor expenditure throughout the supply chain to evaluate its impacts and determine whether the commitments outlined in the SCDS are being met. This will also help identify necessary actions to ensure the maximisation of spending commitments as per the SCDS.	Spending will be monitored as part of the Lease Agreement.
Social Impacts	Engage with the communities around construction, O&M, and decommissioning ports to understand nature of social impacts.	Detailed monitoring commitments will be agreed post consent.

## 17.14 TRANSBOUNDARY EFFECTS

17-429. The assessment has considered the economic impact in Scotland, the UK, and the potential locations for the construction and operation ports, as well as the potential economic impacts associated with the construction, operation and maintenance, and decommissioning phases for the Proposed Offshore Development. However, a significant proportion of expenditure is also expected to take place in the European Union (EU) and elsewhere in the world, which will generate beneficial economic impacts.

### 17.14.1 Construction

17-430. The applicant has provided estimates of expenditure in Scotland (£911 million) and the UK (£1,484 million). In addition to this, there are expected to be billions of pounds worth of contracts located outside of the UK, including in the EU, in contract areas such as turbine manufacturing.

17-431. These contracts will generate economic activity and support employment in the EU and the rest of the world. It is not possible to assess the economic impacts generated, but these are expected to be positive impacts in nature. In addition, given the scale of the EU and global economies, it is therefore considered likely that, at most, there will be a negligible beneficial transboundary effect.

### 17.14.2 Operation and Maintenance

17-432. In addition to the expenditure in Scotland and the UK, there is expected to be an expenditure in the EU and elsewhere in the world. This is expected to lead to beneficial socio-economic effects, generating economic activity and supporting employment in the EU and elsewhere. Given the scale of the EU and global economies, it is considered likely that there will be a negligible beneficial effect.

### **17.14.3 Decommissioning**

17-433. In addition to the decommissioning expenditure in Scotland and the UK, there is expected to be an additional expenditure in the EU and elsewhere in the world. This is expected to lead to beneficial socio-economic effects, generating economic activity and supporting employment in the EU and elsewhere. Given the scale of the EU and global economies, it is considered likely that there will be a negligible beneficial effect

## **17.15 INTER-RELATED EFFECTS**

17-434. The inter-related effects of socio-economics, tourism and recreation are considered throughout the report. These effects are assessed in relation to the environmental effects in other chapters, such as shipping and navigation, where relevant. As a result, no additional assessment of inter-related effects is presented here, as there are no secondary environmental impacts arising from the socio-economics, tourism and recreation effects.

## **17.16 SUMMARY**

17-435. The construction, operational and decommissioning phases of the Proposed Offshore Development would cause a range of effects on socio-economics, tourism and recreation. The magnitude of these effects has been assessed using expert assessment, drawing from a wide science base that includes surveys and numerical modelling activities. A summary of the residual effects of the Proposed Offshore Development on socio-economics, tourism and recreation is listed in **Table 17-48**.

**Table 17-48 Summary of the Likely Significant Environmental Effects, Mitigation, Monitoring and Residual Effects for Socio-Economics, Tourism and Recreation**

Description of Impact	Phase			Magnitude of Impact	Sensitivity of Receptor	Embedded Mitigation Measures	Significance of Effect	Secondary Mitigation Measures	Residual Effect	Proposed Monitoring
	C	O	D							
Project Alone Summary										
Increase in employment and Gross Value Added (Scotland)	✓			High	Low	EM8, EM15, EM17, EM23, EM24, EM25, EM27, EM48	Significant (Moderate)	N/A	Significant (Moderate)	Monitor expenditure based on SCDS commitments
Increase in employment and Gross Value Added (UK)	✓			Low	Negligible		Not Significant (Negligible)	N/A	Not Significant (Negligible)	Monitor expenditure based on SCDS commitments
Increase in employment and Gross Value Added (Construction Port)	✓			High	Medium to High		Significant (Major)	N/A	Significant (Major)	Monitor expenditure based on SCDS commitments
Demographic changes (Construction Port)	✓			High	Medium to High		Significant (Major)	Engage with the local community and local authority once construction port has been identified	Significant (Major)	Engage with the local community and local authority once construction port has been identified
Changes to housing demand (Construction Port)	✓			High	Medium to High		Significant (Major)	Engage with the local community and local authority once construction port has been identified	Significant (Major)	Engage with the local community and local authority once construction port has been identified
Changes to other local public and private services (Construction Port)	✓			High	Medium to High		Significant (Major)	Engage with the local community and local authority once construction port has been identified	Significant (Major)	Engage with the local community and local authority once construction port has been identified
Socio-cultural impacts (Construction Port)	✓			High	Medium to High		Significant (Major)	Engage with the local community and local authority once construction port has been identified	Significant (Major)	Engage with the local community and local authority once construction port has been identified
Changes to commercial fisheries	✓			N/A	N/A		Not Significant (Negligible)	N/A	Not Significant (Negligible)	N/A
Changes to shipping and navigation	✓			N/A	N/A		Not Significant (Negligible)	N/A	Not Significant (Negligible)	N/A
Increase in employment and Gross Value Added (Scotland)		✓		Negligible	Low		Not Significant (Negligible)	N/A	Not Significant (Negligible)	Monitor expenditure based on SCDS commitments

Description of Impact	Phase			Magnitud e of Impact	Sensitivity of Receptor	Embedded Mitigation Measures	Significance of Effect	Secondary Mitigation Measures	Residual Effect	Proposed Monitoring
	C	O	D							
Increase in employment and Gross Value Added (UK)		✓		Negligible	Negligible		Not Significant (Negligible)	N/A	Not Significant (Negligible)	Monitor expenditure based on SCDS commitments
Increase in employment and Gross Value Added (O&M Port)		✓		Medium to High	Medium to High		Significant (Major)	N/A	Significant (Major)	Monitor expenditure based on SCDS commitments
Demographic changes		✓		Negligible to High	Medium to High		Not Significant (Minor) to Significant (Major)	Engage with the local community and local authority once O&M port has been identified	Not Significant (Minor) to Significant (Major)	Engage with the local community and local authority once O&M port has been identified
Changes to housing demand		✓		Negligible to High	Medium to High		Not Significant (Minor) to Significant (Major)	Engage with the local community and local authority once O&M port has been identified	Not Significant (Minor) to Significant (Major)	Engage with the local community and local authority once O&M port has been identified
Changes to other local public and private services		✓		Negligible to High	Medium to High		Not Significant (Minor) to Significant (Major)	Engage with the local community and local authority once O&M port has been identified	Not Significant (Minor) to Significant (Major)	Engage with the local community and local authority once O&M port has been identified
Socio-cultural impacts		✓		Negligible to High	Medium to High		Not Significant (Minor) to Significant (Major)	Engage with the local community and local authority once O&M port has been identified	Not Significant (Minor) to Significant (Major)	Engage with the local community and local authority once O&M port has been identified
Changes to commercial fisheries		✓		N/A	N/A		Not Significant (Negligible)	N/A	Not Significant (Negligible)	N/A
Changes to shipping and navigation		✓		N/A	N/A		Not Significant (Negligible)	N/A	Not Significant (Negligible)	N/A
Increase in employment and Gross Value Added (Scotland)			✓	Negligible	Low		Not Significant (Negligible)	N/A	Not Significant (Negligible)	Monitor expenditure based on SCDS commitments
Increase in employment and Gross Value Added (UK)			✓	Negligible	Negligible		Not Significant (Negligible)	N/A	Not Significant (Negligible)	Monitor expenditure based on SCDS commitments
Changes to commercial fisheries			✓	N/A	N/A		Not Significant (Negligible)	N/A	Not Significant (Negligible)	N/A
Changes to shipping and navigation			✓	N/A	N/A		Not Significant (Negligible)	N/A	Not Significant (Negligible)	N/A
Cumulative Summary										

Description of Impact	Phase			Magnitude of Impact	Sensitivity of Receptor	Embedded Mitigation Measures	Significance of Effect	Secondary Mitigation Measures	Residual Effect	Proposed Monitoring
	C	O	D							
Significance of Increase in offshore wind supply chain in Scotland	✓			Medium	Low	EM8, EM15, EM17, EM23, EM24, EM25, EM27, EM48	Minor	N/A	N/A	N/A
Significance of Increased Competition for Resources in the UK	✓			Negligible	Negligible		Negligible	N/A	N/A	N/A
Significance of Increase in offshore wind supply chain in Scotland		✓		Negligible	Low		Negligible	N/A	N/A	N/A
Significance of Increased Competition for Resources in the UK		✓		Negligible	Negligible		Negligible	N/A	N/A	N/A
Significance of Increased Competition for Resources in Scotland	✓	✓		Negligible	Low		Negligible	N/A	N/A	N/A
Significance of Increased Competition for Resources in the UK	✓	✓		Negligible	Negligible		Negligible	N/A	N/A	N/A
Social Impacts	✓	✓	✓	N/A	N/A		N/A	N/A	N/A	Engage with the local community once construction, O&M, and decommissioning ports have been identified
Changes to commercial fisheries	✓	✓	✓	N/A	N/A		N/A	N/A	N/A	N/A
Changes to shipping and navigation	✓	✓	✓	N/A	N/A		N/A	N/A	N/A	N/A



## 17.17 REFERENCES

- BVG Associates. (2021) UK and Scottish content baseline and roadmap.
- BVG Associates, The Online Guide to a Floating Wind Farm. Available online at: <https://guidetofloatingoffshorewind.com> (Accessed May 2024).
- BVG Associates (2019), Guide to an offshore wind farm. Available online at: <https://bvgassociates.com/wp-content/uploads/2019/04/BVGA-Guide-to-an-offshore-wind-farm-r2.pdf> (Accessed May 2024).
- Crown Estate Scotland. (2023) Offshore wind: sector profile.
- HM Treasury. (2022) The Green Book: Appraisal and Evaluation in Central Government.
- IMF. (2022) World Economic Outlook Database.
- Kantar Taylor Nelson Sofres (TNS). (2023a) GB Day Visitor 2022.
- Kantar TNS. (2023b) GB Tourism Survey 2022.
- Marine Analytical Unit. (2022) General Advice for Offshore Socio-economic Impact Assessment (SEIA).
- Marine Scotland. (2022) Defining 'local area' for assessing impact of offshore renewables and other marine developments: guidance principles.
- MD-LOT. (2023) Marine Directorate – Licensing Operations Team – Buchan Offshore Wind Scoping Opinion.
- National Records of Scotland. (2024) Mid-2023 Population Estimates Scotland.
- National Records of Scotland. (2025) 2022-based Principal Population Projections.
- Offshore Renewable Energy Catapult. (2020) The Offshore Wind O&M Opportunity.
- Offshore Wind Industry Council. (2021) People Skills Survey 2021-2026.
- Offshore Wind Industry Council. (2023) Offshore Wind Skills Intelligence Report.
- ONS. (2023a) Annual Survey of Hours and Earnings 2023.
- ONS. (2023b) Jobs Density Survey 2023.
- ONS. (2023c) Annual Business Survey 2021.
- ONS. (2023d) UK Input Output Tables 2019.
- ONS. (2023e) Digest of UK Energy Statistics 2023, Chapter 5: Electricity.
- ONS. (2024a) Mid-Year Population Estimates UK 2023.
- ONS. (2024b) Business Register and Employment Survey 2023.
- ONS. (2025a) Annual Population Survey 2024.

ONS. (2025b) Principal Population Projections 2022-based.

Scottish Government. (2018) National Performance Framework.

Scottish Government. (2020) Offshore Wind Policy Statement.

Scottish Government. (2020) Sectoral Marine Plan for Offshore Wind Energy.

Scottish Government. (2022a) Defining 'local area' for assessing impact of offshore renewables and other marine developments: guidance principles.

Scottish Government. (2022a) National Strategy for Economic Transformation.

Scottish Government. (2022b) Scottish Input Output Tables 2019.

Scottish Government. (2023) National Planning Framework 4.

Scottish Government (2023) Draft Energy Strategy and Just Transition Plan.

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

UK Government. (2020) The Offshore Wind Sector Deal.

UK Government. (2021) UK Net Zero Strategy: Build Back Better.

UK Government (2024) Clean Power 2030 Action Plan: A new era of clean electricity.

MAU (2020), General Advice for Offshore Socio-Economic Impact Assessment.

ONS (2023), UK Input Output Tables 2019. Available from:  
<https://www.ons.gov.uk/economy/nationalaccounts/supplyandusetables/datasets/ukinputoutputanalyticaltablesdownload> (Accessed May 2024).

Scottish Government (2022), Scottish Input Output Tables 2019. Available from:  
<https://www.gov.scot/publications/about-supply-use-input-output-tables/> (Accessed May 2024).

Buchan Offshore Wind (2023), SCDS Outlook Update. Available from:  
<https://www.crownstatescotland.com/sites/default/files/2023-07/buchan-offshore-wind-farm-scds-outlook-july-2023-update.pdf> (Accessed May 2024).

Scottish Government. (2015) National Marine Plan.

## Annex A: List of other developments considered within the CEA

**Table A-49 List of Other Developments Considered Within the CEA for Socio-Economics, Tourism and Recreation**

Plan/Project	Summary	Status	Distance from array area (km)	Distance from ECC (km)	Construction Dates (if relevant)	Operational by (if relevant)	Summary of Interaction with Proposed Offshore Development
<b>Tier 1</b>							
Proposed Onshore Development	Onshore export cable, onshore landfall infrastructure, onshore substation	Planned	N/A	N/A	2030-2036	2036-2071	Will generate the power connecting to the onshore grid infrastructure.
<b>Tier 2</b>							
Oriel Wind Farm	275MW OWF, 25T	Planned	563.4	484.5	2026 - 2028	2028	Interacts with construction and O&M phase of Proposed Offshore Development
Clogher Head	500MW OWF, 50-60T	Planned	571.7	492.2	2026 - 2030	2030	Interacts with construction and O&M phase of Proposed Offshore Development
North Irish Sea Array (NISA)	500MW OWF, 35-49T	Planned	563.8	484.2	2026 - 2029	2029	Interacts with construction and O&M phase of Proposed Offshore Development
Braymore Point	1000MW OWF, 50-60T	Planned	563.9	484.5	2027 - 2030	2030	Interacts with construction and O&M phase of Proposed Offshore Development

<b>Plan/Project</b>	<b>Summary</b>	<b>Status</b>	<b>Distance from array area (km)</b>	<b>Distance from ECC (km)</b>	<b>Construction Dates (if relevant)</b>	<b>Operational by (if relevant)</b>	<b>Summary of Interaction with Proposed Offshore Development</b>
Cooley Point	800MW OWF, 40-53T	Planned	563.2	483.7	2027	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Berwick and Marr Bank Wind Farm	1400-4100 MW OWF, 307T, Existing round	Planned	195.4	123.1	2025	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Pentland Floating Offshore WF	15MW OWF Float Demo, 1T, Existing round	Consented	147.6	156.2	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Hornsea Project 3	2,852MW OWF, 200T	Construction	519.4	469.0	2023 - 2027	2027	Interacts with construction and O&M phase of Proposed Offshore Development
Hornsea Project 4	2600MW OWF, 180T	Consented	468.1	409.7	2025 - 2030	2030	Interacts with construction and O&M phase of Proposed Offshore Development
Ossian Offshore Wind Farm	2600-3600MW OWF Float, 270T, ScotWind	Planned	151.6	94.6	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Inch Cape Offshore Wind Farm	1080MW OWF, 72T, Existing round	Construction	191.5	112.8	2024	N/A	Interacts with construction and O&M phase of Proposed Offshore Development

Plan/Project	Summary	Status	Distance from array area (km)	Distance from ECC (km)	Construction Dates (if relevant)	Operational by (if relevant)	Summary of Interaction with Proposed Offshore Development
Forthwind	20MW OWF Demo, 1T, Existing round	Consented	254.2	174.0	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Marr Bank Wind Farm	1400-4100MW OWF, 307T	Planned	193.3	118.7	2025 - 0	0	Interacts with construction and O&M phase of Proposed Offshore Development
Neart na Gaoithe Offshore WF	448MW OWF, 54T, Existing round	Construction	220.7	142.0	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Seagreen Phase 1a Windfarm	500MW, OWF, 36T, Existing round	Consented	187.9	110.9	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Bowdun Offshore Wind Farm	1,008MW OWF, 50-60T, ScotWind	Planned	131.7	61.4	N/A	2031	Interacts with construction and O&M phase of Proposed Offshore Development
Stromar	1000MW OWF Float, 71T, ScotWind	Planned	39.6	47.1	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Broadshore	900MW OWF Float, 32-60T, ScotWind	Planned	21.2	22.4	2029 - 2032	2032	Interacts with construction and O&M phase of Proposed Offshore Development

Plan/Project	Summary	Status	Distance from array area (km)	Distance from ECC (km)	Construction Dates (if relevant)	Operational by (if relevant)	Summary of Interaction with Proposed Offshore Development
Bellrock	1200MW OWF Float, 42-80T, ScotWind	Planned	162.6	119.6	2028 - 2030	2030	Interacts with construction and O&M phase of Proposed Offshore Development
MarramWind	3000MW OWF Float, 126-225T, ScotWind	Planned	24.2	24.3	2026 - 2030	2030	Interacts with construction and O&M phase of Proposed Offshore Development
MachairWind	2000MW OWF, 80-130T, ScotWind	Planned	391.5	327.0	2028 - 2032	2032	Interacts with construction and O&M phase of Proposed Offshore Development
CampionWind	2000MW OWF Float, 100T, ScotWind	Planned	105.8	85.4	2026 - 2030	2030	Interacts with construction and O&M phase of Proposed Offshore Development
Ayre Offshore Wind Farm	1,008MW OWF Float, 40-67T, ScotWind	Planned	53.1	72.3	2029 - 2032	2032	Interacts with construction and O&M phase of Proposed Offshore Development
Spiorad na Mara	840MW OWF, 60T, ScotWind	Planned	306.3	297.1	2027 - 2031	2031	Interacts with construction and O&M phase of Proposed Offshore Development
Muir Mhor	798MW OWF Float, 40T, ScotWind	Planned	90.0	57.6	4057 - 2034	2034	Interacts with construction and O&M phase of Proposed Offshore Development

Plan/Project	Summary	Status	Distance from array area (km)	Distance from ECC (km)	Construction Dates (if relevant)	Operational by (if relevant)	Summary of Interaction with Proposed Offshore Development
Havbredey	1500MW OWF Float, 108T, ScotWind	Planned	236.1	244.7	N/A	2034	Interacts with construction and O&M phase of Proposed Offshore Development
West of Orkney Wind Farm	2000MW OWF, 125T, ScotWind	Planned	157.3	168.5	2026 - 2029	2029	Interacts with construction and O&M phase of Proposed Offshore Development
Caledonia Offshore Wind Farm	2000MW OWF Float, 84-140T, ScotWind	Planned	55.1	56.0	N/A	2030	Interacts with construction and O&M phase of Proposed Offshore Development
Stoura Offshore Wind Farm	500MW OWF Float, ScotWind	Planned	218.2	252.9	N/A	2034	Interacts with construction and O&M phase of Proposed Offshore Development
Arven South	2300MW OWF Float, 161T	Planned	183.5	217.7	2026 - 2030	2030	Interacts with construction and O&M phase of Proposed Offshore Development
Arven Offshore Wind Farm	2300MW OWF Float, 161T, ScotWind	Planned	186.8	221.5	2026 - 2030	2030	Interacts with construction and O&M phase of Proposed Offshore Development
Moray West	882MW OWF, 60T, Existing round	Construction	87.9	85.5	2024 - 2025	2025	Interacts with construction and O&M phase of Proposed Offshore Development

Plan/Project	Summary	Status	Distance from array area (km)	Distance from ECC (km)	Construction Dates (if relevant)	Operational by (if relevant)	Summary of Interaction with Proposed Offshore Development
Morven	2,907MW OWF, 191T, ScotWind	Planned	148.9	84.2	2027 - 2030	2030	Interacts with construction and O&M phase of Proposed Offshore Development
Blyth Demonstration Phase 2	58.4MW OWF Demo Float, 5T	Planned	334.4	262.5	N/A	2025	Interacts with construction and O&M phase of Proposed Offshore Development
Dogger Bank C	1200MW OWF, 87T	Construction	419.2	381.1	2025 - 2026	2026	Interacts with construction and O&M phase of Proposed Offshore Development
Sofia	1400MW OWF, 100T	Construction	406.2	365.2	2024 - 2026	2026	Interacts with construction and O&M phase of Proposed Offshore Development
Dogger Bank A	1,235MW OWF, 95T	Construction	418.5	369.6	2024 - 2025	2025	Interacts with construction and O&M phase of Proposed Offshore Development
Dogger Bank B	1,235MW OWF, 95T	Construction	391.4	343.6	2023 - 2024	2024	Interacts with construction and O&M phase of Proposed Offshore Development
Awel y Mor	300 - 1100MW OWF, 34-50T	Consented	548.9	470.0	N/A	2030	Interacts with construction and O&M phase of Proposed Offshore Development



<b>Plan/Project</b>	<b>Summary</b>	<b>Status</b>	<b>Distance from array area (km)</b>	<b>Distance from ECC (km)</b>	<b>Construction Dates (if relevant)</b>	<b>Operational by (if relevant)</b>	<b>Summary of Interaction with Proposed Offshore Development</b>
Dogger Bank South West	1500MW OWF, 100T	Planned	420.0	367.6	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Dogger Bank South East	1500MW OWF, 100T	Planned	441.0	391.5	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Outer Dowsing	1500MW OWF, 75-100T	Planned	535.2	476.0	2026 - 2030	2030	Interacts with construction and O&M phase of Proposed Offshore Development
Mona	1500MW OWF, 96T	Planned	511.3	431.8	2026 - 2029	2029	Interacts with construction and O&M phase of Proposed Offshore Development
Morecambe	480MW OWF, 20-35T	Planned	511.4	432.0	2026 - 2029	2029	Interacts with construction and O&M phase of Proposed Offshore Development
Morgan	1500MW OWF, 96T	Planned	492.5	412.6	2026 - 2029	2029	Interacts with construction and O&M phase of Proposed Offshore Development
Green Volt	490-560MW OWF Float, 35T, INTOG	Consented	43.8	36.2	2025 - 2029	2029	Interacts with construction and O&M phase of Proposed Offshore Development

<b>Plan/Project</b>	<b>Summary</b>	<b>Status</b>	<b>Distance from array area (km)</b>	<b>Distance from ECC (km)</b>	<b>Construction Dates (if relevant)</b>	<b>Operational by (if relevant)</b>	<b>Summary of Interaction with Proposed Offshore Development</b>
Cenos	1350MW OWF Float, 68-90T, INTOG	Planned	185.7	182.5	2027 - 2029	2029	Interacts with construction and O&M phase of Proposed Offshore Development
Talisk Offshore Wind Project	495MW OWF Float, 33T, ScotWind	Planned	288.8	292.8	N/A	2030	Interacts with construction and O&M phase of Proposed Offshore Development
IN Sinclair	99.45MW OWF Float, 3-6T, INTOG	Planned	20.1	25.5	2028 - 2031	2031	Interacts with construction and O&M phase of Proposed Offshore Development
Scaraben	99.45MW OWF Float, 3-6T, INTOG	Planned	14.2	17.1	2028 - 2031	2031	Interacts with construction and O&M phase of Proposed Offshore Development
Flora	50MW OWF Float, 50T, INTOG	Planned	80.8	28.9	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Malin sea	1000MW OWF Float, 67T	Planned	448.6	378.1	2027 - 2030	2030	Interacts with construction and O&M phase of Proposed Offshore Development
Salamander	100MW OWF Float, 5-7T, INTOG	Planned	66.3	21.1	2026 - 2029	2029	Interacts with construction and O&M phase of Proposed Offshore Development

<b>Plan/Project</b>	<b>Summary</b>	<b>Status</b>	<b>Distance from array area (km)</b>	<b>Distance from ECC (km)</b>	<b>Construction Dates (if relevant)</b>	<b>Operational by (if relevant)</b>	<b>Summary of Interaction with Proposed Offshore Development</b>
Sinclair	99.45MW OWF Float, 3-6T	Planned	16.9	20.9	2028 - 2031	2031	Interacts with construction and O&M phase of Proposed Offshore Development
Morlais Demonstrator	240MW Tidal	Consented	502.2	422.1	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
West Islay Tidal Energy Park	400MW, Tidal	Consented	428.6	359.9	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Westray South	200MW Tidal array	Planned	119.3	135.8	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Transmission infrastructure (Ocean Winds) (ENQ/2023/073 9, MS-00010285, APP/2018/0624)	Moray East Electrical Transmission Infrastructure	PAC Agreed	79.0	44.0	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Cable Installation (Ocean Winds) (APP/2015/0478 )	Onshore electrical transmission cables	Approved	79.0	44.0	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development

Plan/Project	Summary	Status	Distance from array area (km)	Distance from ECC (km)	Construction Dates (if relevant)	Operational by (if relevant)	Summary of Interaction with Proposed Offshore Development
Cable Installation (Ocean Winds) (APP/2014/2430)	Onshore electrical transmission cables	Approved	79.0	44.0	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Cable Installation (Ocean Winds) (APP/2018/0623)	Onshore Electrical Transmission Cables	Approved	79.0	44.0	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Cable Installation (Vattenfall) (APP/2018/3097)	Alteration to Export Cable Burial Location	Approved	55.2	43.8	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Cable Installation (Ocean Winds)	Caledonia export cable	Planned	123.8	40.8	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Cable Installation (EQUINOR UK LIMITED)	Hywind export cable	Operational	83.2	7.5	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Cable Installation (Floatation Energy Plc)	Green volt export cable	Consented	56.4	6.6	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development

Plan/Project	Summary	Status	Distance from array area (km)	Distance from ECC (km)	Construction Dates (if relevant)	Operational by (if relevant)	Summary of Interaction with Proposed Offshore Development
Muir Mhòr cable transmission	Onshore Transmission Infrastructure for Muir Mhòr	Planned	84.8	5.0	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Salamander infrastructure	Installation of Onshore Infrastructure for the Salamander	Planned	84.1	4.7	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Cable Installation (ENQ/2022/1845 )	Installation of Underground Cable	Awaiting decision	85.7	6.1	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
<b>Tier 3</b>							
Dounreay Tri Wind Farm	15MW OWF Float Demo, 1T	Consented	147.8	156.6	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Aspen	1008MW OWF Float, 70-100T, INTOG	Planned	71.5	61.1	2026 - 2028	2028	Interacts with construction and O&M phase of Proposed Offshore Development
Beech	1008MW OWF Float, 70-100T, INTOG	Planned	168.1	169.3	2026 - 2028	2028	Interacts with construction and O&M phase of Proposed Offshore Development
Cedar	1008MW OWF Float, 70-100T, INTOG	Planned	164.7	144.8	2026 - 2028	2028	Interacts with construction and O&M

Plan/Project	Summary	Status	Distance from array area (km)	Distance from ECC (km)	Construction Dates (if relevant)	Operational by (if relevant)	Summary of Interaction with Proposed Offshore Development
							phase of Proposed Offshore Development
Sound of Islay Tidal Energy Project	10MW Tidal array	Submitted	396.0	326.5	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
West Islay Tidal Energy Park	30MW Tidal array	Consented	431.3	362.7	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Oran na Mara	3MW Tidal array	Planned	395.0	323.9	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Pipeline and carbon capture installation (ENQ/2021/1036)	CO2 Export pipeline and Carbon Capture	PAC Agreed	80.7	0.6	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Cable Installation (ENQ/2012/1909)	HVDC Cable Connection Between Norway and UK	PAC additional Nots	90.4	11.6	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
<b>Tier 4</b>							
MacColl (Kansai Electric Power Co.)	313.5MW OWF, 33T	Operationa l	72.5	70.5	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development

<b>Plan/Project</b>	<b>Summary</b>	<b>Status</b>	<b>Distance from array area (km)</b>	<b>Distance from ECC (km)</b>	<b>Construction Dates (if relevant)</b>	<b>Operational by (if relevant)</b>	<b>Summary of Interaction with Proposed Offshore Development</b>
Stevenson (Kansai Electric Power Co.)	323MW OWF, 34T	Operational	77.5	77.8	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Moray East (Ocean Winds)	313.5MW OWF, 33T	Operational	74.1	75.5	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Hornsea Project 1 (Orsted)	1,218MW OWF, 174T	Operational	509.6	456.0	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Hornsea Project 2 (Orsted)	1,386MW, OWF, 165T	Operational	499.8	444.3	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Hywind Scotland (Equinor)	30MW OWF Float Demo, 5T, Existing round	Operational	82.4	20.2	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Robin Rigg East (RWE)	84MW OWF, 30T, Existing round	Operational	413.1	333.1	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Robin Rigg West (RWE)	90MW OWF, 30T, Existing round	Operational	416.7	336.7	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development

<b>Plan/Project</b>	<b>Summary</b>	<b>Status</b>	<b>Distance from array area (km)</b>	<b>Distance from ECC (km)</b>	<b>Construction Dates (if relevant)</b>	<b>Operational by (if relevant)</b>	<b>Summary of Interaction with Proposed Offshore Development</b>
Levenmouth (Offshore Renewable Energy Catapult)	7MW OWF Demo, 1T, Existing round	Operational	253.7	173.6	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Beatrice Offshore Wind Farm (SSE)	10MW OWF Demo, 2T, Existing round	Operational	81.3	87.1	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Aberdeen Offshore Wind Farm (Vattenfall Wind Power Ltd)	96.8MW OWF, 11T, Existing round	Operational	117.5	38.2	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Robin Rigg OFTO (Amber Infrastructure Group)	Offshore Transmission Owner	Operational	416.8	336.9	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Kincardine (Crupe COBRA)	47.5MW OWF Float, 5T, Existing round	Operational	138.6	61.3	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Moray Offshore Windfarm (East) (Kansai	950MW OWF, 100T	Operational	71.0	70.5	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development



Plan/Project	Summary	Status	Distance from array area (km)	Distance from ECC (km)	Construction Dates (if relevant)	Operational by (if relevant)	Summary of Interaction with Proposed Offshore Development
Electric Power Co.)							
Seagreen Phase 1 Windfarm (SSE)	1,075MW - 1,140MW OWF, 114T, Existing round	Operational	178.9	101.8	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Walney extension (Orsted)	183.6MW OWF, 87T	Operational	481.2	401.7	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Walney (Orsted)	367MW OWF, 102T	Operational	484.8	405.5	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
West of Duddon Sands (SPR & Orsted)	389MW OWF, 108T	Operational	488.2	409.1	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Barrow (Orsted)	90MW OWF, 30T	Operational	487.8	409.0	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Ormonde (Vattenfall Wind Power Ltd)	150MW OWF, 30T	Operational	479.8	400.6	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development

Plan/Project	Summary	Status	Distance from array area (km)	Distance from ECC (km)	Construction Dates (if relevant)	Operational by (if relevant)	Summary of Interaction with Proposed Offshore Development
Rhyl Flats (Greencoat UK Wind)	90MW OWF, 25T	Operational	560.2	481.2	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Gwynt y Mor (Stadtwerke Munchen GmbH)	576MW OWF, 160T	Operational	547.4	468.6	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Burbo Bank Extension (Orsted)	258MW OWF, 32T	Operational	541.6	463.4	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Burbo Bank (Orsted)	90MW OWF, 25T	Operational	541.1	462.9	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Humber Gateway (RWE)	219MW OWF, 73T	Operational	517.6	453.8	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Westermest Rough (Orsted)	210MW OWF, 35T	Operational	497.3	432.9	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Teesside (EDF)	62MW OWF, 27T	Operational	399.2	328.5	N/A	N/A	Interacts with construction and O&M

Plan/Project	Summary	Status	Distance from array area (km)	Distance from ECC (km)	Construction Dates (if relevant)	Operational by (if relevant)	Summary of Interaction with Proposed Offshore Development
							phase of Proposed Offshore Development
Triton Knoll (J-Power Electric Power Development Co)	857MW OWF, 90T	Operational	539.8	478.8	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
North Hoyle (Greencoat UK Wind)	60MW OWF, 30T	Operational	552.3	473.8	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
EN17 (N/A)		Early/concept	465.2	442.9	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
EN20 (N/A)		Early/concept	487.6	467.8	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
EN18 (N/A)		Early/concept	484.1	465.1	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
EN15 (N/A)		Early/concept	511.4	489.1	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development

Plan/Project	Summary	Status	Distance from array area (km)	Distance from ECC (km)	Construction Dates (if relevant)	Operational by (if relevant)	Summary of Interaction with Proposed Offshore Development
EN19 (N/A)		Early/concept	382.3	361.7	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Islay Demo Zone (SPR)	10MW Tidal array	Unclear	423.5	355.5	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Brough Ness (Marine Current Turbines)	99MW Tidal array	Operational	97.6	109.4	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Strangford Lough Array (Marine Current Turbines)	1.2MW Tidal array	Commissioned	507.5	428.2	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
North Wales Tidal Energy (North Wales Tidal Energy)	2-2.5 GW Tidal	Early/concept	569.4	490.1	N/A	2032	Interacts with construction and O&M phase of Proposed Offshore Development
Colwyn Bay Tidal Lagoon (N/A)	Tidal	Early/concept	571.5	492.5	N/A	2032	Interacts with construction and O&M phase of Proposed Offshore Development
Mersey Tidal Power	700MW Tidal	Early/concept	550.3	472.7	2027 - 2032	2032	Interacts with construction and O&M

Plan/Project	Summary	Status	Distance from array area (km)	Distance from ECC (km)	Construction Dates (if relevant)	Operational by (if relevant)	Summary of Interaction with Proposed Offshore Development
(Liverpool City Region Combined Authority)							phase of Proposed Offshore Development
Port of Mostyn Tidal Lagoon (Mostyn SeaPower Ltd)	128MW Tidal 16T	Early/concept	558.9	480.6	N/A	2027	Interacts with construction and O&M phase of Proposed Offshore Development
Morecambe Bay Tidal Lagoon (N/A)	Tidal	Early/concept	476.9	398.3	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Duddon Estuary Tidal Lagoon (N/A)	Tidal	Early/concept	470.4	391.5	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
West Cumbrian Tidal Lagoon (N/A)	Tidal	Early/concept	420.5	340.6	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Solway Firth-Venturi Enhanced Turbine Technology (VETT) (Solway	Tidal	Unclear	385.8	306.2	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development

Plan/Project	Summary	Status	Distance from array area (km)	Distance from ECC (km)	Construction Dates (if relevant)	Operational by (if relevant)	Summary of Interaction with Proposed Offshore Development
Energy Gateway)							
EMEC Bilia Croo (EMEC)	1MW Test tidal energy	Operational	131.4	144.7	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
EMEC Fall of Wareness (EMEC)	7.2MW Test tidal array	Operational	114.9	131.1	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Scapa Flow (EMEC)	Test wave energy	Operational	106.6	120.2	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Shapinsay Sound (EMEC)	Test tidal array	Operational	107.2	124.3	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Lashy Sound (EMEC)	30MW Tidal array	Unclear	112.7	134.7	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Inner Sound (SAE Renewables)	4MW Tidal array	Operational	104.7	114.9	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development

<b>Plan/Project</b>	<b>Summary</b>	<b>Status</b>	<b>Distance from array area (km)</b>	<b>Distance from ECC (km)</b>	<b>Construction Dates (if relevant)</b>	<b>Operational by (if relevant)</b>	<b>Summary of Interaction with Proposed Offshore Development</b>
Burn diversion (WRG Waste Services Ltd)	Diversion of the Blackdog Burn	Consented	123.4	43.4	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Energy infrastructure installation (NorthConnect)	1.4 GW Interconnector Convertor Station & HVAC cable to power station	Approved	56.2	11.9	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Cable Installation (NorthConnect)	Installation of Underground HVDC Cables	PAC Agreed	92.6	13.9	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Cable Installation (NorthConnect)	Installation of Underground HVDC Cables	Approved, Jan 2019	92.6	13.9	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development
Pipeline survey (Shell U.K. Limited)	Acoustic pipeline survey	Awaiting decision	78.8	0.1	N/A	N/A	Interacts with construction and O&M phase of Proposed Offshore Development