

14 Socio-economics, Recreation and Tourism

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14 Socio-economics, Recreation and Tourism

14.1 Executive Summary

- 14.1.1 This Chapter assesses the potential socio-economic, recreation and tourism effects of the Proposed Development.
- 14.1.2 Orkney has a declining and ageing population in comparison to other areas of Scotland. While the labour market performs well, the area features higher costs of living in comparison to the rest of Scotland. Tourism plays an important part in the local economy and accounts for higher share of employment than the Scottish average.
- 14.1.3 During the development and construction phase, the Proposed Development could generate up to:
- £2.2 million GVA and 28 years of employment in Orkney; and
 - £7.2 million GVA and 106 years of employment in Scotland.
- 14.1.4 During each year of the operational phase, the Proposed Development could generate up to:
- £0.2 million GVA and 2 jobs in Orkney; and
 - £0.6 million GVA and 7 jobs in Scotland.
- 14.1.5 The Proposed Development would have an important strategic role for Orkney towards the achievement of the threshold set by Ofgem, in order for the construction of a new interconnector to be approved. This would in turn lead to additional socio-economic benefits and will support investment and innovation in the renewable sector in Orkney.
- 14.1.6 The Proposed Development would also provide community benefit funding for the local area of up to £132,000 annually, which could be used to the needs and concerns of the local community. In addition, it was estimated that the Proposed Development would pay £0.2 million each year in non-domestic rates, supporting local government services.
- 14.1.7 The most recent evidence on the relationship between wind farms and tourism suggests that there are no adverse effects on the tourism economy resulting from the development of onshore wind. An assessment of the likely effects of the Proposed Development on specific local tourism assets, accommodation providers and routes found no significant adverse effects are expected.
- 14.1.8 Overall, there were no significant adverse effects identified. While the beneficial construction and operation socio-economic effects are not significant in EIA terms, they would be important to the local and national economy, contributing to sustainable economic growth. The cumulative effect of supporting the needs case for an interconnector between Orkney and the Scottish mainland has been assessed as significant in EIA terms.

14.2 Introduction

- 14.2.1 This Chapter considers the potential land-use, socio-economics, recreation and tourism impacts associated with the Proposed Development.
- 14.2.2 This Assessment has been undertaken by Graeme Blackett, of BIGGAR Economics, an applied economist with over 30 years experience in consultancy. This has included providing economic consultancy services to a wide range of organisations including central and local government, universities, other public sector agencies and companies. Graeme has undertaken a number of socio-economics, tourism and recreation assessments of proposed onshore wind developments, as well as undertaking evaluations of existing developments and appearing at hearings and public inquiries.

14.3 Legislation, Policy and Guidelines

- 14.3.1 There is no specific legislation, policy or guidance available on the methods that should be used to assess the socio-economic impacts of a proposed onshore wind farm development. The proposed method has however been based on established best practice, including that used in UK Government and industry reports on the sector.
- 14.3.2 In particular this Assessment draws on two studies by BIGGAR Economics on the UK onshore wind energy sector, a report published by RenewableUK and the then Department for Energy and Climate Change (DECC) in 2012 on the direct and wider economic benefits of the onshore wind sector to the UK economy (Department of Energy and Climate Change, RenewableUK, 2012) and a subsequent update to this report published by RenewableUK in 2015 (RenewableUK, 2015).
- 14.3.3 The evidence collected in those studies is frequently reviewed and updated by BiGGAR Economics, based on its most recent experience working with wind farm developers. Evaluations of costs and the extent to which contracts are carried out in Scotland and within local authority areas, as well as experience working with developers elsewhere in Scotland, have all contributed to this assessment.
- 14.3.4 For recreational assets, guidance has been provided by NatureScot (previously Scottish Natural Heritage) on how to assess effects on recreational amenity and the approach outlined has been used (Scottish Natural Heritage, 2018). This takes into consideration a number of potential effects, including direct effect on facilities, such as limitation or restrictions on access, and effects on the intrinsic quality of the resources enjoyed by people. In general, this guidance would consider recreational and access impacts to potentially be significant if:
- permanent or long-term effects on the resources on which enjoyment of the natural heritage depends, in particular where facilities have been provided by NatureScot or others under statutory powers;
 - permanent or long-term change that would affect the integrity and long-term sustainable management of facilities which were provided by NatureScot or others under statutory powers;
 - where there are recreational resources for open air recreation pursuits affected by the proposal which have more than local use or importance, especially if that importance is national in significance;
 - major constraints on or improvements for access or accessibility to designated natural heritage sites; and
 - where mitigation and/or compensatory or alternative recreational provision is considered to be inadequate.
- 14.3.5 Effects will be considered based on the guidance from Guidelines for Environmental Impact Assessment (IEMA, 2004) and a Handbook for EIA (Scottish Natural Heritage, 2018).

14.4 Consultation

- 14.4.1 No consultation responses related to socio-economics, tourism or recreation have been received as part of the Scoping Opinion.

14.5 Assessment Methodology and Significance Criteria

Study Area

14.5.1 The analysis of socio-economic effects from the Proposed Development was carried out with respect to the following study areas:

- the Orkney Islands, as defined by the local authority area; and
- Scotland

14.5.2 The tourism and recreation assessment are based on an assessment of tourism and recreation assets within 15 km of the Proposed Development.

Desk Study

14.5.3 The following data sources have been used:

- (BIGGAR Economics, 2021), Wind Farms & Tourism Trends in Scotland: Evidence from 44 Wind Farms;
- (Department of Energy and Climate Change, RenewableUK, 2012), UK Onshore Wind: Direct and Wider Economic Impacts;
- (Glasgow Caledonian University/Moffat Centre, 2008), The Economic Impacts of Wind Farms on Scottish Tourism;
- (Highlands and Islands Enterprise, 2019), Highlands and Islands Enterprise 2019-2022 Strategy;
- (National Records of Scotland, 2021), Population Estimates 2020;
- (National Records of Scotland, 2020), Sub-National Population Projections 2018-2043;
- (ONS, 2022), Annual Population Survey Jan 2021- Dec 2021;
- (ONS, 2022), Annual Survey of Hours and Earnings - Resident and Workplace Analysis 2021;
- (ONS, 2021), Business Register and Employment Survey 2020;
- (Orkney Renewable Energy Forum, 2017), Orkney Sustainable Energy Strategy 2017-2025;
- (Orkney Renewable Energy Forum, 2018), Orkney Electrical Vehicle Strategy 2018-2023;
- (Orkney Islands Council, 2018), The Council Plan 2018-2023;
- (RenewableUK, 2015), Economic Impacts in 2014;
- (Scottish Government, 2022), National Strategy for Economic Transformation;
- (Scottish Government, 2021), Growth Sector Database;
- (Scottish Government, 2018), National Performance Framework;
- (Scottish Government, 2022), National Strategy for Economic Transformation;
- (Scottish Government, 2021), Scottish House Condition Survey: Local Authority Analysis 2017-19;
- (Scottish Tourism Alliance, 2020), Scotland Outlook 2030;
- (VisitScotland, 2020), Orkney Islands Visitor Survey 2019.

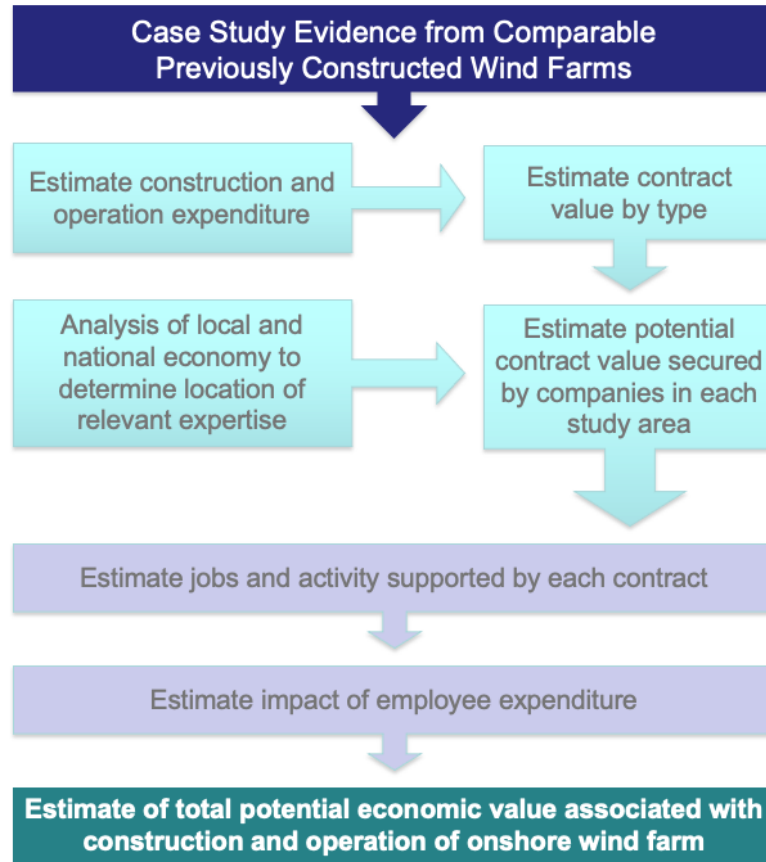
Site Visit

- 14.5.4 No site visit was necessary to inform the assessment of effects in this Chapter. Desk-based study and consultation were considered to be the most appropriate means of collecting data for the assessment.

Assessment of Socio-Economic Benefits

- 14.5.5 Given that no specific legislation or guidance is available on the methods which should be used when assessing the socio-economic effects of a proposed wind farm development for an EIA, to identify and assess the significance of predicted socio-economic effects, the assessment has been based on professional judgement for the degree of change resulting from proposals, using methods commonly used in EIAs for proposed renewable energy developments, as outlined below.
- 14.5.6 The assessment of economic effects was undertaken using a model that has been developed by BiGGAR Economics specifically to estimate the socio-economic effects of wind farm developments.
- 14.5.7 The units of measurement which are used to quantify the economic impacts of the Proposed Development are:
- Gross Value Added (GVA): this is a measure of the economic value added by an organisation or industry;
 - job years: this is a measure of employment which is equivalent one person being employed for an entire year and is typically used when considering the short term employment impacts, such as those associated with construction; and
 - jobs: this is a measure of employment, which considers the headcount employment in an organisation or industry.
- 14.5.8 To begin estimating the economic activity supported by the Proposed Development, it was first necessary to calculate the expenditure during the construction and development, and operation and maintenance phases. The total expenditure figure was then divided into its main components using calculated assumptions regarding the share that could be expected by main and sub-contractors. This provides an estimate for each main component that could be secured in Orkney and in Scotland.
- 14.5.9 There are three sources of economic activity:
- component contracts and the jobs they support;
 - wider spending in the supply chain (indirect effect); and
 - spending of people employed in these contracts.
- 14.5.10 There are four key stages of this model, which are illustrated in Diagram 14.1 below:
- estimation of the capital and operational expenditure;
 - estimation of the value of component contracts that make up total expenditure;
 - assessment of the capacity of businesses in the study area to perform and complete component contracts; and
 - estimation of economic impact from resultant figures.

Diagram 14.1 Approach to Economic Impact Assessment



Tourism and Recreation Assessment

- 14.5.11 The potential effect of wind farm development on the tourism and recreation sector has been the subject of several research studies. A review of the latest available research evidence has been undertaken.
- 14.5.12 Tourist attractions and accommodation were identified within the vicinity of the Proposed Development, and the potential effect of the Proposed Development has been considered with reference to the research evidence. Important visitor attractions for Orkney were also identified and considered, even if they are not within the vicinity of the Proposed Development.
- 14.5.13 Recreational assets, such as trails, have been identified, and the potential reduction in recreational amenity has been assessed. There are a number of potential ways that the Proposed Development could affect trails, including through reduced amenity associated with landscape and visual impacts, and through reduced access. Reduced access to amenity is particularly important in the context of areas that have limited access to recreational amenities, such as walking.

Assessment of Potential Effect Significance

Sensitivity

14.5.14 Sensitivity has been determined on the basis outlined in Table 14.1.

Table 14.1 Sensitivity Criteria

Sensitivity	Description
Very high	The asset/economy has little or no capacity to absorb change without fundamentally altering its present character and/or is of very high tourism, recreational or socio-economic value, or of national importance. For example, it is a destination in its own right (for attractions), with a substantial proportion of visitors on a national level.
High	The asset/economy has low capacity to absorb change without fundamentally altering its present character and/or is of high tourism, recreational or socio-economic value, or of importance to Scotland.
Medium	The asset/economy has moderate capacity to absorb change without substantially altering its present character, has some tourism, recreational or socio-economic value and/or is of regional importance (e.g., Orkney). For example, it is a popular destination among current visitors (for attractions), with a significant contribution to the regional economy.
Low	The asset/economy is tolerant to change without alteration to its character, has low tourism, recreational and/or socio-economic value, or is of local importance. For example, it is an incidental destination for current visitors (for attractions).
Negligible	The asset/economy is resistant to change and/or is of little tourism, recreational or socio-economic value. For example, an incidental destination with low numbers of current visitors (for attractions).

Magnitude

14.5.15 Magnitude of change has been assessed based on the criteria outlined in Table 14.2.

Table 14.2 Magnitude Criteria

Magnitude	Description
High	Major loss/improvement to key elements/features of the baseline conditions such that post development character/composition of baseline condition will be fundamentally changed. For example, a major long-term alteration of socio-economic conditions, a major reduction/improvement of recreational assets, or a substantial change to tourism spend.
Medium	Loss/improvement to one or more key elements/features of the baseline conditions such that post development character/composition of the baseline condition will be noticeably changed. For example, a moderate alteration of socio-economic conditions, a moderate reduction/improvement in the recreational asset, or a moderate change to tourism spend.

Magnitude	Description
Low	Changes arising from the alteration will be detectable but not material; the underlying composition of the baseline condition will be similar to the pre-development situation. For example, a small alteration of the socio-economic conditions, a small reduction/improvement in the recreational asset, or a small change in tourism spend.
Negligible	Very little change from baseline conditions. Change is barely distinguishable, approximating to a “no change” situation.

Significance

14.5.16 The predicted significance of the effect was determined through a standard method of assessment was based on professional judgement, considering both sensitivity and magnitude of change. Major and moderate effects are considered significant in the context of the EIA Regulations.

Table 14.3 Significance Criteria

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

Limitations to Assessment

14.5.17 Given the ongoing Covid-19 pandemic, uncertainty remains as to the state and composition of the tourism industry in Orkney in the future. There may also be temporary volatility associated with some statistical releases, such as unemployment data. It is also noted that rural areas of Scotland tend to have a relatively large share of small businesses and self-employment compared to urban areas. Some of these businesses may have failed as a result of the restrictions associated with the Covid-19 pandemic.

14.5.18 The assessment is based on the experience of comparable developments elsewhere and a review of the local socio-economic context. In order to maximise the benefits associated with the Proposed Development, it will be necessary to engage with local contractors to make sure that they are aware of the opportunities available and are able to access them.

14.6 Baseline Conditions

Strategic Economic Context

Scotland’s National Performance Framework

14.6.1 Scotland’s National Performance Framework, first published in 2018 (Scottish Government, 2018), sets out the ambitions of the Scottish Government to provide a vision for national wellbeing across a range of economic, social and environmental factors. The framework includes ‘increased well-being’ as part of its purpose, and combines measurement of how well Scotland is doing in economic terms with a broader range of well-being measures. The National Performance Framework is

designed to give a more rounded view of economic performance and progress towards achieving sustainable and inclusive economic growth and well-being across Scotland. 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 well-being of people living in Scotland;
- create sustainable and inclusive growth; and
- reduce inequalities and give equal importance to economic, environmental and social progress.

14.6.2 The National Performance Framework also sets out outcomes and indicators which illustrate the progress Scotland is making in achieving the aims of the National Performance Framework. The outcomes outlined in the National Performance Framework are that people in Scotland:

- grow up loved, safe and respected so that they realise their full potential;
- live in communities that are inclusive, empowered, resilient and safe;
- are creative and their vibrant and diverse cultures are expressed and enjoyed widely;
- have a globally competitive, entrepreneurial, inclusive and sustainable economy;
- are well educated, skilled and able to contribute to society;
- value, enjoy, protect and enhance the environment;
- have thriving and innovative businesses, with quality jobs and work for everyone;
- are healthy and active;
- protect and fulfil human rights and live free from discrimination;
- connected and make a positive contribution internationally; and
- tackle poverty by sharing opportunities, wealth and power or equally.

14.6.3 The development and operation of the Proposed Development would contribute to the achievement of the national outcomes set out in the National Performance Framework, with the project advancing the development of a competitive, inclusive and sustainable economy in Scotland.

Scotland’s National Strategy for Economic Transformation

14.6.4 In March 2022, the Scottish Government released the National Strategy for Economic Transformation (Scottish Government, 2022), 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 environment dimensions, 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.

14.6.5 A key longer term key challenge identified in the strategy is to address deep-seated regional inequality, which includes 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.

14.6.6 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;
- reorienting the economy towards wellbeing and fair work.

14.6.7 The Strategy notes that Scotland has substantial energy potential, with a quarter of Europe's wind 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, for example in the hydrogen economy and in the decarbonisation of heating systems, where Scotland may be able to secure first-mover advantage, and will need continuing investment and support. Renewable energy also has a role to play in supporting productive businesses and regions across Scotland.

Economic Recovery Plan

14.6.8 The growth of the renewable energy sector was a priority for the Scottish Government prior to the Covid-19 pandemic. The importance of the sector as a driver of economic recovery and transformation is difficult to overstate.

14.6.9 In June 2020, the report of the Advisory Group on Economic Recovery (AGER) (Advisory Group on Economic Recovery, 2020) to the Scottish Government highlighted the importance of renewable energy to national economic recovery. Recommendations in the report included "prioritisation and delivery of green investments", including that the green economic recovery is central to recovery overall and that Scotland should lever its natural advantages, such as "the almost limitless quantities of renewable energy from wind, wave and tidal power".

14.6.10 The Scottish Government's response (Scottish Government, 2020) outlines how it intends to implement the recommendations made in the AGER report, prioritising a sustainable recovery that supports all parts of Scotland, while meeting climate environmental targets.

Highlands and Islands Enterprise 2019-2022 Strategy

14.6.11 The overarching themes of the three-year strategy for the Highlands and Islands (Highlands and Islands Enterprise, 2019) are people and place, with a strong emphasis placed on achieving inclusive growth for all areas in the region.

14.6.12 The renewable energy sector and low carbon economy have been identified as areas of significant economic, social and industrial opportunities for the area both now and in the future. Highlands and Islands Enterprise are committed to building on the region's international reputation for excellence in energy and low carbon by securing supply chain opportunities from energy developments including onshore and offshore wind farms.

14.6.13 At the time of writing, the period covered by the strategy was coming to an end, and an updated strategy is expected following the new national economic strategy.

The Council Plan 2018-2023

14.6.14 The Orkney Council Plan 2018-2023 (Orkney Islands Council, 2018) sets out the priorities for Orkney Islands Council. The Plan considers the context within which Orkney Islands Council operates and will operate, which includes challenges, such as budgetary pressures and the uncertainties related to Brexit, as well as opportunities such as the Islands Deal.

- 14.6.15 The result of consultations with local residents, the plan is built around five priority themes:
- connected communities – to give access to affordable well-integrated public services as well as to digital connectivity;
 - caring communities – to provide care and support to those who need it and encourage a healthy population;
 - thriving communities – to have access to a modern infrastructure that can support leisure, work and learning;
 - enterprising communities – to have a carbon neutral economy supporting local businesses and promoting investment in Orkney; and
 - quality of life – to have a good quality of life, with people choosing to stay in Orkney and returning there.

14.6.16 The Proposed Development will contribute to meeting the need for generating capacity to ensure the construction of the interconnector between Orkney and the Scottish mainland. This will have the potential to increase the level of investment in renewable energy in Orkney and lead to future benefits for Orkney and its inhabitants.

14.6.17 The Proposed Development would contribute towards the achievement of a local carbon neutral economy, as set out in the Plan.

Orkney Islands Economic Review

14.6.18 The Orkney Islands Economic Review (Fraser of Allander Institute, 2020) assesses the economic performance of Orkney compared to Scotland as a whole, sets out four challenges that are going to affect its economy and lists eight areas that feature opportunities for sustainable growth in Orkney.

14.6.19 The report finds that the economic performance of Orkney tends to compare positively with that of Scotland on a range of dimensions, including labour market performance and measures of economic output. Still, it faces several challenges that are linked to its geographical position including access, infrastructure (physical and digital) and fuel poverty.

14.6.20 The review further considers four future challenges to which policymakers are exposed both at an Orkney and Scottish level. These include:

- transition to net zero;
- demographic change;
- technological change; and
- growth and wellbeing.

14.6.21 The transition to net zero in Orkney provides a good example of the challenges Orkney faces and of the relative advantages it has with respect to them. Whereas Orkney has a larger carbon footprint per capita than the Scottish average mostly due to its rurality and high levels of fuel poverty, it is also one of the areas across Scotland with the most potential for renewable energy.

14.6.22 The study also identified the energy sector as one of the key areas offering economic opportunities for Orkney. This is mostly a result of its renewable energy potential as well as of existing activity, in particular, wind and tidal energy.

Orkney Sustainable Energy Strategy 2017-2025

14.6.23 As highlighted in the Orkney Sustainable Energy Strategy (Orkney Renewable Energy Forum, 2017) renewable energy currently plays an important part in the Orkney economy, with 60 MW of installed capacity and 300 jobs related to sustainable energy in 2017. Orkney also generated 120 % of its

electricity demand from renewable sources, while also reducing its energy consumption through initiatives in areas such as transport and grid management.

- 14.6.24 For instance, there is a higher level of penetration of electric vehicles (EVs) in Orkney than elsewhere in Scotland and there is also a commitment to increase the number of EVs to 1,000 by 2025 and to install additional public chargers, as highlighted in the 2018 - 2022 Electric Vehicle Strategy (Orkney Renewable Energy Forum, 2018).
- 14.6.25 Orkney has ambitious plans to increase its total installed capacity for renewable energy generation to 600 MW, and the number of jobs supported to 600 by 2030. It also aims to increase the renewable generation of electricity to 300% of domestic demand, a substantial increase in energy exports.

Ofgem-Conditional Decision on Orkney Final Needs Case

- 14.6.26 In September 2019 Ofgem (Ofgem, 2019) published its final decision on the Needs Case for a new grid connection for Orkney in which it agreed with SSENs proposals to build a 220 MW connection, provided that 135 MW of new generation can demonstrate that it is ‘likely to be developed’ by December 2021. This was subsequently extended by 12 months (Ofgem, 2021).
- 14.6.27 ‘Likely to be developed’ is defined by Ofgem as being projects which have been granted planning permission, have signed a relevant grid connection agreement and are financially viable, for example having qualified for Contracts for Difference.
- 14.6.28 At present 36 MW of new wind generation is consented in Orkney and could contribute to this. The Proposed Development will contribute to the 135 MW threshold, which may not be reached without it being consented.

Baseline Economic Context

- 14.6.29 As shown in Table 14.4, in 2020 the population living in Orkney was 22,400, representing around 0.4% of Scotland’s population. Overall, the population in Orkney has a larger share of its population (24.1%) aged 65 and over compared to 19.3% in Scotland. It also has a relatively smaller working-age population (59.8%) compared to the Scottish average 63.9% respectively.

Table 14.4 Population Estimates, 2020

	Orkney	Scotland
Total	22,400	5,466,000
0-15	16.1%	16.8%
16-64	59.8%	63.9%
65 and over	24.1%	19.3%

Source: National Records of Scotland (2021), Mid-year Population Estimates 2020.

- 14.6.30 By 2043, the population of Orkney is expected to fall by 1.7 % to 21,800, whereas the population of Scotland will increase by 2.5 % to almost 5.6 million people (National Records of Scotland, 2020).
- 14.6.31 Existing differences in the population structures of Orkney and Scotland are expected to persist. While both Scotland and Orkney are expected to have a higher proportion of the population aged 65+, the share in Orkney is projected be significantly higher at around a third (33.2 %) compared to around a quarter in Scotland (24.9 %).
- 14.6.32 The share aged 16-64 is also projected to be lower in Orkney (53.9 %), compared to Scotland (60.3 %). This would represent a decrease in Orkney’s working age population of around 12 %, suggesting that there is a lack of opportunities within the local authority.

Table 14.5 Population Projections, 2018-2043

	Orkney		Scotland	
	2018	2043	2018	2043
Total	22,200	21,800	5,438,100	5,574,800
0-15	16.0 %	13.0 %	16.9 %	14.8 %
16-64	60.4 %	53.9 %	64.2 %	60.3 %
65 and over	23.6 %	33.2 %	18.9 %	24.9 %

Source: National Records of Scotland, (2019), Sub-National Population Projections 2018-2043

- 14.6.33 As shown in Table 14.6, in 2020 the rate of economic activity in Orkney was 84.6 %, higher than the Scottish rate of 76.1 %. Unemployment in Orkney was also lower (3.1 %) than that of Scotland (4.3 %) (ONS, 2022). However, the mean annual gross pay for full-time workers in Orkney was £27,000, compared to £31,7000 in Scotland (ONS, 2022).

Table 14.6 Economic Indicators,2020

	Orkney	Scotland
Economic Activity Rate (16-64)	84.6%	76.1%
Unemployment Rate (all economically active)	3.1%*	4.3%
Mean Annual Gross Pay (£)**	27,000	31,700

Source: ONS (2021), Annual Population Survey; * model-based estimates; ** ONS (2021) Annual Survey of Hours and Earnings - resident analysis.

- 14.6.34 Around 18.4 % of those in employment in Orkney work within the agriculture, forestry and fishing sector, as opposed to 3.1 % in Scotland as a whole, with fishing accounting for 3.5 % of the total employment in Orkney (ONS, 2021). Orkney has a higher share of the population employed in construction (6.6 %), compared to Scotland as a whole (5.1 %), which suggests that it may be well-placed to benefit from balance of plant contracts.

Table 14.7 Industrial Structure, 2020

	Orkney	Scotland
Agriculture, forestry and fishing	18.4 %	3.1 %
Human health and social work activities	14.5 %	16.1 %
Wholesale and retail trade; repair of motor vehicles and motorcycles	12.6 %	13.7 %
Public administration and defence; compulsory social security	7.7 %	6.2 %
Transportation and storage	7.0 %	4.3 %
Education	7.0 %	8.0 %
Construction	6.6 %	5.1 %
Accommodation and food service activities	5.4 %	7.1 %
Professional, scientific and technical activities	4.6 %	7.0 %
Administrative and support service activities	3.5 %	7.0 %
Manufacturing	3.5 %	7.7 %
Arts, entertainment and recreation	2.9 %	2.2 %
Information and communication	1.9 %	3.5 %
Other service activities	1.2 %	1.7 %
Electricity, gas, steam and air conditioning supply	1.0 %	0.8 %
Real estate activities	0.8 %	1.5 %
Mining and quarrying	0.7 %	1.1 %
Financial and insurance activities	0.5 %	3.1 %
Water supply, sewerage, waste management and remediation activities	0.4 %	0.7 %
Total	13,000	2,544,000

Source: ONS, (2021). Business Register and Employment Survey 2020.

Fuel Poverty

- 14.6.35 Fuel poverty is defined as spending over 10 % of household income on fuel, and extreme fuel poverty is defined as spending over 20 % of income.
- 14.6.36 The main causes of fuel poverty are low incomes, high fuel costs, and poor energy efficiency. Remote communities face different expenditure profiles than urban communities. Communities living in rural and island settings typically spend more on electricity, due, for instance, to higher user system charges and the absence of a gas grid. These problems can compound, as money spent on fuel reduces the amount that low-income households can invest in energy-saving measures, with the

housing stock being relatively older (Highlands and Islands Enterprise, 2016). Fuel poverty can also be linked to serious health complications, and it is estimated that every £1 invested in property improvements can reduce health spending by £0.42 (Liddell, 2008).

14.6.37 Despite substantial income from the energy sector, Orkney has the highest fuel poverty rate in Scotland, with data from the Scottish House Condition Survey (SHCS) (Scottish Government, 2021) from 2017-2019 finding that:

- 31 % of the 10,000 households in Orkney are in fuel poverty (about 3,300), rising to 41% among older households;
- 20 % of all households are in extreme fuel poverty, rising to 38% among all pension-aged households;
- 52 % of Orkney dwellings failed to meet the Scottish Housing Quality Standard (SHQS); and
- 59 % of dwellings are in a state of disrepair, with 26% in urgent disrepair and 11% in extensive disrepair.

14.6.38 In 2017, THAW Orkney, a charity established in 2014 to assist fuel poor households in Orkney, prepared a report outlining how fuel poverty might be addressed by deploying community benefit funds from renewable energy projects. THAW's work confirms that fuel poverty is a serious issue, which often requires substantial investment. From the 1st of August 2020 to the 31st July 2020 THAW had 421 clients, of which 61% were in fuel poverty, and 45 % were classed as being in extreme fuel poverty (THAW, 2021).

Summary Socio-Economic Baseline

14.6.39 The population in Orkney is relatively older than in the rest of Scotland, and the working age population is expected to decrease more quickly than for Scotland as a whole, suggesting a lack of high-quality employment opportunities. While labour market outcomes in Orkney compare favourably with Scotland as a whole, wages are relatively low suggesting a need for higher productivity jobs as discussed in Scotland's new economic strategy. In addition, living costs are higher than elsewhere in Scotland, due to higher energy and fuel costs and transport costs, contributing to Orkney's high rates of fuel poverty compared to Scotland.

Tourism Strategies

Scotland's Outlook 2030

14.6.40 In 2020 the Scottish Tourism Alliance, a collaborative network of industry experts, published Scotland's Outlook 2030 (Scottish Tourism Alliance, 2020), a strategy focused on creating a world-leading tourism sector in Scotland that is sustainable in the long-term. The strategy is focused on four key priorities:

- people;
- places;
- businesses; and
- experiences.

14.6.41 The strategy recognises the effects of climate change, technological advancements, Brexit and changing consumer behaviour on tourism and highlights the need for collaboration between government, communities, and the public and private sectors. There are six conditions that the strategy has highlighted as being crucial for success:

- using technological advancements and information to understand changes and trends in tourist behaviours;

- ensuring policies are in place that support the vision;
 - enabling investment opportunities into Scotland’s tourism market;
 - improving transport and digital infrastructure;
 - greater collaboration between businesses in the industry; and
 - positioning Scotland as a great place to live and visit locally and globally.
- 14.6.42 A main commitment of the Strategy is to address the effects of energy demand associated with tourism and make the sector commit fully to Scotland’s ambition of becoming a net-zero society by 2045.

Destination Orkney – Orkney Tourism Strategy Summary

14.6.43 The Orkney Tourism Strategy (VisitScotland, 2020) sets out the ambitions for the tourism sector for the period 2020-2025. The vision of the partnership of tourism industry businesses and public sector organisations that prepared the strategy is: "By 2025, Orkney will be a world-class sustainable destination enriching the lives of its people and visitors".

- 14.6.44 The objectives of the strategy are to:
- increase economic prosperity of the islands;
 - extend the visitor season and increase visitor spend;
 - sustainably manage visitor numbers to protect the quality of experience, the key sites and routes to the sites, for visitors and local residents;
 - disperse the benefits of tourism throughout the whole of Orkney; and
 - conserve and enhance the islands’ natural and cultural heritage.

Tourism in Orkney

- 14.6.45 As found by a survey undertaken by VisitScotland (VisitScotland, 2020), there were around 192,000 domestic and international overnight and day visitors to Orkney, with around two thirds being leisure visitors. In total, they spent an estimated £67 million in Orkney.
- 14.6.46 This does not include cruise passengers. Though passenger numbers for 2019 are not available, in this year there were 163 ships docked (Orkney Islands Council, 2021). In 2017, when 138 ships docked there were 160,000 visitors (Orkney Islands Council, 2019).
- 14.6.47 In 2020, 1,000 people in Orkney were employed in sustainable tourism (tourism related industries) (Scottish Government, 2021). This represented 0.5% of all sustainable tourism employment in Scotland in 2020 (Orkney accounts for 0.4% of Scotland’s population) and accounted for 13% of total employment in Orkney in 2020.
- 14.6.48 This year (2020) was impacted by the restrictions imposed by the Covid-19 pandemic, with the tourism industry being particularly affected by significant operating restrictions, which has resulted in a reduction in tourism employment, as can be seen in Table 14.8 (the figures for Orkney should be interpreted with caution due to rounding).

Table 14.8 Sustainable Tourism Statistics, 2019/20

	Orkney	Scotland
Employment (jobs)	1,000 (*1,500)	189,000 (*229,000)

Source: Scottish Government (2022). Growth Sector Statistics. *2019 data.

- 14.6.49 The visitor survey also found that Kirkwall, Stromness and other areas on the mainland are the most visited areas of Orkney. The top five reasons for visiting Orkney, as recorded by the survey, include:
- the scenery and landscape (62 %);
 - the history and culture (57 %);
 - always wanted to visit (56 %);
 - to visit a particular attraction (33 %); and
 - interest in archaeology (31 %).

Visitor Attractions

- 14.6.50 The visitor survey also provides evidence on the most popular visitor attractions in Orkney.
- 14.6.51 The survey shows that the attractions most frequently visited by leisure visitors were the Ring of Brodgar (82 %), Skail House/Skara Brae (75 %) and St Magnus Cathedral (70 %). The Italian Chapel (62 %), public museums/heritage centres (46 %) and Bishop’s Palace/Earl’s Palace (40 %) were also popular attractions.
- 14.6.52 A total of 20 visitor attractions were identified within a 15 km radius of the Proposed Development, including the Ring of Brodgar, Skara Brae and Bishop Earl’s Palace. The attractions were identified through a search of the Visit Scotland website and are described in Table 14.9, along with their distance from the site. These predominantly include archaeological and cultural heritage sites, nature reserves and local museums.

Table 14.9 Visitor Attractions Within 15 km of the site

Attraction	Description	Distance from site (km)
Kirbuster Museum	Remnants of a traditional ‘firehouse’ with Neolithic interiors and outdoor activities for visitors.	2 km
RSPB Birsay Moors	Wild moorland area known for bird-watching.	3 km
Barony Mill	A beremeal producing mill that provides tours to visitors during the summer months.	4 km
Click Mill	A preserved 1800’s water mill.	4 km
Birsay Earl’s Palace	Historic castle that was once the residence of Mary Queen of Scots’ half-brother.	5 km
RNAS Twatt (HMS Tern)	A memorial and control tower dating back to the second world war with tours available to visitors.	5 km
Kitchener Memorial	Memorial site for Lord Kitchener, minister of war, who died aboard the HMS Hampshire.	7 km
RSPB Scotland Marwick Head Nature Reserve	A coastal area with the largest seabird colony on Mainland.	7 km

Attraction	Description	Distance from site (km)
Broch of Gurness	An archaeological heritage site from the iron ages with an on-site visitor centre.	7 km
Corrigall Farm Museum	A traditional farmhouse steading dating back to the Victorian era.	7 km
Midhowe Tomb and Chambered Cairn	The largest Neolithic chambered cairn on Rousay	7 km
RSPB Scotland Cottascarth	Nature reserve featuring a variety of wildlife and birds of prey.	9 km
Skara Brae	A well-preserved 5,000 year old settlement on the western half of Mainland, which is part of Orkney's UNESCO World Heritage Site.	10 km
Fernvalley Wildlife Centre	A family run local animal centre featuring an array of exotic rescue animals.	10 km
Ring of Bookan	A prehistoric stone henge near to the Tind of Brodgar.	12 km
Trumland House	Located in Rousay, Trumland House features scenic gardens and a picnic area for visitors.	12 km
RSPB Scotland Trumland	A nature reserve in Rousay that is home to various species of breeding birds during the summer months.	13 km
Ring of Brodgar	A stone ring dating back to 2500-2000BC which is part of Orkney's UNESCO World Heritage Site.	13 km
Maeshowe Visitor Centre	Visitor tours around the Maeshowe Chambered Cairn, one of the four monuments that form the Heart of Neolithic Orkney World Heritage Site.	15 km
Cuween Hill Chambered Cairn	A chambered cairn over 5,000 years old.	15 km

Recreational Trails and Core Paths

- 14.6.53 A web-search of WalkHighlands.com (Walkhighlands, 2022) identified 11 recreational trails that lie within 15 km of the Proposed Development: five of which are found on the mainland, five on Rousay and one on Wyre.

- 14.6.54 On the mainland, the five recreational trails located within 15 km of the Proposed Development are:
- The Brough of Birsay and Earl’s Palace, a 5.8 km walk around 4-5 km to the west of the Proposed Development;
 - West Coast Walk Stage between Stromness, and Birsay, a 32.2 km walk around 5 km to the west of the Proposed Development;
 - Marwick Head and the Kitchener Memorial, a 5.2 km walk around 7 km to the south-west of the Proposed Development;
 - The Ring of Brodgar to Maes Howe, a 4.6 km walk around 13-14 km to the south of the Proposed Development; and
 - Binscarth Wood, Finstown, a 3.8 km walk around 12-13 km to the south-east of the Proposed Development.
- 14.6.55 On Rousay, to the north-east of the Proposed Development, there are five recreational trails located within 15 km of the Proposed Development. These include:
- Mid Howe Broch and Cairn on the west of the island, a 5.3 km walk around 7 km from the Proposed Development;
 - Sacquoy Head on the north of the island, a 6.6 km walk around 10 - 11 km from the Proposed Development;
 - Faraclett Head on the north-east of the island, a 3.5 km walk around 14 km from the Proposed Development;
 - Knitchen Hill, Blotchnie Field and Trumland Reserve on the south-east of the island, a 7.4 km walk around 11 km from the Proposed Development; and
 - The Tombs of Rousay on the west of the island, an 8.0 km walk around 9-10 km from the Proposed Development.
- 14.6.56 On Wyre, the Cubbie Roo’s Castle and The Taing is a 7.5 km recreational trail located approximately 11 km from the Proposed Development.
- 14.6.57 St Magnus Way is a long-distance trail through Mainland Orkney, which follows the path taken by the saint, beginning at the Broch of Gurness, following the coast to Birsay then passing through Twatt, Dounby, Finstown and Orphir, before finishing at Kirkwall. The trail is 93 km in length and, at its closest point, passes approximately 2 km from the Proposed Development.
- 14.6.58 No core paths pass within the Proposed Development boundary.

Accommodation Providers

- 14.6.59 Through VisitScotland (VisitScotland, 2022) and a wider web search, a total of 64 accommodation providers were identified within 15 km of the Proposed Development. This includes three hotels, three hostels and caravan/camp sites and 58 self-catered accommodation facilities. The closest, Lochview Apartment and Rymmon Lodge, were identified within 1 km of the Proposed Development.
- 14.6.60 Accommodation providers are grouped by local settlement areas in Table 14.10.

Table 14.10 Accommodation Providers within 15 km of the Proposed Development

Location	Hotels	Caravan/Camp Sites & Hostels	Self-Catering Cottages/B&Bs	Total	Approximate Distance to Proposed Development (km)
Costa/Loch of Swannay	-	-	4	4	1-3 km
Swannay	-	-	3	3	1-2 km
Loch of Banks	-	-	2	2	4-5 km
Birsay	-	2	5	7	4-6 km
Evie	-	1	4	5	4-7 km
Loch of Isbister	-	-	3	3	6-7 km
North of Loch of Harray	1	-	6	7	6-9 km
Woodwick	-	-	4	4	8-10 km
Rousay	1	-	-	1	9 km
East of Loch of Harray	-	-	8	8	9-14 km
West of Loch of Harray	-	-	3	3	10-11 km
Bay of Isbister	-	-	7	7	11-14 km
Finstown	-	-	7	7	14-15 km
Stenness	1	-	2	3	15 km
Total	3	3	58	64	

Summary of Tourism and Recreation Baseline

14.6.61 Tourism is a significant part of Orkney’s economy, though it has been affected by the Covid-19 pandemic. Visitors are attracted to the island for its historic past and Neolithic archaeological sites, some of which can be found within 15 km of the Proposed Development.

14.7 Standard Mitigation

14.7.1 No standard mitigation will be required on socio-economic and tourism grounds.

14.8 Receptors Brought Forward for Assessment

14.8.1 The socio-economic assessment is for the two Study Areas: Orkney and Scotland. Given the relatively small size of the Orkney economy, which has around 13,000 jobs, it has been assessed as medium sensitivity. Given the size of the Scottish economy, with over 2.5 million jobs, it has been assessed as negligible sensitivity.

14.8.2 The Assessment also considers effects on tourism assets, such as visitor attractions, accommodation clusters and recreational trails. Unless stated otherwise these are assumed to be of mainly local importance, and therefore are considered low sensitivity.

14.9 Potential Effects

Socio-economics

Construction

14.9.1 The Proposed Development consists of four turbines, each with a capacity of up to 6.6 MW, giving a combined capacity of 26.4 MW. Using research undertaken by BiGGAR Economics on behalf of RenewableUK in 2015 (RenewableUK, 2015) and more recent data from evaluations of onshore wind farm developments, the average expenditure on construction and development of wind farms can be estimated based on the average spend per MW, the average spending per turbine, or a combination of the two, as appropriate. On the basis of this methodology, the total construction and development cost for the Proposed Development was estimated to be £24.8 million.

14.9.2 The expenditure was split into four main categories of contract:

- development and planning;
- balance of plant;
- turbines; and
- grid connection

14.9.3 The proportion of construction and development spending that is spent on each of the main categories was also informed by BiGGAR Economics' research into operational wind farms. As shown in Table 14.11, it was assumed that 57.6 % of capital expenditure (Capex) would be on turbine contracts, with 25.5 % spend on balance of plant contracts, 8.8 % on development and planning and 8.2 % on grid connections.

Table 14.11 Development and Construction by Contract Type

	% Capex	Value of Proposed Development (£m)
Development and Planning	8.8	2.2
Turbines	57.6	14.3
Balance of Plant	25.5	6.3
Grid Connections	8.2	2.0
Total	100	24.8

Source: BiGGAR Economics Analysis. *Totals may not add up due to rounding.

14.9.4 The economic impact of the construction and development phase was estimated for Orkney and Scotland as a whole. In order to do this, it was necessary to estimate the proportion of each type of contract that might be secured in each of the study areas. The assumptions were based on the average from the RenewableUK research, analysis of the industries and professions in each study area, and BiGGAR Economics' previous experience undertaking such analysis for other wind energy projects in Orkney.

14.9.5 Orkney is expected to benefit from contracts relatively more than would be the case in other local authority areas given that its geographical position makes it less likely that spending will spill over to neighbouring local authority areas. To estimate the expenditure for each contract in each of the study areas these percentages were applied to the estimated size of each component contract.

14.9.6 On this basis, it was estimated that Orkney could secure contracts worth up to £3.3 million, equivalent to 13 % of total capital expenditure. The largest opportunities would be the contracts related to balance of plant, as companies in the area could secure up to 30 % of contracts, worth £1.9 million.

14.9.7 Scotland (including Orkney) was estimated to secure £10.2 million, equivalent to 41 % of total capital expenditure. The largest opportunity would be balance of plant contracts, worth around £5.6 million.

Table 14.12 Development and Construction by Study Area (£m)

	Orkney		Scotland	
	%	£m	%	£m
Development and Planning	33	0.7	82	1.8
Turbines	3	0.4	10	1.5
Balance of Plant	30	1.9	88	5.6
Grid Connections	14	0.3	69	1.4
Total	13	3.3	41	10.2

Source: BiGGAR Economics Analysis. *Totals may not add up due to rounding.

14.9.8 To estimate the direct GVA from each of the main contract categories, each contract was split into sub-contracts. Using industry-specific data on turnover and Gross Value Added (GVA) from the Scottish Annual Business Statistics (Scottish Government, 2020), turnover/GVA ratios were applied to each specific sub-contract in order to estimate GVA.

14.9.9 In this way, it was estimated that construction and development contracts could generate £1.7 million direct GVA in Orkney and £5.2 million direct GVA in Scotland as shown in Table 14.13.

Table 14.13 Direct GVA by Contract Type and Study Area (£m)

	Orkney	Scotland
Development and Planning	0.5	1.1
Turbines	0.2	0.8
Balance of Plant	0.9	2.8
Grid Connections	0.1	0.6
Total	1.7	5.2

Source: BiGGAR Economics Analysis. *Totals may not add up due to rounding.

14.9.10 Similarly, the contract values potentially awarded in each area would support employment. Turnover per employee for each of the industries involved is also given by the Scottish Annual Business Statistics (Scottish Government, 2020), which allows the employment from any increase in turnover to be estimated.

- 14.9.11 The employment impacts during the construction and development phase are reported in years of employment as the contracts would be short-term. Years of employment measures the number of years of full-time employment generated by a project. For example, an individual working on this project for 18 months would be reported as 1.5 years of employment.
- 14.9.12 In this way, it was estimated that the Proposed Development could support 23 direct years of employment in Orkney, and 80 direct years of employment in Scotland.

Table 14.14 Development and Construction Employment by Contract Type and Study Area (Years of Employment)

	Orkney	Scotland
Development and Planning	2	10
Turbines	5	16
Balance of Plant	14	41
Grid Connections	2	13
Total	23	80

Source: BIGGAR Economics Analysis.

- 14.9.13 There would also be knock on effects in the supply chain and from spending by employees in the local economy. These effects are estimated by applying Type I (indirect) and Type II (indirect and induced) GVA and employment multipliers, which are sourced from the Scottish Government (Scottish Government, 2018), to the direct GVA and employment impacts.
- 14.9.14 In order to adjust these multipliers, which consider the national economy, for the economy of Orkney it was assumed that indirect multiplier effects would be 33 % of the national impact, and induced multiplier effects, which consider the effect of local spending, would be 70 % of the national impact.
- 14.9.15 Adding together direct, indirect and induced impacts, it was estimated that the Proposed Development could generate a total £2.2 million GVA and support 28 years of employment in Orkney and £7.2 million GVA and 106 years of employment in Scotland.

Table 14.15 Total GVA Impacts (£m)

	Orkney	Scotland
Direct	1.7	5.2
Indirect	0.2	0.9
Induced	0.2	1.1
Total	2.2	7.2

Source: BIGGAR Economics Analysis.

Table 14.16 Total Employment Impacts (years of employment)

	Orkney	Scotland
Direct	23	80
Indirect	3	13
Induced	2	13
Total	28	106

Source: BiGGAR Economics Analysis.

- 14.9.16 Considering the relative size of the economy in the two study areas, the magnitude of socio-economic impacts from the construction and development of the Proposed Development were assessed as low in Orkney (**minor** effect), and negligible in Scotland as a whole (**negligible** effect).

Operation

- 14.9.17 The operation and maintenance impact of the Proposed Development was estimated as the impact that would persist throughout the lifespan of the Proposed Development.
- 14.9.18 Annual expenditure on operations and maintenance was estimated based on analysis undertaken in the 2015 RenewableUK report. It was estimated that the annual operations and maintenance expenditure associated with the Proposed Development could be up to £1.1 million (which excludes community benefit payments and non-domestic rates).
- 14.9.19 In order to estimate the economic impact of the operation and maintenance expenditure in Orkney and Scotland, it was first necessary to estimate the proportion of contracts that could be secured in each of these areas. These assumptions were based on the contract proportions reported in the RenewableUK report, the analysis of the industries present in each of the study areas, as well as previous experience BiGGAR Economics had on onshore renewable wind farms in Orkney.
- 14.9.20 On this basis it was estimated that Orkney could benefit from £0.3 million in operations and maintenance contracts, with Scottish businesses potentially benefitting from £0.8 million.

Table 14.17 Operations and Maintenance Spending by Study Area

	Orkney	Scotland
Turnover (£m)	0.3	0.8
Share (%)	31	69

Source: BiGGAR Economics Analysis.

- 14.9.21 As with the construction phase, the contract values awarded in each of the study areas represent an increase in turnover in those areas. The economic impact of the increase in turnover on GVA and employment was estimated in the same way as the construction expenditure, using the Scottish Annual Business Statistics (Scottish Government, 2020).
- 14.9.22 In this way it was estimated that turnover generated by the operation and maintenance of the Proposed Development could support £0.2 million GVA and 2 jobs in Orkney, and £0.4 million GVA and 5 jobs in Scotland.

Table 14.18 Annual Operations and Maintenance Direct Impact

	Orkney	Scotland
GVA (£m)	0.2	0.4
Employment	2	5

Source: BIGGAR Economics Analysis.

- 14.9.23 There would also be indirect and induced impacts during the operation and maintenance of the Proposed Development, which were estimated using the same method as for the development and construction phase.
- 14.9.24 By applying relevant economic multipliers, it was estimated that each year the spending required for the operation and maintenance of the Proposed Development could support £0.2 million GVA and 2 jobs in Orkney, and £0.6 million GVA and 7 jobs in Scotland.

Table 14.19 Annual Economic Impact during Operations and Maintenance

	Orkney	Scotland
GVA (£m)	0.2	0.6
Employment	2	7

Source: BIGGAR Economics Analysis.

- 14.9.25 Considering the relative size of the economy in the two study areas, the magnitude of socio-economic impacts from the operation and maintenance of the Proposed Development were assessed as negligible in Orkney (**negligible** effect), and negligible in Scotland as a whole (**negligible** effect).

Community Benefit Fund

- 14.9.26 In its publication outlining good practice principles for community benefits arising from onshore wind developments (Scottish Government, 2019), the Scottish Government discusses the approach that developers should take when developing community benefits proposals with the local community. The ultimate aim of a community benefits package should be to achieve a lasting legacy for communities.
- 14.9.27 In line with Scottish Government recommendations, the Applicant has committed to offering £5,000 per MW per year in community benefits for the local area. This is equal to around £132,000 annually, or £5.3 million during the 40-year operational lifetime of the Proposed Development.
- 14.9.28 The Applicant is in discussions with the local community about how this funding can best be used to support the local community. This may involve targeted measures to address fuel poverty, such as grants to improve energy efficiency.

Non-Domestic Rates

- 14.9.29 The Proposed Development would be liable for non-domestic rates, the payment of which would contribute directly to public sector finances. There is some uncertainty about the future non-domestic rates paid by onshore wind developments, but based on discussions with industry a conservative assumption would be £7,000 per MW.
- 14.9.30 Using this estimate, the Proposed Development would contribute £0.2 million annually through the payment of non-domestic rates. Over the project's 40 year operational lifetime it would contribute £7.4 million.

14.9.31 In the context of total public spending in Orkney and Scotland, the payment of non-domestic rates has been assessed as **negligible**.

Tourism and Recreation Effects

Wind Farms and Tourism Evidence

14.9.32 A study of the potential effects of wind farms on tourism was undertaken by the Moffat Centre at Glasgow Caledonian University in 2008 (Glasgow Caledonian University/Moffat Centre, 2008). The study was based on effects that could happen and found that, although there may be minor effects on tourism providers and a small number of visitors may not visit Scotland in the future, the overall effect on tourism expenditure and employment would be very limited. This study is now over a decade old and in the intervening time wind farms have become a more common feature in Scotland. As such, it would be expected that any adverse effects on the tourism economy would now be apparent.

14.9.33 In 2021 BiGGAR Economics published new research on wind farms and tourism in Scotland (BiGGAR Economics, 2021). The study was undertaken to understand the relationship between the development of onshore wind energy and the tourism sector in Scotland and investigated whether there was a relationship between trends in tourism employment and wind farm development.

14.9.34 The study notes that since 2009, the onshore wind sector has expanded considerably in Scotland, from an installed capacity of 1.75 Gigawatts (GW) in 2009 to 8 GW in 2019. Employment in tourism in Scotland also grew during these periods, by 19.7 % between 2009 and 2019, including by 3.0 % between 2015 and 2019.

14.9.35 The research identified 16 wind farms with a capacity of at least 10 megawatts (MW) that became operational between 2015 and 2019. Analysis of trends in tourism employment in the locality of these wind farms (study areas were based on a 15km radius) found that 11 of the 16 areas had experienced more growth in tourism employment than for Scotland as a whole. For 13 of the 16 wind farms, trends in tourism employment in the locality had outperformed the local authority area in which they were based.

14.9.36 The research also re-examined the 28 wind farms considered in an earlier 2017 report, again finding that the localities in which they were based had outperformed Scotland and their local authority areas in the majority of cases. Moreover, the analysis found that in the six areas which had underperformed their local authority areas in the 2017 study, all had done better than their local authorities in the 2015 to 2019 period.

14.9.37 Overall, this research has analysed trends in tourism employment in the localities of 44 wind farms developed in recent years, providing a substantial evidence base. The study found no relationship between tourism employment and wind farm development, at the level of the Scottish economy, across local authority areas nor in the locality of wind farm sites.

Tourism and Recreation Assets

14.9.38 This section considered whether the Proposed Development would have any effect on tourism and recreation assets, including local visitor attractions, trails, tourism routes and accommodation providers, as identified in Section 14.6. The assessment includes consideration of whether the Proposed Development is likely to result in changes to tourism behaviour and motives for visiting particular attractions or accommodation.

Visitor Attractions

14.9.39 The baseline analysis identified 20 visitor attractions that are located within 15 km of the Proposed Development.

14.9.40 Approximately 2 km from the Proposed Development is the Kirbuster Museum. The attraction is the only un-altered 'firehoose' left in Northern Europe and features traditional interior. It also has outdoor activities for visitors and is free to access. The main motivations for visiting the site are the

- opportunity to experience what it would have been like to live in Orkney in historic times which is unlikely to be affected by the Proposed Development (negligible impact). Therefore, the effect of the Proposed Development on the attraction has been assessed as **negligible**.
- 14.9.41 Nature site RSPB Birsay Moors is approximately 3 km from the Proposed Development. The attraction is known for its variety of bird-watching opportunities and scenic views over Orkney from Mid Hill. Motivations for visiting the nature reserve are unlikely to be affected by the Proposed Development (negligible magnitude) and therefore its effect on tourism has been assessed as **negligible**.
- 14.9.42 The Barony Mill is a traditional water mill that produces beremeal and is located approximately 4 km from the Proposed Development. The attraction has been around since 1873 and is Orkney's only existing working water mill, providing tours and demonstrations of the machinery to the public in the summer months. The motivations for visiting the historic attraction are likely to undertake the unique tour, a feature which will not be affected by the Proposed Development (negligible magnitude). Therefore, the effect on tourism has been assessed as **negligible**.
- 14.9.43 The Click Mill is a Historic Environment Scotland attraction, located approximately 4 km from the Proposed Development of the Proposed Development. The restored 1800s water mill is the only of its kind on the island to still have all its internal apparatus that are of working order, including a waterwheel. Motivations for visiting the attraction are its historic nature, with a chance to see a rare, working water mill on the island. Such motivations will not be affected by the Proposed Development (negligible magnitude) and therefore the effect on tourism has been assessed as **negligible**.
- 14.9.44 Earl's Palace, in Birsay, is a Historic Environment Scotland site located approximately 5 km from the Proposed Development. The Palace was once home to the half-brother of Mary Queen of Scots during the 1500s and still has much of its original walls. The historic draw of the attraction and its links to Scotland's past will not be altered by the Proposed Development (negligible magnitude) and therefore its effect on tourism has been assessed as **negligible**.
- 14.9.45 The Royal Naval Air Station, *Twatt*, was part of the Royal Navy's presence in Orkney during World War Two and is located approximately 5 km from the Proposed Development. The historic airfield was primarily used as a training base for the Navy, as well as forming part of Orkney's defence. It is now open for the public to visit with guided tours available of the Control Tower. Visitors to the site are unlikely to be deterred by the Proposed Development as the features of the attraction will remain unchanged (negligible magnitude) and therefore its effect on tourism has been assessed as **negligible**.
- 14.9.46 Located approximately 7 km from the Proposed Development is the Kitchener Memorial. The memorial site is in homage to Lord Kitchener, minister of war, and others who were aboard the HMS Hampshire when it sank in 1916. Motivations for visiting the memorial site are its reference to a historical figure and this will not be affected by the Proposed Development (negligible magnitude). Therefore, its effect on tourism has been assessed as **negligible**.
- 14.9.47 The RSPB Scotland Marwick Head Nature Reserve is approximately 7 km from the Proposed Development. The attraction is situated along the west coast of Mainland and has clifftop views out to the sea. It is attractive for nature lovers with a seabird colony and chances to spot whales and dolphins in the sea below. The nature attraction and sea views will be uninhibited by the Proposed Development (negligible magnitude) and therefore its effect on tourism has been assessed as **negligible**.
- 14.9.48 The Broch of Gurness is located approximately 7 km west of the Proposed Development. The Historic Environment Scotland site is open to the public during the summer months and is one of Orkney's archaeological sites dating back to the Iron Ages. It is one of the best-preserved brochs in Scotland and features artefacts from pre-historic times. Opportunities to explore the island's ancient artefacts will not be affected by the Proposed Development (negligible magnitude) and therefore its effect on tourism has been assessed as **negligible**.

- 14.9.49 Corrigall Farm Museum is a traditional Orkney farmhouse with origins dating back to the Victorian era. It is located approximately 7 km from the Proposed Development and features a working barn and livestock on-site. The attraction is currently closed to the public and effects on tourism to the attraction from the Proposed Development have been assessed as **negligible**.
- 14.9.50 RSPB Scotland Cottascarth is a nature reserve located approximately 9 km south-east of the Proposed Development. The reserve is attractive for visiting the island’s wildlife, including birds of prey such as merlins, kestrels and hen harriers, and also has views over to the North Isles. These featured are unlikely to be affected (negligible magnitude) and therefore the effect of the Proposed Development has been assessed as **negligible**.
- 14.9.51 Skara Brae is one of the Islands’ top tourist attractions and is located around 10 km from the Proposed Development. It is considered to be regionally important (medium sensitivity). The attraction is known as the best-preserved Neolithic settlement in Western Europe and features a replica of how a Neolithic house may have looked. Motivations for visiting the site are its opportunity to explore how island living may have looked thousands of years ago, an aspect that is not likely to be affected by the Proposed Development (negligible magnitude). The effect of the Proposed Development on tourism has therefore been assessed as **negligible**.
- 14.9.52 Fernvalley Wildlife Centre is a local animal centre located approximately 10 km south-east of the Proposed Development. It is home to a range of animal species, many of which had come from rescue centres, and also has a tearoom for visitors. Motivations for visiting the attraction are to see the range of animals and this won’t be altered by the Proposed Development (negligible magnitude). Therefore, its effect on tourism has been assessed as **negligible**.
- 14.9.53 The Ring of Bookan is a prehistoric henge located around 12 km from the Proposed Development. The exact traditions of the site are still unknown, but it is thought that it is connected with the Standing Stones of Stenness. Motivations for visiting the site are not expected to be affected by the Proposed Development (negligible magnitude) and therefore the effect has been assessed as **negligible**.
- 14.9.54 The Ring of Brodgar is one of Orkney’s most visited tourist attractions (medium sensitivity) and is located 13 km south of the Proposed Development. The prehistoric monument dates back to the 3rd millennium BC and is part of the Heart of Neolithic Orkney World Heritage Site. The historic and cultural attraction of the Site and its unique stone circle landscape are likely the key motivations for visiting the site, which will be unaffected by the Proposed Development (negligible magnitude). Therefore, the effect on tourism has been assessed as **negligible**.
- 14.9.55 Maeshowe Chambered Cairn and Visitor Centre is located approximately 15 km south of the Proposed Development. The ancient cairn is open to visitors who can enter the tomb. It is part of the Heart of Neolithic Orkney World Heritage Site and situated amongst the three other Neolithic sites. Motivations for visiting the site are unlikely to be affected by the Proposed Development as its historic buildings and heritage status will not be changed (negligible magnitude). Therefore, the effect on tourism has been assessed as **negligible**.
- 14.9.56 Cuween Hill Chambered Cairn is a Neolithic burial tomb located around 15 km from the Proposed Development. The ancient traditions of Orkney’s ancestors and the stonework of the tomb are the key attractions to the site. Motivations to visit the attraction are unlikely to be affected by the Proposed Development (negligible magnitude) and the effect on tourism has been assessed as **negligible**.
- 14.9.57 Three visitor attractions (Midhowe Tomb and Chambered Cairn, RSPB Scotland Trumland and Trumland House) were identified on the island of Rousay, between 7 and 13 km west of the Proposed Development. The closest attraction to the Proposed Development is Midhowe Tomb and Chambered Cairn. The historic cairn is the largest of the 15 chambered cairns on the island and an attraction for its archaeological and cultural background. RSPB Trumland attracts visitors particularly in the summer months when it features a number of breeding birds and owls. The site is principally an attraction for nature lovers, as are the Trumland House Gardens which features woodlands and water gardens, complete with a picnic area. The main attractions to these sites are

their historic origins, tranquil settings and the opportunity to see local wildlife. These motivations are unlikely to be affected by the Proposed Development (negligible magnitude) and therefore its effect on attractions in Rousay has been assessed as **negligible**.

Accommodation Providers

- 14.9.58 The research on wind farms and tourism finds no evidence of negative impacts on the tourism sector. Nevertheless, this section considers whether there are locations where tourism behaviour in relation to the choice of accommodation provider may change. The proposition that accommodation providers in the area utilise, particularly in relation to their marketing, is therefore relevant to assessing whether any tourist behaviour changes might be expected.
- 14.9.59 The baseline identified 64 accommodation providers that are located within 15 km of the Proposed Development, the vast majority of which (58) are self-catered providers.
- 14.9.60 Around the areas of Costa and Swannay, seven self-catered accommodation providers lie within 1-3 km of the Proposed Development. Lochview apartment, which markets itself on its tranquil setting and fishing opportunities in the loch faces directly at the Proposed Development and is less than 1 km from the Proposed Development. The other six providers market themselves on their tranquillity and panoramic views of local farmland, the loch, and the sea, in addition to their onsite activities such as fishing and birdwatching. Some key features, such as views of the surrounding farmland, may be affected and therefore the impact has been assessed as low. Therefore, the effect has been assessed as **negligible**.
- 14.9.61 Around Loch of Banks, approximately 4-5 km south-west of the Proposed Development, are two self-catered accommodation providers. These providers market themselves on their central location on the island and close proximity to local amenities, tourist attractions and ferry ports. Such offerings will not be affected by the Proposed Development and therefore unlikely to change visitor motivations for staying at the accommodation providers (negligible magnitude). Therefore, the effect of the Proposed Development on the accommodation providers has been assessed as **negligible**.
- 14.9.62 There are a further seven accommodation providers identified in Birsay, approximately 4-6 km east of the Proposed Development. They include five self-catered accommodation providers, Birsay Outdoor Centre Campsite and the SYHa - Birsay youth hostel. The main attractions of these providers are their proximity to the coastline and scenic views over the North Atlantic Sea and to the Brough of Birsay. The Birsay Outdoor Centre Campsite and SYHa - Birsay youth hostel are both seasonal accommodation providers for visitors and market themselves on their on-site facilities and convenient location for somewhere to stay whilst exploring the island. The locational advantages of the providers are unlikely to be affected by the Proposed Development as it will not inhibit the coastal view of these providers, nor are any effects expected on any of the providers' other attractions (negligible magnitude). Therefore, the effect of the Proposed Development on accommodation providers located in Birsay have been assessed as **negligible**.
- 14.9.63 A total of five accommodation providers in Evie are located 4-7 km south-east from the Proposed Development. This includes two self-catered providers, Castlehill B&B and Stonehigh Campsite. The main attractions of these providers in the area are their proximity to Evie beach and views out over the sea to the Isle of Rousay, quiet farmland location and bird watching opportunities. Such attractions are unlikely to be altered by the Proposed Development (negligible magnitude) and therefore its effect on the providers has been assessed as **negligible**.
- 14.9.64 There are three self-catered accommodation providers located around the Loch of Isbister, approximately 6-7 km from the Proposed Development. The three providers market the accommodation on their tranquil, rural settings with nearby farmland and wildlife spotting opportunities, in addition to their proximity to attractions such as Marwick Head RSPB bird reserve, the Kitchener Memorial. The distance to these sites and rural attractions of the accommodation providers are not going to be altered by the Proposed Development and therefore unlikely to result in changes to visitor behaviour (negligible magnitude). Therefore, the effect of the Proposed Development on the accommodation providers has been assessed as **negligible**.

- 14.9.65 Around Loch Harray is a total of 18 accommodation providers located within 6-14 km of the Proposed Development: seven to the North of the Loch, eight to the East and three to the west. Of the 18 providers, 14 are self-catered providers and the remainder include the Merkister Hotel, Kenila B&B, Bedrock B&B and the Orkney Island Memories B&B. The providers' close proximity to many of Orkney's popular attractions, such as Skara Brae, Maeshowe visitor centre, ring of Brodgar and Stones of Stenness are selling points of the providers, in addition to their views over Loch Harray which provides ample opportunities for fishing and bird watching. The Proposed Development is unlikely to cause any effect to these offerings (negligible magnitude) and thus visitor motivations for choosing the accommodation, therefore its effect has been assessed as **negligible**.
- 14.9.66 Around the area of Woodwick is four self-catered accommodation providers, approximately 8-10 km from the Proposed Development. The providers are clustered close to the Broch of Gurness attraction and within a short distance of several other archaeological attractions and sea and island views. As the Proposed Development will be unlikely to affect these aspects of the accommodation providers (negligible magnitude), and thus visitor motivations for booking them, its effect has been assessed as **negligible**.
- 14.9.67 On Rousay, the Taversoe Hotel is located approximately 9 km from the Proposed Development. The hotel markets itself on its panoramic sea views and close proximity to the islands archaeological and nature sites. It is unlikely that there will be any change in visitor behaviour to the Taversoe hotel as the Proposed Development will not affect its offering (negligible magnitude). Therefore, its effect has been assessed as **negligible**.
- 14.9.68 Around the Bay of Isbister, around 11-14 km from the Proposed Development, is six self-catered accommodation providers and Aviedale Cottage B&B. The providers market themselves on their relaxing scenic location with sea-facing views. In addition to the distance of the accommodation providers from the shore, the eastern-facing sea views that the providers market themselves on will be unaffected by the Proposed Development, which is to the north-west of the providers (negligible magnitude). Therefore, the effect of the Proposed Development on accommodation providers around the Bay of Isbister has been assessed as **negligible**.
- 14.9.69 There are six self-catered accommodation providers and the Waterfront House B&B located in Finstown, approximately 14-15 km south of the Proposed Development. The accommodation providers market themselves on their scenic views over the Bay of Firth and North Isles and their centrality to the Orkney's main towns and heritage sites. Given the providers' distance from the Proposed Development and the eastern facing location of the providers no impact is expected (negligible magnitude) and the effect of the Proposed Development has been assessed as **negligible**.
- 14.9.70 Three accommodation providers are located in Stenness, approximately 15 km from the Proposed Development. This includes two self-catered accommodation providers and the Standing Stones Hotel. The main attractions of these providers are their close proximity to the tourist attraction of the Standing Stones, Maeshowe Visitor Centre and the Ring of Brodgar. Given these attractions and the providers' distance from the Proposed Development no impact is expected (negligible magnitude) and the effect of the Proposed Development has been assessed as **negligible**.

Recreational Trails

- 14.9.71 Included in this section is consideration of whether the Proposed Development is likely to affect the use of recreational trails. The primary concern of local residents in relation to these trails is whether the routes will continue to be available in light of the Proposed Development.
- 14.9.72 The baseline identified 11 recreational trails that are up to 15 km from the Proposed Development.
- 14.9.73 The Brough of Birsay and Earl's Palace, a 5.8 km walk around 4-5 km to the west of the Proposed Development. The cliff-side walking trail features a series of historic sites, including the remnants of a Norse settlement, a 12th century church dedicated to Saint Peter and Earl's Palace. There is also a small museum run by Historic Scotland on the route. The historic attractions featured on the route are likely the main motivations for walking the trail and these will not be affected by the Proposed

- Development (negligible magnitude). Therefore, its effect on tourism has been assessed as **negligible**.
- 14.9.74 The West Coast Walk Stage is a long-distance, 32.2 km, trail between Stromness and Birsay. At its closest point, the trail is around 5 km to the west of the Proposed Development. The trail passes along the west coast of Mainland and by popular tourist attractions such as Skara Brae, the Kitchener Memorial and the Brough of Birsay. The motivations for using this trail are likely its long-distance and opportunity to visit tourist attractions along the way. As the Proposed Development has been assessed as having a negligible impact on tourist attractions and the motivations for using the trail unlikely to be deterred (negligible magnitude), its effect on tourism has been assessed as **negligible**.
- 14.9.75 The Marwick Head and the Kitchener Memorial trail is a 5.2 km walk, around 7 km to the south-west of the Proposed Development. The scenic clifftop trail goes through the RSPB nature reserve, provides ample bird-watching opportunities and ends at the Kitchener Memorial site. Such features are unlikely to be affected by the Proposed Development (negligible magnitude) and therefore its effect on tourism has been assessed as **negligible**.
- 14.9.76 The Ring of Brodgar to Maes Howe is a 4.6 km walk around 13-14 km south of the Proposed Development in Stenness. The trail features the tourist attractions of the Ring of Brodgar and the Standing Stones of Stenness. These historic archaeological sites are likely the main motivations for using the recreational trail and these will be unaffected by the Proposed Development (negligible magnitude). Therefore, the effect of the Proposed Development has been assessed as **negligible**.
- 14.9.77 Binscarth Wood, Finstown, is a 3.8 km walk around 12-13 km to the south-east of the Proposed Development. The trail is predominantly woodland based, which is uncommon on the island due to lack of tree growth on the island, and also passes the Loch of Wasdale, which is an ample birdwatching location. The unique woodland aspect of this trail on the island and its recreational purpose is not likely to be affected by the Proposed Development (negligible magnitude) and therefore its effect on tourism has been assessed as **negligible**.
- 14.9.78 Mid Howe Broch and Cairn is a 5.3 km walk on the island of Rousay, around 7 km west of the Proposed Development. The circular trail features archaeological sites, including the Midhowe Cairn and Midhowe Broch, and sites from both the 13th and 16th centuries. The attractions of this trail will still be accessible and unaffected by the proposed Development (negligible magnitude) and therefore its effect on tourism has been assessed as **negligible**.
- 14.9.79 Sacquoy Head is a 6.6 km coastal trail on the north-west of the island of Rousay. The trail is approximately 10-11 km from the Proposed Development and has scenic coastal views over to Westray and opportunities for seal spotting. This aspect of the trail will be unaffected by the Proposed Development (negligible magnitude) and therefore its effect on tourism has been assessed as **negligible**.
- 14.9.80 Faraclett Head, on the north-east of the island of Rousay, is a 3.5 km walk located around 14 km from the Proposed Development. The coastal trail rounds to the highest point on Faraclett Head, where walkers can spot Arctic terns and skuas, and has views over to Westray. Given the distance of the trail from the Proposed Development, the trail is not expected to be affected by the Proposed Development (negligible magnitude) and its effect on tourism has been assessed as **negligible**.
- 14.9.81 The Knitchen Hill, Blotchnie Field and Trumland Reserve trail on the south-east of the island of Rousay is a 7.4 km walk located around 11 km from the Proposed Development. The trail reaches the highest point on the island and passes by a chambered cairn and the Trumland RSPB nature reserve. The attractions on the route and the views provided over the Outer North Isles will be unaffected by the Proposed Development (negligible magnitude) and therefore its effect on tourism has been assessed as **negligible**.
- 14.9.82 The Tombs of Rousay is an 8 km trail on the south-east of Rousay, approximately 9-10 km from the Proposed Development. The trail passes by three chambered cairns on the island and connects to Trumland House gardens. The historic attractions on the route will not be impacted by the Proposed

Development (negligible magnitude) and therefore its effect on tourism has been assessed as **negligible**.

14.9.83 On Wyre, the Cubbie Roo’s Castle and The Taing is a 7.5 km recreational trail located approximately 11 km from the Proposed Development. The coastal trail provides opportunities for spotting seals and passes by one of Scotland’s oldest castles. The motivations for using the trail are unlikely to be affected by the Proposed Development (negligible magnitude) and therefore its effect on tourism has been assessed as **negligible**.

14.9.84 St Magnus Way is a long-distance trail through Mainland Orkney, which follows the path taken by Orkney’s patron saint, beginning at the Broch of Gurness, following the coast to Birsay then passing through Twatt, Dounby, Finstown and Orphir, before finishing at Kirkwall. The trail is 93 km in length and, at its closest point, passes approximately 2 km from the Proposed Development. The trail features coastal, forest and hill landscapes and in general motivations for using the trail along its 58 mile length are unlikely to be affected. For a small stretch near the Proposed Development, it is possible that the Proposed Development may affect motivations (low magnitude). Therefore, the effect of the Proposed Development on tourism has been assessed as **negligible**.

14.10 Additional Mitigation and Enhancement

14.10.1 No significant adverse effects have been identified and therefore no mitigation is required.

14.10.2 The Applicant can increase the local economic impacts associated with the Proposed Development by engaging proactively with local suppliers to make sure that they are fully aware of the opportunities associated with the development and construction phase. This may include Meet the Buyer events and engaging with local representative bodies.

14.11 Residual Effects

Construction

14.11.1 Development and construction of the Proposed Development is expected to result in:

- a **temporary minor beneficial** effect on the Orkney economy; and
- a **temporary negligible beneficial** effect on the Scottish economy.

Operation

14.11.2 Operation and maintenance of the Proposed Development is expected to result in:

- a **negligible beneficial** effect on the Orkney economy;
- a **negligible beneficial** effect on the Scottish economy;
- a **negligible beneficial** effect on Orkney as a result of the payment of non-domestic rates; and
- a **negligible** effect on the local tourism and recreation.

14.12 Cumulative Assessment

Orkney Interconnector

14.12.1 In addition to the benefits linked to its construction, development and operations, the Proposed Development will contribute towards reaching the threshold set by Ofgem for investment in an interconnector between Orkney and the Scottish mainland to take place. At present Orkney’s 40MW connection to mainland Scotland is operating at full export capacity and therefore new renewable energy developments are not feasible (SSEN, 2022).

- 14.12.2 The investment in an interconnector can take place only if 135 MW of new generation have been awarded a Contract for Difference (CfD) or are likely to be developed by December 2022 (Ofgem, 2021). Without the Proposed Development the interconnector is likely to fall short of the 135 MW of new generation required by December 2022.
- 14.12.3 The presence of the interconnector could lead to considerable economic benefits. A 2021 study (GHD, 2021) found that the interconnector could enable a further economic impact of between £371 and £807 million, equivalent to between £730 and £1,591 per person per year in Orkney. The benefits included both direct economic and indirect community benefits from both private sector and community developments.
- 14.12.4 These benefits cannot be directly attributed to the construction of the Proposed Development. However, the existence of sufficient capacity in Orkney is a pre-condition for the interconnector to be built and for these wider benefits to be realised and is therefore an indirect effect of the Proposed Development.
- 14.12.5 There are wider economic benefits from securing the cable including from development, construction and operation of all relevant wind farms and enabling infrastructure, as well as the potential for knock on benefits to other parts of the local energy industry, potentially including marine renewable energy technologies.
- 14.12.6 Whilst it is noted that these benefits cannot be solely attributed to the Proposed Development, the implications for the future development of the renewable energy in Orkney represent a material change for the Orkney economy (high magnitude) and so the effect is assessed as **moderate** (beneficial) for Orkney (and so significant in EIA terms). In Scotland, the impact is likely to be smaller (low magnitude) and so the effect is assessed as **negligible** (beneficial).

Tourism and Recreation

- 14.12.7 There are not expected to be any significant effects on tourism and recreation assets, and therefore it is not expected that there would be any significant cumulative effects on tourism and recreation.

14.13 Summary

- 14.13.1 This Chapter assesses the potential socio-economic, recreation and tourism effects of the Proposed Development.
- 14.13.2 Orkney has a declining and ageing population in comparison to other areas of Scotland. While the labour market performs well, the area features higher costs of living in comparison to the rest of Scotland. Tourism plays an important part in the local economy and accounts for higher share of employment than the Scottish average.
- 14.13.3 During the development and construction phase, it was estimated that the Proposed Development could generate up to:
- £2.2 million GVA and 28 years of employment in Orkney; and
 - £7.2 million GVA and 106 years of employment in Scotland.
- 14.13.4 During each year of the operational phase, it was estimated that the Proposed Development could generate up to:
- £0.2 million GVA and 2 jobs in Orkney; and
 - £0.6 million GVA and 7 jobs in Scotland.
- 14.13.5 The Proposed Development would have an important strategic role for Orkney towards the achievement of the threshold set by Ofgem, in order for the construction of a new interconnector to be approved. This would in turn lead to additional socio-economic benefits and will support investment and innovation in the renewable sector in Orkney.

- 14.13.6 The Proposed Development would also provide community benefit funding for the local area of £132,000 annually, which could be used to the needs and concerns of the local community. In addition, it was estimated that the Proposed Development would pay £0.2 million each year in non-domestic rates, supporting local government services.
- 14.13.7 The most recent evidence on the relationship between wind farms and tourism suggests that there are no adverse effects on the tourism economy resulting from the development of onshore wind. An assessment of the likely effects of the Proposed Development on specific local tourism assets, accommodation providers and routes found no significant adverse effects are expected.
- 14.13.8 Overall, there were no significant adverse effects identified. While the beneficial construction and operation socio-economic effects are not significant in EIA terms, they would be important to the local and national economy, contributing to sustainable economic growth. The cumulative effect of supporting the needs case for an interconnector between Orkney and the Scottish mainland has been assessed as significant in EIA terms.

Table 14-20 – Summary of Effects

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/ Adverse		Significance	Beneficial/ Adverse
Construction					
Economic impact of £2.2 million GVA and 28 years of employment in Orkney	Minor	Beneficial	n/a.	Minor	Beneficial
Economic impact of £7.2 million GVA and 106 years of employment in Scotland	Negligible	Beneficial	n/a.	Negligible	Beneficial
Operation					
Economic impact of £0.2 million GVA and 2 jobs in Orkney	Negligible	Beneficial	n/a.	Negligible	Beneficial
Economic impact of £0.6 million GVA and 7 jobs in Scotland	Negligible	Beneficial	n/a.	Negligible	Beneficial
Non-domestic rates of £0.2 million	Negligible	Beneficial	n/a.	Negligible	Beneficial
Effects on local tourism economy	Negligible	n/a	n/a	Negligible	n/a

Table 14-21 – Summary of Cumulative Effects

Receptor	Effect	Cumulative Developments	Significance of Cumulative Effect	
			Significance	Beneficial/ Adverse
Orkney	Economic impact of interconnector	HVDC Interconnector	Moderate	Beneficial

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