Chapter 13 Socio-economics, Tourism and Recreation

Contents

13.1. Executive Summary 2
13.2. Introduction 2
13.3. Legislation, Policy and Guidelines 3
13.4. Consultation 3
13.5. Assessment Methods and Significance Criteria 4
13.6. Baseline Conditions 9
13.7. Potential Effects 22
13.8. Mitigation 37
13.9. Residual Effects 37
13.10. Cumulative Effects 37
13.11. Summary 38

List of Abbreviations

Abbreviation	Description
AGER	Advisory Group on Economic Recovery
DECC	Department for Energy and Climate Change
EIA	Environmental Impact Assessment
GBDVS	Great Britain Day Visitor Survey
GVA	Gross Value Added
HIE	Highlands and Islands Enterprise
Job years	The number of years of employment generated by a project
MW	Megawatt
NPF	National Performance Framework
NS	NatureScot
ONS	Office for National Statistics
ROCs	Renewables Obligations Certificates

13. Socio-economics, Tourism and Recreation

13.1. Executive Summary

13.1.1. This chapter assesses the potential socio-economics, tourism and recreation effects of the Proposed Development.

13.1.2. The economy of Highland is well placed to benefit from economic opportunities associated with the Proposed Development. Highland has a substantial role to play in supporting the transition to Net-Zero for both Scotland and the wider UK. This transition, including the Proposed Development, will support new employment opportunities in highly paid year-round jobs.

13.1.3. Highland features both an ageing and declining population, with the Local Area surrounding the Proposed Development expected to follow the same trends. A lack of employment opportunities and an influx of retirees to Highland is contributing to this demographic change. The industrial structure of the Local Area suggests that the economy is highly reliant on sectors associated with the tourism industry for employment.

13.1.4. During the development and construction phase, it is estimated that the Proposed Development could generate up to:

- £10.8 million Gross Value Added (GVA, a measure of economic activity) and 155 job years (a job year being equivalent to one person employed for a year) in Highland;
- £17.8 million GVA and 260 job years in Scotland (including Highland); and
- £32.6 million GVA and 475 jobs across the UK (including Scotland).

13.1.5. During each year of the operational phase, it was estimated that the Proposed Development could generate up to:

- £0.4 million GVA and 5 jobs in Highland; and
- £1.6 million GVA and 15 jobs in Scotland (including Highland); and
- £2.3 million GVA and 25 jobs across the UK (including Scotland).

13.1.6. The Proposed Development would also provide community benefit funding for the Local Area of approximately £288,000 annually.

13.1.7. It was estimated that the Proposed Development would pay £403,000 each year in non-domestic rates, helping to support local government services.

13.1.8. The most recent evidence on the relationship between wind farms and tourism suggests that there is no direct relationship between the development of the tourism economy and 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 expected adverse effects.

13.1.9. Overall, there were no significant adverse effects identified. Whilst the direct beneficial socio-economic effects are not significant in EIA terms, they would be important to the local, regional and national economy, contributing to economic recovery and sustainable economic growth.

13.2. Introduction

13.2.1. This chapter has been prepared by Simon Cleary of BiGGAR Economics (MA (Hons) Economics and Mathematics) and over 10 years' consultancy experience in the renewable energy sector. It provides an assessment of the potential effects of the Proposed Development on socio-economics, tourism and recreation.

13.2.2. The assessment was conducted on the basis of eight turbines, each with a generating capacity of around 7.2 Megawatts (MW), and a total capacity of around 57.6 MW, and an additional 10 MW battery energy storage system. This is the Proposed Development as described in Chapter 3 of this EIA Report.

13.3. Legislation, Policy and Guidelines

13.3.1. There is no specific legislation, policy or guidance available on methods that should be used to assess the socio-economics impact of a proposed onshore wind farm development. The method adopted has however been based on established best practice, including that used in UK Government and industry reports on the sector.

13.3.2. In particular, the assessment draws on studies by BiGGAR Economics on the UK onshore wind energy sector, including 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 (RenewableUK, DECC, 2012) and a subsequent update to this report published by RenewableUK (RenewableUK, 2015).

13.3.3. Similarly, there is no formal guidance on the methods that should be used to assess the effects that wind farm developments may have on tourism and recreation. The assessment has been undertaken in line with established best practice in assessing the tourism and recreation effects of onshore wind farm proposals.

13.3.4. For recreational assets, guidance has been provided by NatureScot (NS) on how to assess effects on recreational amenity and the approach outlined has been used. 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 considers 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 NS 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 NS 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.

13.4. Consultation

Table 13.1 - List of Consultation Responses

Consultee	Consultation Response	Applicant Action
The Highland Council Scoping Opinion (April 2022)	The EIA Report should estimate who may be affected by the development, including communities or wider socio-economic groupings	The economic analysis considers which sectors are most likely to be affected by the Proposed Development. The potential effect on tourism activity and recreational users is also considered. The

	economic impact is considered in **Section 13.7**.
The EIA Report should include relevant economic information connected with the project including the potential number of jobs and economic activity associated with the procurement, construction, operation and decommissioning of the development	The economic impacts of the Proposed Development are assessed across the development, construction and operational phases. The operational life of the Proposed Development is assumed to be 35 years and therefore decommissioning impacts have been scoped out of the analysis. The economic impact is considered in **Section 13.7**.
The EIA Report should set out the impact on the regional and local economy, as well as the national economy	The economic impacts are considered for the Highland economy, in addition to the economy of Scotland and the UK. The economic impact is considered in **Section 13.7**.
The potential impact on and mitigation for public access on the site should be assessed, incorporating core paths, public rights of way etc. The applicant should follow relevant guidance from NatureScot when completing this assessment	The potential impact on recreational users is considered in **Section 13.7.**

13.5. Assessment Methods and Significance Criteria

Study Area

13.5.1. The baseline description section of this chapter considers and compares the study areas of:

- the Local Area (comprised of the electoral wards of Aird and Loch Ness, Caol and Mallaig, Badenoch and Strathspey and Fort William and Ardnamurchan);
- Highland (as defined by the Highland Local Authority);
- Scotland; and
- the UK.

13.5.2. The study areas considered for the economic analysis were:

- Highland;
- Scotland; and
- the UK.

13.5.3. For the tourism and recreation assessment, the focus was the area within a 15 km radius of the Proposed Development, consistent with the study areas used in research studies that have considered the relationship between wind farm development and tourism.

Desk Research

13.5.4. To assess the effect of the Proposed Development on socio-economics, tourism and recreation, the following study approach was taken to identify the baseline conditions:

- a review of economic strategies for Highland, Scotland and the UK;

- an analysis of socio-economic statistics for the Local Area, Highland, Scotland and the UK;
- an analysis of tourism statistics for Highland, Scotland and the UK; and
- identification of local tourism and recreation assets, including local attractions, accommodation providers and recreational trails.

Assessment of Socio-Economic Effects

13.5.5. 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.

13.5.6. 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.

13.5.7. 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;
- years of employment: 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.

Stages in Socio-Economic Analysis

13.5.8. To begin estimating the economic activity likely to be 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 Highland, Scotland and the UK.

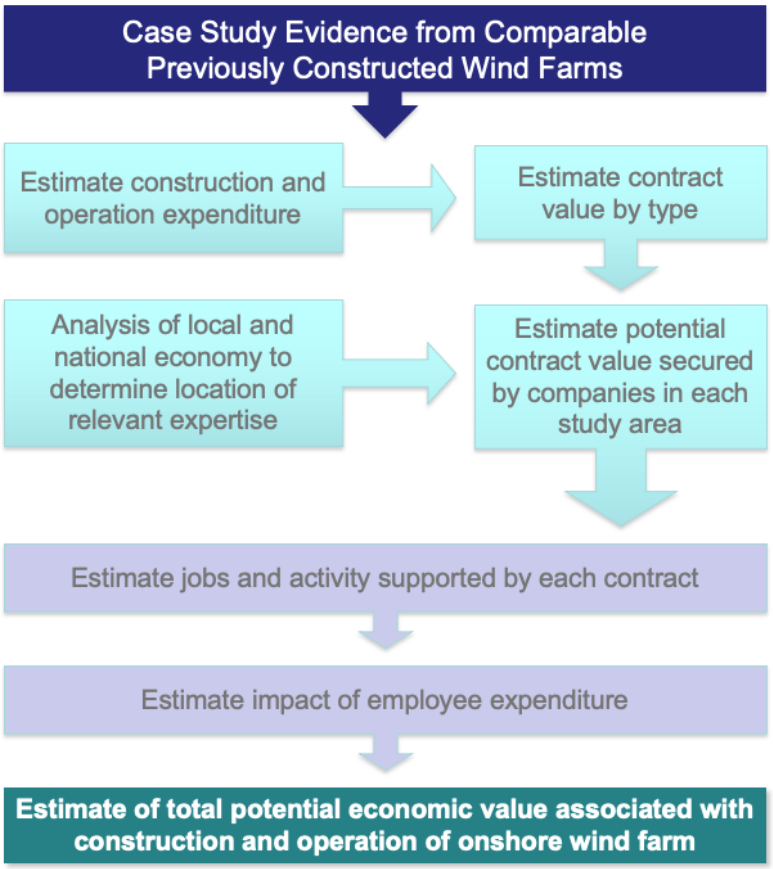
13.5.9. There are three sources of economic activity:

- component contracts and the jobs they support;
- wider spending in the supply chain (indirect effect); and
- spending of people employed in these contracts.

13.5.10. There are four key stages of this model, which are illustrated in Graphic 13.1:

- 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.

Graphic 13.1 - Approach to Economic Impact Assessment



Tourism and Recreation Assessment

13.5.11. 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 and is discussed in **Section 13.7**.

13.5.12. 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 the wider Highland region were also identified and considered, even if they are not within the vicinity of the Proposed Development.

Effects Evaluation Methodology

13.5.13. The significance of the effect of the Proposed Development on the economy and on tourism and recreation assets has been considered by determining the sensitivity of the receptor in question and the magnitude of change.

13.5.14. The sensitivity of receptors has been assessed based on professional judgement and previous experience of comparable developments elsewhere. The criteria used to do this are provided in **Table 13.2**.

Table 13.2 - Sensitivity Criteria

Sensitivity	Description
Very high	The asset has little or no capacity to absorb change without fundamentally altering its present character and/or is of very high tourism, recreational or socio-economics 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 has low capacity to absorb change without fundamentally altering its present character and/or is of high tourism, recreational or socio-economics value, or of importance to Scotland.
Medium	The asset has moderate capacity to absorb change without substantially altering its present character, has some tourism, recreational or socio-economics value and/or is of regional importance. For example, it is a population destination among current visitors, with a significant contribution to the regional economy.
Low	The asset is tolerant to change without detriment to its character, has low tourism, recreational and/or socio-economics value, or is of local importance. For example, it is an incidental destination for current visitors.
Negligible	The asset is resistant to change and/or is of little tourism, recreational or socio-economics value. For example, an incidental destination with low current numbers of visitors.

13.5.15. The magnitude of economic effects on the UK, Scottish and Highland economies has been assessed using BiGGAR Economics' economic impact model and professional judgement. The magnitude of change on tourism and recreation assets has been assessed with reference to published research evidence and experience of comparable wind farm developments elsewhere. The criteria used to do this are provided in **Table 13.3**.

Table 13.3 - Magnitude Criteria

Magnitude	Description
High	Major loss/improvement to key elements/features of the baselines 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 materially changed. For example, a moderate long-term alteration of socio-economic conditions, a moderate reduction/improvement in the recreational asset, or a moderate change to tourism spend
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

13.5.16. The sensitivity of the asset and the magnitude of the predicted change will be used as a guide, in addition to professional judgement to predict the significance of the likely effects. Moderate

and major effects are assessed as significant in EIA terms (as shown in bold). The significance criteria are outlined in **Table 13.4**.

Table 13.4 - Significance Matrix

	Sensitivity				
Magnitude of Change	**Very High**	**High**	**Medium**	**Low**	**Negligible**
High	**Major**	**Major**	**Moderate**	**Moderate**	Minor
Medium	**Major**	**Moderate**	**Moderate**	Minor	Negligible
Low	**Moderate**	**Moderate**	Minor	Negligible	Negligible
Negligible	Negligible	Negligible	Negligible	Negligible	Negligible

13.5.17. For the assessment of recreational effects, magnitude and significance criteria will be assessed following guidelines provided by NatureScot. The criteria for this are outlined in **Table 13.5**.

Table 13.5 - NatureScot Assessment of Scale of Effects Criteria

Assessment Factor	Commentary
The magnitude of impacts on access, or on settings in which recreation takes place	Direct physical effects may vary from complete loss of a resource to minor and/or marginal impacts. Visual or noise effects might be accommodated or open to mitigation in an urban edge setting, but much less acceptable or even beyond amelioration in remoter countryside.
The nature, intensity, frequency of occurrence or timing of the effect	These will be important factors in assessment of the acceptability of effects on recreation. At the less intense levels of effect, the outcomes may be acceptable or open to mitigation either in intensity or through time limitations on certain activities within the development.
Potential for the effects to increase over time	This is a precautionary point of reasonable anticipation of how effects might increase in scale over the years and thereby make mitigation ineffective.
Scarcity vale of the recreation resource on a wider strategic scale	This factor recognises there are considerable geographic imbalances in the supply of recreation opportunities, and where a resource is in short supply then less compromise may be feasible. As examples, some parts of the country are very poorly endowed with accessible open water space.
Recognition of the recreation opportunity spectrum (ROS)	The recreation opportunity spectrum is a basic principle of recreation planning that provision should be made for people's recreation needs along a range which provides for gregarious, active and some noisy recreations at one end of the scale, and solitude and quiet enjoyment at the other.

13.6. Baseline Conditions

Strategic Context

Scotland's National Strategy for Economic Transformation

13.6.1. 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.

13.6.2. 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.

13.6.3. 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.

13.6.4. 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.

13.6.5. The strategy also notes evidence from the country's Regional Economic Partnerships that were used to inform the engagement process for the strategy. It notes that the Highlands and Islands region presents opportunities in the renewables sector and the area aspires to be a 'world renowned net zero' region by 2030 by continuing to develop capabilities in the sector.

National Performance Framework

13.6.6. 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.

13.6.7. 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.

13.6.8. 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.

Draft Energy Strategy and Just Transition Plan

13.6.9. In January 2023, the Scottish Government published the Draft Energy Strategy and Just Transition Plan (Scottish Government, 2023). This document states that the purpose of Just Transition Plans is to:

- Maximise the economic benefits of Scotland's transition to net zero, including ensuring a pipeline of skills for net zero jobs;
- Ensure fair distribution of opportunities, benefits and risks, including consideration of community benefits, and how to adapt to the impacts of climate change; and
- Ensure a n inclusive and fair process via co-design with stakeholders, trade unions and the public.

13.6.10. The strategy outlines the ambition of adding an additional 20 GW of renewable energy generation capacity in Scotland by 2030, including 12 GW of onshore wind. It is expected that community benefit and shared ownership opportunities are offered as standard across all new onshore wind projects.

Onshore Wind Sector Deal

13.6.11. In September 2023, the Scottish Government published the Onshore Wind Sector Deal for Scotland (Scottish Government, 2023b). This document highlights the opportunities that the onshore wind sector presents for Scotland and outlines the commitments made by both the Scottish Government and onshore wind developers to realise these opportunities.

13.6.12. These commitments cover:

- Supply chain, skills and the circular economy;
- Community;
- Land use and environment;
- Planning; Legislative and regulatory; and
- Technical.

13.6.13. The Applicant played an integral part in creating the Onshore Wind Sector Deal, in collaboration with other onshore wind developer, Scottish Renewables and the Scottish Government.

Economic Recovery Plan

13.6.14. 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.

13.6.15. 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*".

13.6.16. 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

13.6.17. 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. Whilst now out of date, this strategy remains the most recent economic strategy for the region.

13.6.18. 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. In particular, HIE commits to:

- push for a supportive policy and regulatory regime which ensures the region is able to fully contribute towards Scottish and UK climate ambitions;
- influence investment and support testing and demonstration in low carbon technology;
- secure supply chain opportunities from energy developments, including onshore and offshore wind energy projects; and
- continue to support communities to engage in local energy systems in rural areas where energy distribution is a challenge.

13.6.19. 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.

Summary of Strategic Context

13.6.20. The renewable energy sector was seen as a key driver of economic growth for the Scottish Government prior to the Covid-19 pandemic and the sector in now recognised as having the potential to make a substantial contribution to economic recovery and transformation. Nationally, regionally and locally, the sector provides a substantial opportunity for economic growth, and the Proposed Development would support these aims in Highland.

Socio-Economics

Population

13.6.21. As shown in **Table 13.6**, in 2021, the Local Area had a total population of 45,121, accounting for approximately 19.2% of the total population of Highland.

13.6.22. The share of the population who were of working age in the Local Area (60.7%) was in line with the share across Highland (60.7%) and slightly lower than that of Scotland (63.9%) and the UK (62.4%).

13.6.23. The share of the population in the Local Area aged 65 and over (23.5%) is slightly above that of Highland (22.9%), and even greater than the share of the population accounted for by this age group across both Scotland (19.3%) and the UK (18.6%).

Table 13.6 - Population by Age, 2021

	Local Area	Highland	Scotland	UK
Total	45,121	235,400	5,466,000	67,081,200
0-15	15.8%	16.4%	16.8%	19.0%
16-64	60.7%	60.7%	63.9%	62.4%
65+	23.5%	22.9%	19.3%	18.6%

Source: ONS (2022), Annual Population Survey

13.6.24. National Records of Scotland provide population projections at the local authority and Scottish geographic levels. While information is not available at the electoral ward level, current population estimates and future trends at the local authority level can be used to form a view of more localised trends.

13.6.25. As **Table 13.7** shows, over the period between 2018 and 2043, the total population of Highland is projected to decrease by 1.0%, from 235,540 to 233,250. During the same period, the population of Scotland is projected to increase by 2.5% and the total population of the UK is projected to increase by 9.0%.

13.6.26. In addition to a declining population, Highland is also projected to experience an ageing population. The share of the working age population is projected to fall from 61.2% to 56.0% (equivalent to a reduction of 13,660 people in the region's labour market) whilst that accounted for by people aged 65+ is projected to rise from 22.1% to 29.8%. Scotland is also projected to feature an ageing population, with the share of the population aged 16-64 projected to fall from 64.2% to 60.3% and the share of people aged 65 and over is projected to increase from 18.9% to 24.9%.

13.6.27. Across the UK, it is projected that the proportion of the population that are of working age will decline from 62.7% to 59.0% whilst the share of people aged 65+ is projected to increase from 18.3% to 24.0%.

Table 13.7 - Population Projections, 2018-2043

	Highland		Scotland		UK	
	2018	2043	2018	2043	2018	2043
Total	235,540	233,250	5,438,100	5,574,819	66,437.568	72,419,993
0-15	16.7%	14.3%	16.9%	14.8%	19.0%	17.0%
16-64	61.2%	56.0%	64.2%	60.3%	62.7%	59.0%
65+	22.1%	29.8%	18.9%	24.95	18.3%	24.0%

Source: National Records of Scotland (2020), Population Projections for Scottish Areas (2018-based) and ONS (2022), 2020-based Interim National Population Projections.

Economic Activity

13.6.28. As shown in **Table 13.8**, in 2021, Highland had an economic activity rate of 71.9%, lower than the rate for both Scotland (76.5%) and the UK (78.4%). Historically, economic activity rates in Highland have been above that of both Scotland and the UK, with 2021 being the first year that the rate was lower. The current economic activity rate in Highland is the lowest rate the region has experienced over the past twenty years, with the rate consistently being above 80% before 2020.

13.6.29. At the same time, data gathered by the ONS (2022) shows that, during 2021, 37.1% of economically active people in Highland had retired from the labour market. This is the largest rate seen in the region over the past twenty years and significantly higher than the rate for Scotland (15.1%) and the UK (13.6%).

13.6.30. Given that the data for 2020/21 occurred during the Covid-19 pandemic, it is likely that this significant change in economic activity is a result of the pandemic affecting Highland more than other areas.

13.6.31. The unemployment rate in Highland (2.5%) was lower than that of Scotland (3.5%) and the UK (4.2%).

13.6.32. The median annual gross income of Highland residents in full time work (£25,452) was lower than that for Scotland as a whole (£26,139) but higher than that of the UK (£25,025).

Table 13.8 - Economic Activity Rates, 2021

	Highland	Scotland	UK
Economic Activity Rate	71.9%	76.5%	78.4%
Unemployment Rate	2.5%	3.5%	4.2%
Median Annual Gross Wage (resident)*	£25,452	£26,139	£26,049

Source: ONS (2022), Annual Population Survey and ONS (2022), Annual Survey of Hours and Earnings

Industrial Structure

13.6.33. As shown in **Table 13.9**, in 2020, 21.7% of people in the Local Area were employed in accommodation and food services, generally associated with the tourism industry. This level of employment is significantly above the share of employment the sector accounts for across Highland (10.5%), Scotland (7.1%) and the UK (7.1%), indicating the importance of the sector as a key driver of the local economy.

13.6.34. The wholesale and retail trade was also a significant employer in the Local Area, accounting for the 14.0% of total employment. This is similar to the share of employment the sector accounts for across Highland (14.2%), Scotland (13.7%) or the UK (14.7%).

13.6.35. The share of employment in the arts, entertainment and recreation sector is also greater in the Local Area (5.4%), than in Highland (2.3%), Scotland (2.2%) and the UK (2.3%).

13.6.36. One of the key sectors in the supply chain for the Proposed Development will be construction. 8.1% of workers in the Local Area were employed in this sector, compared to 6.3% in Highland, 5.1% in Scotland, and 4.9% across the UK.

Table 13.9 - Industrial Structure, 2020

	Local Area	Highland	Scotland	UK
Accommodation and food services	21.7%	10.5%	7.1%	7.1%
Wholesale and retail trade; repair of motor vehicles and motorcycles	14.0%	14.2%	13.7%	14.7%
Human health and social work activities	10.2%	17.1%	16.1%	13.2%
Education	8.8%	7.5%	8.0%	8.6%
Construction	8.1%	6.3%	5.1%	4.9%
Manufacturing	6.4%	4.6%	7.0%	7.7%
Arts, entertainment, recreation and other	5.4%	2.3%	2.2%	2.3%
Transportation and storage	4.4%	4.2%	4.3%	5.0%
Professional, scientific and technical activities	4.0%	5.0%	7.0%	8.8%
Administrative and support service activities	3.5%	4.6%	7.7%	8.6%
Agriculture, forestry & fishing	3.3%	10.5%	3.1%	1.6%
Public administration and defence; compulsory social security	2.7%	4.6%	6.2%	4.4%
Other service activities	2.0%	1.7%	1.7%	2.0%
Real estate activities	1.9%	1.3%	1.5%	1.9%
Electricity, gas, steam and air conditioning supply	1.2%	0.9%	0.8%	0.4%
Information and communication	1.1%	2.0%	3.5%	4.3%

Mining and quarrying	0.8%	0.4%	1.1%	0.2%
Water supply; sewerage, waste management and remediation activities	0.4%	1.7%	0.7%	0.7%
Financial and insurance activities	0.3%	0.7%	3.1%	3.4%

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

Summary and Conclusion of Socio-Economics Context

13.6.37. Highland's population is projected to decline over the next two decades, in contrast to the expected population growth across Scotland and the UK. At the same time, the population of Highland is expected to age, growing older than that of Scotland as a whole. It is likely that the Local Area will follow the same trends given the already above-average share of the population that are no longer of working age. Such features suggest that there are limited opportunities for working age people in both the Local Area and Highland with people seeking employment opportunities elsewhere in the country, contributing to depopulation in these study areas.

13.6.38. The economic structure of the Local Area suggests that the local economy is highly reliant on sectors associated with the tourism industry for employment. The Local Area is also likely to benefit from the construction of a wind farm in the area, having a higher proportion of employment in the construction sector than both Scotland and the UK, indicating that the skills and capacity for this may already be in place. This has the potential to address the ageing population of the local and regional areas, retaining the workforce and attracting younger workers through job creation.

Tourism and Recreation

Scotland's Outlook 2030

13.6.39. 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.

13.6.40. 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.

13.6.41. A main commitment of the strategy is to address the effects of energy demand associated with tourism and encourage the sector to commit fully to Scotland's ambition of becoming a net-zero society by 2045.

Local Tourism Context

13.6.42. Tourism, referred to as Sustainable Tourism, is one of the six sectors identified in the 2015 Scotland's Economic Strategy which have the potential to support the growth of Scotland's economy.

13.6.43. In 2020, the number of people employed in the tourism sector in Highland was 14,000. This is equivalent to 7.4% of the 189,000 people working in the sector in Scotland. Employment in tourism was significantly impacted by Covid-19 in 2020 as the sector was particularly sensitive to the regulations and behaviour changes caused by the pandemic. As this year represented atypical tourism activity, data for 2019 has been used to provide a more typical view of the performance of the sector.

13.6.44. As shown in **Table 13.10**, in 2019, the sustainable tourism sector generated £286 million Gross Value Added (GVA) in Highland, accounting for 6.4% of the total £4,497 million GVA generated by this sector across Scotland. In the same year, the sustainable tourism sector employed 19,000 people in Highland. This represented 8.3% of the total 229,000 people employed in this sector across Scotland that year.

Table 13.10 - Tourism Employment and GVA

	Highland	Scotland
GVA (£ million)	286	4,497
Employment	19,000	229,000

Source: Scottish Government (2022), Growth Sector Statistics

Visitors

13.6.45. Tourism data was not available for the Local Area, however a range of statistics are available on visitor numbers and visitor spend for Highland, Scotland and the UK, including the Great Britain Day Visitor Survey, the Great Britain Tourism Survey and the International Passenger Survey.

13.6.46. As **Table 13.11** shows, there were 14.5 million visitors to Highland in 2019, with tourist spend in the region amounting to £1.1 billion. Day visitors accounted for 82.9% of visitors to Highland, followed by domestic overnight visitors (13.5%) and international overnight visitors (3.6%). While the highest total spending was associated with day visitors (£413.2 million), the largest spend per visit came from international overnight visitors, who spend approximately £395 per visit, followed by domestic overnight visitors (£252 per visit) then domestic day visitors (£34 per visit).

13.6.47. Highland accounted for 9.0% of total visitors across Scotland, which in 2019 received 161 million visitors, spending £10.6 billion. Day visitors accounted for the largest share of visitors across Scotland (90.1%), followed by domestic overnight visitors (7.7%) and international overnight visitors (2.2%). As with Highland, international overnight visitors had the highest spend per trip (£694), followed by domestic overnight visitors (£241) and domestic day visitors (£36).

Table 13.11 - Number of Visitors and Visitor Spending in Highland, Scotland and the UK

	Highland	Scotland	UK
Visitors (million)			
Day Visitors*	12.0	144.9	1,795.1
Domestic Overnight Visitors	2.0	12.4	123.7
International Overnight Visitors	0.5	3.5	43.4
Total	**14.5**	**160.9**	**1,962.1**
Spend (£ million)			
Day Visitors	413.2	5,186.6	58,623.2
Domestic Overnight Visitors	492.0	2,989.3	24,411.9
International Overnight Visitors	205.2	2,458.6	27,919.4
Total	**1,110.4**	**10,634.5**	**110,954.6**

Source: Kantar (2020), Great Britain Day Visitor Survey, Kantar (2020), Great Britain Tourist Survey, NISRA (2020), Domestic Overnight Trips to Northern Ireland and NISRA (2020), External Overnight Tourism Trips to Northern Ireland. Note figures may not sum due to rounding.

Visitor Attractions

13.6.48. Of the top ten most visited attractions across Highland, as identified by VisitScotland, none are located within 15km of the Proposed Development. The regional visitor attractions are shown in **Table 13.12**. The closest, Glen Affric, is 26 km away from the site.

Table 13.12 - Regional Visitor Attractions, Highland

	Number of Visitors	Distance from Site (km)
Urquhart Castle	547,518	30 km
Glenfinnan Monument	462,235	49 km
Glencoe Visitor Centre	436,924	50 km
Glenmore Forest Park	427,791	61 km
Loch Ness by Jacobite	321,980	36 km
Culloden Visitor Centre	209,011	57 km
Dunvegan Castle & Gardens	176,534	120 km
Corrieshalloch Gorge	146,707	76 km
Glen Affric	135,710	26 km
Inverness Botanic Gardens	105,703	50 km

Source: VisitScotland (2020), Insight Department: Highland Factsheet 2019

13.6.49. Using a web search of VisitScotland, a number of local visitor attractions located within 15km of the site were identified. These attractions, and their distance from the site, are included in **Table 13.13**.

Table 13.13 - Local Visitor Attractions

	Description	Distance from Site (km)
Bridge of Oich	Suspension bridge over the River Oich originally constructed in 1854	2 km
Kytra Lock, Scottish Canals	Lock gate on the Caledonian Canal which serves as a picturesque stop for canal cruises	4 km
Invergarry Castle	Ruins of 17th century castle	4 km
Fort Augustus Golf Club	Traditional heathland golf course	6 km
The Clansman Centre	Museum featuring a recreation of a 17th century Highland turf house	6 km
Glendoe Eagle Statue	Bronze statue of a golden eagle overlooking the Glendoe dam	7 km
Fort Augustus Lighthouse	Lighthouse constructed in 1840 along the Caledonian Canal	7 km
Loch Ness View Point Fort Augustus	Lookout point across Loch Ness	7 km
Monster Activities	Activity centre offering outdoor activities including clay pigeon shooting, archery and canoeing	7 km
Daingean Settlement	Ruins of 18th century cottage on an ancient settlement	12 km
Glen Garry Viewpoint East	Lookout point across Loch Ness	12 km
Glen Garry Viewpoint West	Lookout point across Loch Ness	14 km
Glenmoriston Shooting Ground	Centre offering activities and events in various trap shooting disciplines	14 km
Garva Double Bridge	Bridge between Dalwhinnie and Fort Augustus constructed in 1732	15 km

Source: VisitScotland (2022), Fort Augustus, VisitScotland (2022), Invergarry, Trip Advisor (2022), Things to Do in Fort Augustus and Trip Advisor (2022), Explore Invergarry.

Accommodation Providers

13.6.50. Accommodation providers were identified using VisitScotland's accommodation database and a web search of local accommodation on TripAdvisor. As shown in **Table 13.14**, it was found that there are 72 accommodation providers within 15km of the Proposed Development, concentrated mainly around Fort Augustus, Invergarry, and Invermoriston, with some providers located in other areas such as Whitebridge, Spean Bridge and Roy Bridge.

13.6.51. In particular, the following accommodation clusters were identified:

- 35 accommodation providers in Fort Augustus, ranging from 1 km to 8 km from the Proposed Development, including:
  - 19 self-catered providers;
  - nine bed and breakfasts;
  - three hotels;
  - two holiday parks;
  - a hostel; and
  - a bothy.
- 20 providers located in Invergarry, located 1 to 11km from the Proposed Development, including:
  - 10 self-catering cottages;
  - three hotels;
  - three campsites;
  - three bed and breakfasts; and
  - a youth hostel.
- two providers in Spean Bridge, located between 6km and 11km from the Proposed Development including one holiday park (Great Glen Water Park) and one self-catered accommodation provider;
- a bothy located in Roy Bridge, approximately 8km from the Proposed Development;
- 11 accommodation providers in Invermoriston, located between 12 and 15km from the Proposed Development, including:
  - seven self-catered providers;
  - two bed and breakfasts;
  - one hotel; and
  - a camp site.
- three accommodation providers in Whitebridge, including two self-catering providers and a bed and breakfast, both of which were approximately 15km from the Proposed Development.

Table 13.14 - Accommodation Providers within 15km of the Proposed Development

Area	Hotels	B&B's	Self-Catering Providers	Camp Sites/ Holiday Parks/ Hostels	Total Number of Providers	Approximate Distance from the site
Fort Augustus	3	9	19	4	**35**	1-8 km
Invergarry	3	3	10	4	**20**	1-11 km
Spean Bridge	-	-	1	1	**2**	6-11 km
Roy Bridge	-	-	-	1	**1**	8 km
Invermoriston	1	2	7	1	**11**	12-15 km
Whitebridge	-	1	2	-	**3**	15 km

13.6.52. Tourism activity within the Great Glen is seasonal, and much of it occurs within the months between April and September. The average occupancy level for hotels in Highland was 72% in 2022, in line with the occupancy rate prior to the Covid-19 pandemic which was 68% in 2019 (VisitScotland, 2023). Between 2019 and 2022 the occupancy level of urban hotels decreased, while the occupancy of the most rural hotels increased.

Recreational Trails

13.6.53. Within 15 km of the Proposed Development, 26 core paths were identified using Highland Council's database of core paths. Located between 2 km – 8 km away from the Proposed Development, this includes clusters of core paths around Invergarry to the north-west, Fort Augustus to the north-east and Spean Bridge to the south-west, with none passing through the site.

13.6.54. A total of 27 recreational trails were identified as falling within 15 km of the Proposed Development, based on a web search of walkhighlands.com. These are described in **Table 13.15** with an approximation of their distance from the Proposed Development at the closest point. The search also includes several of the core paths and long-distance trails that were identified via Highland Council's database and include: Allt na Criche, Jenkins Park Forest Walks and the Great Glen Way.

Table 13.15 - Recreational Trails Within 15 km of the Proposed Development

Name of Trail	Description	Distance from site (km)
Fort Augustus to Mandally	A 9 km route along the Caledonian Canal towards Loch Oich, to the north-west of the Proposed Development	1 km
Loch Oich circuit, Invergarry	A 17 km walk around Loch Oich to the north-west of the Proposed Development	1 km
Great Glen Way	17 km section of the 119 km Great Glen Way which stretches from coast to coast across the Highlands, located to the north-west of the Proposed Development.	2 km
Laggan to Fort Augustus (Corrieairack Pass)	This is a 39km route between Laggan and Fort Augustus, originally built as a military road by General Wade. It now forms part of the Scottish National Trail, a 864km route from Cape Wrath to Kirk Yetholm.	
River Oich, Fort Augustus	A 6 km route on forest tracks along the River Oich, to the north of the Proposed Development	4 km
Carn a' Chuilinn, via Glen Doe	A 17 km walk along the Monadhliath to the east of the Proposed Development	4 km
River Garry, Invergarry,	A 6 km route along the river to the west of the Proposed Development	5 km
The Eachach Carn Deargs, Glen Roy	A 14 km route south of the Proposed Development with views of Corbetts	5 km
Fort Augustus Explorer	An 8 km route to the north of the Proposed Development that passes along the Caledonian Canal towards Loch Ness	5 km

Gairbeinn and Corrieyairack Hill, Melgarve	A 16 km route across two Corbetts, located to the south-east of the Proposed Development	5 km
Meall na h-Aisre, from Garva Bridge	A 13 km walk across Monadhliath hill located to the east of the Proposed Development	5 km
Mandally to Poulary	A 20 km walk which is part of the Scottish National Trail, an 864 km walk running the length of Scotland, located west of the Proposed Development	6 km
Loch Ness 360: Invermoriston to Fort Augustus	A 12 km route which is part of the Loch Ness 360, a 129 km route which circles Loch Ness, located north of the Proposed Development	6 km
Jenkins Park, Near Fort Augustus	An 8 km circular walk-through forestry plantations with views of Fort Augustus and the Great Glen, located north of the Proposed Development	6 km
Loch Lundie, Invergarry	A 5 km route with views across the Loch, located west of the Proposed Development	6 km
Allt na Calliche Trail, near Invergarry	A 5 km walk through the forest towards a picturesque waterfall and open views, located west from the Proposed Development	7 km
Ciste Dubh Trail, near Invergarry	A 3 km route which follows the River Garry, located to the west of the Proposed Development	7 km
Allt na Criche, near Fort Augustus	A 3 km route through woodland with views over Loch Ness, located north of the Proposed Development	8 km
Dundreggam Estate Walks	A 4 km route through Dundreggan Estate woodlands to a picturesque waterfall and views over Glen Moriston, located north of the Proposed Development	12 km
Ben Tee, Kilfinnan	A 10 km walk up the Corbett, with views across the Great Glen and Glen Garry, located north-west of the Proposed Development	10 km
Loch Lochy Munros from Kilfinnan	A 19 km hillwalking route above Loch Lochy, located north-west of the Proposed Development	10 km
Daingean Trail, Glengarry	A 1 km walk exploring the remains of the original settlement in Daingean with views over Loch Garry, located to the west of the Proposed Development	11 km
Carn Dearg (Bhrunachain), Glen Roy	A 9 km route up a Corbett, located south of the Proposed Development	11 km
Geal Charn, Monadhliath	A 13 km hillwalking route up one of the Monadh Liath, located south-east of the Proposed Development	11 km
Sron na Muic, Invermoriston	A 24 km walk across forestry tracks up a summit with views across Loch Ness, located north of the Proposed Development	12 km
Meall Dubh, from Glen Moriston	An 11 km hill walk up a Corbett hosting an operational wind farm, located north-west of the Proposed Development	12 km

Beinn Iaruinn and Leana Mhor, Glen Roy	A 9 km hill walk above the rollercoaster road up Glen Roy, located south-west of the Proposed Development	13 km
Creag Meagaidh circuit	A 21 km mountain walk with views across to neighbouring Munros, located south-east of the Proposed Development	13 km

Source: https://www.walkhighlands.co.uk/

Summary of Local Tourism and Recreation Context

13.6.55. The tourism sector is an important employer in Highland, in particular in the Local Area. However, none of the most visited tourism attractions in Highland are located within 15 km of the site.

13.6.56. There are a number of clusters of accommodation providers and attractions within 15km of the Proposed Development, with the majority centred around the areas of Fort Augustus, Invergarry and Invermoriston. Most accommodation providers in these areas are self-catered facilities and attractions are primarily viewpoints over nearby Loch Ness and historic sites.

13.6.57. The most important recreational assets within the vicinity of the site are the two long distance routes. The Great Glen Way, one of Scotland's Great Trails, passes to the north-west of the Proposed Development, about 2 km away at the closest point. The Scottish National Trail, which spans the length of Scotland, passes to the west of the Proposed Development, around 6 km away.

13.7. Potential Effects

Economic Impact

Construction

13.7.1. The Proposed Development consists of eight turbines, each with a capacity of up to 7.2 MW, giving a combined capacity of 57.6 MW, and approximately 10MW of battery energy storge system (BESS). 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 £53.1 million.

13.7.2. The expenditure was split into four main categories of contract:

- development and planning;
- balance of plant;
- turbines;
- grid connection; and
- battery storage.

13.7.3. 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 13.16**, it was assumed that 53% of capital expenditure (CAPEX) would be on turbine contracts, with 23% spend on balance of plant contracts, 8% on development and planning, 8% on grid connections and 9% on battery storage.

Table 13.16 - Development and Construction by Contract Type

	% CAPEX	Value of the Proposed Development (£m)
Development and Planning	8%	£4.6
Turbines	53%	£30.5
Balance of Plant	23%	£13.5
Grid Connections	8%	£4.4
Battery Storage	9%	£5.0
Total	**100%**	**£58.1**

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

13.7.4. The economic impact of the construction and development phase was estimated for Highland, Scotland and the UK.

13.7.5. 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 Highland.

13.7.6. To estimate the expenditure for each contract in each of the study areas, the proportions of contract type that might be secured in each area were applied to the estimated size of each component contract. The estimated split of spending and contract values are shown in **Table 13.17.**

13.7.7. On this basis, it was estimated that Highland could secure contracts worth up to £16.0 million, equivalent to 28% 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 77% of contracts, worth £10.4 million.

13.7.8. Scotland (including Highland) was estimated to secure £20.7 million, equivalent to 36% of total capital expenditure. The largest opportunity would be balance of plant contracts, worth around £11.7 million.

13.7.9. The UK (including Scotland) was estimated to secure £26.3 million, equivalent to 45% of total capital expenditure. The largest opportunity would be balance of plant contracts, worth around £13.5 million.

Table 13.17 Development and Construction by Study Area (£m)

	Highland		Scotland		UK	
	%	£m	%	£m	%	£m
Development and Planning	35%	£1.6	62%	£2.9	78%	£3.6
Turbines	2%	£0.8	8%	£2.3	13%	£3.9
Balance of Plant	77%	£10.4	86%	£11.7	100%	£13.5

	Highland		Scotland		UK	
	%	£m	%	£m	%	£m
Grid Connections	58%	£2.5	71%	£3.1	79%	£3.5
Battery Storage	14%	£0.7	14%	£0.7	35%	£1.8
Total	**27%**	**£16.0**	**36%**	**£20.7**	**45%**	**£26.3**

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

13.7.10. 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, 2022), turnover/GVA ratios were applied to each specific sub-contract in order to estimate GVA.

13.7.11. In this way, it was estimated that construction and development contracts associated with the Proposed Development could generate £8.1 million GVA in Highland, £10.5 million GVA in Scotland and £13.3 million GVA across the UK. The split by contract type is shown in **Table 13.18**.

Table 13.18 - Direct GVA by Contract Type and Study Area (£m)

	Highland	Scotland	UK
Development and Planning	£1.1	£1.8	£2.2
Turbines	£0.4	£1.2	£2.0
Balance of Plant	£5.2	£5.8	£6.7
Grid Connections	£1.1	£1.4	£1.6
Battery Storage	£0.3	£0.3	£0.8
Total	**£8.1**	**£10.5**	**£13.3**

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

13.7.12. 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, 2022), which allows the employment from any increase in turnover to be estimated.

13.7.13. The employment impacts during the construction and development phase of the Proposed Development 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.

13.7.14. In this way, it was estimated that the Proposed Development could support 120 direct years of employment in Highland, 160 direct years of employment in Scotland and 205 direct years of employment across the UK. The split of direct employment impacts by contract type is shown in **Table 13.19**.

Table 13.19 - Direct Employment by Contract Type and Study Area (Years of Employment)

	Highland	Scotland	UK
Development and Planning	5	15	20
Turbines	10	25	40
Balance of Plant	80	85	100
Grid Connections	20	30	30
Battery Storage	5	5	15
Total	**120**	**160**	**205**

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

13.7.15. 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, 2022), to the direct GVA and employment impacts.

13.7.16. In order to adjust these multipliers, which consider the national economy, for the economy of Highland, 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 effect.

13.7.17. The combined direct, indirect and induced impacts are shown in **Table 13.20**. It was estimated that the Proposed Development could generate a total of £10.8 million GVA and support 155 years of employment in Highland, £17.8 million GVA and 260 years of employment in Scotland, and £32.6 million GVA and 475 years of employment across the UK.

Table 13.20 - Total Economic Impact During Development and Construction

	Highland	Scotland	UK
GVA (£m)	£10.8	£17.8	£32.6
Jobs (Years of Employment)	155	260	475

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

13.7.18. The significance effect of activity associated with the development and construction of the Proposed Development on the Highland economy was assessed as not significant (**minor beneficial**). Across Scotland and the UK, the effect is expected to be not significant (**negligible**).

Operation

13.7.19. The operation and maintenance impact of the Proposed Development was estimated as the annual impact that would persist throughout the 35-year operational lifespan of the Proposed Development.

13.7.20. Annual expenditure on operations and maintenance was estimated based on analysis undertaken in the 2015 RenewableUK report. It was estimated that annual operations and maintenance expenditure associated with the Proposed Development could total up to £2.4 million (excluding community benefit payments and the payment of non-domestic rates).

13.7.21. In order to estimate the economic impact of the operation and maintenance expenditure in the study areas, 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 Highland.

13.7.22. On this basis it was estimated that Highland could benefit from £0.6 million in operations and maintenance contracts, with Scottish and UK businesses potentially benefitting from £2.2 million. The share of contracts in each area and their estimated values are shown in **Table 13.21**.

Table 13.21 - Operations and Maintenance Spending by Study Area

	Highland	Scotland	UK
Turnover (£m)	£0.6	£2.2	£2.2
Share (%)	24%	88%	88%

Source: BiGGAR Economics Analysis

13.7.23. 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 for the construction expenditure, using the Scottish Annual Business Statistics (Scottish Government, 2022).

13.7.24. In this way it was estimated that the turnover generated by the operation and maintenance of the Proposed Development could support up to £0.3 million direct GVA and 5 jobs in Highland, £0.9 million direct GVA and 10 jobs in Scotland and the UK. This is shown in **Table 13.22**.

Table 13.22 - Direct Economic Impact During Annual Operations and Maintenance

	Highland	Scotland	UK
GVA (£m)	£0.3	£0.9	£0.9
Employment (jobs)	5	10	10

Source: BiGGAR Economics Analysis

13.7.25. 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.

13.7.26. The impacts including the relevant economic multipliers are shown in **Table 13.23.** It was estimated that each year the spending required for the operation and maintenance of the Proposed Development could support up to £0.4 million GVA and 5 jobs in Highland, £1.6 million GVA and 15 jobs in Scotland and £2.3 million GVA and 25 jobs across the UK.

Table 13.23 - Total Annual Economic Impact During Operations and Maintenance

	Highland	Scotland	UK
GVA (£m)	£0.4	£1.6	£2.3
Employment (jobs)	5	15	25

Source: BiGGAR Economics Analysis

13.7.27. The magnitude of these impacts was assessed as negligible with respect to the economies of Highland, Scotland and the UK.

13.7.28. The significance of the effect has therefore been assessed as not significant (**negligible**) in each of the study areas.

Wider Economic Benefits

Community Benefit Fund

13.7.29. The Applicant has undertaken extensive engagement with the communities closest to the wind farm, in particular Fort Augustus, Invergarry and Spean Bridge – discussing at length the opportunities associated with the community benefit fund that Culachy Wind Farm will deliver.

13.7.30. The Applicant has followed an approach that is focussed on developing an understanding of community needs and local aspirations. As a result, the Applicant is very aware of the appetite within the community to utilise the funding to support existing and future long-term sustainable projects – such as the development of affordable housing and investing in community buildings.

13.7.31. The Applicant has committed to seeking to deliver a fund that utilises the existing structures in place and acknowledges the different challenges being faced across the communities. Therefore, the Applicant will continue to work with the communities to identify the best structure to deliver a fund using the best mechanisms to ensure that it is empowering communities to make the important decisions about what they want to see happen locally and how the fund is allocated.

13.7.32. 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.

13.7.33. 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 £288,000 annually, or £10.1 million during a 35-year operational lifetime.

13.7.34. The magnitude of this effect has been assessed as low for each of the study areas. The significance of the effect has been assessed as not significant (**negligible**) in the Highland economy and not significant (**negligible**) across Scotland and the UK.

Non-Domestic Rates

13.7.35. The Proposed Development would be liable for non-domestic rates, the payment of which would contribute directly to public sector finances. Analysis of rateable values of previous wind farms found an average rateable value per MW of approximately £24,000.

13.7.36. However, these values were calculated based on projects which had benefitted from Renewables Obligations Certificates (ROCs). The Proposed Development would not benefit from this programme and as a result the rateable value would not be in line with previous data.

13.7.37. Current expectations in the sector are that wind farm valuations in the future might typically be around £14,000 per MW. This would result in annual payments of approximately £7,000 per MW.

13.7.38. Using this estimate, the Proposed Development would contribute £403,000 annually through the payment of non-domestic rates. Over a 35-year lifespan, the Proposed Development would contribute £14.1 million.

13.7.39. The significance of this effect has been assessed as not significant (**negligible**) on the Highland economy.

Tourism and Recreation

Evidence on the Impacts of Wind Farms on Tourism

13.7.40. In 2008, the Moffat Centre at Glasgow Caledonian University studied the potential effects of wind farms on tourism (Glasgow Caledonian University/Moffat Centre, 2008). The study analysed the possible effects of wind farm development and concluded that, while tourism may be affected in small numbers, the overall impact on tourism expenditure and employment would be limited. This study is now dated and since 2008, wind farms have become increasingly common across Scotland, particularly in Highland. It would be expected that, with the growth in onshore wind since the completion of the Moffat Centre study, any negative effects wind farms have on tourism would now be apparent in tourism employment statistics.

13.7.41. BiGGAR Economics produced a study on the effect that onshore wind has on tourism employment in 2021 (BiGGAR Economics, 2021). The study, which analysed 16 onshore wind farms constructed between 2015 and 2019 in Scotland, reported on the effect these wind farms had on tourism employment at the national, regional, and local level.

13.7.42. In the study, tourism employment was considered over the period 2015 to 2019. During this period, the number of wind farms increased in Scotland and in almost all local authority areas, while employment in tourism also grew. The analysis found no correlation between tourism employment and the number of turbines at the national or local authority level.

13.7.43. The study also analysed the impact onshore wind has on tourism employment proximate to developments. Areas within 15 km areas of the wind farms constructed between 2015 and 2019 were analysed, comparing employment in tourism in 2015 and 2019, before the construction of the wind farms and after, allowing for the exclusion of construction impacts on tourism (such as wind farm related workers staying at local accommodation).

13.7.44. The study found no link between the development of a wind farm and employment in the tourism sector. Of the 16 local areas included in the study, 11 experienced an increase in tourism employment between 2015 and 2019. In 12 of the local areas, employment grew faster or decreased less than the rate for the corresponding local authority.

13.7.45. The 2021 study also reassessed 28 wind farms constructed between 2009 and 2015 analysed in a previous 2017 study (BiGGAR Economics, 2017), finding that, in the years following the construction of the 28 wind farms, 19 of the small areas experienced an increase in tourism employment, including four areas where tourism employment had fallen between 2009 and 2015. In 16 local areas, employment grew quicker or decreased less than in the corresponding local authority area.

13.7.46. The study concluded that there was no pattern suggesting the development of a wind farm would result in a reduction in tourism employment at a national, regional or local level.

13.7.47. Nevertheless, tourism makes an important contribution to the economy in Highland and Moray and so following assessment considers whether there may be any impact on specific tourism-related businesses.

Visitor Attractions

13.7.48. This assessment is based on whether the Proposed Development would impact behaviour in a way that would reduce visitor numbers to attractions or have an effect on the local tourism economy.

13.7.49. Factsheets produced by VisitScotland (2022) identify the ten most visited attractions in Highland. Of these, the closest is Glen Affric, located 26 km away from the Proposed Development. The distance between the Proposed Development and the regional attractions outlined in the baseline suggests that the Proposed Development would be unlikely to impact any motivations to visit these attractions. Therefore, the effect on tourism has been assessed as **negligible**.

13.7.50. An additional 14 local attractions were identified within 15 km of the Proposed Development following a web search of VisitScotland (2022).

13.7.51. Bridge of Oich, a suspension bridge originally construction in 1854, is located approximately 2 km from the Proposed Development. The assessment in **Chapter 6** (Landscape and Visual Impact Assessment), including the ZTV, indicate that the Proposed Development will not be visible from the Bridge of Oich. Motivations to visit the bridge, such as an interest in Victorian architecture and engineering, would not be impacted by the Proposed Development, and it would not be expected that there would be any changes in visits as a result of its development. Therefore, the effect on tourism has been assessed as **negligible**.

13.7.52. Located 4 km from the Proposed Development is Kytra Lock, a lock gate on the Caledonian Canal where passengers on canal cruises will often stop due to the picturesque surrounding. The assessment in **Chapter 6** (Landscape and Visual Impact Assessment), including the ZTV, indicate that the Proposed Development will not be visible from Kytra Lock. As the area around the lock and the interest of tourists to take part in canal cruises will not be affected by the Proposed Development, the effect on tourism related to this asset has been assessed as **negligible**.

13.7.53. Also located 4 km from the Proposed Development is Invergarry Castle. The assessment in **Chapter 6** (Landscape and Visual Impact Assessment), including the ZTV, indicate that the Proposed Development will not be visible from Invergarry Castle. Visitors to the ruins of the 17th century castle would be driven to visit the site due to an interest in Scottish history or the views across Loch Oich. As it is not expected that these benefits would be affected by the Proposed Development, the impact on tourism has been assessed as **negligible**.

13.7.54. Fort Augustus Golf Club is located 6km from the Proposed Development. The assessment in **Chapter 6** (Landscape and Visual Impact Assessment), including the ZTV, indicate that one or two of the blade tips will theoretically be visible on some parts of the golf course. Visitors to the club are motivated to visit the course through access to the challenging traditional heathland golf course, as well as a club house and bar. As the motivations to visit would not be impacted by the Proposed Development, the impact on tourism has been assessed as **negligible**.

13.7.55. Also located 6 km from the Proposed Development is the Clansman Centre. The assessment in **Chapter 6** (Landscape and Visual Impact Assessment), including the ZTV, indicate that one or two of the blade tips will theoretically be visible from the outside of the museum. The museum includes a recreated interior of a Highland turf house as well as a shop featuring Celtic and locally produced crafts and gifts. It is not expected that motivations to visit the museum, such as an interest in Scottish history, would not be impacted by the Proposed Development. Therefore, the impact on tourism has been assessed as **negligible**.

13.7.56. The Glendoe Eagle Statue, located 7 km from the Proposed Development, is a bronze statue of a golden eagle which has overlooked the Glendoe Dam since 2009. The assessment in **Chapter 6** (Landscape and Visual Impact Assessment), including the ZTV, indicate that the Proposed Development will not be visible from the statue. Motivations to see the statue, such as an interest in the works of the sculptor or the views over the Glendoe Dam would not be impacted by the Proposed Development and therefore the effect on tourism has been assessed as **negligible**.

13.7.57. The Fort Augustus Lighthouse is located 7 km from the Proposed Development. The assessment in **Chapter 6** (Landscape and Visual Impact Assessment), including the ZTV, indicate that one or two of the blade tips will theoretically be visible from the lighthouse. The 'saltshaker' lighthouse, which was constructed in 1840 on the banks of the Caledonian Canal, is often viewed by tourists on canal cruises. As the motivations to take a canal cruise and to visit the lighthouse itself, such as an interest in its unusual design, would not be impacted by the Proposed Development, the impact on tourism has been assessed as **negligible**.

13.7.58. Loch Ness View Point Fort Augustus is located 7 km from the Proposed Development. The assessment in **Chapter 6** (Landscape and Visual Impact Assessment), including the ZTV, indicate that one or two of the blade tips will theoretically be visible from the viewpoint. The viewpoint looks North across the Loch in the opposite direction of the Proposed Development. It is therefore not expected that the Proposed Development would impact the motivation to visit the viewpoint, and the effect on tourism has been assessed as **negligible**.

13.7.59. Also located 7 km from the Proposed Development is the outdoor activities centre Monster Activities. The centre offers events and classes in activities such as clay pigeon shooting, archery and canoeing in various locations across the area. As the motivation to take part in these activities would not be impacted by the Proposed Development, the effect on tourism has been assessed as **negligible**.

13.7.60. Daingean Settlement is located 12 km from the Proposed Development. The site features the ruins of an 18th century cottage, constructed on top of an ancient settlement. The assessment in **Chapter 6** (Landscape and Visual Impact Assessment), including the ZTV, indicate that seven or eight of the blade tips will theoretically be visible from the settlement. As the motivations to visit the settlement, such as an interest in Scottish history, would not be impacted by the Proposed Development, the effect on tourism has been assessed as **negligible**.

13.7.61. Glen Garry Viewpoint East is located 12 km away from the Proposed Development, and Glen Garry Viewpoint West is located 14 km away. The assessment in **Chapter 6** (Landscape and Visual Impact Assessment), including the ZTV, indicate that seven or eight of the blade tips will theoretically be visible from the viewpoint. However, the significant forestry in the area will reduce the visibility of these blades.The viewpoints offer views South across the Loch, parallel to the Proposed Development. Therefore, the effect on tourism has been assessed as **negligible**.

13.7.62. Located 14 km from the Proposed Development is Glenmoriston Shooting Ground. The centre offers activities and hosts events in trap shooting disciplines. The assessment in **Chapter 6** (Landscape and Visual Impact Assessment), including the ZTV, indicate that the Proposed Development will not be visible from the shooting ground. As the motivation to visit the shooting ground, an interest in taking part in clay pigeon shooting or similar outdoor sports, would not be impacted by the Proposed Development, the effect on tourism has been assessed as **negligible**.

13.7.63. Garva Double Bridge, located 15 km from the Proposed Development, is a bridge connecting Dalwhinnie and Fort Augustus. Completed in 1732, the listed bridge was constructed to carry the military road from Dalwhinnie to Fort Augustus across the River Spey. The assessment in **Chapter 6** (Landscape and Visual Impact Assessment), including the ZTV, indicate that the Proposed Development will not be visible from the bridge. As the motivation to visit the bridge, such as an interest in its history or engineering at the time of its construction, would not be impacted by the Proposed Development, the impact on tourism has been assessed as **negligible**.

Accommodation Providers

13.7.64. A number of accommodation clusters within 15 km of the Proposed Development were identified. The assessment considered how any potential effects on these providers would contribute to a change in the tourism economy via a change in visitor behaviour.

13.7.65. There are 35 accommodation providers located in Fort Augustus. This includes one provider located 1 km from the Proposed Development, with the remaining 34 ranging from between 5 km to 8 km away from the Proposed Development.

13.7.66. Of the 35 providers, 19 were self-catered. The self-catering providers in the area advertised their modern amenities, as well as additional attractive features such as private parking, gardens and terraces. Many highlighted their proximity to Inverness and Fort William, as well as local walking routes, mountain trails and areas to take part in outdoor sports such as fishing. Some providers, such as the Highland Club and Tigh Na Coilltean, highlighted their location on extensive grounds or by a wooded area which guests can explore. As none of these motivations to visit these providers would be impacted by the Proposed Development, the effect has been assessed as **negligible**.

13.7.67. Nine of the Fort Augustus providers were B&Bs. The various B&Bs in the area marketed their facilities based on their proximity to the village of Fort Augustus, the Caledonian Canal, Loch Ness, River Oich and River Tarff, as well as local walks and cycling trails. Benefits also included shared gardens and lounges for guests. As none of these motivations to stay at the hotels in the area would be impacted by the Proposed Development, the effect has been assessed as **negligible**.

13.7.68. An additional three providers in Fort Augustus were hotels. The Lovat Loch Ness highlighted its 4-star status as a luxury hotel, as well as its restaurant supplied by the hotel's kitchen garden or through foraging in the local area. The Inch Hotel marketed its historic routes as a country house, as well as its proximity to Urquhart Castle, the Caledonian Canal and the village centre of Fort Augustus. The Inch Hotel also benefits from its location by Loch Ness, with views North across the Loch in the opposite direction to the Proposed Development. The Caledonian Canal Centre and Lock Chambers markets its boutique rooms located near Loch Ness, with views over Fort Augustus. As these motivations to visit the hotels in Fort Augustus would not be impacted by the Proposed Development, the effect has been assessed as **negligible**.

13.7.69. Providers in Fort Augustus also include two holiday parks. Loch Ness Highland Resort markets its luxury glamping pods and holiday homes, as well as on-site facilities including a restaurant, playpark and gift shop. The resort also highlights its proximity to Loch Ness and the available local walking routes. Fort Augustus Chalet Park highlights its extensive grounds, as well as the proximity to the Caledonian Canal, River Oich and the village of Fort Augustus. As none of the motivations to visit these providers would be impacted by the Proposed Development, the effect has been assessed as **negligible**.

13.7.70. Morag's Lodge, a hostel in Fort Augustus, markets its dog-friendly status, affordability and proximity to the Great Glen Way, Loch Ness, and the local village. These motivations to stay at the hostel would not be impacted by the Proposed Development and therefore, the effect has been assessed as **negligible**.

13.7.71. The closest accommodation provider in Fort Augustus was Blackburn of Corrieyairack, a bothy located 1 km from the Proposed Development. While the bothy will be in close proximity to the site, the motivation to stay at the bothy is to take shelter overnight when walking or cycling on Corrieyairack Hill. As any walkers on the Corbett staying overnight will still require shelter, it is unlikely that levels of use of the bothy will be affected by the Proposed Development. Consequently, the effect as assessed as **negligible**.

13.7.72. Another cluster of accommodation providers in the local area was located in Invergarry, with 20 providers located between 1 to 11km from the Proposed Development.

13.7.73. Ten self-catering providers were identified within Invergarry. Many providers highlighted their amenities, such as wood burning fires, decked areas and private gardens. Many also marketed their location close to Loch Garry and the Caledonian Canal, as well as local walking routes and cycling trails. As none of these motivations to visit these providers would be impacted by the Proposed Development, the effect has been assessed as **negligible**.

13.7.74. Accommodation in Invergarry also included three hotels. Rokeby Manor highlighted its historic architecture, originally constructed in 1840, as well as its bar and farmhouse restaurant. The Glengarry Castle Hotel emphasised its location between Loch Garry and Loch Ness, with extensive grounds for guests to explore, including the ruin of Invergarry Castle. Invergarry Hotel also highlighted its proximity to the River Garry and its brasserie which serves local produce. The hotels also highlighted their location near the route to Skye, advertising themselves as stop off points for travellers. It is not expected that any of these motivations to visit the hotels would be impacted by the Proposed Development. Therefore, the effect has been assessed as **negligible**.

13.7.75. There were 3 campsites within 15 km of the Proposed Development in Invergarry, including Faichemard Farm Touring Campsite, Leiterfearn Wild Campsite and Aberchalder Bridge Informal Campsite. The sites highlighted their proximity to local and major walking routes such as the Great Glen Way and the Caledonian Canal. As none of the motivations to visit these sites would be impacted by the Proposed Development, the effect has been assessed as **negligible**.

13.7.76. Two bed and breakfasts in the area, Corrie View and Lundie View B&B, marketed amenities such as a private garden and outside decking, as well as their location by walking routes and the Aberchalder Forest. As these motivations to visit would not be impacted by the Proposed Development, the effect has been assessed as **negligible**.

13.7.77. There was one provider in Invergarry offering both self-catered and bed and breakfast accommodation. Ardgarry Farm highlights its proximity to local walks, activities such as hillwalking and fishing. The provider also features several ponies and a donkey which guests can visit. It is not expected that these motivations to visit would be impacted by the Proposed Development. Therefore, the effect has been assessed as **negligible**.

13.7.78. Accommodation in Invergarry also featured Youth Hostels Association Scotland, a youth hostel which marketed its location by the Great Glen Way, local forest walks, and Ben Tee, the local Corbett. The provider also highlights the activities available in the area, including mountain biking, white water rafting and rock climbing. As none of these motivations to visit would be impacted by the Proposed Development, the effect has been assessed as **negligible**.

13.7.79. Invermoriston featured 11 accommodation providers, located between 12 and 15km from the Proposed Development.

13.7.80. Of accommodation providers in Invermoriston, seven were self-catered. The providers marketed themselves based on access to the Great Glen Way and views across Loch Ness and of Stron na Muic, a mountain located North of the Proposed Development. Providers also highlighted additional space provided by private grounds and gardens. As none of these motivations to visit the providers would be impacted by the Proposed Development, the effect has been assessed as **negligible**.

13.7.81. There were also two bed and breakfast providers in Invermoriston: Darroch View B&B and Craik Na Dav B&B. These providers highlighted their proximity to Loch Ness and the Great Glen Way, as well as views to Stron na Muic. As none of these motivations to visit would be impacted by the Proposed Development, the effect has been assessed as **negligible**.

13.7.82. One hotel within 15 km of the Proposed Development was located in Invermoriston. The Glenmoriston Arms Hotel highlights its comfortable rooms, restaurant and bar, as well as its location on the route to Skye, Fort William and Inverness. It would not be expected that these motivations to visit would be impacted by the Proposed Development. Therefore, the effect has been assessed as **negligible**.

13.7.83. The one campsite in Invermoriston, Inver Coille Camping & Glamping, highlighted its available glamping facilities, as well as its facilities including fire pits, outdoor seating and a ship. The site also emphasises its proximity to the Great Glen Way and forest and mountain views. As none of these motivations to visit would be impacted by the Proposed Development, the effect has been assessed as **negligible**.

13.7.84. There were three accommodation providers in Whitebridge, all located approximately 15 km from the Proposed Development.

13.7.85. Whitebridge accommodation included two self-catering providers. Both providers highlight their proximity to Loch Ness, and views across the local landscape including the Monadhliath Mountains to the North East of the Proposed Development. As none of these motivations to visit will be impacted by the Proposed Development, the effect has been assessed as **negligible**.

13.7.86. There was also one bed and breakfast within 15 km of the Proposed Development located in Whitebridge. Glen Mor Lodge Bed and Breakfast highlights its own private garden and further extensive grounds, as well as views of the Monadliath Mountains and access to the South Loch Ness Trail. It would not be expected that these motivations to visit would be impacted by the Proposed Development. Therefore, the effect has been assessed as **negligible**.

13.7.87. There were two providers in Spean Bridge, located 6 km and 11 km away respectively.

13.7.88. Great Glen Lodges, a self-catering provider, highlighted the available views across Loch Lochy and the surrounding hills to the opposite direction of the Proposed Development, as well as proximity to the Great Glen Way and other challenging walks. These motivations would not be impact by the Proposed Development and therefore the effect has been assessed as **negligible**.

13.7.89. Great Glen Water Park, a holiday park in Spean Bridge, was marketed largely on its available activities, including snow sports, mountain sports and water sports. As none of these motivations to visit would be impacted by the Proposed Development, the effect has been assessed as **negligible**.

13.7.90. There was one accommodation provider in Roy Bridge. Luib Chonnal, located 8km from the Proposed Development, is a bothy which is used by walkers when staying overnight on the Monadhliath Hills. Due to the distance from the site, as well as the bothy being the only available accommodation for walkers and cyclists staying overnight on the hills, it is unlikely that these motivations to stay there would be impacted by the Proposed Development, and therefore the effect has been assessed as **negligible**.

13.7.91. Within 15 km of the Proposed Development, 27 recreational trails were identified. They have been assessed on the bases of whether there would be a reduction in visitors or recreational users in the area.

13.7.92. This assessment has been carried out in line with the guidance from NatureScot (**Table 13.5**) and takes account of **Chapter 6** (Landscape and Visual Impact Assessment) and **Chapter 12** (Traffic and Transport).

13.7.93. The results of this assessment are shown in **Table 13.24**.

Table 13.24 - Impact of Recreational Trails

	Tourism	LVIA	Traffic & Transport
Fort Augustus to Mandally	X	X	X
Loch Oich circuit	X	X	X
Great Glen Way	X	X	X
River Oich, Fort Augustus	X	X	X
Carn a' Chuilinn, via Glen Doe	X	X	X
River Garry, Invergarry	X	X	X
The Eachach Carn Deargs, Glen Roy	X	X	X
Fort Augustus Explorer	X	X	X
Gairbeinn and Corrieyairack Hill, Melgarve	X	√	X
Meall na h-Aisre, from Garva Bridge	X	X	X
The Scottish National Trail	X	X	X
Loch Ness 360	X	X	X
Jenkins Park, Near Fort Augustus	X	X	X
Loch Lundie, Invergarry	X	X	X

Allt na Calliche Trail, near Invergarry	X	X	X
Ciste Dubh Trail, near Invergarry	X	X	X
Allt na Criche, near Fort Augustus	X	X	X
Ben Tee, Kilfinnan	X	X	X
Loch Lochy Munros from Kilfinnan	X	X	X
Daingean Trail, Glengarry	X	X	X
Carn Dearg (Bhrunachain), Glen Roy	X	√	X
Geal Charn, Monadhliath	X	X	X
Dundreggam Estate Walks	X	X	X
Sron na Muic, Invermoriston	X	X	X
Meall Dubh, from Glen Moriston	X	X	X
Beinn Iaruinn and Leana Mhor, Glen Roy	X	X	X
Creag Meagaidh circuit	X	X	X

13.7.94. For those trails where no impacts have been identified, the following assessment applies:

- there would be no expected impact on access to this route as a result of the Proposed Development;
- it is not expected that the nature of the Proposed Development would result in intense levels of effect which would damage recreation on the route;
- given that there would be no change to the Proposed Development over time, there would be no potential for any effects on the route to increase over time;
- the route forms part of a cluster of recreational trails in the area and therefore its scarcity value is relatively low; and
- any visitors who prefer not to view manmade structures on recreational paths would have the opportunity to use other routes in the area with no visibility of the Proposed Development.

13.7.95. Consequently, the effect of the Proposed Development on those recreational trails has been assessed as **negligible**.

13.7.96. The Corrieyairack Pass between Laggan and Fort Augustus comes within the site Boundary and includes originally formed part of General Wade's Military Road, and is considered to be a cultural heritage asset, in addition to being a recreational asset. The assessment of impact in Chapter 10: Cultural Heritage found that the cultural impacts of the Proposed Development on the Pass would be minor adverse and not significant in EIA terms.

13.7.97. The entire route is approximately 39km long and the assessment in Chapter 6: Landscape and Visual Impact Assessment, including the ZTV, has identified that the turbine blade tips would not be visible for the majority of the route. Including the first 23 km from Laggan and the first 5km from Fort Augustus.

13.7.98. The route is used by both cyclists and walkers. The route includes a total climb of over 900 meters and is considered to be a challenging cycling route (VisitScotland, 2023). The motivations for cycling the route are therefore likely to be associated with fitness and the challenge of the climb. This challenge will not be affected by the visibility of the Proposed Development.

13.7.99. The walkers who use this route will either traverse the route in its entirety, include it as part of a circular route or to climb some of the peaks on the way. The entire route is expected to take between 10 and 12 hours (Walkhighlands, 2022) and therefore the route is likely to attract experienced and motivated walkers. The presence or visibility of the Proposed Development will not impact the motivation to walk this route. However, the assessment in Chapter 6: Landscape and Visual Impact Assessment has identified that there will be Major Significant Effects on some parts of this route and the landscape may also be a motivation for walkers.

13.7.100. The assessment of significance of this effect has been assessed in line with the guidance from NatureScot this guidance considers 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 NS 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 NS 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.

13.7.101. The motivations for both cyclists and walkers to use the path suggest that while visual impacts may be important, the use of the route is not dependent on them. Therefore, the significant visual effects will not have permanent or long-term effects on the resources on which enjoyment of the natural heritage depends.

13.7.102. Consequently, the effect of the Proposed Development on the recreational trail of the Corrieyairack Pass has been assessed as **minor adverse (not significant)**.

13.7.103. Gairbeinn and Corrieyairack Hill, Melgarve passes 5 km south-west of the Proposed Development. The route attracts visitors with its trail ascending up and along the twin Corbetts of Gairbeinn and Corrieyairack Hill. This motivation to take the route would not be impacted by the Proposed Development.

13.7.104. Chapter 6: Landscape and Visual Impact Assessment has identified that there will be significant visual impacts from the Proposed Development on Corrieyairack Hill and the associated Corrieyairack Pass. As with the assessment of effects on the Corrieyairack Pass, it was determined that the visual impacts will not be the primary motivation for completing these routes for the majority of users.

13.7.105. Consequently, the effect of the Proposed Development on the recreational trail Gairbeinn and Corrieyairack Hill, Melgarve has been assessed as **minor adverse (not significant)**.

13.7.106. Carn Dearg (Bhrunachain), Glen Roy is a route located 11 km from the Proposed Development at the closest point. The trail benefits from its route up the tallest of the four Corbetts accessible from Glen Roy, with views across the Parallel Roads. It is not expected that these benefits would be impacted by the Proposed Development.

13.7.107. Chapter 6: Landscape and Visual Impact Assessment has identified that there will be significant visual impacts from the Proposed Development on Carn Dearg. However, as with the assessment of the Corrieyairack Pass, the enjoyment of the natural heritage by recreational users is not dependent on the viewpoint towards the Proposed Development.

13.7.108. Consequently, the effect of the Proposed Development on the recreational trail Carn Dearg (Bhrunachain), Glen Roy has been assessed as **minor adverse (not significant)**.

13.8. Mitigation

13.8.1. No significant adverse socio-economics, tourism and recreation effects during the construction or operation phases of the Proposed Development have been identified. Therefore, no mitigation measures are necessary.

13.9. Residual Effects

13.9.1. As no significant adverse effects have been identified and no mitigation measures are necessary, the residual effects of the Proposed Development are the same as the potential effects described above.

13.10. Cumulative Effects

13.10.1. The assessment of cumulative effects during the construction and operation was based on developments either operational, consented or within the planning system, including:

- 8 operational developments (Stronelairg Wind Farm, Bhlaraidh Wind Farm, Beinneun and Beinneun Extension, Farr Wind Farm, Glen Kyllachy Wind Farm, Dunmaglass Wind Farm and Millennium Wind Farm)
- 2 consented developments (Aberader Wind Farm, Bhlaraidh Extension)
- 7 developments in the planning system (Corriegrath 2 Wind Farm, Cloiche Wind Farm, Tomchrasky, Flodhag Wind Farm, Chrathiach Wind Farm, Corrimony Wind Farm and Allt Carach Wind Farm)

Cumulative Effects during Construction

13.10.2. There may be cumulative effects on socio-economics if the Proposed Development supports the development of a local supply chain, which other wind farm developments in the area may benefit from. This would benefit local businesses and increase the economic impact in Highland and Scotland. The cumulative projects represent a cluster of onshore wind project, and the pipeline of activities will encourage the diversification of local businesses to support the onshore wind sector and the investment of existing onshore wind supply companies into the area. The development of a strong local supply chain for the Proposed Development and similar projects would help to increase the magnitude of beneficial economic effects considered in the chapter.

13.10.3. If multiple projects, including the Proposed Development, were constructed at the same time, and the supply chain was not sufficiently developed, this could result in competition for local supply chain content. This could result in goods and services being procured from further afield as local companies may lack the capacity to meet the demands of multiple projects. This would have the potential of reducing the local economic impact of any individual project.

Cumulative Effects during Operation

13.10.4. As with the construction effects the presence of an onshore wind cluster around the Proposed Development will create an opportunity for diversification and investment within local companies to support the operational phase of onshore wind projects. This would have the potential to increase the magnitude of beneficial economic effects considered in this chapter.

13.10.5. 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. The effects that have been identified on tourism and recreation assets are the result of significant effects identified in Chapter 6: Landscape and Visual Impact Assessment.

13.10.6. Any cumulative effects on tourism and recreation would be the result of cumulative effects in other environmental effects that have the potential to influence tourism and recreation, for example landscape and visual impacts. The cumulative visual effects for Corrieyairack Pass and Corrieyairack Hill for consented projects are considered to be the same as for the Proposed Development, namely Major Significant for Corrieyairack Pass and Moderate – Major Significant for Corrieyairack Hill. The inclusion of the projects within the planning system does not change this assessment for Corrieyairack Pass, but it does increase the assessment of significance for Corrieyairack Hill to Major Significant. However, it was not expected that this increase in the significance of the assessment would result in a change in activity different from the Proposed Development in isolation because the primary motivations for using both recreational routes will not be changed, either for cyclists or walkers. In particular, the enjoyment of the recreational assets is not dependent on the visual impacts at specific points along each route. Therefore, there is not expected to be any cumulative effects on these receptors.

13.10.7. The cumulative visual effects for Carn Dearg for both the consented projects and those within the planning system have been assessed as Moderate Significant. This is the same as the assessment for the Proposed Development in isolation and therefore there is not expected to be any additional cumulative effects.

13.11. Summary

13.11.1. This chapter assesses the potential socio-economics, recreation and tourism effects of the Proposed Development.

13.11.2. The Highland Council area features both an ageing and declining population, with the Local Area surrounding the Proposed Development expected to follow the same trends. A lack of employment opportunities and an influx of retirees to Highland is contributing to this demographic challenge. The industrial structure of the Local Area suggests that the economy is highly reliant on sectors associated with the tourism industry for employment.

Construction

13.11.3. During the development and construction phase, it is estimated that the Proposed Development will generate up to:

- £10.8 million GVA and 155 job years of employment in Highland;
- £17.8 million GVA and 260 job years of employment in Scotland; and
- £32.6 million GVA and 475 job years of employment in the UK.

13.11.4. The development and construction of the Proposed Development is expected to result in:

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

Operation

13.11.5. During the operations and maintenance phase, it is estimated that the Proposed Development will generate an annual impact of up to:

- £0.4 million GVA and 5 job years of employment in Highland;
- £1.6 million GVA and 15 job years of employment in Scotland; and
- £2.3 million GVA and 25 job years of employment in the UK.

13.11.6. The operation and maintenance of the Proposed Development is expected to result in:

- a **negligible** effect on the Highland economy;
- a **negligible** effect on the Scottish economy; and
- a **negligible** effect on the UK economy;
- a **negligible** effect on the Highland economy through community benefit payments;
- a **negligible** effect on Highland as a result of the payment of non-domestic rates; and
- a **negligible** overall effect on local tourism and recreation, with two recreational routes expected to experience minor adverse effects.

13.11.7. The Proposed Development would also provide community benefit funding for the Local Area of up to £288,000 annually.

13.11.8. It is estimated that the Proposed Development would pay £403,000 each year in non-domestic rates, helping to support local government services.

13.11.9. 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.

13.11.10. 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 economies, contributing to sustainable economic growth.

Table 13.25 - Summary of Effects

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse
Construction					
£10.8 million GVA and 155 job years in Highland	Minor and not significant	Beneficial	n/a	Minor and not significant	Beneficial
£17.8 million GVA and 260 job years in Scotland	Negligible and not significant	Beneficial	n/a	Negligible and not significant	Beneficial
£32.6 million GVA and 475 jobs in the UK	Negligible and not significant	Beneficial	n/a	Negligible and not significant	Beneficial
Operation					
£0.4 million GVA and 5 jobs in Highland	Negligible and not significant	Beneficial	n/a	Negligible and not significant	Beneficial
£1.6 million GVA and 15 jobs in Scotland	Negligible and not significant	Beneficial	n/a	Negligible and not significant	Beneficial
£2.3 million GVA and 25 jobs in the UK	Negligible and not significant	Beneficial	n/a	Negligible and not significant	Beneficial
£288,000 annual community benefit payments	Negligible and not significant	Beneficial	n/a	Negligible and not significant	Beneficial
Payment of non-domestic rates	Negligible and not significant	Beneficial	n/a	Negligible and not significant	Beneficial
Effect on local tourism economy	Negligible and not significant	n/a	n/a	Negligible and not significant	n/a

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