

13 Socio-economics, Tourism and Recreation

13.1 Introduction

13.1.1 This chapter considers the likely significant effects (LSE) that the proposed Longcroft Wind Farm (the proposed development) may have on the socio-economics, tourism and recreation of the area/ region surrounding the site. Where relevant, effects are also considered within the rest of Scotland and the United Kingdom (UK). The specific objectives of the chapter are to:

- describe the current baseline;
- describe the assessment methodology and significance criteria used in completing the impact assessment;
- describe the potential effects, including direct, indirect and cumulative effects;
- describe the mitigation measures proposed to address the likely significant effects; and
- assess the residual effects remaining following the implementation of mitigation measures.

13.1.2 The impacts on socio-economics, tourism and recreation may come as a direct result or indirect interaction between the proposed development and the socio-economics of the area/ region, where the interactions could be positive or negative.

13.1.3 Socio-economics, tourism and recreation impacts during the construction phase of the proposed development include the temporary creation of employment opportunities, and potential adverse effects on recreational and tourism receptors. Technical information used to support the economic modelling of employment and Gross Value Added (GVA)¹ effects have been provided by Renewable Energy Systems Ltd (RES) (the applicant).

13.1.4 Once operational, impacts on the local labour market arising from operation and maintenance jobs would be more limited. However, there is potential for further long-term benefits to the community, which could result from any potential community benefit fund payments. There is also the potential for adverse effects during the operational phase on tourism and recreation assets.

13.1.5 The assessment has been carried out by Anne Dugdale of SLR Consulting Ltd. Anne has over 25 years' experience and is highly qualified, with an MA in Town and Regional Planning and is a Member of the Royal Town Planning Institute (RTPI). She has managed a wide range of planning applications and Environmental Impact Assessments (EIA) for major projects throughout the UK. Her experience in business development and commercial awareness has led her to develop expertise in supply chain and employment & skills issues in socio-economics, tourism and recreation assessment.

13.1.6 The chapter is supported by **Figure 13.1** and **Figure 13.2** which are referenced in the text where relevant.

13.2 Legislation, Policy and Guidance

13.2.1 A summary of the policy and guidance relevant to socio-economics, tourism and recreation is provided in the following sections. For a full list of planning policies of relevance to this EIA see **Chapter 4: Climate Change, Energy & Planning Policy**.

National Policy and Guidance

National Planning Framework 4

13.2.2 National Planning Framework 4 (NPF4) (Scottish Government, 2023a) Policy 11: Energy, notes that:

“Development proposals will only be supported where they maximise net economic impact, including local and community socio-economic benefits such as employment, associated business and supply chain opportunities”.

13.2.3 Continuing, stating that proposed development design and mitigation should demonstrate:

“public access, including impact on long distance walking and cycling routes and scenic routes”.

¹ GVA measures the contribution to an economy of an individual producer, industry sector or region.

Onshore Wind Policy Statement 2022

13.2.4 The Scottish Government's 'Onshore Wind Policy Statement' (2022) states the reasons behind the development of further onshore wind energy in Scotland as a cheap and reliable source of zero carbon energy. It highlights the lowering costs of the development of onshore wind, whilst encouraging the promotion of community benefits from all sources of renewable energy, as well as shared ownership opportunities. This position is summarised in paragraph 4.2.4, stating:

"We are committed to increasing access to affordable energy, maximising community benefits from, and ownership of, energy projects, and providing regional and local opportunities to participate in our net zero energy future. We are encouraging developers to offer shared ownership opportunities to communities as standard on all new renewable energy projects, including repowering and extension to existing projects."

Scotland's National Strategy for Economic Transformation 2022

13.2.5 Published in March 2022, the National Strategy for Economic Transformation (Scottish Government, 2022a) sets out the priorities over the forthcoming ten years to maximise Scotland's economic opportunities.

13.2.6 The Strategy aims to move to a 'just transition', whereby a green economic recovery from the impacts of the Covid-19 pandemic is driven through the creation of a wellbeing economy. It is envisioned that this will be achieved in part by:

"building on our strengths in sectors like energy, financial services and life-sciences and carving out new strengths in technology, space and decarbonisation."

Good Practice Principles for Community Benefits from Onshore Renewable Energy Developments

13.2.7 This guidance was updated in 2019 as a result of the Scottish Government's (2019) recognition that the renewables industry is in a period of transition at the moment, following changes to UK government support schemes. This means that new models of community benefits, and new approaches, are likely to be needed. The revised guidance places a greater focus on achieving a lasting legacy for local communities underpinned by a well-developed community action plan. The guidance notes that within the previous 12 months, 214 projects offered community benefits packages totalling over £15 million. The guidance is supportive of renewable energy businesses that seek to offer communities a flexible package of benefits that might not necessarily be based on Scottish Government's recommended national rate of £5,000 per installed MW per year; such flexible packages of benefit should offer an element of additionality and go beyond the requirements of the planning process, and also recognise the ambition to offer the lowest cost energy for consumers.

13.2.8 The package of benefits that a renewable energy business offers may vary in line with the priorities of community/ communities involved, and the size and scope of the renewable energy project. However, community benefits should relate to the specific needs and aspirations of local people. The guidance advises that possession of a community action plan is key to delivering a community's aspirations and ambitions, and guidance is provided as to how this should be developed with a view to establishing a lasting legacy.

13.2.9 Good Practice Guidance on Wind Farm Construction (NatureScot et al., 2019) contains advice on management measures to provide for continuing public access to core paths and rights of way. The guidance advises that management measures should be flexible enough to take reasonable amount of public access requirements. The guidance emphasises the importance of effective communication.

Onshore Wind Sector Deal for Scotland 2023

13.2.10 Following engagement between the Scottish Government and renewable energy developers, the Onshore Wind Sector Deal for Scotland (Scottish Government, 2023b) was published with plans to reduce permitting timelines and increase the onshore wind capacity in Scotland to 20GW by 2030.

13.2.11 The deal aims to further collaboration between the public and private sectors through upskilling/reskilling workers and actions to retain local supply chains.

13.2.12 The Sector Deal also builds upon the Good Practice Principles for Community Benefits from Onshore Renewable Energy Developments guidance, with an agreement of community benefits packages which ‘meet or exceed’ the principles previously set out in 2019.

The Onshore Wind Industry Prospectus

13.2.13 The Onshore Wind Energy Prospectus (RenewableUK, 2021) sets out the potential mutual benefit that onshore wind developers and the UK public can receive, through maximise the outcomes from onshore wind energy. It details the benefits, in terms of investment and employment, that the UK, its countries and regions can potentially receive should the onshore wind target of 30GW by 2030 be met.

13.2.14 In Scotland, they project that 17,000 jobs could be created, as well as £27.8bn of additional GVA. The lower cost of onshore wind energy is expected to reduce household energy bills by £25 every year, across all homes in the UK.

Environmental Impact Assessment Handbook

13.2.15 The Scottish Natural Heritage (now NatureScot) handbook on Environmental Impact Assessment (Scottish Natural Heritage, 2018) states (at E.2.2) that:

“the Environmental Statement may set out material consideration which could outweigh the [relevant planning] policies - such as economic benefits or benefits to other aspects of the environment that may be enhanced rather than harmed”.

Energy Trends: September 2023

13.2.16 Published by the Department for Energy Security and Net Zero (2023), the Energy Trends shows the quarterly statistics for the generation and consumption of energy in the UK over the period of April to June 2023.

13.2.17 It shows that the share of electricity generated by renewable sources increased from 38.8% in the same quarter of 2022, to 42.1% in 2023. Of this, 7.9% was from onshore wind, which was a decrease from 9.5% in the previous year. The reduction in generation from onshore wind was due to anomalously low windspeeds during the 3-months specified, estimated to be an average of 6.9 knots, below the average of 8.2 in prior years.

Wind Farms & Tourism Trends in Scotland: Evidence from 44 Wind Farms

13.2.18 A study by Biggar Economics (2021) examined whether there is a link between the development of wind farms and changes in patterns of tourism spend and behaviour, finding that trends at a local authority level showed there was *“no relationship between the growth in the number of wind turbines and the level of tourism-related employment”*.

13.2.19 The study also considered trends at a more localised scale, where an analysis of 16 wind farms which were in the immediate vicinity of tourism-related employment and constructed between 2015 and 2019, as well as a further 28 less recent case studies, found that *“in the majority of cases, tourism-related employment in the vicinity of wind farms had outperformed the trend for Scotland as a whole and for the local authority area in which the wind farm was based”*.

13.2.20 Of the full 44 wind farms analysed, the study found that there was *“no relationship between tourism employment and wind farm development, at the level of the Scottish economy, across local authority areas nor in the locality of wind farm sites”*.

13.2.21 This concurred with studies from a decade prior, with an academic review of other studies as part of the Scottish Government’s Renewable Inquiry by ClimateXChange (Dinnie, 2012) finding that that *“there is no new evidence to contradict the earlier findings that wind farms have little or no adverse impact on tourism in Scotland”*, and a study by the University of Edinburgh (Aitchison, 2012) found that *“the findings from both primary and secondary research relating to the actual and potential tourism impact of wind farms indicate that there will be neither an overall decline in the number of tourists visiting an area nor any overall financial loss in tourism-related earnings as a result of a wind farm development”*.

Quantifying Benefits of Onshore Wind to the UK

13.2.22 A report by Vivid Economics (2019) projected the potential benefit to the UK economy as a result of 35GW of onshore wind being developed by 2035, at a rate of 1.4GW annually since the reports publishing. They estimated that this could:

- reduce UK electricity costs by 7%;
- save households an average of £50 per year in bills;
- support 14,000 jobs directly;
- support a further 17,000 jobs indirectly;
- enable £360m in annual exports; and
- increase productivity throughout the UK.

Local Policy and Guidance

Scottish Borders Local Development Plan 2016

13.2.23 The statutory Development Plan applicable to the proposed development comprises the Scottish Borders Local Development Plan (LDP) (Scottish Borders Council, 2016) and associated statutory Supplementary Guidance. The LDP was formally adopted on 12th May 2016 and sets out how the Scottish Borders Council (SBC) sees their LDP area developing up to 2025. Policies from the LDP that are relevant to socio-economics, tourism and recreation includes:

- PMD3: Land Use Allocations;
- ED3: Town Centres and Shopping Development;
- ED4: Core Activity Areas in Town Centres;
- ED7: Business, Tourism and Leisure Development in the Countryside;
- ED8: Caravan and Camping Sites;
- EP6: Countryside Around Towns;
- EP7: Listed Buildings; and
- IS5: Protection of Access Routes.

Scottish Borders Core Paths Plan 2008

13.2.24 The Core Paths Plan is a requirement of the Land Reform (Scotland) Act 2003 and sets out the SBC’s adopted core paths and their objectives and policies for their development, improvement, management and promotion.

13.3 Consultation

13.3.1 Consultation with stakeholders has principally been conducted by way of the request for a Scoping Opinion, as described in **Chapter 5: Approach to EIA**. This is summarised in Error! Reference source not found.3.1.

Table 13.1. Scoping Key Issues

Consultee	Summary of Key Issues	Addressed in Chapter
Scottish Ministers, Scoping Opinion, June 2023	We note that tourism assets and employment including regionally/nationally promoted recreational assets are to be included in the socio-economic study. Hopes Estate and others manage their moor for grouse shooting. The income from this helps enable the moor to be kept in the condition it is. Therefore, an adverse impact on the profitability of this resource could have effects not only on the rural economy but also indirectly on habitat management. At the distance it is, this is probably unlikely but should be considered.	Recreation, including those undertaken within the site and surrounding facilities have been noted in the baseline in section 13.5 and assessed in section 13.6 .

Consultee	Summary of Key Issues	Addressed in Chapter
	The assessment proposes to scope out recreational activities outwith the site unless promoted nationally/regionally. The area is used by locals and tourists alike for walking, cycling and horse riding. In addition game shooting takes place in the area. An assessment should be included to identify the current use of the land for recreation as well as any rights of way, and the impact the proposed development will have on these assessed.	Recreation, including those undertaken within the site and surrounding facilities have been noted in the baseline in section 13.5 and assessed in section 13.6 .
Scotways, Scoping Opinion, June 2023	It is our understanding that there is very little guidance regarding the siting of turbines in relation to established paths and rights of way. ScotWays considers the following sets out a reasonable principle for a recommended minimum separation distance: <i>“a minimum distance, equivalent to the height of the blade tip, from the edge of any public highway (road or other public right of way) or railway line.”</i> There may be site specific factors which would lead us to prefer a larger minimum separation distance; these could include the affected route being one of Scotland’s Great Trails or it being known for equestrian use, for example. ScotWays is likely to object to any proposal where the above principle is not followed, including where a micro-siting allowance could lead to turbine encroachment upon a route because it has been insufficiently buffered. ScotWays has long been involved in promoting public access in the Lammermuirs, including having been active in signposting historic and other routes. We produce and distribute a well-received map leaflet “Paths In & Around the Lammermuirs”; available locally, it is also downloadable from our website and paper copies are available upon request. We note that the Scoping Report (13.31) refers to examining options which may open up access and providing links, so we invite the applicant to approach us directly in this regard. Under section 3 of the Land Reform (Scotland) Act 2003, there is a duty upon landowners to use and manage land responsibly in a way which respects public	Noted, a minimum separation distance of turbine height to blade tip plus 10% has been adopted as part of the design process. See Chapter 2 for details. See above. Noted. An Outline Access Management Plan (AMP) has been included as Technical Appendix 3.4 . A detailed OAMP will be compiled

Consultee	Summary of Key Issues	Addressed in Chapter
	access rights. Under section 14 of the same Act, access authorities have a duty to uphold access rights. Accordingly, we suggest that the applicant may wish to approach the relevant authority's access team for their input when drawing up their Access Management Plan for their proposed development.	should the proposed development receive consent.

- 13.3.2 Engagement with the local community was undertaken through public information days held in May 2023 and September 2023. The information available at these information days was also made available online for those who could not attend in person, as well as an online feedback form. Further details on the events, the feedback received, and attendance numbers can be found in the **Pre-Application Consultation (PAC) Report** submitted as part of the application for consent for the proposed development.
- 13.3.3 The public exhibitions provided the public with opportunity to learn about the proposed development through detailed information boards and visualisations. The attendees were encouraged to take part in the discourse, highlighting any perceived benefits of issues with the proposed development.

Effects Scoped Out

- 13.3.4 Based on past experience of onshore wind farm projects of this scale, it is not expected that there would be a large influx of workers' families to the area during the construction phase and those who would be working in the area would be there temporarily, for no more than 18-24 months; consequently it is not expected that there would be a significant effect on the demand for permanent housing, health or educational services.
- 13.3.5 Regarding broader impacts related to the competition between construction workers and potential tourists visiting the Scottish Borders, it is considered that the close proximity of the site to major population centres, such as Edinburgh (approximately under an hour's drive away), would result in a negligible increase in local accommodation demand and therefore effects on accommodation businesses would be scoped out of the assessment.
- 13.3.6 The number of permanent employees for the operation of the proposed development are expected to be low and, as such, the demand for permanent housing, health or educational services is expected to be low.

- 13.3.7 Recreational activities outside the site will be scoped out unless they are promoted regionally/ nationally and are therefore likely to draw in visitors from outside the area.
- 13.3.8 The impacts during the decommissioning phase are expected to be largely the same as those during the construction phase, albeit to a lesser degree and in approximately 50 years. To avoid a repetition of the construction phase assessment, the impacts on socio-economics, recreation and tourism during the decommissioning phase have been scoped out of the assessment.

13.4 Method of Assessment

Scope of Assessment

- 13.4.1 This chapter takes an appropriate and topic-specific approach to the assessment of the proposed development. It provides a worst-case or conservative assessment for socio-economic effects and presents enough information for consultees and the decision makers to comment on and determine the application within the parameters of the proposed development.
- 13.4.2 It considers the effect of the proposed development on the economic resource, including employment, within the local, regional and national context, as well as more local effects such as the potential impacts on tourist attractions and recreation facilities within and in the vicinity of the proposed development.
- 13.4.3 The key impacts for the assessment of potential effects relating to the proposed development are short-term beneficial direct and indirect employment and economic effects and potential adverse effects on tourism and recreation assets.
- 13.4.4 During the operational phase, it is expected that many of these impacts would have already been mitigated, however, there may continue to be some beneficial longer-term direct and indirect effects on employment and the economy, as well as potentially beneficial and/ or adverse impacts on tourism and recreation associated with any increase in access tracks or losses of amenity.
- 13.4.5 Where appropriate conclusions from **Chapter 6: Landscape and Visual Impact Assessment** have been utilised to inform the assessments within this chapter. In those instances, cross references have been provided.

Baseline Characterisation

Study Area

13.4.6 The socio-economics, tourism and recreation assessment utilises a two-tiered study area which is considered to be representative of the quantitative and qualitative characteristics of the assessment. The quantitative economic and employment aspects are defined by the Wider Study Area (WSA), whilst the qualitative tourism and recreation aspects are defined by the Local Area of Impact (LAI), as shown on **Figure 13.1**.

13.4.7 These two tiers are described as follows:

Wider Study Area (WSA)

13.4.8 The WSA encompasses the area where economic and employment effects could occur. The WSA is required for certain receptor groups because the majority of the business and labour market effects that could occur would be experienced by population and business centres located across a wider area than that of the fixed location of the proposed development.

13.4.9 Due to the potential indirect effects occurring at a wider spatial area than that of the local authority alone, the WSA is inclusive of three spatial levels:

- The local WSA (SBC administrative area);
- The regional WSA (Scotland); and
- The national WSA (UK).

Local Area of Influence (LAI)

13.4.10 The LAI forms the focus for assessment of both direct and indirect effects on those recreation and tourism receptors that are likely to experience effects at a more local level. The LAI for such developments is generally defined by the application boundary together with an area extending to 5km from the site.

Information and Data Sources

13.4.11 Information used for the socio-economics, tourism and recreation baseline within the WSA and LAI was collected through a detailed desktop review of existing studies and datasets. These are summarised in Error! Reference source not found..

Table 13.2. Summary of Key Sources

Title	Source	Year	Author
Annual Business Survey (ABS)	https://www.ons.gov.uk/businessindustryandtrade/business/businessservices/methodologies/annualbusinesssurveyabs	2023	ONS
Annual Population Survey	https://www.nomisweb.co.uk/datasets/apsnew	2023	ONS

Title	Source	Year	Author
Annual Survey of Hours and Earnings - Resident Analysis	https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/datasets/placeofresidencebylocalauthorityshetable8	2023	ONS
Business Register and Employment Survey	https://www.nomisweb.co.uk/datasets/newbres6pub	2022	ONS
Estimates of the population for the UK, England, Wales, Scotland and Northern Ireland	https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/populationestimatesforukenglandandwalesScotlandandnorthernireland	2022	ONS
Input-output supply and use tables	https://www.ons.gov.uk/economy/nationalaccounts/supplyandusetables/datasets/inputoutputsupplyandusetables	2022	ONS
Scottish Annual Business Statistics 2021	https://www.gov.scot/publications/scottish-annual-business-statistics-2021/pages/headline-results/	2023	Scottish Government
Scottish Borders Council Area Profile	https://www.nrscotland.gov.uk/files/statistics/council-area-data-sheets/scottish-borders-council-profile.html#:~:text=Between%202001%20and%202021%2C%20the,Scotland's%20population%20rose%20by%208.2%25.&text=In%202021%2C%20there%20were%20more,%25)%20living%20in%20Scottish%20Borders.	2022	National Records Centre of Scotland
Supply, Use and Input-Output Tables: 1998-2019	https://www.gov.scot/publications/input-output-latest/	2022	Scottish Government

Desk Study / Field Survey

13.4.12 The assessment uses desk-based information sources to assess the likely effects supplemented by consultation with relevant stakeholders where necessary, and professional judgement based on previous experience.

13.4.13 No specific field survey has been undertaken with regard to socio-economics, tourism and recreation effects, although information has been gathered where relevant from surveys undertaken in respect of other disciplines, notably **Chapter 6: Landscape and Visual Impact Assessment**.

Assessment Methods

13.4.14 **Chapter 5: Approach to EIA** provides an overview of the approach to assessment and explains the parameters being assessed in the EIA. **Chapter 5** also sets out the information on cumulative sites, and the approach to assessing cumulative effects.

- 13.4.15 There are no published standards or technical guidelines that set out a preferred methodology for assessing the likely socio-economic effects of an onshore wind farm proposal, although, NatureScot's 'Environmental Impact Assessment Handbook' (Scottish Natural Heritage, 2018) makes reference to the potential effects of a development on outdoor recreation and opportunities for mitigation. However, there is a series of commonly used methodologies for such an assessment, including recognised approaches to quantifying economic effects both during the construction of a development and following its completion, that have been widely used in other major projects.
- 13.4.16 The assessment approach is to describe the baseline conditions, to identify likely effects from construction and operation of the proposed development, consider the sensitivity of receptors, and then to assess the likely significance of any effects. Any adverse effects considered to be 'significant' are further considered with regard to bespoke mitigation measures and residual effects following mitigation are then identified.
- 13.4.17 Any significant effects that would be direct, indirect, secondary, cumulative, short, medium and long term, permanent or temporary are examined and their significance assessed. These effects are identified as being beneficial (positive), adverse (negative) or neutral.
- 13.4.18 When assessing the socio-economic effects on employment and GVA, it is useful to distinguish between two types of effects generated by developments such as the proposed development:
- **Direct effects:** employment and GVA which is associated with the first round of capital expenditure within each impact area used in the assessment; and
 - **Indirect effects:** employment and GVA associated with the supply of goods and services to main contractors by other companies located within each impact area of the assessment.
- 13.4.19 Regarding tourism and/ or recreational receptors, direct effects are considered to be those where the receptor would be directly, physically, impacted by any stage of the proposed development. For this to occur, the receptor would therefore need to be located within the site (as shown on **Figure 13.1**).
- 13.4.20 Indirect effects on tourism and/ or recreational receptors are considered to be those where the receptor is beyond the site, but may still receive indirect effects as a result of the proposed development, such as visual or noise effects.

Assumptions, Limitations and Confidence

- 13.4.21 The data available at a national level can vary between Great Britain (GB) and the UK. Although it is noted that these terms are often used interchangeably colloquially, it is recognised that there is a geographical difference, therefore a difference in the data may be evident as well. This occurs as a result of specific datasets only having data for mainland GB, whilst others have data for the entire UK.
- 13.4.22 Where available, particularly from data sourced from the Office of National Statistics (ONS), GB has been used, however, some sources and documentation used for estimations regarding forecasting the economic and labour impacts of developments of this nature may only be available at a UK spatial level. For the avoidance of doubt, the assessments have been based upon UK data where relevant.
- 13.4.23 The datasets for the population trends have a sharp decrease for the year 2021. This is likely due to mid-year adjustments and the use of interim results. These most recent results will have been modelled after the 2020-based principal projection and would be updated in subsequent projections which incorporate the census 2021 data. Further to this is the uncertainty in the mid-2020 base year and the setting of long-term demographic assumptions following the onset of the COVID-19 pandemic.
- 13.4.24 The data presented in the baseline has been ascertained from the latest sources, where available and appropriate, however, the expenditure estimates rely upon a 2021 price base to allow for expenditure to be related to the ONS datasets used to estimate GVA and employment impacts. Effects of inflation are excluded from the assessment in line with guidance for the appraisal of major projects (HM Treasury, 2022).
- 13.4.25 In common with projects of a similar nature, no field surveys were undertaken to assess the real-time physical state and usage of the recreational and tourism receptors. Data has, however, been retrieved from topics of other chapters of this EIA Report, where relevant.

Sensitivity Criteria

13.4.26 There are no published standards that defined receptor sensitivity in relation to a socio-economic assessment. As a general rule, the sensitivity of each receptor or receptor group is based on its importance or scale and the ability of the baseline to absorb or be influenced by the identified effects. For example, a receptor (such as a public footpath or an accommodation business) is considered less sensitive if there are alternatives with capacity within the study area. In assigning receptor sensitivity, consideration has been given to the following:

- The importance of the receptor e.g. local, regional, national, international;
- The availability of comparable alternatives;
- The ease at which the resource could be replaced;
- The capacity of the resource to accommodate the identified impacts over a period of time; and
- The level of usage and nature of users (e.g. sensitive groups such as people with disabilities)

13.4.27 Based upon professional judgement and experience on other large-scale developments, four levels of sensitivity have been used, high; medium; low and negligible. These are defined in Error! Reference source not found..

Table 13.1. Receptor Sensitivity

Sensitivity	Description
High	<p>The receptor:</p> <ul style="list-style-type: none"> • Has little or no capacity to absorb change without fundamentally altering its present character; • Is of high socio-economic, recreational, or tourism value²; • Is of national or international importance; • Is accorded priority in national policy; • Has no alternatives with available capacity within its catchment area; or • Is a destination in its own right (as regards tourism and visitor attractions).
Medium	<p>The receptor:</p> <ul style="list-style-type: none"> • Has moderate capacity to absorb change without fundamentally altering its present character; • Has a moderate socio-economic, recreational or tourism value; • Is of regional importance; • Is accorded priority in local policy; • Has some alternatives with available capacity within its catchment area; • Is a destination for people already visiting the area (as regards tourism and visitor attractions); or • Forms a cluster of low sensitivity receptors.

² Which may include being of high value to a user group of high sensitivity (e.g. mobility impaired users).

Sensitivity	Description
Low	<p>The receptor:</p> <ul style="list-style-type: none"> • Is tolerant of change without detriment to its character; • Is of low socio-economic, recreation or tourism value; • Is of local importance; • Is accorded low priority in policy; • Has a choice of alternatives with available capacity within its catchment area; or • Is an incidental destination for people already visiting the area (as regards tourism and visitor attractions).
Negligible	<p>The receptor is resistant to change and is of low socio-economic, tourism or recreation value, or there is a wide choice of alternatives with available capacity with its catchment area.</p>

13.4.28 In considering the sensitivity of a receptor it is important to remember that, in the case of a socio-economic assessment, the sensitivity is often subjective and different receptors will have differing sensitivities depending on matters such as the economic profile of the local area, perception of the type of development and attitude to the potential benefits of a development.

Magnitude of Effect

13.4.29 There are no published standards that define the thresholds of the magnitude of change for socio-economic, tourism or recreation impacts. In order to aid clear and robust identification of significant effects, specific and targeted criteria for defining the magnitude of change have been developed for this assessment based on experience on other similar developments. The following four levels of magnitude have been adopted using professional judgement; high, medium, low and negligible. These impacts can be beneficial, adverse or neutral. Criteria for each of these levels of magnitude for each receptor group are set out in Error! Reference source not found..

Table 13.4. Magnitude Criteria

Receptor Group	High	Medium	Low	Negligible
WSA economy	A change that would dominate over baseline economic conditions by >10%	A change that would be expected to result in a moderate change to baseline economic conditions by >5%.	A change that would be expected to result in a perceptible difference from baseline economic conditions by >0.5%	A change that would not be expected to result in a measurable variation from baseline economic conditions.
WSA labour market	A change that would dominate over baseline labour market conditions	A change that would be expected to	A change that would be expected to	A change that would not be expected to

Receptor Group	High	Medium	Low	Negligible
	and/or would affect a large proportion (>10%) of the existing resident workforce.	result in a moderate change to baseline labour market conditions and/or would affect a moderate proportion (>5%) of the existing resident workforce	result in a perceptible difference from baseline labour market conditions and/or would affect a small proportion (>0.5%) of the existing resident workforce.	result in a measurable variation from baseline labour market conditions.
Tourism and recreation assets	A change that would be expected to cause a major restriction of access to or availability of tourism and visitor assets in the LAI or would result in a major change to existing patterns of use.	A change that would be expected to have a moderate restriction of access to or availability of tourism and visitor assets in the LAI or would result in a moderate change to existing patterns of use.	A change that would be expected to have a small restriction of access to or availability of tourism and visitor assets in the LAI or would result in a small change to existing patterns of use.	A change that would be unlikely to result in a noticeable difference to tourism and visitor assets in the LAI.

Significance Criteria

13.4.30 The significance of effect of an impact on socio-economic, tourism and recreation receptors is initially assessed by combining the magnitude of the change and the sensitivity of the receptor. A significance matrix is presented in Error! Reference source not found. and comes from NatureScot’s ‘Environmental Impact Assessment Handbook’ (Scottish Natural Heritage, 2018).

Table 13.5. Significance Matrix

Sensitivity or Value of Resource or Receptor	Magnitude of Change			
	High	Medium	Low	Negligible
High	Major	Major	Moderate	Minor
Medium	Major	Moderate	Minor	Negligible
Low	Moderate	Minor	Negligible	Negligible
Negligible	Minor	Negligible	Negligible	Negligible

13.4.31 Effects may be beneficial, adverse or neutral. Where an effect is classed as major, this is considered to represent a ‘significant effect’ in terms of the EIA Regulations. Where an effect is classified as moderate, this may be considered to represent a ‘significant effect’ but should always be subject to professional judgement and interpretation, particularly where the sensitivity or change magnitude levels are not clear or are borderline between categories or the change is intermittent.

13.4.32 The significance matrix shown in Error! Reference source not found. therefore provides a guide to decision making but is not a substitute for professional judgement. Impacts and effects can be beneficial, neutral or adverse and these would be specified where applicable. It should be noted that significant effects need not be unacceptable or irreversible.

13.4.33 A statement of residual effects, following consideration of any specific mitigation measures, is provided.

Mitigation

13.4.34 The assessment takes account of any environmental principles that are incorporated into the design of the proposed development, these include good practice measures with regard to traffic management, control of noise and dust, signage and provisions for maintaining access for walkers, details of which are set out in **Technical Appendix 3.1: Outline Construction and Environmental Management Plan (CEMP)**. Any additional mitigation measures that would reduce the level of any significant effects are set out and considered prior to assessing residual effects.

Cumulative Effects

13.4.35 In relation to economic effects, cumulative effects depend on the extent to which the supply chain and labour market within the local WSA have the capacity to meet demand for construction services from a number of similar developments. An assessment has been made as to whether it is considered likely that the cumulative effect indicates a loss of benefit as a result of cumulative developments, or an enhancement of opportunity which would help to develop expertise and capacity in the market. The cumulative effects assessment is able to make a quantitative judgement on potential loss of benefit due to cumulative developments. Enhancement of opportunity is identified only in qualitative terms.

13.4.36 Other cumulative effects may arise if the construction and/ or operation of a number of wind farms were to affect receptors in the LAI.

13.5 Baseline

13.5.1 This section comprises the existing conditions of the site of the proposed development, accounting for each aspect of the assessment; socio-economics, recreation and tourism assets.

13.5.2 The baseline conditions are split into the relative study area, with the WSA (as described in **paragraph 13.4.8**) including:

- population;
- labour market and supply chain; and
- tourism economy

13.5.3 This is followed by the baseline conditions of the LAI (as described in **paragraph 13.4.10**), comprising:

- recreation; and
- tourism.

13.5.4 The characterisation of the baseline is then followed by the Cumulative Situation, where the potential constructed, consented and proposed projects which could potentially interact with the socio-economic, tourism and recreation receptors of the proposed development are described.

Wider Study Area

13.5.5 A baseline review of population and employment has been undertaken which focuses on the WSA (the SBC administrative area), although data for Scotland and the UK are provided for comparison as appropriate.

Population

13.5.6 In 2021, the population of the Scottish Borders was 116,000 which represented 2.12% of Scotland's total population, making it the 18th largest of Scotland's 32 local authorities (ONS, 2022). **Image 1** details the changes in population over a 10-year period to 2021, showing that, with the exception of decreases in 2012 and 2020, and no change in 2015, the population of the Scottish Borders has consistently grown, alongside the populations of Scotland and the UK as a whole (barring 2021 in the UK).

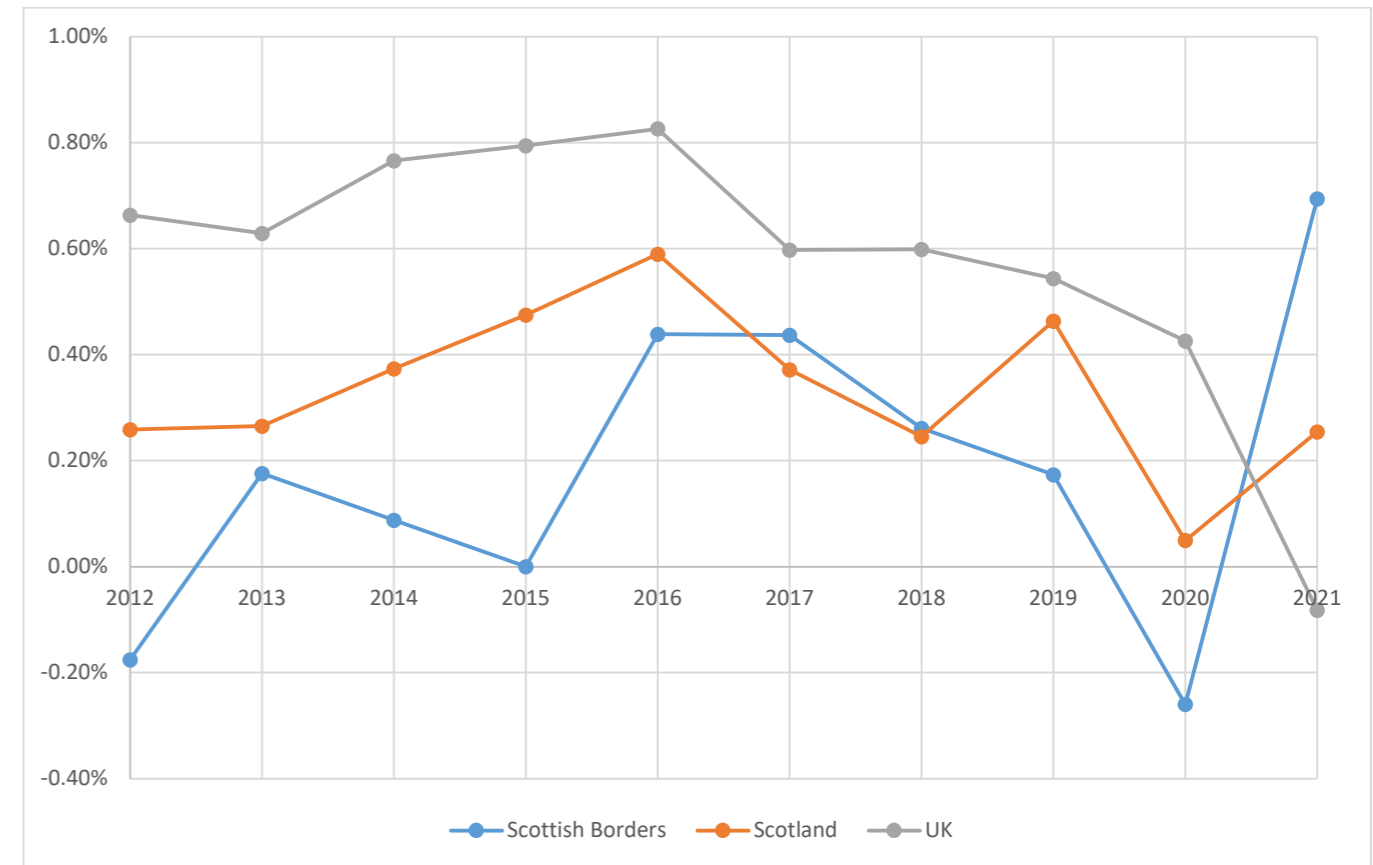


Image 1: Changes in Population (2011-2021)

13.5.7 The Scottish Borders has an older population than average, with 58.3% considered to be of 'working age' (16-64), compared to 63.8% in Scotland, and 62.9% in the UK (ONS, 2022). This is reflected in the number of 65+ residents, 25.6% of the Scottish Borders, compared to 19.6% in Scotland and 18.7% in the UK (ONS, 2022).

Labour Market and Supply Chain

13.5.8 There are 54,700 economically active residents in the Scottish Borders (ONS, 2023), which, proportionately, is a higher rate of activity of than Scotland or the UK, as shown on **Image 2**. This shows that despite having a proportionately lower working age population, those living in the Scottish Borders have a greater rate of economic activity.

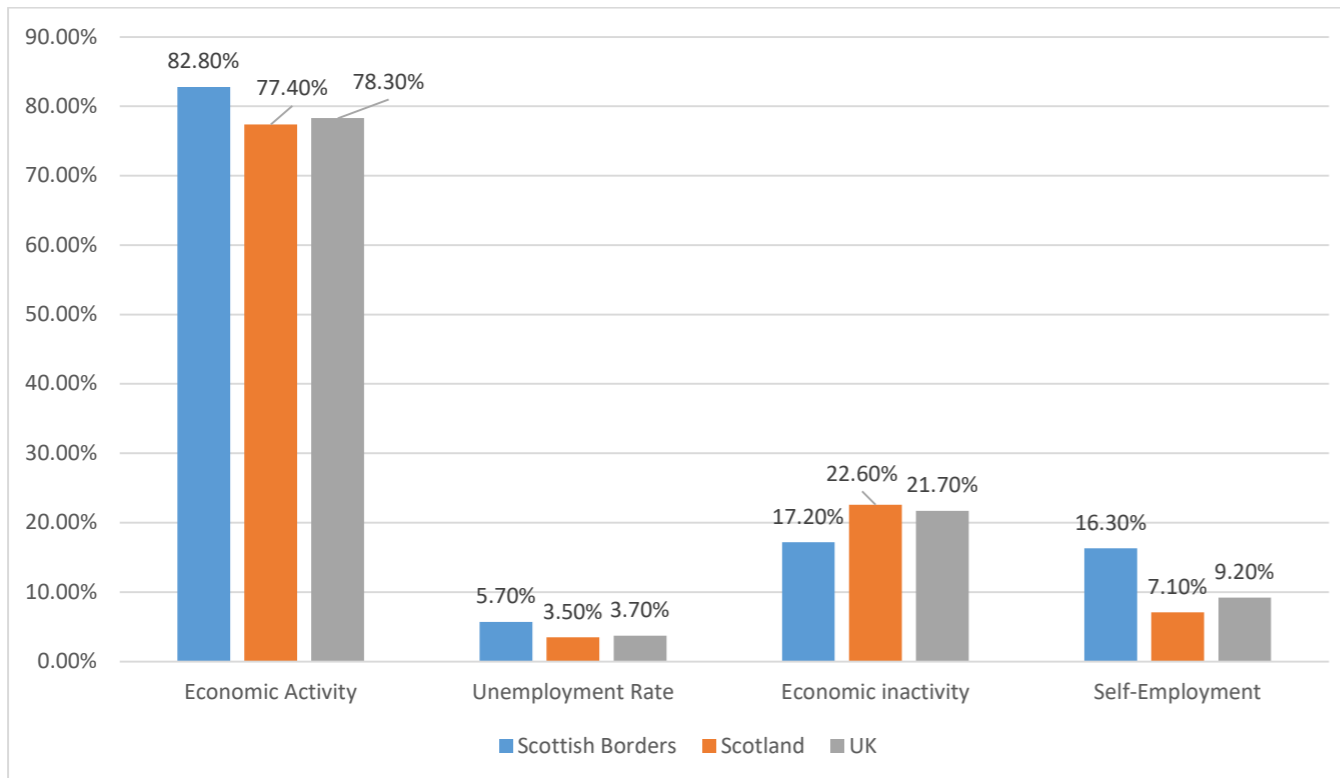


Image 2: Labour Market

13.5.9 The higher rate of economic activity is reflected in a lower rate of economic inactivity (those of working age who are not employed nor seeking work; students, sick, retired, for example), in the Scottish Borders when compared to the rest of Scotland and the UK, whilst the Scottish Borders also has a higher rate of self-employment. Despite having a comparatively higher rate of economic activity, the unemployment rate in the Scottish Borders is also higher than the average in Scotland and the UK.

13.5.10 Useful insights into the dynamics of the labour market are often revealed by consideration of the occupational structure of those in employment as shown in Table 13.1 (ONS, 2023).

Table 13.1: Employment by Occupation Type

Sector	Scottish Borders	Scottish Borders (%)	Scotland (%)	UK (%)
1: Managers, Directors and Senior Officials	5,500	10.1	8.2	10.7
2: Professional Occupations	15,900	29.1	25.6	26.2
3: Associate Professional Occupations	6,100	11.2	15.1	14.1
4: Administrative and Secretarial	3,900	7.1	9.1	9.6
5: Skilled Trades	7,200	13.2	9.5	9.1

Sector	Scottish Borders	Scottish Borders (%)	Scotland (%)	UK (%)
6: Caring, Leisure and Other Service	5,000	9.2	8.5	8.1
7: Sales and Customer Service	3,300	6.1	7.5	6.3
8: Process, Plant & Machine operatives	4,000	7.3	5.1	5.8
9: Elementary occupations	3,700	6.8	10.9	9.5

13.5.11 Of note in Table 13.1 is the higher proportion of Skilled Trades workers in the Scottish Borders, 3.7 and 4.1 percentage points higher than that of Scotland and the UK respectively. The Scottish Borders also have a higher proportion of Process, Plant and Machine Operatives when compared with Scotland and the UK (an increase of 2.2 and 1.5 percentage points respectively). Both of these occupations are likely to include skills and services that would be required for wind farm construction and operation. Conversely, there is a lower proportion of Associate workers and Elementary occupations in the Scottish Borders than in its comparatives.

13.5.12 Regarding the qualifications attained by the population, degree-qualified (or equivalent) residents of working age account for 45.4% of the Scottish Borders population, which is higher than the UK average, but lower than the Scottish average, as shown in Image 3 (ONS, 2023).

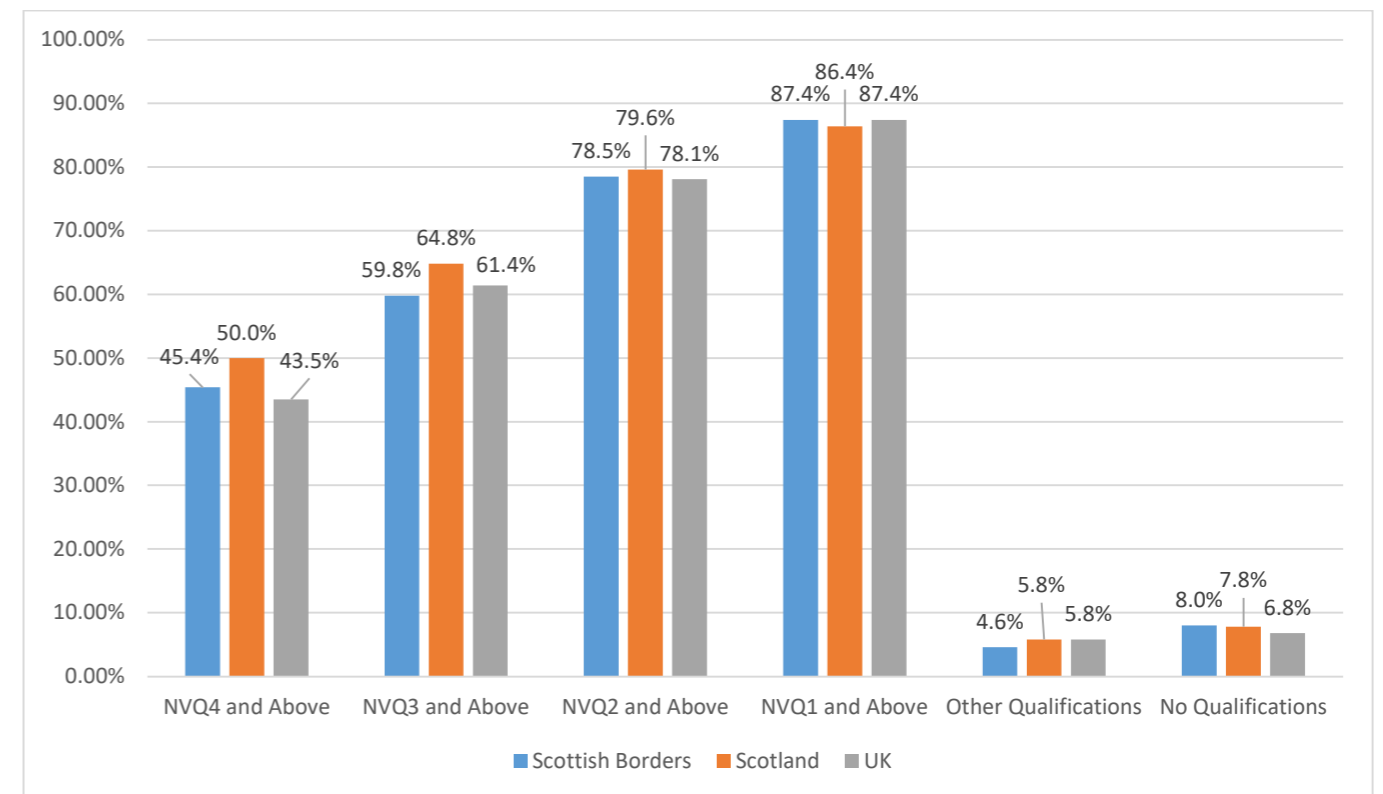


Image 3: Qualifications

13.5.13 Regarding qualifications of NVQ1 and above, the Scottish Borders are on par with the average in the UK, and slightly above the average in Scotland. There are slightly fewer people with other qualifications than in its comparatives, and conversely, slightly more people with no qualifications than Scotland and the UK.

13.5.14 According to the ONS Annual Survey of Hours and Earnings (ASHE) (ONS, 2023a), the average weekly gross earnings for residents of the Scottish Borders were £571.40, £69.10 lower than the Scottish average of £640.50, and £68.60 less than the UK average of £640.00.

13.5.15 Data on an area’s business population can be obtained from the ONS UK Business Counts data series (which is sourced from the Interdepartmental Business Register) (ONS, 2022a). This data source can be used to identify the structure of the local business base by sector: this is potentially useful in assessing the capacity of the local area to host supply chain activity for infrastructure and other large-scale construction projects such as the proposed development. **Table 13.2** provides data on the structure of the local business base, both in absolute and relative terms.

Table 13.2: Employee Jobs by Industry

Industry	Scottish Borders (no.)	Scottish Borders (%)	Scotland (%)	Great Britain (%)
A: Agriculture, forestry and fishing	3,000	7.1	1.8	0.7
B: Mining and quarrying	15	0.0	1.0	0.1
C: Manufacturing	4,500	10.7	7.0	7.6
D: Electricity, gas, steam and air conditioning supply	125	0.3	0.7	0.4
E: Water supply; sewerage, waste management and remediation activities	350	0.8	0.8	0.7
F: Construction	3,000	7.1	6.0	4.9
G: Wholesale and retail trade; repair of motor vehicles and motorcycles	7,000	16.7	14.2	14.4
H: Transportation and storage	900	2.1	4.1	5.0
I: Accommodation and food service activities	2,500	6.0	7.5	7.5
J: Information and communication	700	1.7	3.1	4.4
K: Financial and insurance activities	250	0.6	3.1	3.6
L: Real estate activities	700	1.7	1.5	1.8
M: Professional, scientific and technical activities	2,250	5.4	6.4	8.9
N: Administrative and support service activities	1,500	3.6	7.9	8.9

O: Public administration and defence; compulsory social security	2,000	4.8	6.5	4.6
P: Education	3,500	8.3	8.6	8.7
Q: Human health and social work activities	8,000	19.0	15.7	13.6
R: Arts, entertainment and recreation	1,250	3.0	2.4	2.3
S: Other service activities	700	1.7	1.7	1.9

13.5.16 The data in **Table 13.2** shows that the ‘Agriculture, forestry and fishing’ sector has a significantly higher proportion of employees compared against the equivalent averages in Scotland and Great Britain, proportionately approximately four times and 10 times more respectively. The Manufacturing and Construction sectors are also above the national average, indicating potential capacity and skills in the WSA for manufacturing and construction services.

13.5.17 It should be noted that, due to data limitations, the values for Great Britain have been used instead of the UK, and that persons in self-employment are not included in the NOMIS data set out in **Table 13.2**.

Tourism Economy

13.5.18 The VisitScotland Insight Department’s ‘Scottish Borders Factsheet 2019’ (2021) shows that the average annual value for visitor spend across 2017-2019, the latest data available, in the Scottish Borders was £144 million, which represented a 16% increase from the average spend across 2016-2018, and supported approximately 4,100 jobs in the sector. One method for reducing error margins when using data from surveys is to take an average over three years to provide a larger sample size. In this report, 3-year average figures were used to provide a more robust basis for analysis of detailed data.

13.5.19 The average annual number of tourists visiting the Scottish Borders on overnight trips across 2017-2019 was 369,000, with the majority of visitors travelling for holidays. The data for total visitor purposes is given in **Image 4**, which also shows the breakdown for international and domestic visitors.

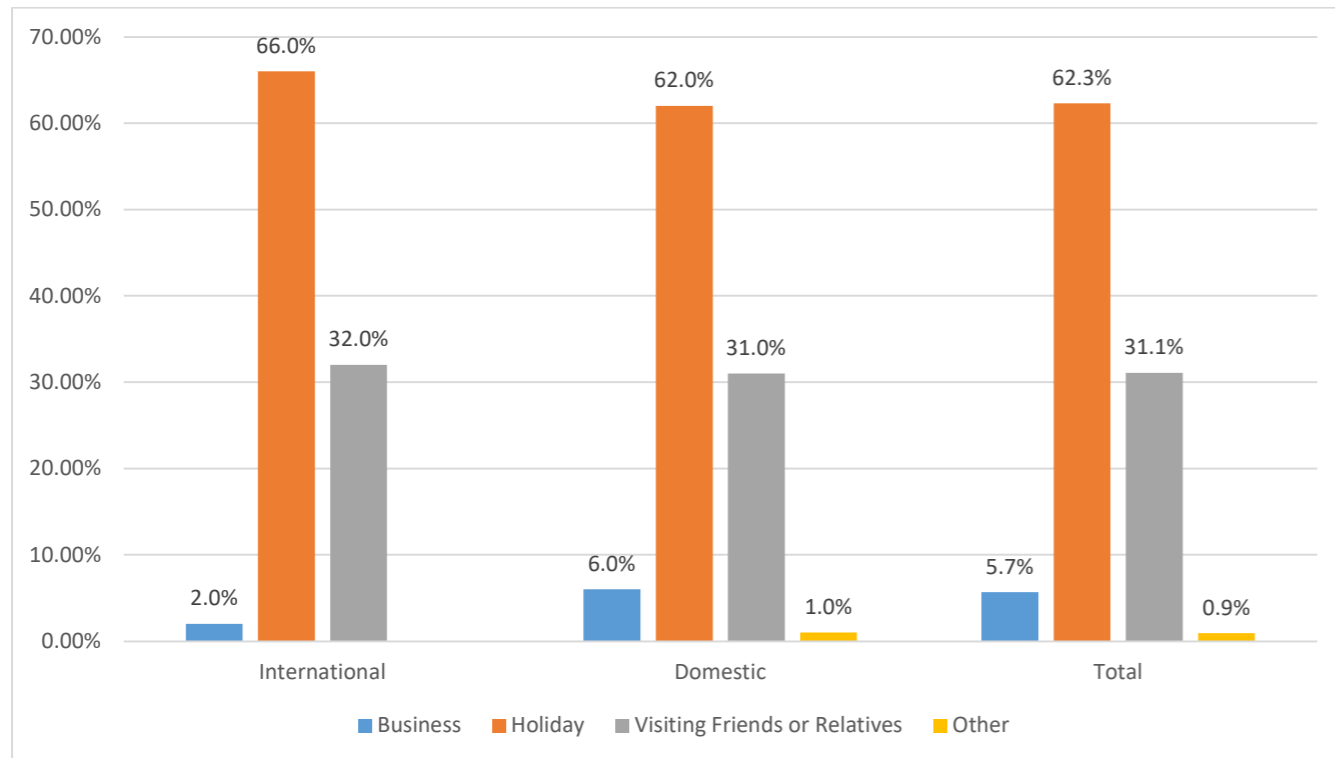


Image 4: Purpose of Visiting The Scottish Borders

13.5.20 With regards to overnight visits to the Scottish Borders, 92% were from Scotland and the Rest of Great Britain (39% and 53% respectively), with visitors from Europe, North America and the Rest of the World accounting for 6%, 1% and 1% respectively.

13.5.21 The VisitScotland’s (2021) Scottish Borders Factsheet for 2019 also includes results from the Great Britain Day Visits Survey, showing the most popular leisure attractions in the Scottish Borders region (i.e. the WSA), where the most popular activity was a long walk, hike or ramble, closely followed by going for a meal in a restaurant or café etc. Due to limitations in the data available, these numbers have been rounded to the nearest hundred thousand, however the results are presented in ascending numerical order within **Image 5**.

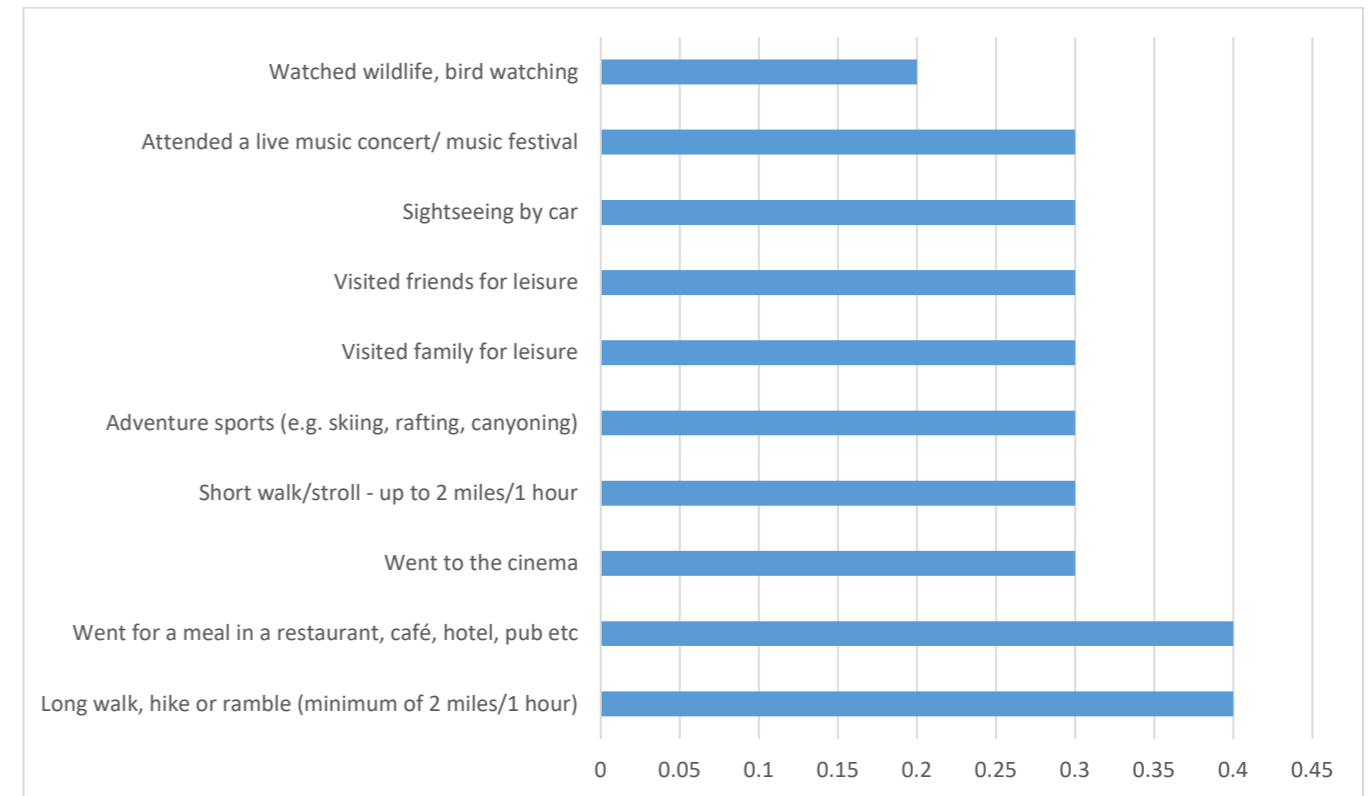


Image 5: Most Popular Activities Undertaken as Part of a Day Trip, the Scottish Borders: 2016-2018 Average Annual Figures (Number of Day Trips in Millions)

Local Area of Impact

13.5.22 The Local Area of Influence (LAI) forms the focus for assessment of both direct and indirect effects on those recreation and tourism receptors that are likely to experience effects at a more local level. The LAI for such developments is generally defined by the application boundary together with an area extending to 5km from the site, including main roads, identifiers and towns. The LAI baseline includes tourism and recreational receptors, including linear recreational routes such as core paths.

Recreation

13.5.23 This section is split into ‘formal recreation’ facilities which are considered to be those with paid or controlled entry, such as a museum, as well as other forms of recreation such as core paths, cycling routes or beaches, which are considered to be ‘informal’ and utilised freely without payment, as shown on **Figure 13.2**.

13.5.24 It is noted that only recreational assets that are promoted nationally or regionally and therefore likely to draw in visitors from outside the area located outside of the site are scoped into the assessment, although tourist visitors to the area may be expected to make use of some of the local recreational attractions.

Formal Recreation

13.5.25 Traditional country sports are popular in the Scottish Borders, with multiple facilities within the LAI. Scottish Borders Sporting and The Roxburghe Shooting School both offer recreational activities such as clay pigeon shooting, axe throwing and gun dog training. These facilities are considered within local context and low sensitivity.

13.5.26 The Lauder Community and Leisure Centre offers paid, formal recreation within the LAI and is considered to be of local importance and low sensitivity.

Informal Recreation

13.5.27 The general area of the LAI is home to various informal recreational activities, such as walking, hiking, and cycling, as shown on **Figure 13.2**. There is a number of designated paths. The following sections describe the various types of paths and trails within the LAI.

Long Distance Routes

13.5.28 The Southern Upland Way Trail is a 341km long-distance path that runs across the south of the LAI area. Given that this is Scotland's only coast to coast long distance route and is considered to be one of Scotland's Great Trails, it is of high sensitivity.

Core Paths

13.5.29 The site is located within the Scottish Border's Core Paths Areas 13 and 14. There are five Core Paths located within the LAI, these are:

- Core Path 13, which runs to the south-west of the site;
- Core Path 16, which goes through the site from south-east to north-east;
- Core Path 22, which runs to the south-west of the site;
- Core Path 189, which is located south of the site; and
- Core Path 194, which is located north of the site.

13.5.30 Core Path 16 intersects the boundaries of the proposed development, along with a series of permissive paths which run parallel to the west of Core Path 16 within the site boundaries:

- OXCH/LMC269/0007/1 and OXCH/FGO/1 (both the same path);
- OXCH/FGO/2; and
- OXCH/FGO/3.

13.5.31 The Core Path routes are considered to be of local to medium importance and of low to medium sensitivity depending on the level of access provided to the wider network. Core Paths 16, 22 and 189 are connected to a wider path network so are all considered to be of regional importance and medium sensitivity.

Rights of Way

13.5.32 Various Rights of Ways (RoWs), in addition to the Core Path and Long Distance Routes have been identified within the LAI through consultation with Scotways, which could be used recreationally.

13.5.33 Within the site boundary there is one RoW, BE/BE11/1, which follows a similar route to that of Core Path 16, intersecting the site from the southwest to the northeast.

13.5.34 This is considered to be of local importance and low sensitivity.

Heritage Paths

13.5.35 There is one heritage path promoted by the Heritage Paths Project (Scotways, 2023) that travels through site. Muir Road from Lauder to Dunbar (Herring Road) (BE/HP408/3 and BB/HP408/2), a 15km trade route, dissects the site from the south-west and travels through to the north-east of the site, following a similar path to that of Core Path 16.

13.5.36 There are 5 other heritage paths with the LAI, these are:

- Old Road from Lauder over Lammer Law, located to the north-west of the site;
- Addinston Hill Ridge Route, located to the north-west of the site;
- Dere Street North, located to the north-west of the site.
- Herring Road, located to the south of the site (to the east of the separate Lauder to Dunbar (Herring Road)); and
- Girthgate, located to the west of the site.

13.5.37 They are considered to be of regional importance and medium sensitivity.

Outdoor Access

13.5.38 The lack of any designated or recorded paths in parts of the LAI does not preclude the public from using other land within the LAI for recreational purposes in accordance with the Land Reform (Scotland) Act 2003, including for walking, cycling and horse riding. From Strava heatmap data (Strava, 2023), it is evident that the site itself is used for recreational purposes, namely cycling and running.

Cycling

13.5.39 No national cycle routes or local cycling routes have been identified; however, it is noted that the aforementioned walking routes are also available for cycling.

Horse Riding

13.5.40 There are multiple horse riding facilities with the LAI. Horse riding is offered at Thirlestane Castle, located in Lauder to the south-west of the site. Thirlestane Castle offers guests and visitors guided rides around the grounds of the castle and the surrounding countryside. Due to the additional services and recreational activities offered, described in Tourism Attractions below, Thirlestane Castle is considered to be of regional importance and medium sensitivity.

13.5.41 Horse riding is also offered at Harryburn Stables, a horse riding school also located in Lauder to the south-west of the site. Harryburn Stables is considered to be of local importance and low sensitivity.

Beaches

13.5.42 There are no beaches within the LAI.

Tourism

Tourism Attractions

13.5.43 Certain recreational activities are of sufficient prominence to draw visitors to the area and are therefore considered to be tourist attractions.

13.5.44 Dating back to the 16th century, Thirlestane Castle is one of the oldest inhabited castles in Scotland. It also has one of the most extensive family collections of portraits and busts, which can be viewed by visitors in the form of guided tours. Furthermore, Thirlestane Castle offers horse riding around the castle's grounds and surrounding countryside. Due to this it is believed that Thirlestane Castle is likely to draw in visitors across Scotland and is therefore of regional importance with medium sensitivity.

13.5.45 Bird Gardens Scotland CIC is a bird sanctuary located in Oxton, west of the site and within the LAI. The sanctuary has a visitor centre that includes a coffee shop, classroom and children's playground. Bird Gardens Scotland CIC also offer services such as flamingo feeding, guided tours and talks about their birds and conservation. Therefore, the sanctuary is considered to be of local importance and low sensitivity.

Accommodation

13.5.46 According to an online review of Airbnb, Google, and other accommodation websites, for local accommodation businesses, close to the LAI, there are 22 accommodation businesses located in the outlined accommodation area on **Figure 13.2**.

13.5.47 These include:

- Four hotels;
- Two bed and breakfast; and
- 16 self-catered.

13.5.48 Of the individual accommodation businesses identified, each are considered to be of local value and low sensitivity; however, collectively, they comprise a concentration of tourism-related businesses can be of regional importance and medium sensitivity.

13.6 Assessment of Potential Effects

13.6.1 The proposed development has been designed to include a range of measures to mitigate potential effects. Included within this are the creation of an Outline Outdoor Access Management Plan (OAMP) (included in **Technical Appendix 3.4**), which will set out the mitigation for impacted paths during construction, as well as any potential enhancements during the operation of the proposed development. All such measures are described fully in **Technical Appendix 3.4**.

13.6.2 The proposed development also incorporates good practice measures for limiting the adverse effects of the construction works through an Outline CEMP, which is provided in **Technical Appendix 3.1**.

13.6.3 Measures are set out in **Chapter 3: Proposed Development Description**, and also in **Chapter 11: Traffic & Transport** relating to how delivery of goods and services would be managed during construction so as to minimise impacts on sensitive receptors. The proposed management measures would be further developed in the final CEMP that would be adopted prior to construction commencing.

13.6.4 The proposed development would also incorporate measures for enhancing the beneficial effects of construction on the local economy, particularly with regard to adding value to the local supply chain. The applicant has historically shown a preference for engaging with local contractors showing a clear commitment to increasing local content in their supply chains.

13.6.5 The applicant will continue to liaise with the local community and local suppliers throughout the full supply-chain, as well as key stakeholders.

13.6.6 As well as the use of local contractors, the proposed development would also include a Local Electricity Discount Scheme (LEDS), which is described as follows:

“RES is proposing a tailored package of benefits for the community from Longcroft Wind Farm that would be worth £5,000 per megawatt (or equivalent) of installed capacity per annum. Based on the current layout design and installed capacity of 125.4MW this could equate to a tailored community benefit package for the local area worth £627,000 (or equivalent) each year. This package could include RES’ unique Local Electricity Discount Scheme (LEDS), something that has received significant interest from the community. LEDS seeks to deliver direct and tangible benefits to people living and working closest to RES’ operational wind farms.”

Proposed Development Expenditure

13.6.7 During the construction of the proposed development there would be economic effects resulting from expenditure on items such as site preparation, construction of the civil infrastructure, purchase and delivery of materials, plant, equipment, and components, etc. Based on information provided by the applicant, the construction period for the proposed development is expected to occur over 16-months.

13.6.8 The applicant and their advisers have provided technical information relevant to the proposed development that has enabled the production of broad estimates of likely costs for its construction. Other information used to enable the development of capital investment expenditure was obtained from sources such as BVG Associates (2017) and RenewableUK (Vivid Economics, 2019), as well as project-specific data sourced from other onshore wind projects recently developed in Scotland.

13.6.9 **Table 13.3** provides a breakdown of this predicted expenditure disaggregated by main category of spend, using a 2021 price base. A 2021 price base has been used to enable the benchmarking of expected economic effects - in particular, GVA - with available information published by the Office for National Statistics.

Table 13.3: Construction Cost Estimates (2021 prices)

Category of Expenditure	£ millions
Development and project management costs	23.0
Wind turbines	134.3
Electricals/grid connection/battery storage	33.5
Civils/contingency and miscellaneous	7.3
Total	198.0

13.6.10 Overall expenditure to construct the proposed development is expected to amount to £198 million (2021 prices).

13.6.11 Drawing upon *ex-post* evidence published by sources such as BVG (2017) and RenewableUK (Vivid Economics, 2019), as well as the assessors’ experience with similar projects elsewhere, an assessment of the predicted spatial location of expenditure for each category of expenditure has been derived. This spatial breakdown of expenditure uses the following areas: the local WSA (Scottish Borders local authority area); regional WSA (Scotland); and national WSA (UK). This indicative destination of expenditure for the proposed development has been converted into estimated proportions of expenditure in terms of the following spatial areas based on experience with other project applications (including completed schemes): the local WSA; regional WSA; and national WSA.

Construction Effects

13.6.12 Construction effects are addressed in turn with regard to the WSA and the LAI.

Wider Study Area - Socio-Economics

13.6.13 Construction effects are assessed for the following spatial areas: the local WSA, regional WSA and national WSA.

Gross Effects During Construction

13.6.14 Estimates of the expected direct construction phase employment implications of the proposed development have been derived using the information on anticipated expenditure set out above, as well as assumptions obtained from the following sources:

- employment and GVA multipliers for Scotland, obtained from ‘Supply, Use and Input-Output Tables: 1998-2019’ (Scottish Government, 2022b);
- employment and GVA multipliers for the UK obtained from ‘Input-output supply and use tables’ (ONS, 2022b); and
- ratios of turnover per unit of GVA and GVA per employee from Scottish and UK Government data (Scottish Government, 2023c) (ONS, 2023b).

13.6.15 Using all of these sources summarised above, estimates have been derived of the direct gross employment and GVA effects that would be expected to be delivered by the proposed development for the three spatial areas. These estimates are presented in **Table 13.4** for both the period to deliver the proposed development as a whole and on a per annum (p.a.) basis. The employment estimates are provided on a person-year basis and the GVA estimates are presented using a 2021 price base.

Table 13.4: Estimates of Gross Construction Phase GVA and Employment Effects

Spatial Area	Gross GVA overall (£m, 2021 prices)	Gross GVA p.a. (£m, 2021 prices)	Gross Employment total (person-years)	Gross Employment p.a. (person-years)
Scottish Borders (local WSA)	6.3	4.7	92	64
Scotland (total, including local WSA)	19.2	14.4	272	204
UK (total, including Scotland)	47.2	35.5	666	501

13.6.16 GVA worth £6.3 million would be expected to be generated by the proposed development in the local WSA economy during the 16-month construction phase. This is equivalent to £4.7 million p.a. over this period.

13.6.17 The equivalent predicted overall GVA total for Scotland is £19.2 million (£14.4 million p.a.), and for the UK as a whole it is £47.2 million (£35.5 million p.a.).

13.6.18 With respect to employment, a total of 92 person-years of gross temporary employment is predicted to be generated in the local WSA economy during the 16-month construction phase. This amounts to an average of 64 person-years p.a. during the construction period.

13.6.19 The equivalent predicted overall total for Scotland is 272 person-years (204 p.a.), and for the UK it is 666 person-years (501 p.a.).

Net Effects During Construction

13.6.20 So far, the focus has been on the expected gross effects of construction phase activity at three spatial levels. The next step is to consider and quantify the potential for net additional effects by taking account of three additionality concepts:

- **Leakage:** is the proportion of project outcomes (including but not limited to expenditure, employment opportunities and GVA) that benefit individuals or organisations located beyond the relevant area of impact (e.g., the WSA area). Leakage is generally higher at a local level, although it varies by the nature of development type.
- **Displacement:** is an estimate of the economic activity hosted by the site that would be diverted from other businesses in the spatial impact area. This again varies by the nature of development type.
- **Multipliers:** an estimate for further economic activity associated with additional income and/or project procurement activity stimulated by project activity within the spatial impact area under consideration.

13.6.21 The specific values assumed for multipliers for Scotland and the UK are sourced from national input-output tables and vary by the project expenditure category. Assumptions about leakage are based on local labour market indicators and experience of other wind farm projects located in Scotland.

13.6.22 **Table 13.5** shows the estimates of net additional construction phase effects, both overall and on a per annum basis during the anticipated 16-month construction period.

Table 13.5: Estimates of Net Additional Construction Phase GVA and Employment Effects

Spatial Area	Net GVA overall (£m, 2021 prices)	Net GVA p.a. (£m, 2021 prices)	Net Employment total (person-years)	Net Employment p.a. (person-years)
Scottish Borders (Local WSA)	5.8	4.4	86	64
Scotland (total, including local WSA)	23.3	17.5	330	248
UK (total, including Scotland)	52.7	39.6	744	560

13.6.23 The predicted duration of the construction phase is 16 months. Therefore, the anticipated additional boost to local WSA employment is equivalent to 64 jobs annually during the construction phase if the proposed development is permitted and delivered as intended by the applicant.

13.6.24 In 2021 there were an estimated 53,000 jobs located within the Scottish Borders local authority area. The temporary addition of 64 net jobs to this total would increase the number of jobs by around 0.12%. The effect on the local employment base is therefore considered to be **Low** and so **Not Significant**.

13.6.25 In terms of output, a net additional annual total of £4.4 million of GVA per annum is predicted to be generated by the proposed development in the local WSA economy during the construction phase. The equivalent predicted annual total for Scotland is £17.5 million and for the UK it is £39.6 million.

13.6.26 As of 2021, the estimated annual value of output generated within the Scottish Borders local authority area was approximately £2.56 billion. The temporary augmentation of the local WSA economy by £4.4 million net would increase the size of the local WSA economy by around 0.17%. The effect on the value of the local WSA economy is therefore considered to be **Low** and so **Not Significant**.

Local Area of Influence - Tourism and Recreation

13.6.27 The principal potential impact on receptors beyond the boundaries of the site is expected to be caused by delivery vehicles on local roads. Traffic restrictions in relation to the proposed access route to the site are assessed in in **Chapter 11: Traffic & Transport**.

13.6.28 Informal routes utilising the network of estate tracks would be temporarily diverted where construction activities is taking place. Waymarked trails, such as Core Path 16, would be either actively managed or temporarily diverted to ensure continuity of the route. Notices will be placed in prominent locations around the site with details of any areas with restricted access. Such measures would be agreed in advance, through consultation with the SBC Outdoor Access Officer, the applicant and recreational groups, in the form of an OAMP, provided in **Technical Appendix 3.4**.

Tourism Effects During Construction

13.6.29 Local businesses, such as food and drink businesses and, to a lesser extent due to the location, accommodation businesses, may experience beneficial impacts during construction due to use by construction workers. The level of effect may be high for individual businesses, and as the sensitivity of these receptors is low the effect would be **Moderate** which may be **Significant (beneficial)**.

13.6.30 Each of the tourism assets are considered to be beyond significant effects related to the proposed development, both in terms of topography and distance, resulting in negligible magnitudes of impact. For the worst-case scenario, whereby construction traffic temporarily impacts the access of the assets or visuals of the construction en-route to the assets degrades the experience, the level of effect would be **Minor**, with the temporary and intermittent nature of the impact considered to result in a level of effect that is **Not Significant**.

Recreational Effects During Construction

13.6.31 The 'formal' recreational assets, the Lauder Community and Leisure Centre, Scottish Borders Sporting and The Roxburghe Shooting School, are considered to be of a distance to be relatively unimpacted by the proposed development, representing a worst-case scenario of a negligible magnitude of impact, therefore, the low sensitivity of the receptors would result in a **Minor** and **Not Significant** level of effect.

13.6.32 The Southern Upland Way Trail is unlikely to experience any impacts due to its distance from the proposed development. It is considered that cyclists and walkers would be more able to traverse any obstructions, with any obstructions to visual amenity likely to be very temporary in nature and assessed in **Chapter 6: Landscape and Visual Impact Assessment**.

13.6.33 Taking account of the above, the magnitude of change is considered to be negligible. As the sensitivity of the receptor is high, the level of effect would be **Minor** in a worst-case scenario, with the temporary and intermittent nature of the impact considered to result in a level of effect that is **Not Significant**.

13.6.34 For recreational activities, RoW BE/BE11/1, Core Path 16 and the Muir Road from Lauder to Dunbar (Herring Road) Heritage Path (as others are considered to be of a distance and direction that would render them unimpacted by the proposed development) are considered to both be of Medium sensitivity. The permissive paths, OXCH/LMC269/0007/1 and OXCH/FGO/1 (both the same path), OXCH/FGO/2, and OXCH/FGO/3, and estate tracks used for recreation would be considered to be of low sensitivity and receptor, however, the magnitude would likely remain the same as they would impacted in the same way. As such, the assessment of RoW BE/BE11/1, Core Path 16 and the Muir Road from Lauder to Dunbar (Herring Road) Heritage Path will be considered primarily.

13.6.35 The paths will be physically impacted by the proposed development, likely resulting in temporary diversions and/or closures. The paths are proposed to be realigned into a single route to avoid overlapping and intersections, in line with the proposed access track.

13.6.36 Permissive paths OXCH/LMC269/0007/1 and OXCH/FGO/1, OXCH/FGO/2 and OXCH/FGO/3 would also be impacted temporarily through the construction of new access tracks, It is proposed these permissive paths are to be upgraded to be used as turbine access tracks, which will in turn formalise the connections between the paths of the site, including the addition of a new crossing over the Whalplaw Burn.

13.6.37 The inclusion of an OAMP would reduce impacts from the temporary restriction of public access by specifying agreements for the announcement of any impacts and the plans and processes in place to continue the usage of the paths. An OAMP is included as **Technical Appendix 3.4**.

13.6.38 The OAMP also details further mitigation in the form of strategically sited signage, which details the timings of the closures as well as a map of the route and contact details of the construction manager. New passing gates are proposed to be installed to allow for non-vehicular access, as well as separating vehicles from pedestrians and non-motorised forms of transport.

13.6.39 Recreationally, with plans in place, the amenity of the usage would be reduced temporarily, however, the recreational quality of the routes would be impacted to a lesser degree, resulting in an overall Minor magnitude of impact. This would result in a **Minor and Not Significant** level of effect.

Operational Effects

13.6.40 Operational effects are addressed in turn with regard to the WSA and the LAI.

Wider Study Area - Socio-Economics

13.6.41 Socio-economic effects at the operational phase of the proposed development consider employment at the local level of the WSA.

13.6.42 Once operational, a permanent workforce would be required to operate and maintain the proposed development. Based on experience of proposed and completed onshore wind farm projects of a comparable size and in similar locations elsewhere in Scotland, it is estimated that there is likely to be between 5 and 9 permanent direct jobs are likely to be created by the proposed development during its operational phase.

13.6.43 As well as the direct impacts on employment during the construction phase there would also be indirect effects generated throughout the operational phase. Indirect effects arise from the placing of contracts with other businesses - both in the local area and elsewhere in Scotland - supplying services and materials to the proposed development during its operational phase.

13.6.44 Examples of such supply chain activity would include the procurement of:

- site maintenance, including waste management and recycling;
- ecological management in line with biodiversity enhancement proposals (see **Technical Appendix 8.6: Outline Biodiversity Enhancement and Restoration Plan**);
- vegetation management along proposed development civil infrastructure;
- maintenance and repair of proposed development civil infrastructure;
- plant and equipment hire;
- supply of consumable items (e.g., fuels, lubricants and oils, spare parts, etc.);
- statutory wind turbine inspections; and
- catering for meetings and visits.

13.6.45 In addition to the list above, local shops, cafes, accommodation providers and hotels often experience an increase in business during the operational phase from visitors to the site (e.g., as a result of extra technicians being needed onsite during wind farm maintenance and servicing).

13.6.46 Overall, based on experience with similar projects elsewhere in various parts of Scotland, it is expected that there is likely to be between 19 and 24 indirect jobs created by operational and maintenance supply chain effects associated with the located within the local WSA.

13.6.47 Therefore, in terms of the overall potential for operational phase job creation from the combined direct and supply chain effects, the overall total number of gross full-time equivalent jobs that could be created in the Scottish Borders local authority area is estimated to amount to between 24 and 33 gross permanent jobs (i.e., between 5 and 9 direct jobs, plus between 19 and 24 indirect jobs).

13.6.48 When the various additionality factors are taken into account, the effect would be expected to lie in the range 21-29 net additional jobs.

13.6.49 Given that there are estimated to be 53,000 jobs located in the Scottish Borders local authority area (as of 2021), this stimulus to net local job creation would be expected to increase the size of the WSA employment base by between 0.04% and 0.05%. Although positive, this effect is assessed to be **Negligible** and therefore **Not Significant**.

13.6.50 In addition to the expected employment effects, more than £1.3million in business rates would be payable each year to the Scottish Borders Council during the operation of the proposed development. The business rates figure of £1.3million each year has been calculated from the most recent non-domestic rates revaluation in Scotland (Scottish Government 2023 Revaluation) and predicted performance of the proposed development.

Local Area of Influence - Tourism and Recreation

13.6.51 During the operational phase there are expected to be both adverse effects due to visual impacts on tourism receptors, detailed in **Chapter 6: Landscape and Visual Impact Assessment**, and beneficial effects arising from the legacy of the enhanced routes within the site. In addition, the applicant is committed to exploring practical routes to shared ownership of the proposed development, which could allow financial capital to be directly invested into improving the local area, possibly through community enhancements or improving skills and training, which could have a lasting benefit beyond the lifespan of the proposed development.

13.6.52 Further to this, the applicant is considering a wide array of community benefits, which have previously included the following:

- Biodiversity enhancement initiatives (habitat restoration);
- Outdoor access enhancement initiatives;

- Local Electricity Discount Scheme (as discussed in **paragraph 13.6.6**);
- Funding for local community groups;
- Education initiatives;
- Funding for upgrades to local public premises;
- Funding for domestic energy saving measures (insulation, solar panels etc);
- Funding for improvements to broadband services; and
- Funding for upgraded or new sports facilities.

13.6.53 Although the community benefits would be considered as a benefit of the wider proposed development, it is noted that they would not be considered mitigation, nor a material planning consideration, and have not been factored in to the assessment.

13.6.54 No significant effects are expected due to maintenance vehicles using the access road and site as this would be on an occasional basis.

Tourism Effects During Operation

13.6.55 During operation, the patronage of local businesses would be markedly lower than that of the construction phase due to a smaller workforce being needed. The reduced workforce within the site would result in **No Effect** to local businesses. The impacts on tourism assets would also range from to **No Effect** for those which are located indoors, to **Negligible** for others which are outdoors, however, are of a greater distance than what would normally be expected to result in an impact.

Recreational Effects During Operation

13.6.56 The 'formal' recreational facilities, long-distance routes and horse-riding facilities are each considered to be of a great enough distance from the proposed development to result in No Effect.

13.6.57 Visual effects on recreational receptors are assessed in **Chapter 6: Landscape and Visual Impact Assessment**, and the findings have been considered in the assessment below, although it is important to note that a significant landscape and visual effect does not necessarily result in a significant socio-economic effect.

13.6.58 The landscape and visual assessment found that the residual impact on Core Path 16 and the Muir Road from Lauder to Dunbar (Herring Road) Heritage Path (both of which follow the same path) would be considered a Major/Moderate (adverse) effect when considering the proximity of where the turbines would be visible from.

13.6.59 For the socio-economic, tourism and recreation assessment this is considered in respect of a loss of amenity, however, the mitigations offered through the OAMP, such as signage promoting access, path improvements and linkages of the routes, would result in a recreational benefit, forming a larger recreational path network throughout the site. The combination of both impacts results in a Minor magnitude of impacts to the Medium sensitivity receptors, which is considered to be a **Minor** and **Not Significant** level of effect.

Decommissioning Effects

13.6.60 In general, the scale and type of effects expected during the decommissioning stage would be expected to be similar to those anticipated to occur during the construction stage, but to a lesser degree. As the end of the operational life would likely be up to 50 years from the date of the beginning of operation, it is recognised that standard industry practice, rules and legislation will change over this time, meaning that no descriptive decommissioning plans or policies can be prepared at this stage. The detail and scope of decommissioning works will be determined by the relevant legislation and guidance at the time of decommissioning and will be agreed with the regulator with decommissioning plan provided.

13.6.61 On the basis that the magnitude of impact for all effects considered will mirror (but is likely to be lower than) the magnitude relating to the construction phase, and that the sensitivity of each receptor is assumed not to change, no significant effects have been identified.

13.7 Assessment of Cumulative Effects

13.7.1 Cumulative effects in relation to socio-economics, tourism and recreation could arise as a result of a competition for materials, workers, accommodation and further supply chain products in relation to the construction of other prospective or consented projects. They could also occur if the developments were under construction in close proximity to one another, impacting tourism amenity or restricting recreational access.

13.7.2 There are two developments of a scale and proximity being considered that could result in tourism and/or recreational impacts, Ditcher Law Wind Farm and Dunside Wind Farm, which are both at the application stage. However, any coinciding construction within the same local authority could result in economic or employment effects, regardless of being within a distance where tourism and/or recreational impacts could occur.

- 13.7.3 The impacts related to public access assessed for the proposed development individually are expected to occur in isolation, with the greatest magnitudes occurring to those receptors which are within the proposed development boundary.
- 13.7.4 The evidence set out in **section 13.2** details the current research on the effect that onshore wind farms have on the volume and value of tourism in Scotland. The evidence shows that wind farms have a negligible effect on tourism, with no relationship between wind farm development and tourism employment within a local authority and, in some cases, tourism levels increasing alongside the number of wind farms being developed.
- 13.7.5 Due to the proposed development being on the mainland of Scotland, within a relative driving distance of two cities, there is not expected to be a scarcity of materials and the related supply chain products which can prove difficult in developments elsewhere. The population of the WSA, along with nearby local authorities, would mean that it is reasonable to assume that there is a readily available workforce who can construct these developments concurrently. The location of the proposed development and cumulative developments within proximity of coastal areas and cities means that a ready supply of accommodation venues would not be as required for the duration of the work.
- 13.7.6 There would be additional beneficial impacts during construction on the local supply chain due to the patronage of local food and drinks venues and further local businesses which can assist with any stage of the construction etc., which would see a considerable increase in business during the construction phase of the proposed development.
- 13.7.7 Finally, the locale of wind farms currently under application could also result in further local community benefits, through the implementation of the Onshore Wind Sector Deal for Scotland (Scottish Government, 2023b). This could increase the volume of community benefits received locally, both in terms of investment and employment, which could maximise the local beneficial effects of the proposed and cumulative developments.

13.8 Summary

- 13.8.1 This assessment has considered data from a diverse range of sources to determine the likely effects of the proposed development on the local economy, together with local effects on tourism and recreation assets. The potential effects on the economy and identified assets take account of good practice measures to be adopted.

- 13.8.2 The assessment concludes that no necessary specific mitigation has been identified regarding the economic assessment to be required and therefore residual effects of the proposed development are effectively the same as the predicted effects. Predicted adverse effects have been assessed as not significant; predicted beneficial effects have been assessed as negligible with regard to effects on the local tourism economy during the construction phase.
- 13.8.3 With regard to local recreational and tourism assets, no significant adverse effects have been identified.
- 13.8.4 There are no likely significant effects associated with the proposed development, with the full list of effects summarised in **Table 13.6**.

Table 13.6: Summary of Residual Effects

Likely Significant Effect	Mitigation	Means of Implementation	Residual Effect
Local Businesses	None	N/A	Moderate (beneficial)
Local Economy	None	N/A	Minor (beneficial)
Local Employment	None	N/A	Minor (beneficial)
Tourism	None	N/A	Minor (adverse)
Recreation	OAMP	Planning Condition	Minor (adverse)

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