CLOICH FOREST WIND FARM

EIA Report – Volume 1 – EIA Report Text

Chapter 15

Socio-Economics, Land-Use, Recreation and Tourism

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15 SOCIO-ECONOMICS, LAND USE, RECREATION AND TOURISM

15.1 INTRODUCTION

1. This Chapter of the Environmental Impact Assessment Report (EIA Report) evaluates the effects of Cloich Forest Wind Farm ('the Development') on the Socio-Economic, Land Use, Tourism and Recreation resources and receptors.

2. This assessment was undertaken by Arcus Consultancy Services Limited (Arcus).

3. This Chapter of the EIA Report is supported by the following figures provided in Volume 2: Figures excluding LVIA:

- Figure 15.1: Assessed Tourism and Recreational Receptors; and
- Figure 15.2: Core Paths and Recreational Routes.

4. This Chapter includes the following elements:

- Legislation, Policy and Guidance;
- Assessment Methodology and Significance Criteria;
- Baseline Conditions;
- Assessment of Potential Effects;
- Cumulative Effect Assessment;
- Mitigation and Residual Effects;
- Summary of Effects; and
- Statement of Significance.

5. The following terms are used within this Chapter to describe the Development:

- The Development: the whole physical process involved in the development of Cloich Forest Wind Farm, including wind farm construction, operation, and decommissioning (*i.e.* not a piece of land or an area);
- The Site Boundary: the red line boundary as shown in Figures 1.1 and 1.2; and
- The Site: the land within the Site Boundary available for turbine development and associated wind farm infrastructure.

15.2 LEGISLATION, POLICY AND GUIDANCE

6. The following guidance, legislation and information sources have been considered in carrying out this assessment:

- The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017[1];
- Economic Action Plan 2019 – 2020[2];
- Scotland's Economic Strategy[3];
- Protecting Scotland, Renewing Scotland: Scotland's Programme for Government 2020 – 2021[4];
- National Performance Framework[5];

[1] The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 [Online] Available at: https://www.legislation.gov.uk/ssi/2017/101/contents/made (Accessed 11/02/2021)
[2] Scottish Government (2018) Economic Action Plan 2019 – 2020 [Online] Available at: https://economicactionplan.mygov.scot/ (Accessed 11/02/2021)
[3] Scottish Government (2015) Scotland's Economic Strategy [Online] Available at: https://www.gov.scot/publications/scotlands-economic-strategy/pages/0/ (Accessed 11/02/2021)
[4] Scottish Government (2020) Protecting Scotland, Renewing Scotland: Scotland's Programme for Government 2020 – 2021 [Online] Available at: https://www.gov.scot/programme-for-government/ (Accessed 11/02/2021)
[5] Scottish Government (2019) National Performance Framework [Online] Available at: https://nationalperformance.gov.scot/national-outcomes (Accessed 11/02/2021)

- Scottish Planning Policy[6];
- National Planning Framework 3[7];
- Scottish Borders Council (2016) Local Development Plan, Volume 1, Policies[8];
- Scottish Borders (2013) Economic Strategy 2023[9];
- Building a resilient recovery from the COVID-19 crisis[10];
- Towards a Robust, Resilient Wellbeing Economy for Scotland: Report of the Advisory Group on Economic Recovery[11];
- Eight policy packages for Scotland's Green Recovery[12];
- Institute of Environmental Management and Assessment (IEMA) (2011) The State of Environmental Impact Assessment in the UK[13];
- NatureScot (2018) Environmental Impact Assessment Handbook[14]; and
- Wind Farms and Tourism Trends in Scotland: BiGGAR Economics (2017)[15].

15.2.1 Legislation

7. The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 ('the EIA Regulations') establish in broad terms what is to be considered when determining the effects of development proposals on socio-economics, land-use, recreation and tourism.

15.2.2 National Policy

15.2.2.1 Socio-Economics

8. Scotland's Economic Strategy sets out how the Scottish Government will provide support for businesses and individuals to grow in an economically sustainable way with the dual objectives of boosting competitiveness and tackling inequality. As part of these objectives, the document aims to direct investment in order to maximise opportunities for employment, business, leisure and tourism and also to join up planning policy to facilitate this.

[6] Scottish Government (2014) Scottish Planning Policy [Online] Available at: https://www.gov.scot/publications/scottish-planning-policy/pages/2/ (Accessed 11/02/2021)
[7] Scottish Government (2014) National Planning Framework 3 [Online] Available at: https://www.gov.scot/publications/national-planning-framework-3/ (Accessed 11/02/2021)
[8] Scottish Borders Council (2016) Local Development Plan, Volume 1, Policies [Online] Available at: https://www.scotborders.gov.uk/downloads/file/2017/ldp_-_volume_1_policies (Accessed 11/02/21)
[9] Scottish Borders (2013) Economic Strategy 2023 [Online] Available at: https://www.scotborders.gov.uk/downloads/file/456/economic_strategy (Accessed 11/02/21)
[10] Committee on Climate Change (2020) Building a Resilient recovery from the COVID-19 crisis [Online] Available at: https://www.theccc.org.uk/publication/letter-building-a-resilient-recovery-from-the-covid-19-crisis-to-roseanna-cunningham-msp/ (Accessed 11/02/2021)
[11] Scottish Government (2020) Towards a Robust, Resilient Wellbeing Economy for Scotland: Report of the Advisory Group on Economic Recovery [Online] Available at: https://www.gov.scot/publications/towards-robust-resilient-wellbeing-economy-scotland-report-advisory-group-economic-recovery/ (Accessed 11/02/2021)
[12] Climate Emergency Response Group (2020) Eight policy packages for Scotland's Green Recovery (2020) Available at: https://www.changeworks.org.uk/sites/default/files/CERG_Green%20Recovery_Final%20report_July2020_0.pdf (Accessed 11/02/2021)
[13] IEMA (2011) The State of Environmental Impact Assessment Practice in the UK [Online] Available at: https://transform.iema.net/article/state-eia-practice-uk (Accessed 11/02/2021)
[14] SNH (2018) Environmental Impact Assessment Handbook [Online] Available at: https://www.nature.scot/handbook-environmental-impact-assessment-guidance-competent-authorities-consultees-and-others (Accessed 11/02/2021)
[15] BiGGAR Economics (2017) Wind Farm and Tourism Trends in Scotland [Online] Available at: https://biggareconomics.co.uk/wp-content/uploads/2020/01/Wind-farms-and-tourism-trends-in-Scotland.pdf (Accessed 11/02/2021)

9. The document identifies four strategic priorities which are critical to economic growth:

- Investing in our people, infrastructure and assets in a sustainable way;
- Fostering a culture of innovation;
- Promoting inclusive growth; and
- Internationalisation.

10. The National Performance Framework tracks progress towards national outcomes. It shows how well Scotland is performing overall on the 81 national indicators including topics such as economy and the environment. In terms of economy, the Scottish Government recognises that a strong, competitive economy is essential to supporting jobs, incomes and our quality of life. The Scottish economy must be environmentally sustainable, inclusive and benefit all Scotland's people and communities.

11. On the 23rd June 2014 the Scottish Government published the Scottish Planning Policy (SPP), which was updated on 18 December 2020. It is clear from SPP that the Scottish Government is committed to developing further renewable energy projects and paragraph 153 of SPP advises that:

"*Efficient supply of low carbon and low cost heat and generation of heat and electricity from renewable energy sources are vital to reducing greenhouse gas emissions and can create significant opportunities for communities. Renewable energy also presents a significant opportunity for associated development, investment and growth of the supply chain*" (page 36).

12. Paragraphs 29 and 169 discuss that decisions for proposals for energy infrastructure should be guided by giving due weight to net economic benefit (paragraph 29) and that key considerations are likely to include:

"net economic impact, including local and community socio-economic benefits such as employment, associated business and supply chain opportunities (paragraph 169)".

13. The National Planning Framework (NPF3) sets out a long-term strategy for Scotland's important development and investment opportunities in infrastructure. Combined with the SPP, NPF3 aims to help deliver a sustainable, economic future for Scotland's communities. NFP3 states that in order to help make Scotland a low carbon place, the spatial strategy suggests:

"…to retain the benefits of renewable energy development in Scotland by supporting investment at key sites across the country."

14. NPF3 also indicates that the future of the renewables sector in Scotland will be key to bringing new employment to Scotland's remote areas and that rural communities will benefit from well-planned renewable energy development.

15. In November 2020 the Scottish Government issued the Fourth National Planning Framework Position Statement[16]. Within the introduction – Our Future Places – it is recognised that the planning system will have to be rebalanced so that climate change is a guiding principle in all plans and decisions, focussing efforts on encouraging developments that help to reduce emissions. The aim should not be to restrict development, but rather to stimulate that green economy. The Position Statement goes on to identify supporting renewable energy developments as one of the key opportunities to both achieve climate change targets and stimulate the green economy.

16. In September 2020, the Scottish Government published its Government's Programme for Scotland 2020-2021 which details the Scottish Government's plans for Scotland's economic, health and educational development. With regards to Scotland's economic

[16] Scottish Government – Scotland's Fourth National Planning Framework Position Statement [Online] Available at: https://www.gov.scot/publications/scotlands-fourth-national-planning-framework-position-statement/ (Accessed 11/02/2021)

programme, the Scottish Government announced its Green Recovery Plan which detailed its funding for a transition to net-zero; this was a part of the Programme for Government 2020/21. The plan states that nearly £1.6 billion will support up to 5,000 jobs and tackle fuel poverty. An additional £500 million will be invested into Scotland's natural economy, £100 million into the Green Job Fund and £60 million to help industrial and manufacturing sectors decarbonise, grow and diversify[17].

15.2.2.2 Land Use

17. In relation to land use, paragraph 80 of Scottish Planning Policy (SPP)[18] states that:

> *"Where it is necessary to use good quality land for development, the layout and design should minimise the amount of such land that is required. Development on prime agricultural land, or land of lesser quality that is locally important should not be permitted except where it is essential:*
>
> *…..to meet an established need, for example for essential infrastructure, where no other suitable site is available; or……*
>
> *for the generation for energy from a renewable source or the extraction of minerals where this accords with other policy objectives and there is secure provision for restoration to return the land to its former status."*

15.2.3 Local Planning Policy

18. The Scottish Borders Local Development Plan (LDP) was adopted by Scottish Borders Council ('the Council') in 2016. The Scottish Borders LDP provides a planning framework for the future use and development of land within Scottish Borders, creating a context to guide the location of development over the next five years, from the adopted date, along with setting out development opportunities and ways to enhance the rural and urban environment.

19. Planning policy is addressed in full in the Planning Statement which accompanies this EIA Report. Relevant Socio-economic, land use, tourism and recreation policies contained within the Council's LDP are summarised in the following sections:

15.2.3.1 ED7 Business, Tourism and Leisure Development in the Countryside

20. The aim of this policy is to ensure that there is appropriate employment generating development in the countryside as well as protecting the environment and to ensure that business, tourism and leisure related developments are appropriate for their location.

15.2.3.2 ED9 Renewable Energy Development

21. This policy aims to support renewable energy, to ensure developments are being constructed in appropriate locations and to advise on the factors that are to be taken into consideration when looking at proposals. The policy takes into account government policy which emphasises the role of local authorities and the planning system in meeting the national renewable targets. The policy supports a wide range of renewable energy sources, including onshore wind farms and takes into account the economic benefits of wind energy, as well as the factors relating to local tourism and business.

15.2.3.3 ED10 Protection of Prime Quality Agricultural Land and Carbon Rich Soils

22. This policy focuses on the protection of the quality of agricultural land and carbon rich soils. Prime quality agricultural land is a valuable resource which needs to be retained for farming and food production. When allocating sites for development, the Council aims to

[17] The Scottish Government (2020) Scotland's Green Recovery [Online] Available at: https://www.gov.scot/news/scotlands-green-recovery/ (Accessed 11/02/2021)
[18] Scottish Government (2014) Scottish Planning Policy [Online] Available at: https://www.gov.scot/publications/scottish-planning-policy/pages/2/ (Accessed 11/02/2021)

avoid such land; carbon rich soils are an important carbon store and can contribute to climate change when extracted. This policy aims to prevent the permanent loss of prime agricultural land and carbon rich soils; proposals for renewable energy developments will be required to accord with the objectives and requirements of policy ED9 rather than meet the requirements of this policy.

15.2.3.4 EP13 Trees, Woodlands and Hedgerows

23. This policy aims to protect the woodland resource and in turn, the character and amenity of settlements and the countryside, maintain habitats and provide an important recreational asset. The policy encourages developers to take into consideration the existing woodland resources within and out with their development schemes to ensure the protection of the resource during construction.

15.2.3.5 EP15 Development Affecting the Water Environment

24. This policy aims to ensure that development does not adversely affect any of the components that comprise the water environment (e.g. rivers, lochs, groundwater etc.). The Council aims to protect and improve the quality of the water environment and requires developers to consider how their proposals might generate potential adverse impacts and to implement measures that will aim to minimise any such impacts and enhance and restore the water environment.

15.2.3.6 IS5 Protection of Access Routes

25. The aim of this policy is to protect all existing access routes in accordance with the Land Reform (Scotland) Act 2003 and the Countryside (Scotland) Act 1967 to maintain, protect and keep access open and free from obstruction. The Council's Core Plan identifies routes which are of significant value to Tourism and to local residents; developers should ensure these routes remain as attractive and convenient as it was prior to development.

15.2.4 Guidance

26. The following documents have been considered for the assessment of potential effects of the Development on, socio-economics, land use, recreation and tourism:

- Institute of Environmental Management and Assessment (IEMA) (2011) The State of Environmental Impact Assessment in the UK;
- Scottish Natural Heritage (2018) Environmental Impact Assessment Handbook; and
- Wind Farms and Tourism Trends in Scotland: BiGGAR Economics (2017).

15.3 ASSESSMENT METHODOLOGY AND SIGNIFICANCE CRITERIA

15.3.1 Scoping Responses and Consultations

27. Consultation for this EIA Report topic was undertaken with the organisations shown in Table 15.1.

Table 15.1 Summary of Consultation Responses

Consultee	Type and Date	Summary of Consultation Response	Response to Consultee
British Horse Society	N/A	No response to Scoping Request with regard to socio-economics, land use or recreation and tourism.	N/A
Scottish Borders Council	Scoping Response (15/11/2019)	Information on the positive and negative economic effects of the Development (in addition to environmental/carbon offset benefits and impacts) would be welcome in order to achieve a rounded understanding of the positive and negative aspects of the Development. Assurances that the specific impacts of this Development would not have unacceptable effects on established local rural (particularly tourist) businesses. Provide some comparison in impacts between the Consented Scheme and the Development would be helpful in focussing on the likely differences, positive or negative. According to the records held by the Council, there are several trails and public rights of way through the Site and in the vicinity. The Council notes the following: • Cross Borders Drove Road; • Public Right of Way Noblehouse to Shiplaw; and • Promoted Path Courhope to Shiplaw. Wind turbines should be set back at a reasonable distance from rights of way and other potential recreational routes.	The potential for economic effects is addressed in Sections 15.4.1 & 15.5.1 of this Chapter. Information on carbon balance is included within Chapter 16 of this EIA Report. The potential for effects on tourism related receptors is addressed in Sections 15.4.3 & 15.5.4 of this Chapter. The potential for effects on public rights of way is addressed in Sections 15.4.3 and 15.5.4 of this Chapter. Turbines are all appropriately set back from public rights of way and other recreational routes by a minimum of 150 m. Comparison of effects provided in separate Project Comparison Document which accompanies the Application.
Scottish Borders Council	Increase in tip height consultation (17/02/2020)	No additional comments relevant to socio-economics, land use or recreation and tourism.	N/A
Eddleston & District Community	Scoping Response 15/11/2019	EDCC raise concerns regarding recreation and tourism receptors such as walkers, riders and cyclists who use trails and routes within	Concerns noted. The potential for effects on these

Consultee	Type and Date	Summary of Consultation Response	Response to Consultee
Council (EDCC)		the vicinity of the Development, specifically the Cross Borders Drove Road.	receptors is addressed in Sections 15.4.3 & 15.5.4 of this Chapter. In addition, **Chapter 5: Landscape and Visual Impact Assessment** provides an assessment of visual amenity impacts on tourism and recreation receptors.
John Muir Trust	Scoping Response 15/10/2019	No comment at the Scoping stage but will assess if and when application is lodged and make comment as necessary.	N/A
Lamancha, Newlands and Kirkurd Community Council	Scoping Response 18/11/2019	The Community Council consider that more should be done to reflect the impact on users of the Cross Borders Drove Road. This core path is being used increasingly by both local walkers, cyclists and horse riders as well as visitors from elsewhere in the Lothian/Borders region and long-distance walkers (it forms part of Scotland's National Trail, between Cape Wrath and Kirk Yetholm).	Noted. The Cross Borders Drove Road has been fully considered during the Development's design and has been assessed in full within this Chapter. In addition, **Chapter 5: Landscape and Visual Impact Assessment** provides an assessment of visual amenity impacts on tourism and recreation receptors.
The Royal Burgh of Peebles & District	Scoping Response 27/10/2019	Concern is noted that the visitor "gateway" impression will be severely impacted as the development will dominate the horizon for those travelling down from Edinburgh and will be visible from just south of Leadburn. The proposed reduction in the number of masts is welcomed, however there is still concern relating to the increase in unit size and the potential for a greater impact.	Concerns noted. **Chapter 5: Landscape and Visual Impact Assessment** will assess visual amenity and landscape impacts.
ScotWays	29/11/2019	The National Catalogue of Rights of Way shows rights of way BT6, BT10, BT40 and BT41 appear to be affected. The Heritage Paths project promotes two routes affected by the proposed application: the Cross Borders Drove Road and the Post Road through the Meldons.	All points raised are noted. The potential for effects on these receptors is addressed in Sections 15.4.3 & 15.5.4 of this Chapter and

Consultee	Type and Date	Summary of Consultation Response	Response to Consultee
		The Development Site and surrounding areas have a high volume of recreational activity, including walkers and mountain bikers. Scotways note advice that wind turbines are set back a minimum distance equivalent to the height of the blade tip.	**Chapter 5: Landscape and Visual Impact Assessment** within this EIA Report.

15.3.2 Scope of the Assessment

28. This Chapter considers:

- The effect of the Development on the socio-economic resource, including employment, within the local, regional and national context;
- The effects on land-use in the immediate vicinity of the Development; and
- The effects on tourist attractions and recreation facilities within and near to the Development.

29. The key issues for the assessment of potential effects relating to the Development are:

- Short-term direct and indirect effects arising from the construction phase;
- Long-term direct and indirect effects that occur during the Operational phase, but are mitigated at decommissioning; and
- Permanent direct and indirect effects that continue after decommissioning.

30. Where appropriate conclusions from **Chapter 5: Landscape and Visual Impact Assessment** have been utilised to inform the assessments within this chapter. In those instances, cross references have been provided.

15.3.2.1 Socio-Economics

The principal socio-economic assessment criteria relate to the employment effects within the Study Area, as defined in Section 15.3.4. These effects are defined in terms of job years and the Gross Value Added (GVA) generated by any jobs created by the Development.

15.3.2.2 Land-Use

Land-use is the anthropogenic management and occupation of the environment, and what the land is used for. Developments can affect the ability of the land to be effectively used for its current purpose and also affect the potential use in the future. This can result from direct loss of land to new infrastructure, which is therefore no longer available for the current land-use; disruption to existing land-use operations can occur as a result of construction and operational activities of a new development (e.g. access restrictions). In this case, the land in which the Development is proposed ('the Site') consists predominantly of commercial forestry plantation and associated access track.

15.3.2.3 Recreation and Tourism

Recreational behaviour will be affected where a development potentially leads to a change in recreational habits or activities. Factors which might lead to change in recreational behaviour include loss, closure, or diversion of routes; obstructing access routes; enhancing access; reduction in amenity or intrusion; enhancement in amenity; and changes in setting and context of the recreational resource.

Where other technical assessments presented within this EIA Report, have considered the effects on recreational resources, *e.g.* **Chapter 5: Landscape and Visual Impact Assessment**, these findings will be drawn upon to inform the assessment of the wider recreational effects.

When assessing tourism, this Chapter deals primarily with amenity, which is defined as the pleasantness of the asset that contributes to its character (*i.e.* the essence of why the asset is visited). Amenity is inextricably linked with both recreational behaviour and tourism.

15.3.3 Elements Scoped Out of Assessment

There are 66 Listed Buildings within 5 kilometres (km) of the Site Boundary. The 66 Listed Buildings include: four Category A, 42 Category B and 20 Category C Listed Buildings.

The four Category A listed buildings are:

- Spitalhaugh House including Stable and Bridge;
- Portmore House;
- Court of Offices, Whim House; and
- Sundial, Lamancha.

Subdial, Lamancha falls outwith the ZTV and is therefore scoped out of further assessment.

31. Spitalhaugh House including Stable and Bridge, Portmore House, and the Court of Offices, Whim House all fall within the zone of theoretical visibility shown on Figure 5.2.1a of **Chapter 5: Landscape and Visual Impact Assessment**; however, both Spitalhaugh House including Stable and Bridge, and the Court of Offices, Whim House do not constitute as tourism and recreational receptors and are therefore scoped out of further assessment. Portmore House falls within the ZTV and its gardens are open to the public – outwith the Covid-19 pandemic – and is therefore scoped in for further assessment.

32. With the exception of the Great Polish Map of Scotland (Category B), Barony Castle Hotel (Category B), and Cringletie House Hotel (Category B), other Category B and C listed buildings within the local area, do not constitute tourist attractions, and are therefore scoped out of further assessment. The Great Polish Map of Scotland, as a tourism and recreation receptor is scoped in for further assessment; and both the Barony Castle Hotel & Cringletie House Hotel are scoped in for assessment as accommodation providers.

33. Listed buildings within 5 km of the Site Boundary are considered fully within **Chapter 6: Archaeology and Cultural Heritage**.

34. There are 3 Scheduled Monuments within the Site and a further 52 within 5 km of the Site Boundary. None are 'properties in care' heritage receptors, although some scheduled monuments within 5 km fall nearby locally promoted paths. However, the appreciation and experience of these scheduled monuments relates to setting which is considered fully within **Chapter 6: Archaeology and Cultural Heritage** therefore are scoped out of further assessment in this Chapter.

35. With regard to the cumulative effects assessment, there are no single turbines within 5 km, and relatively few single turbines beyond 5 km from the outermost wind turbines of the Development; therefore single turbines are scoped out and not considered within the assessment of cumulative effects. Similarly, there are relatively few turbines below 50 m tip height surrounding the Development, and none within 5 km; therefore turbines below 50 m in tip height are scoped out and not considered within the assessment of cumulative effects. Additionally, schemes at Scoping stage are scoped out of cumulative assessment.

15.3.4 Study Area

36. The study areas in this assessment are receptor specific and are detailed in the following sections.

15.3.4.1 Socio-Economics

37. The 'Study Areas' are defined as at local and national scale as follows:

- 'Local' is defined as comprising the electoral wards of both Penicuik and Tweeddale West;
- 'Regional' is defined as the Scottish Borders; the geographical size of the Scottish Borders area means that the Development will not affect the entire area. As national statistics apply to Scottish Borders as a single area, it will be referred to as a whole for a number of assessments; and
- 'National' is defined as Scotland.

15.3.4.2 Land Use

38. The 'Study Area' comprises the land within the Site Boundary and that taken by the Development, either temporarily during construction and decommissioning or permanently after operation and decommissioning.

15.3.4.3 Tourism and Recreation

39. The Primary Study Area for tourism and recreation comprises land within the Site Boundary when considering direct effects and within 10 km of the Site Boundary when considering indirect effects.

40. A Secondary Study Area, comprising land within the Site and within 5 km of the Site Boundary, is used for assessing direct and indirect effects on Recreational Routes, Core Paths and Rights of Way.

15.3.4.4 Cumulative Effects

41. Cumulative effects related to socio-economics, land-use and tourism are assessed in the context of other developments within 10 km of the Site. Cumulative effects in this context are generally related to visibility of multiple schemes, or effects such as multiple developments being constructed within proximity to one another. 10 km is therefore considered to be the conceivable maximum distance that these effects may occur.

15.3.5 Baseline Survey Data Sources

42. The following sources of information have been used to inform the baseline description set out in this Chapter:

- The Scottish Borders Council (www.scotborders.gov.uk);
- Visit Scotland (https://www.visitscotland.com/);
- Heritage Paths (www.heritagepaths.co.uk);
- National Statistics Online (www.statistics.gov.uk);
- National Records of Scotland (www.nrscotland.gov.uk/statistics-and-data);
- NOMIS Official Labour Market Statistics (www.nomisweb.co.uk);
- Scottish Tourist Board (www.visitscotland.com);
- ScotWays (www.scotways.com);and
- Sustrans (www.sustrans.co.uk)

43. Baseline conditions have been established through desktop studies and consultation, including responses to the Scoping Report. However, information gathered, and conclusions arrived at, through Site visits undertaken for other environmental topics, namely Landscape & Visual Impact Assessment and Cultural Heritage & Archaeology, have also been used to inform aspects of the baseline for this Chapter.

15.3.6 Methodology for the Assessment of Effects

44. Effects on the socio-economics, land use, and tourism and recreation resources can be described as direct, indirect or cumulative. The methodology for assessment of effects takes account of the NatureScot (2018) Environmental Impact Assessment Handbook.

45. The assessment aims to predict the likely effects (positive, negative or neutral) arising from the Development; these effects are divided into:

- Direct effects: those arising from an immediate effect of the Development such as physical disturbance to land-use resource and therefore the tourism and recreation resource, such as the footprint of the Development and/or construction/decommissioning activities restricting/blocking access to tourism receptors;
- Indirect effects: for example, opportunities that will be created by the Development further down the supply chain, (e.g. companies providing services to the Development), or visual effects from the Development on the amenity of nearby recreational assets;
- Induced effects: for example, employment opportunities created by the additional spend of wages within the local economy and the purchasing of basic materials, equipment and office space for staff, or a loss of business to an economic receptor from reduced attraction for visitors; and
- Cumulative Effects: where the combined effect of two or more developments are of greater significance than those of the Development itself.

46. The significance of the potential effects of the Development has been classified by professional consideration of the sensitivity of the receptor and the magnitude of change.

15.3.6.1 Sensitivity of Receptors

47. The sensitivity of the baseline conditions, including the importance of environmental features on or near to the Site or the sensitivity of potentially affected receptors, will be assessed in line with best practice guidance, legislation, statutory designations and / or professional judgement.

48. Table 15.2 details the framework for determining the sensitivity of receptors.

Table 15.2 Framework for Determining Sensitivity of Receptors

Sensitivity of Receptor	Definition
Very High	The asset is of very high socio-economic, land use, recreational or tourism value, or of importance at UK or International level, and has little or no capacity to absorb change without fundamentally altering its present character. For example, it is a destination in its own right (for attractions), with a substantial proportion of visitors on a national (UK) level and/or possesses priority in national policy.
High	The asset is of high socio-economic, land use, recreational or tourism value, or of importance to Scotland, and has low capacity to absorb change without fundamentally altering its present character. For example, it is a destination in its own right (for attractions), with a significant contribution to the national (Scotland) economy and/or possesses priority/weight in regional and/or local policy.

Sensitivity of Receptor	Definition
Medium	The asset is of some socio-economic, land use, recreational or tourism value, or is of regional importance (e.g. Scottish Borders), and has moderate capacity to absorb change without substantially altering its present character. For example, it is a popular destination among current visitors (for attractions), with a significant contribution to the regional economy and/or possesses priority/weight in regional and/or local policy.
Low	The asset has low socio-economic, land use, recreational or tourism value, or is of local importance (e.g. Penicuik and Tweeddale West), and is tolerant to change without detriment to its character. For example, it is an incidental destination for current visitors (for attractions).
Negligible	The asset is of little socio-economic, land use, recreational or tourism value, and is resistant to change. For example, an incidental destination for low numbers of current visitors (for attractions) and/or possesses no weight in authority policy.

49. Sensitivity of the receptor, in terms of landscape and visual impact, is assessed within **Chapter 5: Landscape and Visual Impact Assessment**; operational assessment conclusions are drawn into this assessment where appropriate, and interpreted in the context of tourism and recreation. Chapter 5 notes that the visibility of construction effects, beyond those experienced at the Site level where low-level construction activity will be apparent in certain views, will largely relate to views of tall cranes and turbine construction. These construction effects will be transient and change throughout the construction period as wind turbines are gradually constructed in sections. As such, visual effects during the construction phase are unlikely to exceed the level of effect associated with operational visual effects and are not assessed separately.

50. Professional judgement is applied when arriving at the sensitivity of receptors, based on both the table above and the findings from Chapter 5 (in the context of tourism and recreation).

15.3.6.2 Magnitude of Change

51. The magnitude of change will be identified through consideration of the Development, the degree of change to baseline conditions predicted as a result of the Development, the duration and reversibility of an effect and professional judgement, best practice guidance and legislation.

52. The criteria for assessing the magnitude of change are presented in Table 15.3.

Table 15.3 Framework for Determining Magnitude of Change

Magnitude of Change	Definition
High	Total loss or major alteration (positive or negative) of the socio-economic, land use, tourism or recreational assets/receptors.
Medium	Loss of, or alteration to (positive or negative), one or more key elements of the socio-economic, land use, tourism or recreational asset's baseline value.
Low	Slight alteration (positive or negative) of the socio-economic, land use, tourism or recreational asset/receptors.
Negligible	Barely perceptible alteration (positive or negative) of the socio-economic, land use, tourism or recreational asset/receptors.

15.3.6.3 Significance of Effect

53. 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. Table 15.4 summarises guideline criteria for assessing the significance of effects.

Table 15.4 Framework for Assessment of the Significance of Effects

Magnitude of Change	**Sensitivity of Resource or Receptor**				
	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	Minor	Minor	Negligible	Negligible	Negligible

54. Effects predicted to be of major or moderate significance are considered to be 'significant' in the context of the EIA Regulations, and are shaded in light grey in the above table.

55. Effects can be positive, negative or neutral and these are specified where applicable in the assessment within this Chapter.

56. Consideration is given to the national, regional and local baseline situation when assessing sensitivity, with the magnitude of change determined in proportion to the geographic scale relevant to each receptor.

57. In terms of socio-economic factors, potential effects would be significant if the Development resulted in any fundamental or material changes in population, structure of community, and economic activity during the operational phase of the Development.

58. For tourism and recreation factors, potential effects would be significant if the Development resulted in any fundamental or material changes in key elements/features of the receptor and/or if effects resulted in major, long-term alterations of the baseline conditions of the attraction, accommodation, recreation route etc.

59. In terms of land-use factors, potential effects would be considered significant if the Development resulted in long-term modification or net loss of an important land-use receptor.

15.3.7 Assessment Limitations

60. Data has been collated from published sources and no surveys specific to the Development and in support of this assessment have been carried out; however, as noted earlier, Site visits related to other environmental topics have, where appropriate, informed the baseline information.

61. Baseline figures have been taken from the latest available information prior to the current COVID-19 situation / economic crisis. As such, assessments are based on the economic climate prior to COVID-19. It is widely recognised that future impacts as a result of the pandemic are not yet fully understood, with the Scottish economy currently in a fragile state. In the medium term, the Scottish Government predict that GDP output is projected to recover gradually back to its pre-COVID level in 2023-24[19]. Given this projection and the anticipated construction date of 2027, pre-COVID data is considered to more be representative than that dating from 2020.

[19] Scottish Government, State of the Economy September 2020, [Online], available at https://www.gov.scot/publications/state-economy/ (Accessed 29/04/2021)

62. Whilst efforts have been made to ensure that the key tourism and recreation facilities in the area have been identified, it is possible that there are a number of small attractions that will not have been identified through the data collection process.

15.4 BASELINE CONDITIONS

63. The land within the Site which contains the proposed turbines and associated infrastructure covers an area of approximately 1,080 hectares (ha), centred on National Grid Reference (NGR) 320648, 647881. The Site lies wholly within the administrative boundary of the Council, and within both Penicuik and Tweeddale West electoral wards. It is noted that the Site is approximately 3.2 km south of Midlothian Council, and approximately 6.6 km east of South Lanarkshire Council.

15.4.1 Socio-economics

15.4.1.1 Population

Local Study Area

64. According to the last Census (2019 Estimate), the Local Study Area (LSA) had a total population of 24,207, of which 52% were female and 48% were male. This is divided as 13,812 within Penicuik[20] and 10,043 within Tweeddale West[21].

65. Of the LSA population (according to the latest available breakdown), 16.7% were aged under 16 (4,045 residents), 62% were aged 16-64 (15,040 residents), and lastly, 19.3% were aged 65 and over (4,670 residents)[22, 23].

Regional Study Area

66. The Scottish Borders Council area, in the south east of Scotland, is largely rural and includes numerous small towns and villages. It covers an area of around 4,732 km^2 with an estimated population of 115,510[24] (2019). The largest settlements are Hawick (approximately 14,003 residents), Galashiels (approximately 12,670 residents), and Peebles (approximately 8,538 residents)[25].

67. In 2019, the female population of the Scottish Borders was higher than men with 51.4% being female and 48.6% being male. The largest age group within the population is between the ages of 45 and 64; the average life expectancy was higher for females at 82.1, with males being 78.8, both of which are above the Scottish average[26].

[20] Scottish Government Statistics (2017) Electoral Ward Penicuik [Online] Available at: https://statistics.gov.scot/atlas/resource?uri=http%3A%2F%2Fstatistics.gov.scot%2Fid%2Fstatistical-geography%2FS13003018 (Accessed 12/04/2021)
[21] Scottish Government Statistics (2017) Electoral Ward Tweeddale West[Online] Available at: https://statistics.gov.scot/atlas/resource?uri=http%3A%2F%2Fstatistics.gov.scot%2Fid%2Fstatistical-geography%2FS13002761 (Accessed 12/04/2021)
[22] Scottish Borders (2015) Tweeddale West: Overview of Population, Deprivation, Employment and Schools (Accessed 26/02/21)
[23] Midlothian (2015) Penicuik Neighbourhood Profile (Accessed 26/02/21)
[24] National Records of Scotland (2020) Scottish Borders Council Area Profile [Online] Accessed here: https://statistics.gov.scot/atlas/resource?uri=http%3A%2F%2Fstatistics.gov.scot%2Fid%2Fstatistical-geography%2FS12000026 (Accessed 11/02/21)
[25] Scottish Borders (2014) Scottish borders Town Matrix and Town Centre Index [Online] Available at: https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwjS6pDD39XvAhWQX8AKHbruDu0QFjAAegQIBBAD&url=https%3A%2F%2Fwww.scotborders.gov.uk%2Fdownload%2Fdownloads%2Fid%2F3428%2Fscottish_borders_town_matrix_2016.pdf&usg=AOvVaw1-Z6XZY52dVU7KtgSjent5 (Accessed 01/04/2021)
[26] National Records of Scotland (2020) Scottish Borders Council Area Profile [Online] Accessed here: https://scottishborders.moderngov.co.uk/Data/Scottish%20Borders%20Council/201008191000/Agenda/Item%20No.%208%20-%20sbfigures10.pdf (Accessed 11/02/21)

68. By mid-2019, 25% of the Scottish Borders population was over 65 years, which is higher than the Scottish average of 19%[27]. National Records of Scotland projections signal that in Scotland the gap between older and younger populations is expected to expand further over time. The pensionable age (over 65) population is set to continue to increase over the next 30 years, however with the pensionable age set to rise to 67 in 2028, the number of people over the pensionable age may decrease; the change in pensionable age is not accounted for within this assessment.

69. The employment rate for the working age population aged 16-24 in the Scottish Borders was 75.7% which was above the rate for Scotland as a whole (74.5%). In the Scottish Borders, 80.3% of males were in employment compared to the 78.1% Scottish average; 71.4% of women were in employment compared to the 71.1% Scottish average[28].

70. There are five local based area partnerships within the Borders and these are:

- Berwickshire;
- Cheviot;
- Eildon;
- Teviot and Liddesdale; and
- Tweeddale.

71. The aforementioned local area partnerships provide locals with an opportunity to take part in informal discussion and debate about the challenges facing their local communities. The local area partnerships seek to bring together a range of different people from different organisations, groups and businesses.

National Study Area

72. According to the last Census (2019 estimation), Scotland's population is approximately 5,463,300[29]. This is its highest ever population, and an increase of 25,200 people (0.46%) since 2018. Since 1959, Scotland's population has increased by 300,700 and has been growing each year since 2000, though the rate of growth over this period has varied.

15.4.1.2 Employment

Local Study Area

73. Within the electoral ward of Penicuik, in 2015, 42.4% of the population were in full-time employment; 15.9% were in part-time employment; 6.6% were self-employed and only 4% were unemployed[30].

74. Tweeddale West has shown a consistently lower rate of unemployment compared to the Scottish Borders as a whole, and Scotland. The unemployment claimant rate in February 2017 in Tweeddale West was shown to be approximately just over 1%, whereas for the Scottish Borders and Scotland, it was approximately 1.7% and approximately 2.4%, respectively[31].

[27] National Records for Scotland (2019) Mid-Year Population Estimates Scotland, Mid-2019 [Online] Available at: https://www.nrscotland.gov.uk/files//statistics/population-estimates/mid-19/mid-year-pop-est-19-report.pdf (Accessed 22/02/2021)
[28] Skills Development Scotland (2019) Regional Skills Assessment, Scottish Borders [Online] Available at: https://www.skillsdevelopmentscotland.co.uk/media/46136/scottish-borders-rsa-summary-report.pdf (Accessed 26/02/2021)
[29] National Records of Scotland (2019) Mid-Year Population Estimates Scotland, Mid-2019 [Online] Available at: https://www.nrscotland.gov.uk/files//statistics/population-estimates/mid-19/mid-year-pop-est-19-report.pdf (Accessed 11/02/2021).
[30] Midlothian (2015) Penicuik Neighbourhood Profile (Accessed 26/02/21)
[31] Scottish Borders Council (2017) Tweeddale West – Overview of Population, Deprivation, Unemployment and School [Online] Available at: https://www.scotborders.gov.uk/download/downloads/id/2982/ward_1_-_tweeddale_westpdf.pdf (Accessed 03/03/2021)

Regional Study Area

75. According to the last Census (2011), 53,600 of Scottish Borders population were in employment with 69.7% being in full-time employment; 18.4% of those full-time employees are earning less than minimum wage.

76. In 2017, there were 5,705 business sites within the Scottish Borders, with 4,516 of those being business units[32]. In 2017 the male employment rate was at 79.9% whereas the female employment rate was significantly lower at 69.5%[33].

77. In 2019[34], the employment rate for the working age population (aged 16-64) in the Scottish Borders was 75.7%, which was above the rate for Scotland (74.5%). Compared to Scotland, the region had above average employment rates for:

- Young people (aged 16-24) at 61.9%, compared to 58.3%;
- Males at 80.3%, compared to 78.1%;
- Females at 71.4%, compared to 71.1%;
- Disabled people at 49.0%, compared to 45.9%; and
- Ethnic minorities at 76.2%, compared to 57.4%.

78. The industries and their employment rates within the Scottish Borders[35] include:

- Wholesale and retail trade (16%);
- Human health and social work (16%);
- Manufacturing (10%);
- Construction (8%);
- Agriculture, forestry and fishing (8%);
- Education (7%);
- Accommodation and food service activities (6%);
- Professional, scientific and technical activities (6%);
- Arts, entertainment and recreation (4%);
- Administrative and support service activities (4%);
- Public administration and defence (4%);
- Transportation and storage (3%)
- Other service activities (2%);
- Real Estate activities (2%);
- Information and communication (1%);
- Electricity, gas and Steam (1%);
- Financial and insurance activities (1%);
- Water supply, sewerage and waste management (<1%); and
- Mining and quarrying (<1%).

[32] Scottish Government Statistics (2017) Scottish Borders [Online] Available at: https://statistics.gov.scot/atlas/resource?uri=http%3A%2F%2Fstatistics.gov.scot%2Fid%2Fstatistical-geography%2FS12000026 (Accessed 11/02/21)
[33] Scottish Government Statistics (2017) Scottish Borders [Online] Available at: https://statistics.gov.scot/atlas/resource?uri=http%3A%2F%2Fstatistics.gov.scot%2Fid%2Fstatistical-geography%2FS12000026 (Accessed 11/02/21)
[34] Skills Development Scotland (2019) Regional Skills Assessment, Scottish Borders [Online] Available at: https://www.skillsdevelopmentscotland.co.uk/media/46136/scottish-borders-rsa-summary-report.pdf (Accessed 04/03/2021)
[35] Skills Development Scotland (2019) Regional Skills Assessment, Scottish Borders [Online] Available at: https://www.skillsdevelopmentscotland.co.uk/media/46136/scottish-borders-rsa-summary-report.pdf (Accessed 26/02/2021)

79. Employment in the Scottish Borders has decreased by 1.0% from 2009 to 2019[36]. This was largely caused by job losses in the larger, more prominent sectors such as:

- Human Health and Social Work Activities (-1500 jobs);
- Manufacturing (-700 jobs); and
- Accommodation and Food Service Activities (-400 jobs)

80. While these sectors experienced job losses, other sectors grew. This employment decline is not predicted to continue. From 2019 to 2029[36], employment is expected to grow by 1.9% which equates to 1000 jobs over the growth period. In comparison to Scotland as a whole, this is a slower rate of growth; a 3% increase in employment is expected to occur across Scotland.

81. The greatest increase in employment in the Scottish Borders is expected to occur from 2019 to 2029 in the following sectors:

- Construction and Professional (400 jobs);
- Scientific and Technical (400 jobs);
- Arts, Entertainment and Recreation (300 jobs);
- Administration and Support Services (300 jobs); and
- Wholesale and Retail (200 jobs).

82. Over the period to 2029, full-time employment is expected to increase in the Scottish Borders with 700 more full-time jobs in 2029 compared to 2019. Both male and female full-time employment will increase, by 500 and 200 jobs respectively. Part-time employment is also expected to increase by 300 jobs. Female part-time employment is forecast to decline by 100 jobs, but some of this decline is expected to be offset by growth of 400 jobs in male part-time employment[37].

15.4.1.3 Renewables and Economic Development

83. The UK renewables industry plays a central role in the economy by producing, transforming and supplying energy in its various forms to all sectors. UK Government statistics released on the 31st January 2019 show turnover from renewable energy activity in Scotland was £5.5 million in 2017[38], with individual sectors showing employment increases of up to 300% between 2015 and 2016[39]. The same study found that Scottish renewable developments in support a total of 17,700 jobs, with 33% of those resulting from onshore wind projects (5,800 jobs). In June 2021 the University of Strathclyde's Fraser of Allander Institute released statistics which shows that 22,660 jobs are supported by green energy in Scotland[40]. Additionally, Scottish Government statistics show that in 2017 the Scottish low carbon and renewable energy sector generated over £11 billion in

[36] Skills Development Scotland (2019) Regional Skills Assessment, Scottish Borders [Online] Available at: https://www.skillsdevelopmentscotland.co.uk/media/46136/scottish-borders-rsa-summary-report.pdf (Accessed 04/03/2021)
[37] Skills Development Scotland (2019) Regional Skills Assessment, Scottish Borders [Online] Available at: https://www.skillsdevelopmentscotland.co.uk/media/46136/scottish-borders-rsa-summary-report.pdf (Accessed 04/03/2021)
[38] Office for National Statistics – Low carbon and renewable energy economy indirect estimates (2019) [Online] Available at: https://www.ons.gov.uk/economy/environmentalaccounts/datasets/lowcarbonandrenewableenergyeconomyindirectestimatesdataset (Accessed 11/02/2021).
[39] Scottish Renewables (2018) Scots renewable energy industry turnover £5.5 billion, new UK Government stats show [Online] Available at: http://www.scottishrenewables.com/news/scots-renewable-energy-industry-turnover/ (Accessed 11/02/2021)
[40] University of Strathclyde / Fraser of Allander Institute (2021) The Economic Impact of Scotland's Renewable Energy Sector [Online] Available at: https://www.scottishrenewables.com/assets/000/001/718/2021_FAI_Economic_Impact_of_Scotland_s_Renewable_Energy_Sector_original.pdf?1622564058 (Accessed 04/06/2021)

turnover, whilst supporting over 46,000 jobs[41]. Scottish onshore wind projects, which support 8,000 jobs, delivered almost half (45.8%) of the UK's turnover from onshore wind in 2016, the latest year for which figures are available. Scotland's turnover from onshore wind activities totalled £1.5 billion in 2016 and achieving 'world leader' status for renewables in 2017[42].

84. The International Energy Agency (IEA) released statistics following analysis of daily data through mid-April 2020 during the COVID-19 pandemic (published in their Global Energy Review 2020) showing that countries in full lockdown, including the UK, experienced an average 25% decline in energy demand per week[43]. Due to COVID-19, the requirements for electricity security and resilient energy systems are heightened, with the need for clean energy transitions to be at the centre of development for economic recovery. The IEA also comment that with the outbreak of COVID-19, the economy would see a collapse in demand for fossil fuels, meaning electricity will play the biggest role in the global energy system in 2020[44].

85. Investment in renewable energy generation in the Scottish Borders is not only helping to meet Council and national climate change targets but it has also delivered economic benefits for the area.

86. As a result of the COVID-19 global pandemic, a global recession is expected to happen as the ongoing lockdowns across the globe have resulted in a reduction in employment and economic investment. In relation to energy, the demand for electricity and transportation fell and by mid-April the energy demand in countries under full lockdown fell by 25%[45] which led to a decline in oil prices and as a result, saw a decline in the fossil fuel industries. Since the beginning of the pandemic, electricity generation from renewables has been ongoing with a 1.5% increase in the global use of renewable energy[46]; renewable electricity generation increased by almost 3% in the first quarter of 2020. However, new renewable energy projects have slowed down as a result of a decline in construction due to supply chain disruptions, lockdown measures and social distancing guidelines[47] which has had an impact on existing and planned projects, investment, employment, and supply chains[48].

87. Furthermore, figures from Scottish Renewables[49] show opportunities for an economic boost from renewable energy projects and a sustained green recovery from the COVID-19 pandemic, signifying that renewable development could play a key role in the country's

[41] Scottish Government (2019) Annual Energy Statement 2019 [Online] Available at: https://www.gov.scot/publications/annual-energy-statement-2019/pages/3/ (Accessed 11/02/2021)
[42] WWF (2017) Scotland a 'World Leader' for renewables in 2017 [Online] https://www.wwf.org.uk/updates/scotland-world-leader-renewables-2017 (Accessed 11/02/2021)
[43] The International Energy Agency (2019) COVID-19 [Online] Available at: https://www.iea.org/topics/covid-19 (Accessed 11/02/2021)
[44] The Guardian (2020) Covid-19 crisis will wipe out demand for fossil fuels, says IEA [Online] Available at: https://www.theguardian.com/business/2020/apr/30/covid-19-crisis-demand-fossil-fuels-iea-renewable-electricity (Accessed 11/02/2021)
[45] Khanna, M. (2020), COVID-19: A Cloud with a Silver Lining for Renewable Energy?. Applied Economic Perspectives and Policy. doi:10.1002/aepp.13102 [Online] Available at: https://onlinelibrary.wiley.com/action/showCitFormats?doi=10.1002%2Faepp.13102 (Accessed 11/02/2021)
[46] Khanna, M. (2020), COVID-19: A Cloud with a Silver Lining for Renewable Energy?. Applied Economic Perspectives and Policy. doi:10.1002/aepp.13102 [Online] Available at: https://onlinelibrary.wiley.com/action/showCitFormats?doi=10.1002%2Faepp.13102 (Accessed 11/02/2021)
[47] Khanna, M. (2020), COVID-19: A Cloud with a Silver Lining for Renewable Energy?. Applied Economic Perspectives and Policy. doi:10.1002/aepp.13102 [Online] Available at: https://onlinelibrary.wiley.com/action/showCitFormats?doi=10.1002%2Faepp.13102 (Accessed 11/02/2021)
[48] IRENA (2020) The Post-Covid Recovery: an agenda for resilience, development and equality. [Online] Available here: https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2020/Jun/IRENA_Post-COVID_Recovery_2020.pdf (Accessed 11/02/21)

economic recovery, including both direct employment and large-scale financial investment.[49]

88. The Scottish Renewables research indicates that investment in renewable energy could speed up the recovery from the economic impacts of COVID-19 at a faster rate. There are opportunities for renewable energy production to grow five times faster than current trends. International Renewable Energy Agency (IRENA) has promoted increased investment in renewables as an economic driver for the Covid-19 recovery which could see the creation of 5.5 million additional jobs, globally, by 2023[50] in the industry if governments follow IRENA's 'Transforming Energy Scenario'. A worldwide second outbreak of COVID-19 is estimated to cause a 7.6% decline in global GDP, with worst affected economies declining as much as 11-12%[51]; therefore, investment in renewable energy projects can make the energy economy more robust to the challenges of COVID-19 and economic uncertainty.

15.4.2 Land Use

89. The Site is currently managed for commercial forestry operations by Forestry and Land Scotland (FLS); however, the area around Courhope in the south of the Site consists of improved upland pasture, utilised for sheep grazing, and improved grassland which remains clear of forestry. The forestry on Site is coniferous woodland at varying stages of maturity, including substantial areas of clear felling awaiting re-planting.

90. The topography of the Site and the immediate vicinity is generally complex with exposed hill tops. The Site encompasses the rolling Cloich Hills, including Peat Hill (466m Above Ordnance Datum (AOD)), Ewe Hill (462m AOD), White Rig (325m AOD), and Crailzie Hill (476m AOD). The hills are dissected by a number of watercourses, including Middle Burn, Flemington Burn, Martyr's Dean, Courhope Burn and Harehope Burn.

91. There are a number of existing forestry tracks used for the commercial forestry harvesting. The Site is currently accessible for informal non-vehicular recreation such as walking, cycling and horse riding, though there are health and safety restrictions in place during periods of harvesting and other forestry operations which means the network of paths and tracks is not always fully accessible to the public.

92. There is currently one active quarry on Site, located at approximate NGR 320456, 649061 which is utilised periodically by FLS to obtain rock, and is otherwise not in use. Public access is not permitted within the quarry.

93. In addition to the operational commercial forest of Cloich Forest, the Site and immediate vicinity consists of further areas of forestry and rural farmland, primarily used for grazing and other agricultural activities.

[49] Scottish Renewables (2020) Renewable energy research shows green covid-19 recovery jobs and investment boost [Online] Available at: https://www.scottishrenewables.com/news/648-renewable-energy-research-shows-green-covid-19-recovery-jobs-and-investment-boost (Accessed 11/02/2021)
[50] IRENA (2020) The Post-Covid Recovery: an agenda for resilience, development and equality. [Online] Available here: https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2020/Jun/IRENA_Post-COVID_Recovery_2020.pdf (Accessed 11/02/21)
[51] IRENA (2020) The Post-Covid Recovery: an agenda for resilience, development and equality. [Online] Available here: https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2020/Jun/IRENA_Post-COVID_Recovery_2020.pdf (Accessed 11/02/21)

15.4.3 Tourism and Recreation

15.4.3.1 Tourism and Recreation Receptors

94. Tourism is a key element in the socio-economic, environmental, and cultural welfare of Scotland. In 2019, around 17.5 million overnight trips were taken in Scotland (UK and international visitors) for which visitor expenditure totalled around £5.9 billion[52]. These figures represent substantial increases on 2018 figures; in 2018, around 15.5 million overnight trips were taken in Scotland, for which visitor expenditure totalled around £5.1 billion[53].

95. In 2017-2019 there were 3,074,000 visits to the Scottish Borders; 1,264,000 of which were overnight visits[54]. A total net tourism spend of £144 million was spent in the Scottish borders during this time. The Scottish Borders experienced an increase in overnight tourism during this period with a 9% increase compared to 2016-2018; bednights increased by 25% and tourism expenditure increase by 13% over the same period.

96. The growth in visitors to the Scottish Borders was largely driven by domestic visitors. Residents of Scotland made 13% more overnight trips during 2017-2019 when compared to 2016-2018; and additionally spent 14% more money compared to 2016-2018. Increasing numbers of English and Welsh visitors also travel to the Scottish Borders and generated more than half of the total trips, bednights and overnight expenditure in the region. International visitors to the borders also rose in the period 2017-2019 and increased their average length of stay[55].

97. Domestic day trips to the Borders fell by 10% to 2.7 million per year 2017-2019, although the annual day trip expenditure increased.

98. In 2019, 57% of visitors went to Hotels for accommodation, with 52% visiting self-catering services and 39% visiting Guest Houses/B&Bs. Free tourist attractions were the most popular in the Scottish Borders region; the most visited is the Tweed Valley Forest Park (347,763 visitors). The most visited paid tourist attraction was Melrose Abbey (61,325 visitors)[56].

99. The Scottish Borders tourism industry is primarily made up of built heritage facilities, a wide range of outdoor spaces and activities, a wide range of speciality shopping and artist studios/galleries, as well as high quality accommodation[57].

100. The table below indicates a number of tourist attractions within the Primary Study Area of 10 km of the Site Boundary.

[52] VisitScotland (2020) Key Facts on Tourism in Scotland 2019 [Online] Available at: https://www.visitscotland.org/binaries/content/assets/dot-org/pdf/research-papers-2/key-facts-on-tourism-in-scotland-2019.pdf (Accessed 11/02/2021)
[53] VisitScotland (2019) Key Facts on Tourism in Scotland 2018 [Online] Available at: https://www.visitscotland.org/binaries/content/assets/dot-org/pdf/research-papers-2/key-facts-on-tourism-in-scotland-2018-v2.pdf (Accessed 22/02/2021)
[54] Visit Scotland (2019) Insight Department: Scottish Borders Factsheet. [Online] Available at: https://www.visitscotland.org/binaries/content/assets/dot-org/pdf/research-papers-2/regional-factsheets/scottish-borders-factsheet-2019.pdf (Accessed 04/03/2021)
[55] Visit Scotland (2019) Insight Department: Scottish Borders Factsheet. [Online] Available at: https://www.visitscotland.org/binaries/content/assets/dot-org/pdf/research-papers-2/regional-factsheets/scottish-borders-factsheet-2019.pdf (Accessed 04/03/2021)
[56] Visit Scotland (2019) Insight Department: Scottish Borders Factsheet. [Online] Available at: https://www.visitscotland.org/binaries/content/assets/dot-org/pdf/research-papers-2/regional-factsheets/scottish-borders-factsheet-2019.pdf (Accessed 04/03/2021)
[57] Tourism and Leisure Solutions (2015) Midlothian and Scottish Borders Tourism Destination Audit 2015 [Online] Available at: https://www.scotborders.gov.uk/downloads/file/2186/tourism_destination_audit_2015 (Accessed 11/02/2021)

Table 15.5: Tourist Activities and Attractions within the Primary Study Area (within 10 km of the Site Boundary)

Tourist Activity / Attraction	Sensitivity of Receptor[58]	Approximate Distance from Site Boundary	Contextual Location	Theoretical Visibility from Receptor (Y/N)
White Meldon	Medium	2 km (SE)	Peebles	Y
Black Meldon	Medium	2 km (SE)	Peebles	Y
The Great Polish Map of Scotland	Low	2.5 km (E)	Peebles	Y
Portmore House & Gardens	Low	3.5 km (NE)	Peebles	Y
Peebles Golf Club	Low	5 km (S)	Peebles	N
Borderloop – cycling track	Low	5.5 km (SE)	Peebles	Y
Neidpath Castle	Low	5.6 km (SE)	Peebles	N
Haylodge Park	Low	6.5 km (SE)	Peebles	N
John Buchan Story	Medium	7 km (SE)	Peebles	Y
Peebles Hydro and Spa	Medium	7.5 km (SE)	Peebles	N
Glentress Forest – 7 Stanes Mountain Biking	Low	8.71 km (SE)	Peebles	Y
Go Ape	Medium	9.8 km (SE)	Peebles	Y
Glentress Forest	Low	9.8 km (SE)	Peebles	Y
Kailzie Gardens	Low	9.8 km (SE)	Peebles	N
Pentlands Hills Regional Park	Medium	9.5 km (NW)	Edinburgh	Y
Tweed Valley Park	Low	10 km (SE)	Peebles	Y
National Cycling Route 196	Medium	10 km (NW)	Penicuik	Y

101. Those attractions scoped out of further assessment are highlighted in orange; those highlighted in blue are scoped in for further assessment.

102. The following tourism activities and attractions do not have theoretical visibility based on Figure 5.1.2a (**Chapter 5: Landscape and Visual Impact Assessment**), and are scoped-out and not assessed further within this assessment:

- Peebles Golf Club;
- Neidpath Castle;
- Haylodge Park;
- Peebles Hydro and Spa; and
- Kailzie Gardens.

103. The Tweed Valley Park, National Cycling Route 196, Go Ape, and Glentress Forest are at distances of approximately 10 km from the Site; as a result of this intervening distance,

[58] The rationale for determining the sensitivity of each receptor, in line with the outlined methodology, is explained below.

they are very unlikely to experience indirect significant effects and are therefore scoped out of further assessment.

104. Both the Borderloop – Cycling Track and John Buchan Story are tourism activities and attractions which fall within the ZTV of the Development; however, significant effects are unlikely to occur due to the intervening distance and nature of these receptors, therefore are scoped out of further assessment.

105. Those highlighted in blue within Table 15.5, and shown on Figure 15.1, are popular and well-established tourist attractions and have the potential to experience effects as a result of the Development. They experience high visitor numbers and are important to local, regional, and national economies. The following sections provide baseline information for each attraction in-turn, including visitor numbers etc. where possible together with a judgement regarding their sensitivity based on the criteria presented in Table 15.2.

White Meldon & Black Meldon

106. White Meldon and Black Meldon are prehistoric hillforts which are open to visitors, largely recreational hillwalkers. White Meldon rises to approximately 427 m AOD and overlooks the west of the valley of Meldon Burn; Black Meldon rises to approximately 407 m AOD, and is located approximately 1.6 km west of White Meldon. Both are popular with recreational hillwalkers, and other recreational users of the natural environment. White Meldon is within Tweed Valley Special landscape Area (SLA) and Black Meldon is within the Upper Tweeddale National Scenic Area, both designations are largely located to the west, south, and east of the receptors.

107. **Chapter 5: Landscape and Visual Impact Assessment** assessed views of the Development from Black Meldon as Major and Significant; Chapter 5 did not specifically assess views of the Development from White Meldon, however as the ZTV shows similar visibility as the neighbouring Black Meldon due to comparable location and scale, White Meldon will likely have the same operational visual effects as Black Meldon.

108. White Meldon and Black Meldon generally attract local visitors; however, some visitors from outwith the local area may make recreational use of the hill tops. Users of the receptors, largely recreational hillwalkers, will make use of the whole walking routes around the receptors, rather than just the summit alone. Additionally, when at the summit, users will enjoy 360° panoramic views, rather than a singular field of view.

109. Therefore, given the receptors are considered to be of some recreational and tourism value which have a moderate capacity to absorb change, they are judged to be of medium sensitivity.

The Great Polish Map of Scotland

110. The Great Polish Map of Scotland is a unique feature within the Scottish Landscape, it is a physical map of Scotland, sculpted in concrete and measures 40 m by 50 m[59]. The map lies in the grounds of Barony Castle (now Barony Castle Hotel) and was built between 1974 and 1979 by a small group of Poles from the Jagiellonian University of Krakow, Poland. It was abandoned but then restored between 2010 and 2017.

111. The Great Polish Map of Scotland is designated as a listed building (LB51967) and attracts more than just local visitors. However, the receptor is within the grounds of Barony Castle Hotel, and is surrounded by mature mixed woodland, forming a substantial barrier to outward-looking views, and therefore is considered to be tolerant to change and therefore of low sensitivity.

[59] Barony Castle (2021) The Great Polish Map of Scotland [Online] Available at: https://www.baronycastle.com/about-barony-castle/the-great-polish-map-at-barony-castle/ (Accessed 20/04/2021)

Portmore House & Gardens

112. Portmore House and its gardens were built in the 19th century; they were neglected but were restored in 1987. The gardens cultivate a wide range of plants, with large Victorian glasshouses which contain exotic plants. Outside of the walled garden is the water garden which leads to a woodland walk. The house and gardens are approximately 3.5 km east from the Site, along the A703. Only the gardens and grounds are open to the public, and therefore constitute as a tourist attraction.

113. Portmore House is designated as a Category A listed building; while the Entrance Gateway and Lodge is designated as a Category C listed building, and the grounds are designated as a Garden and Designed Landscape (GDL). An assessment of the potential cultural heritage effects is undertaken within **Chapter 6: Archaeology and Cultural Heritage**, which finds that as a whole the Development's impact on the setting of the GDL is not significant.

114. **Chapter 5: Landscape and Visual Impact Assessment** adjudged that there will be a Moderate and significant visual effect as a result of the Development from its grounds.

115. The Gardens are situated within an area with mature forestry on all sides of the receptor, this forestry forms a barrier to outward looking views at many locations within the grounds of Portmore House and Gardens. Some views over existing forestry do exist within the grounds of the receptor, and when looking towards the Development, as described above and in **Chapter 5: Landscape and Visual Impact Assessment**. However, the receptors' attraction, from a tourism and recreation point of view, is largely enjoyed at ground level within the gardens to the north of Portmore House, where views outward are screened by woodland. Subsequently, the receptor is adjudged to be tolerant to change and is classed as a local receptor, therefore considered to be of low sensitivity.

John Buchan Way

116. John Buchan Way is a 22 km way marked trail from Peebles to Broughton which utilises minor roads, tracks and good paths on open moorland and farmland, traversing various hills and valleys of Tweeddale; key hills to see along the way include Stobo Hope Head and Penvalla and Hammer Head. The route is named after Tweeddale's John Buchan, who has a museum dedicated to him in Peebles town centre.

117. It should be noted that the John Buchan Way is a recreational path; however, falls outwith the Secondary Study Area for recreational paths, therefore, as a path which forms as a tourist attraction, the John Buchan Way is included within tourism and recreation receptors for assessment.

118. **Chapter 5: Landscape and Visual Impact Assessment** adjudged Moderate and Significant visual effect for a section of the route between the B712 / Stobo Road and Morning Hill (approx. 11 km of 22 km route). Beyond this section of the route, there will be visual no effect. Therefore, the receptor has a moderate capacity to absorb change; and as the receptor extends outwith the local context, across 22 km of the Scottish Borders, the receptor is considered to be of medium sensitivity.

Glentress Forest –7 Stanes Mountain Biking

119. The 7 Stanes are mountain biking centres which span across the south of Scotland and offer some of the best mountain biking in the country; they attract visitors from a national and worldwide level. The Glentress 7 Stanes Mountain Biking has routes that provide views of the Tweed Valley; they also have a Wildlife Room where visitors can learn more about the wildlife found in Glentress Forest.

120. The receptor is located within Glentress Forest, and therefore largely within areas of dense forestry that restricts and blocks wider views of the surrounding landscape. As a

result, the receptor is considered to be tolerant to change and therefore, of low sensitivity.

Pentlands Hills Regional Park

121. The Pentland Hills are a range of medium sized hills (the largest, Scald Law, is 1900 feet) that extend for around 25km from Edinburgh to near Dolphinton. The Pentlands Hills Regional Park encompasses the northern hills between the City of Edinburgh and Carlops. The Pentland Hills provide hillside grazing for sheep farms and sport shooting is also a seasonal activity in some locations. The park has a good network of footpaths for public access and is a popular destination for visitors from Edinburgh and the Lothians.

122. As a regionally important area of upland land formations and recreational routes, with often expansive wider views of the surrounding landscape, the Pentlands Hills Regional Park is considered of medium sensitivity.

15.4.3.2 Local Accommodation

123. There are a number of settlements near to the Site which offer a range of accommodation; the nearest settlement offering accommodation is Eddleston approximately 3 km east of the nearest indicative turbine (T5).

124. Table 15.6 presents local accommodation options within the primary study area of 10 km; this information has been gathered through a search of available online information. It is acknowledged that there may be some additional accommodation available which is not detailed within online sources which have been used to complete the baseline.

Table 15.6: Local Accommodation within the Study Area (within 10 km of the Site Boundary)

Accommodation Name	Address	Approximate Distance from Site boundary
Barony Castle Hotel	Old Manse Road, Eddleston, Peebles, EH45 8QW	2.5 km (E)
The Horseshoe Inn	Eddleston, Peebles, EH45 8QP	3 km (E)
Cringletie House Hotel	Edinburgh Road, Peebles, EH45 8PL	4 km (E)
Drochil Castle	Ann Black, Drochil Castle Farm, West Linton EH46 7DD	4.6 km (SW)
Winkston Farmhouse	Edinburgh Rd, Peebles EH45 8PH	5 km (SE)
Gartmore Holiday Cottage	Blyth Square, West Linton EH46 7EG	5 km (NW)
The Gordon Arms Hotel	Dolphinton Rd, West Linton EH46 7DR	5.3 km (NW)
Torview Bed and Breakfast	Torview House, Peebles EH45 8NP	5.5 km (S)
Slipperfield Cottages	Slipperfield House, West Linton EH46 7AA	5.6 km (W)
Tonetine Hotel	High St, Peebles EH45 8AJ	6 km (SE)
Green Tree Hotel	41 Eastgate, Peebles EH45 8AD	6.8 km (S)
Rutherfors house Bed & Breakfast	Rutherford House, West Linton EH46 7AS	6.9 km (NW)
Cross Keys Hotel	24 Northgate, Peebles EH45 8RS	6.98 km (SE)
The Park Hotel	2 Innerleithen Rd, Peebles EH45 8BA	7 km (SE)
The Neidpath Inn	27-29 Old Town, Peebles EH45 8JF	7 km (SE)
Peebles Hydro & Spa	Innerleithen Rd, Peebles EH45 8LX	7.5 km (SE)
Whitestone House	Innerleithen Rd, Peebles EH45 8BD	7.7 km (SE)

Accommodation Name	Address	Approximate Distance from Site boundary
Kingsmuir Guest House	Springhill Rd, Peebles EH45 9EP	7.8 km (SE)
Craiguart Hotel	Eshiels, Innerleithen Rd, Peebles EH45 8LZ	8 km (SE)
Roberton Mains Farm Cottage	Roberton Mains Farm, Dolphinton, West Linton EH46 7AB	8 km (E)
Ferniehaugh Cottage	West Linton EH46 7HJ	8 km (W)
The Leadburn	Leadburn, West Linton EH46 7BE	8 km (N)
The Allan Ramsay House	Carlops, Penicuik EH26 9NF	8.4 km (NW)
Patieshill Farmhouse B & B	Patieshill Farm, Penicuik EH26 9NB	8.5 km (NW)
Stobo Castle Health Spa	Stobo, Peebles EH45 8NY	9.5 km (S)
Peggyslea Farm Visit Bed & Breakfast	Peggyslea Farm, Nine Mile Burn, Penicuik EH26 9LX	9.5 km (NW)
Glentress Forest Lodges	Eshiels, Peebles EH45 8NA	10 km (SE)
Glentress Hotel	Glentress, Peebles EH45 8NB	10 km (SE)

125. As noted above, it is acknowledged that there may be other accommodation and hospitality providers which exist within the Primary Study Area that have not been noted in Table 15.6 as a result of some providers of accommodation not being listed on available online sources. The visual effects upon nearby settlements are assessed within **Chapter 5**: **Landscape and Visual Amenity.**

15.4.3.3 Public Rights of Way and Core Paths

126. There are many recreational routes, paths, and trails in proximity to the Development and within the Secondary Study Area (5 km of the Development), including:

- Cross Borders Drove Road;
- Post Road through the Meldons;
- Core Paths;
- Promoted Paths; and
- Public Rights of Way.

127. These recreational routes, paths, and trails are detailed in full within Table 15.7 below. The Site is accessible via the Land Reform Act (Scotland) 2003[60].

Cross Borders Drove Road

128. The Cross Borders Drove Road is a part of Scotland's Great Trails[61] and encompasses valleys, rolling countryside, hills and historic settlements/villages; it is one of the most utilised walking tracks in Scotland. It is also listed as a Heritage Path[62]. The official Drove Road runs along an approx. 84 km stretch from Hawick to Karperrig; however, it is often extended to between approx. 97 km and 113 km should users seek to continue on to West Lothian or Edinburgh.

129. The route passes through Hawick; Selkirk; Innerleithen; Peebles; West Linton; East Calder; Livingston; and Edinburgh. The Drove Road passes through the southern section of the Site Boundary. The route is also part of a Scottish Hill Track.

[60] Office of Public Sector Information (OPSI) (2016). [Online] 'Land Reform Act Scotland 2003. [Online] Available at: https://www.legislation.gov.uk/asp/2003/2/pdfs/asp_20030002_en.pdf (Accessed 11/02/2021)
[61] Scotland's Great Trails (2021) Scotlands Great Trails [Online] Available at: https://www.scotlandsgreattrails.com/ (Accessed 06/04/2021)
[62] Heritage Paths (2021) Heritage paths [Online] Available at: www.heritagepaths.co.uk (Accessed 06/04/2021)

130. As one of Scotland's Great Trails, the route is of national importance; however, due to the route's length there are extensive sections of the route which are not within close proximity to the Development. **Chapter 5: Landscape and Visual Impact Assessment** adjudged Major and significant visual effect for the receptor along the stretches of the route on the approach to the Site from the west (LVIA VP 1), within the Site and to the south-east of the Site (LVIA VP 2) as far as Hamilton Hill. However, Chapter 5 states that beyond these sections of the route, the magnitude of change reduces, resulting in either a minor and not significant visual effect, or no effect. Therefore, as a route which extends well beyond the Site, the receptor as a whole is adjudged to be tolerant to change. However, due to its national importance the sensitivity of the receptor is concluded as medium as a result of professional judgement taking into account the above rationale.

Post Road through the Meldons

131. The Post Road through the Meldons is a Heritage Path and encompasses a Scottish Hill Track. The path is approximately 11.5 km in length, starting at Lyne and ending north-west of White Rig. It is generally suitable for pedestrians, bikes and horses; and is thought to have been historically used as a drove road.

132. The Post Road through the Meldons is considered to be of local importance, and therefore low sensitivity.

Core Paths

133. There are 11 core paths within the Secondary Study Area. These paths are designated by the Council and afforded protection to ensure the public can exercise access rights established under the Land Reform Act (Scotland) 2003.

134. The core paths within the Secondary Study Area are detailed within Table 15.7 below. As locally designated paths, and paths of low recreation and tourism value, they are of low sensitivity.

Promoted Paths

135. There are two promoted paths (Promoted Path 63 & 64) within the Secondary Study Area, both of which enter the Site. They are promoted by the Council, of local importance, and paths of low recreation and tourism value, therefore of low sensitivity.

136. The promoted paths within the Secondary Study Area which the Council identified in its Scoping Response are detailed within Table 15.7 below.

Public Rights of Way

137. There are many public rights of way within the Secondary Study Area, some of which enter the Site. They are promoted by the Council, and paths of low recreation and tourism value, therefore of low sensitivity.

138. The public rights of way within the Secondary Study Area which ScotWays and the Council identified in their Scoping Responses are detailed within Table 15.7 below.

Table 15.7: Identified Recreational Routes, Core Paths and Rights of Way within the Secondary Study Area (5 km from the Site Boundary)

Type of Route	Status of Route	Assigned Collective Route Name	Sensitivity of Route	Individual References	Approximate Distance from Site Boundary	Assessment Location
Heritage Route / Scottish Great Trail / Hill Track	National	Cross Borders Drove Road	Medium	N/A	Within the Site Boundary.	Refer to 'Cross Borders Drove Road' assessment. Construction Effects: Section 15.5.4.3. Operational Effects: Section 15.5.4.6.
Heritage Route / Hill Track	Local	Post Road through the Meldons	Low	N/A	Within the Site Boundary.	Refer to 'Post Road through the Meldons' assessment. Construction Effects: Section 15.5.4.3. Operational Effects: Section 15.5.4.6.
Core Path	Local	Core Path 174	Low	LANK/174/1	200 m (SW)	Refer to 'Other Core Paths & Public Rights of Way' Assessment. Construction Effects: Section 15.5.4.3. Operational Effects: Section 15.5.4.6.
				LANK/174/2	200 m (SW)	
				LANK/174/3	2. 7 km (W)	
				LANK/174/4	3 km (W)	
		Core Path 168	Low	LANK/168/1	2. 8 km (W)	Follows Cross Borders Drove Road – refer to assessment of 'Cross Borders Drove Road'. Construction Effects: Section 15.5.4.3. Operational Effects: Section 15.5.4.6.
				LANK/168/2	2.8 km (W)	
				LANK/168/3	3 km (W)	
			Low	LANK/168/4	3.2 km (W)	
		Core Path 167	Low	LANK/167/1	5 km (W)	Refer to 'Other Core Paths & Public Rights of Way' Assessment. Construction Effects: Section 15.5.4.3. Operational Effects: Section 15.5.4.6.
				LANK/167/2	5.1 km (W)	
				LANK/167/3	4.8 km (SW)	

Type of Route	Status of Route	Assigned Collective Route Name	Sensitivity of Route	Individual References	Approximate Distance from Site Boundary	Assessment Location
		Core Path 147	Low	RBUP/147/6	3.8 km (SE)	Refer to 'Other Core Paths & Public Rights of Way' Assessment. Construction Effects: Section 15.5.4.3. Operational Effects: Section 15.5.4.6.
				RBUP/147/5	4.4 km (SE)	
				RBUP/147/4	5 km (SE)	
		Core Path 162	Low	RBUP/162/2	4 km (SE)	Refer to 'Other Core Paths & Public Rights of Way' Assessment. Construction Effects: Section 15.5.4.3. Operational Effects: Section 15.5.4.6.
		Core Path 143	Low	RBUP/143/3	5 km (SE)	Refer to 'Other Core Paths & Public Rights of Way' Assessment. Construction Effects: Section 15.5.4.3. Operational Effects: Section 15.5.4.6.
			Low	RBUP/143/6	5 km (S)	
		Core Path 146	Low	EDDL/146/1	2.7 km (E)	Refer to 'Other Core Paths & Public Rights of Way' Assessment. Construction Effects: Section 15.5.4.3. Operational Effects: Section 15.5.4.6.
		Core Path 150	Low	EDDL/150/5	1.3 km (E)	Follows Post Road through the Meldons – refer to assessment of 'Post Road through the Meldons'. Construction Effects: Section 15.5.4.3. Operational Effects: Section 15.5.4.6.
				EDDL/150/4	1.4 km (E)	
				EDDL/150/3	1.5 km (E)	
				EDDL/150/2	1.6 km (E)	
				EDDL/150/1	1.7 km (E)	
		Core Path 151	Low	EDDL/151/1	1.4 km (E)	Refer to 'Other Core Paths & Public Rights of Way' Assessment.

Type of Route	Status of Route	Assigned Collective Route Name	Sensitivity of Route	Individual References	Approximate Distance from Site Boundary	Assessment Location
						Construction Effects: Section 15.5.4.3. Operational Effects: Section 15.5.4.6.
		Core Path 154	Low	EDDL/154/1	2.8 km (E)	Refer to 'Other Core Paths & Public Rights of Way' Assessment. Construction Effects: Section 15.5.4.3. Operational Effects: Section 15.5.4.6.
		Core Path 152	Low	EDDL/152/1	2.7 km (E)	Refer to 'Other Core Paths & Public Rights of Way' Assessment. Construction Effects: Section 15.5.4.3. Operational Effects: Section 15.5.4.6.
Promoted Path	Local	Promoted Path 63	Low	EDDL/63P/3	Within the Site Boundary.	Refer to 'Promoted Path 63' Assessment. Construction Effects: Section 15.5.4.3. Operational Effects: Section 15.5.4.6.
				EDDL/63P/4	Within the Site Boundary.	
				EDDL/63P/5	1.4 km (E)	
				EDDL/63P/6	1.5 km (E)	
		Promoted Path 64	Low	EDDL/64P/3	Within the Site Boundary.	Follows Cross Borders Drove Road – refer to assessment of 'Cross Borders Drove Road'. Construction Effects: Section 15.5.4.3. Operational Effects: Section 15.5.4.6. Follows Post Road through the Meldons – refer to assessment of 'Post Road through the Meldons'. Construction Effects: Section 15.5.4.3. Operational Effects: Section 15.5.4.6.
				EDDL/64P/2	600 m (E)	
				EDDL/64P/1	620 m (E)	

Type of Route	Status of Route	Assigned Collective Route Name	Sensitivity of Route	Individual References	Approximate Distance from Site Boundary	Assessment Location
Public Right of Way	Local	BT6	Low	BT6	0 m from the Site Boundary.	Refer to 'Other Core Paths & Public Rights of Way' Assessment. Construction Effects: Section 15.5.4.3. Operational Effects: Section 15.5.4.6.
		BT10	Low	BT10	Within the Site Boundary.	Refer to 'BT10' assessment. Construction Effects: Section 15.5.4.3. Operational Effects: Section 15.5.4.6.
		BT40	Low	BT40	Within the Site Boundary.	Follows Cross Borders Drove Road – refer to assessment of 'Cross Borders Drove Road'. Construction Effects: Section 15.5.4.3. Operational Effects: Section 15.5.4.6.
		BT41	Low	BT41	0 m from the Site Boundary.	Refer to 'Other Core Paths & Public Rights of Way' Assessment. Construction Effects: Section 15.5.4.3. Operational Effects: Section 15.5.4.6.

139. In addition to the routes summarised in this section, it is acknowledged that public access may not be limited to such formally recognised routes, particularly in consideration of the general right to access most land that was formalised in the Land Reform Act (Scotland) 2003[63]. Other public rights of way exist within the surrounding area, as seen on Figure 15.1; however, those listed within Table 15.7 were identified by the Council and ScotWays in their scoping responses. All other rights of way are outwith the Site Boundary and therefore assessed as a whole.

140. The Site also encompasses Scottish Hill Tracks, as shown in Figure 15.7; however, these tracks share their alignment with routes within Table 15.7 and are therefore covered within assessments referred to in Table 15.7.

141. Recreational use may include members of the public making use of the wider access tracks associated with the Cloich Forest. However, as the Site is used as an active commercial forest there are provisions in place to control public access within the Site during times when felling etc. is taking place; these provisions are in the interests of public health and safety and will remain applicable during all phases of the Development.

15.4.3.4 Public Attitudes towards Wind Farm Development

142. The potential for impact on tourism is closely linked to public perception of those visiting the area. This section provides an overview of studies undertaken to assess public perception of wind farm development across the UK.

143. In 2011, as part of their policy update, VisitScotland commissioned research to learn more about UK consumer attitudes to wind farms. The survey was largely attitudinal based and according to the results, wind farms are not expected to have significant impacts on the levels of tourism. In some cases, they have become attractions themselves; Whitelee Wind Farm Visitor Centre attracted over 120,000 visitors in the first 12 months of opening in 2009 and was awarded a Gold Award for Green Tourism in 2015[64].

144. Based on this research, VisitScotland published a Position Statement[65] in 2014 which stated:

> *"VisitScotland understands and supports the drive for renewable energy and recognises the economic potential of Scotland's vast resource, including the opportunities for wind farm development… There is a mutually supportive relationship between renewable energy developments and sustainable tourism."*

145. A Department of Energy and Climate Change (DECC)[66] survey on public attitudes showed that in March 2014, 80% of the British public said they supported using renewable energy for electricity, heat and fuel in the UK.

146. More recently, the Public Attitudes Tracker, published by the Department for Business Energy and Industrial Strategy (BEIS) in 2020[67], showed 73% of people support the

[63] Scottish Government (2003) Land Reform (Scotland) Act 2003 [Online] Available at: https://www.legislation.gov.uk/asp/2003/2/contents (Accessed on 22/02/2021)
[64] ScottishPower Renewables (2020) About Whitelee [Online]. Available at: https://www.whiteleewindfarm.co.uk/whitelee-windfarm-about-us (Accessed 22/02/2021)
[65] VisitScotland (2014) VisitScotland Position Statement – Wind Farm [Online] Available at: https://www.visitscotland.org/binaries/content/assets/dot-org/pdf/policies/visitscotland-position-statement---wind-farms---oct-2014.pdf (Accessed on 11/02/2021)
[66] Department of Energy and Climate Change (DECC) (2014) Public Attitudes Tracker Survey - Wave 9, 29th April 2014 [Online] Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/306898/summary_of_key_findings_wave_9.pdf (Accessed on 11/02/2021
[67] Department for Business, Energy and Industrial Strategy (2020) BEIS Public Attitudes Survey – Wave 35 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/934647/BEIS_PAT_W35_-_Key_findings.pdf (Accessed on 11/02/2021)

development of onshore wind, which remained stable when compared to 77% recorded in 2019; long-term support for onshore wind has increased from 65% in March 2015. The advance in onshore wind development in Scotland has also been accompanied by an interest in understanding how the impacts of wind farm developments affect local house prices. In recent years, there has been considerable research looking at measurable effects on whether or not properties near, or in sight of, new wind farm developments see price changes that differ from other houses. A topical study conducted by RenewableUK and the Centre for Economics and Business Research concluded that no adverse impacts were found on house prices from a range of wind farm cases across England and Wales and that there was, in fact, a slight beneficial influence on house prices from the cases analysed[68].

147. Shortly after that study was published, an analysis conducted by Gibbons identified that larger wind farms may reduce the values of properties by up to 12% within a 2 km radius and reduce property prices as far as 14 km away[69], as a result of wind farm visibility, but the price effect could also be attributed to noise and shadow flicker effects. Subsequently, ClimateXChange did a parallel study based on Scottish property and following Gibbons' approach, but with an increased resolution and precision of the data[70]. This study, undertaken in 2016, concludes that there is no consistent evidence of adverse impacts of wind developments on house price growth and that research sample sizes tend to be too low to be statistically viable and conclude robust results.

148. In addition to the above, the impact of onshore wind developments has also been discussed in the Republic of Ireland. In 2012, Fáilte Ireland, Ireland's National Tourism Development Authority, commissioned an updated survey on the effect that onshore wind turbines have on visitors to Ireland[71]. The study found that 71% of visitors claimed that a greater number of wind farms in Ireland would either have no impact or a positive impact on their likelihood to visit Ireland; the study found that this opinion was based on the principal that visitors largely supported the generation of renewable energy and subsequent carbon emission reductions.

149. Most recently, a poll recently undertaken by IWEA, of 1,015 members of public of the Irish public surveyed, 83% support wind power in the Republic of Ireland. Another study undertaken by Fáilte Ireland *'Protecting the Irish Environment and Landscape: A Critical Issue for Irish Tourism'* Report[72] 'points to '*beautiful and unspoilt scenery'* as being the top priority reason for tourists visiting Ireland. However, the Fáilte Ireland Report notes that *"that a majority of tourists did not find that either their experience of Ireland or their sightseeing was negatively affected by the presence of wind farm".*

150. Whilst these studies were conducted in Ireland, it is further evidence that there is no proven link that onshore wind has a detrimental impact on tourism and recreation.

151. In addition and supportive of the above, total installed capacity of renewable electricity in Scotland, of which onshore wind will play a significant role, has increased from 4,369

[68] RenewableUK (2014) The Effect of Wind Farms on House Prices [Online] Available at: https://www.renewableuk.com/news/304411/RenewableUK--Cebr-Study---The-effect-of-wind-farms-on-house-prices.htm (Accessed on 11/02/2021)
[69] Stephen Gibbons (2015) Gone with the Wind: Valuing the Visual Impacts of Wind Turbines through House Prices. *Journal of Environmental Economics and Management* 72, doi: 10.1016/j.jeem.2015.04.006.
[70] Heblich *et al.,* (2016) Impact of wind turbines on house prices in Scotland [Online] Available at: https://www.climatexchange.org.uk/media/1359/cxc_wind_farms_impact_on_house_prices_final_17_oct_2016.pdf (Accessed on 11/02/2021)
[71] Fáilte Ireland (2012) Visitor Attitudes on the Environment [Online] Available at: https://www.failteireland.ie/FailteIreland/media/WebsiteStructure/Documents/3_Research_Insights/4_Visitor_Insights/WindFarm-VAS-(FINAL)-(2).pdf?ext=.pdf (Accessed: 11/02/2021)
[72] Fáilte Ireland (2011) Guidelines on the treatment of tourism in an Environmental Impact Statement.

MW in 2010 to 11,933 MW in 2020[73]; this represents a 173% increase between 2010 and 2020. And during this time, tourism within Scotland, as discussed in Section 15.4.3 has continued to see increases in visitor numbers and overnight stays etc.; therefore, suggestive and supportive of the principal that increased renewable energy deployment does not negatively impact upon tourism.

15.5 ASSESSMENT OF POTENTIAL EFFECTS

15.5.1 Effects on Socio-Economics

152. The investment in the Development has potential to generate a range of economic and social effects and opportunities for local businesses; most notably employment opportunities and local spending. Potential social and economic effects can be divided into:

- Wider effects, which are largely unquantifiable: including effects in the wider economy from renewable energy development, such as research and development, skills development and worker retention.
- Direct effects: for example, employment opportunities in the construction, operation and maintenance and decommissioning of the Development. The nature and scale of the economic effects would depend on the total cost and the sources of the materials and labour. Other direct effects include a community benefit fund; the payment of non-domestic rates; and rental income received by the landowner.
- Indirect effects: such as employment opportunities created down the supply chain by those companies providing services to the Development during construction, operation and decommissioning; and
- Induced effects: for instance, employment created by the additional spend of wages into the local economy and the purchasing of basic materials, equipment and office space for staff.

153. The direct, indirect and induced effects are assessed below for each phase of the Development. This follows a more general assessment of wider benefits.

15.5.1.1 Wider Economic Benefits

154. In terms of potential supply chain benefits, the Development provides opportunities for the involvement of local, regional and Scottish suppliers in a range of activities, including research and development, design, project management, civil engineering, component fabrication / manufacture, installation and maintenance. There is expertise in all of these areas in the wider region, although a full wind energy supply chain covering all aspects of wind turbine component manufacture has not yet been developed within the region or indeed within Scotland as a whole. Scotland currently houses wind turbine manufacturing plants in Argyll and Bute, Fife, and in the Highlands respectively. Proposals are also emerging for the location and development of wind turbine manufacturing facilities, including those in and around the east coast, although these are currently primarily for offshore technologies.

155. The key consideration in this context is that with an increasing number of wind farm schemes either operational, under development or having gained consent in Scotland, the commercial viability, and with it, job prospects amongst Scottish firms, has improved. Cluster benefits in the industry increase where firms are supported by the spending of other firms within the renewables sector. The net effect is to increase business and employment opportunities within Scotland's renewable energy sector, boosting the performance of local and national economies.

[73] Scottish Renewables (2021) Statistics: Energy Consumption by Sector [Online] Available at: https://www.scottishrenewables.com/our-industry/statistics#:~:text=Capacity,only%2047MW%20up%20from%202019. (Accessed 06/04/2021)

156. In addition, during the construction process there will be opportunities where those employed will develop skills that will be of benefit to the local economy and to local businesses in the longer term. Further, employment generated through the Development will contribute to diversifying the local economy and help support the local retention of the working age population.

15.5.1.2 Construction Effects

Employment

157. To construct the Development, the Applicant will place significant contracts for services and materials and the infrastructure contractor would be required by the Applicant to give local companies due consideration for the provision of goods and services. A series of 'Meet the Developer Days' will be held to brief local businesses on the types of contracts being let during the construction period, to assist local businesses to take advantage of the opportunities arising and bid for appropriate contracts.

158. Local sourcing of equipment is preferred whenever possible, but this procurement is subject to tendering and may be constrained by the specialist nature of some of the equipment. Qualified local contractors will be encouraged to tender for construction, operation and maintenance work, to ensure maximum benefit to local communities.

159. Among the services that local contractors may be able to provide during the construction phase:

- Haulage and transport services;
- Site clearance;
- Access road, turbine platform construction and other civil engineering services;
- Site and ground investigation services;
- Building construction, electrical, plumbing, roofing, flooring, plastering, decorating and joinery services;
- Crane companies to provide lifting services;
- Plant and equipment hire;
- Fencing, road furniture and signage installation;
- Supply of building and electrical materials (e.g. aggregates, concrete, cabling, equipment, culvert tubes etc.);
- Mechanical, electrical, project management and supervisory services;
- Provision and servicing of temporary welfare facilities; and
- Supply of fuel and other consumables.

160. It is anticipated that a temporary workforce averaging at 75 people will be employed during the 18-month construction period. Calculated by 'job years', one individual working for 18 months would result in 1.5 job years; therefore, 75 individuals working during the 18-month construction period represents 112.5 job years.

161. There would also be knock on effects from the direct employment during the construction and development of the Development as employees spend a proportion of their salaries in the wider economy, creating indirect benefits. The research undertaken by RenewableUK in 2012[74] found that the average salary for employees in the onshore wind sector is £34,613.

162. Overall, the construction of the Development will have positive, short-term, direct and indirect effects on the area, through the increase in employment. This will not result in any fundamental or long-term change to population, local services, employment or overall structure of the community, but will represent a minor positive effect at a local level. This is considered **not significant** in terms of the EIA regulations.

[74] DECC, RenewableUK (2012) Onshore wind: Direct and Wider Economic Impacts [Online] Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/48359/5229-onshore-wind-direct--wider-economic-impacts.pdf (Accessed 22/02/2021)

Induced Effects

163. It is likely that there will be some local employment generated as an indirect result of the construction of the Development. This could include supply chain spin-offs for local businesses and sub-contracted work relating to the transportation of labour and materials. Local shops, cafes, accommodation providers and hotels often experience an increase in turnover during the construction phase as they have opportunities to provide additional services to the developer and their contractors. There are several accommodation options in the local and wider area, and it is expected that local services will be used by temporary construction contractors.

164. There may also be the opportunity for local people, who are employed by the appointed contractors, to work on the Development. They would be developing skills gained during construction which will be of benefit both to individuals and the local economy in the longer term. Skills gained or improved may include, for example, project management and construction skills which would be transferrable to other construction roles, including other wind farm projects.

165. Following the COVID-19 outbreak, experts have said that the construction sector may act as a catalyst for economic recovery. The *Build Back Better: COVID-19 Economic Recovery Plan*[75] features a blueprint for a safe return to construction, and sets out recommendations to help stimulate demand for new housing and essential infrastructure emerging from government investment while delivering income to HMRC through training of a new generation of skilled workers post COVID-19. Additionally as referenced in Section 15.4.1.3, Scottish Renewables have emphasized the key role that renewable development could play in the post COVID-19 economic recovery, including both employment and large-scale financial investment[76].

166. Overall, the construction of the Development will have positive, short-term, induced effects on the area, through the increase in employment. This will not result in any fundamental or long-term change to population, local services, employment or overall structure of the community, but will represent a minor positive effect on the economy at a local level. This is considered **not significant** in terms of the EIA Regulations.

Capital Expenditure

167. Based on the BiGGAR Economics report commissioned by RenewableUK[77], onshore wind Capital Expenditure (CAPEX) is £1.32 m per MW on average. This includes the following elements:

- Turbine: Tower; Blades; and Nacelle;
- Balance of Plant: Civil and Project Management; Roads; Substation; Buildings; Turbine foundation and hardstanding; Landscaping/forestry/fencing; Mechanical and electrical installation; and
- Grid Connection: Engineering services; Construction; Electrical Components; and industrial equipment and machinery.

168. The final MW of the project will not be determined until the final turbine model has been selected; however, this assessment assumes that the Development has a capacity of 57

[75] Birmingham City University (2020) Build Back Better: Covid-19 Economic Recovery Plan [Online] Available at: https://scottishconstructionnow.com/uploads/documents/Build%20Back%20Better%20-%20a%20Covid-19%20economic%20recovery%20plan%20FINAL.docx.pdf (Accessed 22/02/2021)
[76] Scottish Construction Now (June 2020) Scottish Renewables energy research shows green COVID-19 research shows green COVID-19 recovery jobs and investment boost [online] Available at: https://www.scottishconstructionnow.com/article/scottish-renewables-energy-research-shows-green-covid-19-recovery-jobs-and-investment-boost (Accessed 22/02/2021)
[77] RenewableUK (2015) Onshore Wind: Economic Impacts in 2014 [Online] Available at: https://cdn.ymaws.com/www.renewableuk.com/resource/resmgr/publications/reports/onshore_economic_benefits_re.pdf (Accessed 22/02/2021)

MW based on a candidate turbine of the Nordex N133 (4.8 MW per machine). Assuming a conservative installed capacity of 57 MW, the total CAPEX of the Development would be expected to be approximately £75.2 m.

169. The BiGGAR Report estimates that, of these construction costs, regional expenditure would be 12%; national expenditure would be 36% (Scotland); and UK expenditure would be 47%. The remaining 53% of construction costs will be spent outwith the UK.

170. On this basis, it is estimated that, during the construction phase, the Development will be worth approximately £35.3 million to the UK economy. Of that approximately £27 million is expected to be spent within Scotland (national) and £9 million is expected to be spent within the local region.

171. The Development will bring positive, short-term, direct, indirect and induced effects to the national and regional area, through the expenditure on capital costs.

172. The change will be of low magnitude at the regional level (medium sensitivity) and negligible at a national level (high sensitivity). Therefore, minor, positive effects are anticipated at a regional and national level, which is considered **not significant** in terms of the EIA Regulations.

15.5.1.3 Operational Effects

Employment

173. The Development will have both direct and indirect effects on employment during operation. The Development will be regularly maintained by a specialist maintenance team. Employees are likely to include a part-time maintenance engineer (local site operator) and a small number of staff to periodically service the turbines. Induced effects will include local spending by the Applicant and maintenance contractors.

174. Overall, the operation of the Development will bring long-term, beneficial, direct, indirect and induced effects to the area, through the increase in employment and business opportunities. This will not result in any fundamental or long term change to population, local services, employment or overall structure of the community, but effects will be of low magnitude at the local level (of low sensitivity). Employment effects arising from the operational phase are of negligible, positive significance, but this is considered to be **not significant** in terms of the EIA Regulations. However, the Development will contribute to employment in Scotland.

Operational Expenditure

175. In the 2015 BiGGAR Report[78] on the economic benefits of the UK onshore wind industry, the average cost of an onshore wind farm was £59,867 per MW installed per annum. This includes:

- Turbine Maintenance;
- Site Maintenance;
- Operational Management;
- Land Agreements;
- Habitat Management costs;
- Non-domestic rates (business rates);
- Community Benefit; and
- Other.

176. For the Development, annual Operational Expenditure (OPEX) is expected to be in the region of £3.4 million per annum. Of this total spend, the BiGGAR report estimates 42%

[78] RenewableUK (2015) Onshore Wind: Economic Impacts in 2014 [Online] Available at: https://cdn.ymaws.com/www.renewableuk.com/resource/resmgr/publications/reports/onshore_economic_benefits_re.pdf (Accessed 22/02/2021)

will be spent in the local area, which would include business rates and land agreements with the local landowner, as well as a proportion of the maintenance costs. 87% of the total operation and maintenance expenditure will likely be within the UK. It has been assumed that the BiGGAR Report is based upon 2-2.5 MW machines; with fewer machines with a greater generating capacity it can be expected that some of these costs may decrease.

177. The OPEX for the Development is not substantial in magnitude in comparison to the annual GDP of Scottish Borders or the value of the renewable industry in Scotland, with the majority of the expenditure taking place at the local, regional or national level. This is considered to be a positive negligible effect, and **not significant** in terms of the EIA Regulations.

Community Benefit

178. The Scottish Government has emphasised the importance of communities benefitting from renewable energy generation, including through community benefit funds and shared ownership as outlined the Scottish Energy Strategy[79].

179. The Development will establish a community fund in line with Scottish Government guidance which currently promotes paying £5,000 per MW installed capacity per annum to a Community Benefit Fund. This will result in an annual value of up to approximately £285,000 per year (based on a conservative estimate of 57 MW). With a 30 year operational consent, this will provide up to approximately £8.5 million in community benefit, dependent on the final installed capacity.

180. Although not a material consideration for the planning process, and has not been factored into this assessment, the Community Fund represents a positive economic effect for the local community.

Community Ownership

181. The Scottish Government has set targets for community investment in onshore wind and the project landowner, FLS, is an Agency of the Scottish Government. The Applicant supports the principles of shared ownership in wind farms and on completion of the Development's construction, there will be an opportunity for the local community and FLS (combined) to purchase up to 25% ownership of the wind Farm and share any profit generated.

182. Investment in the wind farm would be offered after it has been built; at which time final costs will be clear.

15.5.2 Decommissioning Effects

183. Socio-economic effects during the decommissioning phase are anticipated to be of a similar nature and scale as construction effects for a shorter period of time, thereby representing a minor short-term, positive effect at local level, which is considered **not significant** in terms of the EIA Regulations.

15.5.3 Effects on Land-Use

184. The Site covers an area of approximately 1,080 hectares (ha), centred on National Grid Reference (NGR) 320648, 647881. However, the total infrastructure footprint is substantially less. The total new land take of the Development, consisting of the turbine infrastructure (wind turbine foundations, crane hardstandings, new and upgraded access tracks, substation and control building) equates to approximately 33 ha; following

[79] Scottish Government (2017) The Future of Energy in Scotland: Scottish Energy Strategy [Online] Available at: https://www.gov.scot/publications/scottish-energy-strategy-future-energy-scotland-9781788515276/ (Accessed 22/02/2021)

construction and restoration, the footprint of the Development infrastructure on the surface of the ground will be 17 ha. This equates to approximately 1.6% of the total land in the Site.

185. Forestry felling is described in **Chapter 13: Forestry**. Permanent felling associated with the Development equates approximately 71 ha; in addition prior to construction, approximately 129 ha of forestry will be felled. Where trees are removed from sections of mature coupes, it is often necessary to harvest the entire coupe to mitigate the effects of windblow. Of this 129 ha, 121 ha will be replanted following construction of the Development; with approximately 8 ha remaining as integrated open ground within the forest in line with UK Forestry Standard, as detailed in **Chapter 13: Forestry**.

186. The total change to land use, including both the infrastructure footprint and required felling buffers (not including that which will be restored following construction), is approximately 71 ha, which equates to approximately 6.5% of the total land in the Site.

15.5.3.1 Construction Effects

187. The Development is located within an area of commercial forestry operations and will involve felling within the Site, as described above and in **Chapter 13: Forestry**. The forestry removal required for the Development will be the first construction activity to occur in the construction programme.

188. The Forestry Design Plan will be updated to account for the construction and operation of the Development and communication protocols between FLS and the Development Contractor will be established to ensure commercial forestry operations are maintained as agreed.

189. Following the introduction of the Development, the land use of the Site will remain as a commercial forestry site, undergoing active land management; therefore, as the site is tolerant to change, the sensitivity of the land use is considered to be low. The magnitude of change is considered to be negligible as felling forms an inherent part of the current land use of the Site.

190. Effects on land use arising from the construction phase is therefore considered to be negligible, which is **not significant** in terms of the EIA Regulations. As stated throughout this Section, the effects of the construction phase of the Development will not have a significant effect on land-use receptors in accordance with the EIA Regulations.

15.5.3.2 Operational Effects

191. During operation of the Development, all areas of commercial forestry will continue to be managed by FLS. The operational phase of the Development will result in a loss of land which would otherwise continue to be used as forestry plantation for the duration of the windfarm operation. Of the approximately 200 ha of forestry removed as part of the construction, approximately 121 ha will be restocked on Site, with 8 ha of integrated open ground, as part of the forest design plan, resulting in a net loss of approximately 6.5%.

192. The change to land use is therefore considered to be of low magnitude. The land-take on a low sensitivity receptor is a long-term, negligible effect on land-use, which is considered to be **not significant** in terms of the EIA Regulations.

193. As stated throughout this Section, the effects of the operational phase of the Development will not have a significant effect on land-use receptors in terms of the EIA Regulations.

15.5.3.3 Decommissioning Effects

194. The operational lifespan of the Development is expected to be 30 years. Following this, an application may be submitted to retain or replace the turbines, or they could be decommissioned.

195. Disruption to land-use during decommissioning will be similar to that during construction, with a temporary cessation of forestry within the Site while activities to remove the turbines are undertaken. It is expected that decommissioning would take up to 12 months to complete. The magnitude of effect would therefore be negligible. Decommissioning will have an effect of short-term, negligible significance on land-use, which is a low sensitivity receptor, which is considered negligible and **not significant** in terms of the EIA Regulations.

196. It is expected that decommissioning will involve the reinstatement of the turbine foundations and associated hardstanding and demolition and removal of control building and compound. The land will be restored with topsoil. This will reduce the permanent land-take for the Development. Prior to decommissioning works, a comprehensive restoration plan setting out the specific methods of re- instatement will be agreed with the Council. There will be negligible permanent land take following decommissioning, largely consisting of the access tracks for use by FLS, and presents a negligible effect on land-use, which is considered to be **not significant** in terms of the EIA Regulations.

15.5.4 Effects on Tourism and Recreation

197. Potential effects on the tourism and recreational resource are categorised as:

- Direct physical effects: for example, temporary diversion of public rights of way during the construction period; and
- Indirect effects: such as the changes in amenity at tourism and recreational receptors.

15.5.4.1 Construction Effects – Tourism and Recreation Receptors

198. The following sections outline the assessment of construction effects associated with the Development on identified tourism and recreational receptors – as outlined in Table 15.5.

Onsite Informal Recreation

199. The Land Reform Act (Scotland) 2003[80] establishes a statutory right to access most land and inland water for recreational use. However, access to areas where construction is taking place or where there is construction related activities will be temporarily restricted under the Construction (Design and Management) Regulations 2015[81] for health and safety purposes.

200. Informal routes, utilising the network of forest tracks would be temporarily diverted where construction activities or felling is taking place. Waymarked trails such as the Cross Border Drove Road, and Promoted Paths 63 & 64, which runs through the southern and eastern parts of the Site (respectively) 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 with the Council in the form of an Access Management Plan.

[80] Scottish Government (2003) Land Reform (Scotland) Act 2003 [Online] Available at: https://www.legislation.gov.uk/asp/2003/2/contents (Accessed 15/03/2021)
[81] Health and Safety Executive (2015) The Construction (Design and Management) Regulations 2015 [Online] Available at: http://www.hse.gov.uk/construction/cdm/2015/index.htm (Accessed 15/03/2021)

White Meldon & Black Meldon

201. Both White Meldon & Black Meldon are located outwith the Site, located at approximately NGR 3211934 642833 and NGR 320663 642505 (respectively) south of the Site; therefore, any construction effects would be limited to visual construction effects largely relating to views of tall cranes and turbine construction (in line with Section 5.9.1.3 of **Chapter 5: Landscape and Visual Impact Assessment**).

202. As elevated landforms with extensive views of the Development, it is likely that construction effects will be within view; however, due to the intervening distance between the receptors and the nearest turbines (T3 – 3.6 km & T2 – 3.5 km, respectively), the transient nature of construction, and construction effects being short-term in nature, it is concluded the magnitude of change would be low.

203. As White Meldon & Black Meldon are considered to be of medium sensitivity and the magnitude of change is predicted to be low, any construction effects are assessed minor, short-term and therefore **not significant** in terms of the EIA Regulations.

The Great Polish Map of Scotland

204. The Great Polish map of Scotland is located outwith the Site, located at approximately NGR 323702 647179 east of the Site, and the Great Polish map of Scotland is not located along the turbine delivery route; therefore, any construction effects would be limited to visual construction effects largely relating to views of tall cranes and turbine construction (in line with Section 5.9.1.3 of **Chapter 5: Landscape and Visual Impact Assessment**).

205. However, it is unlikely that users at the receptor will experience views of construction activities due to the intervening distance between the receptor and the nearest turbine (T5 – 2.5 km), as well as natural screening of construction visibility due to mature woodland which surrounds the receptor. Therefore, whilst taking into account the aforementioned rationale, and the fact that construction effects will be short-term in nature, it is concluded the magnitude of change would be low.

As the Great Polish Map of Scotland is considered to be of low sensitivity and the magnitude of change is predicted to be low, any construction effects are assessed as negligible, short-term and therefore **not significant** in terms of the EIA Regulations.

Portmore House & Gardens

206. The Portmore House & Gardens access is located south of the turbine delivery route; therefore, any construction effects would be limited to visual construction effects largely relating to views of tall cranes and turbine construction (in line with Section 5.9.1.3 of **Chapter 5: Landscape and Visual Impact Assessment**).

207. However, it is unlikely that users at the receptor will experience views of construction activities due to the nature of the receptor and the intervening distance between the receptor and the nearest turbine (T5 – 4.3 km), the natural screening of construction visibility due to mature woodland which surrounds the receptor, and the receptors' entrance/access position south of the turbine delivery route. Therefore, whilst taking into account the aforementioned rationale, and the fact that construction effects will be short-term in nature, it is concluded the magnitude of change would be low.

208. As Portmore House is considered to be of low sensitivity and the magnitude of change is predicted to be low, any construction effects are assessed negligible, short-term and therefore **not significant** in terms of the EIA Regulations.

John Buchan Way

209. As explained in Section 15.4.3.1, the John Buchan Way is of medium sensitivity. The John Buchan Way is located outwith the Site, located approximately 8.3 km south of the nearest turbine (T2), and the John Buchan Way is located a considerable distance south of the turbine delivery route, thus any construction effects would be limited to visual construction effects largely relating to views of tall cranes and turbine construction (in line with Section 5.9.1.3 of **Chapter 5: Landscape and Visual Impact Assessment**).

210. When travelling towards the Site, users at the receptor will likely experience views of construction activities (limited to tall cranes etc.) during approximately half of the route between Stobo Road / B712 and Morning Hill; however, will not experience views for the remaining half of the route. However, due to the intervening distance between the receptor and the nearest turbine, the natural screening of construction visibility which will exist along a large section of the route, and the fact that construction effects will be short-term in nature, it is concluded the magnitude of change would be low.

211. As the John Buchan Way is considered to be of medium sensitivity and the magnitude of change is predicted to be low, any construction effects are assessed minor, short-term and therefore **not significant** in terms of the EIA Regulations.

Glentress Forest - 7 Stanes Mountain Biking

212. Glentress Forest is located outwith the Site, approximately 8.7 km south-east of the Site. The Mountain Biking facility, and its access, are not located on the turbine delivery route to the Site, thus any construction effects would be limited to visual construction effects largely relating to views of tall cranes and turbine construction (in line with Section 5.9.1.3 of **Chapter 5: Landscape and Visual Impact Assessment**).

213. However, it is unlikely that users of the mountain bike trails will experience views of construction activities due to the activity (mountain biking – often fast-paced and within dense forestry) that the receptor offers users, the intervening distance between Glentress Forest and the Site, and natural forestry screening of views. Therefore, whilst taking into account the aforementioned rationale, and the fact that construction effects will be short-term in nature, it is concluded the magnitude of change would be negligible.

As the Glentress Forest Mountain Biking facility is considered to be of low sensitivity and the magnitude of change is predicted to be negligible, any construction effects are assessed negligible, short-term and therefore **not significant** in terms of the EIA Regulations.

Pentlands Hills Regional Park

214. Pentlands Hills Regional Park is located outwith the Site, approximately 9.5 km north-west of the Site. The Pentlands Hills Regional Park is not located on the turbine delivery route to the Site,, any construction effects would be limited to visual construction effects largely relating to views of tall cranes and turbine construction (in line with Section 5.9.1.3 of **Chapter 5: Landscape and Visual Impact Assessment**).

215. However, it is unlikely that users at the receptor will experience views of construction activities due to the intervening distance between the receptor and the Site, and natural screening of views; in addition, theoretical visibility of the Development does not span across the whole receptor. Therefore, whilst taking into account the aforementioned rationale, and the fact that construction effects will be short-term in nature, it is concluded the magnitude of change would be negligible.

216. As the Pentlands Hills Regional Park is considered to be of medium sensitivity and the magnitude of change is predicted to be negligible, any construction effects are assessed as negligible, short-term and therefore **not significant** in terms of the EIA Regulations.

15.5.4.2 Construction Effects – Other Receptors (Accommodation Etc.)

217. Indirect effects on offsite resources such as local accommodation providers, mentioned in Section 15.4.3.2, and local socio-economics, mentioned in Section 15.4.1, are unlikely to be negatively affected by the construction of the Development. As per **Chapter 12: Access, Traffic, and Transportation**, the turbine delivery route to Site comes south from Grangemouth; there are no identified tourism accommodation receptors located directly on the route to Site, therefore in-combination with the intervening distance between accommodation providers etc. and the Development, it is considered that the magnitude of change would be negligible and that these receptors are of low sensitivity to the Development. Therefore, this represents a negligible, short-term, negative effect which is considered **not significant** in terms of the EIA Regulations.

218. Local shops, cafes, accommodation providers and hotels often experience an increase in turnover during the construction phase as they have opportunities to provide additional services to the wind farm development. The Development will result in a minor, short-term, positive effect at local level, which is **not significant** in terms of the EIA Regulations.

15.5.4.3 Construction Effects – Recreational Routes, Core Paths, and Rights of Way

219. The following sections outline the assessment of construction effects associated with the Development on identified recreational routes, core path and public rights of way – as outlined in Table 15.7. Identified recreational routes, core path and public rights of way are also shown on Figure 15.2.

Cross Border Drove Road

220. The Cross Borders Drove Road, as shown on Figure 15.2, enters the Site at approximate NGR 318895 646080 in the west, and exits the Site at approximate 321609 646104 in the east. The Cross Borders Drove Road is crossed by the Development's access tracks (both existing and new), as per the detailed development site layout shown in Figure 3.1. The nearest turbine location is T3, located approximately 175 m south of the route.

221. The turbine delivery route to the Site, as detailed within **Chapter 12: Access, Traffic, and Transportation**, commences near Grangemouth and travels east towards the Edinburgh City Bypass, then south towards Site. All traffic would enter the Site having travelled from the north. The Cross Borders Drove Road does not cross the turbine delivery route and is located, at its nearest point, 3.9 km from the site entrance (as described in **Chapter 3: Project Description**). However, as the Cross Borders Drove Road runs through the Site, it will be crossed by construction traffic associated with the Development.

222. As explained in Section 15.4.3.3, the Cross Borders Drove Road is of medium sensitivity. The section of the Cross Borders Drove Road within, and nearby, the Site will experience views of the construction of the Development due to the route passing directly through, and nearby, areas of high construction activity; however, this construction activity will be short-term.

223. As a result of the Cross Borders Drove Road being within the Site, and due to construction traffic crossing the Cross Borders Drove Road, short-term management measures (detailed in Section 15.7) are likely to be required. This disruption would be experienced over an approximate 500 m stretch, encompassing both points where the Development's access tracks cross the route. The disruption over the approximate 500 m stretch is in the context of the wider ~113 km route; disruption would take place over 0.4% of the total route, and would be temporary in nature. Given the temporary short-term nature of the change, and the small section of the route that is affected, magnitude of change is predicted to be medium.

224. As the Cross Borders Drove Road is considered to be of medium sensitivity and the magnitude of change is predicted to be medium, construction effects are assessed as moderate and short-term, and therefore **significant** in terms of the EIA Regulations.

Post Road through the Meldons

225. The Post Road through the Meldons, as shown on Figure 15.2, crosses the public road which forms part of the Development's access at approximate NGR 323233 649473 . The nearest turbine location is T4, located approximately 1.3 km west of the route.

226. As explained in Section 15.4.3.3, the Post Road through the Meldons is of low sensitivity. The section of the Post Road through the Meldons within (where it crosses the access route), and nearby, the Site will experience views of the construction of the Development due to the route passing directly across the public road which will be subject to upgrade works; however, the construction activity at this crossing will be minimal; relating to road widening works and short-term in nature and will not give rise to any closure of the route.

227. The turbine delivery route to the Site, as detailed within **Chapter 12: Access, Traffic, and Transportation**, commences near Grangemouth and travels south towards the Site. All traffic would enter the Site having travelled from the north, crossing The Post Road through the Meldons. The route may be subject to delays as construction vehicles pass by; however, this is not anticipated to result in route closure for the Post Road through the Meldons.

228. As the Post Road through the Meldons enters the Site on the access route, and construction traffic will cross the Post Road through the Meldons, short-term disruption, health and safety signage, and temporary traffic management will be required; however, closure is not anticipated. Any disruption would be experienced over a very short part of the route as it junctions with the main access road. Given the temporary short-term nature of the change, and that only a small section of the route is affected, magnitude of change is predicted to be low.

229. As the Post Road through the Meldons is considered to be of low sensitivity and the magnitude of change is predicted to be low, construction effects are assessed as negligible and short-term, and therefore **not significant** in terms of the EIA Regulations.

Promoted Path 63

230. Promoted Path 63, as defined by the Council and shown on Figure 15.2, originates at approximate NGR 324392 648204 at the A703; the route then heads west and north along public rights of way, entering the Site as it joins the main access to the Development. Promoted Path 63 then runs along the 'D17 Cloich', past Cloich Farm and into the main body of the Site, following existing forestry tracks and forming part of the Development's access tracks. The Path ends at approximate NGR 320531 646357, as it joins the Cross Borders Drove Road and Promoted Path 64. The nearest turbine location is T5, located approximately 155 m east of the route.

231. As explained in Section 15.4.3.3, the Promoted Path 63 is of low sensitivity. The A703, 'D17 Whim – Shiplaw', and 'D18 Cloich' forms part of the turbine delivery route to Site as detailed within **Chapter 12: Access, Traffic, and Transportation**. Therefore, the construction traffic route follows and encompasses part of the Promoted Path 63.

232. Part of the Promoted Path 63 forms the turbine delivery route and internal wind farm tracks, and construction traffic will use these sections. The road and forestry tracks will be subject to widening works along the sections of the Promoted Path 63 which fall within the Site. For the sections of the promoted path 63 that are within the Site, short-term diversions and management measures (detailed in Section 15.7) may be required. Local access to properties will be maintained throughout the construction period.

233. Outwith periods of temporary closure, there will be temporary disturbance from increased construction traffic along the route. This would be experienced over 5.5 km of the ~8 km route (69%) and would be temporary in nature. Given the temporary nature of the change, and that the whole route is not affected, magnitude of change is predicted to be medium.

234. As the Promoted Path 63 is considered to be of low sensitivity and the magnitude of change is predicted to be medium, any effects are minor and short-term, and therefore **not significant** in terms of the EIA Regulations.

Public Right of Way BT10

235. BT10, as defined by ScotWays and shown on Figure 15.1, passes through the Site, entering at approximate NGR 321298 650282 in the west; the route then heads east along the 'D17 Cloich' which forms part of the main access road to the Development. The nearest turbine location is T12, located approximately 1.8 km south of the route.

236. As explained in Section 15.4.3.3, public rights of way, including the BT10, is of low sensitivity. The A703, 'D17 Whim – Shiplaw', and 'D18 Cloich' is the turbine delivery route to Site as detailed within **Chapter 12: Access, Traffic, and Transportation**. Therefore, the construction traffic route follows and encompasses the BT10.

237. As the BT10 forms the turbine delivery route and construction traffic will utilise the route, there will be road widening works along the sections of the BT10 which fall within the Site. For the sections of the BT10 that fall within the Site, short-term diversion and management measures (detailed in Section 15.7) may be required. However, local access will be maintained for residents who need to access property. Outwith periods of temporary closure, temporary disturbance from increased construction traffic is the only other construction effect which the route may be subject to. This would be experienced over the section of the route within the Site Boundary and would be temporary in nature. Given the temporary nature of the change, and that the whole route is not affected, magnitude of change is predicted to be medium.

238. As the BT10 is considered to be of low sensitivity and the magnitude of change is predicted to be medium, any effects are minor and short-term, and therefore **not significant** in terms of the EIA Regulations.

Other Core Paths and Public Rights of Way

239. As detailed within Table 15.7, and shown on Figure 15.1, there are several other core paths, recreational routes, and public rights of way within the Secondary Study Area; however, these routes do not enter the Site and do not cross the turbine delivery route to Site and therefore are only subject to indirect construction effects.

240. Construction effects on these remaining routes are limited to short-term disruption due to increased traffic, as a result of construction in the locality, and construction visual effects. Construction visual effects will not be significant due to intervening distance, and natural screening, between the Site and the routes. As explained in Section 15.4.3.3, all remaining routes are of low sensitivity, and subject to a magnitude of change assessed as low.

241. Therefore, other routes are predicted to experience construction effects, in the form of disruption, which is short-term, temporary, minor and **not significant** in terms of the EIA Regulations.

15.5.4.4 Operational Effects – Tourism and Recreation Receptors

Onsite Informal Recreation

242. The Site will be accessible to the public at all times of the year as per Section 1 and 2 of Land Reform Act (Scotland) 2003. However, temporary exclusions may be required close

to turbines and grid infrastructure for health and safety reasons during times where essential maintenance is required. This is not envisaged to affect the use of established footpaths within the site. This would represent a low magnitude of change on a low sensitivity receptor, representing a negative, long-term, negligible effect which is **not significant** in terms of the EIA Regulations.

243. Visual effects associated with the Development may occur at receptor locations, when people are looking towards the Development and from locations where clear views of the turbines are accessible. The visual effects of the Development from several tourism and recreational assets are assessed in **Chapter 5**: **Landscape and Visual Impact Assessment** of the EIA Report. It should be noted that there is a distinction between a visual effect and effects on recreational amenity. Effects on recreational amenity are described as effects that would influence the recreational value *e.g.* use or enjoyment of an asset such as a walking route.

Identified Tourism and Recreation Receptors

244. The identified tourism and recreation receptors for assessment of operational effects are:

- White Meldon;
- Black Meldon;
- The Great Polish Map of Scotland;
- Portmore House;
- John Buchan Way;
- Glentress 7 Stanes Mountain Biking; and
- Pentlands Hills Regional Park.

245. There will be no direct effects on any of the aforementioned receptors during the operation of the Development.

246. There is the potential for indirect effects to occur on receptors, where tourism numbers change as a result of the Development. As detailed in Section 15.4.3.4, surveys of the public's attitudes to wind farms provide no clear evidence that the presence of wind farms in an area has a negative effect on local tourism. Tourists using local public rights of way and local tourist attractions may have a particular sensitivity to visual effects; however, access to tourist facilities will be unaffected.

247. Table 15.8, overleaf, summarises the visual effects on the aforementioned tourism and recreation receptors. Where possible, these visual effects are based on findings identified in **Chapter 5: Landscape and Visual Impact Assessment**; where there are no relevant **Chapter 5: Landscape and Visual Impact Assessment** findings, visual effects are based on professional judgement using predicted theoretical visibility, as shown in Figure 5.1.2a. Consequently, Table 15.8 provides assessment of the operational effects in the context of tourism and recreation.

Table 15.8: Summary of Operational Visual Effects and Operational Tourism and Recreation Effects on Identified Tourism and Recreation Receptors

Receptor	Visibility based on Development ZTV[82] (Yes or No)	Assessment of Tourism and Recreation Operational Effects		
		Sensitivity of Receptor	Magnitude of Change	Significance of Effect & Rationale
White Meldon & Black Meldon	Yes	Medium	Low	Generally, White Meldon & Black Meldon will experience views of the Development; and tourism and recreation users will generally make use of the main viewpoint, where visual effects are greatest. However, there will be intervening distance between the receptor and the Development. The long distance views from both White Meldon and Black Meldon are largely to the west, south, and east from the hilltops towards the Upper Tweeddale NSA and the Tweed Valley SLA. Immediate views north, where the Development is located, does not have any immediate local or nationally designated landscapes. Additionally, evidence cited in Section 15.4.3.4 indicates that onshore wind developments do not have significant effects on tourism in terms of tourist attractions' appeal to visitors. Therefore, for recreation and tourism the magnitude of change as a result of the operational phase of the Development is low. Given the medium sensitivity of the receptors and the low magnitude of change, the resultant significance of effect for tourism and recreation is minor and **not significant**.
The Great Polish Map of Scotland	Yes	Low	Negligible	The Great Polish Map of Scotland is located within the grounds of Barony Castle, and encircled by well-established woodland. This woodland, and neighbouring buildings is very likely to screen views to the Development. Visitors to the map will be focussed on the ground level attraction below and visibility to the Development will be minimal. Additionally, evidence cited in Section 15.4.3.4 indicates that onshore wind developments do not have significant effects on tourism in terms of tourism attractions' appeal to visitors. Therefore, for recreation and tourism the magnitude of change as a result of the operational phase of the Development is negligible. Given the low sensitivity of the receptor and the negligible magnitude of change, the resultant significance of effect for tourism and recreation is negligible and **not significant**.

[82] Full visual impact assessment is included within Chapter 5: Landscape and Visual Impact Assessment.

Receptor	Visibility based on Development ZTV[82] (Yes or No)	Assessment of Tourism and Recreation Operational Effects		
		Sensitivity of Receptor	Magnitude of Change	Significance of Effect & Rationale
Portmore House & Gardens	Yes	Low	Medium	Portmore House & Gardens will experience visual effects from its grounds on higher elevations and without natural screening. However, visitors will be focussed on the gardens. Visitors will not always be looking towards the Development, and views are likely to be screened by mature woodland which surrounds large sections of the gardens. Additionally, evidence cited in Section 15.4.3.4 indicates that onshore wind developments do not have significant effects on tourism in terms of tourism attractions' appeal to visitors. Therefore, for recreation and tourism the magnitude of change as a result of the operational phase of the Development is low. Given the low sensitivity of the receptor and the low magnitude of change, the resultant significance of effect for tourism and recreation is negligible and **not significant**.
John Buchan Way	Yes	Medium	Low	Approximately half of the John Buchan Way will not experience views of the Development; however, west of the B712 visual effects will occur. As a long-distanced tourism and recreation receptor, and as shown in evidence cited in Section 15.4.3.4 which indicates that onshore wind developments do not have significant effects on tourism in terms of tourism attractions' appeal to visitors, it is not likely there will be any significant reduction in user numbers of the John Buchan Way as a result of the Development. The magnitude of change as a result of the operational phase of the Development is low. Given the medium sensitivity of the receptor and the low magnitude of change, the resultant significance of effect for tourism and recreation is minor and **not significant**.

Receptor	Visibility based on Development ZTV[82] (Yes or No)	Assessment of Tourism and Recreation Operational Effects		
		Sensitivity of Receptor	Magnitude of Change	Significance of Effect & Rationale
Glentress Forest mountain biking centre	Yes	Low	Negligible	The Glentress Forest mountain biking trails are located within well-established, mature forestry. The ZTV shows that the vast majority of the Glentress 7 Stanes Mountain Biking facility does not have theoretical visibility, and therefore not subject to views of the Development. Visibility, where it exists on the ZTV would be further curtailed by existing forestry screening. Users of the trails will be focussed on the ground level as they mountain bike through the forest. Additionally, evidence cited in Section 15.4.3.4 indicates that onshore wind developments do not have significant effects on tourism in terms of tourism attractions' appeal to visitors. Therefore, for recreation and tourism the magnitude of change as a result of the operational phase of the Development is negligible. Given the low sensitivity of the receptor and the negligible magnitude of change, the resultant significance of effect for tourism and recreation is negligible and **not significant**.
Pentlands Hills Regional Park	Yes	Medium	Low	Much of the Pentlands Hills Regional Park will not experience views of the Development. There are areas of the Pentlands Hills Regional Park which will be subject to visual effects; however, these are not significant due to the distance between the receptor and the Development, as detailed within Chapter 5: Landscape and Visual Impact Assessment tables 5.53 & 5.55. Recreational users of the Pentland Hills are likely to make use of large parts of the park; not only areas with visibility. Additionally, evidence cited in Section 15.4.3.4 indicates that onshore wind developments do not have significant effects on tourism in terms of tourism attractions' appeal to visitors. Therefore, in conjunction with the intervening distance and screening of Development views, for recreation and tourism the magnitude of change as a result of the operational phase of the Development is low. Given the medium sensitivity of the receptor and the low magnitude of change, the resultant significance of effect for tourism and recreation is minor and **not significant**.

15.5.4.5 Operational Effects – Other Receptors (Accommodation Etc.)

248. Other recreational receptors, including local shops, cafes, accommodation providers and hotels, as mentioned in Section 15.4.3, are not expected to be affected by the Development during the operational phase due to the intervening distance of these receptors from the Development. Where there is theoretical visibility in views from an accommodation provider, for example, it is likely to be screened to varying extents by natural and man-made features, such as trees, elevated landform, and/or buildings; or further, views will be reduced in impact by distance. Further, as detailed within Section 15.4.3.4, tourists are not deterred by presence of onshore wind developments. It is therefore considered that the magnitude of change would be negligible, representing a negligible effect which is **not significant** in terms of the EIA Regulations.

249. The Development will be regularly maintained by a specialist maintenance team likely to include maintenance engineers and a small number of staff to occasionally service the turbines; in addition, workers will be employed to undertake ongoing habitat management work. Local shops, cafes, accommodation providers and hotels could experience an increase in turnover during the operational phase as they have opportunities to provide additional services to the Development's staff. The Development will result in a minor, positive effect at local level, which is **not significant** in terms of the EIA Regulations.

15.5.4.6 Operational Effects – Recreational Routes, Core Paths and Public Rights of Way

250. The identified recreational routes, core paths, and public rights of way receptors for assessment of operational effects are:

- Cross Borders Drove Road;
- Promoted Path 63;
- Post Road through the Meldons;
- Public Right of Way BT10; and
- Other Core Paths and Public Rights of Way.

251. There will be no direct effects on any of the aforementioned receptors during the operation of the Development.

252. Surveys of the public's attitudes to wind farms provide no clear evidence that the presence of wind farms in an area has a negative effect on local tourism (see Section 15.4.3.4). Access to routes and paths will be unaffected.

253. Table 15.9, overleaf, summarises the visual effects on the aforementioned receptors. These visual effects are based on findings identified in **Chapter 5: Landscape and Visual Impact Assessment** where possible, and based on professional judgement and the theoretical visibility each receptor will be subject to. Consequently, Table 15.9 provides assessment of the operational effects in the context of tourism and recreation.

Table 15.9: Summary of Operational Visual Effects and Operational Tourism and Recreation Effects on Identified Recreational Routes, Core Paths and Public Rights of Ways Receptors

Receptor	Visibility based on Development ZTV[83] (Yes or No)	Assessment of Tourism and Recreation Operational Effects		
		Sensitivity of Receptor	Magnitude of Change	Significance of Effect & Rationale
Cross Border Drove Road	Yes	Medium	Low	Sections of the Cross Border Drove Road will experience views of the Development, visual effects will be greatest on the Cross Borders Drove Road where it nears/enters the Site, where proposed wind turbines are located. However, the majority of the route will not experience significant visual effects. Therefore, as the visual effects are limited to a short section of the receptor given its total length, it is not likely there will be any notable change to the use of the receptor for recreation. When considering the whole route as one receptor, and the evidence cited in Section 15.4.3.4 that onshore wind development do not have negative implications for tourism, the magnitude of change as a result of the operational phase of the Development is negligible. Given the medium sensitivity of the receptor and the low magnitude of change, the resultant significance of effect for tourism and recreation is minor and **not significant**.
Post Road through the Meldons	Yes	Low	Low	The Post Road through the Meldons will experience extensive views of the Development according to the ZTV. No direct effects are predicted as a result of operation of the Development, thus operational effects are limited to visual effects. Users of the receptor will be travelling along the route, therefore, on approach, views of the Development will be of a transitory nature. As there will be no operational disruption to the route, the intervening distance between the Development and the receptor, and that users move along the route, it is judged that there will only be a slight alteration to the recreational value of the receptor, therefore, the magnitude of change will be low. Given the low sensitivity of the receptor and the low magnitude of change, the resultant significance of effect for tourism and recreation is negligible and **not significant**.

[83] Full visual impact assessment is included within Chapter 5: Landscape and Visual Impact Assessment.

Receptor	Visibility based on Development ZTV[83] (Yes or No)	Assessment of Tourism and Recreation Operational Effects		
		Sensitivity of Receptor	Magnitude of Change	Significance of Effect & Rationale
Promoted Path 63	Yes	Low	Medium	Promoted Path 63 will experience extensive views of the Development according to the ZTV, as the receptor passes through the Development and forms part of the onsite access tracks. No direct effects are predicted as a result of operation of the Development, thus operational effects are limited to visual effects. And, as the Site, in which the path runs through, is forested; and receptors will likely have views of the Development, at eye/ground-level, screened by areas of forestry, the magnitude of change is likely to be medium. Given the low sensitivity of the receptor and the medium magnitude of change, the resultant significance of effect for tourism and recreation is minor and **not significant**.
Public Right of Way BT10	Yes	Low	Low	The BT10 will experience views of the Development. No direct effects are predicted as a result of operation of the Development, thus operational effects are limited to visual effects. Users will likely experience views of the Development of a transitory nature when approaching the Development, it is judged that there will only be a slight alteration to the recreational value of the receptor, therefore, the magnitude of change will be low. Given the low sensitivity of the receptor and the low magnitude of change, the resultant significance of effect for tourism and recreation is negligible and **not significant**.
Other Core Paths and Public Rights of Way	Yes	Low	Low	Other Core Paths and Public Rights of Way will experience views of the Development according to the ZTV. However, the paths/routes will not be closed or disrupted as a result of operation of the Development, thus operational effects are limited to visual effects. Users of these routes will experience views of the Development of a transitory nature when approaching the Development although screening by buildings and natural features, such as foliage will also reduce visibility. As there will be no operational disruption to the route, the intervening distance between the Development and the receptors reduces visual effects, and users moving along the route, sometimes at speed, it is judged that there will be a barely perceptible alteration to the recreational value of the receptors and therefore, magnitude of change will be negligible. Given the low sensitivity of the receptor and the negligible magnitude of change, the resultant significance of effect for tourism and recreation is negligible and **not significant**.

15.5.4.7 Decommissioning Effects

254. Effects during the decommissioning phase are anticipated to be of a similar nature and scale as construction effects, albeit for a shorter period when compared to construction, and are therefore **significant** in terms of the EIA Regulations for the Cross Borders Drove Road.

255. All other receptors will experience decommissioning effects that are **not significant** in terms of the EIA Regulations, as per construction effects assessment.

15.6 CUMULATIVE EFFECT ASSESSMENT

The appropriate scale for considering cumulative development depends on the nature of the potential effect. These are considered in turn, for each category of potential effect. Bowbeat Wind Farm (Operational) consists of 24 turbines and is located 6.9 km[84] away from the Development. Within 10 km cumulative effects study area, there are no other operational/consented/under construction/proposed (including at appeal/public inquiry) wind farm developments to consider.

15.6.1 Socio-Economics

256. Regional socio-economic effects have been defined as at the scale of the Scottish Borders. As there are no other nearby wind farm developments under construction, which could increase the beneficial socio-economic effects associated with the Development there is no cumulative effect on socio-economics.

257. Potential exists in the future, other wind farms be proposed and consented in the area, for job creation to occur to support the industry. However, at a regional level, the sustaining of jobs, in construction in particular, is considered **not significant**.

258. The greater the capacity of consented and constructed developments in the area, the more likely it is that the local area can benefit from supply chain opportunities. Additionally, it is likely that maintenance operations of the Development and other nearby wind farm development will be sourced locally as there would be enough opportunity locally to employ full time employees and provide work to local companies however, these effects are **not significant** in terms of the EIA Regulations.

15.6.2 Land Use

259. There are no other within wind farm developments within the study area for land use, therefore no cumulative effects are predicted on land use.

15.6.3 Tourism and Recreation

260. Cumulative visual effects on outdoor recreational and tourism facilities resulting from the Development in conjunction with other wind farms in the Study Areas are assessed in **Chapter 5: Landscape and Visual Impact Assessment**.

261. Cumulative effects on the amenity of tourism and recreation receptors during operation are strongly linked to visual effect. As set out in Section 15.4.3.4, there is no evidence that tourism is adversely impacted by wind farms in Scotland. There are no known impacts recorded as a result of the operational Bowbeat Wind Farm, which is the only cumulative development considered; therefore, no cumulative impacts are predicted in combination with the Development.

[84] Approximate distance between the outermost turbines of the Development and other wind farms.

15.7 MITIGATION AND RESIDUAL EFFECTS

262. Socio-economic and land use effects were assessed as **not significant**, therefore mitigation is not required as a result of the Development.

263. With regard to tourism and recreation, **significant** effects were identified during construction and operation of the Development on the Cross Borders Drove Road; all other receptors are judged to be in receipt of effects deemed **not significant**.

264. During the construction of the Development a significant effect has been identified in relation to the Cross Borders Drove Road. This effect will be mitigated through the application of an Access Management Plan, to be drafted and agreed with the Council prior to construction. Following appropriate mitigation within the Access Management Plan, including a gating system operated by a banksman as well as appropriate health and safety signage local route diversions (if required), and traffic management measures, the residual effect during the construction of the Cross Borders Drove Road will be **not significant**. Whilst no other significant effects were identified during construction, it is anticipated that the Access Management Plan will cover all identified routes by construction and further reduce effects.

15.8 SUMMARY OF EFFECTS

265. Table 15.10 provides a summary of the effects detailed within this chapter; where no effects were identified these are not summarised but detailed in the assessments.

Table 15.10: Summary of Effects

Receptor	Potential Effect	Significance of Effect	Mitigation Proposed	Residual Effect
Socio-Economics	Construction & Decommissioning: • Positive, minor increase in employment; and • Positive, minor increase in capital expenditure.	Not Significant	None	Not Significant
	Operation: • Positive, negligible increase in employment and local business; • Positive, negligible increase in operational expenditure; and • Minor, positive, long-term, investment through community benefit fund. (Not accounted for in the assessment of significance.)	Not Significant	None	Not Significant
Land Use	Construction & Decommissioning: • Negligible effect on land use during construction; and • Short-term, negligible effect on land use during decommissioning.	Not Significant	None	Not Significant
	Operation: • Long-term, negligible effect on land use as a result of the operation of the Development.	Not Significant	None	Not Significant

Receptor	Potential Effect	Significance of Effect	Mitigation Proposed	Residual Effect
Tourism and Recreation	Construction & Decommissioning: • Moderate, short-term effects relating to construction activities for the Cross Borders Drove Road; • Negligible/minor, short-term effects relating to construction activities for all other identified tourism and recreation receptors, and identified recreational routes, core paths and public rights of way; and • Minor, short-term, positive increase in accommodation use.	Significant Not Significant	Access Management Plan None	Not Significant Not Significant
	Operation: • Minor effect relating to operation of the Development for the Cross Borders Drove Road; • Negligible/minor effects relating to operation of the Development for all other identified tourism and recreation receptors, and identified recreational routes, core paths and public rights of way; and • Minor, positive increase in accommodation/business use.	Not Significant Not Significant Not Significant	None None None	Not Significant Not Significant Not Significant

15.9 STATEMENT OF SIGNIFICANCE

266. The renewables industry is an important economic asset to the UK and Scotland, and supports a substantial and growing number of employment opportunities. Although not significant in terms of the EIA Regulations, the Development will further contribute to the beneficial economic effect of renewable energy, and associated skills base within Scotland.

267. The establishment of a local community fund will make a valuable contribution to community initiatives surrounding the Site however, this is not significant in terms of the EIA Regulations. There is further potential for enhancements from participation in shared ownership etc.

268. A short-term **significant** construction/decommissioning effect in terms of the EIA Regulations was identified for the Cross Borders Drove Road; mitigation via an Access Management Plan reduces the construction effect to **not significant**.

269. No other significant effects in terms of the EIA Regulations are predicted on socio-economics, all other tourism and recreation and land-use receptors during the construction, operation or decommissioning phases of the Development.