

16 SOCIO-ECONOMICS, LAND USE, TOURISM AND RECREATION

16.1 INTRODUCTION

1. This Chapter of the Environmental Impact Assessment Report (EIA Report) evaluates the effects of Heathland Wind Farm (the Development) on socio-economic, land use, tourism and recreation resources. This assessment was undertaken by Arcus Consultancy Services Limited (Arcus).
2. 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.
3. This Chapter of the EIA Report is supported by the following figures provided in Volume 2a EIA Report Figures:
 - Figure 16.1: Core Paths within Study Area; and
 - Figure 16.2: Core Paths within Site.

16.2 LEGISLATION, POLICY AND GUIDANCE

4. The following guidance, legislation and information sources have been considered in carrying out this assessment:
 - The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017¹;
 - Scotland's Economic Strategy²;
 - National Performance Framework³;
 - Scottish Planning Policy⁴;
 - National Planning Framework 3⁵;
 - The South Lanarkshire Local Development Plan⁶;
 - The West Lothian Local Development Plan⁷;

¹ Scottish Government (2017) The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 [Online] Available at: <https://www.legislation.gov.uk/ssi/2017/101/contents/made> (Accessed 18/08/2020)

² Scottish Government (2015) Scotland's Economic Strategy [Online] Available at: <https://www.gov.scot/publications/scotlands-economic-strategy/pages/0/> (Accessed on 18/08/2020)

³ Scottish Government (2019) National Performance Framework [Online] Available at: <https://nationalperformance.gov.scot/national-outcomes> (Accessed 18/08/2020)

⁴ Scottish Government (2014) Scottish Planning Policy [Online] Available at: <https://www.gov.scot/publications/scottish-planning-policy/pages/2/> (Accessed 18/08/2020)

⁵ Scottish Government (2014) National Planning Framework 3 [Online] Available at: <https://www.gov.scot/publications/national-planning-framework-3/> (Accessed 18/08/2020)

⁶ South Lanarkshire Council (2015) Local Development Plan [Online] Available at: https://www.southlanarkshire.gov.uk/info/200145/planning_and_building_standards/39/development_plans/6 (Accessed 21/08/2020)

⁷ West Lothian Council (2018) Local Development Plan [Online] Available at: <https://www.westlothian.gov.uk/LDP> (Accessed 21/08/2020)

- ClydePlan⁸
- SESPlan⁹
- Institute of Environmental Management and Assessment (IEMA) (2011) The State of Environmental Impact Assessment in the UK¹⁰;
- Scottish Natural Heritage (now known as NatureScot) (2018) Environmental Impact Assessment Handbook¹¹; and
- Wind Farms and Tourism Trends in Scotland: BiGGAR Economics (2017)¹².

16.2.1 Legislation

5. The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations (2017)¹³ (the EIA Regulations) establish in broad terms what is to be considered when determining the effects of development proposals on socio-economics, land-use, tourism and recreation. There is no specific legislation or guidance available on methods that should be used to assess the socio-economic impacts of a proposed onshore wind farm development.

16.2.2 National Policy

16.2.2.1 Land Use

6. On the 23rd June 2014, the Scottish Government published the latest Scottish Planning Policy (SPP)¹⁴. 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 supply chain" (page 36).

7. Paragraph 80 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....."

⁸ Glasgow and Clyde Valley Strategic Development Planning Authority (2017) *ClydePlan: Strategic Development Plan* [Online] Available at: <https://www.clydeplan-sdpa.gov.uk/images/ApprovedPlanHighRes.pdf> (Accessed 26/01/2021)

⁹ Strategic Development Planning Authority for Edinburgh and South East Scotland (2013) *SESPlan: Strategic Development Plan* [Online] Available at: <https://www.sesplan.gov.uk/assets/files/docs/290813/SESplan%20Strategic%20Development%20Plan%20Approved%2027%20June%202013.pdf> (Accessed 26/01/2021)

¹⁰ 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 18/08/2020)

¹¹ SNH (2018) Environmental Impact Assessment Handbook [Online] Available at: <https://www.nature.scot/handbook-environmental-impact-assessment-guidance-competent-authorities-consultees-and-others> (Accessed 18/08/2020)

¹² 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 18/08/2020)

¹³ Scottish Government (2017). The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations [Online] Available at: <http://www.legislation.gov.uk/ssi/2017/101/contents/made> (Accessed 21/08/2020)

¹⁴ Scottish Government (2014) Scottish Planning Policy [Online] Available at: <https://www.gov.scot/publications/scottish-planning-policy/pages/2/> (Accessed 16/01/2020)

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.”(page 22)

16.2.2.2 Socio-Economics

8. Scotland’s Economic Strategy¹⁵ 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.
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 Framework¹⁶ 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. 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)”.
12. The National Planning Framework (NPF3)¹⁷ sets out a long-term strategy for Scotland’s important development and investment opportunities in infrastructure. Combined with the SPP, the NPF3 aims to help deliver a sustainable, economic future for Scotland’s communities. NPF3 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.”
13. 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.
14. As outlined in Chapter 4 – Energy and Planning Policy, NPF4 is under preparation and will include all aspects of national planning policy as per the provisions of the Planning (Scotland) Act 2019, which was passed by the Scottish Parliament in June 2019. The Act includes a broad range of changes to be made across the planning system. It was anticipated that a consultation draft NPF4 will be issued around Autumn 2021 and therefore it will not be considered within this assessment.

¹⁵ Scottish Government (2015) Scotland’s Economic Strategy [Online] Available at: <https://www.gov.scot/publications/scotlands-economic-strategy/pages/0/> (Accessed on 21/08/2020)

¹⁶ Scottish Government (2019) National Performance Framework [Online] Available at: <https://nationalperformance.gov.scot/national-outcomes> (Accessed 16/01/2020)

¹⁷ Scottish Government (2014) National Planning Framework 3 [Online] Available at: <https://www.gov.scot/publications/national-planning-framework-3/> (Accessed 16/01/2020)

16.2.3 Local Planning Policy

15. The South Lanarkshire Local Development Plan (SLLDP)¹⁸ was adopted by South Lanarkshire Council (the Councils) in June 2015. The West Lothian Local Development Plan (WLLDP)¹⁹ was adopted by West Lothian Council (the Councils) in September 2018. The SLLDP and WLLDP provide a planning framework for the future use and development of land within South Lanarkshire and West Lothian, 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.
16. Planning policy is set out in Chapter 4 - Energy and Planning Policy of the EIA Report and addressed in full in the Planning Statement which accompanies the EIA Report. A summary of the local policies relevant to this assessment are as follows:
 - SLLDP – Policy 1: Spatial Strategy - supporting regeneration activities and maximising regeneration and local economic benefits;
 - SLLDP – Policy 2: Climate Change – seeking to mitigate and minimise effects of climate change through suitably located development utilising renewable energy with no significant, adverse environmental effects.
 - SLLDP – Policy 3: Green Belt and Rural areas – states that development within rural areas need to demonstrate an acceptable reasoning for being sited in such locations;
 - SLLDP – Policy 15: Natural and Historic Environment – states that the Council will assess the proposal against the amenity of the natural and built environment, including recreational amenity. Any effects of the development on the area must be outweighed by potential economic and social benefits of a national importance;
 - SLLDP - Policy 17: Water Environment and Flooding – states that any development deemed to have a significant adverse effect on the local water environment will not be permitted;
 - SLLDP - Policy 19: Renewable Energy – states that renewable energy applications will be subject to assessment against the principles of SPP;
 - WLLDP – Policy DES 1: Design Principle – states that development proposals must be integrated with local context and built form;
 - WLLDP – Policy ENV 1: Character and Special Landscape Areas – states that development will not be permitted where it adversely effects local landscape character;
 - WLLDP – Policy ENV 3: Other development in the countryside – states that developments should make best use of resources, integrate with services and demonstrate high standards of design and environmental quality;
 - WLLDP – Policy ENV 9: Woodland, Forestry, Trees and Hedgerows – states that there is a presumption against development which is deemed to have adverse effects on woodland areas;
 - WLLDP – Policy ENV 17: Protection of International Nature Conservation Sites – states that proposal that affect areas of international importance will only be permitted if the effects are not adverse or overriding reasons to consent exist;
 - WLLDP – Policy ENV 18: Protection of Nature Conservation Sites – States that proposals within or affecting areas of national importance will not be permitted unless overriding circumstances exist;

¹⁸ South Lanarkshire Council (2015) Local Development Plan [Online] Available at: https://www.southlanarkshire.gov.uk/info/200145/planning_and_building_standards/39/development_plans/6 (Accessed 21/08/2020)

¹⁹ West Lothian Council (2018) Local Development Plan [Online] Available at: <https://www.westlothian.gov.uk/LDP> (Accessed 21/08/2020)

- WLLDP – Policy ENV 19: Protection of Local Biodiversity Sites and Local Geodiversity Sites – states that there is a presumption against development affecting areas of natural heritage unless overriding social or economic factors exist;
- WLLDP – Policy ENV 32: Archaeology – states that developments will not be supported if there is a significant adverse effect on archaeological or historical sites or settings, unless this can be successfully mitigated;
- WLLDP – Policy NRG 1: Climate Change and Sustainability – sets out the Council’s desire for development to help meet national climate change objectives and targets;
- WLLDP – Policy NRG 3: Wind Energy Development – states an in-principle support for wind energy development subject to acceptable levels of impacts; and
- WLLDP – Policy EMG 5: Noise – states that there is a presumption against any development that may have the potential to affect the noise character of its immediate surroundings.

16.2.4 Guidance

17. The following documents have been considered for the assessment of potential effects of the Development on socio-economics, land-use, tourism and recreation:
 - Institute of Environmental Management and Assessment (IEMA) (2011) The State of Environmental Impact Assessment in the UK²⁰;
 - Scottish Natural Heritage (SNH) (2014) A Handbook on Environmental Impact Assessment²¹; and
 - Wind Farms and Tourism Trends in Scotland: BiGGAR Economics (2017)²².

16.3 ASSESSMENT METHODOLOGY AND SIGNIFICANCE CRITERIA

16.3.1 Scoping Responses and Consultations

18. Consultation for this EIA Report topic was undertaken with the organisations shown in Table 16.1.

Table 16.1 Consultation Responses

Consultee	Type and Date	Summary of Consultation Response	Response to Consultee
West Lothian Council	No response to Scoping Request with regard to socio-economics, land use or tourism.	n/a	n/a
South Lanarkshire Council	No response to Scoping Request with regard to socio-economics, land use or tourism.	n/a	n/a
ScotWays		ScotWays highlight the following recorded rights	These rights of way are considered within

²⁰ IEMA (2011) The State of Environmental Impact Assessment Practice in the UK [Online] Available at: <https://www.iema.net/assets/uploads/Special%20Reports/iema20special20report20web.pdf> (Accessed 21/08/2020)

²¹ SNH (2018) Environmental Impact Assessment Handbook [Online] Available at: <https://www.nature.scot/handbook-environmental-impact-assessment-guidance-competent-authorities-consultees-and-others> (Accessed 21/08/2020)

²² 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 17/07/2020)

Consultee	Type and Date	Summary of Consultation Response	Response to Consultee
	<p>Scoping Response, 21/02/2020</p>	<p>of way are within the site boundary: SL24, SL159/LW66, SL160 They also noted that these may have already been affected by forestry.</p>	<p>the assessment detailed in Section 16.5. Please note the Council's Core Path registers were used for this assessment.</p>
<p>ScotWays recommend setting turbines back a distance equivalent to the blade tip, from any public highway or road/railway.</p>		<p>A distance of the tip height plus 10% has been implemented through the design process to ensure safety for users of the paths and roads in the vicinity. This is detailed in Chapter 2 – Site Selection and Design.</p>	
<p>ScotWays note that the applicant proposes to scope in the Core Paths Plans. ScotWays understands there is also a wider path network and records indicate that in addition to recreational walking, runners, cyclists and horse-riders also use the site</p>		<p>Core Paths are considered within the assessment, detailed in Section 16.5. Various receptors and users of the Core Paths have been considered within the assessment.</p>	
<p>ScotWays require that the proposed onsite access track layout is presented in the EIA Report in order for ScotWays to make an assessment on the effects on public access.</p>		<p>The infrastructure layout is provided within the EIA Report (as Figure 3.1) for consultees to consider.</p>	
<p>ScotWays note that the EIA Report should include the minimum separation distance between the turbines and the recorded rights of way</p>		<p>A distance of the tip height plus an allowance distance has been implemented through the design process to ensure safety for users of the paths and roads in the vicinity. This is detailed in Chapter 2 – Site Selection and Design.</p>	
<p>ScotWays is concerned about impacts on recreational amenity and cumulative impacts of other wind farms. ScotWays note the proposed VPs for the</p>		<p>A cumulative socio-economics assessment has been undertaken and is provided in Section 16.7. Viewpoint 13 (Harrows Law) and Viewpoint 16</p>	

Consultee	Type and Date	Summary of Consultation Response	Response to Consultee
		LVIA assessment and suggest an appropriate VP in the Pentlands should be part of the cumulative assessment.	17 (West Cairn Hill), both within the Pentlands, have been included within the LVIA as a representation of views for recreational users.
Mountaineering Scotland	Scoping Response, 11/12/2019	No comment to make on the scope of the EIA at this point	n/a
Visit Scotland	No response	n/a	n/a
British Horse Society	No response	n/a	n/a

16.3.2 Scope of Assessment

19. 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.

20. 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.

16.3.2.1 Socio-Economics

21. The principal socio-economic assessment criteria relate to the employment effects within the Study Area. These effects are defined in terms of Full-Time Equivalent (FTE) jobs and the Gross Value Added (GVA) generated by those jobs.

16.3.2.2 Land-Use

22. Land-use is the anthropogenic management and occupation of the environment, and what the land is used for, both at present and in the future. 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 network.

16.3.2.3 Recreation and Tourism

23. When assessing tourism and recreation, this Chapter deals primarily with amenity, which is defined as the pleasantness of the recreational asset that contributes to its character (i.e. the essence of why the asset is visited). Amenity is inextricably linked with recreational behaviour and tourism. Where outdoor tourism and recreation facilities are not designated for their visual setting or outlook, the visual impact on these receptors is

assessed in Chapter 6 - Landscape and Visual Impact Assessment of the EIA Report. This Chapter solely focuses on the designated use of the tourism and recreational receptor.

24. 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 the EIA Report, have considered the effects on recreational resources (e.g. Chapter 6 - Landscape and Visual Impact Assessment) these findings will be drawn upon to inform the assessment of the wider recreational effects.
25. The assessment of effects on cultural heritage assets, such as Wilsontown Ironworks, is provided in Chapter 7 – Cultural Heritage and Archaeology and is not considered within this Chapter. However an assessment of the Core Path network associated with Wilsontown Ironworks is provided and will reflect the potential effects on Wilsontown Ironworks as a recreational asset.

16.3.3 Study Area / Survey Area

26. The study areas in this assessment are receptor specific, as follows:
 - Socio-economics: The 'Study Areas' are defined as at local, regional, and national scale as follows:
 - 'Local' is defined as comprising of the electoral wards of Clydesdale North (within South Lanarkshire Council), and Fauldhouse & Breich Valley (within West Lothian Council);
 - 'Regional' is defined as South Lanarkshire and West Lothian (the geographical size of both Councils means that the Development will not affect the entire area);
 - 'National' is defined as Scotland;
 - Land-use: The 'Study Area' comprises the land taken by the Development, either temporarily during construction and decommissioning or permanently after operation and decommissioning; and
 - Tourism and Recreation: The 'Study Area' comprises land within the Site and immediately adjacent in considering direct effects, and within 5 km of the Site boundary in considering indirect effects.
27. Cumulative effects: 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.

16.3.4 Baseline Survey Methodology

28. The following sources of information have been used to inform the baseline description set out in this Chapter:
 - South Lanarkshire Council (<https://www.southlanarkshire.gov.uk/>);
 - West Lothian Council (<https://www.westlothian.gov.uk/>);
 - Visit Lanarkshire (<https://www.visitlanarkshire.com/about-us/>);
 - Visit West Lothian (<https://www.visitwestlothian.co.uk/>);
 - Visit Scotland (<https://www.visitscotland.com/>);
 - 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 website (www.scotways.com); and
 - Sustrans website (www.sustrans.co.uk).
29. Baseline conditions have been established through desktop studies and consultation, including the Scoping Opinion (March 2020). No surveys specific to the Development and in support of this assessment have been carried out, however information has been gathered where relevant from surveys undertaken in respect of other, related, disciplines, such as cultural heritage and archaeology, and landscape and visual.

16.3.5 Methodology for the Assessment of Effects

30. Effects on the socio-economics, land use, and tourism and recreation resources can be described as direct, indirect or cumulative.
31. The assessment aims to predict the likely effects (positive, negative or neutral) arising from the Development; these effects are divided into:
- Direct effects: opportunities that can be created as 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: opportunities that will be created by the Development further down the supply chain, for example, companies providing services to the Development, or visual effects from the Development on users of nearby recreational assets;
 - Induced effects: for example, employment opportunities created by the additional spend of wages into the local economy and the purchasing of basic materials, equipment and office space for staff; and
 - Cumulative Effects: where the combined effect of two or more developments are of greater significance than those of the Development itself.
32. 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.

16.3.5.1 Sensitivity of Receptors

33. 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.

Table 16.2 details the framework for determining the sensitivity of receptors.

Table 16.2 Framework for Determining Sensitivity of Receptors

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

Sensitivity of Receptor	Definition
	tourism value, or is of regional importance (e.g. South Lanarkshire and West Lothian). 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 is tolerant to change without detriment to its character, has low socio-economic, recreational or tourism value, or is of local importance (e.g. Forth and Breich). For example, it is an incidental destination for current visitors (for attractions).
Negligible	The asset is resistant to change and is of little socio-economic or tourism value. For example, an incidental destination for low numbers of current visitors (for attractions) and/or possesses no weight in authority policy.

16.3.5.2 Magnitude of Change

34. 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.
35. The criteria for assessing the magnitude of change are presented in Table 16.3.

Table 16.3 Framework for Determining Magnitude of Change

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

16.3.5.3 Significance of Effect

36. 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 16.4 summarises guideline criteria for assessing the significance of effects.

Table 16.4 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

37. 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.

38. Effects can be positive, negative or neutral and these are specified where applicable in the assessment within this Chapter.
39. 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.
40. An example of a potential significant effect in terms of socio-economics would be 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.
41. An example of a potential significant effects in terms of tourism and recreation would be if the Development resulted in any fundamental or material changes in key elements/features of the receptor or if effects resulted in major, long-term alterations of the baseline conditions of the attraction, accommodation, recreation route etc.
42. An example of a potential significant effect in terms of land use would be if the Development resulted in long-term modification or net loss of an important land-use receptor.

16.3.6 Assessment Limitations

43. Data has been collated from published sources; no surveys specific to the Development and in support of this assessment have been carried out, however as stated in Section 16.3.4 above, information has been gathered where relevant from surveys undertaken in respect of other, related, disciplines, such as cultural heritage and archaeology, and landscape and visual.
44. 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.
45. 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.

16.4 BASELINE CONDITIONS

46. The land within the Site which contains the turbines and associated infrastructure covers an area of approximately 831 hectares (ha), centred at approximate NGR 296917, 657090. The Site lies within the administrative boundaries of South Lanarkshire Council and West Lothian Council, and within both Clydesdale North electoral ward and Fauldhouse & the Breich Valley electoral ward.

16.4.1 Socio-economics

16.4.1.1 Population

Local Study Area

47. According to the last Census (2018 estimation)²³, the Local Study Area (LSA) had a total population of 30,790, of which 50.65% were female and 49.35% were male. This is divided as 16,040 within Fauldhouse and the Breich Valley and 14,750 within Clydesdale North. Of the total LSA population, 20% were aged under 16 (6,158 residents), 63% were aged 16-64 (19,398 residents) and 17% were aged 65 or over (5,235 residents).

²³ National Records of Scotland (2019) Mid-Year Population Estimates [Online] Available at: <https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/population/population-estimates/mid-year-population-estimates> (Accessed 11/08/2020)

Regional Study Area

48. South Lanarkshire is an area of Scotland stretching from the urban central belt to the rural south of Scotland covering an area of 1,772 km²⁴ and has an estimated population of 320,530 (as at June 2019)²⁵. The two main settlements within South Lanarkshire Council (SLC) are Hamilton (population of approximately 83,730) and East Kilbride (population of approximately 75,120)²⁶. The area is divided into four local area committees, which are recognised by the Council. These committees are:
- Cambuslang & Rutherglen Area Committee;
 - Clydesdale Area Committee;
 - East Kilbride Area Committee; and
 - Hamilton Area Committee.
49. In 2018, 19% of SLC population was over 65 years, which is equal to the Scottish average²⁷. National Records of Scotland projections²⁸ 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.
50. The West Lothian Council area is located between Edinburgh and Falkirk, and sits north of South Lanarkshire Council, covering an area of approximately 428 km², and has an estimated population of 183,140 (as of June 2019²⁹). The main settlements within West Lothian Council (WLC) are Livingston (approximate population of 65,720) and Linlithgow (approximately population of 13,100). The area is divided into nine local area committees, which are recognised by the Council. These committees are:
- Armadale and Blackridge Ward;
 - Bathgate Ward;
 - Broxburn, Uphall and Winchburgh Ward;
 - East Livingston and East Calder Ward;
 - Fauldhouse and the Breich Valley Ward;
 - Linlithgow Ward;
 - Livingston South Ward;
 - Livingston North Ward; and
 - Whitburn and Blackburn Ward.

²⁴ South Lanarkshire Council (2015) Local Development Plan [Online] Available at: https://www.southlanarkshire.gov.uk/info/200145/planning_and_building_standards/39/development_plans/6 (Accessed 16/01/2020)

²⁵ National Records of Scotland (2019) South Lanarkshire Council Area Profile [Online] Available at: <https://www.nrscotland.gov.uk/files/statistics/council-area-data-sheets/south-lanarkshire-council-profile.html> (Accessed 17/01/2020)

²⁶ National Records for Scotland (2018) Mid-2016 Population Estimates for Settlements and Localities in Scotland [Online] Available at: <https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/population/population-estimates/settlements-and-localities/mid-2016-population-estimates-for-settlements-and-localities-in-scotland> (Accessed 17/01/2020)

²⁷ National Records for Scotland (2019) Mid-Year Population Estimates Scotland, Mid-2018 [Online] Available at: <https://www.nrscotland.gov.uk/files/statistics/population-estimates/mid-18/mid-year-pop-est-18-pub.pdf> (Accessed 21/08/2020)

²⁸ National Records of Scotland (2018) Population Projections for Scottish Areas (2016-based) [Online] Available at: <https://www.nrscotland.gov.uk/files/statistics/population-projections/sub-national-pp-16/pop-proj-principal-2016-tab-publication.pdf> (Accessed 21/08/2020)

²⁹ National Records of Scotland (2019) West Lothian Council Area Profile [online] Available at: <https://www.nrscotland.gov.uk/files/statistics/council-area-data-sheets/west-lothian-council-profile.html> (Accessed 21/07/2020)

51. In 2018, 16% of WLC population was over 65 years³⁰, which is less than the Scottish average of 19%. In terms of overall size, the 45 to 64 age group was the largest in 2019³¹, with a population of 51,735, with the 25-44 age group being the second largest, meaning the pensionable age (over 65) population will to continue to increase significantly over the next 30 years.
52. There is slightly greater percentage of the population aging 0-15 years (19%) compared to the Scottish average (17%). This means nearly one in 5 people in WLC are between 0-15 years.

National Study Area

53. According to the last Census (2018 estimation), Scotland's population is approximately 5,438,100³². This is its highest ever population, and an increase of 13,300 people (0.2%) since 2017. Since 1998, Scotland's population has increased by 7%, and has been growing each year since 2000, though the rate of growth over this period has varied.

16.4.1.2 Employment

Local Study Area

54. The most recent source of employment statistics for the LSA is the 2011 census³³. 62.2% (43,785) of the LSA population aged over 16 years old, were economically active, which is similar to the Scottish average of 62.8%. The percentage of people in employment was 50.7% (35,671), the same as the Scottish average. The percentage of people in unemployment was 5.7%, slightly above the Scottish average of 5.1%.

Table 16.5 below show the employment by industrial sector in the LSA in 2011.

Table 16.5: Employment in the Local Study Area (2011)³⁴

	Number of people employed in the LSA	% of population employed (LSA)	% of population employed (Scotland)
Agriculture and mining	644	1.6%	3.0%
Energy and Water	615	1.6%	1.6%
Manufacturing	4,411	11.1%	8.0%
Construction	3,903	9.9%	8.0%
Services	3,633	9.2%	10.7%
Wholesale and Retail	6,580	16.6%	15.0%
Transport Storage	2,382	6.0%	5.0%

³⁰ National Records for Scotland (2019) Mid-Year Population Estimates Scotland, Mid-2018 [Online] Available at: <https://www.nrscotland.gov.uk/files//statistics/population-estimates/mid-18/mid-year-pop-est-18-pub.pdf> (Accessed 21/08/2020)

³¹ National Records for Scotland (2019) West Lothian Council Area Profile [online] Available at: https://www.nrscotland.gov.uk/files/statistics/council-area-data-sheets/west-lothian-council-profile.html#population_estimates (Accessed 21/08/2020).

³² 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-18/mid-year-pop-est-18-pub.pdf> (Accessed 17/01/2020).

³³ National Records of Scotland (2013) 2011 Census Reconciliation Report [online] Available at: <https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/population/2011-census-reconciliation-report> (Accessed 12/08/2020)

³⁴ National Records of Scotland (2013) 2011 Census Reconciliation Report [online] Available at: <https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/population/2011-census-reconciliation-report> (Accessed 12/08/2020)

Accommodation and Food Storage	1,545	3.9%	6.3%
Information and Communication	1,238	3.1%	2.7%
Financial and Other Business Services	1,633	4.1%	4.5%
Public Admin, Education and Health	11,281	28.5%	30.4%
Other Services	1,742	4.4%	4.9%
Total Employee Jobs	39,607	-	-

55. The data reflects the importance of the manufacturing and construction employment sectors, with manufacturing accounting for 11.1% of all jobs in the LSA compared to 8% in Scotland and construction accounting for 9.9% in the LSA compared to 8% in Scotland.

Regional Study Area

56. Nomis Official Labour Market Statistics is a database which provides up to date census data for council areas around the UK, and has been used to determine the baseline for the regional study area.

57. The percentage of the population that are economically active in South Lanarkshire is 79.3%³⁵, which is higher than the Scottish average of 77.1%, and the percentage of people in full time employment is 77%³⁶, slightly higher than the Scottish average of 73%. The employment breakdown within SLC by sector is:

- Manager, Directors and Senior Officials – 9.8%;
- Professional Occupations – 19.2%;
- Associate Professional and Technical 17.6%;
- Administrative and Secretarial – 6.9%;
- Skilled Trades – 9.3%;
- Caring, Leisure and Service Occupations – 11.6%;
- Sales and Customer Service – 7.8%;
- Process Plant and Machine Operatives – 8.5%; and
- Elementary Occupations – 9%.

58. The percentage of economically active population in West Lothian is 80.5%, which is higher than the Scottish average of 77.1%, and the percentage of people in full time employment is 76.8%³⁷, slightly higher than the Scottish average of 73%. The employment breakdown within WLF by sector is:

- Manager, Directors and Senior Officials – 10.3%;
- Professional Occupations – 13.1%;
- Associate Professional and Technical 14.5%;
- Administrative and Secretarial – 10.9%;
- Skilled Trades – 10.4%;
- Caring, Leisure and Service Occupations – 10%;
- Sales and Customer Service – 9.2%;
- Process Plant and Machine Operatives – 9%; and

³⁵ Nomis Official Labour Market Statistics – Labour Market Profile South Lanarkshire (2019) [Online] Available at: <http://www.nomisweb.co.uk/reports/lmp/la/1946157433/printable.aspx> (Accessed 21/07/2020)

³⁶ Scottish Government Statistics – Council Area South Lanarkshire (2019) [Online] Available at: <https://statistics.gov.scot/atlas/resource?uri=http%3A%2F%2Fstatistics.gov.scot%2Ffid%2Fstatistical-geography%2FS12000029> (Accessed 21/07/2020)

³⁷ Scottish Government Statistics – Council Area South Lanarkshire (2019) [Online] Available at: <https://statistics.gov.scot/atlas/resource?uri=http%3A%2F%2Fstatistics.gov.scot%2Ffid%2Fstatistical-geography%2FS12000029> (Accessed 21/07/2020)

- Elementary Occupations – 12.5%.

16.4.1.3 Renewables and Economic Development

59. 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 billion in 2017³⁸. 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). Scotland's turnover from onshore wind activities totalled £1.5 billion in 2016 and achieving 'world leader' status for renewables in 2017³⁹.
60. 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 week⁴⁰. 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.
61. 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. The demand for electricity and transportation fell and by mid-April 2020 the energy demand in countries under full lockdown fell by 25%⁴¹ which led to a decline in oil prices and as a result, saw a decline in the fossil fuel industries. Electricity generation from renewables has been ongoing with a 1.5% increase in the global use of renewable energy⁴⁰; 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 guidelines⁴⁰ which has had an impact on existing and planned projects, investment, employment and energy access⁴².
62. Furthermore, figures from Scottish Renewables show the potential for economic boost provided the Government utilise renewable energy to ensure a green recovery from the COVID-19 pandemic, signifying that renewable development could play a key role in the country's economic recovery, including both employment and large-scale financial investment.⁴³
63. Investments in renewables now could speed up the recovery from the economic impacts of COVID-19 at a faster rate; investments starting now can put renewable energy production on track to grow five times faster than current plans would indicate and could see the creation of 5.5 million jobs by 2023⁴³ in the industry. A worldwide second

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 10/08/2020).

³⁹ WWF (2017) Scotland a 'World Leader' for renewables in 2017 [Online] <https://www.wwf.org.uk/updates/scotland-world-leader-renewables-2017> (Accessed 13/05/2020)

⁴⁰ The International Energy Agency (2019) COVID-19 [Online] Available at: <https://www.iea.org/topics/covid-19> (Accessed 20/05/2020)

⁴¹ Khanna, M. (2020), COVID-19: A Cloud with a Silver Lining for Renewable Energy?. Applied Economic Perspectives and Policy. doi:[10.1002/aepp.13102](https://doi.org/10.1002/aepp.13102) [Online] Available at: <https://onlinelibrary.wiley.com/action/showCitFormats?doi=10.1002%2Faep.13102> (Accessed 05/11/2020)

⁴² 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 05/11/10)

⁴³ 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 04/09/2020)

outbreak of COVID-19 is estimated to cause a 7.6% decline in global GDP, with worse affected economies declining as much as 11-12%⁴³ so it is important that there is a global investment in renewables.

16.4.2 Land Use

64. The Site is currently utilised for commercial woodland, and operated by Forestry and Land Scotland (FLS). The forestry is coniferous woodland at varying stages of maturity, including substantial areas of clear felling. The topography of the Site and the immediate vicinity is generally gently sloping with relatively low lying, but exposed hills. The elevation ranges from approximately 290 m Above Ordnance Datum (AOD) in the south-west part of the Site to approximately 362 m AOD at the north-east part of the Site.
65. There are a number of existing forestry tracks used for the commercial woodland harvesting. The Site is currently accessible on foot to the public for walking and recreation, 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.
66. There are currently two active quarries on Site, located at NGR 297030, 656421 (Worm Law) and NRG 297411, 657449 (Brownrock) which are utilised periodically by FLS to obtain rock for FLS sites, but are otherwise not in use. Public access is not permitted within the quarries at any time.
67. There are no farmsteads or other built infrastructure which lie within the Site boundary. The closest village is Wilsontown, and is located 0.8 km to the south-west of the Site boundary. The closest property is Mountainblaw Farm which stands alone approximately 200 m south of the Site's southern boundary on Tashieburn Road, and is located 1.25 km south of the nearest turbine.

16.4.3 Tourism and Recreation

16.4.3.1 Tourism and Recreation Receptors

68. Tourism is a key element in the socio-economic, environmental and cultural welfare of Scotland. In 2018, around 15.5 million overnight trips were taken in Scotland (a 3% increase from 2017), for which visitor expenditure totalled around £5.1 billion⁴⁴.
69. With regard to South Lanarkshire and West Lothian, the tourism sector is predominantly centred on cultural heritage, and outdoor recreational activities such as walking, cycling and hiking. This is outlined in the respective Councils' Development Plans (Section 11) which support the protection of rural areas and the natural and built environments.
70. There are nearby settlements which offer a range of accommodation; the nearest is Forth which is located approximately 1.5 km south-west of the Site. Formally recognised tourist attractions and activities, including accommodation options, within the Study Area are included within Table 16.5 below.

Table 16.5: Recreational Attractions and Tourist Facilities within Study Area

Tourist Activity / Attraction	Approximate Distance from Site	Approximate Distance from nearest Turbine	Contextual Location
Wilsontown Ironworks	Located partly within Site boundary	>1 km (S)	Wilstontown

⁴⁴ 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 04/09/2020)

Tourist Activity / Attraction	Approximate Distance from Site	Approximate Distance from nearest Turbine	Contextual Location
The Church at The Old Manse (self-catering accommodation)	1 km (S)	2.2 km (S)	Forth
The Willie Waddell Sports and Community Centre	1.3 km (SW)	2.4 km (SW)	Forth
Cleugh Farm Cottages	1.3 km (SW)	2.4 km (SW)	Forth
Cobbinshaw Reservoir	2.6 km (E)	3.1 km (E)	Woolfords
Greenburn Golf Club	3 km (NW)	3.5 km (NW)	Fauldhouse
Craighhead Farm Hotel	2.8 km (N)	3.2 km (N)	Longridge
Crossfield Farm and Farm shop	3.1 km (N)	3.5 km (N)	Longridge
Knowes Colliery Woodland Country Park	3.7 km (NW)	4.1 km (NW)	Fauldhouse
Fauldhouse Meadows	3.5 km (NNW)	3.8 km (NNW)	Fauldhouse
The Pitstop Softplay	4.3 km (NW)	4.5 km (NE)	West Calder
Cobbinshawloch Cottages	3.2 km (E)	3.7 km (E)	Woolfords
Backbrae House	2.5 km (S)	3.6 km (S)	Braehead
Muirhall Holiday Cottages	3.6 km (SE)	4.5 km (SE)	Auchengray
Addiewell Bing Nature Reserve	4.7 km (NE)	5.1 km (NE)	West Calder
Harburn Golf Club	6.4 km (NE)	6.8 km (NE)	Harburn, West Lothian
Ampherlaw Farmhouse Luxury Self Catering Accommodation	5.3 km (SE)	6.3 km (SE)	Auchengray

71. The local area is popular amongst tourists and also local walkers, and there are a number of Core Paths within the 5 km Study Area, and one Core Path route traverses the Site linking Tormywheel to Wilstontown. These paths are shown on Figure 16.1 and Figure 16.2, and listed in Table 16.6 below:

Table 16.6: Identified Paths within 5 km

Type of Route	Status of Route	Route Reference	Approximate Distance from Site	Approximate Distance from Nearest Turbine
SLC Core Path	Local	CL/3166/1	Onsite	220 m (W)
SLC Core Path	Local	CL/3167/1	Onsite	250 m (W)
SLC Core Path	Local	CL/3165/1	Onsite	850 m (SW)
SLC Core Path	Local	CL/3164/1	70 m (S)	1.3 km (SW)
SLC Core Path	Local	CL/3163/1	275 m (S)	1.4 km (SW)
SLC Core Path	Local	CL/3159/1	280 m (S)	1.5 km (S)
SLC Core Path	Local	CL/3156/1	400 m (S)	1.6 km (SW)

Type of Route	Status of Route	Route Reference	Approximate Distance from Site	Approximate Distance from Nearest Turbine
SLC Core Path	Local	CL/3160/1	450 m (S)	1.6 km (S)
SLC Core Path	Local	CL/3157/1	500 m (S)	1.7 km (SW)
SLC Core Path	Local	CL/3155/1	700 m (SW)	1.9 km (SW)
SLC Core Path	Local	CL/3161/1	800 m (S)	2 km (S)
SLC Core Path	Local	CL/3162/1	1 km (S)	2.2 km (S)
SLC Core Path	Local	CL/3151/1	1.3 km (S)	2.4 km (S)
SLC Core Path	Local	CL/3110/1	2.2 km (W)	2.8 km (W)
WLC Core Path	Local	Greenburn-Fauldhouse	2.6 km (NW)	3 km (NW)
SLC Core Path	Local	CL/3150/1	2.4 km (S)	3.4 km (S)
SLC Core Path	Local	CL/3136/1	2.6 km (SW)	3.8 km (SW)
WLC Core Path	Local	Stoneyburn	3.7 km (NE)	4 km (NE)
SLC Core Path	Local	CL/3108/1	3.8 km (W)	5 km (W)
SLC Core Path	Local	CL/3113/1	4.5 km (SW)	5.3 km (SW)
SLC Core Path	Local	CL/3107/1	4.4 km (W)	5.4 km (W)
SLC Core Path	Local	CL/3170/1	4.9 km (SW)	6 km (SW)

72. It is acknowledged that public access may not be limited to such formally recognised routes, particularly under consideration of the Land Reform Act (Scotland) 2003⁴⁵. Such routes may include members of the public making use of the wider access tracks associated with the forest. These paths are recognised as being regularly used by local walkers, cyclists, runners and horse riders.
73. The paths running through the western section of the Site follow forestry tracks, link Tormywheel Wind Farm in the north with the settlement of Wilsontown to the south. The route (Note it is one linear route, however it is split into the following Core Path sections by SLC: CL/3156/1, CL3157/1, CL/3163/1, CL3164/1, CL/3165/1, CL3166/1, CL/3167/1) runs through the Wilsontown Ironworks Scheduled Monument, and associated interpretation boards, and there is a car parking and picnic area within Wilsontown adjacent to the path which suggests a certain level of tourism interest. Beyond usage by local residents, it would be anticipated that people using the path are drawn to the area

⁴⁵ Scottish Government (2003) Land Reform (Scotland) Act 2003 [Online] Available at: <https://www.legislation.gov.uk/asp/2003/2/contents> (Accessed on 01/04/2020)

for the cultural heritage interest, and there is a degree of information published online advertising Wilsontown Ironworks as a place of interest.

74. With the exception of the Core Path route including CL/3165/1, CL3166/1 and CL/3167/1 which runs through the Site and onto Wilsontown, all walking routes within 5 km are clustered around the village of Forth. The majority of these Core Paths run along forestry tracks, as well as several sections which run along wind farm access tracks at Black Law Wind Farm, indicating the occurrence of recreational activity at this nearby operational wind farm development.
75. Other than the Wilsontown Ironworks, there are no notable advertised points of interest which the walking routes link, and it may be assumed that the majority of those using the paths, will be local residents, rather than those who have specifically made a journey to visit the area.
76. The paths to the north of the Site, within Greenburn and Stoneyburn, are managed by WLC, and appear to be utilised as links through the settlements.

16.4.3.2 Public Attitudes towards Wind Farm Development

77. 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.
78. 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 do not have any significant impacts on the levels of tourism. This finding is supported by the example of Whitelee Wind Farm Visitor Centre which attracted over 120,000 visitors in the first 12 months of opening in 2009. This could be interpreted as an example of onshore wind increasing tourism and recreational amenities however, it is acknowledged this is a site-specific case.
79. Based on this research, VisitScotland published a Position Statement⁴⁶ 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."
80. The Public Attitudes Tracker, published by the Department for Business Energy and Industrial Strategy (BEIS) in August 2020⁴⁷, showed a record 80% of people support the development of renewable development, including onshore wind, compared to a previous 76% in 2018. The advance in onshore wind development in Scotland has also been accompanied by an interest in understanding whether 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

⁴⁶ 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 20/05/2020)

⁴⁷ Department for Business, Energy and Industrial Strategy (2020). BEIS Public Attitudes Survey – Wave 28 [Online]. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/906452/BEIS_PAT_W34_-_Key_findings.pdf (Accessed 20/08/2020).

farm cases across England and Wales and that there was, in fact, a slight beneficial influence on house prices from the cases analysed⁴⁸.

81. 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 2km radius and reduce property prices as far as 14km away⁴⁹, as a result of visibility of the turbines. Subsequently, ClimateXChange did a parallel study based on Scottish property and following Gibbons' approach, but with an increased resolution and precision of the data⁵⁰. 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.

16.5 ASSESSMENT OF POTENTIAL EFFECTS

16.5.1 Socio-Economics

82. 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.
83. The direct, indirect and induced effects are assessed below for each phase of the Development. This follows a more general assessment of wider benefits.

16.5.1.1 Wider Economic Benefits

84. 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,

⁴⁸ RenewableUK (2014). The Effect of Wind Farms on House Prices [Online]. Available at: <http://ruk.pixl8-hosting.co.uk/en/publications/index.cfm/RenewableUK-CebrStudy-The-effect-of-wind-farms-on-house-prices> (Accessed 04/09/2020).

⁴⁹ 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.

⁵⁰ Hebllich *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 04/09/2020).

including those in and around the east coast, although these are currently primarily for offshore machines.

85. 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 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.
86. 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 retention in the area of the working age population.

16.5.1.2 Construction Effects

Employment

87. 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.
88. 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. Local contractors will be encouraged to tender for construction, operation and maintenance work wherever possible, to ensure maximum benefit to local communities.
89. 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.
90. It is anticipated that a temporary workforce averaging up to 60 people at any one time will be employed during the 18 month construction period. It is standard practice in economic appraisals to convert temporary employment levels into full-time equivalents (FTEs). Therefore, using a conversion factor of ten years of full time employment to one permanent FTE, the total employment generated through construction is predicted to be 9 FTEs.

91. 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 2012⁵¹ found that the average salary for employees in the onshore wind sector is £34,613.
92. Overall, the construction of the Development will bring short-term, positive, direct and indirect effects to 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 (as detailed in Section 16.4.1.1), but effects will represent a minor positive effect at the local level (of low sensitivity). This is considered not significant under the EIA Regulations.

Induced Effects

93. 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 area, and it is expected that local services will be used by temporary construction contractors.
94. There may also be the opportunity for local people working on the Development to develop skills gained during construction which will be of benefit both individually and to the local economy in the longer term, such as project management and construction skills which would be transferrable to other construction roles, including other wind farm projects.
95. 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*⁵² 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 16.4.1.3, 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 investment⁵³.
96. 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 (as detailed in Section 16.4.1), but effects will be minor, short-term, positive at the local level (of low sensitivity). This is considered not significant under the EIA Regulations.

⁵¹ 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 21/08/2020)

⁵² 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 21/08/2020)

⁵³ 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 20/08/2020)

Capital Expenditure

97. Based on the BiGGAR Economics report commissioned by RenewableUK⁵⁴, onshore wind Capital Expenditure (CAPEX) is £1.32 million per megawatt (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.
 - Grid Connection: Engineering services; Construction; Electrical Components; and industrial equipment and machinery.
98. On the basis that the Development has an installed capacity of up to 80 MW, a total CAPEX of the order of £105.6 million, would be expected, dependent on the final installed capacity.
99. The BiGGAR Report estimates that, of these construction costs, regional expenditure would be 12% (in this case South Lanarkshire and West Lothian); national expenditure would be 36% (Scotland); and UK expenditure would be 47%. 53% of construction costs will be spent outwith the UK.
100. On this basis, it is estimated that, during the construction phase, the Development will be worth approximately £49.6 million to the UK economy. Of that approximately £38 million is expected to be spent within Scotland (national) and £12.6 million is expected to be spent within South Lanarkshire and West Lothian (regional).
101. The Development will bring short-term, positive, direct, indirect and induced effects to the national and regional area, through the expenditure on capital costs.
102. 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, and which is considered not significant in terms of the EIA Regulations.

16.5.1.3 Operational Effects

Employment

103. 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 occasionally service the turbines. Induced effects will include local spending by the Applicant and maintenance contractors.
104. The operation of the Development will bring long-term, positive, 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 negligible 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.

⁵⁴ 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 04/09/2020)

Operational Expenditure

105. In the 2015 BiGGAR report 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.
106. For the Development, annual Operational Expenditure (OPEX) is therefore expected to be approximately £4.8 million per annum, dependent on the final installed capacity. Of this total spend, the BiGGAR report estimates that 42% 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.
107. The OPEX for the Development is not substantial in magnitude in comparison to the annual gross domestic product (GDP) of South Lanarkshire and West Lothian or the value of the renewable industry in Scotland, with the majority of the expenditure taking place at the local, regional or Scotland level. This is considered to be a positive, albeit minor effect, and would be not significant in terms of the EIA Regulations.

Community Benefit

108. 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 Strategy⁵⁵.
109. The Development will contribute £5,000 per MW installed capacity to a Community Fund. This will result in an annual value of up to approximately £400,000 per year. With a 30 year operational consent, this will provide up to approximately £12 million in community benefit, dependent on the final installed capacity.
110. Although not a material consideration for the planning process, and therefore carries no weight in the EIA significance findings, the Community Fund represents a positive effect for the local community.

Community Ownership

111. The Scottish Government has set targets for community ownership in onshore wind and the project landowners, FLS, is an Agency of the Scottish Government. The Applicant supports the principle of these targets and, in agreement with FLS, are offering the community to take a stake of up to 25% in the project.
112. EDF Renewables have contacted local stakeholders and community organisations to gauge any interest there may be in shared ownership in the Development. A leaflet outlining the opportunity is made available as an appendix to the Pre-application Consultation (PAC) Report which accompanies the application.
113. This means that if the wind farm is built, shared ownership would give local community groups an opportunity to invest in the wind farm and share any profit generated. Any

⁵⁵ 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 21/02/2020)

community decision on shared ownership, and how it would work in practice for the Heathland project, would take place after the wind farm has been built.

16.5.1.4 Decommissioning Effects

114. 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 (approximately eight months), thereby representing a minor, short-term, positive effect acting at local level, resulting in a minor effect which is considered not significant in terms of the EIA Regulations.

16.5.2 Land-Use

115. The Site covers an area of circa 831 ha. 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 and meteorological mast) equates to 26.7 ha; following construction and restoration, the footprint of the Development infrastructure on the surface of the ground will be 19.1 ha. This equates to approximately 2.3% of the total land in the Site.
116. The forestry felling required in addition to the Development footprint is approximately 58.45 ha, 8.55 ha of which is restorable following construction. Therefore, 49.9 ha of forestry would be cleared from the Site and replanted on a substitute site as compensatory planting.
117. The total land-take, including both the infrastructure footprint and required felling (not including that which will be restored following construction), is 69 ha, which equates to approximately 8.3% of the total land in the Site. This removal of forestry will be offset by compensatory planting which would be replanted on a substitute site.

16.5.2.1 Construction Effects

118. The Development is located within an area of commercial forestry operations and will involve the felling of 58.45 ha of forestry within the Site, as described in Chapter 15 – Forestry. The forestry removal required for the Development will be the first construction activity to occur in the development programme.
119. The Forestry Design Plan has been 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.
120. One of the Development borrow pits is adjacent to the FLS Brownrock quarry. A short length of purpose built track has been included within the Development to the south of the borrow pit. This design is to ensure access does not impact on any required FLS quarry operations during construction.
121. The Core Paths demonstrate the use of the Site by the public, and therefore the land-use is considered to be a medium sensitivity receptor as it is used by the public for recreational purposes. As construction effects (e.g. restricted access for recreation) will be limited and temporary in nature, the magnitude of effects are considered low. This is explored further in Section 16.5.3.1.
122. Effects on land use arising from the construction phase is therefore considered to be of minor significance, 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.

16.5.2.2 Operational Effects

123. The operational phase of the Development will result in a loss of land which would otherwise continue to be used as forestry plantation. In order to comply with the criteria of the Scottish Government's Control of Woodland Removal Policy, 49.9 ha of off-site compensatory planting would be required. The Applicant is committed to providing appropriate compensatory planting; however, there will be a net loss of woodland area on Site due to the construction of the Development.
124. Of the 58.45 ha of forestry removed as part of the construction, 8.55 ha will be restocked on Site as part of the forest design plan, resulting in a net loss of 49.90 ha on Site; compensatory planting off-site will offset the loss of woodland caused by the Development.
125. From the total area within the Site of 831 ha, as noted above it is anticipated that the overall land-take as a result of the Development will be 69 ha, equating to around 8.3% of the land within the Site.
126. During operation, the remaining areas of the Site, not used for the Development and associated felling, will continue to host commercial forestry operations and quarry operations managed by FLS, as agreed with the Applicant.
127. In relation to Brownrock quarry, the Development infrastructure, including turbines, are located at a distance which would not restrict the ability to work this quarry. This includes blasting if required, with the appropriate communication and good practice measures in place in relation to Health & Safety. The location of the closest infrastructure T12 and access track has been positioned to minimise the potential to impact on any quarry extension to the north at a future time.
128. Effects arising from the operational phase on recreational use of the Site is detailed within Section 16.5.3.2.
129. The change to land use is therefore considered to be of low magnitude. The land-take on a medium sensitivity receptor is a long-term, minor effect on land-use, which is considered to be not significant in terms of the EIA Regulations.
130. 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 accordance with the EIA Regulations.

16.5.2.3 Decommissioning Effects

131. The operational lifespan of the Development will be 30 years. Following this, an application may be submitted to retain or replace the turbines, or they could be decommissioned. It is anticipated that there will be no additional land-use effects associated with the decommissioning of the Development.
132. Disruption to land-use during decommissioning will be similar to that during construction, with a temporary cessation of forestry, quarrying and recreational activities in the vicinity of the Site while activities to remove the turbines are undertaken. It is expected that decommissioning would take up to 8 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 medium sensitivity receptor, which is considered not to be significant in terms of the EIA Regulations.
133. 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 Councils. 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.

134. The land-use is a medium sensitivity receptor and the magnitude of effect is expected to be low.

135. As stated throughout this Section, the effects of the Development will not have a significant effect on land-use receptors in accordance with the EIA Regulations.

16.5.3 Tourism and Recreation

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

- Direct effects: for example, construction activities interfering with rights of access; and
- Indirect effects: such as the changes in amenity on tourists and recreational land users.

16.5.3.1 Construction Effects

137. The Site is currently accessible to the public by virtue of the Core Paths on site and via the Land Reform Act (Scotland) 2003⁵⁶, however, access to areas where construction is taking place or where there are construction related activities may be restricted temporarily. The Construction (Design and Management) Regulations 2015⁵⁷ is a legal obligation for health and safety purposes. 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 Councils.

138. It is considered that the Site is of medium sensitivity for recreation, as it contains Core Paths CL3165/1, CL3166/1 and CL/3167/1 which are of importance at a local to regional level. However outwith the Core Path network, which is restricted to the west of the Site, the Site is not currently promoted for public access due to ongoing forestry operations. The effects on walking routes during construction will be limited to temporary access restrictions and general amenity from the construction site. Furthermore, given the proposed layout and entrance point for construction traffic, it is likely that these effects will be restricted to the path network in the northwest of the Site, and will likely not have effects on Core Paths CL/3165/1 and the southern part of CL/3166/1.

139. The magnitude of effect would be medium, given the construction phase will be temporary and restricted to parts of the Site where construction is taking place, and there is alternative access to the surrounding hills and paths, which are used as walking routes. Additionally, it should be noted that public restricted access applies presently when forestry operations are in place.

140. Therefore, the effect on walking routes within the Site is considered to be a short-term minor effect, which is not significant in terms of the EIA Regulations.

141. Considering Wilsontown Ironworks as a tourism and recreation receptor, located partly within the Site boundary, there will be no requirement to restrict access to Wilsontown Ironworks given the separation distance from the general developable area and the construction access point. There may be a temporary adverse effect on the general amenity of the asset as construction works are ongoing, however it is expected that any effect will be limited due to the intervening forestry which will limit views of the construction activities, and short term due to the temporary construction period.

⁵⁶ Scottish Government (2003) Land Reform (Scotland) Act 2003 [Online] Available at: <https://www.legislation.gov.uk/asp/2003/2/contents> (Accessed 08/08/2020)

⁵⁷ 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 08/08/2020)

Therefore, the effect on Wilsontown Ironworks is considered to be a short-term, minor effects, which is not significant in terms of the EIA Regulations.

142. The construction phase will have no direct effects on walking routes outwith the Site or within the 5 km Study Area. Construction effects on amenity and enjoyment of these walks will be localised, as the construction works will only be detectable to route users for short periods along the route. As the walking routes have a medium sensitivity, as they are of local to regional importance, and the magnitude of change is considered to be negligible, the effects are considered to be short-term and negligible, and therefore not significant in terms of the EIA Regulations.
143. Other offsite resources such as the recreational assets, mentioned in Section 16.4.3.1, are unlikely to be affected by the construction of the Development. Due to the intervening distance of these receptors from the Development, it is considered that the magnitude of effect would be low and of low sensitivity to construction effects. Furthermore, as detailed in Section 16.4.3.2, it is not likely that these assets would receive reduced visitor numbers as a result of the wind farm. Therefore this signifies a short-term, negligible adverse effect which is considered to be not significant in terms of the EIA Regulations.
144. 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. The Development will result in a short-term, positive effect at local level, resulting in a minor effect, which is, however, not significant in terms of the EIA Regulations.
145. As stated throughout this Section, the effects of the construction phase of the Development are considered to be not significant on tourism and recreation receptors in accordance with the EIA Regulations.

16.5.3.2 Operational Effects

146. 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 available. The visual effects of the Development on tourism and recreational resources such as the Pentland Hills, though this is outwith the tourism and recreation Study Area, are assessed in Chapter 6 - Landscape and Visual Impact Assessment of this EIA Report. It should be noted that there is a distinction between a visual effect and a recreational amenity effect. Recreational amenity effects are described as effects that would influence the recreational value e.g. use or enjoyment of an asset such as a walking route.
147. The land within the Development will be accessible to the public at all times of the year via the path network and the Land Reform Act (Scotland) 2003. However, temporary exclusions may be needed, for health and safety reasons, during times where essential maintenance is required. Where these are required, clear signage advising of the restrictions will be provided. Additionally, it should be noted that public restricted access applies presently when forestry operations are in place. This would therefore represent a low magnitude of effect on a medium sensitivity receptor, constituting long-term, minor, negative effect which is not significant in terms of the EIA Regulations.
148. There are a number of further Core Paths identified within the Study Area and within the Site. Within the Study Area are the Core Paths which run along wind farm access tracks at Black Law Wind Farm. These tracks run to turbine bases in many cases which indicate that the paths may not necessarily present a significant constraint to development, and that the Development may provide an opportunity for improved access. As well with Whitelee Wind Farm (see Section 16.4.3.2 of this Chapter), it is evident that wind farms may work in tandem with recreational activities.

149. The operation of the Development is therefore not expected to alter the features or characteristics of onsite or nearby Core Paths. It is expected that the Development will have no impact on the behaviour of visitors/tourists that use paths within the Study Area during operation. Therefore, the effect assessed is considered to be negligible, and therefore not significant in terms of the EIA Regulations.

150. Surveys of the public's attitudes to wind farms provide no clear evidence that the presence of wind farms in an area has an adverse impact on local tourism (see Section 16.4.3.2 of this Chapter). Tourists using the local Core Paths and local tourist attractions may have a particular sensitivity to visual effects; however, access to tourist facilities will be unaffected. Hence, even where significant visual effects are predicted, adverse effects of the operational phase of the Development on tourism receptors will be not significant in accordance with the EIA Regulations.

16.5.3.3 Decommissioning Effects

151. Effects during the decommissioning phase are anticipated to be of a similar nature and scale as construction effects, thereby not significant in terms of the EIA Regulations.

16.6 GRID ROUTE

152. Although the precise grid route has not been confirmed, it is not considered likely that the grid route will have any significant effects on socio-economic, land use, or tourism and recreation receptors.

153. The route will be designed to minimise disturbance to local paths and routes that are used for recreational purposes. If temporary closures are required, alternative routes will be arranged where necessary, and notices placed around the route with details of diversions.

154. There is potential for the construction of the grid route to create employment and contract opportunities for local and regional contractors, as well as indirect opportunities such as increased trade from the construction period and skill development.

16.7 CUMULATIVE EFFECT ASSESSMENT

155. The appropriate scale for considering cumulative development depends on the nature of the potential effect. There are considered in turn, for each category of potential effect.

156. There are a number of wind farms within 10 km of the Site, either consented or in the planning process, as set out in Table 16.7.

Table 16.7: Cumulative Wind Farm Sites

Wind Farm	Status of Wind Farm	Approximate Distance to the Site
Tormywheel	Operational	150 m northwest
Longhill Burn	Consented	150 m northeast
Tormywheel Extension	Consented	200 m northwest
Upper Haywood Farm Turbine	Operational	900 m south
Upper Haywood Farm Extension	Consented	950 m south
Pates Hill	Operational	2 km east
Burnfoot Poultry Farm Turbine	Consented	2.4 km southeast
Heathland Single Turbine	Operational	3 km west
Black Law Extension Phase 1	Operational	3.5 km west
Climpy	Operational	3.5 km west-southwest

Wind Farm	Status of Wind Farm	Approximate Distance to the Site
Muldron Farm Turbine	Operational	3.6 km northwest
Black Law	Operational	4.8 km west
Pearie Law	Operational	4.9 km east
Muirhall	Operational	4.9 km southeast
Harburnhead	Operational	6 km east
Black Law Extension Phase 2	Operational	7.3 km west
Muirhall Extension	Operational	7.3 km southeast
West Benhar	Application	7.5 km northwest
Muirhall South	Operational	7.5 km southeast
Camilty	Application	7.8 km east
Brownhill Farm	Application	8 km northwest
Torrance Farm Extension	Operational	9 km northwest
Torrance Farm	Operational	9 km northwest
Watsonhead Farm	Application	9.9 km southwest
Standhill Farm	Operational	9.9 km northwest

157. 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 operations and maintenance operations of the Development will be based locally as there would be enough opportunity locally to employ full time employees and companies.

16.7.1 Socio-Economics

158. Regional socio-economic effects have been defined as at the scale of the Councils. The beneficial socio-economic effects associated with the Development would be increased and prolonged as a result of the construction and operation of cumulative wind farm developments, benefiting both the construction and energy generation sectors. However, even with the addition of the Development, the combined effect with other wind farms would be considered unlikely to lead to a fundamental change in economic activity within the Councils. This is considered to be not significant in the terms of this EIA, and in terms of the EIA Regulations.

159. Potential exists in the future, should a large enough number of wind farms be 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 to be not significant.

16.7.2 Land Use

160. The felling as a result of the Development represents a small footprint of land under commercial forestry operations in the wider region, approximately 5,068 ha in South Lanarkshire⁵⁸ and 1,666 ha within West Lothian⁵⁹.

⁵⁸ Forestry Commission Scotland (2013) Native Woodland Survey of Scotland – South Lanarkshire [Online] Available at: <https://scotland.forestry.gov.uk/images/corporate/pdf/fcs-nwss-south-lanarkshire.pdf> (Accessed 25/11/2020).

⁵⁹ Forestry Commission Scotland (2013) Native Woodland Survey of Scotland – West Lothian [Online] Available at: <https://scotland.forestry.gov.uk/images/corporate/pdf/fcs-nwss-west-lothian.pdf> (Accessed 25/11/2020)

161. In order to comply with the criteria of the Scottish Government's Control of Woodland Removal Policy, off-site compensation planting is required by all windfarms to offset removal of forestry on Site. Although planting will be on a substitute Site there will be no net loss. The location of that substitute site has yet to be identified but in compliance with the terms of the Control of Woodland Removal Policy details including the location, design, planting timescale and appropriate post-planting maintenance schedules would be agreed with Scottish Forestry in advance of construction commencing on the Development.
162. As stated in Chapter 3 - The Development, it is estimated that the felling required for the Development throughout operation, following completion of construction, will be approximately 49.9 ha, equating to approximately 6% of the total land in the Site.
163. Additionally, the remaining areas of the Site, not used for the Development and associated felling, will continue to host commercial forestry operations and quarry operations managed by FLS. This is a resultant negligible effect, and therefore, not significant in terms of the EIA Regulations.

16.7.3 Tourism and Recreation

164. Cumulative visual effects on outdoor recreational and tourism facilities resulting from the Development in conjunction with other windfarms in the Study Area are assessed in Chapter 6 - Landscape and Visual Impact Assessment of this EIA Report.
165. Cumulative effects on the amenity of tourism and recreation receptors during operation are strongly linked to visual effect. As set out in Section 16.4.3.2, there is no evidence that tourism is adversely impacted by wind farms.
166. In SLC and WLC, the region has seen large increases in wind turbine developments in the last decade, with 520 MW growth in installed capacity between 2009 and 2015⁶⁰. This trend is mirrored across Scotland, with 8.4% growth in onshore wind installed capacity between 2017 and 2018⁶¹.
167. Despite the increased installation of onshore wind capacity in the Councils' areas and Scotland, tourism has also risen⁶² over the same period. Between 2010 and 2015, the percentage change in visitor numbers to West Lothian's paid attractions increased by almost 50%⁶³, despite the deployment of more onshore wind developments.
168. It is considered that wind farm development does not have a noticeable effect on tourism and no cumulative effects from the Development are anticipated.

16.8 MITIGATION AND RESIDUAL EFFECTS

169. The effect of the temporary closure of the Core Paths and other recreational routes within the Site during the construction period is considered to be a short-term, minor, direct effect. The mitigation proposed for this effect is that notices will be placed in prominent locations around the Development Site with details of any areas with restricted access

⁶⁰ 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 21/05/2020)

⁶¹ UK Government (2019) Renewable electricity in Scotland, Wales, Northern Ireland and the regions of England in 2018 [Online] Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/834159/Regional_Renewables_2018.pdf (Accessed on 21/05/2020)

⁶² Visit Scotland (2019) Insight Department Key Facts on Tourism in Scotland [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 21/05/2020)

⁶³ West Lothian Council (2014) Economic Profile [online] Available at: https://www.westlothian.gov.uk/media/3887/West-Lothian-Economic-Profile/pdf/2014-04-30_Economic_profile_2014_-_final_online_low_res.pdf (Accessed 21/08/2020).

and where routes have been diverted. Such measures would be agreed in advance of construction with the Councils, as appropriate. This mitigation proposed is considered to change the significance of the effect to negligible, as the diversion will still present a slight alteration to the baseline of the asset, however the effect remains not significant in terms of the EIA Regulations.

16.9 SUMMARY OF EFFECTS

170. Table 16.8 provides a summary of the effects detailed within this chapter.

Table 16.8 Summary of Effects

Receptor	Potential Effect	Significance of Effect	Mitigation Proposed	Residual Effect
Construction Phase				
Employment	Direct local employment opportunities	Minor, positive	None proposed	Minor, positive
Local economy	Capital expenditure within the local area	Minor, positive	None proposed	Minor, positive
Skill development and indirect employment	Indirect and induced employment opportunities and skill development	Minor, positive	None proposed	Minor, positive
Core Paths within Site (CL3165/1, CL3166/1 and CL/3167/1)	Temporary loss of public access for health and safety	Minor, negative	Access restrictions would be minimised, and signage would be erected to advise of alternative routes where possible	Negative, negligible
Wilsontown Ironworks	Adverse effect on amenity of tourism and recreational receptor during construction period	Minor, negative	None proposed	Minor, negative
Core Paths within 5km of the Site	Reduced visual amenity for temporary periods throughout the walks	Negligible	None proposed	Negligible
Local tourism receptors (within 5 km)	Reduced visitor numbers	Negligible	None proposed	Negligible
Local shops and accommodation	Increased business from construction workers	Minor, positive	None proposed	Minor, positive
Land use	Temporary ceasing of	Minor, negative	None proposed	Minor, negative

Receptor	Potential Effect	Significance of Effect	Mitigation Proposed	Residual Effect
	forestry/quarrying operations			
Operational Phase				
Local area	Increased employment and business opportunities	Negligible, positive	None proposed	Negligible, positive
Local and regional economy	Operational expenditure to the regional	Minor, positive	None proposed	Minor, positive
Path network within the Site (CL3165/1, CL3166/1 and CL/3167/1)	Access restrictions within the Site during maintenance	Minor, negative	None proposed	Minor, negative
Path network within the Site (CL3165/1, CL3166/1 and CL/3167/1)	Reduced usage and visitor numbers due to the Development	Negligible	None proposed	Negligible
Local tourism receptors (within 5km)	Reduced visitor numbers	Negligible	None proposed	Negligible
Land use	Change of land use to include the Development. Site will continue to host commercial forestry operations.	Minor	None proposed	Minor

16.10 STATEMENT OF SIGNIFICANCE

171. The renewables industry is an important economic asset to the UK and Scotland, and supports a substantial and growing number of employment opportunities.
172. 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.
173. The establishment of a local community fund will make a valuable contribution to the local community surrounding the Site although not significant in terms of the EIA Regulations. There is further potential for enhancements from participation in shared ownership.
174. No significant effects in terms of the EIA Regulations are predicted on socio-economics, tourism and recreation and land-use receptors during the construction, operation or decommissioning phases of the Development.
175. There are a limited number of recreational opportunities within the Study Area, with more opportunities within the wider area. There will be no significant direct or indirect effects on tourism or recreation as a result of the Development both in isolation or cumulatively, although access to the land within the Site will be temporarily restricted to the public

during the construction and decommissioning phases for health and safety reasons. These effects are considered to be not significant in terms of the EIA Regulations.

176. The effect on existing land-use within the Site is not significant in terms of the EIA Regulations.