
6. Socio-Economics, Tourism and Recreation, and Land Use

6.1 Non-Technical Summary

6.1.1 This chapter of the EIA Report assesses the likely significant effects of Tom na Clach Wind Farm extension (hereafter known as the 'Proposed Development') with respect to Socio-Economics, Tourism, Recreation and Land Use.

6.1.2 The assessments presented in this chapter demonstrate that the Proposed Development would result in a moderate and potentially significant effect on recreational/tourism users around Lochindorb, but that there would be no other significant adverse effects from the proposals. The Proposed Development would lead to beneficial economic effects, but these are not expected to be significant.

6.2 Introduction

6.2.1 This chapter of the EIA Report assesses the likely significant effects of Tom na Clach Wind Farm extension (hereafter known as the 'Proposed Development') with respect to Socio-Economics, Land Use, Tourism and Recreation. The chapter should be read in conjunction with the development description provided in **Chapter 3: Description of Proposed Development** and with respect to relevant parts of other chapters **Chapter 9: Landscape and Visual Impact ('LVIA')**, **Chapter 11: Ecology**, and **Chapter 13: Hydrology**, where common receptors have been considered and where there is an overlap or relationship between the assessments of effects.

6.2.2 This chapter qualitatively assesses the potential impact of the Proposed Development on the baseline socio-economic situation of the local community and the impacts in relation to tourism and recreation within the defined Study Area.

6.3 Legislation, Policy and Guidance

Planning Policy Context

6.3.1 National/regional and district/local planning policies as well as policies in respect of economic development, tourism, and wider social and community effects may have a bearing on the scope of the assessment of socio-economic, tourism and recreation effects.

6.3.2 The Development Plan and other relevant planning policy are discussed within **Chapter 4: Planning Policy**. The following documents were examined for their relevance to this socio-economic, tourism and recreation assessment of the Proposed Development:

- National Planning Framework (NPF) 3 (2014);
- The Scottish Planning Policy (SPP) (2014);
- Scotland's Economic Strategy (2011 and 2015);
- A Low Carbon Economic Strategy for Scotland (2010);
- Scottish Energy Strategy: The Future of Energy in Scotland (2017);
- Highland-Wide Local Development Plan (HwLDP) (2012);
- The Inner Moray Firth Local Development Plan (IMFLDP) (2015); and
- Onshore Wind statutory Supplementary Guidance (2016).

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- 6.3.3 National, regional and local planning policy is supportive of renewable energy development. Local Planning Authorities are required to balance the benefits delivered by renewable energy schemes against any predicted adverse effects.

National Policies and Strategies

- 6.3.4 This section provides an overview of national policies of relevance to the Proposed Development. This section also considers national strategies of relevance to this socio-economic assessment.

National Planning Framework 3 (2014)

- 6.3.5 Scotland's Third National Planning Frameworkⁱ (NPF3 – Scottish Government, 2014) provides a statutory framework around which to orientate Scotland's long-term spatial development. Paragraph 2.2 of the NPF3 identifies Scotland's key economic sectors as energy; food and drink; life sciences; tourism; financial and business services; universities and the creative industries. Paragraph 2.24 recognises the important role of rural areas in supporting economic sectors including tourism, food and drink and other primary industries. The paragraph notes that "*growth and investment in these sectors relies on the continuing environmental quality of our countryside, infrastructure and the sustainable use of our natural resources*". At the same time paragraph 2.26 states that "*we do not wish to see development in our rural areas unnecessarily constrained*".

Fourth National Planning Framework 4

- 6.3.6 The fourth National Planning Policy Framework (NPF4) was published 10 November 2021 and consultation runs until 31 March 2022. Once approved by the Scottish Parliament, this plan will become part of the statutory development plan and will directly influence planning decisions.

- 6.3.7 The Town and Country Planning (Scotland) Act 1997 directs that the NPF must contribute to a series of six outcomes, including meeting targets for emissions of greenhouse gases. The plan sets a target of net zero emissions by 2045 and must make significant progress towards this by 2030, confirming that this will require new development and infrastructure across Scotland.

- 6.3.8 Spatial principles for Scotland by 2045 are set out, and include '*Just transition. Meeting our climate ambition will require a rapid transformation across all sectors of our economy and society.*'

- 6.3.9 The document refers to the Northern revitalisation area, which includes the Highlands, '*renowned for their stunning landscapes, rich biodiversity and cultural heritage.*' The document shows support for windfarms in this area, such as the Proposed Development, stating that the area '*also makes an important contribution to our climate change targets by supporting renewable energy generation. Repowering and extending existing wind farms will optimise their productivity and capitalise on the area's significant natural energy resources.*'

Scottish Planning Policy (2014)

- 6.3.10 The Scottish Planning Policyⁱⁱ (SPP) sets out the Scottish Government's objectives and expectations for the Scottish Planning System. In doing so the SPP aims to contribute to the achievement of the Scottish Government's overarching purpose of realising sustainable economic growth.

6.3.11 The '*Supporting Business and Employment*' Subject Policy within the SPP is of direct relevance to this socio-economic assessment. Under this policy, paragraph 93 of the SPP identifies three key principles for planning. Two of these principles are of relevance to the Proposed Development:

"Promote business and industrial development that increases economic activity while safeguarding and enhancing the natural and built environments as national assets; (and)

Give due weight to net economic benefit of proposed development".

6.3.12 Paragraph 187 states that '*Planning Authorities should support the development of wind farms in locations where the technology can operate efficiently, and environmental and cumulative impacts can be satisfactorily addressed. Development plans should provide a clear indication of the potential for development of wind farms of all scales, and should set out the criteria that will be considered in deciding applications for development of wind farms of all scales. The criteria will vary... but are likely to include:*

- *Effect on the local and national economy and tourism and recreation interests; and*
- *Benefits and disbenefits for communities.'*

The Government Economic Strategy (2011)

6.3.13 The Government Economic Strategyⁱⁱⁱ (Scottish Government, 2011) gives clear priority to accelerating economic recovery, with a range of measures to tackle unemployment and promote employability. Actions are focussed on six 'strategic priorities' which will drive sustainable economic growth and develop a more resilient and adaptable economy. These are: Supportive Business Environment; Transition to a Low Carbon Economy; Learning, Skills and Well-being; Infrastructure Development and Place; Effective Government; and Equity.

6.3.14 The 'Transition to a Low Carbon Economy' priority identifies the excellent opportunities Scotland has to secure investment and jobs from the growing low carbon sector and ensure that the benefits of this transformational change are shared across the economy and communities.

6.3.15 The Scottish Government has confirmed its intention to continue to play a key role in the national and international energy economy and its aim is to become a global leader in developing solutions to the challenge of climate change.

Scotland's Economic Strategy (Scottish Government, 2015)

6.3.16 This document^{iv} identifies the transition to a low carbon economy, including the deployment of renewable energy technologies, as a "key aspect" of the current Economic Strategy for Scotland.

A Low Carbon Economic Strategy for Scotland (Scottish Government, 2010)

6.3.17 This strategy^v explains how the Scottish Government intends to transition Scotland's current economy towards a low carbon one and explores the predicted socio-economic impacts of this transformation, including on inward investment and employment. Energy generation is identified as a key economic sector where substantial decarbonisation is required in order to meet statutory climate change

targets. The document observes that *"onshore wind is still the technology that can make the most immediate positive impact on our low carbon economy"* (paragraph 90) and therefore envisages the continued deployment of onshore wind farms, stating that *"the Scottish Government will continue to encourage large, medium and small scale developments that are sited appropriately"* (paragraph 90).

Scotland's Economic Action Plan (2019/20)

6.3.18 The Scottish Government's Economic Action Plan^{vi} for 2019/20 outlines the Scottish Government's plans to improve productivity and competitiveness in Scotland with the aim of making Scotland a leader in technological and social innovations. Additionally, the plan sets out how Scotland will transition to a carbon neutral economy while utilising the economic opportunities for Scotland presented by the transition.

6.3.19 The main outcome of the action plan is sustainable inclusive growth in Scotland, which would combine the goal of increasing prosperity with improving equity.

Local Energy Policy Statement

6.3.20 In January 2021, the Scottish Government published a statement^{vii} on Local Energy Policy which highlights the role that communities can have in supporting the transition to Net Zero. The statement includes a set of key principles for stakeholders engaging in local energy, which includes:

- Opportunity: seeking to support the creation of jobs and ensuring changes to the energy system support a just transition for Scotland's workforce.

Development Plan Policies

Highland Wide Local Development Plan

6.3.21 The Highland Wide Local Development Plan^{viii} was adopted in April 2012 and is the applicable development plan for the area covering the Proposed Development. Whilst **Chapter 4: Planning Policy** of this EIA Report sets out all the relevant planning policies, the paragraphs below provide an overview of those which are considered relevant to this socio-economic assessment.

Policy 67 – Renewable Energy Developments

6.3.22 Policy 67 requires that renewable energy developments should be *"well related to the source of the primary renewable resources that are needed for their operation. The Council will also consider:*

- *The contribution of the proposed development towards meeting renewable energy generation targets; and*
- *Any positive or negative effects it is likely to have on the local and national economy.*

The policy also states that the council will need to be satisfied that proposals are not *"significantly detrimental overall, having regard in particular to any significant effects on the following:*

- *Tourism and recreation interests".*

Policy 77 – Public Access

6.3.23 Policy 77 requires developments which affect any route defined in a Core Paths plan, an access point to water or wider access rights, to maintain or enhance any existing path including its amenity value, or ensure alternative access provision is provided which is no less attractive, is safe and convenient for public use, and does not damage or disturb habitats or species. Any proposal classed as a major development will need to be accompanied by an Access Plan, indicating existing public access provision alongside proposed public access provision both during and post-construction.

Policy 78 – Long Distance Routes

6.3.24 Policy 78 seeks to safeguard and enhance long distance routes, and their settings.

The Inner Moray Firth Local Development Plan (IMFLDP)

6.3.25 The IMFLDP was adopted in July 2015 and provides policies and proposals for delivering sustainable economic growth in the Inner Moray Firth area. It focuses largely on site allocations in settlements and communities, rather than presenting planning policies of relevance to onshore wind.

6.3.26 It notes that many rural parts of the plan area have high agricultural value and many are popular tourist destinations, in particular Loch Ness and the Black Isle.

6.3.27 Paragraph 1.3 notes that ‘the importance of the area nationally is recognised in the Scottish Government’s National Planning Framework 3 Main Issues Report (NPF3) which identifies Inverness and the Inner Moray Firth as an ‘Area of Coordinated Action’. It focuses on the potential for the area to deliver new homes and facilities for research, education and employment and realise the benefits from the energy sector.’

The Onshore Wind Energy Supplementary Guidance

6.3.28 The Onshore Wind Energy Supplementary Guidance^{ix} was adopted in November 2016 and is supplemented by Part 2B Highland Strategic Capacity assessment. This Supplementary Guidance (SG) sets out how The Highland Council (‘THC’) will manage onshore wind energy development proposals in line with Section 22 of the Town and County Planning (Scotland) Act 1997.

6.3.29 The supplementary guidance includes criteria on the amenity of key recreational routes and transport routes, as shown in **Table 6.0** below.

Table 0.0 Onshore Wind Energy Supplementary Guidance Criterion

Criterion 4	Measure
The amenity of key recreational routes and ways is respected.	The extent to which the proposal affects the amenity of key recreational routes and ways (e.g. Core Paths, Munros and Corbetts, Long Distance Routes etc...)
Development should seek to achieve a threshold where:	Wind turbines or other infrastructure do not overwhelm or otherwise significantly detract from the visual appeal of key routes and ways.

Criterion 5	Measure
The amenity of transport routes is respected.	The extent to which the proposal affects the amenity of transport routes (tourist routes as well as rail, ferry routes and local road access)
Development should seek to achieve a threshold where:	Wind turbines or other infrastructure do not overwhelm or otherwise significantly detract from the visual appeal of the transport routes.

6.3.30 The supplementary guidance notes that onshore wind energy development may deliver social and economic benefits to communities and that this is particularly important in a Highland context where around 44% of the THC area is identified by the Highlands and Islands Enterprise as Fragile. It is essential that applicants consider all opportunities for how their scheme could benefit local communities and demonstrate how it has the potential to deliver social and economic benefits.

6.3.31 In relation to tourism and recreation, this supplementary guidance states that THC will have regard to a range of considerations:

- Relevant research into the potential effects of wind farms on tourism and recreation;
- The potential for socio-economic benefits to be derived from the development proposals, for example, evidence of community benefit discussions;
- The potential for effects on industries for which the Highlands landscape is important – for example tourism and recreation; and
- The potential for secondary effects for tourism and recreation, such as change in land use that causes adverse effects, for example, a change from forestry to a wind farm, or where there are potential benefits like improved public access in the area.

6.3.32 For public access, this supplementary guidance requires that *'all proposals should seek to avoid significant adverse effects on the quality and quantity of public access. This will include any effect on a route included in a Core Paths Plan, an access point to water, wider access rights or Rights of Way as provided by the Scottish Rights of Way Society. The Council will encourage developers to improve path networks and create new opportunities for access. Members of the public access land around wind farms so applicants are encouraged to erect information boards at entrances to sites to make members of the public aware of relevant information and any potential risks.'*

6.3.33 Developers are urged to consider adequate mitigation of any adverse effects. This should include:

- Retention of any existing path or water access point while maintaining or enhancing its amenity value; or
- Alternative Access provision maintaining the same level of amenity, safety and convenience for public use.

Technical Guidance

6.3.34 There are no specific guidelines or requirements for the preparation of socio-economic assessments within EIAs. The method adopted in this chapter is therefore

one of determining the existing circumstances (the baseline) through desk-based analysis, drawing on a range of statistical information, research papers and information received during consultations.

6.4 Assessment Methodology and Significance Criteria

Scoping Response and Consultation

- 6.4.1 Throughout the scoping process, and subsequently during the ongoing EIA process, relevant organisations were contacted with regards to the Proposed Development. **Table 6.1** outlines the consultation responses received in relation to socio-economics, tourism and recreation and land-use.

Consultee	Issues Raised	Response	Where Addressed in This Chapter
	<ul style="list-style-type: none"> • Existing public non-motorised public access footpaths, bridleways and cycleways on the site and any proposed access route from the public road infrastructure. • Proposed public access provision both during construction and after completion of the development, including links to existing path networks (where appropriate) and to the surrounding area, and access points to water. • Impacts of the proposed development on the core paths and proposed mitigation (if any). <p>The application should be accompanied by an Access Management Plan, or one to be required via a condition, and should consider the requirement for any stopping up orders.</p>		<p>The Applicant would be agreeable to accepting a condition of any consent granted to produce an Access Management Plan.</p>

Study Area

- 6.4.2 To identify the key components of the local economy, existing land use, tourism and recreational facilities in the Highlands, a desk-based study using publicly available information has been undertaken. The Study Area for tourism and recreation was confirmed by the Scoping exercise as being 15km from the Proposed Development, with the population, employment and economic baseline focused on the Nairn and Cawdor ward within which the site is situated and for the Highlands as a local authority area. The land use Study Area for the Proposed Development is the site itself.

Desk Study

- 6.4.3 The assessment includes an extensive review of information sources to establish the baseline conditions and to identify current tourism and recreation businesses and resources as well as tourism and recreational activities in the Study Area. The assessment uses standard socio-economic and demographic data from available datasets, including the 2001 census and the 2011 census where available, NOMIS (the Office for National Statistics website), standard sources of tourist and visitor data found on Visit Scotland's website, and other individual research reports. Conclusions on previous surveys carried out regarding attitudes to wind farms have also been reviewed.

Survey Work

- 6.4.4 No site-specific survey work has been undertaken by the Applicant for this socio-economic assessment.

Assessment Methodology and Significance Criteria

- 6.4.5 The generic project-wide approach to the assessment methodology is set out in **Chapter 2: EIA Process**. However, whilst this has informed the approach that has been used in this socio-economic assessment, it is necessary to set out how this methodology has been applied, and adapted as appropriate, to address the specific needs of this socio-economic assessment.
- 6.4.6 This socio-economic assessment follows the approach set out in the Scoping Report submitted in March 2021 and conforms with the subsequent Scoping Opinion issued by Scottish Ministers (June 2021). In doing so, it takes into consideration associated consultation responses from statutory and other consultees.
- 6.4.7 The Proposed Development has the potential to generate a range of socio-economic effects (including effects on tourism, recreation and economics). The method adopted for this assessment draws on publicly available information and is based upon the approach set out in Morris and Therivel^x (2009). This is:
- Establishing the baseline to determine the existing socio-economic characteristics of the site and its surrounding area (receptors);
 - Defining receptor sensitivity to wind farm development where possible;
 - Identifying the potential change that the receptor would experience as a result of a proposed development, with consideration given to its magnitude, temporal scope (e.g. short/long term, temporary/permanent) and valency (i.e. adverse/beneficial);
 - Identifying the significance of potential socio-economic effects;

- Identifying mitigation measures where significant adverse effects are predicted; and
- Identifying any residual effects after mitigation.

6.4.8 As mentioned above, there is no specific guidance on identifying effects on socio-economics in the context of an EIA; however, there are a number of documents that can guide assessments for industry and economy and recreation and tourism effects. Predicted economic and employment effects can be quantified using the guidance set out in a report by O’Herlihy and Co Ltd (2006)^{xi} to Scottish Enterprise and a separate report by Renewable UK (2015)^{xii}. This includes consideration of effects during construction, operation and decommissioning. This guidance has been used together with updated datasets, though recognising that the geographic distribution of economic effects is project specific.

6.4.9 The guidance used to assess effects on recreational activities (including public outdoor access) accords with guidance contained within Appendix 5 of ‘A handbook on environmental impact assessment’^{xiii} (SNH, 2014). In particular, the assessment of potential impacts on physical access considers any changes to existing access arrangements during the construction, operation and decommissioning phases of the Proposed Development.

6.4.10 The tourism assessment component of this chapter follows the standards set out in the recommendations of the Moffat Report^{xiv} (2008) and the assessment of predicted effects on leisure and tourism receptors takes account of the findings detailed in **Chapter 9: LVIA**.

Assessment of Significance

6.4.11 **Table 6.2** below sets out the matrix for identifying significant effects. Major effects are significant in EIA terms, moderate effects are probably significant in EIA terms and minor / negligible effects are not significant in EIA terms.

Table 6.2 Significance Evaluation Matrix

		Magnitude of Change			
		Very High	High	Medium	Low
Sensitivity/Importance/Value	Very High	Major (significant)	Major (significant)	Moderate (Potentially significant)	Minor (Not significant)
	High	Major (significant)	Major (significant)	Moderate (Potentially significant)	Minor (Not significant)
	Medium	Major (significant)	Major (significant)	Moderate (Potentially significant)	Minor (Not significant)
	Low	Moderate (Potentially significant)	Moderate (Potentially significant)	Minor (Not significant)	Negligible (Not significant)

Economic and Employment Impacts

6.4.12 Sensitivity criteria in terms of employment, economy and land use are shown in **Table 6.3** below.

Table 6.3 Employment and Economy Sensitivity

Sensitivity	Definition
Very High	Employment – Where there is the requirement for very technical specialist input, which is difficult to source at a national level and/or there is very low labour or skills at a local level. Economy – Where the economy is very sensitive to financial change.
High	Employment -- Where there is some requirement for technical specialist input, which is difficult to source at a national level and /, or where there is limited labour or skills available at the local level. Economy – Where the economy is sensitive to financial change.
Medium	Employment – Where there is limited requirement for very technical specialist input, which is difficult to source at a national level, and /or where there are some constraints to the availability of labour or skills at the local level. Economy – Where the economy is resilient to change.
Low	Employment -- Where there no requirement for technical specialist input, and / or where there is a readily available labour force and skills. Economy – Where the economy is very resilient to financial change

6.4.13 The magnitude of potential changes on socio-economic receptors will be assessed as defined in **Tables 6.4, 6.6 and 6.8** below. In the case of economy, employment and land use effects, this is based on participants within the labour force; the level of occupational skills available, the resilience of the economy in the Study Area and the number of land uses on the site as set out in **Table 6.3** above.

Table 6.4 Employment and Economy Magnitude of Change

Magnitude of Change	Definition
Very High	An impact that would be very adverse/beneficial and very likely to affect a large number of businesses and/or people.
High	An impact that would be adverse/beneficial and that is likely to affect a moderate number of businesses and/or people.
Medium	An impact that would be adverse/beneficial and that it is likely to affect a small number of businesses and/or people.
Low	An impact that is anticipated to have a slight or no effect on the operation of businesses or the social resource.

Health

- 6.4.14 During the construction of the Proposed Development there would need to be construction workers brought into the area surrounding the site. This could put pressure on health services and facilities in the area surrounding the site. The main factors considered relevant when defining the sensitivity of receptors relating to health are outlined in **Table 6.5** below.

Table 6.5 Health Sensitivity

Sensitivity	Definition
Very High	Where health facilities are at capacity.
High	Where there is a low / limited number or availability of health facilities.
Medium	Where there is a constrained number or availability of health facilities.
Low	Where there are readily available health facilities.

- 6.4.15 The magnitude of change is gauged by estimating the level of change on the receptor as a result of Proposed Development. The magnitude of change is evaluated in line with the criteria below in **Table 6.6** below.

Table 6.6 Health Magnitude of Change

Magnitude of Change	Definition
Very High	Changes as a result of the Proposed Development are of national scale.
High	Changes as a result of the Proposed Development that are of greater than local scale or which exceeds recognised standards.
Medium	Noticeable changes at a local scale as a result of the Proposed Development.
Low	Slight changes as a result of the Proposed Development that may not be perceptible or are within the normal seasonal/annual variation range

Tourism and Recreation

- 6.4.16 Tourism and recreational behaviour would only be detrimentally affected where the Proposed Development either changes the visitor/user pattern in terms of numbers, and /or their patterns of expenditure for the worse. As such, opportunities for tourist and visitor expenditure, any potential variation in expenditure or visitor

numbers, and consequent effects on turnover or employment are of key importance.

- 6.4.17 Recreational behaviour would 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 access routes; obstructing access routes; enhancing access; reduction in amenity or intrusion; enhancement in amenity; and changes in setting and context of the recreational resource^{xv}.
- 6.4.18 The potential effect on recreational users is likely to be a factor of the proximity of the site, the resource in terms of usage and the type of resource, the visibility of the Proposed Development, and any diversion of recreational routes due to its presence.
- 6.4.19 The main factors considered relevant when defining the sensitivity of receptors relating to recreation and tourism are outlined in **Table 6.7** below.

Table 6.7 Tourism and Recreation Sensitivity

Sensitivity	Definition
Very High	Where the receptor or resource is defined as being of National (UK) status or has high visitor numbers.
High	Where the receptor or resource is defined as being National (Scotland) status or has high visitor numbers.
Medium	Where the receptor or resource is defined as being of regional status or has medium visitors' numbers.
Low	Where the receptor or resource is defined as being of local status or low visitor numbers.

- 6.4.20 The magnitude of change is gauged by estimating the level of change on the receptor as a result of Proposed Development. The magnitude of change is evaluated in line with the criteria below in **Table 6.8** below.

Table 6.8 Tourism and Recreation Magnitude of Change

Magnitude of Change	Definition
Very High	Where the extent of changes on receptors (activities, resources, or businesses) is very large scale and a very large number of people or activities would be affected.
High	Where the extent of changes on receptors (activities, resources, or businesses) is large scale and a large number of people or activities would be affected; or where other technical chapters conclude that there may be significant effects that this assessment considers may affect visitors to the recreation/tourist receptor (for example close views of turbines).
Medium	Where the extent of changes on receptors is small in scale, but a large number of people or activities would be affected; or alternatively where the extent of changes on activities, resources and/or businesses is large in scale but only a small number of people or activities would be affected.
Low	Where the extent of changes on receptors is small in scale and would only affect a small number of people or activities; or where the site would be unlikely to be visible (as it would be obscured by topography or woodland, etc) or would be at a considerable distance from receptors.

- 6.4.21 In line with standard EIA practice, and taking into account professional judgement, the sensitivity of receptors, as defined in **Table 6.3, Table 6.5 and Table 6.7**, are considered against the magnitude of change (**Table 6.4, Table 6.6 and Table 6.8**) to determine the significance of resultant effects as set out in **Table 6.2** above.
- 6.4.22 Based on the approach summarised in **Table 6.2** above, effects that would result in a change identified as major are considered to be significant in terms of the EIA Regulations and this assessment. Effects that are considered moderate are considered to be potentially significant.

6.5 Baseline Conditions

- 6.5.1 This section sets out the current baseline for this socio-economic assessment and identifies the key receptors against which the Proposed Development has been assessed. These subjects considered within the baseline conditions are:
- Population;
 - Employment and Economy;
 - Health;
 - Tourism and Recreation; and
 - Land Use.
- 6.5.2 Information is also provided in this baseline section about the renewables industry and public attitudes to wind farms in relation to tourism and recreation.

Renewable Energy Industry

Manufacturing & Supply Chain

- 6.5.3 There are currently no operational manufacturing plants in Scotland which specialise in the production of onshore turbine towers or major turbine components, with the most likely location for turbine manufacturing coming from elsewhere in northern Europe.
- 6.5.4 However, several leading engineering and energy companies have announced their intention to invest significant funds in deploying large-scale, next generation renewable energy technologies across Scotland, including at Fife Energy Park and Clydeport's Hunterston site.
- 6.5.5 There are also businesses across Scotland that are involved in developing secondary components for wind turbines, however these components are not required solely for wind turbines. Therefore, it is not possible to identify with any precision, the presence or absence of such businesses in the Highlands and whether any such businesses would directly benefit from the Proposed Development.

Employment & Investment

- 6.5.6 In January 2014, Scottish Renewables published a report entitled 'Employment in Renewable Energy in Scotland' by O'Herlihy & Co^{xvi}. which demonstrates that in 2013 there were at least 11,625 full time equivalent (FTE) posts within Scotland's renewable energy sector. This included 3,397 FTE posts within the onshore wind subsector, which has at least 343 firms operating in it, 103 of which are involved exclusively with onshore wind projects. Scottish Renewables recognises that this study is likely to have underestimated the numbers as it relied on a survey

methodology which means that there are likely to be organisations who were not included and who are either directly active in, or supply services to, the renewable energy sector in Scotland. Nonetheless, these statistics demonstrate the national and regional employment significance of both the renewables sector generally, and specifically the onshore wind industry.

- 6.5.7 In September 2019, as part of the Scottish Renewable Energy Festival^{xvii}, Scottish Renewables released a document which set out the contribution of renewable energy to innovation, jobs, communities, climate and the rural economy. The report revealed that in 2017, the renewable energy sector employed 17,700 people in Scotland, a number likely to increase as the Committee on Climate Change has calculated that Scotland must quadruple the amount of electricity it produces to meet its net-zero target. The 17,700 included 5,800 jobs in the onshore wind sector.
- 6.5.8 The Renewable UK Onshore Wind: Economic Impacts 2014 report evaluates the economic impacts of the UK onshore wind industry at national, regional and local scales. This report assesses the direct and indirect economic impacts of the commercial onshore wind sector using similar case studies and economic modelling methodologies.
- 6.5.9 The report concludes that throughout the period between 2012 and 2015, the percentage of expenditure from individual development projects coming into the UK has increased for development and construction phases and that a higher percentage of this is spent within local supply chains, however these trends are not evident for operations and maintenance. This means that projects such as the Proposed Development are now predicted to generate greater positive economic and employment impacts during their construction phase than was previously calculated.
- 6.5.10 From a detailed economic analysis of onshore wind case studies, the report concludes that for each 1MW of installed capacity, 69% of total expenditure takes place within the UK. This takes account of the following reported expenditure in the UK: 98% of development; 48% of construction; and 87% of operation and maintenance costs. The report also calculates that the medium-large subsector of the onshore wind market contributes 13,600 jobs and £906 million in gross value added (GVA) to the UK economy.
- 6.5.11 The Review of the Generation Costs and Deployment Potential of Renewable Energy Technologies in the UK report^{xviii} (DECC, 2011) analyses the deployment potential and generation costs of renewable electricity technologies in the UK up to 2030. It states that onshore wind energy "*still has significant deployment potential of around 17.3GW by 2030*". This report estimates total capital costs for onshore wind farms greater than 5MW to between £1.18m and £1.82m per MW installed, and an operating expenditure of between £30,000/MW/year and £73,000/MW/year (page 21).
- 6.5.12 A study by Scottish Renewables in March 2012^{xix} indicated that the 20GW of renewable energy developments located in Scotland have resulted in at least 11,136 FTEs being created, with 2,235 directly related to onshore wind, 3,223 related to the grid connections, with another 1,231 working across other sectors. Scottish Renewables recognises that this study is likely to have underestimated the numbers as the methodology followed did not factor in the "*lower tiers of the supply chain*"

along with "*induced jobs in other support services*". Therefore, this figure does not include roles in the delivery stage of renewable energy development.

- 6.5.13 Renewable UK published a report 'Working for a Green Britain and Northern Ireland'^{xx} in September 2013 which stated that employment in wind, wave and tidal energy sectors now directly employs 18,465 people full time, an increase of 74% since 2010, with the largest increase for offshore wind where the number of direct jobs doubled between 2010 and 2013. The report also showed that 91% of the employees in the UK wind and marine energy industry are UK citizens, while also showing that small and medium enterprises make up the heart of the sector and driving the growth in employment with more than 80% of employers in the sector employing fewer than 250 people with 56% employing fewer than 25 people. The report also predicted that over 70,000 jobs could be created over the next decade. Of the 18,465 people directly employed, 54% were in relation to onshore wind with 36% relating to large onshore wind (over 500kW turbines). Scotland accounts for 3,827 jobs, approximately 20% of the sector, which while lower than the total number of direct jobs in England, accounts for a higher proportion of total employment in Scotland (also higher than Wales and Northern Ireland).
- 6.5.14 Vivid Economics produced a report^{xxi} for Renewable UK in June 2019 - Quantifying the benefits of onshore wind to the UK¹. Deploying 35GW of onshore wind by 2035 could reduce UK electricity costs by 7%, support 31,000 jobs, lift productivity throughout the UK and enable a £360m export industry.
- 6.5.15 This report notes that the Committee on Climate Change (CCC) recently recommended that the UK government adopt a net zero emissions target by 2050, which would require a significant acceleration of onshore wind deployment. This recommendation was accepted by the UK Government and Parliament has now legislated to set the 2050 net zero target and to achieve this by 2045. Onshore wind is the cheapest low-carbon generation technology available. In order to reach net zero greenhouse gas emissions at least by 2050, the UK could need up to 35GW of onshore wind capacity by 2035. This would require the deployment of 1.4GW of onshore wind annually, a significant increase on the modest 0.6GW deployed in 2018. Beyond reducing emissions, accelerating deployment in line with CCC net zero recommendations would result in a series of socio-economic benefits to the UK (as previously detailed above) as follows:
- 7% reduction in electricity costs, saving households £50 per year;
 - £360m in exports annually by 2035;
 - 14,000 direct jobs and 17,000 indirect jobs; and
 - Productivity uplift throughout the UK.
- 6.5.16 The 14,000 jobs referenced above would be a threefold increase on current levels. The Office of National Statistics (ONS) estimates that there are 5,300 direct onshore wind jobs across the UK today. This number could nearly triple under a CCC-consistent deployment scenario, driven by an increase in development, manufacturing and installation jobs to around 7,200 in 2035. Operations and

¹ [Quantifying benefits of onshore wind to the UK \(vivideconomics.com\)](https://www.vivideconomics.com)

maintenance jobs are expected to increase steadily to around 3,000 in 2035 as the expenditure needed to operate and maintain onshore wind farms increases with deployment levels. To a lesser degree, these increases are driven by an increase in UK wind farm content from 66% today to a target of 70% by 2030. Jobs from exports could reach 3,700 by 2035 as the UK lifts exports from £53m today to £360m in 2035.

- 6.5.17 This report^{xxii} also notes that the onshore wind industry could support up to 31,000 direct and indirect^{xxiii} jobs by 2035. The ONS estimates that each direct onshore wind job supports 1.24 indirect jobs (ONS, 2019a). Today, the ONS estimates that the onshore wind industry supports 12,200 direct and indirect jobs. Deploying 35GW by 2035 could increase direct and indirect jobs steadily to 2030, followed by more modest job growth between 2030 and 2035. This modest jobs growth is driven by a deceleration in onshore wind capacity additions in the EU27 (European Union Countries), a key export market.
- 6.5.18 The Economic Impact of Scotland's Renewable Energy Sector^{xxiv} was commissioned by Scottish Renewables in June 2021. The report notes that the true economic impact of the renewables industry is not just the activity of the industry itself, but also includes the activity that it generates in its supply chains. The report finds that Scotland's renewables sector has a turnover of £2.8billion and 6,440 full-time equivalent employment.
- 6.5.19 The report surmises that, including spill over effects, such as employees spending their wages in the Scottish economy, Scotland's renewable activities support £5.2bn of output, £2.3bn of GVA and 22,660 FTE employment in the Scottish economy.

Population

- 6.5.20 Results from the 2011 Census show that the population of The Highlands on census day was 232,132 increasing to 235,540 in mid-2018. On 30 June 2020, the population of Highland was 235,430. This is a decrease of 0.2% from 235,830 in 2019. Over the same period, the population of Scotland increased by 0.0%.
- 6.5.21 The Highlands had the 7th highest population in 2020, out of all 32 council areas in Scotland. Between 2019 and 2020, 20 councils saw a population decrease and 12 councils saw a population increase. Between 1998 and 2020, the population of Highland has increased by 12.7%. This is the 8th highest percentage change out of the 32 council areas in Scotland. Over the same period, Scotland's population rose by 7.7%.
- 6.5.22 Between 2018 and 2028, the population of The Highlands is projected to increase from 235,540 to 236,664. This is an increase of 0.5%, which compares to a projected increase of 1.8%^{xxv} for Scotland as a whole.
- 6.5.23 Population data at the ward level is available from Scottish Neighbourhood Statistics. The site is located within the Nairn and Cawdor ward. The population of this ward^{xxvi} in 2020 was 13,456, with 95 births recorded in 2019. 2,035 children were receiving benefits in 2018. The average house price in 2018 was 206,514 - higher than that in the Highlands and Scotland overall. In the period 2016 - 2019, 24% of adults provided unpaid care, and 26% had long term or limiting illness.
- 6.5.24 At the time of the 2011 census, 58% of the population are aged 18-64, with 21% under 18 and the remaining 21% 65+^{xxvii}.

Employment and Economy

6.5.25 Table 6.9 below shows economic activity rates in the Highlands. The economic activity rate in the Highlands is higher than the equivalent rates for Scotland and the UK as a whole (81.7% compared with 77.9% for Scotland and 78.9% for the UK). In turn the economic activity rate for both males and females is higher in the Highlands. As a consequence of the high levels of economic activity, the unemployment rates are lower, for both males and females.

Table 6.9 Economic Activity Rates in The Highlands

	Highland (Numbers)	Highland (%)	Scotland (%)	Great Britain (%)
All People				
Economically Active	116,000	76.5	75.9	78.4
In Employment	114,100	75.2	72.2	74.4
Employees	91,900	61.8	64.3	64.7
Self-Employed	20,800	12.5	7.6	9.4
Unemployed	4,400	3.7	4.7	5.0
Males				
Economically Active	59,100	78.6	79.0	82.0
In Employment	58,400	77.7	74.4	77.6
Employees	43,600	60.0	64.7	65.2
Self-Employed	14,700	17.6	9.5	12.1
Unemployed	N/A	N/A	5.6	5.3
Females				
Economically Active	56,900	74.6	72.9	74.8
In Employment	55,700	72.9	70.1	70.2
Employees	48,400	63.5	64	64.3
Self-Employed	6,100	7.7	5.8	6.7
Unemployed	N/A	N/A	3.8	4.7

Source: <https://www.nomisweb.co.uk/reports/lmp/la/1946157421/report.aspx>

6.5.26 **Table 6.10** below shows that the biggest occupation for employment in the Highlands is professional occupations which accounts for 18% of those in employment, closely followed by skilled trades (15.2%) and then associate professional and technical occupations (12.9%). For all of these occupations, the percentages employed is lower than the equivalent figures for Scotland and the UK as a whole.

Table 6.10 Employment by Occupation

	Highland (Numbers)	Highland (%)	Scotland (%)	Great Britain (%)
Soc 2010 Major Group 1-3	48,700	42.7	48.4	50.0

	Highland (Numbers)	Highland (%)	Scotland (%)	Great Britain (%)
1 Managers, Directors And Senior Officials	8,000	7.0	8.4	10.9
2 Professional Occupations	26,000	22.8	24.1	23.3
3 Associate Professional & Technical	14,700	12.9	15.6	15.6
Soc 2010 Major Group 4-5	26,900	23.6	18.8	19.2
4 Administrative & Secretarial	11,400	10.0	9.6	10.2
5 Skilled Trades Occupations	15,600	13.7	9.2	9.0
Soc 2010 Major Group 6-7	18,700	16.4	17.6	16.1
6 Caring, Leisure And Other Service Occupations	10,200	8.9	9.3	9.0
7 Sales And Customer Service Occupations	8,500	7.5	8.3	7.1
Soc 2010 Major Group 8-9	19,800	17.3	15.2	14.7
8 Process Plant & Machine Operatives	7,300	6.4	5.3	5.6
9 Elementary Occupations	12,500	11.0	9.8	9.1

Source: <https://www.nomisweb.co.uk/reports/lmp/la/1946157421/report.aspx>

6.5.27 **Table 6.11** below shows employee jobs by industry. The dominant industries for employment are wholesale and retail trade; repair of motor vehicles and motorcycles (15.4%) and then accommodation and food service activities (11.5%). Accommodation and food service activities in particular is much higher in The Highlands than the equivalent figures for Scotland (7.2%) and Great Britain (7.2%) as a whole. Education, construction, and professional, scientific, and technical activities also provide high numbers of employment.

Table 6.11 Employment by Industry in the Highlands

Employee Jobs by Industry	Highland (Numbers)	Highland (%)	Scotland (%)	Great Britain (%)
B : Mining And Quarrying	500	0.5	1.2	0.2
C : Manufacturing	5,000	4.8	7.2	7.9
D : Electricity, Gas, Steam And Air Conditioning Supply	1,000	1.0	0.9	0.5
E : Water Supply; Sewerage, Waste Management And Remediation Activities	2,000	1.9	0.7	0.7
F : Construction	7,000	6.7	5.1	4.8
G : Wholesale And Retail Trade; Repair Of Motor Vehicles And Motorcycles	16,000	15.4	13.9	14.9

Employee Industry	Jobs by	Highland (Numbers)	Highland (%)	Scotland (%)	Great Britain (%)
H : Transportation And Storage		5,000	4.8	4.5	5.1
I : Accommodation And Food Service Activities		12,000	11.5	7.2	7.2
J : Information And Communication		2,500	2.4	3.7	4.5
K : Financial And Insurance Activities		800	0.8	3.3	3.5
L : Real Estate Activities		1,500	1.4	1.5	1.8
M : Professional, Scientific And Technical Activities		6,000	5.8	7.1	8.7
N : Administrative And Support Service Activities		5,000	4.8	8.0	8.8
O : Public Administration And Defence; Compulsory Social Security		6,000	5.8	6.5	4.6
P : Education		9,000	8.7	8.4	9.0
Q : Human Health And Social Work Activities		20,000	19.2	16.6	13.6
R : Arts, Entertainment And Recreation		3,000	2.9	2.3	2.2
S : Other Service Activities		1,750	1.7	1.7	1.9

Source: <https://www.nomisweb.co.uk/reports/lmp/la/1946157421/report.aspx>

6.5.28 The level of earnings is an important indicator of the general health of the local economy but also reflects economic activity in the area. In general, higher earnings indicate a prosperous economy comprised of sectors that pay well, whilst low earnings indicate the opposite. Gross weekly pay (median earnings for employees living in the area) in the Highlands is £575, slightly lower than that for Scotland of £577.70 and also lower than the figure for Great Britain of £587 per week.

6.5.29 **Table 6.12** below shows that 18.3% of the population is economically inactive, which is lower than the equivalent figures for Scotland (22.1%) and Great Britain (21.1%) as a whole. Those on long term sick, followed by students and those who are retired, closely followed by those looking after family/home make up the majority of those who are economically inactive.

Table 6.12 Economic Inactivity in the Highlands

	Highland (Numbers)	Highland (%)	Scotland (%)	Great Britain (%)
Total	33,000	23.5	24.1	21.6
Student	#	#	25.9	28.5
Looking After Family/Home	4,800	14.4	17.0	19.3
Temporary Sick	N/A	N/A	2.0	2.0
Long-Term Sick	8,000	24.3	29.7	23.8
Discouraged	N/A	N/A	1.1	0.8

	Highland (Numbers)	Highland (%)	Scotland (%)	Great Britain (%)
Total	33,000	23.5	24.1	21.6
Retired	8,300	25.2	14.6	13.5
Other	5,200	15.9	9.7	12.0

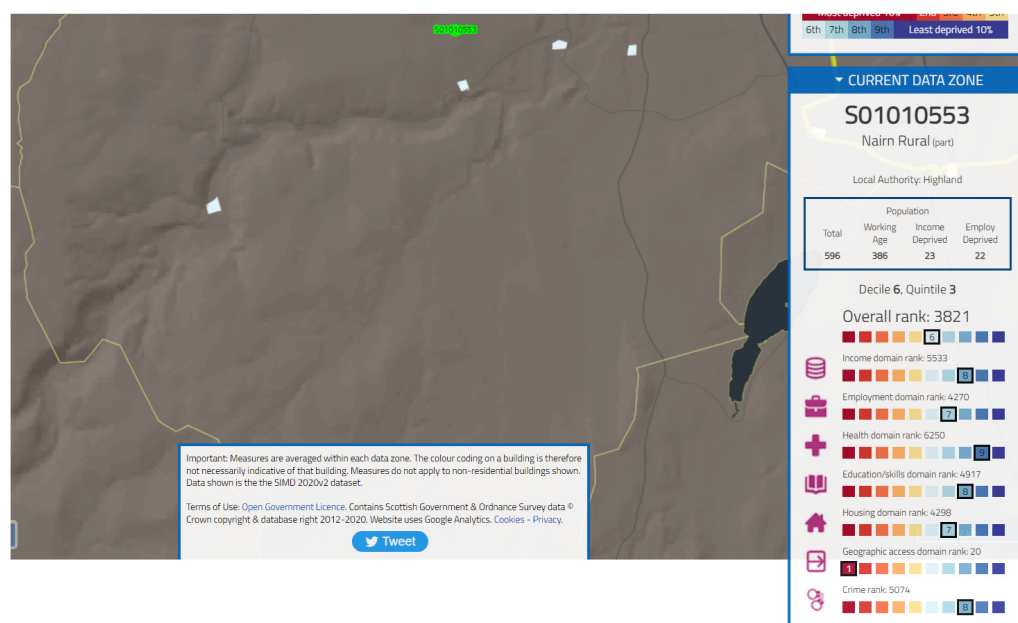
Source: <https://www.nomisweb.co.uk/reports/lmp/la/1946157421/report.aspx>

- 6.5.30 In November 2018, the Scottish Government released a publication on Businesses in Scotland 2018^{xxviii}. This publication provides information on the number of enterprises operating in Scotland. For the Highlands in 2019 there were 11,605 businesses with a total employment of 88,440 and total turnover of £10,303 million pounds, which is a 3% increase in turnover from the previous year.
- 6.5.31 For the Highlands and Islands, it is estimated that 600 jobs are supported by the renewables sector, giving an estimated GVA of £15m. The Scottish Government estimate that at the national level, the low carbon employment sector accounted for 44,800 jobs in 2013 of which 5,400 were within the onshore wind energy subsector (Scottish Government, 2015). These statistics demonstrate the importance of the renewable energy sector to the regional and national economy.
- 6.5.32 In 2016, GVA in the energy sector in Scotland amounted to £12.9 billion, representing a £1.6 billion (or 11.2%) decrease on 2015; this fall is as a result of the decline in the oil price.

Deprivation

- 6.5.33 The Scottish Index of Multiple Deprivation (SIMD) identifies small area concentrations of multiple deprivation across all of Scotland. 38 indicators of deprivation are used within SIMD 2016 and 2020 looking at seven dimensions which are: Income; Employment; Health; Education; Housing; Access to Services; and Crime. The SIMD is separated out into data zones which are able to identify small areas of deprivation, with the level of deprivation increasing with the SIMD score.
- 6.5.34 The site is located within the Nairn Rural data zone, as shown in **Figure 6.1** below. This zone is ranked 3,821st for Scotland and is also ranked highly for a number of the domains used to measure deprivation including for income, employment, health and education/skills suggesting that overall, the area surrounding the site is in overall terms not deprived.

Figure 6.1 Nairn Rural Data Zone



Source: [SIMD \(Scottish Index of Multiple Deprivation\)](#) **Tourism and Recreation**

- 6.5.35 The significance of tourism in the Highlands and Islands is greater than the rest of Scotland, representing up to 43% of employment in areas such as the Cairngorms National Park compared with 8% in Scotland overall. Tourism sustains some of the most remote and rural populations, providing essential employment opportunities and attracting investment.
- 6.5.36 As shown in **Table 6.13** below, in 2018 the Highlands attracted 14% of all overnight visits to Scotland and 12% of the total overnight tourism expenditure on a national level for Scotland. Number of beds aside, the year marked a decline in the volume and value of tourism from 2017. This was mainly the result of a significant decrease in the number of day trips to the region, as well as lower overnight spend of domestic visitors.
- 6.5.37 Roughly three in four overnight visits were domestic and while these decreased by only one percent, their associated spend declined by £51 million (-11%) from 2017. Figures indicate that international trips also fell in numbers in 2018. However, total nights and expenditure of overseas travellers to the Highlands rose by 4% and 1% respectively.
- 6.5.38 The number of domestic day trips to the Highlands fell by nearly two and a half million (-18%) in 2018, whereas total day spend declined by 15%. Decreases in day trip figures, albeit more moderate, were also experienced on national level, where both the number of trips and total spend were 9% below their 2017 levels.

Table 6.13: Visits Nights and Spend in the Highlands – Value and Percentage Change 2018

Visits Breakdown	Visits		Nights		Spend	
	000s	% Change 2018/19	000s	% Change 2018/19	£m	% Change 2018/19
Europe	243	-10%	1,259	+29%	92	+15%
North America	152	-17%	515	-42%	97	-6%
Rest of World	64	-24%	255	-6%	23	-29%
Total International Overnight	459	-15%	2,029	-5%	202	-2%
Scotland	1,541	+63%	4,974	+43%	291	+54%
Rest of Great Britain	906	+21%	4,513	+21%	284	+21%
Total Domestic Overnight	2,448	+45%	9,487	+32%	575	+35%
Total Overnight Tourism	2,448	+30%	11,516	+23%	777	+23%
Total Day Tourism	2,907	-15%	N/A	N/A	776	+80%
Grand Total	12,486	-8%	11,516	+23%	1,553	+46%

Source: Highland Factsheet 2019^{xxix}

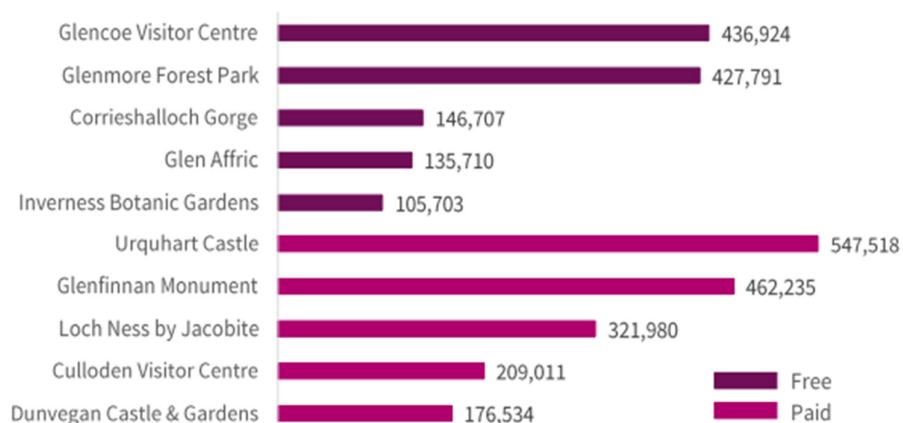
- 6.5.39 Figures indicate a massive increase in domestic day tourism spend in the region. Between 2017 and 2019, it was £571 million per year on average, up from £334 million per year in 2014-16.
- 6.5.40 Occupancy rates for accommodation fluctuated during 2019. Hotels had the highest overall occupancy rate at 70%, followed by hostels at 60% and self-catering at 55%. Guest House/B&B had the lowest overall occupancy rate at 44%.
- 6.5.41 With regards to domestic tourism overnight trips to the Highlands reached just under 2.5million (+45%) and associated expenditure totalled £575million (+35%). These figures represent 18% of the domestic overnight visits and spend nationally. Bed nights also increased significantly (+32%), albeit to a slightly lesser extent, indicating a 9% drop in visitors' average length of stay. Like international travellers, between 2017 and 2019, most British residents went to the Highlands for a holiday and summer was the most popular season to visit. However, seasonality of domestic trips was less pronounced, with 38% of all visits made between October and March.
- 6.5.42 **Figure 6.2** below illustrates the increase in visits and spend to Scotland The Highland's noting that whilst there was a decrease in average length of stay and spend per visit, this was compensated by the number of visits, spend and length of stay.

- 6.5.43 The national tourism strategy, Tourism Scotland 2020^{xxx} was launched in June 2012, with an ambition to grow visitor spend by £1bn to 2020. The strategy was developed to target those markets that offer Scotland the greatest growth potential, to collaborate within and across Scotland's tourism destinations and to develop the authentic memorable experiences today's visitors seek, delivered to the consistently high quality they expect.
- 6.5.44 The strategy's common goal is to make Scotland a quality destination of 'first choice', where the nation's outstanding tourism assets, such as nature, heritage, and destination towns and cities, are maximised to their full potential and turned into rich experiences for visitors.
- 6.5.45 The Highlands Tourism Partnership have produced a Tourism Action Plan^{xxxi} to deliver the national tourism strategy in the Highlands and to outline the priorities and activities that will be undertaken to grow tourism in the Highland area between 2014 and 2020. The vision for the Highlands is that it:
- "will be a destination of first choice for a high quality, value for money and memorable customer experience, delivered by skilled and passionate people".*
- 6.5.46 This action plan notes that tourism related expenditure supports a substantial number of local jobs and that the economic impact in 2012 of tourism in the Highlands was:
- Direct expenditure: £738,432,000;
 - Indirect expenditure: £174,391,000; and
 - Direct Employment: 16,820.
- 6.5.47 The action plan notes that the Highlands is one of Scotland's strongest tourism products and as such can reasonably be expected to equal or exceed the national growth rate if the actions in the national strategy and this plan are delivered. Based on the National Strategy growth ambitions this could mean that the value of tourism could grow from a level of £738m in 2012 to between £900m and £1.07bn by 2020.

Tourism – Visitor Statistics and Attractions

- 6.5.48 **Figure 6.2** below shows the top five free and paid visitor attractions in The Highlands in 2019 (the most recent statistics available). Glencoe Visitor Centre and Glenmore Forest Park are by some distance the most popular free attractions with 436,924 and 427,791 annual visitors. Corrieshalloch Gorge is next on the list with 146,707 annual visitors. Urquhart Castle is the most popular paid attraction with 547,518 annual visitors, followed by Glenfinnan Monument with 462,235 annual visitors and then Loch Ness by Jacobite with 321,980.

Figure 6.2: Top Five Free and Paid Visitor Attractions in the Highlands 2019



Source: Insight Department: Highland Factsheet 2019 (Published December 2020)

6.5.49 Whist the Highlands has a number of major tourist attractions which attract many visitors each year there are no major tourist attractions within the 15km study area identified for the tourism and recreation assessment. There are number of local attractions within the study area: Tomatin Distillery Visitor Centre, Landmark Adventure Park and Carrbridge Trekking Centre.

Recreation

6.5.50 The Highlands, including the area around the site, is popular for a wide range of recreational pursuits, including walking, cycling, horse riding, golf, a variety of water sports, fishing and off-road driving. There are also opportunities to undertake parachute diving, flying, rock climbing, snow sports and country sports. Many of these activities also attract tourists, either as part of a wider holiday in the area, or in their own right.

6.5.51 Running to the north of the site is the River Findhorn, and to the east Dulsie Bridge which is a beauty sport attracting tourists. To the west of the site is Gleann Seileach forest, popular for walking, running and cycling routes.

Long Distance Driving, Walking and Cycling Routes

6.5.52 The Highland Tourism Route is a promoted driving route, utilising minor roads away from the main highway network. The route runs east-west along B roads in the northern extent of the Study Area, south of the A96.

6.5.53 The only long-distance footpath in the Study Area is the Dava Way. Part of this route is just inside the eastern extent of the Study Area.

6.5.54 National Cycle Route 1 (NCR1) and National Cycle Route 7 (NCR 7) occur on the edges of the Study Area. Within the Study Area NCR1 roughly follows the coastline from the A939 to Culloden Moor. NCR7 largely follows the route of the A9 through the Study Area. A further cycle route has also been promoted along the Dava Way, which utilises a disused rail line from Forres to Grantown-on-Spey.

Land Use

6.5.55 The proposal is for up to 7 turbines which will form an extension to the existing, operational Tom nan Clach Wind Farm (the 'Operational Scheme'). The site is located at Cawdor Estate and Lethen Estate, 8km north-east of Tomatin. Cawdor Estate is managed primarily as a sporting, forestry and agricultural estate. Glenkirk Estate is a commercial forestry plantation. Lethen Estate is managed primarily as a sporting, forestry and agricultural estate.

6.5.56 The current land-use onsite is upland moorland, and rough grazing agriculture, and the estates on which the Proposed Development is located are also managed as active shooting estates. The majority of the Proposed Development is subject to the 'right to roam' under the Land Reform (Scotland) Act 2003 such that access for recreation (including walking and horse riding) is permitted over most of the Proposed Development.

Public Attitude Surveys to Wind Farms

6.5.57 There have been a number of studies undertaken over the years to assess public attitudes to wind farms in relation to tourism and recreation. A selection of the studies undertaken are outlined below with some commentary provided on the key findings from these studies.

Moffat Centre Research

6.5.58 In 2007, the Moffat Centre^{xxxii} undertook a study of the economic impact of wind farms on the Scottish economy, the objective being to provide guidance on assessing the economic impact of wind farm developments and related infrastructure on tourism. Scottish tourism depends heavily on the country's landscape, with 92% of visitors stating that scenery was important in their choice of Scotland as a holiday destination. As man-made structures such as pylons and wind turbines may affect the attractiveness of a landscape this could result in a reduction in prices for tourism services or reduced numbers of tourists, leading to a loss of income and jobs.

6.5.59 Part of the research involved interviewing 380 tourists at locations that maximised the likelihood that respondents would have seen a wind farm during their visit. This found that 39% of respondents were positive about wind farms, 36% had no opinion either way, and 25% were negative. Importantly, respondents that had seen a wind farm were less hostile than those who had not. The results confirm that a minority (20% to 30%) of tourists preferred landscapes without wind farms. However, of these, only a very small group were so negative that it would affect their intentions about revisiting Scotland.

6.5.60 In general, the research found that the negative impact of wind farms on tourism at a national level (Scotland) was small, and it was concluded that even large sites such as the Dalswinton Wind Farm in Dumfries and Galloway have minimal impact on tourism.

BiGGAR Economics (2007) Review of Evidence on the Impact of Wind Farms on Tourism and Recreation

6.5.61 This report^{xxxiii} found that the key drivers of tourism were either major geopolitical events or more regional/local factors, with wind farms not considered to have an impact on tourism trends.

- 6.5.62 Results from the surveys reviewed by BiGGAR Economics were inconclusive. Some suggested that a minority of visitors may be less likely to return to areas where wind farms are developed. Other surveys suggested a positive response to wind farm development, with wind farms even becoming a tourist attraction in their own right. The report noted David Stewart Associates carried out research with a holiday centre in Kerrier District Cornwall, 2km from the Goonhilly Wind Farm within an Area of Outstanding Natural Beauty (AONB). The report stated that the holiday centre had over 500 units of accommodation and that each year, a questionnaire was given out for visitor comments on the park and its surroundings. Just under 1,400 questionnaires were received in 1995 and the report noted that the same exercise has been carried out each year since, with the wind farm not raised in any of the responses.
- 6.5.63 The report stated that *"There is no case study evidence that wind farm developments have a negative impact on tourism"*.
Survation Energy Poll 27/10/2013 Prepared on Behalf of The Mail on Sunday
- 6.5.64 An opinion poll commissioned by the Mail on Sunday^{xxxiv} found that 70.1% of people surveyed would be happy to have a wind farm built in their local area, with 68.1% stating they would prefer to live near a wind farm development than a fracking plant. This increased when looking at the regional view of Scotland with 70.6% of people surveyed in favour of wind development.
- 6.5.65 This view was represented across the age groups surveyed with 81.5% of people aged 18-34, 68.5% of people aged 35-54 and 62.6% of people 55 and over happy to have wind farms in their local area. Support in favour of wind farms was also represented across the political spectrum with those intending to vote: Conservative (60.8% in favour), Labour (74.6 % in favour) and Liberal Democrat (81.1% in favour).
Public Attitudes Tracking Surveys, Department of Energy and Climate Change (DECC), 2012 and 2018
- 6.5.66 In 2012, DECC set up a tracking survey^{xxxv} to monitor and understand public attitudes to DECC's main business priorities. The survey began in March 2012 and runs four times a year.
- 6.5.67 The seventh wave of data was collected between 25 and 29 September 2013 with a representative sample of 2,103 households in the UK using face-to-face in-home interviews. Three-quarters of people (76%) continued to support the use of renewable energy sources, similar to the September 2012 figure of 79%. Support for onshore wind was 66%, which has been the average level of support through waves 1 to 7 of the survey.
- 6.5.68 The 25th wave of data was published in April 2018^{xxxvi}. This data highlights that there are growing levels of concern about the UK's future energy security and that this was most notable for *'the UK becoming too dependent on energy from other countries'* (72% concerned at wave 25, compared with 66% at wave 21), and *'the UK not investing fast enough in alternative sources of energy'* (71% at wave 25, compared with 66% at wave 21).

6.5.69 The data also highlights that support for the use of renewable energy has reached a peak of 85% at wave 25, an increase from 79% at wave 24. Opposition to renewable energy remained very low at 3%, with only 1% strongly opposed.

6.5.70 Levels of concern over climate change has increased. Almost three quarters of respondents are concerned, and respondents were more likely to see climate change as a result of human activity rather than a natural process.

6.6 Future Baseline

6.6.1 From the information acquired for this assessment, there is no indication that the baseline is in the process of any significant transitions and would be expected to remain largely as described above, without the Proposed Development taking place.

6.7 Design Evolution

6.7.1 As detailed within **Chapter 2:EIA Process**, the design of the Proposed Development has fully taken account of all known technical and environmental constraints within the site and has sought to minimise predicted landscape and visual effects (see **Chapter 9: LVIA**).

6.7.2 Given that adverse visual effects have the potential to result in adverse effects on the attractiveness or tourism potential of some receptors, and that the scale of the Proposed Development largely determines predicted economic and employment effects, the design process has indirectly taken account of potential socio-economic, tourism and recreation effects.

6.8 Scope of the Assessment

Spatial Scope

6.8.1 The spatial scope of this assessment covers the site, together with the surrounding area as described under 'Study Area' in **Section 6.4.2**.

Temporal Scope

6.8.2 The temporal scope of this assessment is consistent with the period over which the Proposed Development would be carried out and therefore covers the construction and operational periods which would be approximately 14 months and 40 years respectively. Decommissioning at the end of the 40 year operational period is also considered.

Potential Receptors

Potential receptors exist within the following categories:

- Local population;
- The local economy and employment numbers;
- Local health care capacity;
- Tourist attractions within 15km of the site:
- Tomatin Distillery Visitor Centre;
- Landmark Forest Adventure Park;
- Carrbridge Trekking Centre;
- Highland Tourist Route.

- Recreational facilities, routes and land access within the site and within 15km:
- Dava Way;
- National Cycle Route 1;
- National Cycle Route 7;
- Open Access recreation;
- River Fordhorn; and
- Lochindorb.
- Land use: agriculture and sporting activities.

6.8.3 The following receptors have been scoped out of the socio-economic, tourism and recreational assessment in this chapter, either during the scoping stage or through the EIA process:

- Effects on the amenity of local residents and the local community due to **Traffic & Transport (Chapter 7), Noise (Chapter 8), LVIA (Chapter 9), and Shadow Flicker and Safety (Chapter 14)** as these are considered in these specific EIA Report chapters;
- Demographic effects due to the relatively short construction period (approximately 14 months). As any local demographic changes would be temporary, and potentially very limited assuming some construction work is undertaken by local employees, it is predicted that there would be no discernible effects at regional and national levels;
- Effects on the capacity of health care facilities effects during the operation of the Proposed Development as this would only involve occasional maintenance visits from workers, with no groundworks anticipated (that could generate dust for example);
- Due to Landmark Forest Adventure Park and Carrbridge Trekking Centre being outside of the ZTV as identified in **Chapter 9: LVIA**, no visual effects can occur on these receptors and they are therefore scoped out. Chapter 9 also scopes out the Highland Tourist Route and NCR 1 as site survey showed that there would be no visibility of the Proposed Development; and
- Effects on tourism during the construction period (approximately 14 months) – significant effects are unlikely given the temporary nature of this activity and the fact that much of the construction work (excluding the short term turbine erection which is considered as part of the operational effect) would only be visible from within the site boundary or relatively close to it.

6.8.4 Sections **6.9.2 – 6.9.24** describe the potential effects on the economy, employment and industry, health, land use, public access and recreation, tourism and leisure that could arise as a result of the construction, operation and decommissioning of the Proposed Development. Cumulative effects that could occur are discussed in Section **6.11**.

6.8.5 Mitigation and enhancement measures are described in Section **6.12** with residual effects set out in Section **6.13** below.

Likely Significant Effects

- 6.8.6 It should be noted that the inclusion of effects in Sections **6.9.2-6.9.24** does not imply that residual effects would be significant, only that potential effects have been considered. Furthermore, it is only where a given socio-economic receptor is considered to be of medium, high or very high sensitivity that detailed assessment is required as, depending on the magnitude of a given effect, it is only for these categories that a significant effect under the under the proposed methodology (as described in **Table 6.2**) can occur.
- 6.8.7 The socio-economic receptors that have been taken forward for assessment are summarised as follows:
- The local economy and employment numbers;
 - Local health care capacity;
 - Tourist attractions: Tomatin Distillery Visitor Centre;
 - Recreational activities / routes: Dava Way, NCR 7, open access recreation, River Frodhorn and Lochindorb; and
 - Land use: agriculture and sporting activities.
- 6.8.8 The predicted effects on these receptors are considered in further detail in Sections **6.9.2– 6.9.24** below.

6.9 Identification and the Evaluation of Key Effects

- 6.9.1 The predicted construction, operation, and decommissioning effects of the Proposed Development on the socio-economic receptors identified in this assessment are considered in further detail in the sections below.

Economic, Employment and Land Use

Predicted Effects and their Significance

Economic, Employment and Land Use Effects – Construction and Decommissioning

- 6.9.2 Due to the similarities in activities between the construction and decommissioning phases, they are both considered within this section.

Economic Effects

Table 6.14: Indicative Construction and Decommissioning Requirements

Required Services	Details
Accommodation	Workers would require the use of local accommodation.
Local amenities	All workers during the construction period of the Proposed Development would require food, drink and other provisions, bringing trade to the local area.
The Site security	Throughout the construction of the Proposed Development and its decommissioning, security workers would be required to protect assets and ensure compliance with CDM Regulations.

Required Services	Details
Abnormal Load (turbines) and Crane Haulage	Specialist haulage contractors would be required to deliver turbine components and cranes to the site during the construction period for the Proposed Development.
Road construction	New access tracks would be required for the Proposed Development.
Balance of Plant construction	Infrastructure including temporary construction compounds and borrow pits would be required for construction of the Proposed Development. This work would be undertaken by civil engineering contractors.
Substation detailed design and construction	Specialist contractors would be required to design and construct an extension building for the on-site control building and substation, which would house all electrical and communications equipment for the Proposed Development.
Turbine foundation detailed design and construction	The final design of the foundations depends on the ground conditions and exact turbine specifications.
Turbine manufacture	The turbine manufacturer and manufacturing location is still to be confirmed, this may be outside the UK.
Turbine erection	Once transported to the site, all turbines would be erected into position by specialist contractors likely to be available within Scotland.
Landscaping	Post construction landscaping works will be required.
Electrical switchgear design & installation	The Proposed Development requires the design and on-site installation of complex electrical systems and cabling.
Power transmission design	All electricity transmission cabling would need to be designed by a specialist company.
Fencers	Temporary construction fencing, and any permanent fencing will be required.
Fuel supplies and delivery	Machinery used during construction would require fuel supplies.
Construction materials supply and delivery	Materials for the construction phase would be sourced from local suppliers where possible including bricks, mortar, cement, concrete, stone, wood, steel, cabling, electricity poles etc.
Sub-contractors	Electrical fitters, carpenters, painters & decorators, plumbers may be required during the construction phase for various tasks.

6.9.3 The Review of Renewable Electricity Generation Cost and Technical Assumptions Study Report^{xxxvii} (ARUP, 2016) estimates the total capital cost of a wind farm in 2020 (construction and infrastructure provision, not pre-development planning, surveys etc) would be around £1.36m per MW installed for a 20MW scheme. On the basis of seven turbines with a power output of 31.5MW, these figures would provide a capital cost for the Proposed Development of around £42.84m. The BEIS report, Electricity Generation Costs 2020^{xxxviii} estimates that by 2025, construction costs for onshore wind will be around £1m per MW. So for the Proposed Development, this would equal around £31.5m

6.9.4 The economic impact assessment set out within the O’Herlihy report (2006) splits construction spend by turbine manufacturing and construction and installations costs. The O’Herlihy report (2006) identifies that approximately 65% of the total capital spend for a proposed wind farm relates to the cost of manufacturing wind turbines, with the remaining 35% related to onsite construction (balance of plant) and installation work. The RUK Report (2015) supports this analysis as it calculates that turbine manufacturing accounts for 64.4% of total capital expenditure, balance of plant contracts account for 28.6% and grid connections account for 7.1%.

6.9.5 Using an expenditure distribution profile of 35% for onsite construction works, the Proposed Development could therefore generate capital expenditure of between £11.03m and £14.99m.

6.9.6 The RUK (2015) report states that 12% of the total capital construction costs of an onshore wind farm are typically spent locally (within the local authority area). This would equate to between £3.78m and £5.14m to be spent within the Highland Council area.

Wind Farm Decommissioning

6.9.7 There would be further local spend at the stage that the Proposed Development is decommissioned. Although these works are not as complex or expensive as construction activities. Once the blades and towers are lowered by specialists, the subsequent breaking up and removal of the towers, blades and other parts is likely to be undertaken by smaller contractors.

6.9.8 Wind farm decommissioning bonds currently estimate costs for decommissioning works and site restoration (leaving tracks in situ) in the order of £15,000 per MW. This would amount to around £472,500 for the Proposed Development.

Employment Effects

6.9.9 The RUK (2015) report in Table 6: GVA and Employment Ratios (Construction Phase) estimates that the weighted average shows there is one employee per £137,942 in turnover. If replicated during the construction of the Proposed Development this could result in employment across the Highland Council area ranging from around 27 FTE (£3.78m ÷ £137,942) to 37 FTE (£5.14m^{xxxx} ÷ £137,942).

6.9.10 In addition to the predicted employment levels calculated above, it is expected that further employment would be sustained or created through induced and indirect economic effects. This would be likely to occur through the supply chain and the impact of wages and salaries on the local economy. This would enable the retention of existing employment related economic benefits in the local economy. Figures from the ONS identify that each direct onshore wind job supports 1.24 indirect jobs, so the construction phase would support between 33 and 46 FTE jobs in the local economy.

Significance assessment

6.9.11 As noted in section 6.5.30, the overall economy of the Highlands has a turnover of around £10,303m and with total employment of 88,440 could be considered to be of a medium sensitivity. The economic and employment effects from the Proposed Development at the Highland Council level is estimated to result in a Low magnitude

of change, which would result in a Minor beneficial effect that is considered to be not significant. However, it is also noted that the renewables sector within the Highlands Council area had a GVA of £15m which indicates that the Proposed Development would have a more substantial positive effect within this sector of the Highland Councils economy.

Economic, Employment and Land Use Effects – Operation

Economics Effects

- 6.9.12 The Review of Renewable Electricity Generation Cost and Technical Assumptions Study Report^{xi} (ARUP, 2016) estimates the operating costs of a wind farm in 2020 would be around £41,000 per year, per MW installed for a 20MW scheme. On the basis of seven turbines with a power output of 31.5MW, these figures would provide an annual operating cost for the Proposed Development of around £1.3m, and a lifetime operating cost of around £51.6m. The BEIS report, Electricity Generation Costs 2020^{xii} estimates that by 2025, operating costs for onshore wind will be around £23,500 per year, per MW installed. So for the Proposed Development, this would equal around £740,000 per year, or £29.6m over the lifetime of the development.
- 6.9.13 In terms of the geographical distribution of operations and maintenance expenditure, the RUK 2015 report states that 42% of expenditure occurs locally (local authority level). Therefore, it is predicted that the Proposed Development could result in between £310,800 and £546,000 local spend each year (between £12.4m and £21.8m over the 40 year lifespan of the Proposed Development).

Employment Effects

- 6.9.14 There would be potential for both national and local employment for the maintenance of the Proposed Development. It is not anticipated that the Proposed Development would result in any job losses taking account of the negligible effect on land use and the not significant effect on tourism and recreation receptors as assessed below.
- 6.9.15 The BiGGAR (2015) report estimates (Table 9: GVA and Employment Ratios Operations and Maintenance) that average total turnover per employee during the operational phase of a wind farm is £121,935. If replicated during the operational phase of the Proposed Development, this could result in total employment within the Highland Councils area ranging from up to 6 FTE ($£740,000 \div £121,935$) and 10.7 FTE ($£1,300,000 \div £121,935$) per annum.

Significance Assessment

- 6.9.16 Overall, the operation of the Proposed Development is predicted to have a low beneficial magnitude of change on the economy and employment at the local Highland Council level. With the economy of the Highland Council area considered to be of medium sensitivity, this would result in a minor effect, which would be not significant.

Table 6.15 Summary of Significance of Economy, Employment and Land Use Effects

Receptor and Summary of Predicted Effects	Sensitivity/ Importance/ Value of Receptor ¹	Magnitude of Change ²	Significance ³	Summary Rationale
Economic and Employment	Medium sensitivity at Highland Council level.	Low	Not significant	The Highland Council area has an economy which employs 88,440 people and has a turnover of £10,202m per year (2019 figures). The Proposed Development would result in spend of between £3.78m and £5.14m during the construction phase, with 27-37 FTE direct jobs created. An additional 33-46 FTE jobs would be supported in the existing economy. The Proposed Development would then contribute £310,800 to £546,000 per year to the local economy, and provide 6 – 10.7 direct FTE jobs.

Assessment of Effects: Health

- 6.9.17 Using the RUK (2015) estimates that there is one employee per £137,942 in turnover for the construction phase of an onshore wind farm, the construction of the Proposed Development would result in an estimated 228-310 construction workers being employed in total. These workers would not all be required on site at any one time, with their involvement being spread over the 14 month construction programme depending on their roles and the activities taking place on site at any one time. A small number may come to stay in the area for an extended period of time, but the majority of construction staff will only come to site for a few days at a time before returning home. The workers will require access to healthcare facilities from time to time, however there is a good provision of medical facilities in the area surrounding the site and the numbers identified are unlikely to place the existing health care facilities in the local area under any particular strain or difficulty.
- 6.9.18 The health care facilities can be considered to have a medium/high sensitivity, but there would be a low magnitude of effect which would result in a minor adverse, but not significant, effect.

Table 6.16 Summary of Significance of Health Effects

Receptor and Summary of Predicted Effects	Sensitivity/ Importance/ Value of Receptor ¹	Magnitude of Change ²	Significance ³	Summary Rationale
Health – Health Facilities	Medium / High	Low	Minor and not significant	There would be between 228 and 310 construction workers employed in total on the Proposed Development. However, they would not all be employed at the same time and the majority would not reside on the local area for a continual, extended period of time.

Assessment of Effects: Tourism and Recreation

Operational Effects

- 6.9.19 The Tomatin Distillery Visitor Centre is located to the west of Tomatin village, adjacent to the East Coast rail line. The visitor centre offers a tour of the distillery and a shop and as such the focus of the tourist attraction is on indoor activities. The attraction is considered to be of regional importance and therefore has a medium sensitivity. **Chapter 9: LVIA** considers two viewpoints from Tomatin, viewpoint 8 located just to the north of the visitor centre where the A9 and East Coast Rail Line adjoin, and Viewpoint 10 just to the south, where the A9 cross the River Findhorn. Due to the distance from the viewpoints to the Proposed Development, and the screening offered by the intervening landform and forestry cover, there are not predicted to be any significant visual effects on these two viewpoints. Given these findings, and the indoor focus of the Tomatin Distillery Visitor centre a low magnitude of change is identified. A medium sensitivity and a low magnitude of change would lead to a minor negative effect which would be not significant.
- 6.9.20 The Dava Way follows the route of a dismantled railway between Granttown-on Spry and Furness, and the route is also proposed as a possible cycle route. Chapter 9 identifies a sensitivity of medium-high, although the socio-economic methodology would suggest a high sensitivity given the trail is promoted as one of Scotland's Great Trails of national interest. Chapter 9 considers the Dava Way under Viewpoint 17 and considers that as the Proposed Development will be seen in the context of other, existing wind farm development (including the existing Tom nan Clach wind farm) and the distance between the trail and the site (almost 14km) that the magnitude of change for users will be low. A high sensitivity and a low magnitude of change would lead to a minor negative effect which would be not significant.
- 6.9.21 National Cycle Route 7 follows the A9 road through the Study Area, and this section is part of the cycle route which runs from Sunderland to Inverness. As a national route, NCR7 has a high sensitivity. **Chapter 9: LVIA** considers Viewpoint 8 which is noted as being on the route of NCR7 and finds that due to the distance from the viewpoints to the Proposed Development, and the screening offered by the intervening landform and forestry cover, there are not predicted to be any significant visual effects on this viewpoint. A high sensitivity and a low magnitude of change would lead to a minor negative effect which would be not significant.
- 6.9.22 For recreational users around the River Findhorn in the Study Area, Chapter 9 does not include a representative viewpoint. It does however consider two landscape character areas which are focused around the River: the Upland Valley and Narrow Wooded Valley landscape types. In the Upland valley area, the landscape assessment finds that there is practically no visibility along the valley floor where the river itself lies and the only visibility available is from the slopes on the northern side of the river. Within the narrow Wooded valley area, there is either no visibility or extremely limited visibility, due to the surrounding landforms and the extensive woodland coverage in this area. Given the limited visibility, and the presence of the Operational Scheme, the magnitude of change found by the landscape assessment is considered to range between no change to low. As a recreational and potential tourist receptor, the River Findhorn is considered to be of medium sensitivity. A medium sensitivity and a low magnitude of change (at worst) would lead to a minor negative effect which would be not significant.

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- 6.9.23 Lochindorb is not considered to be a tourist attraction as there is no public access to the ruined castle or the loch, nor any tourist facilities around the loch side. It is however a popular spot with walkers, birdwatchers and recreational users. Chapter 9 considers two viewpoints around Lochindorb, number 14 (located at the northern end of the loch) and number 15: (along the eastern shore, where the view of the castle lines up with the wind farm in the background). The location is considered to be of local-regional importance for recreational and tourism, and therefore has a low to medium sensitivity. Chapter 9 finds a medium-high magnitude change which would lead to a Moderate and potentially significant adverse effect on recreational users in this location.
- 6.9.24 During the operational phase of the Proposed Development, the public would have unrestricted access to the site under the general 'right to roam' enshrined in the Land Reform (Scotland) Act 2003. Temporary public access restrictions would only apply if it is necessary to undertake intensive maintenance or upgrading to on-site infrastructure including turbines and access tracks, in accordance with the CDM Regulations 2015. Therefore, there is considered to be no change to public access rights.

Table 6.17 Summary of Significance of Heritage Assets Effects

Cultural Heritage Assets				
Receptor Name	Sensitivity/ Importance/ Value of Receptor¹	Magnitude of Change²	Significance³	Assessment
Tomatin Distillery Visitor Centre	Medium	Low	Minor and Not Significant	The Visitor centre is an indoor focussed attraction and its location has in any case low visibility of the proposed Development.
Dava Way	High	Low	Minor and Not Significant	Users of the Dava Way would be at around 14km distance from the Proposed Development, which would be seen in the context of other windfarms, including the existing Tom na Clach Wind Farm.
National Cycle Route 7	High	Low	Minor and Not Significant	Due to the intervening landform and screening provided by forestry cover, there would be limited views of the Proposed Development from NCR 7.
River Findhorn	Medium	Low (at worst)	Minor and Not Significant	For most of the River Findhorn within the Study Area, the Proposed Development would not be visible. Limited visibility will be available in places, but screening from the existing landform or forestry cover will minimise the visual impact.
Lochindorb	Low / medium	Medium - High	Moderate and Potentially Significant	Certain views from the loch shore will incorporate both the ruined castle located on an island within the loch and also the Proposed Development in the background. Due to the popularity of the location for it's views this could create medium-high magnitude of change.

Cultural Heritage Assets				
Receptor Name	Sensitivity/ Importance/ Value of Receptor¹	Magnitude of Change²	Significance³	Assessment
Right to roam / open access land			No change	

6.10 Land Use

6.10.1 In terms of land use change, no areas of the site are forested, and the land of the two Estates (Cawdor and Lethen) making up the site is used for rough grazing agriculture and sporting activities. There may be temporary disruption to land within the site for sporting activities during the construction phase, but this should be able to continue once the site is operational. Rough grazing agriculture will have some more limited restrictions due to the specific land take requirements of the operational phase (395 ha), but this would not interfere with the wider practices (forestry, arable & sporting estate) on Cawdor Estate (which cover approximately 17,000 ha in total). The Land use of the site is therefore considered to be of low sensitivity and would be subject to a low magnitude of change, leading to a negligible effect which is not significant.

6.11 Cumulative Effects

6.11.1 Consideration has been given as to whether any of the socio-economic receptors that have been taken forward for assessment in this chapter are likely to be subject to cumulative socio-economic effects in combination with other developments. Other developments in the Highlands that have been considered for any cumulative effects have been identified in **Chapter 9: LVIA**.

Health

6.11.2 No cumulative effects on health are predicted which require any further assessment.

Economy and Employment

6.11.3 No cumulative effects on economy and employment are predicted which require any further assessment.

Recreation & Tourism

6.11.4 The effects on recreational and tourism users primarily come from the visual impacts which they may encounter from the Proposed Development. Any cumulative effects which are relevant in regards to visual impact are already considered within the assessment in **Chapter 9: LVIA**.

Land Use

6.11.5 No cumulative land use effects are identified which require any further assessment.

6.12 Mitigation Measures

Community Benefit Fund

6.12.1 Whilst not strictly a mitigation measure, the Applicant has pledged to provide local community funding which would be delivered during the operational phase of the Proposed Development. In accordance with the Scottish Government's Good Practice Principles for Community Benefits from Onshore Renewable Energy Developments document^{xliii} (2013, revised in 2015 for factual accuracy), this funding aims to ensure that local communities share the socio-economic benefits which would be generated from the Proposed Development. As at April 2019, a total of £18,520,483^{xliiii} of funding has been made available to communities through onshore renewables developments to support a diverse range of activity to improve the daily lives of people across Scotland.

6.12.2 The Proposed Development would make an annual payment of £5,000 (index-linked) per MW over the lifetime of the project. For the 31.5MW proposed this would mean an annual payment of £157,500 per annum for the local community to invest in local projects and priorities. This would equate to £6.3m during the 40 year operational period.

6.13 Residual Effects

6.13.1 The assessments presented in this chapter demonstrate that the Proposed Development would result in a possible significant effect on recreational/tourism users around Lochindorb, but that there would be no other significant adverse effects from the proposals. The Proposed Development would lead to beneficial economic effects, but these are not expected to be significant.

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^{xxiv}

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xxxix The £2.9m and £4.5m figures relate to the estimated percentage of capital cost spent locally.

^{xi} Arup on behalf of DECC: Review of Renewable Electricity Generation Cost and Technical Assumptions Study Report (2016). Available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/566718/Arup_Renewable_Generation_Cost_Report.pdf [Accessed 05/01/22].

^{xii} Electricity Generation Costs 2020, BEIS (2020). Available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/911817/electricity-generation-cost-report-2020.pdf (Accessed 05/01/22)

^{xiii} Scottish Government's Good Practice Principles for Community Benefits from Onshore Renewable Energy Developments. Available at <https://www2.gov.scot/resource/0043/00438782.pdf> (accessed 17/01/20)

^{xiiii} Figure from <https://www.gov.scot/publications/scottish-government-good-practice-principles-community-benefits-onshore-renewable-energy-developments/> (accessed 17/01/20)