

---

<b>6.</b>	<b>Socio-economics</b>	<b>6-1</b>
<b>6.1</b>	<b>Summary</b>	<b>6-1</b>
<b>6.2</b>	<b>Introduction and overview</b>	<b>6-2</b>
<b>6.3</b>	<b>Methodology</b>	<b>6-3</b>
<b>6.4</b>	<b>Baseline information</b>	<b>6-4</b>
<b>6.5</b>	<b>Predicted effects of the scheme</b>	<b>6-17</b>
<b>6.6</b>	<b>Mitigation and enhancement measures</b>	<b>6-23</b>
<b>6.7</b>	<b>Assessment of residual effects</b>	<b>6-24</b>
<b>6.8</b>	<b>Cumulative effects</b>	<b>6-24</b>
Table 6.1	Employment in key sectors (% of total employment in area)	6-7
Table 6.2	Change in total number of jobs by region	6-8
Table 6.3	Proportion of component contract that could be secured in each study area - RenewableUK comparison	6-19
Table 6.4	Potential effect by area	6-20

---

## 6. Socio-economics

### 6.1 Summary

- 6.1.1 The socio-economic and tourism assessment was carried out by describing the existing environment (in terms of policy context, socio-economic context and the tourism economy), describing the existing evidence base relating to effects on tourism, describing the quantitative positive and negative economic effects and the wider positive and negative economic effects.
- 6.1.2 The proposed development is expected to generate a slight beneficial effect on the economy in the local area, Highlands and in the wider Scottish economy during the construction phase and the operational phase. This is due to the contracts that could be secured in these areas by businesses, the jobs supported by these contracts and the spend of wages.
- 6.1.3 There is expected to be a moderate beneficial effect on tourism businesses during the construction phase and a slight beneficial effect in the Highlands from tourism during the construction phase. This is due to construction workers, engineers and management staying in local tourism businesses.
- 6.1.4 During the operational phase there is expected to be no measurable impact on tourism as the main type of visitor is the general sightseer. Their key reason for visiting the local area is to go to the most northern part of the mainland. Discussions with local tourism businesses have not noted any negative comments from tourists regarding the presence of wind farms. A review of existing tourism evidence and surveys of the potential and current effect on wind farms on tourism including evidence from planning decisions for other wind farms has found no evidence of wind farms affecting tourism.
- 6.1.5 The proposed development is expected to have no measurable impact on other sectors.
- 6.1.6 The proposed development will have a moderate beneficial effect on the local area due to community benefit funding.

---

## 6.2 Introduction and overview

6.2.1 This chapter considers socio-economics, including tourism. The assessment has been undertaken by BiGGAR Economics Limited.

### Potential effects

6.2.2 There are a range of potential socio-economic effects associated with the proposed development, in the local area, Highlands and in the wider Scottish economy. These include:

- development and construction phase economic effects;
- operational phase economic effects;
- impacts on sectors locally, regionally and on Scotland such as tourism, forestry and film; and
- wider potential impacts such as community benefits, estate developments and non domestic rates.

### Study area

6.2.3 This chapter considers impacts for Scotland as a whole and for the Highland area which is defined as the council area. The geographical size of the Highland area means that it is also necessary to consider impacts at a more local level. In this chapter, the local area has been defined as Caithness and North Sutherland<sup>1</sup> which is an area commonly used in local economics<sup>2</sup> and tourism planning<sup>3</sup>. This area is shown in

---

<sup>1</sup> Tourism Resources Company (2011), *A Framework for Destination Development: Ambitious for Tourism Caithness and North Sutherland. Full Report – Volume 2 (Research Document)*, A Report to Highlands and Islands Enterprise – Appendix IV gives the Population Datazones used in the report which are the datazones used to define the local area in this chapter

<sup>2</sup> Caithness and North Sutherland Regeneration Partnership <http://www.cnsrp.org/>, Ambitious for Tourism – Caithness and North Sutherland <http://www.hie.co.uk/highlands-and-islands/growth-sector-projects/tourism-caithness-and-north-sutherland.html>

<sup>3</sup> VisitScotland <http://guide.visitscotland.com/vs/guide/5,en,SCH1/objectId,RGN985vs,curr,GBP,season,at1,selectedEntry,home/home.html> (Accessed 31st October 2011)

6.2.4 **Figure 6.1.**

**Figure 6.1 Caithness and North Sutherland**



## 6.3 Methodology

### Guidance

- 6.3.1 The scope of this assessment has been guided by the Scottish Planning Policy (SPP) document (Scottish Government, 2010)<sup>4</sup> which outlines the Scottish Government's policy on nationally important land use planning matters.

### Method

- 6.3.2 The methodology for the socio-economic and tourism assessment included the following tasks:
- description of the existing environment – in terms of policy context, socio-economic context and the tourism economy. This stage uses published policy documents, published data sets and consultations with local tourism businesses, accommodation providers and tourism agencies in order to inform the tourism baseline and identify key tourism assets and activities. The consultations were carried out through face-to-face interviews, telephone interviews and by email

<sup>4</sup> Scottish Government (February 2010), Scottish Planning Policy

in November and December 2011. Telephone and face-to-face consultations were also carried out with sector organisations and economic development organisations in December 2011 and January 2012;

- describe the existing evidence base relating to effects on tourism – including a review of general literature on the subject, including the most recent study commissioned by the Scottish Government “The Economic Impacts of Wind Farms on Tourism (March 2008)” and specific decisions on existing wind farms. This also included a review of evidence from other wind farm inquiry decisions;
- describe the quantitative positive and negative economic effects – represents the scale of the opportunity for local businesses, based on the experience of what has happened in similar developments elsewhere and on an analysis of the local economy in the vicinity of the proposed development. It should be noted that these effects are estimated based on assumptions about the likely behaviour of local businesses and cannot therefore be guaranteed. This also included consultations with organisations that could give an overview of the supply of goods and services and the supply of skills; and
- wider positive and negative economic effects – using evidence gathered from consultations with tourist businesses and in the local area and BiGGAR Economics previous experience of similar projects elsewhere.

#### **Assessment criteria**

6.3.3 The potential positive and negative effects are adjusted to take account of mitigation measures. This assessment produces residual effects.

6.3.4 Having assessed the potential positive and negative effects, the assessment then considers the measures that could maximise the extent to which the three areas benefit from the proposed development.

### **6.4 Baseline information**

#### **Policy context**

##### *National economic strategy*

6.4.1 Economic policy in Scotland is guided by the Scottish Government’s Economic Strategy (GES) that was published in September 2011 laying out the objective of delivering sustainable economic growth. The GES builds on an earlier economic strategy, published in 2007 by focusing on a set of strategic priorities which include:

- supportive business environment;
- learning, skills and well-being;
- infrastructure development and place;
- effective government; and
- equity.

6.4.2 In addition, the new strategy also identifies a new, sixth strategic priority – transition to a low carbon economy. The new strategic priority reflects an increased emphasis in the 2011 strategy on the economic potential of renewable energy and low carbon technologies. It is intended that the transition to a low carbon economy will bring about the reindustrialisation of Scotland as a renewable energy powerhouse and centre for low carbon technologies.

- 6.4.3 The Scottish Government has shown its support for renewable energy by having identified energy (including renewables) as one of seven priority sectors that offer particular opportunities for growth. Another of the priority sectors identified is sustainable tourism. However the strategy also acknowledges that sectors such as tourism depend on high quality air, land and water and therefore maintaining Scotland's natural environment is particularly important to the future success of the tourism sector.
- 6.4.4 In pursuing the transition to a low carbon economy the Government has set the target of meeting 100% of Scotland's electricity demand through renewables by 2020. In the short, medium and quite possibly the longer term, onshore wind farms will make an important contribution to achieving these targets, while the main focus of the strategy is on the long-term opportunities presented by offshore renewables.
- 6.4.5 Whilst the ownership of any development is not a material consideration in determining the acceptability of the development in planning terms, in National Planning Framework 3 and the Electricity Generation Policy Statement the Scottish Government commits to achieving at least 500 megawatts of renewable energy in community and local ownership by 2020. National Planning Framework 3 paragraph 3.24 states 'Local and community ownership and small-scale generation can have a lasting impact on rural Scotland, building businesses and community resilience and providing alternative sources of income. Collectively the potential benefits of community energy projects are nationally significant.' Scottish Planning Policy paragraph 169 is clear that net economic impact including the community socio-economic benefits such as employment, associated business and supply chain opportunities are relevant material considerations in the determination of planning applications for renewable energy applications, including on-shore wind.

*Highland economic strategy*

- 6.4.6 Highlands & Islands Enterprise (HIE) is the Scottish Government's economic and community development agency for the Highland and Islands. HIE's role is to implement the Government Economic Strategy (GES) in order to deliver sustainable economic growth in all parts of Highland and Islands and is guided in this by their operating plan.
- 6.4.7 Energy is a major focus within the HIE's operational plan, which highlights that the natural resources of Highlands and Islands "*constitute the greatest concentration of potentially exploitable renewable energy resources in the UK*" and provide a "*once in a life time opportunity*" for the area. While the operational plan focuses particularly on marine renewables, it also refers to wind tower manufacturing in Argyll and the Outer Hebrides and a growing renewables supply chain involving many local businesses.
- 6.4.8 Although the operational plan is very supportive of renewable energy, it is not specific in its support for any particular wind farm development. However, providing the proposed development does not conflict with any of HIE's other strategic priorities, most notably tourism, it is reasonable to conclude that it would be consistent with HIE's objective of implementing the GES in the region.
- 6.4.9 The Highland Council established the Highland Economic Forum to ensure that the business community in the Highlands is fully consulted on economic development matters. This Forum is a partnership of public and private sector organisations. Its Action Plan aims to generate new employment in the private sector and the

social economy to compensate for employment and earnings reductions due to national public sector cuts. The Forum's Working Group has an initiative to maximise the benefits the region's workforce receives from renewable energy developments.

*Local economic strategy*

- 6.4.10 The Caithness and North Sutherland Regeneration Partnership (CNSRP) published its 'Vision for Caithness & North Sutherland The Energy Environment'<sup>5</sup>. The vision is for Caithness and North Sutherland to be an international centre for renewable energy by 2020, in particular marine energy. Within the energy sector the aim is to create or retain between 100 and 185 jobs between 2011 and 2014<sup>6</sup>.

*National tourism strategy*

- 6.4.11 Tourism policy in Scotland is currently driven by the national tourism strategy: A Tourism Framework for Change, which covers the period to 2015. At the heart of the current strategy is a commitment to increase Scottish tourism revenue by 50% between 2006 and 2015. The strategy also emphasises the need to achieve this aspiration in a sustainable manner that does not compromise Scotland's environment, culture or communities.

*Highland tourism strategy*

- 6.4.12 The Highland Area Tourism Partnership (ATP) comprises representatives from the tourist industry and key public bodies involved in delivering tourism in the Highlands. The group was established in 2005, in order to develop and deliver plans and programmes to grow tourism in the Highlands. The current Area Tourism Partnership Plan (ATPP) comprises two documents: the Highland Tourism Strategy and an Action Plan. The Strategy outlines longer term aims for the period from 2006 to 2015, while a new Action Plan agreed in 2009 details specific actions to be undertaken in the short term. The ATPP describes the key issues that need to be addressed in order to grow tourism in the Highlands.
- 6.4.13 The overall aim of the ATPP is to grow the value of tourism in the area by around 4% annually, which will be achieved primarily through an increase in visitor spend. The ATPP identifies the major strengths of the Highlands as the quality of its landscapes and natural heritage and the iconic images that they present. As with the national strategy, the principles of sustainability underpin all the priority activities identified and are reflected by the inclusion of relevant sustainability actions.

*Local tourism strategy*

- 6.4.14 Ambitious for Tourism Caithness and North Sutherland (ATCNS) is a development programme led by HIE. Its aim is to bring together public and private businesses and encourage partnership working through a destination management approach. The programme aims to support ambitious Caithness and North Sutherland businesses and enterprises to make more of their resources to deliver a high quality visitor experience.
- 6.4.15 The ACTNS notes that the downsizing of the decommissioning process at Dounreay Nuclear Power Plant will have an adverse effect on the level of business tourism in

<sup>5</sup> CNSRP, *Vision for Caithness and North Sutherland, The Energy Environment*

<sup>6</sup> CNSRP, *Delivery Plan 2011- 2014*

the local area. The renewables industry is seen as a potential area for growth in the business tourism market.

### Socio-economic context

#### Population

- 6.4.16 Mid-year population estimates for 2015<sup>7</sup> gives the population of Highland at 234,110. This represents around 4.35% of the total Scottish population.
- 6.4.17 The local study area used has a population of 27,729<sup>8</sup> that represents 12% of the total Highland population. It also has one of the lowest population densities in Scotland, with an estimated 5.8 people per square kilometre<sup>9</sup> compared to 66.0 for the rest of Scotland. Over half of the population in this area reside in the towns of Thurso and Wick<sup>10</sup>.

#### Key sectors

- 6.4.18 Caithness and North Sutherland has 11.1% of all the jobs in the Highland area. The single largest source of private sector employment for the local area is the Dounreay Nuclear Power Site Restoration. This supports nearly 2,500 jobs directly or indirectly in this area<sup>11</sup>. This is shown by comparatively large section of "Mining, quarrying & utilities".
- 6.4.19 The public sector, represented by the sectors of health, education and public administration & defence in the table below, is a significant employer in Caithness and North Sutherland accounting for 31.1% of employment in the area. This is lower than in the Highland area as a whole, and more in line with the levels for the whole of Scotland.
- 6.4.20 The accommodation and food services sector shows that tourism is more important to the Highland economy than to Scotland as a whole. However, tourism is relatively less important to Caithness and North Sutherland compared to the Highland area as a whole and more in line with employment in Scotland as a whole.

**Table 6.1 Employment in key sectors (% of total employment in area)**

Sectors	C & NS	Highland	Scotland
Agriculture, forestry & fishing*	0.56%	1.42%	1.60%
Mining, quarrying & utilities	12.18%	2.48%	2.78%
Manufacturing	6.91%	5.88%	7.47%
Construction	5.24%	5.50%	5.25%

<sup>7</sup> General Register Office for Scotland, 2016

<sup>8</sup> General Register Office for Scotland, *2010 Small Area Population Estimates, Scotland, 2011*

<sup>9</sup> This is based on the assumption that our local area contains 100% of the council wards of Thurso, Wick, Landward Caithness, 50% of the council ward of North & West Caithness and 40% of the council ward of East Sutherland & Edderton, giving a total area of 4790km<sup>2</sup>

<sup>10</sup> Population Data for Thurso locality and Wick locality given by [www.scrol.gov.uk](http://www.scrol.gov.uk)

<sup>11</sup> Caithness Socio-Economic Strategy Group, *A Strategy for Caithness and North Sutherland*, 2006

<b>Sectors</b>	<b>C &amp; NS</b>	<b>Highland</b>	<b>Scotland</b>
Motor trades	1.32%	2.42%	1.88%
Wholesale	2.30%	2.61%	2.98%
Retail	10.10%	10.75%	10.20%
Transport & storage	3.09%	4.84%	3.99%
Accommodation & food services	7.68%	10.40%	7.14%
Information & communication	1.64%	2.38%	2.68%
Finance & insurance	1.02%	1.12%	3.71%
Property	0.72%	0.92%	0.98%
Professional, scientific & technical	7.20%	4.27%	5.88%
Business administration & support services	7.04%	5.72%	7.47%
Public Admin & Defence	4.59%	6.69%	6.79%
Education	9.15%	9.55%	8.40%
Health	17.31%	18.51%	16.41%
Art, entertainment, recreation & other	1.95%	4.53%	4.39%

Source: Business Register and Employment Survey, 2009. \*These figures are aggregates from which farm agriculture (SIC class 0100) have been excluded

6.4.21 Scottish Renewables<sup>12</sup> in 2012 surveyed 200 companies in the renewable energy industry and found that onshore wind is the largest employer by generation type with 2,235 employees in the industry in Scotland. In addition the study noted that the majority of employment in grid (3,223) and employers who work across multiple sectors (1,231) were also supported by the development of onshore wind.

6.4.22 RenewableUK and Department of Energy and Climate Change<sup>13</sup> in 2012 carried out a report that estimated the total direct and supply chain effect of onshore wind. In 2011 this was estimated to be 8,600 jobs and £548 million in gross added value across the UK.

#### *Jobs and Claimant Rate*

6.4.23 Between 2004 and 2011 the total number of jobs in the Highland area has decreased slightly, while it has increased in Scotland. In this same period the population of Highland has grown quicker than the rest of Scotland and so the rate of job creation is also lower in Highland.

**Table 6.2 Change in total number of jobs by region**

<b>Years</b>	<b>Highland</b>	<b>Scotland</b>
2004-2008	2.58%	3.72%

<sup>12</sup> Scottish Renewables (April 2012), *Delivering the Ambition: Employment in Renewable Energy in Scotland*

<sup>13</sup> RenewableUK and Department of Energy & Climate Change (May 2012), *Onshore Wind: Direct and Wider Economic Impacts*

2008-2011	-2.61%	-2.93%
2004-2011	-0.09%	0.69%

Source: Office for National Statistics, Annual Population Surveys, 2004 – 2011

6.4.24 Despite this the Highland area has a lower level of unemployment than the rest of Scotland. However the claimant rate in Caithness and North Sutherland (4.1%) is more similar to the rate for Scotland (4.0%) than the rate in the Highland area (2.5%)<sup>14</sup>.

*Employment and earnings*

6.4.25 In the Highland area, around 63.5% of employment is full time, somewhat lower than the Scottish rate of 67.3%. Within Caithness and North Sutherland this rate is 63.9%. The Annual Survey of Hours and Earnings shows that median gross weekly income for residents of the Highland area (in full time employment) is £456.40, approximately 94% of the Scottish median wage (£486.90) (Office for National Statistics, 2010).

6.4.26 The Annual Population Survey shows that generally economic activity rates in the Highland area are higher than for Scotland as a whole. The latest available data suggests that the economic activity rate for the Highland area is around 81.1% compared to the Scottish rate of 77.1% (Office for National Statistics, 2011).

*Summary*

6.4.27 Caithness and North Sutherland has a low population density and has seen a slight decrease in population over time. The energy sector dominates the economy with the Dounreay Nuclear Power Plant employing a large section of the workforce. Caithness and North Sutherland is less reliant on the tourism sector compared to Highland and has a higher concentration of energy sector skills than both Highland and Scotland. The past decade has seen a lower level of job creation in Highland than in Scotland despite a growing population.

**Tourism**

*Value and volume*

6.4.28 VisitScotland estimates that in 2010, 2.11 million trips were made to the Highlands and Islands, staying 9.19 million nights and spending £537 million in the area<sup>15</sup>.

6.4.29 In 2010, 14% of employment in the Highland area<sup>16</sup> was due to tourism<sup>17</sup>. Employment in the Highland area is more reliant on tourism than in Scotland as a whole, which has 10% of employment in tourism. Caithness and North Sutherland is less reliant than Highland as a whole on tourism with 9.9% of employment in this sector, making the local area as reliant as the rest of Scotland on tourism for employment.

<sup>14</sup> Department of Work and Pensions, *Key Benefit claimants – working age client group*, 2011

<sup>15</sup> VisitScotland, *Tourism in Northern Scotland 2010*

<sup>16</sup> Office of National Statistics, *Business Register and Employment Survey 2010*

<sup>17</sup> Scottish Government (2010), *Key Sectors Database*,

6.4.30 In the local area tourist expenditure is estimated to be £35.3 million of which over half is due to leisure tourism, 26% due to business tourism and 22% due to visits to friends and family<sup>18</sup>.

*Visitor profile*

6.4.31 A higher percentage (79%) of visitors to the Highlands were from the UK than in Scotland as a whole and of these 59% were from Scotland<sup>19</sup>.

6.4.32 Ambitious for Tourism Caithness and North Sutherland (ATCNS) is a development programme led by HIE. As part of ATCNS, HIE has a report that investigates the opportunities for tourism in Caithness and North Sutherland (Tourism in CNS report)<sup>20</sup>. Non discretionary business tourism related to Dounreay Nuclear Power Plant is an important source of overseas and domestic tourists. Non-discretionary business tourism is also driven by public sector agencies and the NHS. A large number of day visitors are those passing through en route to a destination, in particular to Orkney.

*Tourism strengths*

6.4.33 The Tourism in CNS report has identified a wide variety of strengths in the area through workshops including both public and tourism stakeholders. Renewables was identified as one of 24 strengths of the destination experience.

*Visitor attractions*

6.4.34 The top five visitor attractions in the Highland area are<sup>21</sup>:

- Rothiemurchus Estate, by Aviemore (359,000);
- Eilean Donan Castle and Visitor Centre (314,199);
- Urquhart Castle, Drumnadrochit (286,262);
- CairnGorm Mountain (249,545); and
- James Pringle Weavers of Inverness, Inverness (203,627).

6.4.35 The Visitor Attraction Monitor<sup>22</sup> lists 76 attractions in the Highland area. Caithness Horizons, located in Thurso 15km from the site, is ranked 13th most popular attraction in the Highland area with 76,931 visits. This is a community facility and visitor attraction housing a museum, lecture facilities, tourist information centre and café.

6.4.36 Castle of Mey had 28,598 visitors. It is about 25km east of Thurso and about 40km from Reay. Tourism businesses consulted described it as the main attraction visitors wish to see.

---

<sup>18</sup> Tourism Resources Company (2011), *A Framework for Destination Development: Ambitious for Tourism Caithness and North Sutherland. Full Report – Volume 1 (Findings and Recommendations)*, A Report to Highlands and Islands Enterprise

<sup>19</sup> VisitScotland, *Tourism in Northern Scotland 2010*

<sup>20</sup> Tourism Resources Company (2011), *A Framework for Destination Development: Ambitious for Tourism Caithness and North Sutherland. Full Report – Volume 1 (Findings and Recommendations)*, A Report to Highlands and Islands Enterprise

<sup>21</sup> VisitScotland, *Tourism in Northern Scotland 2010*

<sup>22</sup> VisitScotland (2009), *Scottish Visitor Attractions Monitor*. This is the last publicly available visitor attraction monitor.

6.4.37 RSPB Forsinard Reserve had 3,870 visits in 2009 and is approximately 11km from the proposed site.

6.4.38 The VisitScotland website gives information for the Caithness and North Sutherland area. This lists 18 attractions<sup>23</sup> in the area. In Thurso there are two attractions, Caithness Horizons and Swanson Art Gallery. The RSPB Forsinard Reserve is also listed.

#### *Tourist activities*

6.4.39 Low level walking is the second most popular activity in the Highland area after general sightseeing<sup>24</sup>.

6.4.40 Walkhighlands claims to be the busiest walking website in the UK and the busiest outdoors website in Scotland<sup>25</sup>. This lists 25 walks in Durness and North Sutherland and 18 in the Caithness, Wick and Thurso area. The nearest walk is Forsinain Trail at Strath Halladale, which starts at the RSPB Forsinard Nature Reserve. One of the walks listed on the site is Causeymire Wind Farm.

6.4.41 Ramblers (formerly The Ramblers Association) claims to be the main UK walking charity. It aims to safeguard footpaths and encourage more people to take up walking. The Ramblers website lists 18 key walking routes across Scotland, none of which pass near the site<sup>26</sup>.

6.4.42 The Land Reform (Scotland) Act 2003 makes it a statutory duty for local authorities (access authorities) to draw up a plan for a system of paths sufficient for the purpose of giving the public reasonable access throughout their area (a Core Path Plan). Highland Council adopted its Core Path Plan in September 2011. The Core Paths aim to satisfy the basic needs of local people and visitors for general access and recreation and will provide links to the wider path network throughout the Highland Council area. The Highland Council area was divided into six areas including Caithness. This was further subdivided into 19 areas<sup>27</sup>. The area relevant to the site is Reay, Crosskirk and Westfield. For the Reay area there are ten paths of which one, Borlum Rock passes through the site.

6.4.43 General sightseeing is shown by the Tourism in CNS report which shows four attractors<sup>28</sup> close to the site which all lie in the vicinity of Reay. One is a feature, Sandside Bay, two are sport clubs and the fourth is an angling service.

#### *Tourist accommodation*

6.4.44 The site is in an area of very low population density. The nearest population centre is Reay, which is 1.8km north of the site and has 300 inhabitants. There are two accommodation providers here as identified by the Tourism in CNS report: The Old Inn at Reay and Linkside B&B (which has since closed down). The next nearest

---

<sup>23</sup> The website actually lists 19 attractions but Mary-Ann's Cottage is listed twice.

<sup>24</sup> Highland Area Tourism Partnership Plan (2006) *Highland Tourism Strategy*

<sup>25</sup> <http://www.walkhighlands.co.uk/about.shtml>

<sup>26</sup> <http://www.ramblers.org.uk/info/paths/region/pathsregion.htm#SC> There are actually 19 walks however the Cape Wrath Trail appears twice. (Accessed 2<sup>nd</sup> November 2011)

<sup>27</sup> <http://www.highland.gov.uk/leisureandtourism/what-to-see/countrysideaccess/corepathplans.htm>

<sup>28</sup> Tourism Resources Company (2011), *A Framework for Destination Development: Ambitious for Tourism Caithness and North Sutherland. Full Report – Volume 2 (Research Document)*, A Report to Highlands and Islands Enterprise – Appendix VII: Area Maps of Tourism Attracts; Attractors in the Thurso Area

- settlements with tourism accommodation as shown in the Tourism in CNS report are Melvich, 9km to the west, Forss, 8km to the east and Thurso, 15km to the east.
- 6.4.45 The consultation with tourism businesses included the tourist accommodation in Reay and other key accommodation providers (in terms of size, facilities and market) in Melvich, Forss and Thurso were contacted.
- 6.4.46 Braeside B&B, which already has views of Dounreay Nuclear Power Plant, is likely to have a view of the proposed wind farm.
- 6.4.47 While some accommodation providers felt that scenery was particularly important to their guests, others felt that atmosphere of being far away was important. Most accommodation providers cited a key driver for guests visiting the area was the desire to have gone to the most northern part of mainland UK. Those that did feel scenery was important felt it was for the sea views. As the proposed development is not situated immediately next to the A836 and not between the A836 and the sea, they felt the effect on visitors' enjoyment of the scenery was limited.
- 6.4.48 Accommodation providers in Thurso also cited another factor related to location, that the area made a good stopping point for either day tours to Orkney as part of a wider tour of the North or a stopping point en route to Orkney.
- 6.4.49 Several businesses noted that there are a number of existing wind farms in the area, including Causeymire Wind Farm which can be seen when approaching Thurso from the south on the A9, and that these had had no discernable effect on tourism.
- 6.4.50 Tourist accommodation providers stated that business visitors connected to Dounreay Nuclear Power Plant and to previous wind farm proposals and construction have been a help to their business, particularly during the off season.

#### *Tourist routes*

- 6.4.51 Scotland has 12 National Tourist Routes designated by VisitScotland. The North and West Highlands National Tourist Route passes through Reay via the A836 and is therefore 1.5km from the development site. It connects Ullapool to John O'Groats via Durness.
- 6.4.52 The A836 is also part of the National Cycle Network as promoted by Sustrans, a leading UK charity that enables people to take more journeys by foot, bike and public transport. There are currently nine National Cycle Routes in the network. National Cycle Route One connects Dover and the Shetland Islands.
- 6.4.53 Part of National Cycle Route One, including the part that passes by the development site, contributes to the North Sea Cycle Route. This is a 6,000km route based on existing national, regional and local cycle routes in Belgium, the Netherlands, Germany, Denmark, Sweden, Norway, Scotland and England.
- 6.4.54 A new addition to the VisitScotland portfolio of tourist routes is the North Coast 500 which starts in Inverness, heads west to Applecross and then northwards towards Caithness and Sutherland, before heading south again through Dingwall and finally back to Inverness. This is a route being promoted to all types of travellers, from motor vehicles to cyclists.

---

*Summary*

6.4.55 The driver for tourists to the local area is its location: being the furthest part of mainland Britain; being on the way to Orkney; and its relative location in terms of being remote.

**Existing tourism evidence and surveys**

*Glasgow Caledonian University Study*

6.4.56 By far the most comprehensive and robust study of the potential effect of wind farms on tourism was undertaken by Glasgow Caledonian University on behalf of the Scottish Government in 2008. The study was based on an extensive literature review and a survey. The literature review considered 40 studies from the UK and Ireland and reports from Denmark, Norway, the US, Australia, Sweden and Germany and found that there was no evidence to suggest that wind farms have a serious negative economic effect on tourists. A person-to-person survey considered the views of 380 tourists in four case study areas (Caithness & Sutherland; Stirling, Perth & Kinross; Scottish Borders; Dumfries & Galloway) and was undertaken at locations that maximised the likelihood that respondents would have seen a wind farm during their visit. The key findings from this survey were that:

- 75% of people felt that wind farms had a positive or neutral effect on the landscape;
- 2% of those interviewed who had seen a wind farm in the area (4 respondents out of 191) said that it would affect their decision to visit the area again – 2 indicated that the likelihood would increase and 2 that the likelihood would decrease. These 4 respondents were intercepted in the Stirling/Perthshire area. None of the respondents in Caithness & Sutherlands indicated that the wind farm they had seen would affect their decision to visit the area again;
- after seeing a photomontage of a local wind farm before and after development, 3% of respondents said that it would affect their decision to visit the area again; and
- after seeing a photomontage of a local wind farm before and after an extension was added, 7% of respondents said that it would affect their decision to visit the area again.

6.4.57 The study also included an internet survey, designed to explore the “scenic value” lost to the public when a wind farm is established. This uses the contingent valuation methodology which asks hypothetical questions (such as how much are you willing to pay to preserve something) and receives hypothetical answers (as the respondent is not actually paying). Although it is a widely used method, it has also been extensively debated as there is a lack of consensus on human decision making and human rationality and therefore whether contingent valuation is able to accurately capture the value humans place on non-market goods. This is reflected in the debate surrounding the many biases that can occur in this methodology such as interviewer biases and the format of the questions<sup>29</sup>.

6.4.58 The worst case scenario was of a negative economic effect equivalent to 3.5% of jobs in tourism by 2015, compared with a situation where there were no wind

---

<sup>29</sup> Ecological Economics (2008) *Bounded rationality in contingent valuation: Empirical evidence using cognitive psychology*. Oliver Frör

farms. This was as a result of two potential effects: visibility from tourist routes (impacting on decisions to return) and visibility from accommodation (impacting prices some tourists might be prepared to pay).

- 6.4.59 Overall the study concludes that the effects of meeting targets on renewables on the possibility of meeting tourism effects are so small that, provided planning and marketing are carried out effectively, there is no reason why the two are incompatible.

*VisitScotland Research*

- 6.4.60 In April 2012 VisitScotland published research<sup>30</sup> on consumer attitudes to wind farms and their effect on tourism. This study incorporated the views of 3,000 interviews. This report found that for 83% of residents in Scotland the decision to holiday in Scotland would not be affected by the presence of a wind farm. This study found that 80% of respondents in Scotland, when asked about holidays and short breaks in the Scottish countryside, disagreed or felt neutral that wind farms spoil the look of the Scottish countryside. Almost half (46%) of respondents in Scotland stated they would be interested in visiting a wind farm visitor centre.

*Other studies and case study evidence*

- 6.4.61 Other relevant wind farm research includes a body of work about the perceptions of residents. This research includes a survey undertaken by NOP in Wales<sup>31</sup>, which found that individuals with previous experience of wind farms tend to have a more positive attitude towards them. A separate study, which considered the perceptions of residents living near to wind farms in Scotland and Ireland<sup>32</sup>, found not only that local people become more favourable towards wind farms after construction but also that the degree of acceptance increases with proximity to the wind farm. This study went so far as to suggest that there was evidence that an 'inverse NIMBY' (not in my back yard) effect may be in operation with those living closest to wind farms i.e. those who have wind farms in their 'back yard' strongly supporting the technology.

*Evidence from other wind farms*

- 6.4.62 There have been a number of decisions in Caithness and elsewhere concerning similar developments and their socio-economic effect. In these decisions the planning committees and reporters have considered the effect the construction of a wind farm would have on local economies and on the tourism sector.

*Camster Wind Farm*

- 6.4.63 Proposals to construct a 50MW wind farm at Cnocab Buidhe in Caithness received planning permission in January 2009. The effects on tourism of constructing a 25 turbine wind farm were discussed during the consulting stages. The view expressed in the Planning Committee<sup>33</sup> regarding the effects of this wind farm development was that tourism would not be adversely affected by the development

---

<sup>30</sup> VisitScotland (2012) *Wind Farm Consumer Research*

<sup>31</sup> Wind Farms in Wales, NOP, 2005

<sup>32</sup> Warren, Lumsden, O'Dowd & Birnie, Green on Green; Public Perceptions of Wind Farms in Scotland & Ireland, March 2005.

<sup>33</sup> Cnocan Buidhe (04/0573/FULCA and 08/00090/FULCA): Decision (January 2009)

and many visitors view the Camster Wind Farm as a tourist attraction in its own right.

#### Burn of Whilk

- 6.4.64 An application to construct a 9 turbine development in the Burn of Whilk region of Caithness was granted by Highland Council in March 2011 despite initial concerns about the effect of the development on tourism. The major concern within the Planning Officer's report<sup>34</sup> was the cumulative effect that the proposed development would have on the visual amenity of the area considering other developments that were taking place in the same area. There are two other wind farms that are visible from the A9, Boulfruich and Causeymire, and it was felt that these developments already had an effect on the visitor experience. However the effects of a new development were unspecified and the Planning Officer recommended approval of the proposal due to the overall benefits that the development would give the area.

#### Hill of Stroupster

- 6.4.65 Proposals to construct a 12 turbine wind farm at the Hill of Stroupster site in East Caithness received planning permission following an appeal to the Scottish Government in April 2010<sup>35</sup>. The effect that this development would have on the visual amenity of the landscape and the consequent effects on tourism, such as the A99 route to John O'Groats, were factors in the original decision by The Highland Council to reject the proposal. The Reporter acknowledged that The Highland Council is rightly concerned about the fragility of the Caithness economy with the rapid decommissioning of the Dounreay reactor, however he stated that (Paragraph 48): "there is no compelling evidence that existing wind farms elsewhere in the UK have had a significant adverse effect on tourist numbers or businesses".
- 6.4.66 Fears over the effects on tourism were dispelled further when he did not agree with the concern that the visual effect of the turbines would detract from the outstanding coastal scenery enough to discourage visitors.
- 6.4.67 The Reporter also made reference to the argument regarding potential of the area to be used as a film location which is discussed in further in 6.5.30.

#### Strathy North

- 6.4.68 In the Reporter's report<sup>36</sup> on the SSE wind farm south of Strathy Village the effect of the wind farm on tourism was considered. The proposed development will be visible from the nearby A836 which is classified as a tourist route. The report acknowledges the potential for the wind farm to have an effect on local activities and that it would be visible from the road; however, the Reporter agreed with the supporting ES which stated that this development would have a low effect on these activities and associated businesses.
- 6.4.69 The Reporter went on to state, "*At a regional scale tourists appear to be unaffected by the current levels of wind farm developments. Well located developments can be seen as positive features by tourists.*" The development was not anticipated to adversely affect the range of activities, or tourists who use or enjoy the landscape

---

<sup>34</sup> Land at Burn of Whilk (06/00676/FUL) Decision (March 2011)

<sup>35</sup> Hill of Stroupster (P/PPA/270/431) Appeal Decision (April 2010)

<sup>36</sup> Strathy North Forest (PLC/012/11) Local Authority Planning Report (March 2011)

of North Sutherland. The Reporter recommended that Scottish Ministers approves the proposal.

#### Baillie Wind Farm

6.4.70 For a proposed wind farm at Baillie in Caithness consideration was given by the Reporter<sup>37</sup> to the potential effect the wind farm could have on tourism. The applicant case stated: *"This proposed wind farm would not affect the "brand image" of Caithness. A wind farm is depicted on a mural that greets visitors arriving at Wick Airport; it is a key theme on display at the Caithness Horizons Centre in Thurso, which depicts the evolution of industry from atomic to renewable energy. The proposed Baillie wind farm would assist this promotion. It is well away from the main tourist destinations and its intervisibility with Dounreay would send a powerful message, in line with the new image of Caithness. This would be enhanced by the proposed mitigation measures for the Cnoc Freiceadain Cairns which provide the potential to place Caithness at the forefront of archaeological investigation and promotion."*

6.4.71 The Reporter reached the following 'finding of fact' regarding tourism based on the above evidence: *"Effects on other tourist businesses in Caithness, such as the Castle of Mey, are also unlikely, and I have found no compelling evidence to suggest that there would be any significant deterrence effect from this wind farm, particularly as wind energy is being reflected in the re-branding of Caithness which is already evident to those arriving at Wick Airport and in the new visitor centre in Thurso."*

#### Langhope Rigg Wind Farm

6.4.72 The Reporter in the Langhope Rigg Wind Farm (in the Scottish Borders) decision<sup>38</sup> referred to the Glasgow Caledonian University Study as part of the consideration of the effects on recreation and tourism. The proposed wind farm was relatively close (approximately 10km) to the Southern Upland Way. The Reporter noted in his decision letter (paragraph 73) that: *"the available evidence at a general level does not allow a conclusion that the presence of the wind farm would be likely to have a crucial impact on the tourist economy of the surrounding area or seriously hinder efforts to promote the tourist potential of the south western borders; not least since the study strongly hints that those involved in outdoor pursuits, including the most numerous activity of hill walking or hiking which is important in the area, are, if anything, more and not less tolerant than the average person, of wind farms and the landscape"*.

6.4.73 The Reporter added at paragraph 74 of the decision letter that: *"it is not credible that more than a very few strongly averse to wind farms would be deterred from walking the Southern Upland Way or other tracks in the area, that substantial numbers of motorists or cyclists would find no prospect of enjoying the Ettrick and Yarrow valleys... because there would be views of a wind farm"*.

#### Drone Hill

6.4.74 A further relevant Scottish Borders appeal decision is the Drone Hill decision to consent<sup>39</sup> a 22 turbine development near Coldingham in November 2008. In this

<sup>37</sup> Baillie (IEC 3/105/3): Report (August 2009) & Decision (January 2010)

<sup>38</sup> Langhope Rigg (P/PPA/140/337): Appeal Decision (August 2008)

<sup>39</sup> Drone Hill (P/PPA/140/357 : Decision (November 2008)

case the designated Coastal Tourist Route (the A1107) ran through the middle of the proposed wind farm and there was a large scale holiday caravan park in close proximity (760m from the closest turbine). The Reporter stated (para 49): "*I am not persuaded that the visual impact of the wind farm would have a material effect on tourism and the local economy*".

## 6.5 Predicted effects of the scheme

### Economic effects

6.5.1 This section summarises the potential effects during the development and construction as well as operation of the proposed Limekiln Wind Farm.

#### *Development and Construction*

6.5.2 The potential development and construction phase effects have been considered at three levels – Caithness and North Sutherland, Highland and Scotland. These effects include:

- direct effects – effect of capital invested directly in any of the three areas considered. This would result in economic output being generated within the area which would support jobs during the construction phase;
- supplier effects – this would be the economic effect generated and employment supported throughout the supply chain by indirect investment (purchase of local goods and services) in any of the three areas considered; and
- income effects – effect of wages (or income) being spent in any of the three areas considered. This is the income of the employees directly and indirectly supported during the development and construction of the wind farm.

6.5.3 Estimates of how much of the work during the construction phase could be carried out by firms in each of the three areas is derived from the capital cost of the wind farm applied to assumptions of how much work could potentially be secured by firms in each of the three areas.

6.5.4 The exact costs and effects are presently unknown due to a range of factors including:

- The declining capital cost of onshore wind development;
- Uncertainty in the renewable energy market which directly influences the renewable energy supply chain and in turn determines how much an area can benefit from a development; and
- The time lag between producing this assessment and the proposed development being built.

6.5.5 The level of investment which will be required to construct the Limekiln Wind Farm is assumed to be £1.29 million per MW installed based on information gathered from other wind farms and reviewing published documents<sup>40</sup>. The wind farm will have 24 wind turbines that each have a capacity of 3MW. The total capacity of the development will be 72MW with an estimated development and construction

---

<sup>40</sup> Renewable UK (March 2011), *Assessment of Onshore Wind Energy Investment at Local, Regional and National level in the UK* and Department for Energy and Climate Change (June 2011), *Review of the generation costs and deployment potential of renewable electricity technologies in the UK and National level in the UK* and Department for Energy and Climate Change (June 2011), *Review of the generation costs and deployment potential of renewable electricity technologies in the UK*

- 
- expenditure of £92.9 million. Investment costs during the construction phase are broken down into four main categories including:
- costs associated with the turbines;
  - costs associated with infrastructure construction;
  - costs associated with connecting the wind farm to the national grid; and
  - other contracts including feasibility and planning.
- 6.5.6 The capacity of the area to deliver the various contracts is assessed by examining current levels of employment and numbers of workplaces in relevant industries within each area<sup>41</sup>.
- 6.5.7 Based on this information and analysis of employment by sector in Caithness and North Sutherland, Highland and Scotland by sector it was then possible to estimate how much of the work during the construction phase could be carried out by local firms, how much could be undertaken by firms based elsewhere in Highland and how much could be awarded to firms based elsewhere in Scotland.
- 6.5.8 Each of the contracts awarded would generate turnover for the company supplying the good or service. The next step was to calculate the employee costs associated with each contract using an assumption of wages as a proportion of turnover for each industry. Appropriate multipliers for each contract were then applied in order to estimate the indirect and induced effects in each geographic area.
- 6.5.9 The assumptions on the proportion of contracts that could be secured by the three study areas is based on previous experience, the RenewableUK and DECC report<sup>42</sup> and the economic structure of the Local Area, Highland and Scotland.
- 6.5.10 For example, the RenewableUK and DECC report found that the average regional share of the turbine contract was typically less than 3%, mostly accounted for by transport services and elements of turbine erection work. However, for the proposed development, it is assumed that the wind towers will be manufactured in Scotland and therefore 10% of the turbine contract value will be retained in Scotland.
- 6.5.11 In the following table the assumptions for the study areas (shown in bold) are compared with the research from the RenewableUK and DECC report (shown in italics). This comparison shows that the opportunity for Scottish companies to secure development and construction contracts is higher than the average for the regional level but lower than the UK share, as would be expected, given the location of the development in the north of Scotland and Scotland's dominant position in the UK onshore wind construction supply chain. Companies in Highland are also expected to have an opportunity to secure a larger proportion of contracts than the findings for the Local Authority Area in the RenewableUK and DECC report, due to the location of the project and the wind farm expertise and experience that is available in Highland.

---

<sup>41</sup> Office of National Statistics, *Business Register and Employment Survey 2010*, RenewableUK and Department of Energy & Climate Change (May 2012), *Onshore Wind: Direct and Wider Economic Impacts*

<sup>42</sup> RenewableUK and Department of Energy & Climate Change (2012) *Onshore Wind: Direct and Wider Economic Impacts* (undertaken by BiGGAR Economics)

**Table 6.3 Proportion of component contract that could be secured in each study area - RenewableUK comparison**

	<b>Feasibility &amp; Planning</b>	<b>Balance of Plant/ Infrastructure</b>	<b>Turbine</b>	<b>Grid Connection</b>
<b>Local Area</b>	<b>6%</b>	<b>19%</b>	<b>0%</b>	<b>20%</b>
<i>Local Authority Area (RUK)</i>	<i>8%</i>	<i>19%</i>	<i>1%</i>	<i>6%</i>
<b>Highland</b>	<b>37%</b>	<b>58%</b>	<b>0%</b>	<b>32%</b>
<i>Regional/National (RUK)</i>	<i>41%</i>	<i>61%</i>	<i>7%</i>	<i>83%</i>
<b>Scotland</b>	<b>85%</b>	<b>90%</b>	<b>10%</b>	<b>90%</b>
<i>UK (RUK)</i>	<i>98%</i>	<i>99%</i>	<i>14%</i>	<i>100%</i>

Source: BiGGAR Economics and RenewableUK and Department of Energy & Climate Change (2012) Onshore Wind: Direct and Wider Economic Impacts

6.5.12 It can be estimated that the proposed development could contribute around £39.0 million to the Scottish economy during the construction phase (if the towers for the turbines are manufactured in Scotland). Of this, the Highland economy could gain £14.1 million of which £5.8 million would be generated in Caithness and North Sutherland.

6.5.13 This activity could potentially support 269.3 job years<sup>43</sup> in Scotland of which 33% could be in the Highland area and 13% in Caithness and North Sutherland. As discussed above, these estimates are based on analysis of the scale of capital investment and the supply chain opportunities for Scottish businesses such as those in the RenewableUK and DECC report. This is composed of:

- the feasibility and planning stage could support for 8.7 job years;
- the balance of plant and infrastructure stage could potentially support 80.5 job years;
- the construction stage could potentially support 66.0 job years;
- the grid connection phase could potentially support 57.4 job years; and
- the wages of the above jobs will support further jobs through being spent in the Scottish economy. This could support a further 56.7 jobs.

#### *Operation*

6.5.14 The operation and maintenance cost for the proposed Limekiln Wind Farm has been estimated as being £3,816,000 per annum, based on £53,000 per MW<sup>44</sup>

<sup>43</sup> Job years are used to measure temporary employment effects. One person working full time for one year or two people working full time for six months will have worked the equivalent of a job year.

<sup>44</sup> RenewableUK and Department of Energy & Climate Change (May 2012), *Onshore Wind: Direct and Wider Economic Impacts*

- 6.5.15 As with the estimated potential development and construction phase effect, the operation and maintenance cost of the wind farm will be spent on separate contracts and based on the capacity of each of the three areas to undertake the work. The methodology used to assess the economic effects of the proposed wind farm’s operational phase is identical to that used to estimate the economic effect of the development and construction phase (described above).
- 6.5.16 The operational phase of the proposed development could contribute approximately £3.6 million to the Scottish economy annually, of which 58% would stay in the Highlands and 33% within Caithness and North Sutherland. This additional economic activity could support 20 full time equivalent jobs in Scotland for 25 years, of which 11 could be in the Highlands and 6 in Caithness and North Sutherland.

**Table 6.4 Potential effect by area**

	Caithness and North Sutherland		Highland		Scotland	
	£m	Job years	£m	Job years	£m	Job years
<b>Development &amp; Construction</b>	5.8	35.0	14.1	88.0	39.0	269.3
	£m	Jobs	£m	Jobs	£m	Jobs
<b>Operations &amp; Maintenance</b>	1.2	6	2.1	11	3.6	33.9

Source: BiGGAR Economics

*Local Investment*

- 6.5.17 The Scottish Government believes shared ownership projects offer Scotland the opportunity for improved community empowerment, a leading and respected renewable energy industry, and increased local economic and social benefits. New SNP Community Local ownership targets have been announced as 1 GW by 2020 and 2GW by 2030. In addition, by 2020, the Scottish Government want to see that at least half of newly consented projects have an element of shared ownership included.
- 6.5.18 The 2014 ‘One Scotland Programme for Government’<sup>45</sup> outlined a commitment to securing the co-operation of energy developers to offer a stake in developments to communities as a matter of course. The Scottish Government believes this should be the standard, and is committed to working with industry, community groups and other stakeholders to ensure this becomes a reality.
- 6.5.19 Limekiln Wind Farm will be open to investment from local community organisations and social enterprises looking to invest in the development. This will be to a maximum of 10% of the project (or 7.2MW equivalent).
- 6.5.20 Potential returns from an investment of up to 10% would add somewhere between £400-700k per annum and up to £14 million over the lifetime of the wind farm into

<sup>45</sup> <http://www.gov.scot/Resource/0046/00464455.pdf>

the local third sector economy, allowing those organisations involved to ensure their development plans have secure funding over the life of the wind farm. These figures are based on a range of inputs which include (but not means inclusive) energy price, turbine pricing, inflation, ability of a project to attract a support mechanism, cost of debt financing, which are all subject to change.

- 6.5.21 Infinergy would seek to de-risk the investment proposal as much as possible in order to safeguard community funds, seeking financial investment at point of operation.
- 6.5.22 In collaboration with Local Energy Scotland, Infinergy has identified a number of potential community bodies/social enterprises based locally who will be invited to discuss the possibility of investment during the planning process and Infinergy will work with Local Energy Scotland to maximise potential involvement. Those bodies interested in exploring this offer are being given support by Community and Renewable Energy Schemes (CARES) established by the Scottish Government to encourage community ownership of renewables across Scotland.

### **Consideration of wider effects on tourism**

- 6.5.23 A number of other potential effects on tourism have been considered.

#### *Tourism during the construction phase*

- 6.5.24 The construction operation could affect visitors to the area in the immediate vicinity of the site, particularly anglers, walkers and stalkers. In order to minimise any potential disruption it will be important that the construction operation is sensitively managed (to avoid excessive noise for example) and access to and around the site is maintained as much as possible.
- 6.5.25 Consultations with local tourism businesses suggest that some businesses have already benefited from the presence of construction workers, engineers and management associated with previous wind farm developments. These benefits could be further enhanced if all those engaged in construction are encouraged to make use of local businesses and services.

#### *Tourism during the operational phase*

- 6.5.26 Extensive research has been undertaken in recent years into the potential and actual effects of wind farms on tourism (this evidence is discussed in **Sections 6.4.56 to 6.4.61**). This does not find any significant impact on tourism from wind farms.
- 6.5.27 As discussed in **Section 6.4.55** the main type of visitor is the general sightseer, driven by the location. While scenery is important to general sightseers, atmosphere and remoteness are slightly more important factors for choosing the area. The area local to the development does not have high scenic characteristics compared to the rest of the region. This is stated in the landscape and visual assessment in **Chapter 9**:

*"The landscape in which the proposed Development is situated comprises low hills which are of local rather than regional or national importance. They lack the scale and scenic qualities of the landscapes to the west and south. At the local level, they form a low ridgeline that marks the transition from the Mixed Agriculture and Settlement landscapes to the north and east and the Sweeping Moorlands to the west and south."*

6.5.28 The development will not impinge on the factors of atmosphere and remoteness as **Chapter 9** states that:

*"The transitional location of the site adds to its suitability as it does not impinge on the more wild and remote landscapes which lie to the south and also does not come too close to the settled north coastal edge where the A836 and small settlements are situated."*

6.5.29 In addition an assessment of wild land is carried out in **Appendix 9.E** that

*"presents an assessment of the effects on wild land and reports that there will be no significant effects or cumulative significant effects on wild land. This assessment focuses on a small area of potential wild land to the south-west of the proposed Development."*

6.5.30 The area already has many prominent wind farms and discussions with local tourism businesses have not noted any negative comments from tourists regarding the presence of wind farms. A key reason for visiting the local area is to go to the most northern part of the mainland. As these visitors come for a specific purpose, the presence of a wind farm will be unlikely to have an effect on their decision.

6.5.31 Consultations with local business suggest that the aspect of the scenery tourists are interested in is the coastal views, therefore a wind farm will only have a negative impact on the scenery if the wind farm came between the road and the coast, which the proposed development does not.

*Tourism and key routes*

6.5.32 **Sections 6.4.51** and **6.4.52** describes the main tourist routes within the local study area. It considers three types of route: car, cyclists and walkers.

6.5.33 The key route is the A836, which is important to both car tourists and cyclists, as it is National Tourist Route 12 as designated by VisitScotland and Sustrans National Route 1. **Chapter 9** states that the effect of the proposed development on the A836 east will be significant between Drum Hollistan and Reay Church which is approximately a three mile stretch. Westbound, the significant effect will occur between Dounreay and Reay Church. During the construction period the effect of the proposed Development will not be significant due to the screening effect of the majority of the construction activities by the plantation.

*Tourism and accommodation*

6.5.34 There is one tourism accommodation business from which the proposed wind farm could be seen. This business has views of Dounreay Nuclear Power Plant.

*Tourism and sustainability*

6.5.35 The principles of sustainability underpin all the Highland Tourism Strategy's activities to grow tourism and it has a priority to *"raise awareness (locals and visitors) of sustainability issues and develop opportunities to demonstrate our environmental awareness to visitors."* The presence of a wind farm would support this priority and help underpin the status of the Highlands as a Green Destination as stated in the strategy.

*Tourism and new activities*

6.5.36 Given the existing association of the area with the energy sector, the development of wind farms and development of marine renewables in the Pentland Firth, there

may be some potential to market the area for energy tours. A similar initiative has been undertaken by the Danish Tourist Board.

### **Consideration of effect on other sectors**

6.5.37 The Highlands of Scotland Film Commission has been consulted regarding the effect of the proposed Limekiln Wind Farm. It has found from location managers that wind farms can be off-putting particularly as the attributes of filming in the Highlands includes natural landscape, iconic scenery and remoteness. There is currently an upswing in terms of very substantial projects in the Highlands; however, due to constraints in terms of accommodation these projects do not come to Caithness. In the decision to grant planning permission to the Hill of Stroupster Wind Farm in Caithness, the Reporter states that "*the arguments regarding the potential for the area to be more regularly used as a film location highly speculative*". The factors that are important in filming in a rural area such as the North Highlands are availability of rural scenery for artistic shots. Given the proposed wind farm is located between commercial forestry and Dounreay Nuclear Power Plant, no rural scenery without man made structures will be affected by the proposed Limekiln Wind Farm.

## **6.6 Mitigation and enhancement measures**

6.6.1 Negative effects have been considered in terms of effect on tourism and in terms of effect on other sectors. There is expected to be no measurable negative effect therefore no mitigation measures are required. A number of positive effects have been identified and these effects could be maximised through enhancement activities.

6.6.2 The effects of the wind farm can be enhanced with measures to maximise the economic benefit. There are three main areas of enhancement: improving skills, maximising the involvement of the local supply chain and creating long term assets that can contribute to the economy. As well as maximising the economic benefit to the economy these would also help ensure that the positive effects of the wind farm are long lasting.

6.6.3 Activities that would improve the skills in the local area include:

- linking up with local colleges to identify areas of collaboration with the proposed development such as apprenticeships, contributing to relevant courses or setting up courses in areas where there is a skills gap;
- setting up or linking with schemes to fund skills and training initiatives in the area; and
- earmarking some of the community benefit fund for social and economic developments. For example employability could be targeted by linking up with the local Adult Literacy and Numeracy Partnership and assessing the demand for employability literacy modules.

6.6.4 Activities to maximise the involvement of the local supply chain in the proposed development could involve:

- working with the Chamber of Commerce to facilitate meet-the-buyer and meet-the-supplier events. This would enable local companies to highlight issues and barriers relating to involvement in with the supply chain and the identified issues to be addressed by the Chamber of Commerce; and

- working with other organisations, such as Caithness and North Sutherland Regeneration Partnership, to ensure all local companies who could potentially supply the proposed development have been identified and increase the marketing of events suggested above.

6.6.5 Activities to create long term assets to contribute to the economy can include:

- focusing community benefit on projects that are likely to generate long-term economic benefits for the area such as improving or creating tourism assets such as paths, signage and toilets;
- converting new access tracks into paths that can be used for recreational paths for example by linking them up to current paths and right of ways; and
- considering how the wind farm can be used as a tourism asset, for example, setting up local information boards for visitors.

## **6.7 Assessment of residual effects**

### **Evaluation criteria**

- 6.7.1 The scale of the economic effects arising during construction is such that their significance to the local, regional and national economy as a whole is likely to be slight beneficial; however, their effect on individual firms is likely to be more significant. While the effects on the economy of the local area are assessed as slight beneficial, it should also be noted that the employment supported at construction and operation and maintenance phases will contribute towards establishing Caithness and North Sutherland as a centre for the renewable energy sector.
- 6.7.2 The proposed development is expected to have no measurable impact on other sectors.
- 6.7.3 The effects on tourism is considered to be moderately beneficial during the construction stage at the local level as the stay of wind farm employees could moderately increase income to local accommodation providers. The proposed Development is not expected to have any measurable effect during the operational stage.
- 6.7.4 There will also be a moderately beneficial effect due to the community benefit funding as it could moderately increase income to local community organisations.

### **Maximising economic effects**

- 6.7.5 The positive effect associated with additional expenditure during the construction and decommissioning phases should be maximised by encouraging contactors to make use of local businesses. The renewable energy supply chain directory recently launched by Scottish Enterprise could help to achieve this.

## **6.8 Cumulative effects**

- 6.8.1 **Chapter 9** lists the cumulative wind energy developments within a 35km radius. This lists:
- two wind farms under construction and five consented wind farms of which the closest to the proposed development are Bailie Wind Farm which is 4.50km from the proposed development and has 21 wind turbines and Strathy North which is 15.23km from the proposed development and has 33 wind turbines; and

- 
- applications for consents for six wind farms have been submitted, of which the closest and largest is Strathy South 17.60km from the proposed development which has 77 wind turbines.
- 6.8.2 The greater the capacity that is constructed in the area the more likely it is that the local area can benefit from supply chains opportunities:
- construction – to enter new markets a company needs to make an investment in terms of resources expended to seek out opportunities, assess opportunities and qualify for an opportunity. For example to enter the supply chain for Balance of Plant opportunities, an onshore wind developer may have a pre qualification process. This may require suppliers to have systems such as a Quality Management System of ISO 9000 or equivalent, an Environmental Management System of ISO 14001 of equivalent and a Health and Safety System of OHSAS 18001 or equivalent. For a company to invest resources into entering a new market, naturally the benefits will have to exceed the costs. The greater the capacity that is constructed in the area the greater potential benefit from entering the onshore wind sector. This larger potential benefit will result in a greater potential return to investment and therefore an increase in the likelihood of companies perceiving that it would be a worthwhile to invest resources to try and enter the supply chain; and
  - operations and maintenance – the greater the number of projects in the area, the more likely that operations and maintenance operations will be based locally as there would be enough opportunities locally to employ a full time locally based employee or company.
- 6.8.3 **Chapter 9** states that the cumulative effects on the A836 both eastbound and westbound are not significant.
- 6.8.4 **Appendix 9.E** states that there are not cumulative significant effects on wild land.