

Slickly Wind Farm

Non-Technical Summary

December 2019



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PREFACE

The EIA Report and supporting documentation is available on the Slickly Wind Farm project website¹ and the Highland Council (the Council) Planning Portal².

In addition, hard copies of the EIA Report will be made available for public inspection during the consultation period at the following locations:

Thurso Library,
Davidson's Lane,
Thurso
KW14 7AF

Seaview Hotel,
County Road,
John O'Groats
KW1 4YR

CD and hard copies of the application may be obtained at a reasonable charge reflecting the cost of making the relevant information available. CD and hard copies can be obtained from:

Ailsa Gray
Arcus Consultancy Services Ltd
144 West George Street
Glasgow
G2 2HG

Any representations to the application should be made by completing the online representation form on the Council Planning Portal.

- Or by email to: eplanning@highland.gov.uk
- Or by post to:

eProcessing Centre
Highland Council Headquarters,
Glenurquhart Road,
Inverness
IV3 5NX

Representations should be dated and should clearly state the name (in block capitals) and full return email or postal address of those making representation. All representations to the Council will be published online along with the name of those making representation.

¹ Statkraft (2019) Slickly Wind Farm [Online] Available at: <https://www.statkraft.co.uk/power-generation/onshore-wind-development-projects/slickly/> (Accessed 04/12/19)

² The Highland Council Planning Portal [Online] Available at: <https://wam.highland.gov.uk/wam/> (Accessed 04/12/19)

1 INTRODUCTION

This Non-Technical Summary (NTS) is a summary of the Environmental Impact Assessment (EIA) Report which accompanies the Planning Application (the Application) under the Town and Country Planning (Scotland) Act 1997³ (as amended by the Planning etc. (Scotland) Act 2006⁴) to construct, operate and decommission 11 wind turbines on land within Stroupster West Forest (the Site). The Site is located approximately 13.5 kilometres (km) north of Wick and approximately 8.5 km south of John o' Groats, north-east Caithness. The Site lies wholly within the administrative boundary of the Highland Council. The project is known as Slickly Wind Farm (the Development).

This NTS is intended to be read alongside the Application, EIA Report, and associated application documents for the Development.

2 THE APPLICANT

The Applicant (Slickly Wind Farm Limited) is a wholly owned subsidiary of Statkraft UK Ltd. Statkraft is a leading company in hydropower internationally and Europe's largest generator of renewable energy; producing hydropower, wind power, solar power, gas-fired power, and supplies district heating.

Statkraft owns and operates 11 wind farms in the UK and the Nordic with a combined installed capacity of almost 1,000 MW. In October 2018, Statkraft acquired 100 per cent of the shares in Element Power Ireland Ltd including Slickly Wind Farm.

3 THE NEED FOR THE DEVELOPMENT

The Climate Change (Scotland) Act 2009⁵ creates the statutory framework for greenhouse gas emission reductions in Scotland by setting a target for net Scottish emissions for the year 2050 to be at least 80 % lower than the 1990 baseline level.

The Climate Change Plan⁶ was laid in Parliament on 28th February 2018 and sets out how Scotland can deliver its target of a 66% emissions reduction, relative to the 1990 baseline for the period 2018-2032. The Climate Change Plan notes that a critical role for the planning system will be to try and accommodate the further development of low emissions energy generation facilities noting that "*we will continue to need to find room for large scale infrastructure such as wind and solar farms, as well as more locally based equipment*" (Page 34/35).

The Scottish Energy Strategy (SES) 2017⁷ sets out the Scottish Government's strategy through to 2050. The SES sets two new targets for the Scottish energy system by 2030:

- The equivalent of 50% of the energy for Scotland's heat, transport and electricity consumption to be supplied from renewable sources; and
- An increase by 30% in the productivity of energy use across the Scottish economy.

The SES goes on to set out what is termed the 'Opportunity' for onshore wind. There is recognition that onshore wind is amongst the lowest cost forms of power generation of any

³ Scottish Government (1997) the Town and Country Planning (Scotland) Act 1997 [Online] Available at: <http://www.legislation.gov.uk/ukpga/1997/8/contents> (Accessed 15/12/19)

⁴ Scottish Government (2006) Planning etc. (Scotland) Act 2006 [Online] Available at: <http://www.legislation.gov.uk/asp/2006/17/contents> (Accessed 15/12/19)

⁵ The Scottish Government (2009) Climate Change (Scotland) Act 2009 [Online] Available at: <http://www.legislation.gov.uk/asp/2009/12/contents> (Accessed 15/12/19)

⁶ Scottish Government (2018) Climate Change Plan: Third Report on Proposals and Policies 2018-2032 [Online] Available at: <https://www.gov.scot/publications/scottish-governments-climate-change-plan-third-report-proposals-policies-2018-9781788516488/> (Accessed 29/11/19)

⁷ Scottish Government (2017) The Future of Energy in Scotland: Scottish Energy Strategy [Online] Available at: <https://www.gov.scot/publications/scottish-energy-strategy-future-energy-scotland-9781788515276/> (Accessed 29/11/19)

kind which will allow it to contribute to one of the six priorities in the SES which is "to protect consumers from excessive or avoidable costs" (Pg. 8). It is also recognised as "a vital component of the huge industrial opportunity that renewables creates for Scotland". These energy and climate change goals mean that onshore wind must continue to play a vital role in Scotland's future - helping to decarbonise our electricity, heat and transport systems, boosting our economy, and meeting local and national demand (Pg. 11).

The Ministerial Foreword to the Onshore Wind Policy Statement (OWPS) 2017⁸ notes that: "our energy and climate change goals mean that onshore wind will continue to play a vital role in Scotland's future – helping to substantively decarbonise our electricity supplies, heat and transport systems, thereby boosting our economy".

National planning policy continues to support the principle of wind energy development, subject to the consideration of environmental criteria. The spatial strategy outlined in Scottish Planning Policy (June 2014)⁹ provides an indication of areas where wind energy developments will not be permitted and areas where they may be permitted subject to consideration of a number of environmental criteria.

The Development Plan for the Development comprises the Highland-Wide Local Development Plan (HwLDP) (2012)¹⁰ and the Caithness and Sutherland Plan (CaSPlan) (2018)¹¹ which is supportive of the principle of wind energy development. The LDP policies require developers to demonstrate that wind energy development proposals will not have unacceptable impacts on people, the natural and water environment, landscape, or the historic, built or cultural environment.

The Council adopted its Supplementary Guidance (SG)¹² on Onshore Wind Energy in November 2016 and this now forms part of the statutory Development Plan. Section 1 'Introduction' states: "The advice that follows provides a fuller interpretation of HwLDP policies as they relate to onshore wind energy development. The Council will balance these considerations with wider strategic and environmental and economic objectives including sustainable economic growth in the Highlands, and our contribution to renewable energy targets and tackling climate change....".

The Addendum Supplementary Guidance 'Part 2B'¹³ which was adopted in December 2017 and provides landscape sensitivity appraisals for 'Black Isle, Surrounding Hills and Moray Firth Coast Caithness'. The Addendum (2017) has identified that turbines in north-east Caithness should "consolidate and improve the existing layout of Stroupster" and "avoid cumulative effects by ensuring turbine height and proportions are similar to existing turbines."

Overall, there is strong policy support for the principle of renewable energy development at all policy levels, subject to the satisfaction of a number of planning and environmental considerations which are considered in detail in the technical chapters of the EIA Report.

⁸ Scottish Government (2017) Onshore Wind: Policy Statement [Online] Available at: <https://www.gov.scot/publications/onshore-wind-policy-statement-9781788515283/> (Accessed 29/11/19)

⁹ Scottish Government (2014) Scottish Planning Policy [Online] Available at: <https://www.gov.scot/publications/scottish-planning-policy/> (Accessed 05/12/19)

¹⁰ The Highland Council (2012) Highland-wide Local Development Plan [Online] Available at: https://www.highland.gov.uk/info/178/local_and_statutory_development_plans/199/highland-wide_local_development_plan (Accessed 05/12/19)

¹¹ The Highland Council (2018) the Caithness and Sutherland Local Development Plan [Online] Available at: https://www.highland.gov.uk/info/178/local_and_statutory_development_plans/283/caithness_and_sutherland_local_development_plan (Accessed 05/12/19)

¹² The Highland Council (2016) Onshore Wind Energy: Supplementary Guidance [Online] Available at: https://www.highland.gov.uk/downloads/file/18793/onshore_wind_energy_supplementary_guidance_november_2016 (Accessed 05/12/19)

¹³ The Highland Council (2017) Onshore Wind Energy: Supplementary Guidance Part 2b [Online] Available at: https://www.highland.gov.uk/downloads/file/18753/addendum_supplementary_guidance_part_2b_december_2017 (Accessed 05/12/19)

A full assessment of the Development against the applicable plans, policies and strategies is contained within the Planning Statement that accompanies the Application.

4 SITE SELECTION AND DESIGN EVOLUTION

The Site was identified as having the potential for development as part of a comprehensive site search exercise and feasibility studies were undertaken looking at a range of factors. The final design of the Development was established through an iterative process which included the identification of technical and environmental constraints determined during the EIA process, through consultation with statutory bodies and members of the local community. The final design layout was established in November 2019 and comprises 11 turbines.

5 SITE AND SURROUNDINGS

The Site covers an area of approximately 332 hectares (ha) and is centred on National Grid Reference (NGR) 332200, 966000 as shown on Figure 1.1.

The topography of the Site and immediate vicinity is relatively flat. The elevation of the Site varies from approximately 40 metres (m) Above Ordnance Datum (AOD) in the central portion of the Site, rising gently to 60 m AOD towards the east of the Site on the south-western flanks of the Hill of Stroupster which rises to 74 m AOD.

The predominant land use within the Site consists of coniferous forestry which mainly includes Sitka spruce, lodgepole pine and larch. The west of the Site is not forested and consists of open moorland and blanket bog. There are a number of watercourses within the Site, all of which drain to the south and the majority of which discharge into the Back Burn of Slickly which runs through the centre of the Site.

The operational Stroupster Wind Farm consisting of 13 turbines is immediately to the north-east, while the operational four turbine Lochend Wind Farm is approximately 3 km to the north-west of the Site. Stroupster Wind Farm consists of 12 turbines with a tip height of 113 m and a single turbine at 110 m.

No public roads are located within the Site, although there two forestry access tracks within the Site, to the west and east.

There are a number of dispersed properties surrounding the Site, predominantly to the east and south along unnamed roads, however none are within 1 km of the proposed turbine locations. There are no residential properties within the Site.

The Site is bordered to the north and south by Caithness and Sutherland Peatlands which is a Special Area of Conservation (SAC), Site of Special Scientific Interest (SSSI), Special Protection Area (SPA) and Ramsar Site.

6 DEVELOPMENT DESCRIPTION

The purpose of the Development is to generate electricity from a renewable source of energy, offsetting the need for power generation from the combustion of fossil fuels. Consequently, the electricity that will be produced results in a saving in emissions of Carbon Dioxide (CO₂) with associated environmental benefit.

The Development would comprise of 11 three-bladed horizontal axis turbines up to 149.9 m tip height with a total generating capacity of up to 49.9 MW. The main components of the Development are as follows:

- 11 turbines with a maximum tip height of 149.9 m and rotor diameters of up to 130 m;
- Associated foundations, blade laydown areas, crane hardstandings and external transformers at each wind turbine location;

- Access tracks linking the turbine locations. These will largely comprise new tracks of which the majority will be floating;
- Substation compound incorporating electrical switchgear, wind farm control elements and battery storage;
- Temporary construction compound;
- Network of underground cabling running adjacent to the access tracks where possible;
- A permanent meteorological mast (up to 92 m); and
- Upgraded site access from existing junction off the C1037 public road.

The Development will require the felling of approximately 205 ha of commercial conifer crops. The Application is for the Development to be operational for 30 years, and at the end of this period, decommissioned. The components of the Development are shown in Figure 1.2.

The EIA has been based on maximum parameters associated with wind turbines of up to tip heights of 149.9 m. The candidate turbine that has been used within this assessment envelope is the Nordex N133 3.6 MW. Based on the candidate turbine, the Development would have a total estimated installed maximum generation capacity of up to 39.6 MW. However, planning permission is being sought for up to 49.9 MW for the wind farm generation and battery storage.

The Development is not, however, tied to a particular turbine model, as the turbine market is dynamic, with technology changes, predicted performance and price fluctuations driving turbine selection. The final turbine choice will depend on technical and commercial considerations at the time of procurement, although the final turbines would not exceed the proposed maximum parameter tip heights of 149.9 m.

The Development would be accessed via a new junction from the C1037 public road connecting Lyth to Upper Gills then existing forestry track and new track. The turbine components which constitute 'abnormal loads' would be delivered by sea to either Wick Harbour or Gills Bay Harbour.

The grid connection for the Development would be via a new on-site substation, which would contain metering equipment and switchgear. The connection between the Site and the wider grid is the responsibility of Scottish Power Energy Networks (SPEN) and would be subject to a separate consent procedure.

7 CONSTRUCTION PHASE DETAILS

The construction period for the Proposed Development would be approximately 18 months in duration.

The starting date for construction activities will largely be dependent upon the date that consent might be granted and grid availability; subsequently, the programme would be influenced by constraints on the timing and duration of any mitigation measures confirmed in the individual technical chapters or by the consent decision.

Construction activities have been assumed to take place between 07:00 to 19:00 hours on weekdays and 07:00 to 18:00 on Saturdays. No work would be undertaken on Sundays or public/bank holidays.

It would be the responsibility of the Principal Construction Contractor to prepare and implement a Construction Environmental Management Plan (CEMP). An Outline CEMP is included as part of the application and can be found in Technical Appendix A9.1.

The CEMP would incorporate the following:

- Pollution Prevention Plan;
- Drainage Management Plan;

- Traffic Management Plan;
- Site Waste Management Plan;
- Stakeholder Management Plan;
- Habitat Management Plan;
- Peat Management Plan;
- Peat Landslide Hazard and Risk Assessment; and
- Geotechnical Risk Register.

8 OPERATION

During operation, general servicing will be required. Each turbine manufacturer has specific maintenance requirements, but typically, routine maintenance or servicing of turbines is carried out twice a year, with a main service at twelve monthly intervals and a minor service at 6 months. In the first year, there will likely be an initial three-month service after commissioning.

9 DECOMMISSIONING

The Development has been designed with an operational life of 30 years. At the end of the operational period, it would be decommissioned and the turbines dismantled and removed. Any alternative to this action would require consent from the Council.

During decommissioning, the turbine bases would be excavated below ground level. All cables would be cut off below ground level, de-energised, and left in-situ. Access tracks would be left for use by the landowner. No stone would be removed from the Site. The decommissioning works are estimated to take six months. This approach is considered to be more environmentally beneficial than seeking to remove foundations, cables and roads entirely.

10 PUBLIC CONSULTATION

10.1 Public Exhibitions

The Applicant appointed Smithy House Associates Ltd (SHA) to act as a third-party community engagement consultant to undertake a range of public consultation for the Development. SHA has been responsible for coordination of community engagement, presentation to and liaison with the community and local decision-makers throughout the design process and preparation of the Application for the Development.

The Applicant and SHA have worked closely with the Council to identify stakeholders and include all sectors of the community in the engagement process.

Three rounds of public exhibitions were undertaken from November 2018 – November 2019 in Keiss, Auckengill, Lyth and Canisbay. Public exhibitions form an integral part of the consultation activity and provide an opportunity for community members to meet with the Applicant to discuss the Development, get up to date information and provide feedback. Ten events were held on different days and extended into the early evening, to give visitors a range of opportunities to attend at their convenience and to provide feedback.

3D visualisation technology was commissioned to demonstrate the layout of the Development. The technology was operated by the Landscape Architect using interactive 3D technology, OS terrain data, Google Street View and local photography to overlay the Development layout in the proposed location. The model enables views of the Development to be replicated from nearby properties and points of interest.

To advertise the first and third rounds of public exhibitions, a newsletter invitation was posted to 1,492 addresses (all properties within a 10 km radius of the Site) to inform residents of the Development and the times and locations for the public events.

Details of the attendance at the three rounds of public exhibitions is listed below:

- Round 1 - November 2018 – 80 attendees with 36 comments;
- Round 2 - September 2019 – 33 attendees with 15 comments; and
- Round 3 - November 2019 – 31 attendees with 20 comments.

At the November 2019 public exhibition, the Applicant included additional information on an Initial Feasibility Study which had been commissioned to explore the potential for using broadband infrastructure at the Development to deliver super-fast broadband to the surrounding communities. The Applicant commissioned a Highland's based company, Monsternet Highland Ltd, to undertake the Initial Feasibility Study. A Broadband Working Group has been proposed to explore this opportunity further and an initial meeting is planned for early 2020.

10.2 Community Liaison Group (CLG)

A CLG was established on 8th October 2018 with representatives from Dunnet and Canisbay Community Council, Bower Community, Sinclairs Bay Community Council and Castletown Community Council invited to attend a meeting in the Seaview Hotel, John O'Groats KW1 4YR. Seven representatives attended from Dunnet and Canisbay Community Council, Sinclairs Bay Community Council and Castletown Community Council. A representative from Foundation Scotland also attended to provide further information to the Community Councils on the administration of the proposed community benefit fund.

A further CLG was held on 24th June 2019 at the Seaview Hotel, John O'Groats KW1 4YR at 6.30pm with representatives from the above Community Councils invited. Ten representatives attended from Dunnet and Canisbay and Sinclairs Bay Community Councils. A representative from the Caithness Broch Project also attended the meeting.

A third CLG was held on 18th November 2019 at the Seaview Hotel, John O'Groats KW1 4YR at 6 pm with representatives from the above Community Councils invited. Two representatives attended from Dunnet and Canisbay and Sinclairs Bay Community Councils. The Applicant requested that the CLG attendees encouraged representatives of Bower and Castletown Community Councils to continue to engage in the CLG process. During the November 2019 CLG, the Applicant offered that a representative of Monsternet could attend a subsequent meeting to discuss the potential for broadband on-site.

11 THE ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

Environmental Impact Assessment (EIA) is a process that aims to ensure that permissions for developments with potentially significant effects on the environment are granted only after the assessment of likely significant environmental effects has been undertaken. The assessment must be carried out following consultation with statutory consultees, other interested bodies and members of the public.

EIA is an iterative process of assessment and design whereby prediction and assessment of effects inform the design of the Development. The Development can then be refined in order to avoid or reduce potential environmental effects, where necessary, through the use of mitigation measures.

The EIA Report has been prepared following a systematic approach to EIA and project design. The process of identifying environmental effects is both iterative and cyclical, running in tandem with the iterative design process. The key elements in an EIA are:

- Iterative project design, taking feedback from consultation and applying it to the Development design process on an ongoing basis throughout the EIA process;
- Scoping and ongoing consultation, including consideration of responses and how these should be addressed as part of the EIA;
- Technical environmental impact assessments; and

- Preparation and submission of the EIA Report.

12 THE EIA REPORT

Arcus Consultancy Services Ltd (Arcus) has prepared an EIA Report on behalf of the Applicant to identify and report upon the potential for significant environmental effects occurring as a consequence of constructing, operating and decommissioning the Development. Measures are identified that can be put in place to avoid, reduce or mitigate those effects.

Following Chapters 1 to 5, the following environmental topics are assessed in the EIA Report:

- Chapter 6: Landscape and Visual Impact Assessment (LVIA);
- Chapter 7: Ecology;
- Chapter 8: Ornithology;
- Chapter 9: Hydrology, Hydrogeology, Geology and Peat;
- Chapter 10: Archaeology and Cultural Heritage;
- Chapter 11: Noise;
- Chapter 12: Transport Assessment;
- Chapter 13: Socio-economics, Tourism and Recreation, and Land-use;
- Chapter 14: Climate Change;
- Chapter 15: Aviation;
- Chapter 16: Forestry; and
- Chapter 17: Other Issues (includes Shadow Flicker, Telecommunications & Utilities, and Health & Safety, including Major Accidents & Disasters).

Chapter 16 - Forestry follows a different structure in that it will describe the baseline forestry conditions and will provide a forest design plan as a result of the Development, but will not describe the environmental impacts as a result of this forest design plan which will be assessed within each specific technical chapter. Chapter 18 - Summary of Mitigation provides a summary of the findings of the EIA, including a tabular summary of all residual effects and proposed mitigation.

A summary of the baseline conditions, assessment of effects, the proposed mitigation and the resulting residual effects for each environmental topic assessed is provided in the following section of this NTS. Full details can be found within Chapters 6 through to 17 of the EIA Report.

13 SUMMARY OF ENVIRONMENTAL EFFECTS

13.1 LVIA

13.1.1 *Baseline Conditions*

The Study Area includes a range of landscapes from coastal bays and cliffs to agricultural crofts and open flows, as well as coniferous plantations. There are no large upland areas or mountains within the Study Area, the highest parts are emergent hills of Ben Dorrery (244 m AOD), Ben Alisky (348 m AOD) and Beinn Ràtha (251 m AOD). The highest point in the study area is Ward Hill on Hoy (479 m AOD).

The Landscape Character Types (LCTs) listed below are included in the detailed assessment of landscape effects:

- 134 Sweeping Moorland and Flows;
- 143 Farmed Lowland Plain; and
- 144 Coastal Crofts and Small Farms.

The following designations are within the surrounding landscape:

- Duncansby Head Special Landscape Area (SLA), 8 km to the north-east;
- Dunnet Head SLA, 10 km to the north-west; and
- The Flow Country and Berriedale Coast SLA, 26 km to the south-west.

There are also Wild Land Areas within the Study Area, but they are distant from the Site and effects on wild land characteristics are not assessed separately:

- 36 Causeymire – Knockfin Flows, 24 km to the south-west; and
- 39 East Halladale Flows, 30 km to the west-south-west.

The landscape around the Study Area is one of open flat moorland and agricultural land with occasional subtle ridges and low hills to the coast which has rocky shores or cliffs. Views are therefore generally panoramic and long ranging, although coniferous plantations and subtle ridges and valleys can contain views. Along the coast, for example from along the A99/A836, views are more varied, but dominated by views out to sea or along the coast.

Change to the visual amenity of the Study Area as seen by people, is assessed using representative viewpoints, as well as considering views from settlements and sequential views along routes. The baseline description of the existing views at these locations is provided for receptor, contained in the assessment sections below.

The road network is of main roads that run along the coast, the A99 and A836, and a network of minor roads running inland. Most roads are relatively straight, such that views from them are often prolonged. There are a number of tracks and paths within 5 km of the Site, including core paths. These routes tend to be perpendicular to the routes they connect to. The closest core path is the CA08.07 Stroupster Hill, which runs for 3 km from Nybster Water Tower, over Enag Hillock to Hill of Stroupster through the existing wind farm.

13.1.2 Assessment of Effects

As with almost any onshore wind farm development, it is recognised that the Development would give rise to some localised significant effects on landscape character and visual amenity. These effects would arise primarily as a result of the introduction of the wind turbines and meteorological mast into the landscape.

An assessment has been made of the potential for significant effects of the Development on landscape character and visual amenity. This assessment has identified potential significant residual effects (in terms of the EIA Regulations) on receptors during the construction, operation and decommissioning of the Development.

The significant landscape and visual effects identified are set out below.

Table 1: Summary of Significant Landscape and Visual Effects

Receptor	Effect (LVIA)	Cumulative Effect ¹⁴
Landscape Effects		
Construction		
The Site / Landscape Fabric	Significant (major)	As per footnote.
Sweeping Moorland and Flows (LCT134) – North East Caithness (CT3)	Significant (moderate) within approximately 2 km	As per footnote.
Operation		

¹⁴ Effects for other receptors not listed here are as identified in the LVIA with no alteration to effects or relationships between wind farm groups with the cumulative baseline.

Receptor	Effect (LVIA)	Cumulative Effect ¹⁴
Sweeping Moorland and Flows (LCT134) – North East Caithness (CT3)	Significant (major to moderate) within approximately 5 km	Significant (moderate) within the south western part – a notable cumulative element
Visual Effects		
Viewpoint 3 Nybster Watertower	Significant (moderate)	As per footnote.
Viewpoint 2 Keiss	Significant (moderate)	As per footnote.
Viewpoint 4 Warth Hill	Significant (moderate)	As per footnote.
Viewpoint 6 Brabster	Significant (major)	As per footnote.
Viewpoint 7 Slickly	Significant (major)	As per footnote.
Viewpoint 8 Lyth	Significant (major)	Significant (major) with a negligible cumulative element
Viewpoint 10 Halcro	Significant (moderate)	As per footnote.
Viewpoint 11 Barrock	Significant (moderate)	As per footnote.
Viewpoint 13 Dunnet Head	Significant (moderate)	As per footnote.
Keiss	Significant (moderate)	As per footnote.
Lyth/Sortat	Significant (moderate)	Significant (moderate) with a negligible cumulative element
A99	Significant (moderate) for a section	Significant (moderate) for two sections – a significant cumulative element
Unclassified road Keiss to Lyth to Greenland	Significant (moderate) for a section	Significant (moderate) for a section – a notable cumulative element
Unclassified road Gills to Lyth to Hastigrow	Significant (major) for a section	Significant (major) for one section, significant (moderate) for another section – a significant cumulative element

13.1.3 Proposed Mitigation

As set out in the LVIA methodology (Technical Appendix A6.1), mitigation of landscape and visual effects has been undertaken through design modifications and input to the design process. The design evolution is set out in Chapter 3 - Alternatives and Scheme Evolution of the EIA Report. As all mitigation is embedded within the final design for the Development, all effects identified are residual effects. Restoration of parts of the Site following construction will follow the proposed Habitat management Plan, and with time, vegetation will grow and recover.

13.1.4 Residual Effects

As all mitigation for landscape and visual effects is embedded within the final design for the Development, all effects identified in this Chapter, as set out in Table 1, are residual effects.

13.2 Ecology

The scope of the ecological assessment was determined through a combination of desk study to identify existing biological data relating to the site and surrounding area, baseline surveys, and consultation with relevant nature conservation organisations and

stakeholders. Baseline ecology surveys were undertaken between May 2018 and January 2019.

13.2.1 Baseline Conditions

13.2.1.1 Statutory Designations

Five statutory designated sites were recorded within 5 km of the Site, including:

- Caithness and Sutherland Peatlands Ramsar and Special Area of Conservation (SAC) immediately adjacent to the northern and southern boundaries of the Site;
- Stroupster Peatlands Site of Special Scientific Interest (SSSI) immediately adjacent to the northern and southern boundaries of the Site;
- Phillips Main Mire SSSI, approximately 3.3 km north of the Site;
- Loch Heilen SSSI, approximately 4.5 km west of the Site; and
- Loch of Wester SSSI and SAC, approximately 5 km south of the Site.

There are no non-statutory Local Nature Reserves or Local Wildlife Sites in the Ecology Desk Study Area. No areas of woodland listed on the Ancient Woodland Index (AWI) were recorded within 2 km of the Site.

13.2.1.2 Habitats

Coniferous plantation was the most extensively recorded habitat on Site. The underlying habitats over which these conifers were planted was a mixture of peatland & wetland habitats. Blanket bog was the most valued habitat recorded and accounted for 6% of the Survey Area with other bog related habitats accounting for 19% of the Survey Area. Based on the underlying geology, hydrogeology, site topography and association/proximity with surface water fed habitats, it is considered unlikely that vegetation communities recorded are associated with groundwater. No plant species of greater than 'Least Concern' in the IUCN Red List were recorded.

13.2.1.3 Protected Species

Although woodland habitats were widespread, no evidence of woodland species such as pine marten, badger and red squirrel was recorded. Due to the dominance of dense coniferous plantation woodland, and prevalence of very wet ground conditions, habitats were generally considered of low ecological value to these protected species. The only protected species recorded on-site was otter. Otter records were limited to a single spraint recorded on the Burn of Slickly in the south-west of the Site.

The Wildcat Winter Walkover Survey recorded no confirmed or potential evidence of wildcat, and habitats within the Site and wider local environment were assessed to be of very low value to the species for foraging, commuting and denning.

Other notable species recorded within the Site included common toad and common frog.

13.2.1.4 Bats

Bat Surveys were carried out in accordance to Bat Conservation Trust (BCT) survey guidelines, between May and September 2018 (the bat survey season).

The coniferous plantation across the Site is a habitat generally considered of low value to foraging, commuting and roosting bats compared to broadleaved woodland, or non-commercial coniferous woodland. No activity was recorded during transect surveys, and only a low level during static surveys (an average of one bat pass every 12.5 hours of survey time).

13.2.1.5 Fisheries

The main watercourse draining the Site was assessed to be the Back Burn of Slickly, which converges with Kirk Burn 1.3 km south of the Site. The Fish Habitat Survey, carried out between August and November 2019 by the FCRT, concluded that only the main stems of the Back Burn of Slickly and the Kirk Burn generally contained suitable habitat to support fish species. The various tributaries to the Back and Kirk Burns from within the forestry were too small streams and vegetated to support fish.

Fish Fauna Surveys were carried out at the six sites across the Back Burn of Slickly and the Kirk Burn which displayed suitable fish habitat quality during the Fisheries Habitat Survey. Atlantic salmon was absent from all sites, and was considered that the Site is likely to be beyond the upper limit for salmon populations within the catchment. Brown trout was recorded at all survey sites and populations ranged from moderate to very poor, with trout fry being more prevalent at four of the six sites.

13.2.2 Assessment of Effects

Following the assessment of Development related impacts, no likely significant detrimental impacts effects on the Caithness and Sutherland Peatlands SAC were predicted, and benefit effects through the peatland restoration proposals outlined are considered likely. Therefore, in accordance the requirements of the Habitats Directive (92/43/EEC)¹⁵, no likely significant effects are predicted, and an Appropriate Assessment is not required for the Development.

The Stroupster Peatlands SSSI lies within the boundary of the Caithness and Sutherland SAC, located to the north of the Site, and is also designated for blanket bog. The connectivity and potential for effects are considered to be similar, albeit likely of lower magnitude, and therefore, the assessment of the effects on the SAC from the construction phase to the decommissioning phase of the Development are considered to be of the same significance for as the Stroupster SSSI, and are not significant in terms of the EIA Regulations.

No significant effects are anticipated with regard to habitats, protected species and other ecological assets.

13.2.3 Proposed Mitigation

Mitigation to reduce potential ecological effects has been incorporated into the design of the Development ('embedded mitigation'). This includes 'mitigation by design' whereby aspects of the Development have been re-designed to avoid or reduce ecological effects.

In addition to the incorporation of effective mitigation through Development design, the following mitigation is proposed for the Development through practice, particularly with the aim of safeguarding of protected species during Development construction and operation and to restore and enhance peatland habitats with connectivity to Caithness and Sutherland Peatlands SAC:

- Ecological Clerk of Works (ECoW);
- Construction Phase Mitigation for Protected Species; and
- Construction Phase Mitigation for Habitats.

A Habitat Management Plan (HMP) will be produced to inform and guide the commencement of practical habitat creation and restoration techniques during Development construction, with the aim of effective management of construction activities

¹⁵ European Commission (1992) Council Directive 92/43/EEC the Conservation of Natural Habitats and of Wild Fauna and Flora [Online] Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31992L0043&from=EN> (Accessed 29/11/19)

and commencement of restoration works within the Peatland Restoration Area. An outline HMP accompanies the Application as presented in Technical Appendix A7.6.

13.2.4 Residual Effects

No significant residual effects are predicted following the implementation of embedded mitigation.

13.3 Ornithology

13.3.1 Baseline Conditions

13.3.1.1 Statutory Sites

A number of statutory sites designated for ornithological features were identified within the relevant search areas including:

- Sites of International Importance:
 - Caithness and Sutherland Peatlands Special Protection Area (SPA) and Ramsar Site, adjacent to the northern and southern boundaries of the Site;
 - Caithness Loch SPA and Ramsar Site, 4.5 km north-west of the Site;
 - North Caithness Cliffs SPA, 4.8 km north-east of the Site;
 - East Caithness Cliffs SPA, 15.2 km south-east of the Site;
 - Pentland Firth Islands SPA, 17.4 km north-east of the Site;
- Sites of National Importance:
 - Loch Heilen SSSI¹⁶, 4.5 km west of the Site; and
 - Loch of Wester SSSI¹⁷, 5 km south of the Site.

13.3.1.2 Existing Records of Protected Species

The RSPB returned 20 records of 12 protected species and species of conservation concern within 2 km of the Site, including one breeding Schedule 1 species. With the exception of the latter, which is detailed in Appendix A8.5, these include: greylag goose, pink-footed goose, white-fronted goose, re-throated diver, white-tailed eagle, crane, curlew, great skua, arctic skua, nightjar and crossbill species.

13.3.1.3 Flight Activity Surveys (2012 -14) and (2017 – 2018)

During the 2012-13 Flight Activity Surveys, a total of 370 flights by 14 target species were recorded. Flight activity during 2013-14 was lower, with a total of 183 flights by ten target species, although the survey period was shorter (12 months compared with 14 months in 2012-13). The reduction in flight activity levels in 2013-14 could also be at least partly due to a reduction in levels of flight activity due to construction disturbance at the adjacent Stroupster Wind Farm. This is supported by the 2017-18 results when the level of flight activity was comparable to 2012-13, with a total of 335 flights by 20 target species, along with a single flight of an unidentified goose species (which the surveyor considered to be either greylag or pink-footed geese).

13.3.1.4 Woodland Point Count (2012 – 2014)

A total of 28 species typical of the woodland habitat and adjacent open ground within the Survey Area were recorded during the 2012-14 Woodland Point Count Surveys. These comprised red grouse, woodpigeon, cuckoo and a range of passerines, including four

¹⁶ Component of the Caithness Lochs SPA.

¹⁷ Component of the Caithness Lochs SPA.

Schedule 1 species: brambling, crossbill species, fieldfare and redwing. Crossbill species was the only Schedule 1 bird present all year around; the others were winter visitors only.

13.3.1.5 Winter Walkover Surveys (2012-14) and (2017-18)

A variety of species typical of both commercial forestry plantations and areas of arable agriculture were observed during the 2012-14 Winter Walkover Surveys, including five Schedule 1 species: hen harrier, crossbill species, redwing, fieldfare and brambling. Observations of other wildfowl, raptor and wader species of conservation concern are summarised in Section 8.6.2.3 of the EIA Report.

13.3.1.6 Foraging Goose and Swan Surveys (2017-18)

Small to moderate numbers of geese were recorded towards outer extent of the 2.5 km Buffer Area on three occasions between early February and early March 2018.

13.3.1.7 Breeding Bird Surveys (2012- 2014 & 2018)

Four wader species were assessed as breeding in 2012-2014, with a further two assessed as breeding in 2018. The majority of territories were in the Buffer Area rather than on the Site itself.

Other notable breeding birds included crossbill species, with an estimated 11 territories recorded in 2018. Evidence of an additional Schedule 1 species recorded during the 2018 Breeding bird Survey is detailed in Appendix A8.7.

13.3.2 Assessment of Effects

The main ways in which a wind farm may affect Important Ornithological Features (IOFs) are via:

- Habitat loss due to land-take;
- Habitat modification;
- Disturbance/displacement; and
- Collision with turbines.

Each of these potential effects during each phase of the Development life cycle (construction, operation and decommissioning) is discussed in turn below.

In addition, as noted previously, cumulative effects may arise as a result of the combined effects of multiple wind farms affecting the same bird population.

No significant effects during any phase of the Development, either alone or cumulatively with other projects, are predicted on a Natura 2000 site (which includes SPAs). As such, no likely significant effect on the integrity of the Caithness and Sutherland Peatlands SPA and Ramsar Site and the Caithness Lochs SPA and Ramsar is predicted.

13.3.2.1 Effects During Construction

Construction of turbine bases and associated infrastructure will lead to direct habitat loss. The severity of potential effects is dependent on the extent of land-take, the type of habitat affected and the species using the Site and surrounding area. In this case, the extent of habitat loss will be relatively small (10.89 ha in total), and will largely (77%) comprise commercial conifer plantation. Note that the entire plantation within the Site Boundary will be felled. As there will not be any re-planting on Site, the loss of this habitat will be permanent. It is likely that effects of direct habitat loss will be largely restricted to species that breed, forage and/or roost in woodland.

As there are patches of woodland in the wider area, and numbers of breeding birds currently supported by the plantation on Site are likely to be relatively small (due to the limited extent of this habitat), it is probable that species affected by habitat loss will move

to alternative woodland habitat, in the wider area, although it is acknowledged that the extent of alternative woodland habitat in the locale is limited.

During the construction phase of the Development, there will be increased levels of activity by Site personnel, vehicles, and machinery, resulting in increased levels of noise and visual disturbance. This could lead to the temporary displacement or disruption of breeding, foraging and/or roosting birds.

The potential effects associated with construction activities are only likely to occur for as long as the construction phase continues, and are thus short-term and can be mitigated by avoiding sensitive areas, and timing construction activities to avoid periods where sensitive species are present, such as the breeding season. The exception to this would be if an adverse effect on the breeding success of an IOF leads to birds being displaced, with birds failing to return post-construction (either the same individuals or other birds from the population moving in to replace them).

13.3.2.2 Effects During Operation

The plantation within the Site will be felled prior to construction to restore the peatland habitats. As the habitat on Site is opened up, species such as hen harrier, merlin and short-eared owl may forage over the Site more frequently. It is also possible that some ground-nesting raptor species (particularly hen harrier and short-eared owl) could nest or roost on Site and some wader species could also nest on Site. However, with the exception of these species and a limited number of other birds considered to be of relatively low conservation concern, it is considered unlikely that other species will make more frequent use of the Site following habitat modification. It is expected that any changes in Site use due to habitat modification will be long-term. Although there could be adverse effects due to increased collision risk, the habitat will be managed to reduce suitability for nesting raptors, and potential benefits to breeding waders are likely to outweigh adverse effects.

Disturbance effects during the operational phase may be of a lower magnitude than during construction, as species may become habituated to turbines, and the level of human activity and associated disturbance on Site will be considerably reduced compared to the construction phase.

Individual turbines, or a wind farm as a whole, may present a barrier to the movement of birds, restricting or displacing birds from much larger areas. The effect this would have on a population is subtle and difficult to predict with any degree of certainty. If birds regularly have to fly over or around obstacles or are forced into suboptimal habitats, this may result in reduced feeding efficiency and greater energy expenditure. By implication, this will reduce the efficiency with which they accumulate reserves, potentially affecting survival during migration and/or breeding success. Based on the size of the Development, presence of other wind farms in the wider area, habitats on Site (including post-construction) and the wider area, and target species flight activity, it is considered highly unlikely that there will be any barrier effects on any target species. Potential barrier effects have therefore been scoped out of the assessment.

13.3.2.3 Effects During Decommissioning

Turbine removal may cause disturbance to birds breeding, foraging or roosting on Site. The level of impact will depend on the bird species present at the time of decommissioning and cannot be reliably predicted at this stage. However, as decommissioning activities are generally of a similar type and intensity as construction activities, the assessment considers that the potential effects of decommissioning will be similar in nature to the potential effects of construction, with the exception that habitat is likely to be restored and any displaced birds will be able to return to abandoned territories.

13.3.3 Proposed Mitigation

There are two key types of embedded mitigation with relevance to ornithological features, namely the HMP and implementation of a Bird Protection Plan (BPP) to protect breeding birds. As no significant effects on IOFs are considered likely, no further mitigation is proposed.

The HMP (Technical Appendix A7.6) proposes habitat restoration which is likely to benefit a number of IOFs. Following peatland restoration, there is a predicted small increase to the collision risk of breeding birds using the site. However, habitat enhancements are likely to have a beneficial effect on these species within the Site and, for some species, in adjacent areas.

Under the Wildlife and Countryside Act 1981 (as amended) it is an offence to kill or injure any bird, or to damage or destroy nests and eggs. Although not recorded on Site during Baseline surveys, it is possible that a variety of species that are protected under the Act and Annex 1 of the Bird Directive, will breed or roost within or near the Site in future, for example hen harrier and short-eared owl. As such, it is proposed that potential disturbance to any roosting birds is minimised as part of the good practice measures outlined below.

13.3.4 Residual Effects

As no significant effects on any IOFs are predicted, no mitigation was proposed and an assessment of residual effects on IOFs is not required.

13.4 Geology, Hydrology, Hydrogeology and Peat

13.4.1 Baseline

13.4.1.1 Peat and soils

BGS mapping and Soil Survey information of the Site indicates a consistent bedrock geology of siltstone, mudstone and sandstone, which is underlain by blanket peat. The Carbon and Peatland Map (SNH, 2016) indicates that no peatland habitat are on Site, however it is surrounded by areas of carbon-rich soils, deep peat and priority peatland habitat.

Surveys demonstrated that peat was generally consistent across the Site, with majority of peat probes encountering depths of between 1.5 m and 2.0 m. Occasional deeper pockets were recorded with a maximum depth of 4.3 m, the majority of which are located in the central and western area of the Site.

Following design iterations as part of the EIA, the preferred final turbine locations were probed in October 2019. Subsequently 10 out of 11 turbine positions in the central and southern part of the Site areas were altered to avoid very deep peat of depths ranging from 3.0 m – 4.3 m. Following this alteration, a series of secondary surveys in November 2019 examined the new turbine positions, tracks and associated infrastructure. The majority of turbines were situated away from pockets of peat extending > 3.0 m deep.

13.4.1.2 Hydrology and hydrogeology

The Site is within the catchment of the Back Burn of Slickly and the Kirk Burn, in the wider Wick Coastal catchment. A narrow, 30 cm, tributary of the Kirk Burn flows from north to south on the east of the Site. These waters were observed to be peaty, suggesting they gain waters from the surrounding peatlands. Forested areas on Site are drained by existing ditches which run parallel and discharge into the watercourses.

Turbines 1 - 4 and 6 - 8 are located within the Back Burn of Slickly catchment. Turbines 5, 10 and 11 are located within upstream Kirk Burn catchment. Turbine 2 and associated infrastructure is located at the divide of two minor unnamed tributaries of the Back Burn of Slickly.

SEPA hydrogeology data show that these surface waters are relatively sensitive receptors.

In accordance with SEPA guidance, surveys were undertaken to identify habitats within the Site. A number of vegetation habitats were identified on site including coniferous woodland plantation, wet bog, swamp habitats and acid flushes, which have varying degrees of ground water dependency.

SEPA flood maps show that turbine 5 is located in an area of medium to high flood risk from surface water sources. No other turbines not located within an area of flood risk.

Consultation with the Council confirmed there are no public water supplies within 2 km of the Development boundary.

Statutory designated sites relating to water within the 10 km of the Site are:

- Caithness and Sutherland Peatlands SSSI, SAC, SPA and Wetland of International Importance (RAMSAR);
- Stroupster Peatlands SSSI; and
- Loch Heilen SSSI and Caithness Lochs SPA.

13.4.2 Assessment of Effects

13.4.2.1 Construction Effects

Potential effects involved with construction are managed with risk management, should a risk arise. Potential construction effects include:

- Chemical pollution;
- Erosion and sedimentation;
- Impediments to flow;
- Changes to soil and peat patterns;
- Compaction of soils;
- Effects on groundwater dependent ecosystems;
- Peat disturbance;
- Peat destabilisation;
- Increase runoff and flood risk; and
- Acidification of watercourses.

Due to the high sensitivity of the watercourses and surface water bodies on Site, watercourses could be at risk from chemical pollution during construction. This is identified as a potential significant effect.

Turbines and associated infrastructure are all effectively underlain by peat, with the exception of turbine 3 which has been relocated to avoid deep peat. While the Site layout design has endeavoured to avoid and limit impacts on peat, there is potential for peat disturbance to occur. This is considered to be a moderate effect and therefore, significant in terms of the EIA Regulations.

No other significant effects are predicted.

13.4.2.2 Operational Effects

Potential operational effects are:

- Increased run-off rates and volume;
- Continued erosion and sedimentation from runoff from areas of hardstanding;
- Alterations to natural flow pathways from runoff from areas of hardstanding; and
- A risk of a pollution event from minor spills from maintenance vehicles.

The nature of these are similar in nature to those assessed during the construction phase, although the magnitude of potential effects are reduced due to substantially less activity during operation.

No significant effects to ground disturbance, including peat and soils, are anticipated. Any increase to run-off rates from construction is likely to be reduced during operation, and no additional alterations to natural flow pathways will be introduced during operation as the majority of infrastructure will remain in place. Any alterations will be reduced through best practice design and construction operations.

Therefore, no significant effects are identified during the operational phase.

13.4.2.3 Decommissioning Effects

Potential decommissioning effects are similar in nature to those during construction, with a substantially lesser magnitude. No significant effects are likely to arise from the decommissioning phase of the Development, assuming the same mitigation and best practice measures are implemented as is proposed for construction effects.

13.4.2.4 Cumulative Effects

There are no cumulative effects predicted during the construction, operational and decommissioning phases of the Development, similarly no residual cumulative effects are predicted.

13.4.3 Proposed Mitigation

As per best practice, the proposed mitigation to reduce the potential effect of chemical pollution is to place a 50 m buffer distance between turbines and watercourses, and to divert the unnamed tributary of Back Burn of Slickly around Turbine 2. Following these mitigation measures, the effects on watercourses are therefore considered to be of negligible magnitude, which is not significant in terms of the EIA Regulations.

Relocation of turbines from very deep peat has reduced peat disturbance where possible. Best practice measures will be carried out for avoid peat and the management of peat, and peaty soils. Additional peat restoration is proposed in the Habitat Management Plan. This mitigation is expected to reduce the magnitude of the effect to not significant.

13.4.4 Residual Effects

There are no residual significant effects on geology, hydrology, hydrogeology and peat as a result of the Development.

13.5 Archaeology and Cultural Heritage

13.5.1 Baseline Conditions

There are six non-designated heritage assets within the Site, as identified within TA10.1 and shown on Figure 10.1 This include four post medieval sheepfolds, a post medieval enclosure, and a modern enclosure. These are representative of local, agricultural importance, likely of post-medieval origin and are related to the agricultural uses of the land in the past. The archaeological potential of the Site is assessed as low due to the recent commercial forestry operations which have likely damaged or destroyed archaeological remains. Areas that have not been subject to forestry activities have a slightly higher potential.

Within 10 km of the Site, there are 65 nationally designated heritage assets, including one Garden and Designed Landscape (GDL), 31 Scheduled Monuments, and 33 Listed Buildings, as shown on Figure 10.2.

13.5.2 Assessment of Effects

The assessment of archaeological and cultural heritage effects has taken into account both potential direct effects arising from proposed construction activities as well as indirect (primarily visual) effects on the settings of cultural heritage assets.

13.5.2.1 Effects during Construction

Within the Site boundary there are six undesignated heritage features of post-medieval and modern origin. These have all been avoided in the design of the Development and therefore no direct effects have been identified.

Indirect effects on assets within the Site may occur during construction, and limited to visual impacts from construction infrastructure onsite. Therefore, any effects would be short term.

13.5.2.2 Effects during Operation

Indirect effects have been considered on the designated sites and landscapes within a 5 km Study Area of the Site, any designations between 5-10 km of the Site that fall within potential visibility, and any additional designations highlighted during consultation.

Inventoried Gardens and Design Landscapes

The Castle of Mey GDL is located 7.7 km north of the Site, it includes two Listed buildings. Although visibility of turbines is indicated from the south of the GDL, views of the turbines will be screened by ancient woodland and therefore the Development will not be visible from the GDL. Therefore, there will be no change to this asset.

Scheduled Monuments

Two significant indirect effects are identified on Scheduled Monuments as a result of the Development.

- Kirkstones settlement (SM4636) is located 240 m south of the Site. Although Stroupster Wind Farm is currently visible from this asset, the Development will increase the visibility of turbines, and bring turbine visibility to closer proximity to the settlement. This will result in a change to the setting of the asset and its wider landscape context. This is considered to be a significant.
- The Green Hill of Clayton Settlement (SM4593) is located 1.8 km south-west of the Site. The Development will be visible in views to the north of the Scheduled Monument, and will be seen in conjunction with Stroupster Wind Farm. Although visibility of Stroupster Wind Farm currently forms part of the wider landscape context, the Development will extend the view of turbines to the north and will be seen in closer proximity to the asset, therefore being more prominent. This constitutes a significant change in the wider landscape context in terms of the EIA Regulations.

Other Scheduled Monuments in the area are considered to receive no significant effect as a result of the Development. This is primarily due to the Development being seen as an extension to Stroupster Wind Farm, and the open moorland landscape context, in which the Development is located, being able to accommodate some level of development due to its vast open character which is not compromised by the addition of turbines.

Listed Buildings

No Listed Buildings were identified as receiving significant effects as a result of the Development. Any visibility of turbines not screened by woodland and forestry, would be seen in conjunction with Stroupster Wind Farm, and appear as a cluster of turbines in an area in which turbines are already sited. The Development will not affect the landscape character of the assets or ability to appreciate the setting in which they are located, as it will appear as an addition to the landscape where turbines already exist.

13.5.2.3 Effects during Decommissioning

No direct effects are likely to arise from the decommissioning phase of the Development, assuming the same mitigation is implemented as is proposed for construction effects.

13.5.3 Proposed Mitigation

Known archaeological features on Site have been avoided through design of the Development, therefore no mitigation is recommended.

Mitigation for effects on unknown archaeological remains within the Site will be agreed with the Council Archaeologist and secured through an appropriately worded planning condition.

To balance out the significant adverse indirect effects identified for Kirkstones settlement (SM4636) and Green Hill of Clayton Settlement (SM4593), it is proposed that the natural open moorland will be reinstated in place of the felled Stroupster Forest. This will open up views to the north of Kirkstones settlement (SM4636) to restore the historic setting of the landscape.

13.5.4 Residual Effects

After mitigation, the residual effect of the Development on the Kirkstones settlement (SM4636) will be reduced to moderate and Green Hill of Clayton Settlement (SM4593) will remain moderate, both of which are significant in terms of EIA Regulations.

13.6 Noise

13.6.1 Baseline Conditions

Background noise and wind speed were measured at Slickly Croft, the nearest property, to provide a baseline against which the Development could be assessed.

Three properties were assessed for operational noise effects, they were chosen based on location in relation to the Development to ensure they represented an appropriate assessment.

13.6.2 Assessment of Effects

During construction, noise may result from the use of plant and machinery to carry out construction activities. However, due to the separation distance between the Development and residential dwellings, no significant effects are anticipated during construction as it is unlikely that noise levels will exceed the recommended limits. Notwithstanding this, Best Practice mitigation measures will be adopted to manage noise emissions, including restrictions on working hours during the construction the Development.

During operation, wind turbines can generate noise from the machinery housed within the turbine and from the movement of blades through the air. Modern turbines are designed to minimise noise and planning conditions are used to ensure compliance with specified noise limits. Due to the proximity between the Development and the nearest residential dwelling (Slickly Croft is located 1.3 km to the west), operational noise effects are potentially significant at Slickly Croft.

The assessment has been undertaken in accordance with the recommendations of ETSU-R-97, the method of assessing wind turbine noise recommended by Government guidance, and following the current best practice methods described in the GPG, as endorsed by the Scottish Government. Due to separation distances between the Development and other wind farms, cumulative construction noise effects are not likely to be significant.

Noise produced during decommissioning of the Development is likely to be of a similar nature to that during construction, although the duration of decommissioning will be

shorter than that of construction. Any legislation, guidance or best practice relevant at the time of decommissioning would be complied with.

13.6.3 Proposed Mitigation

Mitigation measures in the form of reduced noise operating modes under certain wind conditions are proposed during operational periods to ensure operational effects are not significant.

13.6.4 Residual Effects

Following implementation of the above mitigation measures, no significant residual effects are predicted.

13.7 Traffic and Transport

13.7.1 Baseline Conditions

It is proposed that turbine components will be transported as 'abnormal loads' from Wick Harbour as follows:

- A99 roundabout;
- A9;
- A836;
- Private access tracks;
- Minor public road (C1037); and
- Site entrance.

Standard construction traffic that is not considered to be an 'abnormal load' will approach the Site from the south via the following route;

- A9;
- A99;
- B867;
- Minor public road (C1037); and
- Site entrance.

Where possible, local quarries and resources will be utilised, with the aim of reducing traffic within Wick town centre and reducing length of construction vehicle journeys.

Baseline traffic flow conditions were established from publicly available data from the Department of Transport (DfT), at nine locations on the delivery routes. Information was also obtained on typical traffic capacity and traffic conditions at four locations on the proposed delivery routes. The assessment then considered the increase in traffic as a result of the Development based DfT forecasts National Trip End Model and Trip End Model Presentation Programme, both of which are industry standard tools for estimating traffic growth.

A road traffic collision assessment was undertaken to determine the risk of increased traffic numbers to the area on the standard traffic route. This was not carried out for the abnormal load route as these traffic movements will be escorted along the route and outwith peak hours, therefore the risk of collision is negligible. No clusters of collisions were identifiable in the assessment, and no serious collisions involving heavy good vehicles (HGVs) occurred within the Study Area.

14 receptors were identified as having high sensitivity to changes in traffic as a result of the Development. These are either located on the proposed delivery routes or are located in close proximity and require access through the proposed delivery routes.

- Lybster Primary School (NGR: ND248359);
- Thrumster Primary School (NGR: ND338450);

- Wick High School (NGR: ND358501);
- Noss Primary School (NGR: ND365514);
- Wick College (NGR: ND365510);
- Bower Primary School (NGR: ND239624);
- Bower Busy Bees Playgroup (NGR: ND228607);
- Town and County Hospital (NGR: ND359499);
- Caithness General Hospital (NGR: ND361508);
- Police Scotland – Station (NGR: ND360509);
- Wick Fire Station (NGR: ND365508);
- Wick Harbour (NGR: ND368507);
- Mount Pleasant Primary School (NGR: ND122683); and
- Wick, John O’Groats Airport (NGR: ND366521).

13.7.2 Assessment of Effects

13.7.2.1 Effects during Construction

Most traffic generated by the Development is associated with the construction phase, which is anticipated to last up to 15 months.

The main potential transportation impacts would be associated with the movement of abnormal loads, HGVs, light goods vehicles (LGVs), and cars to and from the site during the construction phase. It is considered that the increase in overall traffic flow and HGV flow may have an effect on pedestrian amenity at six sensitive receptors identified in the study area.

It is estimated that a total of up to 20,415 vehicle movements (where one movement equals one arrival or departure) would be associated with the construction phase of the Development. The total daily vehicle movements are predicted to peak during month 8 of the Development’s construction period, where a total of 1,361 vehicle movements are predicted. This peak is due to concrete delivery.

Potentially significant effects relating to pedestrian amenity and pedestrian delay are identified at six locations on the proposed routes, including:

- Wick High School, Wick;
- Town and County Hospital, Wick;
- Caithness General Hospital, Wick;
- Police Scotland, Wick;
- Wick Fire Station, Wick; and
- Wick Harbour, Wick.

No significant effects are predicted to result with relation to the following:

- Traffic generation;
- Accidents and Safety;
- Driver delay;
- Severance;
- Noise and vibration;
- Hazardous loads;
- Visual effects; and
- Air quality.

13.7.2.2 Effects during Operation

Traffic during the operational phase is limited to maintenance and site monitoring visits. These activities will likely be undertaken by car and LGV and are expected to reach an average of three visits per day. This effect is not significant as per the EIA Regulations.

13.7.2.3 *Effects during Decommissioning*

Prior to decommissioning of the Development, a traffic assessment would be undertaken and appropriate traffic management procedures agreed with the relevant authorities at the time.

13.7.2.4 *Cumulative effects*

Cumulative effects were assessed in conjunction with other nearby wind energy developments which have the potential to result in cumulative traffic and transport effects, particularly during construction.

It was found that there is sufficient residual capacity on each of the roads within the study to accommodate the predicted increase in traffic which may occur in the cumulative scenario.

13.7.3 Proposed Mitigation

A significant effect is identified on pedestrian amenity at six receptors in Wick, as outlined in above. To mitigate this effect, the following measures are recommended for adoption in the Traffic Management Plan:

- Deliveries should be made outside of school opening and closing time; and
- Drivers of delivery vehicles are to be advised of schools and emergency services in Wick, and that formal pedestrian crossing facilities are not present.

The traffic management plan will be developed in agreement with the Council and Transport Scotland and detail the exact measures to be implemented during construction of the Development.

It is considered that these mitigation measures will reduce the effect of traffic and transport to low and therefore not significant in terms of EIA Regulations.

13.7.4 Residual Effects

No significant residual effects are predicted following the implementation of mitigation.

13.8 Socio-economics, Recreation and Land-use

13.8.1 Baseline Conditions

13.8.1.1 Socio-economics

The Highlands region of Scotland has an estimated population of 235,540 (as at June 2018)¹⁸. The Site is located within Caithness and Sutherland, which has a total population of 39,732¹⁹ according to the latest census in 2011.

In 2018, the employment rate in the Highlands was 81.2%, which is higher than the national average of 74.3%. The top employment sectors in the Highlands are:

- Distribution;
- Hotels and restaurants;
- Manufacturing;
- Construction;
- Transport and communications; and

¹⁸ National Records of Scotland (2019) Highland Council Area Profile [Online] Available at: <https://www.nrscotland.gov.uk/files/statistics/council-area-data-sheets/highland-council-profile.html> (Accessed 26/11/19)

¹⁹ Highlands and Islands Enterprise (2014) Caithness and Sutherland Area Profile [Online] Available at: <http://www.hie.co.uk/common/handlers/download-document.ashx?id=9e61af71-1b5b-45fc-8e74-074805f77cd7> (Accessed 26/11/19)

- Agriculture and fishing.

The construction sector is predicted to see the biggest increase in employment by 2035, estimated at 2,000 jobs on average per year. Additionally, tourism is an important sector to the Highlands economy; in 2018, approximately 180 jobs were created as a result of the North Coast 500.

The UK renewables industry is also important to the Highlands economy and employment, not only by delivering economic benefits but by helping to meet national climate change targets. However, the decommissioning of Dounreay nuclear reactor (approximately 32 km west of the Site) has been seen as the main reason for a decline in overall job numbers within Caithness and Sutherland over recent years.

13.8.1.2 Recreation

Tourism is a key element in the socio-economic, environmental and cultural welfare of Scotland. The Site itself is located in a remote location with no designated walking routes or recreational facilities on Site. There are several recreation and tourism attractions within 5 km of the Site, including heritage features and those associated with accommodation or attractions in relation to North Coast 500, which is located approximately 4.2 km to the east. There are a number of Core paths within 5 km for the Site.

The nearest settlement offering accommodation is Auckengill approximately 2.9 km to the east of the Site, which hosts a variety of accommodation options. Further accommodation amenities are available in Keiss, Wick, and John O'Groats.

13.8.1.3 Land-Use

The land on Site is privately owned, and comprises an area of commercial forestry, and open moorland. There are no public roads within the Site, and access on site is currently taken on forestry tracks.

The closest residential property is Slickly Croft, located 1.3 km from the nearest turbine.

13.8.2 Assessment of Effects

13.8.2.1 Socio-economics

The Development will create contract opportunities for local and regional contractors, through construction work and through the supply chain. During the construction phase it is estimated that the Development will generate £24.4 million within the UK economy. £18.7 million of that is expected to be spent within Scotland, and £6.2 million of that is expected to be spent within Highland.

It is anticipated that a temporary workforce averaging up to 30 people at any one time will be employed during the 15-month construction period. It is likely that indirect local employment effects may also occur as a result of the construction period, including supply chain spin-offs for local businesses, and sub-contracted work. Local shops, cafes, accommodation providers and hotels often experience an increase in turnover during the construction phase as they have opportunities to provide additional services to the developer and their contractors. There are several accommodation options in the local area, and it is expected that local services will be used by temporary construction contractors.

During the construction process there will be opportunities where those employed will develop skills that will be of benefit to the local economy and to local businesses in the longer term, such as project management and construction skills which can be transferred to other roles and projects.

Overall, the construction of the Development will bring short-term, beneficial effects to the area, through the increase in employment and expenditure of capital costs in the wider area and on local services.

The Development will be regularly maintained by a specialist maintenance team. Employees are likely to include a part-time maintenance engineer (local site operator) and a small number of staff to occasionally service the turbines. Induced effects will include local spending by the Applicant and maintenance contractors. Annual operational expenditure is expected to be approximately £3 million, 42% of this is expected to be spent in the local area.

The Development will contribute £5,000 per MW installed capacity to a Community Fund. This will result in an annual value of approximately £198,000 per year. With a 30-year operational per, this will provide approximately £5.95 million in community benefit. These payments are acknowledged not to be a material planning consideration.

The Applicant is willing to offer an element of shared ownership of the Development. The Applicant has initiated discussion at meetings with the local Community Liaison Group regarding opportunities for the community to have a financial interest in a portion of the project. These discussions will continue through the determination period for the planning application.

There will therefore be beneficial long-term effects associated with the operation of the Development.

The combined socio-economic effect of the Development in conjunction with other wind farms is unlikely to lead to a fundamental change in socio-economics within the Highlands and therefore, no significant cumulative effects are anticipated.

13.8.2.2 Recreation

Surveys of the public's attitudes to wind farms provide no clear evidence that the presence of wind farms in an area has a adverse impact on local tourism. Tourists using the local core paths and local tourist attractions may have a particular sensitivity to visual effects. The Site contains no public paths or recreational assets, and access to neighbouring hills or tourist facilities will not be impacted by construction. Construction effects on amenity and enjoyment of the walks within the Study Area will be localised, as the construction works will only be detectable to route users for short periods along the route, presenting a minor effect. The effect of construction on recreation is negligible and not significant in terms of the EIA Regulations.

Other offsite resources such as the accommodation are unlikely to be affected by the construction of the Development. Local shops, cafes, accommodation providers and hotels often experience an increase in turnover during the construction phase as they have opportunities to provide additional services to the developer and their contractors. The effects of the construction phase of the Development will not have a significant effect on tourism and recreation receptors.

During operation the Site will be accessible to the public with the exception of temporary exclusions for health and safety reasons such as during maintenance.

Visual effects associated with the Development may occur at receptor locations, when people are looking towards the Development from locations where clear views of the turbines are available. The visual effects of the Development on tourism and recreational resources such as Nybster Broch and the NC500 are assessed in the Chapter 6 - Landscape and Visual Amenity of the EIA Report.

No cumulative effects on tourism and recreation are expected during construction. It is assessed that wind farm development does not have a noticeable effect on tourism, and

therefore no cumulative effects from the Development are anticipated. Cumulative visual effects are assessed in Chapter 6 - Landscape and Visual Amenity of the EIA Report.

13.8.2.3 Land-Use

As the land on Site is not used by the public, and construction period is temporary, effects as a result the construction phase will not be significant in terms of the EIA regulations. The operational phase of the Development will not present significant effects on land-use.

The total new land take of the Development equates to 11 ha; following construction and restoration, the footprint of the Development on the surface of the ground will be 5.25 ha, equating to approximately 1.6% of the total land in the Site. The Development will require felling of 205 ha of forestry within the Site.

Should the Development be decommissioned, permanent land take will be reduced by carrying out reinstatement and restoration where possible and agreed with the landowner. As a result, no significant effects are identified.

Given the relatively small footprint of wind farms in the Highlands in comparison to grassland and forested areas, the cumulative effects are considered to be negligible and not significant in terms of the EIA Regulations.

13.8.3 Proposed Mitigation

No mitigation is proposed other than embedded design.

13.8.4 Residual Effects

No residual effects on socio-economics, tourism and land-use are anticipated as a result of the Development.

13.9 Aviation

13.9.1 Baseline Conditions

The Development is located 13.5 km north of Wick Airport, and 120 km north-east of Inverness Airport.

The Development is located a substantial distance from military aviation infrastructure.

13.9.2 Assessment of Effects

Operational wind turbines have the potential to affect the safe operation of aviation interests, including airfields, radars, meteorological radars and military low flying exercises.

No significant effects are predicted on the safeguarding or operations of Inverness Airport.

The closest operational radars to the Site are located in Aberdeenshire. Technical assessment has shown that the Development would not be visible from these radars and therefore no effects are predicted.

Highlands and Islands Airport Limited (HIAL) who operate Wick Airport have confirmed that given the proximity of the Development, the height of the turbines, and the terrain of the landscape, it is expected that the Development will affect operations without mitigation in place. This would be a significant effect and would require mitigation.

The MoD have confirmed that they do not have concerns with the Development on the basis of military low flying as it is located in proximity to the operational Stroupster Wind Farm and Wick Airport. However, the MoD have requested that non-visible aviation lighting is installed on the turbines, due to the proximity to Wick Airport.

13.9.3 Proposed Mitigation

The wind turbines associated with the Development will penetrate the Outer Horizontal Surface (OHS) at Wick Airport. It has been agreed with HIAL that to mitigate the penetration of the OHS the turbines will need to be lit with low intensity fixed red lights with a brilliance of 32cd, located on the nacelle and visible throughout 360 degrees.

Sufficient turbines will need to be lit in order for a pilot to fully visualise the extent of the Development. Mitigation for the potential effect on Wick Airport is to be agreed with HIAL.

Engagement with HIAL in relation to Wick Airport is continuing and it is anticipated that the outstanding aviation issues will be resolved in early January 2020.

During the construction and decommissioning phases of the Development, Wick Airport will be informed about the location and height of any crane infrastructure required on the Site.

13.9.4 Residual Effects

Provided the outlined mitigation measures are carried out, no significant residual effects are predicted.

13.10 Climate Change

13.10.1 Baseline Conditions

Climate Projections show that the trends over the 21st century in the UK are towards warmer and wetter winters and hotter, drier summers, with an increase in frequency and intensity of extremes weather events.

Climate parameters considered most relevant to the assessment are wind speed, temperature and precipitation. Increasing wind speeds have the potential to damage turbines or alter their efficiency for energy generation. Wind energy developments are sensitive to cold weather events and have the potential to encourage ice forming on turbines blades. Increase precipitation risks the potential for flooding on Site and destruction of the Development's infrastructure and therefore operation.

13.10.2 Assessment of Effects

13.10.2.1 Vulnerability of the Development to Climate Change

The predicted future baseline conditions and changes in wind speed, temperature and precipitation are highly unlikely to affect the operation of the Development throughout its lifetime. The effect is therefore not significant in terms of the EIA Regulations.

13.10.2.2 Influences of the Development on Climate Change

The Development will contribute up to 49.9 MW of installed capacity which will contribute to increasing renewable energy generation capacity within Scotland the UK.

A carbon balance assessment for the Development was generated using the methodology and carbon calculator provided in Calculating Carbon Savings from Wind Farms on Scottish Peatlands – A New Approach as recommended by the Scottish Government²⁰. Based on this guidance, the Development has an expected CO₂ payback time of between 1.6 and 5.9 years. This payback period is calculated as the length of time it will take the carbon savings produced as a result of the wind farm operation, to amount to the carbon costs used

²⁰ Scottish Government (2008) Calculating carbon savings from wind farms on Scottish peat lands: a new approach [Online] Available at: <https://www.gov.scot/publications/calculating-carbon-savings-wind-farms-scottish-peat-lands-new-approach/pages/13/> (Accessed 12/12/19)

through construction of the Development. This helps to inform the viability of the wind farm development in terms of the carbon balance and overall savings.

The Development will not significantly influence climate change, and the Development will have a beneficial cumulative effect with regards to reduction in carbon emissions when considering the UK-wide electricity generation mix. As such, there is a beneficial significant effect of the Development on climate change.

13.10.2.3 Effects on Environmental Receptors

Changes to future climate conditions are negligible over the lifetime of the Development, and therefore no further assessment is required and no significant effects are predicted as a result of climate change.

13.10.3 Proposed Mitigation

No adverse significant effects are identified with relation to climate change and therefore no mitigation is proposed other than that already incorporated into the design.

13.10.4 Residual Effects

The Development will have a beneficial effect on carbon savings and a significant beneficial effect when considered cumulatively with UK-wide renewable energy deployment. No additional significant effects to those already identified within the EIA Report will occur as a result of climate change during the operational phase of the Development.

13.11 Forestry

Chapter 16 - Forestry of the EIA Report follows a different structure in that it describes the baseline forestry conditions and provides a forest design plan as a result of the Development, but will not describe the environmental impacts as a result of this forest design plan which will be assessed within each specific technical chapter.

The Development is situated within an area of commercial forestry, in single ownership. The area of coniferous crop within the Site Boundary extends to 205 ha. The forestry was planted in 1986 and 1990, and predominantly with an intimate mixture of Sitka spruce and Lodgepole pine, with smaller discrete stands of Sitka spruce.

No felling has taken place on the Site and there is no approved Forest Plan for the Site. The Development, and the associated outline Habitat Management Plan (oHMP), would require approximately 205 ha of conifer woodland to be felled (i.e. all forestry on the Site).

As the Site is capable of peatland restoration, the public benefits of extending peatland habitats significantly outweigh the public benefits of retaining woodland on the Site. The supporting operations in the HMP will restore priority peatland habitat and improve the connectivity between the designated areas of the Caithness and Sutherland SAC/SPA.

Considering the treatment of the forest in light of the extensive published guidance on the treatment of afforested peatlands, the location of the Site, its soils and non-woodland habitats, make it more suitable for peatland restoration rather than restocking. The Site lies adjacent to, and is hydrologically linked with the Caithness and Sutherland SAC/SPA. ESC data suggests that further cultivation and fertiliser inputs would be required to re-establish commercial conifer crops, perpetuating the adverse impact the present land use is having on the adjacent peatland SAC.

13.12 Other Issues

13.12.1 Introduction

An assessment was undertaken of the effects of the Development upon other issues not covered elsewhere in the EIA Report including:

- Shadow Flicker;
- Telecommunications and Utilities; and
- Health and Safety, including Major Accidents and Disasters.

13.12.2 Shadow Flicker

13.12.2.1 Baseline Conditions

Shadow flicker is an effect that can occur when the shadow of a blade passes over a small opening (such as window), briefly reducing the intensity of light within the room, and causing a flickering to be perceived. It occurs when a receptor is within a certain distance of an operational turbine. A single residential property, Slickly Croft located approximately 1.4 km to the west of the Development is the only potential receptor of shadow flicker.

13.12.2.2 Assessment of Effects

As a result of the distance from the Development to the nearest property and the weather conditions of the area, shadow flicker effects are only likely at a Slickly Croft at low levels and do not exceed the recommended limits. Therefore, shadow flicker effects will not be significant.

Given the distance to Stroupster Wind Farm, which is the nearest cumulative development, shadow flicker from Stroupster on Slickly Croft are unlikely to occur and therefore have not been considered further.

13.12.3 Telecommunications and Utilities

13.12.3.1 Baseline Conditions

Due to the size and nature of wind turbines, they have the potential to interfere with electromagnetic signals passing above ground during operation. Infrastructure affected can include telecommunication links, microwave links and television reception. In addition, other infrastructure such as buried utilities may be affected by the construction of the Development.

Consultation with telecommunication and utilities consultees was undertaken to ensure all links within 1 km of the Site that may be affected by the Development were identified. The following organisations were consulted:

- Ofcom – SpectrumLicencing;
- CityFibre;
- Arqiva;
- Atkins;
- Joint Radio Company (JRC); and
- British Telecoms (BT).

Ofcom, CityFibre, Arqiva & Atkins did not respond to the consultation. BT identified one link which runs through the centre of the Site; the potential effects on this link will be mitigated through design and therefore in line with the buffers required by BT. JRC sent an initial response dated 24th October 2019 stating part (or all) of the proposed development breaches one or more of the exclusion zone limits. A further response was received on 24th October 2019 stating "*this proposal cleared with respect to radio link infrastructure operated by the local utility*". The Applicant responded to JRC to confirm the

position of the Development in relation to exclusion zones however, no response was received.

A utility search was undertaken to identify other infrastructure that could be affected during construction, which identified no utilities within the site. Prior to construction, an additional search would be undertaken to identify any new or updated services.

13.12.3.2 Assessment of Effects

If the construction and operation of the Development are found to affect the operation of the telecommunication links through adversely affecting signal quality, this would be considered a significant effect and would require mitigation by design.

Adverse effects on infrastructure such as utilities are also unlikely; however, safe systems of work, technical solutions and appropriate mitigation will be adopted to ensure no adverse effects occur. No utilities were identified within the Site, this was not considered further and no significant effects are predicted.

13.12.4 Health and Safety including Major Accidents and Disasters

13.12.4.1 Baseline Conditions

This section assesses the vulnerability of the Development to major accidents and disasters. The location of the Site is not in an area known for natural disasters or forest fires. Flooding is the most probable natural disaster to occur, and the Development has been designed to minimise the impact of flooding.

13.12.4.2 Assessment of Effects

Due to the location of the Development and Site management through CDM Regulations and the CEMP, major accidents and disasters are considered negligible and not significant in terms of the EIA Regulations.

13.12.5 Proposed Mitigation

Embedded design has ensured that no telecommunications links are subject to significant adverse effects as a result of the Development.

13.12.6 Residual Effects

There are no residual significant effects of shadow flicker, telecommunications, utilities or health and safety as a result of the Development

14 SUMMARY

An EIA for the Development has been carried out in accordance with the regulatory requirements and relevant good practice guidance, which involves the compilation, evaluation and presentation of any potentially significantly environmental effects resulting from the Development.

The design strategy has created a wind farm that represents optimum fit within the technical and environmental parameters of the Site. Throughout this process, an iterative approach has allowed the findings of the public consultation exercises, along with the EIA, to guide the evolution of the Development allowing the design to be modified in order to avoid environment effects where possible.

Through embedded design and proposed mitigation significant adverse effects as a result of the construction and operation of the Development are predicted in relation to landscape and visual and indirect effects on Kirkstones settlement (SM4636), which given the nature of the Development cannot be avoided in their entirety.

The Development presents an important environmental benefit as a renewable energy generator contributing to Scotland's ambitious renewable energy targets and offsetting fossil fuel energy sources which produce CO₂ and contribute to climate change. In terms of payback periods for the Development, this equates to between 1 and 6 years. Beyond the payback periods, the Development will make a beneficial net contribution to CO₂ emissions savings for the remainder of its operational period.

An HMP will be produced to inform and guide the commencement of practical habitat creation and restoration techniques during Development construction, with the aim of effective management of construction activities and commencement of restoration works within the surrounding Caithness and Sutherland Peatlands.

The renewable industry is an important economic asset to the UK and Scotland, and supports a substantial and growing number of employment opportunities. The Development will further contribute to the positive effects of renewable energy, and associated skills base within the UK and Scotland, and the spend and employment should be considered beneficial for the local and Highland area.

This EIA shows that, given the iterative design process, and with the committed good practice measures and proposed further site-specific mitigation in place, most potential environmental effects associated with the construction and operation of the Development can be avoided or minimised.