Environmental Impact Assessment Report

Lairdmannoch Energy Park

Volume 1: Non-Technical Summary

Lairdmannoch Energy Park Limited

May 2025

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Preface

This Non-Technical Summary (NTS) is an overview of the Environmental Impact Assessment Report (EIA Report), produced in support of an application under Section 36 of the Electricity Act (Scotland) 1989 (as amended) for the construction and operation of an electricity generating station known as Lairdmannoch Energy Park (the 'Proposed Development').

The Proposed Development would consist of nine wind turbines each with a maximum tip height of 180m above ground level (agl), ground mounted solar panels, battery energy storage system (BESS) and associated infrastructure.

The Proposed Development is made up of two renewable generation technologies (wind and solar) which are discussed in individual detail within this EIA Report. The Proposed Development will also feature battery storage which will support the integration into the grid of the low carbon power generated by the two renewable technologies.

The Proposed Development will have an indicative electricity export output of approximately 60MW from wind generation and 20MW from solar. With a battery storage capacity of up to 20MW, the total project installed capacity will be approximately 100MW.

The Proposed Development would be located approximately 7km north east of Gatehouse of Fleet and 10km west of Castle Douglas in Dumfries and Galloway.

This application (including the EIA Report and this NTS) has been prepared by Atmos Consulting Ltd on behalf of Lairdmannoch Energy Park Limited.

The EIA Report has been produced to provide information on the likely significant environmental effects of the Proposed Development.

The EIA Report includes the following documents:

- Volume 1: Non-Technical Summary;
- Volume 2: Environmental Impact Assessment Report;
- Volume 3: Technical Appendices;
- Volume 4: Figures; and
- Volume 5: Confidential Annex.

The application is also supported by a Pre-Application Consultation Report, a Design and Access Statement and a Planning Statement.

Electronic copies of the EIA Report are available to view at the following locations:

- On the Scottish Government Energy Consents Unit (ECU)'s website at www.energyconsents.scot;
- On Dumfries and Galloway Council's Planning Applications portal at https://eaccess.dumgal.gov.uk/online-applications/ and;
- The Applicant's website at https://lairdmannochenergypark.co.uk/

Paper copies of the NTS are available free of charge from:

info@wind2.co.uk

01352 748300

Wind2 Limited, 2 Walker Street, Edinburgh, EH3 7LB

Paper copies of the EIAR (including Supporting Documents and Non-Technical Summary) may be purchased by arrangement from the above address for £1,400 per copy, or free per USB stick copy. The price of the paper reflects the cost of producing all of the Landscape and Visual photographs at the recommended size.

A publicly available hardcopy of the EIAR volumes will be available for viewing at the following address from the 2nd June until the 18th July 2025:

Kirkcudbright Library

Customer Service Centre

Daar Road Offices

Daar Road

Kirkcudbright

DG6 4PJ

United Kingdom

1 Introduction

Lairdmannoch Energy Park Limited ('the Applicant') is seeking consent under Section 36 of the Electricity Act (Scotland) 1989 (as amended) to develop Lairdmannoch Energy Park, an energy park consisting of 9 wind turbines each with a tip height of 180m above ground level (agl), ground mounted solar panels, a battery energy storage system (BESS) and associated infrastructure including hardstandings, cabling, borrow pits and access roads (the 'Proposed Development') (**Figure 1-1**).

The Proposed Development will have an indicative electricity export output of approximately 60MW from wind generation and 20MW from solar. With a battery storage capacity of up to 20MW. The total project installed capacity will be approximately 100MW.

The Scottish Government has set a target of achieving net zero carbon emission by 2045. This target relies on a large increase in renewable energy generation across Scotland and on the Scottish Government's ambitions to secure an additional 8-12 GW of installed onshore wind capacity by 2030, which the Proposed Development would help to achieve.

1.1 The Applicant

Lairdmannoch Energy Park is being developed by Lairdmannoch Energy Park Limited (the Applicant), which forms part of a joint venture between Wind 2 Limited (Wind2) and companies managed by Octopus Energy Generation.

Wind2 is a specialist renewable energy developer which is working on the development of a range of renewable energy projects across the UK. The company has personnel in Edinburgh, Perthshire, Cromarty, Wells (Somerset) and in Mold in North Wales. Further information on Wind2 can be found on its company website at https://wind2.co.uk.

Octopus Energy Generation are one of Europe's largest investors in renewables, operating £4 billion of green energy generation across seven countries. Octopus Energy Generation operate solar and wind projects across the UK.

The Applicant is committed to investing in Dumfries and Galloway through renewable energy projects, with the community benefits and additional outcomes that renewable energy development can bring (including construction and post construction employment).

1.2 Land Use

The Proposed Development Site occupies an area of approximately 612.2 hectares (ha) and is shown bounded by the red line on **Figure 1-1** in **Volume 4** of this EIA Report.

The Proposed Development Site is an irregular parcel of land bounded to the east by the A762 and by forestry to the north and south. The southwestern access track passes through forestry to join the B727 east of Gatehouse of Fleet as described above.

The northern tip of Loch Mannoch lies within the boundary of the Proposed Development Site and the Proposed Development Site is crossed by a number of watercourses, including the Anstool Burn with crosses from north to south to drain into Loch Mannoch.

With the exception of the southwestern access track route, the land cover consists of predominantly upland bog with wet heath in the vicinity of the wind farm infrastructure to the west and lowland pasture to the east in the vicinity of the solar farm infrastructure. The land use across the Proposed Development Site is livestock grazing.

The area surrounding the Proposed Development is home to dispersed settlements connected by minor roads between the A762, A75, B727 and Laurieston Road.

Recreational routes include core paths providing access to moorland and forest areas and the National Cycle Network Route (NCNR) 7 which comes within 5.6km west of the windfarm infrastructure as it progresses along the B796

There is a fixed telecommunication link which intersects the Proposed Development Site boundary in the eastern part.

1.3 Purpose of the EIA Report

The EIA Report presents the findings of the EIA process by describing the Proposed Development, the current conditions at the Proposed Development Site and the likely environmental effects which may result from the Proposed Development.

Where appropriate, measures designed to avoid, reduce or offset potentially significant effects are proposed (mitigation measures) and residual effects (those effects that are expected to remain after mitigation) are described.

The findings and conclusions of the EIA are summarised in this Non-Technical Summary (NTS) which is intended to allow anyone with an interest in the Proposed Development to understand and access information on its potential environmental effects.

2 EIA Approach

EIA is a systematic process used to inform consenting authorities of the potential environmental implications of a development by collecting baseline information about the existing environment and the determining of the potential effects of the development on the environment. Where significant negative (adverse) effects are identified, reduction of these effects is then sought by changing the design or applying mitigation measures. Any remaining adverse residual effect after mitigation has been applied would then be considered.

The Proposed Development falls under Schedule 2 of the EIA Regulations[1] and an EIA has been undertaken, as the Applicant recognises that the Proposed Development has the potential to cause significant environmental effects.

The scope of the EIA was determined through a Scoping Opinion from the Energy Consents Unit (ECU) on behalf of the Scottish Ministers in January 2024 (Ref: ECU00004900) as outlined in Chapter 2, as well as statutory consultees and non-statutory consultees.

3 Development Description

The Proposed Development would consist of 9 wind turbines each with a tip height of 180m above ground level (agl), ground mounted solar panels, a battery energy storage system (BESS) and associated infrastructure including:

- Electrical transformers;
- Construction of turbine foundations and crane hardstandings;
- New access tracks;
- Cabling;
- Borrow pits;
- Substation;
- Battery Energy Storage System;
- Ground mounted solar panels; and
- Up to eight watercourse crossings.

The Proposed Development layout is shown on **Figure 3-1 Detailed Site Layout**.

The wind turbines will be built using standard concrete gravity base foundations made of steel reinforced concrete. To facilitate the installation of the wind turbines, a crane hardstanding adjacent to the turbine base will be built.

The solar panels' structure is made of aluminium frames, mounted vertically into the ground to a depth of approximately 1.5m. When the modules are fixed to the supporting frame, the modules will reach a maximum height of 3.2m above the ground level. The lowest point of the solar modules is approximately 0.8m above ground.

Access to the Proposed Development Site shall be from two separate points. Access to the Wind Development area of the Proposed Development shall be gained from the

[1] The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017

southwest via the A75 Trunk Road and B727 towards Gatehouse of Fleet where access to Proposed Development Site follows an established commercial forestry track through Disdow Wood and the Glengap Forest for approximately 9km.

Access to the Solar Development area of the Proposed Development is from the east from the A762, and the construction traffic route will follow the A75 Trunk Road from the east or west of Ringford, and north onto the A762 for approximately 4.2km to the Proposed Development Site access.

Once the turbines and solar panels have been installed, the access tracks, turbine foundations, substation, battery energy storage system, and crane hardstand areas around the turbines will remain in place as permanent infrastructure. The temporary construction compound area, borrow pits and working areas (laydown areas for turbine blades, ancillary pads) will be reinstated.

The Proposed Development is anticipated to utilise up to one potential borrow pit for the excavation of on-site aggregate to be used in the construction of the Proposed Development and for peat reinstatement.

The electrical power produced by the individual turbines and solar panels will be fed to an onsite substation via underground cables. On site cabling will typically consist of array cables, at 33,000 volts (33KV).

The connection from the Proposed Development Site to the National Grid would be subject to a separate consenting process and does not form part of this Application.

The construction of the Proposed Development is anticipated to take approximately 12 - 18 months.

The Proposed Development will have an operational lifespan of 40 years after which it will be decommissioned if no further consents are granted.

3.1 Site Design

As part of the development design process, the Applicant has reviewed and discounted alternative infrastructure siting (turbines, solar panels, sections of new access track) due to a variety of factors including environmental, planning, technical and commercial constraints.

Iterations to the design have occurred throughout the development process, design iterations include:

- Reduction in the number of turbines down from 12 to 9;
- Positioning of wind turbines and solar panels to minimise effects on cultural heritage assets;
- Siting of infrastructure away from the deepest peat; and
- Movement of a site access from the north to the south-west after community feedback.

For further information on site design see **Chapter 3 Description of Development**, **Section 3.2.2**.

3.2 Benefits of the Proposed Development

Once operational, the Proposed Development is anticipated to generate approximately 147,119 MWh per year.

This will displace an equivalent amount of fossil fuel generated electricity amounting to a reduction in the release of greenhouse gases equal to 54,259 tonnes (CO_2 equivalent) per year. For more information see **Chapter 13**.

The Scottish Government's Climate Change Plan (2018) states that by 2030 Scotland will have a largely decarbonised electricity system with a grid carbon intensity of 50g CO_{2e}/kWh of generation. The Proposed Development has a grid connection contract which, if consented, would enable connection to the national grid by 2030.

The Proposed Development is expected to have a carbon intensity of 16g CO_{2e}/kWh, which is below (and therefore compliant with) the 2030 carbon intensity target. The Proposed Development is anticipated to further support Scotland's Climate Change Plan by maintaining and succeeding the target already achieved.

The results of the Carbon Calculator are presented in **EIA Volume 2 Technical Appendix 13-1**.

The Applicant is adhering to Scottish Government best practice guidance and is proposing a community benefit package of up to £310,000 per annum or £12.4 million over the 40-year life of the Proposed Development, based on a figure of £5,000 per MW of wind and £500 per MW of solar of installed generating capacity.

The Proposed Development is a substantial investment that will result in the generation of employment. It is estimated that the Proposed Development will generate up to 214 jobs during the construction phase in the UK, and up to 10 jobs in the UK during the operation phase. With a likely predicted total Gross Value Added (GVA) of up to £17.5 million during the construction phase in the UK with a further £2 million during the operational phase in the UK.

It is likely that the Proposed Development will also have wider beneficial effects that are not possible to quantify at this stage. Nevertheless, these would be expected to have positive effects on local, regional and national economies including:

- **Local supply chain opportunities**: Wider, 'knock-on' effects of workers visiting the area, e.g. in the accommodation, food service and retail sectors.
- **Income effects:** The generation of additional wages and salaries from new employment, much of which will be spent regionally or nationally;
- **Exchequer effects:** Additional business rates and tax revenue, regionally and nationally from increased economic activity;
- **Effects on landowners**: There will be a financial transaction to the landowners which may support diversification and/or other spending in the local, regional and national economy;
- **Battery Storage**; The project also proposes to include a battery storage facility of up to 20MW.;
- **Cultural Heritage**; Given the project's proximity to important heritage assets, the Applicant is engaged with Heritage Environment Scotland (HES) and is exploring offering heritage trails and a new footpath linking the turbine infrastructure to features such as the Scheduled Loch Mannoch cairn and stone circle, by audio

and visual content to inform visitors about the cultural heritage within and around the proposed development.

- **Land Management & Ecological Enhancements;** which help support the local area and, in some cases, provide employment;
- **Investment in local infrastructure**; such as access roads which brings wider benefits to the local economy and community, including longer-term benefits as a result of the improvements to infrastructure.
- **Peatland Restoration:** 88 Ha of priority peatland will be restored as part of the Proposed Development
- **Community Benefit**-: the Applicant is adhering to the best practice recommendation and is proposing a community benefit package based on a figure of £5,000 per MW of wind and £500 per MW of solar installed generating capacity. This results in a fund of up to £310,000 per annum or £12.4 million over the 40-year life of the Proposed Development.
- **Shared Ownership:** The EIA Report advises that the Applicant is keen to explore interest in part community shared ownership in the Proposed Development. This would provide an opportunity for the communities around the Proposed Development Site to invest in the Proposed Development.

4 Planning and Energy Policy

4.1 National Planning Policy

The Fourth National Planning Framework (NPF4)

NPF4 was approved and published by the Scottish Government (2023a) on 13th February 2023. NPF4 is the national spatial strategy for Scotland and also incorporates Scottish Planning Policy. It sets out the principles for spatial development, defines national developments and regional priorities and sets out national planning policy.

NPF4 sets out significant and increased emphasis on the climate change and net zero agenda to bring together cross-cutting priorities and achieve sustainable development through three key themes: sustainable places, liveable places and productive places.

In terms of renewable energy generation, NPF4 states that:

> *"A large and rapid increase in electricity generation from renewable sources will be essential for Scotland to meet its net zero emissions targets";*

and:

> *"Additional electricity generation from renewables and electricity transmission capacity of scale is fundamental to achieving a net zero economy and supports improved network resilience in rural and island areas".*

This need for new renewable electricity generation is carried forward into National Policy through Policy 11: Energy, the intent of which is:

> *"To encourage, promote and facilitate all forms of renewable energy development onshore and offshore. This includes energy generation, storage, new and replacement transmission and distribution infrastructure and emerging low-carbon and zero emissions technologies including hydrogen and carbon capture utilisation and storage (CCUS)"*

The key policies from NPF4 which are most relevant to the Proposed Development include:

- National Planning Policy 1 in Part 2 of NPF4: 'Tackling the climate and nature crises', states that *"When considering all development proposals significant weight will be given to the global climate and nature crises"*
- Policy 2 'Climate mitigation and adaptation' seeks to "*… encourage, promote and facilitate development that minimises emissions and adapts to the current and future impacts of climate change*" .
- Policy 3: Biodiversity - "*. . . protect biodiversity, reverse biodiversity loss, deliver positive effects from development and strengthen nature networks*"
- The intent of Policy 5: Soils - "*. . . protect carbon-rich soils, restore peatlands and minimise disturbance to soils from development.*"
- Policy 7: Historic Assets and Places – "*To protect and enhance historic environment assets and places, and to enable positive change as a catalyst for the regeneration of places.*"
- Policy 11: Energy – "*To encourage, promote and facilitate all forms of renewable energy development…*"

4.2 Local Planning Policy

The Statutory Development Plan is comprised of NPF4 and the adopted Local Development Plan, the Dumfries and Galloway Council Local Development Plan 2 (LDP2) (Adopted 2019).

4.2.1 The Dumfries and Galloway Council Local Development Plan (LDP2) 2019

Dumfries and Galloway Council's LDP2 was adopted in September 2019 and establishes the planning framework for the region, guiding land use and future development across towns, villages, and rural areas. It outlines designated areas for development, including regeneration initiatives, while also identifying locations where development is restricted (Dumfries and Galloway Council, 2019).

The LDP2 notes that:

> *"The renewable energy field is constantly evolving with existing technologies developing and new technologies coming forward. It is expected that the current renewable energy policies and other policies contained within the Plan will provide a basis to consider these emerging changes. Such technologies include, but are not confined to, the following:*
>
> *Energy hubs – where more than one energy source is located on a site, such as solar and wind energy production. This will ensure greater efficiency by enabling energy to be stored during highly productive periods then fed into the grid when demand is high.*
>
> *Energy storage is becoming more important at both domestic and commercial levels. Energy can be stored when production exceeds demand, then released when demand exceeds production, leading to a much more efficient energy system. There are a range of developing technologies for energy storage, including the use of batteries, hydrogen, and pumped hydro storage."*

The key policies relevant to the Proposed Development include:

- Overarching Policies:
  - OP1: Development Policies
  - OP2: Design Quality and Placemaking
- Economic Development Policies:
  - ED10: Galloway and Southern Ayrshire Biosphere
  - ED11: Dark Skies
- Historic Environment Policies:
  - HE1: Listed Buildings-
  - HE2: Conservation Areas –
  - HE3 Archaeology
  - HE4 Archaeologically Sensitive Areas
  - HE6: Gardens and Designed Landscapes
  - HE8: Enabling Development
- Natural Environment Policy:
  - NE1: National Scenic Areas

  - NE2: Regional Scenic Areas
  - NE3: Areas of Wild Land
  - NE4: Sites of International Importance for Biodiversity
  - NE5: Species of International Importance
  - NE6: Sites of National Importance for Biodiversity and Geodiversity
  - NE7: Forestry and Woodland
  - NE8: Trees and Development;
  - NE11: Supporting the Water Environment
  - NE12: Protection of Water Margins
  - NE13: Agricultural Soil
  - NE14: Carbon Rich Soil
  - NE15: Protection and Restoration of Peat Deposits as Carbon Sinks
- Infrastructure Policy:
  - Policy T1: Transport Infrastructure
  - Policy IN2- Wind Energy

4.2.2 Dumfries and Galloway Council Supplementary Guidance

These supplementary guidance documents are to provide further detail in support of policies within Dumfries and Galloway Council's Local Development Plan 2.

These include:

- LDP2 Wind Energy Development: Development Management Considerations- supplementary guidance, February 2020
- LDP2 Dark Skies Friendly Lighting Supplementary Guidance, February 2020
- LDP2 Trees and Guidance Supplementary Guidance, February 2020
- Draft Wind Energy Landscape Sensitivity Study, 2025 update

4.3 Climate Change and Energy Policy

Both the UK and Scottish Government have declared a Climate Emergency and climate change has been described as the greatest environmental challenge facing the world today. In June 2019 Dumfries and Galloway (D&GC) also declared a climate emergency and subsequently incorporated this into all future policies in line with their Council Plan for 2023 to 2028.

Scottish Energy Strategy

The Scottish Energy Strategy (SES): The Future of Energy in Scotland was published in December 2017. 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.

For the longer term the SES states that;

> *"Scotland's long term climate change targets will require the near complete decarbonisation of our energy system by 2050, with renewable energy meeting a significant share of our needs"*

This commitment has been brought forward to 2045 following the Climate Change (Emission Reduction Targets) (Scotland) Act 2019 and noted in Scotland's Energy Position Statement (2021).

Onshore Wind Policy Statement 2022

The Onshore Wind Policy Statement (OnWPS) 2022 (Scottish Government, 2022) was published on 21 December 2022 and outlines the Scottish Government's ambitions for the Onshore Wind Sector, highlighting how these can be delivered. The urgency and relevance of the need to meet Net Zero targets is stressed through the statement that; *"We must now go further and faster than before"*.

The Statement notes Scotland's current installed onshore capacity of 8.7GW as of June 2022 and Scotland's aim to maintain a supportive policy and regulatory framework. It is stated that this will enable an increase in renewable energy deployment and meet the overall ambition of 20 GW of installed onshore wind capacity in Scotland by 2030.

Reversing degradation through peatland restoration is therefore central to mitigating and adapting to the linked climate and nature crises and the OnWPS identifies the opportunity for wind energy development to contribute significantly to improving biodiversity.

The criteria through which proposals will be evaluated has been updated to focus a stronger emphasis on the role which wind energy developments can play both in the response to the joint climate and nature crises as well as the resulting socioeconomic and community benefits.

5 Landscape and Visual Impact Assessment

The Landscape and Visual Impact Assessment examines the potential for significant landscape and visual effects arising from the Proposed Development during construction and operation; including night-time effects. A precautionary approach has been taken, in which all effects are described as "adverse." The three main elements of the Proposed Development; the wind turbine array, the solar farm (north and south arrays), and the access track, have been considered as one development in the study. The development is considered to be Long Term in nature but is ultimately time-limited and the majority of landscape effects would be removed following decommissioning, the effects are considered to be fully reversible.

The assessment takes into account the measures aimed at reducing potential adverse effects carried out during design and construction. In addition, the positive effects of proposed tree belts intended to ultimately screen, or partially screen, the solar farm elements have also been considered.

The effect of decommissioning on landscape character and visual amenity would be equal to, or lesser than, the effects arising during construction and therefore, in this assessment, they have been considered together.

During the intense periods of activity associated with construction, in terms of visual amenity, local residents in the nearby villages and settlements of Laurieston, Kirkconnell, Glengap and Gatehouse of Fleet and motorists on the A762 would have views or partial views of the work as it progresses but effects arising would not be significant. However, some very localised significant adverse effects are predicted during the construction period for recreational users of the Core Path which is used as the south western access track.

Significant Landscape and Visual effects arising from the Proposed Development were also considered for the period of operation, on completion of the construction period.

In the "host" landscape, there would be a distinct area of influence within approximately 4-6km of the proposed turbines, dropping away quickly due to landform. When the extent of screening by forestry is considered, this is reduced to an approximately 2.5km radius of influence. Within this area, there would be a large scale of change, but due to topography and extent of screening by forestry, the effects would be localised, they would only occur over a limited extent of the landscape character area and would not be significant.

None of the neighbouring, or nearby, landscape character types would experience any significant landscape effects.

In terms of effects on residential visual amenity, it was concluded that no residents would exceed the "Residential Visual Amenity Threshold" as it is referred to. Nevertheless, some significant visual effects would occur for some of the nearest residents and on groups of viewers near to the Proposed Development Site and for limited, higher parts of the village of Laurieston.

There would be Significant short-term construction effects predicted for recreational users of the Core Path which is used for the access track.

At Laurieston Church Road, Major/Moderate significant operational effects were identified. At Laurieston-Upper, effects were assessed as Moderate significant.

Significant operational effects were identified at the Core Path Loch Mannoch-Kirkconnell, Core Path Loch Whinyeon, and A762 between Kirkconnell and Laurieston.

A number of public vantage points were also assessed, and a significant effect was identified at Neilson's Monument, Barstobrick Hill during the construction and operational phases.

There would be no significant construction or decommissioning effects on the Special Qualities of the Fleet Valley National Scenic Area (NSA). There would be a localised not significant effect upon one of the Fleet Valley NSA Special Landscape Qualities in the upper Fleet Valley. The integrity of the NSA is not affected.

There would be no significant construction or decommissioning effects on the Galloway Hills RSA. There would be some localised significant effects upon the Galloway Hills RSA.

6 Ecology

Chapter 6 of the EIAR assesses the potential significant effects of the Proposed Development on habitats and non-avian species.

Ecology surveys were undertaken within the boundary of the Proposed Development Site to establish baseline conditions for habitats, protected species and other fauna. These included habitat surveys, automated bat surveys carried out in 2023 and 2024, and protected species surveys.

Habitat surveys were aimed at identifying important habitat types, including priority peatlands, groundwater dependant terrestrial ecosystems and woodlands either likely to fall within the Proposed Development Site or with potential to be affected by it. The Proposed Development Site consists mostly of blanket bog which is currently in a degraded condition.

Bat activity was recorded across multiple survey periods, with most calls detected during summer and autumn. A total of 3,715 bat passes were recorded in 2023, and 1,895 in 2024. Species detected included Nyctalus, Myotis, brown long-eared bats, and pipistrelles.

Evidence of otter, badger, red squirrel, and potential bat roosts were found within the site boundaries.

Without mitigation, the development could result in:

- Permanent and temporary loss or damage of habitats, including 9.39 ha of priority peatlands;
- Indirect drying of sensitive habitats;
- Sedimentation or pollution of nearby watercourses;
- Disturbance, injury, or unintentional harm to protected species during construction;
- Secondary impacts on sensitive habitats such as spread of invasive species, pollution or siltation; and
- Nyctalus species were assessed as high risk due to their abundance. Other species identified in surveys were considered low or moderate risk with no significant effects anticipated. No statutory ecological designations were directly affected, and ancient woodland that had been identified nearby will be protected through appropriate buffer zones.

To address these effects, a range of mitigation measures will be implemented, including:

- A Habitat Management Plan detailing restoration and enhancement of up to 88 ha of peatland resulting in a 1:9.25 loss to enhancement ratio;
- Species Protection Plans and enforcement of buffer zones around sensitive features such as otter holts and badger setts;
- A turbine curtailment strategy to reduce collision risk to Nyctalus bats;
- Timing and management of works to minimise disturbance to fauna and habitats;
- Oversight by an Environmental Clerk of Works and adherence to a Construction Environmental Management Plan; and

- A programme of monitoring would be established to observe the efficacy of mitigation measures proposed and allow for iterative changes to minimise any potential non-significant effects. These will be in place for bats and habitat reinstatement as well as for proposed enhancement measures.

  Following implementation of mitigation measures no significant negative residual effects would remain on any identified feature.

  Following implementation of all mitigation measures, no significant residual effects on ecological features are expected. Cumulative effects from other developments in the area were assessed and are also not considered significant.

7 Ornithology

Chapter 7 of the EIAR assesses the potential significant effects on bird species.

Between September 2019 and August 2021 bird surveys were conducted on the Wind Development area of the Proposed Development Site following NatureScot guidance and other published methodologies. These surveys consisted of:

- Vantage point surveys;
- Breeding bird surveys;
- Breeding raptor surveys;
- Black grouse surveys; and
- Nightjar surveys.

In 2023, breeding bird surveys were undertaken on the Solar Development area of the Proposed Development.

Key receptors identified as a result of the survey work and desk study included:

- Red kite which were breeding in the area and also very active across the Proposed Development;
- Twite, which were found to have a small breeding population within the Solar Survey Area, which was found to be regionally important; and
- Laughenghie and Airie Hills SSSI.

Design mitigation had already protected one Red kite nest from construction impacts and habitat loss. In addition to design mitigation, other mitigation and good practice measures were described which included surveys to identify sensitive breeding raptors and other receptors, and measures to protect them should they be found.

Effects were assessed for all phases of the Proposed Development (construction, operational and decommissioning). Effects considered included disturbance, displacement, habitat loss and additional mortality as a result of collision risk.

These effects were also considered cumulatively. Population viability analysis was also carried out for Red kite collision to investigate in detail the effect of collision risk on the regional Red kite population.

As a result of the mitigation and good practice measures which were applied, while there were some minor adverse effects on Red kite and Twite, these were not considered significant. All other effects were assessed as negligible and not significant.

8 Hydrology, Hydrogeology and Geology (including peat)

Chapter 8 of the EIA Report assesses the potential significant effects of the Proposed Development on hydrology, hydrogeology, and geology. This includes an assessment of potential impacts on private water supplies, peat resources, and landslide risk.

The assessment is based on a combination of desk based studies and extensive field work including 2 rounds of peat probing, one of which was based on a 100m grid across the Proposed Development Site and one based on a grid of between 10m and 50m in the vicinity of the proposed infrastructure in accordance with standing guidance

Peat probing confirmed the presence of variable peat depths across the Proposed Development Site. It was found that the Proposed Development Site has been extensively drained in its western half with approximately 82.5km of artificial drainage cut into both peat and organic soils. Habitats are therefore indicative of drier, drained and modified peatland rather than high quality blanket bog.

Where feasible, the development layout was designed to avoid areas of deep peat. Peat and carbon-rich soils that will be disturbed are limited in volume and suitable for reuse on the Proposed Development Site, as confirmed by the Peat Landslide Hazard and Risk Assessment (PLHRA) and the Outline Peat Management Plan (OPMP). No significant risks of peat landslides were identified.

A number of tributaries arise within the Proposed Development Site such as the Anstool Burn and Glengap Burn, which drain into the Tarff Water Drinking Water Protection Area (DWPA), Loch Mannoch, and the Barlay Burn, a tributary of the Water of Fleet. The Proposed Development will require eight new permanent water crossings.

As a result of the Proposed Development one Private Water Supply and the pipework for another are assessed to be at risk.

The desk study found that the majority of the Proposed Development Site is underlain by peaty podzols and brown soils. The Wind Development area of the Proposed Development is indicated to be underlain by peaty podzols with the Solar Development area of the Proposed Development being underlain by brown soils. The study area is underlain by Silurian and Ordovician rocks which are classified as a low permeability aquifer.

Areas of potential Groundwater Dependant Terrestrial Ecosystems (GWDTE) were generally located on ground adjacent to watercourses or within existing surface water flow routes and underlain by either low permeability peat and bedrock deposits or alluvium deposits which are hydraulically connected to the adjacent watercourses and were not typical of those sustained by groundwater and are likely supported by rain, ponding and waterlogging of soils. It is therefore considered that the potential GWDTE habitats are not supported by groundwater.

In the absence of mitigation, construction could result in:

- Degradation of habitats, carbon storage and hydrological function of the peatlands on site;

- Pollution risk to surface water catchments and groundwater bodies, impacting their quality and adversely affecting wildlife GWDTE area and Drinking Water Protection Areas;
- Erosion and sediment generation during construction;
- Increased flood risk due to hardstanding areas;
- Impacts on the water quality of Private Water Supplies and Drinking Water Protection Areas;
- In the event of a BESS fire, firewater can be considered a potential risk due to leakage of Lithium from the batteries impacting water quality; and
- Erosion and sedimentation due to drainage systems.

A series of measures will be implemented to avoid or minimise these risks:

- Design informed by peat depth data to avoid deep peat where possible;
- Adoption of best practice construction techniques and site-specific management through a Construction Environmental Management Plan (CEMP), which would address pollution, sediment and flood risk incidents;
- Inclusion of drainage management and Sustainable Drainage Systems (SuDS) within the CEMP;
- Implementation of a Pollution Prevention Plan;
- Implementation of a Firewater Management Plan for the BESS;
- Ongoing consultation with statutory bodies, including SEPA and Dumfries and Galloway Council, to agree the final CEMP before construction begins;
- A comprehensive water quality monitoring programme, including pre-construction, construction, and post-construction phases, with a focus on local watercourses and the Tarff Water DWPA;
- A buffer of 50m has been applied to watercourses where feasible;
- An Environmental Clerk of Works (ECoW) will be required to be present onsite during the construction phase and will carry out monitoring of works and briefings with regards to any ecological and hydrological sensitivities on the Proposed Development Site; and
- The preparation of a Peat Landslide Risk Assessment and Peat Management Plan.

The Proposed Development after mitigation measures were applied was assessed to cause a minor and not significant impact to peat and carbon rich soils. All other impacts of the Proposed Development were assessed as negligible and not significant.

Cumulative effects are not anticipated as a result of the Proposed Development due to no other developments being within 5km of the Proposed Development.

9 Noise

Chapter 9 of the EIAR assesses the potential significant effects of the Proposed Development on surrounding properties.

Work was carried out in accordance with relevant guidance, and predicted operational noise levels were compared with applicable noise limits for the Proposed Development. Noise modelling was conducted based on the expected noise generated by the Proposed Development at the nearest relevant properties. This included baseline environmental noise from sources such as wind through trees and foliage, water flow in nearby burns, traffic, forestry works, operations at Bargatton Quarry, and animal activity.

Construction noise arises from vehicles accessing the Proposed Development Site and the construction of key components and infrastructure. Operational noise arises from the operation of the Wind Development including noise from wind turbines as they rotate to generate power, and noise generated at the Proposed Development site substation, Battery Storage and solar inverters and transformers associated with the Solar Development.

The significance of the noise impact depends on the relative levels arising from each element of the Proposed Development, the duration of the noise exposure (i.e. noise from construction activities are permitted to be higher than operational noise due to the short term nature of the impact), and the existing baseline noise levels.

Construction noise impacts were largely scoped out of detailed assessment, as noise levels are expected to remain below thresholds outlined in relevant guidance at sensitive receptors. Operational noise levels from the Wind Development meet relevant limits and are determined to be not significant.

Noise from the Proposed Development Site substation, BESS and Solar Development was scoped out of detailed assessment as initial predictions resulted in sufficiently low rating levels at sensitive properties due to large distances between the on-site potentially noise generating plant and nearest properties. Therefore, operational noise from the substation, BESS and Solar Development is considered to be not significant.

Both construction and operational noise impacts are determined to be not significant.

Noise during construction will be controlled and minimised via the Construction Environmental Management Plan, to be prepared prior to the commencement of works.

Cumulative operational noise effects were scoped out of the assessment, as there are no nearby wind turbine developments requiring assessment.

10 Cultural Heritage

Chapter 10 of the EIAR assesses the potential significant effects of the Proposed Development on cultural heritage assets.

A desk-based assessment was carried out to identify Scheduled Monuments, Listed Buildings, and non-designated heritage assets that could be affected by the Proposed Development. The assessment incorporated data from various sources and findings from walkover surveys. In addition, a Zone of Theoretical Visibility (ZTV) analysis was undertaken to identify assets whose settings might be affected by views of the Wind Development and Solar Development. The archaeological potential across the Proposed Development Site was also assessed, taking into account existing records, local topography, and land use history.

In terms of archaeological potential, the Proposed Development Site shows a high likelihood of containing prehistoric, post-medieval, and modern remains, particularly in the western area, where the Wind Development is proposed. The eastern area, where the Solar Development is proposed, is expected to contain medieval to modern agrarian features. The northwestern area of the Proposed Development Site also has a relatively high potential for paleoenvironmental remains.

The assessment identified one Scheduled Monument Loch Mannoch, cairn and stone circle N end of as a key constraint, with Historic Environment Scotland confirming that its setting is particularly sensitive. One Category B Listed Building, Kirkconnell Farmstead and Steading, is located within the Proposed Development Site. A total of 91 non-designated heritage assets were recorded within the Proposed Development Site. A further 133 designated and non-designated heritage assets of potential national importance were identified within the 10 km study area due to potential intervisibility with the development.

Of the 91 non-designated heritage assets identified within the site, 22 within the main site area, three along the access track, and twelve in areas proposed for wildflower and tree planting are predicted to be physically affected. Two of these assets, burnt mound (Asset 77) and Building Remains (Asset 169), are assessed as experiencing Moderate effects, which are significant in EIA terms. All other effects on non-designated assets are assessed as Minor or Negligible and therefore not significant. The wider study area assets are predicted to experience Minor to No Impact, with none of these effects considered significant.

The Listed Building, Kirkconnell Farmstead and Steading, would experience a change to its setting due to a shift in land use from agricultural to semi-industrial, though this is considered a minor effect and not significant in EIA terms.

The Proposed Development is predicted to have a Moderate significant effect the Scheduled Monument at Loch Mannoch. However, the overall integrity of its setting is not considered to be significantly adversely impacted.

The Proposed Development has been designed to minimise impacts on heritage assets, particularly by avoiding direct effects where possible. Known archaeological remains

will be physically protected during construction through fencing and other protective measures. A programme of archaeological mitigation will be implemented, including investigation, identification, and recording of any remains that may be disturbed during construction. This applies especially in areas identified as having high potential for buried archaeological or paleoenvironmental remains. No additional mitigation is proposed for either the Scheduled Monument or the Listed Building.

When considered alongside other existing or consented developments, the Proposed Development is not predicted to result in significant cumulative effects due to distance to the nearest cumulative development (over 15km away). The impact on the setting of another ten designated heritage assets identified by key consultees within the 10 km Study Area are considered to negligible/minor and therefore not significant in EIA terms.

11 Transport and Access

Chapter 11 of the EIAR assesses the potential significant effects of the Proposed Development on transportation and access.

An assessment was carried out on the potential environmental effects associated with the increased traffic generated by the Proposed Development.

The most likely route for general construction traffic travelling to the Proposed Wind Development Site access are:

- From the A75(T) from the east or west to the junction of the A75(T) with the B727;
- North on the B727 towards Gatehouse of Fleet; and
- Via an established commercial forestry track through Disdow Wood and the Glengap Forest for approximately 9km to the Proposed Development Site.

Access to the Solar Development would be via two separate access points taken from the A762 to serve both the northern and southern sections of the Solar Development. The construction traffic route to the Solar access point is:

- From the A75(T) from the east or west of Ringford; and
- North on the A762 for approximately 4.2km to the Proposed Development Site access.

It is expected that the wind turbine components would be transferred by abnormal load vehicles to the Proposed Development Site from the King George V docks in Glasgow.

The traffic generated by construction of the Development (over a 12 to 18 month period) would result in a temporary increase in baseline traffic levels. The likely significant environmental effects associated with this increase in traffic have been assessed and are anticipated to give rise to effects that are classed as significant, and which require mitigation.

With mitigation in place, in the form of a Construction Traffic Management Plan (CTMP), the potential traffic and transport related environmental effects during construction are considered to be not significant.

During the operational phase of the Proposed Development, only a small number of vehicles would attend the Proposed Development on a regular basis to undertake inspections or maintenance activities. As such, no significant operational effects are anticipated. Therefore, no further assessment of such effects has been undertaken.

Traffic effects during the decommissioning phase of the Proposed Development are assumed to be significantly less than during the construction phase. Therefore no further assessment of decommissioning effects has been undertaken.

No significant residual effects from construction traffic are predicted to arise either as a result of the Proposed Development in isolation or cumulatively when other developments are considered as part of the cumulative assessment.

12 Socio-Economics, Tourism and Recreation

Chapter 12 of the EIAR assesses the potential significant socio-economic effects of the Proposed Development on recreation and tourism.

During the development phase (prior to the construction phase) the Proposed Development will result in the potential creation of up to 62 jobs in the UK, 26 of which would be in Scotland, and 5 in Dumfries and Galloway

During the construction phase the Proposed Development will result in the potential creation of up to 214 jobs in the UK, 139 or which would be in Scotland, and 31 in Dumfries and Galloway.

During the operational phase the Proposed Development will result in the potential creation of up to 14 jobs in the UK, 10 of which would be in Scotland, and 4 in Dumfries and Galloway.

The Proposed Development during the development phase is estimated to result in a total Gross Value Added (GVA) into the economy of £5.6 million in the UK, £2.3 million in Scotland, and £464,438 in Dumfries and Galloway.

The Proposed Development during the construction phase is estimated to result in a total GVA into the economy of £17.5 million in the UK, £11.4 million in Scotland, and £2.5 million in Dumfries and Galloway.

The Proposed Development during the operational phase is estimated to result in a total GVA into the economy of £2 million each year in the UK, £1.4 million each year in Scotland, and £655,564 each year in Dumfries and Galloway.

The Applicant is proposing a community benefit package of up to £5,000 per MW of installed wind capacity and £500 per MW of solar capacity per annum over the 40-year operational life of the proposed development. This would provide up to £310,000 per year in community benefits or £12.4 million over the 40-year operational period. Additionally, there is an interest in offering part community shared ownership of up to 10% in the project.

Surveys of the public's attitudes to wind farms provide no clear evidence that the presence of wind farms in an area has a negative impact on local tourism.

This conclusion is supported by research, including studies by Glasgow Caledonian University and BiGGAR Economics, which found no notable link between the presence of wind farms and reductions in tourist activity or employment.

Tourists using local core paths and local attractions may be visually sensitive to changes in the landscape; however, access to key tourism facilities and paths such as the "Gatehouse to Glengap" core path will be preserved or managed through signage and engagement. While temporary access restrictions may occur during construction for safety reasons, these effects are expected to be minor and short-term for socio-economics, tourism and recreation.

Overall, even where visual effects are identified, they are not considered likely to significantly affect tourism and recreation, this includes users of paths, trails, attractions and visitor accommodation.

Overall, the socio-economic impact during the development and construction phases are assessed as Negligible to Minor beneficial, with operational economic effects

considered Negligible (beneficial). All effects are considered not significant under EIA criteria. Mitigation measures consisting of engagement and signage for health and safety on the Gatehouse to Glengap Core Path have been proposed.

Current wind farm activity within 15km is limited, with the nearest operational site being Blackcraig Wind Farm some 19km to the north. Consequently, the cumulative effects of both the construction and operational phases of the Proposed Development, are expected to bring minor but positive socio-economic benefits at the local, regional, and national levels.

13 Climate Change and Carbon Balance

Chapter 13 of the EIAR assesses the potential significant effects of the Proposed Development on climate change and carbon balance including both the net carbon savings as a result of the construction and operation of the Proposed Development (taking into account the effect of the use of raw materials and peat loss as a result of construction) and the vulnerability of the Proposed Development to the effects of climate change.

An iterative design approach was taken for the Proposed Development layout to avoid siting infrastructure in areas of peat where possible in order to minimise disturbance of peat soils and associated carbon losses.

It should be noted that the Carbon Calculator only includes the carbon benefits of the wind element due to an inherent limitation of the Carbon Calculator, whilst the construction impacts of all of the infrastructure (including the solar panels and the Batteries) are included.

The results of the carbon balance assessment show the wind elements of the Proposed Development could save 54,259 tonnes of CO_2 equivalent over the lifetime of the Proposed Development based on displacement of the grid mix of electricity generation (renewables, nuclear and gas turbines) and would have a Carbon Payback Time of 2 years based on this same criteria.

As a result, the carbon benefits of the overall development are considered to be significantly underestimated as the electricity generated from the solar panels and stored in the batteries contributes to displacement of generation from non-renewable generation, further reducing reliance on fossil fuel sources.

The cumulative effect of the Proposed Development with other Scotland and UK renewable generation is considered to have a major, positive, environmental effect that is significant under the EIA Regulations.

Change to weather patterns as a result of climate change has the potential to impact the Proposed Development as follows:

- Wind - Wind turbines are built to withstand extreme conditions. UKCP18 shows future changes to wind speed and storm frequency are modest and fall within the range of current variability. The magnitude of impact is low, the effect is Negligible, therefore not significant;
- Precipitation - The design includes buffers and drainage infrastructure resilient to a 1 in 200 year flood event. Projected increases in winter precipitation are modest. The magnitude of impact is low, and the effect is Negligible, therefore not significant; and
- Temperature - While higher temperatures can reduce solar PV efficiency by approximately 0.5% per increase in degree Celsius), the overall impact remains low. Warming may slightly benefit wind operation reliability and reduce icing risks. The effect is negligible, therefore not significant.

Over the lifetime of the Proposed Development, the UK Climate Projections (UKCP18) show the change in wind speeds and storms is limited to well within the limits of current inter-annual variability. These changes will have a low / negligible magnitude of effect on the efficient operation of the Proposed Development.

14 Other Considerations (including aviation, telecommunication and shadow flicker)

Chapter 14 of the EIAR assesses the potential significant effects of the Proposed Development on aviation and telecommunications as well as the potential shadow flicker effects on sensitive receptors.

Aviation and Radar

Consultation with NATS, Edinburgh Airport, Glasgow Airport, and Glasgow Prestwick Airport confirmed that the Proposed Development is outwith the consultation zones for these airports. Edinburgh Airport, Glasgow Airport, and Glasgow Prestwick Airport confirmed no objection, with no anticipated impacts.

Highlands and Islands Airports Limited confirmed that the development would not infringe the safeguarding criteria and operation of Campbeltown Airport; therefore, no objection was raised.

Consultation with the Defence Infrastructure Organisation and Ministry of Defence (DIO and MOD) identified that the Proposed Development lies within Tactical Training Area (TTA) 20T, an area designated for low-level flight training. As such, the turbines may introduce a physical obstruction to low flying aircraft.

The MOD requires the implementation of aviation safety lighting in accordance with the Air Navigation Order 2016.

The Applicant has agreed to implement a reduced aviation lighting scheme that meets CAA and MOD requirements.

A Technical and Operational Assessment (TOPA) conducted by NATS raised potential concerns regarding Lowther Hill and Great Dun Fell radar coverage. The Applicant is currently engaging with NATS in order to agree suitable mitigation to ensure the Proposed Development has no impact on NATS operations. The Applicant is prepared to pay the demonstrably and reasonably incurred costs associated with the specific mitigation measured identified to address the evident impacts of the Proposed Development.

Subject to the agreement of suitable mitigation measures with NATS, it is anticipated that the Proposed Development will not have significant effects on aviation interests.

Subject to the implementation of agreed aviation safety lighting with the MOD and CAA the Proposed Development will not have significant effects on aviation safety.

Telecommunication

The moving rotors of wind turbines have the potential to affect telecommunication and television signals by causing Electromagnetic Interference (EMI). Wind turbines cause EMI by reflection of signals from rotor blades so that a nearby receiver picks up both a direct and reflected signal.

The types of signals potentially affected include TV and radio broadcasting, microwave and cellular radio communications, and various navigational and air traffic control systems. Any turbines located within or near to the communications link may interfere with the signal causing unwanted "noise".

The potential for negative effects on domestic television reception has been greatly diminished following the digital switchover completed in 2012.

Consultation with British Telecommunications (BT) concluded that the Proposed Development will not interfere with electromagnetic compatibility (EMC) or BT point-to-point microwave radio links.

Consultation with the Joint Radio Company (JRC) confirmed that the Proposed Development is *cleared* with respect to all relevant radio infrastructure, provided no changes are made to turbine locations.

A review by Arqiva identified no concern with the proposed turbine locations. The nearest television RBL link is approximately 6km south of the development. Although Arqiva noted a low risk of signal degradation to domestic receivers, this was not considered significant, and no objection was raised.

One fixed telecommunications link crosses the east of the Proposed Development near the solar area. However, no infrastructure will impact this link, and this has therefore been excluded from further assessment.

Consultation with other operators including Vodafone, Virgin O2, MLL Telecom, and Atkins Global confirmed no existing links or concerns in the area.

No significant effects are anticipated on telecommunication links as a result of the Proposed Development.

Shadow Flicker

Shadow flicker can arise from the passing of the moving shadow of a wind turbine rotor-blade over a narrow opening such as the window of a nearby residence. A similar effect can also occur when the gloss blades of a rotating turbine reflect the sun causing a flashing light.

Effects are limited to 130 degrees of due north and within ten rotor diameters of the turbine position.

An assessment based on this distance and the maximum rotor diameter of 163m results in a study area of 1,630m. There are no confirmed receptors within the shadow flicker impact zone.

The closest operational wind farms (Blackcraig Hill and Plascow) are over 19km away and therefore pose no cumulative impact.

Glint and Glare

Glint and glare effects can arise from sunlight reflecting off reflective surfaces, such as solar panels, and can result in visual discomfort and may impact road safety or residential amenity.

A Glint and Glare Assessment was undertaken in line with recognised guidance and industry best practices.

A 2.25km stretch of the A762 was identified as having potential visibility of the proposed solar development. Five dwellings were also identified as being within the theoretical glint and glare visibility zone. These were taken forward for modelling.

A low level of impact is predicted, with no significant effects anticipated. Mitigation measures are not considered necessary due to the limited nature of the impact and the screening provided by intervening vegetation.

15 Summary and Conclusion

The Applicant is seeking consent under Section 36 of the Electricity Act (Scotland) 1989 (as amended) to develop Lairdmannoch Energy Park, an energy park consisting of 9 wind turbines each with a tip height of 180m above ground level, ground mounted solar panels, a battery energy storage system and associated infrastructure including hardstandings, cabling, borrow pits and access roads (the 'Proposed Development') (Figure 1-1).

An EIA has been conducted based on a Scoping Opinion and consultation with the Energy Consents Unit and Dumfries and Galloway Council as well advice obtained from technical consultation to inform assessments of the effects on the Proposed Development on the following:

- Landscape and Visual;
- Ecology;
- Ornithology
- Hydrology, Hydrogeology and Geology (including peat);
- Noise;
- Cultural Heritage;
- Transport and Access;
- Socio-economics, Tourism and Recreation;
- Climate Change and Carbon Balance; and
- Other Considerations (including aviation, telecommunication and shadow flicker).

Best practice will be used to control the potential effects of construction activities including undertaking the work in accordance with the guidelines of best practice proposed in the Outline Construction Environmental Management Plan.

The only assessment with significant residual effects (inclusive of mitigation measures) is Landscape and Visual, and Cultural Heritage. Climate Change also has a significant beneficial residual effect.

Landscape and Visual

After mitigation, the following residual impacts remain:

- Select groups of residential receptors on A762 between Kirkconnell and Laurieston;
- Recreational users of the forest track/Core Path north of Glengap;
- Receptors at Neilson's Monument, Barstobrick Hill; and
- Localised significant effect on Galloway Hills Regional Scenic Area.

Cultural Heritage

After mitigation, the following residual impacts remain:

- The Scheduled Monument "Loch Mannoch, cairn & stone circle N end of" is assessed to experience a Moderate Significant effect as a result of the Proposed Development. However, the assessment considered that the integrity of setting on this asset would not be significantly adversely impacted; and
- Significant Moderate effects on Non-designated assets Burnt Mound (Asset 77) and Building Remains (Asset 169).

Climate Change

- The cumulative effect of the Proposed Development with other Scotland and UK renewable generation is considered to be a material change in the climate effect of Scotland and UK energy supply, which is a major beneficial significant effect.