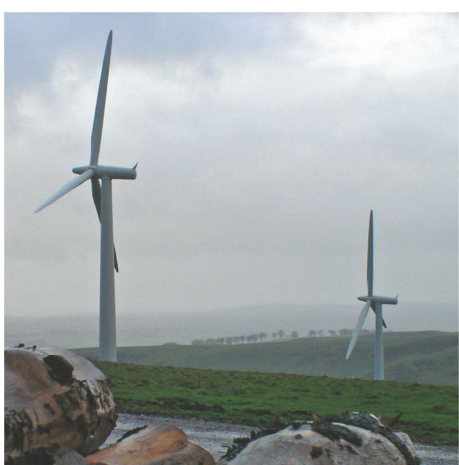


LONGCROFT WIND FARM

Environmental Impact Assessment Report

Volume 4 - Non-technical Summary



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1 Introduction

1.1 Overview

- 1.1.1 This Non-Technical Summary (NTS) forms part of the Environmental Impact Assessment (EIA) Report that has been prepared to accompany an application for consent under Section 36 of the Electricity Act 1989 to construct and operate Longcroft Wind Farm (hereafter referred to as the proposed development). The proposed development is located approximately 8.5km north of Lauder, as measured to the site centre, in the Scottish Borders.
- 1.1.2 The EIA Report presents the findings of the EIA which aims to identify potentially significant environmental effects from the proposed development and where possible proposes suitable mitigation measures to address or minimise such effects. This NTS summarise the findings of the EIA Report in non-technical language.

1.2 The Applicant

- 1.2.1 Renewable Energy Systems Ltd (RES) is the world's largest independent renewable energy company active in onshore and offshore wind, solar, energy storage and transmission and distribution. At the forefront of the industry for over 40 years, RES has delivered more than 23GW of renewable energy projects across the globe and supports an operational asset portfolio of 10GW worldwide for a large client base.
- 1.2.2 RES employs more than 2,500 people and is active in 14 countries working across onshore and offshore wind, solar, energy storage, green hydrogen and transmission and distribution.
- 1.2.3 From its Glasgow office RES has been developing, constructing and operating wind farms in Scotland since 1993. RES has developed and/or built 21 wind farms in Scotland with a total generation capacity of 597MW. The applicant has the necessary knowledge and experience in renewable energy to develop the proposed development.

1.3 The Proposed Development

- 1.3.1 The proposed development is located to the east of the A68, approximately 8.5km north of Lauder, and 6km east of Oxton, in the Scottish Borders. The site is entirely within the administrative boundary of the Scottish Borders (SBC). **Figure 1** presents a general context for the location of the site within SBC. The border with East Lothian Council (ELC) is located approximately 1.6km to the north of the closest part of the site.
- 1.3.2 The site extends to approximately 1,290 hectares (ha) and comprises open rolling moorland and steep sided valleys with relatively large watercourses flowing within, the topography of which varies from west to east. The Whalplaw Burn passes through the centre of the site, which flows into Cleekhimin Burn and onwards into Leader Water, ultimately flowing into the River Tweed. The A68 and A697 pass to the west and south west of the site. To the north and east lie the Lammermuir Hills. The operational wind farm Fallago Wind Farm sits adjacent to the north-east of the site. Outwith the site, the landscape to the south-west is generally composed of lower, rolling agricultural land interspersed with small areas of woodland and forestry. To the east, west and north of the site, the landscape continues in the same vein as the site.
- 1.3.3 The site is located adjacent to the operational Fallago Rig Wind Farm, which comprises 48 wind turbines up to 126.5m in height to blade tip and associated infrastructure. Fallago Rig Wind Farm became operational in 2013.
- 1.3.4 The proposed development would comprise 19 wind turbines, with a height to blade tip of 220m.
- 1.3.5 Associated permanent infrastructure would include wind turbine foundations, low to medium voltage transformers and related switchgear adjacent to each wind turbine, crane hardstand areas adjacent to each wind turbine, underground electrical and communication cabling, a substation compound containing electrical infrastructure, control building, welfare facilities and a communications mast, a battery energy storage system (BESS) compound, access tracks including watercourse crossings, turning heads and site entrances from the public road network, search areas for up to three borrow pits; and one temporary construction compound.

- 1.3.6 A BESS compound is included as part of the application to improve the efficiency of the proposed development. It is anticipated that the BESS will have a storage capacity of up to 50MW.
- 1.3.7 It is anticipated that construction activities for the proposed development would take approximately 16 months, depending upon seasonal working and weather conditions. Once constructed, it is anticipated that the proposed development would have an operational life of up to 50 years.
- 1.3.8 The proposed development and associated infrastructure are shown on **Figure 2**. A more detailed description of the site and the proposed development is provided in **Chapter 3** of the EIA Report.

1.4 Need for and Benefits of the Proposed Development

Renewable Electricity Generation

- 1.4.1 Both UK and Scottish Government energy policy recognises the need for substantial increases in renewable energy generation, in particular onshore wind, if the transition towards net zero is to be achieved. Furthermore, recent global events have also shed a spotlight once again in UK energy policy on the importance of having greater security over our future energy supplies and the importance of generating more of the UK's energy domestically.
- 1.4.2 The proposed wind turbines would have an anticipated nominal capacity of approximately 125.4MW. The annual generation from the wind turbines is therefore estimated at approximately 509 Gigawatt hours (GWh) based on a site derived capacity factor of 46.4%.
- 1.4.3 The proposed wind turbines will therefore supply renewable electricity equivalent to the approximate annual domestic needs of up to 145,256¹ average UK households.
- 1.4.4 Each unit of renewable electricity transmitted will displace a unit of conventionally generated electricity, therefore displacing carbon dioxide (CO₂) emissions. It is estimated that the proposed wind turbines will displace approximately 215,151² tonnes of CO₂ emissions per year, or

¹ Calculated using the most recent statistics from the Department of Business, Energy and Industrial Strategy (BEIS) showing that annual GB average domestic household consumption is 3,509kWh (as of December 2022, updated annually).

² Based on the current grid-mix of the UK electricity grid.

10,757,550 tonnes over the anticipated 50-year lifespan of the proposed development.

Effect on Greenhouse Gas Emissions

- 1.4.5 The First Minister of Scotland declared a climate emergency in April 2019. In response, the Scottish Government introduced amendments to the Climate Change (Scotland) Act 2009 through the Climate Change (Emission Reduction Targets) (Scotland) Act 2019. The 2019 Act amendment sets legally binding targets requiring Scotland to reduce carbon emissions to net zero by 2045, with interim targets to reduce emissions by 56% by 2020, 75% by 2030 and 90% by 2040. A series of annual targets towards this net zero and interim target have also been set. These new greenhouse emissions targets represent a substantial increase over the targets set in the previous Act, in particular over the period to 2030.
- 1.4.6 The proposed development would reduce greenhouse gas emissions through replacing fossil fuel generation. The length of time a wind turbine needs to be in operation before it has, by displacing fossil fuel energy generation, avoided as much carbon dioxide as was released in its lifecycle is known as the carbon payback period.
- 1.4.7 A carbon balance assessment has been undertaken for the proposed development using the latest version of the Scottish Government's carbon calculator for wind farms (version 1.7.0). The results from the carbon calculator reveal that the net impact of the proposed development will be positive overall, as over its proposed 50 year operational life, it is expected to generate over 47 years' worth of clean energy if it replaced fossil fuel-mix electricity generation and around 49 years' worth of clean energy even if it replaces cleaner grid-mix electricity generation (which includes some fossil fuels and low carbon electricity generation sources such as nuclear, hydro-electric and wind energy).
- 1.4.8 Over the expected 49 years that the proposed development is likely to be generating carbon-free electricity, this could result in over 10.7 million tonnes of net carbon dioxide emission savings when replacing fossil fuel-mix electricity generation.
- 1.4.9 Overall, the proposed development would therefore lead to substantial net carbon savings and reduction of greenhouse gas emissions over its operational life.

Biodiversity Enhancement and Restoration

- 1.4.10 A Biodiversity Enhancement and Restoration Plan (BERP) will be produced for the proposed development. The overall purpose of the BERP will be to implement positive land management for the benefit of landscape and nature conservation which will mitigate any adverse impacts that the proposed development may have. In addition to purely mitigating any adverse impacts, the applicant is committed to enhancing the nature conservation and landscape value of the site.
- 1.4.11 The BERP would be targeted to deliver benefits to riverine habitats and to the breeding bird community (particularly curlew). An outline BERP is included in **Technical Appendix 8.6** of the EIA Report which outlines the proposals for the following key goals:
- Rewetting degraded peatland to raise its water table and improve its condition;
 - Restoration of heathland and other open upland habitats;
 - Enhance northern brown argus butterfly habitat;
 - Maintain or enhance the population of wild pansy on the site;
 - Enhancement of existing woodland and creation of riparian woodland and juniper scrub; and
 - Provision of breeding and resting sites for protected and notable species including otter, birds and bats.
- 1.4.12 The habitat management proposed in the BERP are expected to compensate for losses of habitat due to the wind farms construction via bog rewetting and moorland restoration. The improvement of habitat condition on site is expected to contribute to on-site natural capital (stocks) and ecosystem services including carbon sequestration and storage, and water storage and regulation as well as enhancing biodiversity.

2 Site Selection and Design

2.1 Site Selection

2.1.1 A site selection process was undertaken which identified the proposed site as being potentially suitable for a wind farm development. This site selection process took into account a number of potential environmental, technical and commercial constraints including, but not confined to:

- average wind speed;
- natural and built heritage constraints, in particular national and internationally designated assets;
- proximity to housing;
- slope constraint;
- aviation and defence interests;
- access for construction; and
- proximity to other wind farm sites (pre-planning, consented and operational)

Key Issues and Constraints

2.1.2 Once the site was identified, key issues and constraints for consideration in the design process were established through a combination of desk-based research, extensive field survey and consultation (through the EIA scoping process). The design process considered the following key issues and constraints:

- landscape designations and visual amenity;
- archaeological and cultural heritage assets;
- sensitive fauna;
- sensitive habitats;
- watercourses, private water supplies and sensitive surface water features;
- topography and ground conditions;
- public road accessibility;
- recreational and tourist routes;
- proximity of residential properties;
- aviation and defence constraints; and
- presence of utilities.

2.1.3 Information in respect of the survey work to identify various key issues and constraints and how they have contributed to the layout design is provided in the technical chapters of the EIA Report (Chapters 6 to 14).

2.2 Design Strategy

2.2.1 As part of the iterative approach adopted by the applicant, a number of design principles have been incorporated into the proposed development as standard practice, including the following:

- consideration to the underlying landscape and its scale;
- consideration to operational, consented and proposed wind turbines neighbouring the site;
- consideration to the size and scale of the proposed development appropriate to the location and proximity to residential properties;
- sensitive siting of the proposed infrastructure incorporating appropriate buffer distances from environmental and archaeological receptors to avoid or reduce effects;
- maximising the re-use of existing tracks as much as possible to access proposed wind turbine locations;
- optimising the alignment of new access tracks and hardstands taking due consideration to the topography of the site, to minimise cut and fill, minimise the impact on sensitive peatland and ecological habitats and reduce landscape and visual effects;
- adoption of floating access tracks to minimise disturbance of peat where appropriate;
- minimising watercourse crossings and encroachment on watercourse buffers;
- consideration to inclusion of borrow pit search areas to minimise the volume of the stone required to be imported to the site;
- using the latest wind turbine technology, consisting of more efficient and larger turbines where these can be reasonably accommodated within the landscape; and
- maximising the potential energy yield of the site through the employment of co-located technology in optimal locations (wind and battery storage).

2.2.2 The results indicated that the site would be a technically and environmentally appropriate location to develop a wind farm.

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- 2.2.3 Environmental survey of Longcroft, for example for birds and other species, peat depth, archaeology and other matters of interest, ran over a period from 2021-23 and also made use of data gathered for the nearby wind farm applications where relevant. The data gathered enabled the team to investigate a number of different design iterations before settling on the final design which maximises the efficiency of the proposed development whilst limiting the potential environmental impacts.
- 2.2.4 The proposed development has been in the design process for a considerable time and the layout has evolved iteratively, including responding to issues raised during and after scoping, having considered different number and size of wind turbines. Such changes have been influenced by several factors including economics, stakeholder feedback, planning policy and potential environmental effects.
- 2.2.5 Full details of the site design process undertaken for the proposed development is provided in **Chapter 2** of the EIA Report.

3 EIA Approach and Technical Assessments

3.1 Introduction

- 3.1.1 The EIA has identified the likely effects of the proposed development on the environment and an assessment has been made as to whether any of these effects could be significant. Conclusions about significance are determined by the sensitivity of the baseline conditions (the sensitivity of the receptor) combined with the predicted degree of alteration (the magnitude of change) from the baseline conditions that will occur as a result of the construction, operation and decommissioning of the proposed wind farm. **Chapter 4** of the EIA Report sets out the EIA approach and methodology employed in more detail.
- 3.1.2 Good practice advises that EIA should be an iterative process rather a unique, post design appraisal. In this way the findings of the environmental assessments can be used to inform the design of the proposed development to respond to the environmental constraints and opportunities present. This approach has been adopted in respect of the proposed development; where likely adverse effects have been identified, consideration has been given to removing or reducing these through evolving the design of the proposed development.
- 3.1.3 This section provides a brief, non-technical summary of the main findings of the EIA as set out in the technical assessment chapters (chapters 6 to 14) within the EIA Report.
- 3.1.4 Consultation on the scope and methodologies for each of these technical assessment chapters was agreed through a formal EIA scoping opinion request to the Scottish Government Energy Consents Unit. In addition, there has been continued dialogue with relevant statutory and non-statutory consultees both before and after the scoping opinion request was submitted to the Scottish Government.

3.2 Landscape and Visual

- 3.2.1 **Chapter 6** of the EIA Report considers the likely significant landscape and visual effects associated with the construction and operation of the proposed development.

Methodology

- 3.2.2 The assessment method for this LVIA draws upon the established GLVIA3; An Approach to Landscape Character Assessment (Natural England, 2014), Landscape Institute Technical Information Note 05/2017 regarding townscape character; LI Technical Guidance Note 02/2019 Residential Visual amenity assessment (RVAA); Landscape Institute's Technical Guidance Note 02/21: Assessing landscape value outside national designations; LI Technical Guidance Note 06/19 Visual Representation of development proposals and other recognised guidelines.

Baseline

- 3.2.3 19 landscape character types are located within 15km of the proposed development, within the Zone of Theoretical Visibility (ZTV) study and Zone of Visual Influence (ZVI). Of these, 17 have been identified that require detailed assessment, with the remainder excluded because the Zone of Theoretical Visibility (ZTV) study and site work indicates limited or no visibility.
- 3.2.4 The different types of groups assessed within this report encompass local residents; people using key routes such as roads; cycle ways, people within accessible or recreational landscapes; people using Public Rights of Way and Core Paths; or people visiting key viewpoints. In dealing with areas of settlement, Public Rights of Way and local roads, receptors are grouped into areas where effects might be expected to be broadly similar, or areas which share particular factors in common.
- 3.2.5 30 representative viewpoints have been selected to inform the assessment of effects on visual receptors.

Effects on Landscape Character

- 3.2.6 The findings of the assessment indicate that landscape sensitivity within the study area is variable, ranging from Medium-Low to High-Medium. This is in part due to the presence of landscape designations including the Eildon and Leaderfoot National Scenic Area, the Pentland Hills Regional Park, and Local Landscape Areas.
- 3.2.7 The proposed development is likely to become the dominant characteristic of the landscape within the site, particularly in the valleys where the sense of being in located within a wind farm will be created. Due to the proximity of the existing Fallago Rig Wind Farm to the east, which already

influences landscape character between the wind farm and the proposed development, effects from the proposed development will be reduced in this direction. Beyond these areas and up to approximately 5km from the proposed development, it will become one of the key characteristics, giving the sense of being near a wind farm. As a result, whilst there will be there will be localised Large scale effects on the host Landscape Character Type, LCT90 - Dissected Plateau Moorland, no significant effects are identified on landscape character.

- 3.2.8 Overall effects on landscape character within the study area will range between High-medium to Negligible magnitude and Moderate to Minimal significance.

Visual Effects

- 3.2.9 Effects on views will be generally of Large scale within close proximity to the site, up to approximately 4km, and Medium scale up to around 8-10km from the proposed wind farm, and will decrease to Small and Negligible scale beyond these distances from the site boundary.

Effects on Visual Receptor Groups

- 3.2.10 The proposed development will be prominently visible from parts of the visual receptor group covering the site: Lammermuir Hills around the site. This will give rise to significant visual effects. Other visual receptor groups within the study area will tend to have fewer and more distant views resulting in effects of no greater than Moderate significance.

Effects on Roads and Rail

- 3.2.11 Views of the proposed development from key road and rail routes through the study area will generally be intermittent. Effects will be of Medium magnitude and Slight Significance for uses of the A697 Boghall/Cleekhimmin Bridge, and from Newbiggins Walls to Hexpathdean Bridge to the east of Hounslow, the A68 and the A6089. There would also be effects of Medium-low magnitude and Slight significance for users of the A6015; Low magnitude and Slight significance for users of the A697 between Cleekhimmin Burn and Newbiggins Walls, and between Hexpathdean Bridge and Greenlaw; Low-negligible magnitude and Minimal significance for users of the A6093; and Negligible effects for users of other main road routes through the study area.

Effects on Long Distance Routes

- 3.2.12 Views of the proposed development from the Southern Uplands Way will be of Medium-low magnitude and Moderate significance.

Effects on Designated Landscapes

- 3.2.13 There will be no effects on the Eildon and Leaderfoot National Scenic Area or the Pentland Hills Regional Park that will be incompatible with the designations in landscape and visual terms. Effects on these designations will be Negligible and will not be significant.
- 3.2.14 There will be localised significant effects on the Lammermuir Hills Local Landscape Area (LLA) within which the site is located, due to direct effect of the proposed development on the LLA and its visibility from much of the designated area. However, the proposed development would not compromise the overall integrity of this LLA. There would also be effects of Low-negligible magnitude and Slight significance on LLA2 Samuelston and Negligible effects other LLAs within the study area.
- 3.2.15 There will be effects of Medium-low magnitude and Moderate significance on the Thirlestane Castle and the Mellerstain Gardens and Designed Landscapes, from a landscape and visual perspective. For other Gardens and Designed Landscapes within the study area, effects would range from Low to Negligible magnitude and would be of no greater than Slight significance.

Night-time Effects

- 3.2.16 The night-time effects of the proposed development are assessed within a study area of 15km.
- 3.2.17 None of the existing wind farms within the study area are currently lit. However, Crystal Rig IV Wind Farm (consented) will include wind turbine lighting on seven of the turbines once construction is complete.

Effects on Landscape Character

- 3.2.18 Of the seven LCTs located within the study area with potential to experience greater than Negligible effects as a result of the proposed wind turbine lighting, localised significant effects on landscape character at night would be experienced within LCT90 - Dissected Plateau Moorland (includes site) due to introduction of new light sources.

Visual Effects

- 3.2.19 Of the visual receptors within the 15km study area for night-time effects, many already experience some level of lighting at night due to the presence of roads, settlement and individual residential properties. As a result, significant visual effects at night are not assessed for any of the visual receptors.

Effects on Designated Landscapes

- 3.2.20 There will be localised significant effects on the Scottish Borders LLA6 Lammermuir Hills Local Landscape Area due to introduction of new light sources.

Effects on Residential Properties

- 3.2.21 The baseline assessment identified a total of 17 residential properties within the 2.5km study area for the residential visual amenity assessment (RVAA). Of these properties, all but five have potential visibility of the proposed development and have been assessed in detail in the RVAA.
- 3.2.22 Operational effects will vary notably between residential properties due to the number and range of properties within the study area. The three properties with the highest magnitude of change are P1 (The Howe), P2 (Tollishill Farmhouse) and P4 (Soonhope House). Detailed assessment of P1, P2 and P4 reached the same conclusion, and it is deemed that effects on these properties would not meet the Residential Visual Amenity threshold.
- 3.2.23 The assessment concludes that for all of the properties within the RVAA study area the Residential Visual Amenity threshold will not be reached, and the effects will not be sufficiently “oppressive” or “overbearing” that any property will be rendered an unattractive place in which to live.

Cumulative Effects

- 3.2.1 Greater effects than for the proposed development alone would arise on the following receptors both during the day at at night, if any of the cumulative schemes and the proposed development were consented, generally due to closer proximity to a number of the cumulative schemes:
- LCT90 - Dissected Plateau Moorland;
 - LCT115 - Upland Valley with Mixed Farmland;
 - LCT91 - Plateau Grassland - Borders;

- LCT99 - Rolling Farmland - Borders;
- LCT103 - Undulating Upland Fringe;
- LCT105 - Upland Fringe Moorland with Hills;
- LCT108 - Lowland Margin;
- Lammermuir Hills around the site;
- Landscape and settlements along the A68 and A697 corridors from Soutra Hill to Ravenswood Roundabout and Greenlaw;
- Recreational landscapes, minor roads and settlements west of the site;
- Minor roads, residents and recreational landscapes east of the Lammermuir Hills;
- Distant roads and residents in the low-land of Carlisle visual receptor group;
- Distant roads and residents along the estuarine landscape west of Carlisle visual receptor group;
- A697;
- A68;
- A6089;
- A6015;
- Southern Uplands Way;
- Scottish Borders LLA6 Lammermuir Hills; and
- East Lothian LLA1 Lammermuir Moorland.

Cumulative Night-time Effects

3.2.2 As set out at in the assessment of night-time effects above, medium intensity steady red (2000 candela) lights will be mounted on the nacelles of wind turbines T1, T3, T6, T8, T11, T13, T15, T17 and T19. At present, within the study area only Crystal Rig IV Wind Farm (consented) will include wind turbine lighting on seven of the turbines once construction is complete.

3.2.3 All of the cumulative schemes that are in planning except Wull Muir are over 150m high and will therefore require aviation lighting. The study area for the assessment of effects at night-time remains 15km.

Cumulative Night-time Effects on Landscape Character

3.2.4 The LCTs that will experience increased landscape effects as a result of the proposed development in combination with cumulative schemes are:

- LCT90 - Dissected Plateau Moorland;
- LCT115 - Upland Valley with Mixed Farmland;

- LCT91 - Plateau Grassland - Borders;
- LCT99 - Rolling Farmland - Borders;
- LCT103 - Undulating Upland Fringe;
- LCT105 - Upland Fringe Moorland with Hills; and
- LCT108 - Lowland Margin.

3.2.5 For all of these LCTs, the addition of night time lighting on the proposed wind turbines will be a new feature in generally dark landscapes. The scale, magnitude and significance of cumulative night time effects will therefore be the same as for the cumulative daytime effects on landscape character.

3.3 Archaeology and Cultural Heritage

3.3.1 **Chapter 7** of the EIA Report assesses the potential impact on cultural heritage assets from the construction, operation, and decommissioning of the proposed development. The report comprises five assessments: direct impacts on heritage assets as a result of the proposed development; indirect impacts on heritage assets as a result of the proposed development; cumulative impacts on heritage assets as taking into account other windfarms that are consented or in the planning process; impacts on cultural heritage assets of the decommissioning of the proposed development; and the residual impacts on cultural heritage assets as a result of any mitigation applied as part of the proposed development. These assessments have been undertaken following national legislation, national and local government policies, and guidance from the relevant authorities. To complete the assessment, Historic Environment Scotland (HES) and the SBC archaeology officer were consulted in through the scoping process and through 2023 regarding heritage assets within their respective remits.

3.3.2 Cultural Heritage and Archaeology refers to assets which contribute to the historic environment. The cultural heritage and archaeological assessment is completed in two parts; direct impacts upon non-designated heritage assets and indirect impacts upon designated heritage assets. A study area of 1km from the site was used to procure non-designated cultural heritage data and 10km for designated cultural heritage assets. The assessment used a desk-based approach to review known and potential archaeology within the Site and designated heritage assets coupled with data obtained during a targeted archaeological walkover and setting assessments.

- 3.3.3 A baseline condition for the study area was compiled, which comprised a synthesis of all known heritage assets within this area to create a predictive model for the potential for unknown below-ground archaeological remains within the site. A field survey was undertaken to support this predictive model. Any heritage assets identified during this survey that were not previously recorded within the Historic Environment Record have been assigned an SLR number and are identified within the Site Gazetteer (Technical Appendix 7.1). Any heritage assets within the site, including the scheduled monument (SM4690), were assessed for direct impacts as a result of the proposed development. Assets of regional and national importance within the study area were also assessed for indirect impacts as a result of the proposed development; a screening process was then conducted, and the outcomes shown in Technical Appendix 7.2.
- 3.3.4 There are 131 nationally important designated assets within 10km, 2 Conservation Areas, and 1 regionally important asset within 5km of the Site boundary. There are two nationally important assets within the site, two Scheduled Monuments, Glenburnie Fort (SM4472) and Longcroft Homestead (SM4480) and 16 non-designated heritage assets located within the site.
- 3.3.5 Through consultation with HES and SBC a total of 16 designated heritage assets were agreed to be assessed further for potential indirect impacts. Assets located over 10km from the proposed wind turbines were scoped out of any further assessment as none of these assets were identified to have any potential impacts, and any assets, their viewpoints and approaches within 10km that were shown by the ZTV not to be intervisible with the proposed development.
- 3.3.6 The archaeological potential within the site is high; there are known prehistoric Scheduled Monuments comprising defensive and domestic settlement, particularly the Scheduled Monuments within the site, Glenburnie Fort (SM4472) and Longcroft Homestead (SM4480), with extensive prehistoric hillforts, cairns and settlements within 1km of the site, with an overall high potential of unknown prehistoric remains. There are also known and potential unknown remains of medieval and post-medieval, comprising agricultural remains such as trackways, cultivation remains, cattle enclosures and farmsteads.

- 3.3.7 Five assets have been identified as being susceptible to direct impacts during the construction phase of the proposed development, being three tracks of medieval and post-medieval date (SLR16, SLR17 and SLR18) and unknown features comprising of earthworks (SLR36, SLR57), and unknown archaeological remains. No impacts upon the recorded assets within the site have been identified to have a significance of effect higher than minor. There are known prehistoric remains within the site of national importance and as such the potential for other remains of high significance cannot be ruled out. The potential impacts upon unknown archaeological remains of other periods were considered negligible to minor significance of effects; this is due to such remains likely characterising medieval and post-medieval agricultural remains and wouldn't be considered of anything higher than low significance. Mitigation has been proposed in Table 7.7 of **Chapter 7**, in the form of Watching Briefs. Whilst known impacts are not considered to be significant in EIA terms. The suggested mitigation would aim to offset this potential impact should it occur.
- 3.3.8 Mitigation has been implemented through design where possible by avoiding non-designated heritage assets within the site. Where avoidance through design wasn't possible, mitigation has been proposed in the form of archaeological observation, subject to agreement with the local authority, subject to an approved Written Scheme of Investigation.
- 3.3.9 Of the designated heritage assets assessed for potential indirect impacts during the operational and maintenance phase of the proposed development, effects ranging from none to major have been identified. Moderate significance of effects has been identified to Addiston Fort (SM362), Longcroft Fort (SM372) and Longcroft Homestead (SM4480). A moderate to major significance of effect has been identified to Glenburnie Fort (SM4473).
- 3.3.10 Direct impacts upon the setting of designated heritage assets as a result of visibility of the proposed development has been mitigated through the design as outlined in **Chapter 2** of the EIA. Assets assessed with Table 7.8, **Chapter 7**, were considered during the design process, and advice was sought from HES in regard to mitigation. Whilst there are Moderate and Moderate/Major impacts identified, these impacts are not considered to be of such significance that they would reduce the ability to appreciate the relationship between them. It is considered that the impact would

effect the contextual characteristics which comprise a portion of these asset's significance, and as such the integrity would largely be preserved. Cumulative effects have also been considered and assessed upon assets in regard to direct effects upon the asset's setting. No assets were identified to have any further impacts due to cumulative effects. It is considered through mitigation and design, the proposed development would be in line with Policy 7 (h) of the NPF4.

3.4 Ecology

- 3.4.1 Assessments of the relevant potential effects upon ecology and biodiversity are presented in **Chapter 8** of the EIA Report. The assessment discusses the methods used to establish the ecological species and communities present in the vicinity of the site, together with the process used to determine their nature conservation value. The ways in which ecological features or species could be affected (directly or indirectly) by the construction and operation of the proposed development are explained, and an assessment is made with regards to the significance of these effects.
- 3.4.2 Desk-based studies and field surveys were carried out in and around the site over respective 'study areas' to establish baseline conditions and the species and communities present. The proposed development is located within the River Tweed Special Area of Conservation (SAC).
- 3.4.3 Five high sensitivity (EU Habitats Directive Annex 1) habitats would be affected by the proposed development: blanket bog (priority and non-priority peatland), wet heath/ blanket bog (priority and non-priority peatland) and marshy grassland (purple moor grass). Though a small loss of these habitats will occur, implementation of the outline BERP will offset these losses.
- 3.4.4 Additional measures will be put in place during the construction phase to protect key species and will be detailed in the CEMP, BERP and Species Protection Plans. An Environmental Clerk of Works (ECoW) will be appointed to monitor adherence to such plans.
- 3.4.5 Potential impacts on fisheries will be mitigated by using best practice and protocols appointment of an ECoW to address potential fish access issues, silt management and pollution risks.

- 3.4.6 A Shadow Habitat Regulations Appraisal (HRA) Screening Report provides a robust initial assessment of the conservation objectives of the relevant International / European designated sites of non-avian ecological interest with details of their designated features. Potential Likely Significant Effects (LSEs), the screening parameters, potential pathways of effect in the absence of avoidance, mitigation and enhancement measures are outlined. **Chapter 8** and **Chapter 10** take forward the assessment of identified LSEs to resolve with adoption of avoidance, mitigation and enhancement measures prior to reaching a conclusion. The HRA test is whether the proposed development will have an adverse effect on the integrity of any International/ European site in the light of the conservation objectives for the qualifying interest features detailed within this screening assessment. In conclusion, no effect was found to undermine the conservation objectives that is considered an adverse effect on the integrity of the site/ favourable conservation status, and vice versa. No effects would result in any breach of the Habitats Regulations, either alone or in combination with other identified projects.
- 3.4.7 The only operational phase ecological impact identified was collision risk to bats. Up to medium magnitude risks were identified, which would be mitigated by preventing the wind turbine blades from turning when they are not operational at low wind speeds.
- 3.4.8 Overall, there are not likely to be any significant impacts on ecology resulting from the proposed development, assuming that the avoidance, mitigation and enhancement measures referred to within **Chapter 8** and **Chapter 10** are adopted (and which are required to ensure compliance with the nature conservation legislation).

3.5 Ornithology

- 3.5.1 Assessment of the relevant potential effects upon ornithology is presented in **Chapter 9** of the EIA Report. The assessment discusses the methods used to establish the bird species and populations present in the vicinity of the site, together with the process used to determine the nature conservation value of the birds that used the site. The ways in which birds could be affected (directly or indirectly) by the construction and operation of the proposed development are explained, and an assessment is made with regards to the significance of these effects.

- 3.5.2 Desk-based studies and field surveys were carried out in and around the site over respective 'study areas' to establish baseline conditions and the bird populations present. The proposed development is not located within any ornithological designation.
- 3.5.3 The focus of the ornithological impact assessment were the key bird species identified by NatureScot as being at potential risk of impact from wind farms that were recorded at the site. These included three species breeding within the potential disturbance zone: greylag goose (30 pairs), golden plover (15 pairs), lapwing (21 pairs), curlew (34 pairs), merlin (1 pair) and short-eared owl (1 pair, 2022 only).
- 3.5.4 Key species recorded using the potential disturbance zone outside the breeding season included red kite, hen harrier, goshawk, golden eagle, golden plover, lapwing, curlew, peregrine and merlin.
- 3.5.5 Key species recorded at risk of collision (i.e. flying through the site at rotor height) included whooper swan, pink-footed goose, greylag goose, red kite, marsh harrier, goshawk, golden eagle, curlew, golden plover, lapwing, peregrine and merlin.
- 3.5.6 Overall, there are not likely to be any significant impacts on ornithology resulting from the proposed development, assuming that the mitigation measures referred to within **Chapter 9**, are adopted. In relation to the key NatureScot wider countryside test, the proposed development would not affect the favourable conservation status of any bird species of conservation importance within the Natural Heritage Zone (NHZ), either alone or in-combination with other schemes. It would also not contribute to any Likely Significant Effect on any SPA qualifying interests. No effects would result in any breach of the Habitats Regulations.
- 3.5.7 Whilst there are no significant effects predicted, additional controls will be put in place during the construction phases and will be detailed in the CEMP and Breeding Bird Protection Plan. The detailed measures will be implemented during construction to protect species within the site, and an ECoW will be appointed to monitor adherence to such plans.

3.6 Hydrology, Hydrogeology, Geology and Soils

- 3.6.1 **Chapter 10** of the EIA Report assess the potential effects of the proposed development on hydrology, hydrogeology and geology. Site survey work has been undertaken in two phases with the purpose of identifying and

- mapping sensitive receptors with the results subsequently informing the site design and assessment. Scottish Water, the Scottish Environment Protection Agency (SEPA), NatureScot, the River Tweed Commission, SBC and other engaged stakeholders have been consulted during the EIA and their guidance used in designing the layout to protect these receptors from disturbance and potential effects during construction and operation.
- 3.6.2 A combination of desk study and field survey work was undertaken to identify and characterise the geological, hydrological and hydrogeological receptors which could be subject to impacts from construction, operation and decommissioning of the proposed development.
- 3.6.3 The site is located within the catchments of the Whalplaw Burn, Soonhope Burn and Kelphope Burn, within the larger catchment of the River Tweed within the Solway Tweed River Basin District. The watercourses of onsite are classified in accordance with the EU Water Framework Directive (WFD) to be of 'Good' status.
- 3.6.4 The bedrock beneath the site is largely sedimentary rocks (wacke) of the Gala Group with igneous intrusions present. Superficial deposits (where present) comprise largely alluvium along watercourses and till located upslope. The peatland onsite is identified as a Class 5 according to the Scottish Natural Heritage (SNH) (now NatureScot) Carbon and Peatlands Map 2016. Extensive peat probing surveys found highly localised peat deposits in the north and east, which have been largely avoided through design iterations.
- 3.6.5 A Peat Landslide and Hazard Risk Assessment (PLHRA) has identified that there is a negligible to low likelihood of a peat landslide at the proposed turbine locations and associated infrastructure.
- 3.6.6 Potential Ground Water Dependent Terrestrial Ecosystems (GWDTE) have been identified and infrastructure located outwith these areas.
- 3.6.7 Potential construction and operational effects include changes to surface water and groundwater flow and quality, excavation of peat, peat slide risk and effects to designated sites.
- 3.6.8 Embedded and good practice mitigation measures will be included within a CEMP, to be agreed with the SBC in consultation with SEPA and NatureScot, prior to the commencement of construction activities. These mitigation measures are considered to be robust and implementable and

will reduce the potential impacts on peat resources, watercourses and groundwater.

- 3.6.9 Taking account of embedded and good practice mitigation, the only potential construction phase effect assessed as being significant is effects to PWS Longcroft (moderate effect). Additional, project-specific mitigation has therefore been set out to ensure appropriate mitigation of PWS pipework that is crossed by new proposed tracks.
- 3.6.10 Additionally, a programme of water quality monitoring is also proposed to be implemented and is included within a CEMP. The performance of the good practice measures would be kept under constant review by the water monitoring programme, based on a comparison of data taken during construction with a baseline data set, sampled prior to the construction period.

3.7 Climate and Carbon Balance Assessment

- 3.7.1 The results of the Climate and Carbon Balance Assessment (**Technical Appendix 14.2**) reveal that the net impact of the proposed development at Longcroft will be positive overall.
- 3.7.2 Peatland is an important carbon store, and the proposed development has potential to impact peat, despite mitigations proposed to limit disturbance to peat and bog habitats. A carbon balance assessment report has been produced and Scottish Government's online carbon calculator tool completed to determine the carbon payback time for the proposed development (see EIA Report **Technical Appendix 14.2** for full details). The results from the carbon calculator reveal that the net impact of the proposed development will be positive overall, as over a 50-year lifespan of the proposed development, it is expected to generate over 49 years' worth of clean energy if it replaced fossil fuel-mix electricity generation and nearly 48 years' worth of clean energy even if it replaces cleaner grid-mix electricity generation.
- 3.7.3 In addition, over the expected 48 years that the wind farm is likely to be generating carbon-free electricity, this could result in over 10.7 million tonnes³ of net CO₂ emission savings when replacing fossil fuel-mix electricity generation. Since, in the worst case (maximum scenario), when

³ Calculation is 48 years x 215,151tCO₂ (as shown in EIA Report **Technical Appendix 14.2** and online submission).

replacing fossil fuel-mix generation, the payback period represents approximately 2 % (1 year) of the operational period (50 years) and the positive contribution through clean energy production is 98% (49 years), it is possible to conclude that the positive contribution is statistically significant. The proposed development therefore illustrates a significantly positive net impact in terms of its contribution towards the reduction of greenhouse gas emissions from energy production.

3.8 Traffic and Transport

- 3.8.1 **Chapter 11** of the EIA Report considers the potential effects of the proposed development on access, traffic and transport during construction of the proposed development.
- 3.8.2 The methodology adopted in this assessment involved the following key stages:
- determine baselines;
 - review development for impacts;
 - evaluate significance of effects on receptors;
 - identify mitigation; and
 - assess residual effects.
- 3.8.3 The proposed development will be accessed via the D124 road, connecting Longcroft Farm with the A697, via a newly provided site entrance at the end of the D124.
- 3.8.4 Baseline traffic information was obtained from the UK Department for Transport (DfT) database and from Transport Scotland database survey information. National Road Traffic Forecast (NRTF) low growth factors, as well as committed development trips, were applied to the current baseline to estimate future baseline flows.
- 3.8.5 The peak of construction occurs in Month 8 with 100 HGV movements per day (50 inbound and 50 outbound) and 72 Car / LGV movements (36 inbound trips and 36 outbound trips). This represents an additional 8 HGV journeys every hour during construction activities, which is not significant in terms of overall traffic flows.
- 3.8.6 The assessment of significance suggests that residents of Pathhead and Lauder and core path users would experience significant effects, prior to the application of mitigation measures.

- 3.8.7 It should be noted that the impacts relate solely to the peak of construction activities and that the construction period is short lived and the effects transitory in nature.
- 3.8.8 The following measures will be implemented to mitigate any adverse effects of construction traffic during the construction phase:
- Construction Traffic Management Plan;
 - Abnormal Indivisible Load Transport Management Plan;
 - Outdoor Access Management Plan;
 - Staff Travel Plan; and
 - Wear and Tear Agreement.
- 3.8.9 With the implementation of appropriate mitigation, no significant residual effects are anticipated in respect of traffic and transport issues. The residual effects are all assessed to be slight or insignificant and as they will occur during the construction phase only, they are temporary and reversible.

3.9 Noise

- 3.9.1 An assessment of the noise impact from both the construction and operation of the proposed development was undertaken taking into account the identified nearest residential properties. The assessment is presented in **Chapter 12** of the EIA Report.
- 3.9.2 The operational noise impact was assessed according to the guidance described in the ‘The Assessment and Rating of Noise from Wind Farms’, referred to as ‘ETSU-R-97’, as recommended for use in relevant planning policy. The methodology described in this document was developed by a working group comprised of a cross section of interested persons including environmental health officers, wind farm operators and independent acoustic experts. It provides a robust basis for assessing the noise impact of a wind farm and has been applied at the vast majority of wind farms currently operating in the UK.
- 3.9.3 ETSU-R-97 makes clear that any noise restrictions placed on a wind farm must balance the environmental impact of the wind farm against the national and global benefits that would arise through the development of renewable energy sources. The assessment also adopts the latest recommendations of the Institute of Acoustics ‘Good Practice Guide to the

Application of ETSU R 97 for the Assessment and Rating of Wind Turbine Noise’.

- 3.9.4 Representative baseline conditions (the “background noise level”) at nearby residential properties were established by undertaking noise surveys. These measured levels were then used to infer the background noise levels at other nearby residential properties as the ETSU R 97 document recommends. As background noise levels depend upon wind speed, as indeed do wind turbine noise emissions, the measurement of background noise levels at the survey locations were made concurrent with measurements of the wind speed and wind direction. These wind measurements are made at the wind turbine site rather than at the survey locations since it is this wind speed that would subsequently govern the wind farm’s noise generation.
- 3.9.5 A sound propagation model was used to predict the noise levels due to the proposed wind farm at nearby residential properties over a range of wind speeds, taking into account the position of the proposed wind turbines, the nearest residential properties, and the candidate wind turbine type. The model employed (which considered downwind conditions at all times) took account of attenuation due to geometric spreading, atmospheric absorption, ground effects and barriers. It has been shown by measurement-based verification studies that this model tends to slightly overestimate noise levels at nearby residential properties.
- 3.9.6 The relevant noise limits for the proposed development were then determined through analysis of baseline conditions and the criteria specified by the ETSU-R-97 guidelines. The general principle regarding the setting of noise criteria is that limits should be based relative to existing background noise levels, except for very low background noise levels, in which case a fixed limit may be applied. This approach has the advantage that the limits can directly reflect the existing noise environment at the nearest residential properties and the impact that the wind farm may have on this environment. Different limits are applicable depending upon the time of day. The daytime limits are intended to preserve outdoor amenity, whilst the night-time limits are intended to prevent sleep disturbance.
- 3.9.7 The predicted operational noise levels are within noise limits at nearby residential properties at all considered wind speeds with the adoption of a noise management strategy. The proposed development therefore

complies with the relevant guidance on wind farm noise and the impact on the amenity of all nearby properties would be regarded as acceptable.

- 3.9.8 A cumulative operational noise assessment has also been undertaken. Considering the mitigation measures identified, the predicted cumulative noise levels are within noise limits at nearby residential properties. Compliance with relevant guidance implies that the cumulative impact on the amenity of nearby properties would be regarded as acceptable.
- 3.9.9 A construction noise assessment, incorporating the impact due to increased traffic noise, indicates that predicted noise levels likely to be experienced at the nearest residential properties could exceed construction noise criteria for a short period of time although appropriate mitigation measures have been identified.
- 3.9.10 An acoustic assessment of the proposed BESS in accordance with BS 4142: 2014 shows that the impact would be low and the levels insignificant in comparison to the wind farm noise levels.

3.10 Socioeconomics, Recreation and Tourism

Introduction

- 3.10.1 **Chapter 13** of the EIA Report evaluates the likely socio-economic effects, including recreation and tourism effects, associate with the proposed development.
- 3.10.2 The assessment has been broken down into two phases, construction (approximately 16 months) and an operational period of 50 years, which is further broken down into the following study areas.

Study Areas

- 3.10.3 For the purposes of the assessment, the ‘socio-economic’ and the ‘tourism and recreation’ issues are separated to better reflect the differing geographic areas that each would be most felt. For the socio-economic aspect, a Wider Study Area (WSA) has been set at the area of the Scottish Borders Council administrative area but referencing Scotland and the UK as a whole where relevant.
- 3.10.4 When assessing the impacts on tourism and recreational receptors, the study area is more refined to reflect the fact that the proposed development would only have the potential to impact each of these receptors which are located at a more local scale. In pursuit of this, a

Local Area of Influence (LAI) was used to reflect the geographic area of these receptors, defined as a 5km radius of the boundaries of the proposed development was considered to be unsuitable due to the remoteness of the site.

Socio-Economic Impact

- 3.10.5 The assessment of the economic impacts associated with the proposed development was based on 19 wind turbines, generating a maximum of 6.6MW each, for a total generating capacity of 125.4MW. On this basis, it was estimated that the expenditure associated with construction and development activity could generate:
- £4.4 million GVA and 86 person-years in the Scottish Borders;
 - £17.5 million GVA and 330 person-years in Scotland; and
 - £39.6 million GVA and 744 person-years in the UK.
- 3.10.6 During the operational phase, it is likely that 5 - 9 permanent direct jobs would be needed to operate and maintain the proposed development, based on experience with similar projects elsewhere across Scotland. In addition to this, it is expected that there is likely to be between 19 and 24 overall indirect jobs created through the supply chain effects associated with the proposed project within the Scottish Borders administrative area. Using the mid-point estimates of 7 direct and 21 indirect operational jobs, a total of 28 permanent jobs within the local area is estimated to be created which, when used for the assessment of significance, is considered to be a minor but beneficial effect.
- 3.10.7 Information from other comparable projects indicates that a wide range of supply chain businesses could expect to benefit from the investment in the local and Scottish economy, including waste management, aggregates supply, forestry services, equipment hiring, fencing and catering. The Applicant would employ good practice measures with regard to maximising local procurement, including the implementation of a Local Contractor Policy, where additional weight is given in the tendering process to primary contractors that show a clear commitment to increasing local content in their supply chains.
- 3.10.8 The proposed development is expected to support the provision of local public services and the investment priorities of local communities. During its operations, it is expected to generate each year £1.3 million in

business rates and result in an annual contribution of £0.6 million in community benefits.

Tourism and Recreational Impacts

- 3.10.9 With regard to recreation and tourism assets, local businesses, such as food and drink businesses and accommodation, were found to experience beneficial impacts during construction due to use by construction workers. The level of effect may be high for individual businesses, however as a whole it was found to be a moderate beneficial effect. Other tourism assets were considered to be in locations which were beyond the distance where significant effects related to the proposed development would occur, resulting in negligible magnitudes of impact.
- 3.10.10 For recreational activities during construction, the Right of Way BE/BE11/1, Core Path 16 and the Muir Road from Lauder to Dunbar (Herring Road) Heritage Path were identified as being impacted directly by the proposed development. Further permissive paths and estate tracks used for recreation were also identified and considered to be impacted in the same way. As such, the assessment of RoW BE/BE11/1, Core Path 16 and the Muir Road from Lauder to Dunbar (Herring Road) Heritage Path were primarily considered in the assessment.
- 3.10.11 The paths would be impacted through their proposed realignment into a single route to avoid overlapping and intersections, in line with the proposed access track. The permissive paths OXCH/LMC269/0007/1 and OXCH/FGO/1, OXCH/FGO/2 and OXCH/FGO/3 would also be impacted temporarily through the construction of new access tracks.
- 3.10.12 The inclusion of an outline Outdoor Access Management Plan (OAMP) reduced impacts from the temporary restriction of public access by specifying agreements for the announcement of any impacts and the plans and processes in place to continue the usage of the paths. Further mitigation is proposed to be included within the OAMP in the form of strategically sited signage, which details the timings of the closures as well as a map of the route and contact details of the construction manager. New passing gates are proposed to be installed to allow for non-vehicular access, as well as separating vehicles from pedestrians and non-motorised forms of transport.
- 3.10.13 Recreationally, with plans in place, the amenity of the usage would be reduced temporarily, however, the recreational quality of the routes

would be impacted to a lesser degree, resulting in a minor and not significant effect.

- 3.10.14 In operational terms, the mitigations offered through the OAMP, such as signage promoting access, path improvements and linkages of the routes, would result in a recreational benefit, forming a larger recreational path network throughout the site. This resulted in a reduced visual amenity but increased recreational amenity, resulting in a minor and not significant.
- 3.10.15 This finding is in line with the literature on the relationship between wind farm developments and tourism. Published research finds there is no evidence that wind farm developments have an impact on tourism assets at the Scottish and regional level, nor in those areas in the proximity of an onshore wind farm development.

3.11 Aviation and Radar

- 3.11.1 The Civil Aviation Authority (CAA) requires any structure equal to and taller than 150m in height to be fitted with visible aviation warning lighting. The CAA has been consulted and an aviation lighting scheme has been agreed.
- 3.11.2 Under the usual planning conditions expected in the consent, if granted, the Ministry of Defence (MOD) would be informed of the dates of commencement, completion, final wind turbine locations and heights. In addition, infrared lighting will be agreed with the Defence Infrastructure Organisation (DIO) for the MOD low flying requirements.
- 3.11.3 The proposed development will potentially impact the MOD radar at Brizlee Wood and the NERL radar at Great Dun Fell, plus Kincardine and Edinburgh radars. In both cases it is expected that the impact can be mitigated with a suitable mitigation scheme that could be secured through an appropriately worded suspensive planning condition.
- 3.11.4 In summary, it is concluded in the EIA Report that with this mitigation in place there are no significant residual effects from the proposed development upon aviation interests.

3.12 Shadow Flicker

- 3.12.1 Wind turbines are tall structures which can cast long shadows when the sun is low in the sky. Given a conjunction of certain meteorological conditions (clear skies, enough wind for the wind turbines to be rotating

and a low angle of the sun in the sky), observers close to a wind farm could experience a phenomenon commonly known as ‘shadow flicker’, where the rotating wind turbine blades pass between the sun and the observer, usually through narrow openings such as doors or windows, creating an intermittent shadow.

- 3.12.2 There are 10 properties within 2km of any wind turbine. 2 of these properties may experience shadow flicker effects as a result of the proposed development.
- 3.12.3 In the event of shadow flicker causing a nuisance, a range of mitigation measures could be incorporated at the operational phase of the Proposed Development to reduce the instance of shadow flicker. Mitigation measures include planting tree belts between the affected residential property and the responsible wind turbine(s), installing blinds at the affected residential property or shutting down individual wind turbines during periods when shadow flicker could occur.

4 Next Steps and Further Information

4.1 Next Steps

- 4.1.1 The Scottish Government Energy Consents Unit will process the application on behalf of Scottish Ministers. At this stage, there will be an opportunity to make representations on the application to:

Scottish Government
Energy Consents Unit
5 Atlantic Quay
150 Broomielaw
Glasgow
G2 8LU

Email: representations@gov.scot

Online: <http://www.energyconsents.scot/>

4.2 Further Information

- 4.2.1 The EIA Report comprises the following:
- Volume 1 EIA Report;
 - Volume 2a-b Figures;
 - Volume 3 Technical Appendices; and
 - Volume 4 Non-Technical Summary;
- 4.2.2 Hard copies of the NTS and EIA Report will be available for viewing in the following locations:
- Lauder Public Hall, Lauder, TD2 6SR
 - Oxton War Memorial Hall, Oxton, TD2 6PL
- 4.2.3 The NTS is available free of charge, and a limited number of hard copies of the EIA Report is available for £1,500 per copy. The price of the hard copy reflects the costs of producing the Landscape and Visual visualisations.

- 4.2.4 Alternatively, a DVD or USB memory stick containing PDF files of the EIA Report are available for £15 per CD. These PDF files can also be downloaded for free from the Longcroft Wind Farm website at:

<https://longcroft-windfarm.co.uk/>



**LONGCROFT
WIND FARM**

**NON-TECHNICAL
SUMMARY
FIGURE 1**

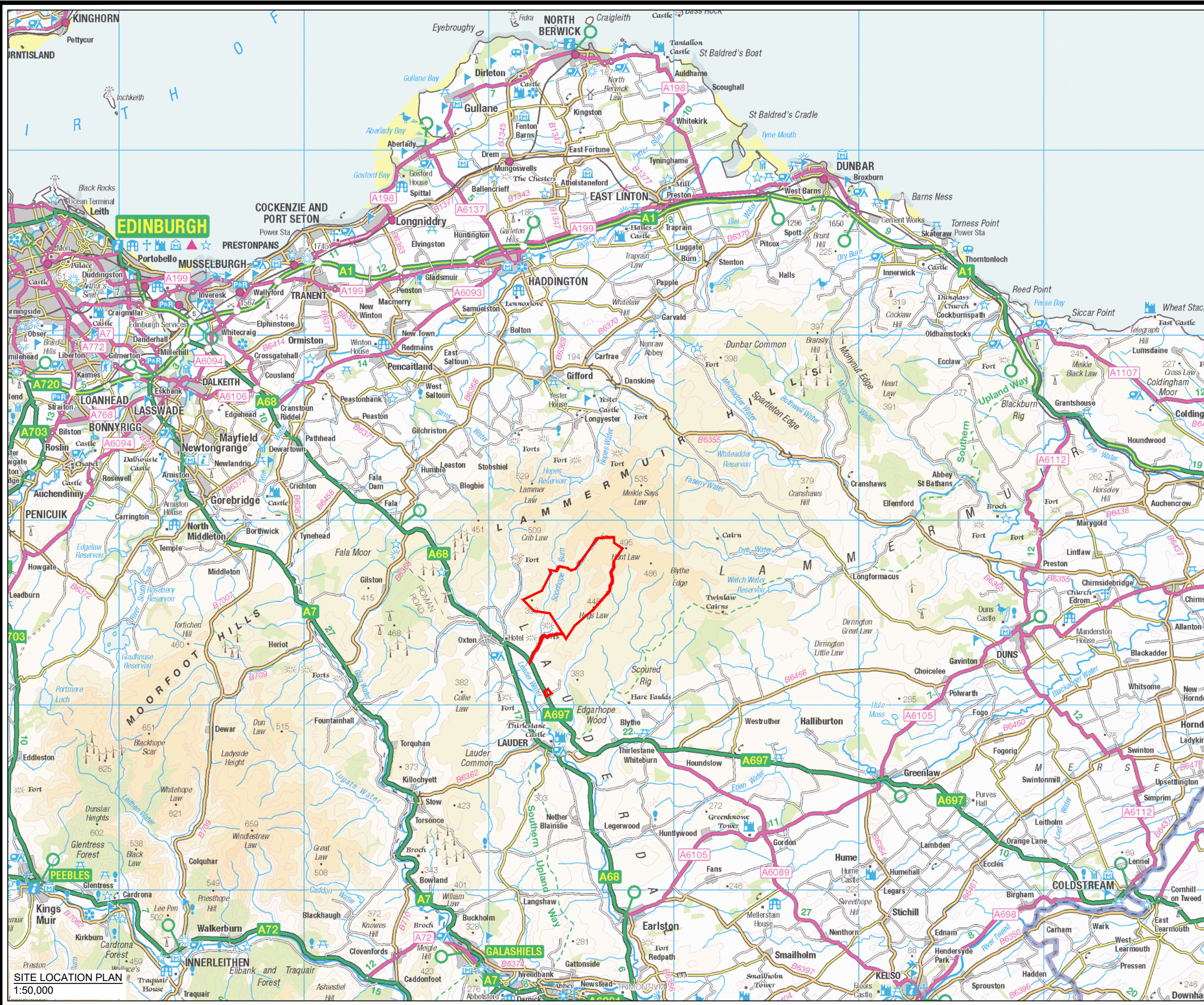
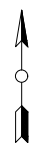
SITE LOCATION

© CROWN COPYRIGHT, ALL RIGHTS RESERVED.
2023 LICENCE NUMBER 0100031673.

KEY:
SITE BOUNDARY



SITE LOCATION - NOT TO SCALE



SITE LOCATION PLAN
1:50,000

LAYOUT DWG	T-LAYOUT NO.
DRAWING NUMBER	REV 2

SCALE - AS SHOWN @ A3

**ENVIRONMENTAL IMPACT
ASSESSMENT REPORT 2023**

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LONGCROFT WIND FARM

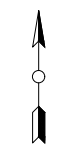
NON-TECHNICAL SUMMARY FIGURE 2

PROPOSED DEVELOPMENT

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KEY:

-  TURBINES
-  SITE BOUNDARY
(CENTRE OF LINE DENOTES BOUNDARY)
-  UPGRADED SITE TRACKS
-  NEW SITE TRACKS
-  WATERCOURSE CROSSING
-  EXISTING PUBLIC ROAD
-  BORROW PIT SEARCH AREA
-  TEMPORARY BATCHING PLANT
-  SUBSTATION LOCATION
-  TEMPORARY CONSTRUCTION COMPOUND
-  BATTERY STORAGE COMPOUND
-  TRANSFER STATION
-  HARDSTANDING
-  SITE ENTRANCE LOCATION



LAYOUT DWG N/A T-LAYOUT NO. PSCOLCF021

DRAWING NUMBER REV 6

SCALE - 1:25,000 @ A3

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