

Torfichen Wind Farm Section 36 Application:

Planning & Sustainable Place Statement

November 2023

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Appendix 1:	Socio-Economic Impact Assessment
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1. Introduction

1.1 Background

- 1.1.1 This Planning & Sustainable Place Statement has been prepared by David Bell Planning Ltd (DBP) on behalf of Renewable Energy Systems Ltd (the Applicant) in relation to the proposed Torfichen Wind Farm ('the Proposed Development') located in within the Midlothian Council ('the Council') administrative area.
- 1.1.2 As the Proposed Development has a generating capacity in excess of 50 megawatts (MW), consent is required from Scottish Ministers under Section 36 of the Electricity Act 1989 ('the 1989 Act'). In addition, a request is being made by the Applicant that planning permission is deemed to be granted under Section 57(2) of the Town and Country Planning (Scotland) Act 1997, as amended ('the 1997 Act').
- 1.1.3 The application for consent is accompanied by an Environmental Impact Assessment Report (EIAR) which presents the findings of an EIA undertaken in accordance with the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 ('the EIA Regulations'). The EIAR presents information on the identification and assessment of the likely significant environmental effects of the Proposed Development.
- 1.1.4 This Planning and Sustainable Place Statement makes various cross references to information contained in the EIAR and presents an assessment of the Proposed Development against relevant policy with due regard given to the provisions of the statutory Development Plan, now made up of National Planning Framework 4 and the Local Development Plan for the Midlothian area, and other relevant material considerations.
- 1.1.5 This Planning & Sustainable Place Statement considers the potential benefits and the effects which may arise and concludes as to the overall acceptability of the Proposed Development in relation to the planning policy framework and relevant material considerations.

1.2 The Applicant

- 1.2.1 RES is the world's largest independent renewable energy company active in onshore and offshore wind, solar, energy storage, green hydrogen, transmission and distribution. At the forefront of the industry for over 40 years, RES has delivered more than 23 GW of renewable energy projects across the globe and supports an operational asset portfolio of 12 GW worldwide for a large client base. RES employs more than 2,500 people and is active in 14 countries.
- 1.2.2 From its Glasgow office RES has been developing, constructing and operating wind farms in Scotland since 1993. RES has developed and/or built twenty-one wind farms in Scotland with a total generation capacity of 597 MW. The Applicant has the necessary knowledge and experience in renewable energy to develop the Proposed Development.

1.3 Site Location and Description

- 1.3.1 The application site is located approximately 4 km south of Gorebridge and 9.5 km south-east of Penicuik within the northern edge of the Moorfoot Hills. The village settlements of North Middleton and Temple lie approximately 3 km to the north-east and north-west of the site respectively. The site lies on land between Gladhouse Reservoir and Whitelaw Cleugh.
- 1.3.2 The site comprises an area of approximately 853 hectares (ha). The site is set within a mixed landscape of undulating farmland, fragmented moorland and forestry which is populated sparsely by settlements. The elevation on site varies in topography from 270 m Above Ordnance Datum (AOD) along the northern boundary to 490 m AOD near at the summit of Mauldslie Hill. The elevation generally decreases towards the north-west.

- 1.3.3 A number of tributaries to the Black Burn, Latch Burn, and Middleton North Burn intersect the site and there is a small area of Ancient Woodland overlapping the northern boundary. The site is primarily in agricultural use, predominately used for livestock farming.
- 1.3.4 Broad Law Quarry is located within the southern area of the site boundary and is currently in use as a rocket engine testing facility.
- 1.3.5 There are no residential properties (either existing or for which there is a live planning permission) within the site boundary. The nearest financially involved property is within approximately 140 m of the site boundary to the north, however there is considerably greater distance between nearby properties and the proposed turbines, with the nearest property approximately 1 km from any proposed turbines. Edinburgh, the nearest city to the site, lies around 13 km to the north-west.
- 1.3.6 The Moorfoot Hills Special Area of Conservation (SAC), Site of Special Scientific Interest (SSSI), and RSPB Important Bird Area (IBA) is adjacent to the southern boundary of the site. Gladhouse Reservoir SSSI, Special Protection Area (SPA), Ramsar and IBA sites approximately 700 m north-west.

1.4 The Proposed Development

- 1.4.1 The Proposed Development is described in detail in Chapter 3 (Proposed Development) of the EIAR. In summary, it will comprise:
- > 18 three-bladed horizontal axis wind turbines up to 180 m tip height;
The specific turbine model will be procured post-consent. The turbines would have a nominal 6 megawatts (MW) generating capacity, providing an approximate installed capacity of 108 MW;
 - > site access;
 - > site tracks;
 - > crane hardstandings;
 - > on-site substation and control building;
 - > underground cabling;
 - > laydown area;
 - > potential concrete batching plant;
 - > potential excavations/borrow pit workings; and
 - > a temporary construction compound and temporary enabling works compound.
 - > a Battery Energy Storage System (BESS), rated at approximately 50 MW and associated compound;
 - > habitat management and biodiversity enhancement measures.
- 1.4.2 Battery storage is increasingly playing an important part in the UK energy network, through the provision of grid stabilisation services. When connected to a wind farm such as the Proposed Development, they will allow the wind turbines to generate electricity in periods of high wind, but low demand (when wind farms may otherwise be constrained off the system) and provide electricity when this scenario reverses (i.e. lower wind speeds but higher electricity demand). Battery storage technologies are rapidly advancing and are seen as an important and necessary component in the wider energy network in order to attain net zero targets. This is further referenced below with regard to the renewable energy policy framework.

- 1.4.3 A micro-siting allowance of up to 50 m in all directions is being sought in respect of each turbine and the supporting ancillary infrastructure in order to address any potential difficulties which may arise in the event that pre-construction surveys identify unsuitable ground conditions or unforeseen environmental constraints that could be avoided by relocation.
- 1.4.4 With structures over 150 m high there is a statutory requirement for aviation lighting. Proposed lighting for the turbines has been agreed with the Civil Aviation Authority (CAA) and Ministry of Defence (MOD), but will need final approval again with the CAA, prior to construction.
- 1.4.5 The proposed site access point is a newly constructed junction on the B7007, entering the site from the south-east.
- 1.4.6 An agreement is in place between the Applicant and Scottish Power Transmission, the Transmission Operator (TO), for the connection of the Proposed Development into the electricity network.
- 1.4.7 The proposed point of connection for the Proposed Development is at the on-site substation compound. The Proposed Development would then be connected at Gala North Substation, a new substation to be constructed approximately 21 km to the south-east of the site.
- 1.4.8 The connection would be comprised of buried 132kV cables and/or overhead line. The exact arrangement of this grid connection is subject to detailed design by the TO.
- 1.4.9 The final grid connection route and associated consents will be subject to a separate consenting process and EIA if required and would be the responsibility of the TO.
- 1.4.10 The Proposed Development is expected to operate for up to 50 years following which decommissioning of the wind turbines and other infrastructure would be undertaken or an application may be submitted to repower the site.

1.5 The Statutory Framework

- 1.5.1 An application under section 36 of the 1989 Act for consent for the construction of an electricity generating station whose capacity exceeds 50 MW is significantly different from an application for planning permission for a similar station whose capacity is less than 50 MW.
- 1.5.2 Section 25 of the 1997 Act does not apply to the determination of applications under section 36 of the 1989 Act as confirmed in the case of *William Grant & Sons Distillers Ltd v Scottish Ministers* [2012] CSOH 98 (paragraphs 17 and 18).
- 1.5.3 In addition, there are potentially certain environmental duties in relation to preservation of amenity and fisheries provisions in Schedule 9, paragraph 3 that are likely to apply.
- 1.5.4 The Applicant does not hold a generation licence or exemption under the 1989 Act and therefore the statutory duties set out in paragraph 3 of Schedule 9 to the 1989 Act do not currently apply to the Applicant when formulating proposals for consent under section 36 of the 1989 Act. The Applicant has however, through the EIA process, had full regard to the matters set out in paragraph 3(1)(a) of Schedule 9.
- 1.5.5 The EIAR identifies how various factors were taken into account in the formulation of the application. In addition, each EIA Chapter includes assessment of the likely significant effects and also, where appropriate, the identification of appropriate mitigation. This includes both embedded mitigation which is integral to the design and also additional specific measures which have been identified. The approach to design and mitigation has been explained in Chapter 3 of the EIAR "Design Evolution and Alternatives".
- 1.5.6 The Scottish Ministers are obliged to consider whether the Applicant has provided sufficient information to enable them to address their duties under sub-paragraph 3(1)(a) of Schedule 9 to the 1989 Act. The duty on the Ministers is to have regard to the matters specified in Schedule 9. Schedule 9 is not a development management test.

1.5.7 In considering the overall statutory and regulatory framework within which the Proposed Development should be assessed, the statutory Development Plan is a material consideration which should be taken into account in the round with all other relevant material considerations. It is important to note, however, that section 25 of the 1997 Act is not engaged as there is no 'primacy' of the Development Plan in an application made under the 1989 Act.

1.6 Scope & Structure of Planning & Sustainable Place Statement

1.6.1 The planning policy framework changed significantly in early 2023 when National Planning Framework 4 (NPF4) came into force and with the publication of the new Onshore Wind Policy Statement (OWPS).

1.6.2 This Planning & Sustainable Place Statement addresses these new policy documents and provides an assessment of the Proposed Development against relevant new policy provisions and the statutory Development Plan. The appraisal highlights policy differences with the former national planning policy and where there are incompatibilities between new national planning policies and those of the Local Development Plan.

1.6.3 This Statement is structured as follows:

- > **Chapter 2** sets out the up-to-date position with regard to the renewable energy policy and emissions reduction legislative framework and includes reference to the new Onshore Wind Policy Statement and the Scottish Government's Draft Energy Strategy and Just Transition Plan;
- > **Chapter 3** describes the benefits of the Proposed Development;
- > **Chapter 4** appraises the Proposed Development against the most up to date element of the Development Plan, namely the relevant provisions of NPF4;
- > **Chapter 5** appraises the Proposed Development against the relevant provisions of the Local Development Plan and related guidance; and
- > **Chapter 6** examines the planning balance and presents overall conclusions.

2. The Renewable Energy Policy & Legislative Framework

2.1 Introduction

- 2.1.1 This Chapter refers to the renewable energy policy and emissions reduction legislative framework with reference to relevant international, UK and Scottish provisions. The framework of international agreements and obligations, legally binding targets and climate change global advisory reports is the foundation upon which national energy policy and greenhouse gas emissions (GHG) reduction law is based. This underpins what can be termed the need case for renewable energy from which the Proposed Development can draw a high level of support.
- 2.1.2 The Proposed Development requires to be considered against a background of material UK and Scottish Government energy and climate policy and legislative provisions, as well as national planning policy and advice. These taken together provide very strong support for onshore wind in principle.
- 2.1.3 It is evident that there is clear and consistent policy support at all levels, from international to local, for the deployment of renewable energy generally, and for onshore wind specifically, to combat the global climate crisis, diversify the mix of energy sources, achieve greater security of supply, and to attain legally binding emissions reduction targets.
- 2.1.4 The Proposed Development would make a valuable contribution to help Scotland meet its renewable energy and electricity production targets, while supporting emissions reduction to combat climate change in the current Climate Emergency.
- 2.1.5 UK and Scottish Government renewable energy policy and associated renewable energy and electricity targets are important considerations. It is important to be clear on the current position as it is a fast-moving topic of public policy. The context of international climate change commitments is set out. This is followed by reference to key UK level statutory and policy provisions and then a detailed description of relevant Scottish Government statutory and policy provisions is set out.

2.2 International Commitments

The Paris Agreement (2016)

- 2.2.1 In December 2015, 196 countries adopted the first ever universal, legally binding global climate deal at the Paris Climate Conference (COP21). The Paris Agreement within the United Nations Framework Convention on Climate Change sets out a global action plan towards climate neutrality with the aims of stopping the increase in global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit global warming to 1.5°C.
- 2.2.2 It is clear that moving to a low carbon economy is a globally shared goal and will require absolute emission reduction targets. The UK Government's commitment under the Paris Agreement links to the Climate Change Committee's (CCC) advice to both the UK and Scottish Governments on 'net zero' targets which have now, at both the UK and Scottish levels, been translated into new legislative provisions and targets for both 2045 (Scotland) and 2050 (UK). This is referred to below.
- 2.2.3 The Paris Agreement does not itself represent Government policy in the UK or Scotland. However, the purpose of domestic and renewable energy and GHG reduction targets is to meet the UK's commitment in the Paris Agreement.

United Nations - Intergovernmental Panel on Climate Change

- 2.2.4 The Intergovernmental Panel on Climate Change (IPCC) is the United Nations Body for assessing the science related to climate change.
- 2.2.5 The IPCC prepares comprehensive assessment reports about the state of scientific, technical and socio-economic knowledge on climate change, its impacts and future risks and options for reducing the rate at which climate change is taking place. IPCC reports are commissioned by the worlds' Governments and are an agreed basis for COP¹ negotiations.
- 2.2.6 The IPCC's Special Report on Warming of 1.5°C, published in 2018, was a key piece of evidence for the CCC's recommendation to the UK Government for a 2050 net zero greenhouse gas emission target. The IPCC's reports since 2018 have provided an up-to-date estimate of how close global temperatures are to 1.5°C of warming above pre-industrial levels and the remaining volume of global cumulative carbon dioxide that could be emitted to be consistent with keeping global warming below any particular threshold (such as the 1.5°C and 2°C levels referred to in the Paris Agreement).
- 2.2.7 The IPCC's 6th Assessment Report was published in March 2023. The Summary for Policymakers Report (page 10) states that it is likely that warming will exceed 1.5°C during the 21st Century and make it harder to limit warming 2°C. It states (page 12):
- “Continued greenhouse gas emissions will lead to increasing global warming, with the best estimate of reaching 1.5°C in the near term in considered scenarios and modelled pathways. Every increment of global warming will intensify multiple and concurrent hazards (high confidence). Deep, rapid and sustained reductions in greenhouse gas emissions would lead to a discernible slowdown in global warming within around two decades, and also to discernible changes in atmospheric composition within a few years (high confidence)”.*
- 2.2.8 Page 24 of the report states *“There is a rapidly closing window of opportunity to secure a liveable and sustainable future for all (very high confidence)”.*

United Nations Statement, July 2023

- 2.2.9 The UN issued a statement on 27 July 2023 with regard to increasing global temperatures. The UN Secretary General Antonio Guterres stated that it was *“virtually certain that July 2023 will be the warmest on record”.*
- 2.2.10 The Secretary General stated *“Climate change is here. It is terrifying. And it is just the beginning. The era of global warming has ended, and the era of global boiling has arrived.”*
- 2.2.11 The statement refers to climate conditions in the month of July 2023 as being remarkable and unprecedented, and that there is virtual certainty that the month of July as a whole will become the warmest July on record and the warmest month on record. In addition, the statement sets out that ocean temperatures are at their highest ever level recorded for this time of year [July].
- 2.2.12 The statement also refers to the net zero goal and the Secretary General stated *“The need for new national emissions targets from G20 members and urged all countries to push to reach net zero emissions by mid-century.”*

¹ United Nations Framework Convention on Climate Change, Conference of the Parties (COP).

2.3 UK Climate Change & Energy Legislation & Policy

The Climate Emergency

2.3.1 A critical part of the response to the challenge of climate change was the Climate Emergency which was declared by the Scottish Government in April 2019 and by the UK Parliament in May 2019. The declaration of Climate Emergency needs to be viewed in the context in which it was declared (advice from the CCC) and in response to commitments under the Paris Agreement and what followed from it as a result of the declaration (new emissions reduction law).

The Climate Change Act 2008 & Carbon Budgets

2.3.2 The Climate Change Act 2008 (the 2008 Act) provides a system of carbon budgeting. Under the 2008 Act, the UK committed to a net reduction in GHG emissions by 2050 of 80% against the 1990 baseline. In June 2019, secondary legislation was passed that extended that target to at least 100% against the 1990 baseline by 2050, with Scotland committing to net zero by 2045.

2.3.3 The 2008 Act also established the CCC which advises the UK Government on emissions targets, and reports to Parliament on progress made in reducing GHG emissions.

2.3.4 The CCC has produced six four yearly carbon budgets, covering 2008 – 2037. These carbon budgets represent a progressive limitation on the total quantity of GHG emissions to be emitted over the five-year period as summarised in **Table 2.1** below. Essentially, they are five yearly caps on emissions.

2.3.5 These legally binding ‘carbon budgets’ act as stepping-stones toward the 2050 target. The CCC advises on the appropriate level of each carbon budget and once accepted by Government, the respective budgets are legislated by Parliament. All six carbon budgets have been put into law and run up to 2037.

Table 2.1: Carbon Budgets and Progress²

Budget	Carbon budget level	Reduction below 1990 levels	Met?
1 st carbon budget (2008 – 2012)	3,018 MtCO _{2e}	25%	Yes
2 nd carbon budget (2013 – 2017)	2,782 MtCO _{2e}	31%	Yes
3 rd carbon budget (2018 – 2022)	2,544 MtCO _{2e}	37% by 2020	Yes
4 th carbon budget (2023 – 2027)	1,950 MtCO _{2e}	51% by 2025	Off Track
5 th carbon budget (2028 – 2032)	1,725 MtCO _{2e}	57% by 2030	Off Track
6 th carbon budget (2033 – 2037)	965 MtCO _{2e}	78% by 2035	Off Track
Net Zero Target	100%	By 2050	

2.3.6 The Sixth Carbon Budget (CB6) requires a reduction in UK greenhouse gas emissions of 78% by 2035 relative to 1990 levels. This is seen as a world leading commitment, placing the UK “*decisively on the path to net zero by 2050 at the latest, with a trajectory that is consistent with the Paris Agreement*” (CB6, page 13).

² Source: CCC (2022).

2.3.7 Page 23 of CB6 refers to the devolved nations and sets out that UK climate targets cannot be met without strong policy action across Scotland, Wales and Northern Ireland. Key points from CB6 include:

- > UK climate targets cannot be met without strong policy action in Scotland.
- > The CCC is clear in setting out that new demand for electricity will mean that electricity demand will rise 50% to 2035 and doubling or even trebling by 2050.
- > CB6 needs to be met and that will need more and faster deployment of renewable energy developments than has happened in the past.
- > The related 'Methodology Report' from the CCC advice, states that in all scenarios for the carbon budget and looking ahead to 2050, the CCC sees new onshore wind generation being deployed by 2050. They set out that their modelling reflects this by almost doubling onshore wind capacity to 20-30 GW in all scenarios by 2050.

2.3.8 Following the Sixth Carbon Budget, the UK Government announced on 20 April 2021 that it would set the world's most ambitious climate change target into law (by the Carbon Budget Order 2021 (the Order)³) to reduce emissions by 78% by 2035 compared to 1990 levels. This effectively brings forward the UK's previous commitment of an 80% reduction by 2050 by 15 years.

The UK Energy White Paper (December 2020)

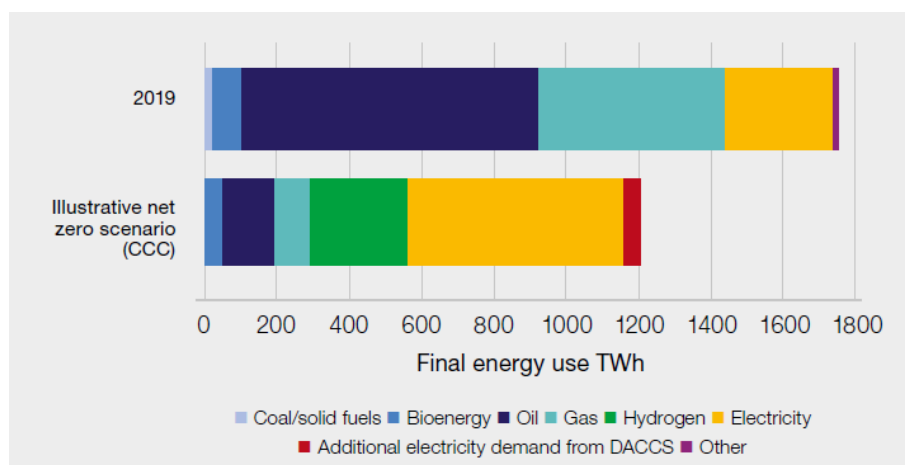
2.3.9 The Energy White Paper 'Powering our Net Zero Future' was published on 14 December 2020, represents a sea change in UK policy, and highlights the importance of renewable electricity.

2.3.10 It sets out that "electricity is a key enabler for the transition away from fossil fuels and decarbonising the economy cost-effectively by 2050". A key objective is to "accelerate the deployment of clean electricity generation through the 2020s" (page 38).

2.3.11 Electricity demand is forecast to double out to 2050, which will "require a four-fold increase in clean electricity generation with the decarbonisation of electricity increasingly underpinning the delivery of our net zero target" (page 42).

2.3.12 This anticipated growth of renewable electricity is illustrated in the graph below – **Figure 2.1**.

Figure 2.1: Illustrative UK Final Energy Use in 2050⁴



³ The Order sets the carbon budget for the 2033-2037 budgetary period at 965 million tonnes of carbon dioxide equivalent. The net UK carbon account is defined in section 27 of the Climate Change Act 2008.

⁴ Source: Energy White Paper page 9 (2020).

2.3.13 Whilst offshore renewables are expected to grow significantly, the White Paper also sets out that *“onshore wind and solar will be key building blocks of the future generation mix, along with offshore wind. We will need sustained growth in the capacity of these sectors in the next decade to ensure that we are on a pathway that allows us to meet net zero emissions in all demand scenarios”* (page 45).

The UK Net Zero Strategy (October 2021)

2.3.14 The UK Government published the Net Zero Strategy in October 2021. This set out policies and proposals for keeping the UK on track in relation to carbon budgets and the UK's nationally determined contribution (NDC)⁵ and establishes the long-term pathway to net zero by 2050.

2.3.15 The Net Zero Strategy sets out the Government's plans for reducing emissions from each sector of the UK economy, related to carbon budget and to the eventual target of net zero by 2050. The Strategy has been submitted to the United Nations Framework Convention on Climate (UNFCCC) as the UK's second long-term low greenhouse gas emission development strategy under the Paris Agreement.

2.3.16 Page 19 addresses the power sector and sets out that the power system will be fully decarbonised by 2035.

2.3.17 Key policies are set out including that by 2030 there will be some 40GW of offshore wind with *“more onshore, solar and other renewables”*. The strategy also builds on the UK Government's 'Ten Point Plan' *“with our vision to create new jobs in net zero Industries as we meet our climate target.”* (page 40).

2.3.18 It is notable that in terms of power, the Strategy references the Energy White Paper (2020) which set out the goal of a fully decarbonised and low-cost power system by 2050. It adds that CB6 represents *“a very significant increase in the pace of power sector decarbonisation, coupled with increased demand due to the accelerated action in other sectors dependent on low-carbon electricity”*. (page 98). It adds:

“although the Energy White Paper envisaged achieving an overwhelmingly decarbonised power system during the 2030s, we have since increased our ambition further. By 2035 all our electricity will need to come from low carbon sources, subject to security of supply, bringing forward the Government's commitment to a fully decarbonised power system by 15 years, whilst meeting a 40-60% increase in demand”.

2.3.19 The Strategy also sets out that the Government will be supporting sustained deployment of low-carbon generation (page 103) and will continue drive a rapid deployment of renewables.

The British Energy Security Strategy (April 2022)

2.3.20 The British Energy Security Strategy (“the Strategy”) was published by the UK Government on 07 April 2022. The Strategy focuses on energy supply and states that in the future nuclear will have an expanded role and that renewables have an important role: the foreword states *inter alia*:

“this government will reverse decades of myopia, and make the big call to lead again in a technology the UK was the first to pioneer, by investing massively in nuclear power....”

Accelerating the transition away from oil and gas then depends critically on how quickly we can roll out new renewables....”

⁵ Every country that signed up to the Paris Agreement (2015) set out a target known as a nationally determined contribution for reducing greenhouse gas emissions by around 2030. For the UK the target was a 68% reduction on 1990 levels by 2030.

The growing proportion of our electricity coming from renewables reduces our exposure to volatile fossil fuel markets. Indeed, without the renewables we are putting on the grid today, and the green levies that support them, energy bills would be higher than they are now. But now we need to be bolder in removing the red tape that holds back new clean energy developments and exploit the potential of all renewable technologies.”

- 2.3.21 Reducing Scotland’s and the wider UK’s dependency on hydrocarbons has important security of supply, electricity cost and fuel poverty avoidance benefits. Those actions already urgently required in the fight against climate change are now required more urgently for global political stability and insulation against dependencies on rogue nation states.

Powering up Britain

- 2.3.22 On 30 March 2023 the UK Government (Department for Energy Security and Net Zero) published ‘Power Up Britain’ which comprises a series of documents including an Energy Security Plan, Carbon Budget Delivery Plan (CBDP) and Net Zero Growth Plan.

- 2.3.23 The CBDP is the means by which the UK Government satisfies Section 14 of the Climate Change Act 2008 to publish proposals and policies for enabling Carbon Budgets 4, 5 and 6 to be met. The CBDP was published in response to the High Court ruling⁶ that the Government’s 2021 Net Zero Strategy did not comply with the Climate Change Act. The Government has therefore had to provide a firmer public commitment to its plans, which has resulted in some changes in approach and ambition.

- 2.3.24 The Energy Security Plan sets out the steps that the UK Government is taking to ensure that the UK is more energy independent, secure and resilient. It builds upon the British Energy Security Strategy and the Net Zero Strategy. The report sets out that the Government is aiming for a doubling of Britain’s electricity generation capacity by the late 2030s in line with the aim to fully decarbonise the power sector by 2035, subject to security of supply.

- 2.3.25 The introduction of the Net Zero Growth Plan states:

“Energy Security and net zero are two sides of the same coin. The energy transition and net zero are among the greatest opportunities facing this country and we are committed to ensuring that the UK takes advantage of its early mover status. Global action to mitigate climate change is essential to long term prosperity...”

CCC – Report to Parliament 2023

- 2.3.26 The CCC published its report to Parliament ‘Progress in Reducing Emissions’ in June 2023. It sets out (page 13) that despite the UK Government having issued the CBDP, *“policy development continues to be too slow and our assessment of the CBDP has raised new concerns. Despite new detail from Government, our confidence in the UK meeting its medium-term targets has decreased in the past year”*.

- 2.3.27 The CCC adds that:

“At COP26, the UK made stretching 2030 commitments in its Nationally Determined Contribution (NDC) – now only 7 years away. To achieve the NDC goal of at least a 68% fall in territorial emissions from 1990 levels, the rate of emissions reduction outside the power sector must almost quadruple. Continued delays in policy development and implementation mean that the NDCs achievement is increasingly challenging”.

- 2.3.28 Key messages include (pages 14 and 15):

⁶ The High Court ruled in July 2022 (*R (Friends of the Earth & Others) v Secretary of State for Business, Energy and Industrial Strategy* [2022] EWHC 1841) that the UK Government’s Net Zero Strategy unlawful as it did not meet its obligations under the Climate Change Act 2008 to clearly evaluate how the Government intended to achieve its Carbon Budgets.

- > A lack of urgency – the CCC note that the net zero target was legislated in 2019 but there remains a lack of urgency over its delivery. It states, *“the net zero transition is scheduled to take around three decades, but to do so requires a sustained high intensity of action. This is required all the more, due to the slow start to policy development so far. Pace should be prioritised over perfection”*.
- > Planning policy needs radical reform to support net zero – the CCC state that in this regard that: *“In a range of areas, there is now a danger that the rapid deployment of infrastructure required by the Net Zero transition is stymied or delayed by restrictive planning rules. The planning system must have an overarching requirement that all planning decisions must be taken given full regard to the imperative of Net Zero”*.

2.4 Climate Change & Renewable Energy Policy: Scotland

The Climate Emergency

2.4.1 The former Scottish First Minister Nicola Sturgeon declared a "Climate Emergency" in her speech to the SNP Conference in April 2019. Furthermore, Climate Change Secretary Roseanna Cunningham made a statement on 14 May 2019 to the Scottish Parliament on the 'Global Climate Emergency' and stated:

"There is a global climate emergency. The evidence is irrefutable. The science is clear and people have been clear: they expect action. The Intergovernmental Panel on Climate Change issued a stark warning last year the world must act now or by 2030 it will be too late to limit warming to 1.5 degrees.

We acted immediately with amendments to our Climate Change Bill to set a 2045 target for net zero emissions - as we said we'd do. If agreed by Parliament, these will be the most stringent legislative targets anywhere in the world and Scotland's contribution to climate change will end, definitively, within a generation. The CCC was clear that this will be enormously challenging...."

2.4.2 The key issue in relation to these statements is that they acknowledge the very pressing need to achieve radical change and that by 2030 it will be too late to limit warming to 1.5 degrees. The Scottish Government therefore acted on the climate emergency in 2019 by bringing in legislation.

2.4.3 Furthermore, the declaration of the climate emergency is not simply a political declaration, it is now the key priority of the Scottish Government at all levels. Indeed, defining the issue as an emergency is a reflection of both the seriousness of climate change and its potential effects and the need for urgent action to cut carbon dioxide and other GHG emissions.

2.4.4 The scale of the challenge presented by the new targets for net zero within the timescale adopted by the Scottish Government on the advice of the CCC is considerable, especially given the requirements for decarbonisation of heat and transport – this will require very substantial increases in renewable electricity generation by 2030.

The Climate Change (Emissions Reduction Targets) (Scotland) Act 2019

2.4.5 Against this severe backdrop, the Scottish Government has set legal obligations to decarbonise and reduce emissions. Most notably, the Scottish Government has a statutory target to achieve "net zero" by 2045, with interim targets of 75% by 2030 and 90% by 2040, further supported by annual targets. It is clear that to have any hope of achieving the net zero target, much needs to happen by 2030.

2.4.6 When it was enacted, the Climate Change (Scotland) Act 2009 set world leading greenhouse gas emissions reduction targets, including a target to reduce emissions by 80% by 2050. However, the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 amended the 2009 Act and has set the even more ambitious targets.

- 2.4.7 The 75% target required to be met by 2030 is especially challenging. It was the Scottish Parliament that increased the requirement from a 70 to 75% reduction by 2030. This acts upon the declaration of the climate emergency and recognises the urgent response that is required.
- 2.4.8 The Scottish Government publishes an annual report that sets out whether each annual emissions reduction target has been met. **Table 2.2** below sets out the annual targets for every year to net zero. The report for the 2019 target year was published in June 2021. The report states that the 'GHG Account' reduced by only 51.5% between the baseline period and 2019. As noted, the 2019 Act specifies a 55% reduction over the same period – therefore the targets for 2018 and 2019 were not met.
- 2.4.9 The Scottish GHG Statistics for 2020 were released in June 2022. These show that the GHG account reduced by some 58.7% between the baseline period and 2020. However according to the report⁷, the drop in emissions between 2019 and 2020 was mainly down to lower emissions from domestic transport, international flights and shipping and energy supply. All other sectors demonstrated modest reductions over this period, except the housing sector.
- 2.4.10 Coronavirus restrictions were responsible for the large drop in emissions from transport, while residential emissions increased by 0.1 MtCO₂e as more people worked from home during the pandemic. The Scottish Cabinet Secretary for Net Zero, Energy and Transport Michael Matheson made a Statement⁸ to the Scottish Parliament on 07 June 2022 on the release of the latest statistics. In the Statement he commented as follows:
- “Nonetheless, the most significant changes are in the transport sector and are associated with the temporary measures taken in response to the Covid-19 pandemic. We must be prepared for these figures to substantially rebound in 2021. There can be no satisfaction taken in emissions reductions resulting from the health, economic and social harms of the pandemic.”* (emphasis added)
- 2.4.11 The Scottish GHG Statistics for 2021 were released in June 2023⁹. The 2009 Act (as amended) required that GHG emissions reduce by 51.1% between the baseline period and 2021¹⁰. GHG emission reduced by 49.9% therefore the interim target for 2021 was not achieved.

⁷ Scottish Government. Official Statistics, Scottish Greenhouse Gas Statistics 2020, (June 2022).

⁸ Ministerial Statement to Scottish Parliament by Cabinet Secretary for Net Zero, Energy and Transport on 07 June 2022, 'Greenhouse gas emission statistics 2020'.

⁹ Scottish Government. Official Statistics, Scottish Greenhouse Gas Statistics 2021, (June 2023). The publication explains that the target figures have been revised since 2022 to incorporate methodological improvements and new data.

¹⁰ Note this is a revised target in line with the Climate Change (Scotland) Act 2009 (Interim target) Amendment Regulations 2023. These Regulations adjust the annual target figures for 2021 to 2029. The reason for the change is based on advice from the CCC regarding international carbon reporting practice.

Table 2.2: Scotland's Annual Emission Reduction Targets to Net Zero

Year	Original % Reduction Target	New Targets (2023)	% Actual Emissions Reduction	Year	Original Reduction Target	%
2018	54	-	50	2032	78	
2019	55	-	51.5	2033	79.5	
2020	56	48.5	58.7	2034	81	
2021	57.9	51.1	49.9	2035	82.5	
2022	59.8	53.8	-	2036	84	
2023	61.7	56.4	-	2037	85.5	
2024	63.6	59.1	-	2038	87	
2025	65.5	61.7	-	2039	88.5	
2026	67.4	64.4	-	2040	90 (Interim)	
2027	69.3	67.0	-	2041	92	
2028	71.2	69.7	-	2042	94	
2029	73.1	72.3	-	2043	96	
2030	75	75	Interim Target	2044	98	
2031	76.5		-	2045	100% Net Zero	

- 2.4.12 The targets set out in the above Table clearly illustrate the speed and scale of change that is required, essentially prior to 2030. This also demonstrates that up to 2020 the annual percentage reduction that was required was 1% but this then increases each year from 2020 to 2030. This is the level of change that is required to achieve the 2030 target.
- 2.4.13 This means the trajectory, in terms of the scale and pace of action to reduce carbon dioxide emissions, is steeper than before and the 2020s is a critical decade.
- 2.4.14 It is no exaggeration to say that there is a 'mountain to climb' to meet Scotland's 75% target for 2030. The CCC modelled five scenarios in CB6 and in none – even its most optimistic – is Scotland close to achieving a 75% emissions reduction by 2030: "*Scotland's 75% target for 2030 will be extremely challenging to meet, even if Scotland gets on track for net zero by 2045, Our balance net zero pathway for the UK would not meet Scotland's 2030 target – reaching a 64% reduction by 2030 – while our most stretching tail winds scenario reaches a 69% reduction*" (CB6, page 229).

The Scottish Energy Strategy (2017)

- 2.4.15 The Scottish Energy Strategy (SES) was published in December 2017. The SES preceded the important events and publications referred to above but nevertheless sets out that onshore wind is recognised as a key contributor to the delivery of renewable energy targets – specifically 50% energy from renewable sources to be attained by 2030. The SES did not and could not take account of what may be required in terms of additional renewable generation capacity to attain the new legally binding 'net zero' targets so it is out of date in that respect.

- 2.4.16 The SES refers to “*Renewable and Low Carbon Solutions*” as a strategic priority (page 41) and states “*we will continue to champion and explore the potential of Scotland’s huge renewable energy resource, its ability to meet our local and national heat, transport and electricity needs – helping to achieve our ambitious emissions reduction targets*”.
- 2.4.17 The SES sets out what is termed the “opportunity” for onshore wind and there is explicit recognition that onshore wind is amongst the lowest cost forms of power generation. It is also recognised as “*a vital component of the huge industrial opportunity that renewables creates for Scotland*”.
- 2.4.18 The SES sets out the Government’s clear position on onshore wind namely:
“our energy and climate change goals mean that onshore wind must continue to play a vital role in Scotland’s future – helping to decarbonise our electricity, heat and transport systems, boosting our economy, and meeting local and national demand.”

2.5 The Onshore Wind Policy Statement (2022)

- 2.5.1 The Scottish Government published an updated Onshore Wind Policy Statement (OWPS) on 21 December 2022. It replaces the version published in November 2017.
- 2.5.2 The Ministerial Foreword makes it explicitly clear that seeking greater security of supply and lower cost electricity generation are now key drivers alongside the need to deal with the climate emergency. In this regard, the Cabinet Secretary for Net Zero, Energy and Transport states (page 3):
“that is why we must accelerate our transition towards a net zero society. Scotland already has some of the most ambitious targets in the world to meet net zero but we must go further and faster to protect future generations from the spectre of irreversible climate damage”.
“Scotland has been a frontrunner in onshore wind and, while other renewable technologies are starting to reach commercial maturity, continued deployment of onshore wind will be key to ensuring our 2030 targets are met”.
- 2.5.3 The Foreword states that onshore wind has the ability to be deployed quickly, is good value for consumers and is also widely supported by the public. The Minister further states that:
“This Statement, which is the culmination of an extensive consultative process with industry, our statutory consultees and the public, sets an overall ambition of 20 GW of installed onshore wind capacity in Scotland by 2030.
While imperative to meet our net zero targets it is also vital that this ambition is delivered in a way that is fully aligned with, and continues to enhance, our rich natural heritage and native flora and fauna, and supports our actions to address the nature crisis and the climate crisis”.
- 2.5.4 The OWPS is structured on the basis of eight chapters which contain a mix of policy guidance and also technical information. Key content of relevance to the Proposed Development is referenced below.
- Renewable Energy Generation & Greenhouse Gas Emission Targets**
- 2.5.5 Chapter 1 “Ambitions and Aspirations” (page 5) refers to current deployment of onshore wind in Scotland and states:
“We must now go further and faster than before. We expect the next decade to see a substantial increase in demand for electricity to support net zero delivery across all sectors, including heat, transport and industrial processes.”
- 2.5.6 It is explained that National Grid’s Future Energy Scenarios project concludes that Scotland’s peak demand for electricity will at least double within the next two decades and that this will require a substantial increase in installed capacity across all renewable technologies.

2.5.7 Paragraph 1.1.4 states “our aim is to maintain the supportive policy and regulatory framework which will enable us to increase that deployment”.

2.5.8 In terms of existing deployment, paragraph 1.1.5 states that as of June 2022 the UK had 14.6 GW of installed onshore wind, with around 8.7 GW of this capacity within Scotland. Reference is made to a figure of 11.3 GW of onshore wind “currently in the pipeline, spread over 217 potential projects”. The breakdown of capacity within the pipeline is shown below in **Table 2.3**.

Table 2.3: Onshore Wind Development Pipeline (June 2022)

Status of Onshore Wind Projects	Giga Watt (GW)	Comments
In the Planning / Consenting Process	5.53	Footnote on page 6 of OWPS applies. Not all projects will receive consent.
Awaiting Construction	4.56	The figures are subject to some duplication – e.g. where some projects have consent, are awaiting construction but are also subject to applications for tip height increases for example.
Under Construction	1.17	
<i>Sub Total</i>	11.26	
Operational Onshore Wind in Scotland	8.70	A number of projects will reach the end of their operational life. Not all will necessarily be repowered or life extended. A considerable proportion of the operational capacity will have passed its notional design life by 2030 and will be under consideration for decommissioning or repowering.
<i>Total</i>	19.96	

2.5.9 Within the table, the figure of 4.56 GW is denoted as "Awaiting Construction", however a footnote acknowledges that some of those projects with consent will need to re-apply or vary such consent to make changes to developments such as to increased tip heights, etc. It is also recognised that this will reduce the deliverable capacity.

2.5.10 There is also a figure of some 5.53 GW as representing projects that are within the planning system; but again, the footnote makes it clear that not all projects will receive consent.

2.5.11 A further point arising is that given consenting and construction timescales for onshore wind developments, projects that are not yet in the planning system are therefore unlikely to provide the "installed" capacity by the Scottish Government’s key date of 2030.

2.5.12 The footnote to the figures set out on page 6 of the OWPS is therefore highly pertinent and is as follows:

“Developments in the planning/consenting process have not yet been considered and given permission to proceed. Some of these projects will receive consent, but some may not, and it is unlikely that all of this noted capacity will be fully realised. A degree of duplication within the planning system must also be considered, where developments which have consent re-apply to adjust the parameters of that consent. This will also reduce the capacity which is deliverable from this overall figure”.

- 2.5.13 Section 1.2 of the OWPS refers to the Deployment Ambition to 2030. Reference is made to the Climate Change Committee's position as set out in their exploratory scenarios for emissions to 2050 and also as referred to within the Sixth Carbon Budget.
- 2.5.14 Paragraph 1.2.2 of the OWPS states that: *"these estimate that, in every scenario, the UK will require a total of 25-30 GW of installed onshore wind capacity by 2050 to meet government targets - which would mean doubling the current UK installed capacity"*.
- 2.5.15 Section 1.3 of the OWPS further refers to the new 20 GW ambition and acknowledges that the Scottish Government's Programme for Government 2022/2023 committed Government to enabling up to 12 GW of onshore wind to be developed and it is stated that:
- "It is vital to send a strong signal and set a clear expectation on what we believe onshore wind capacity will contribute in the coming years.*
- In line with this commitment, and reflecting the natural life cycles of existing wind farms, this statement sets a new ambition for the deployment of onshore wind in Scotland:*
- A minimum installed capacity of 20 GW of onshore wind in Scotland by 2030.*
- This ambition will help support the rapid decarbonisation of our energy system, and the sectors which depend upon it, as well as aligning with a just transition to net zero whilst other technologies reach maturity"*.
- 2.5.16 This statement is followed by reference to the "Legislative Context", in particular the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 and the related net zero greenhouse gas emissions targets. The OWPS states (paragraph 1.4.1) *"meeting these targets will require decisive and meaningful action across all sectors"*.
- 2.5.17 Paragraph 2.4.2 states that *"onshore wind will play a crucial role in delivering our legally binding climate change targets"*.
- 2.5.18 The Scottish Government has made clear that the 20 GW ambition of installed capacity is a "minimum". In short, there is a substantial 'hill to climb' to attain that figure and projects that are not yet in the planning system are unlikely to provide installed capacity by 2030. This underlines the importance of the benefits that the Proposed Development can deliver – namely near-term delivery of a substantial volume of installed capacity.
- 2.5.19 This means that the Scottish Government's ambition, as stated in December 2022, is to increase the installed capacity of onshore wind in Scotland by a minimum amount equivalent to about 130% of the entire installed capacity of all current operational onshore wind farms in Scotland in a period of around eight years. The Proposed Development and its contribution must be considered in the context of the sheer scale and urgency of the stated Scottish Government policy position.

Delivering the Government's 20 Giga Watt Ambition for Onshore Wind

- 2.5.20 Chapter 2 of the OWPS entitled 'Delivering on our Ambition for Onshore Wind in Scotland' states that the Scottish Government is to form an Onshore Wind Strategic Leadership Group (SLG) and *"will task this SLG with taking forward the aspirations of this policy statement, and the development of an Onshore Wind Sector Deal"*. This reflects the importance of the onshore wind sector.
- 2.5.21 Section 2.3 refers to a "Vision for Onshore Wind in Scotland" and states that Scottish Renewables, on behalf of the sector in Scotland, has produced a Vision Statement which the Government considers *"to lay the basis of a more detailed sector deal that the SLG will develop"*.
- 2.5.22 The Onshore Wind Sector Deal was finalised and published in September 2023 and is referenced further below.

- 2.5.23 The **Vision Statement** is contained within Annex 5 of the OWPS (page 66). A summary of the Vision for the onshore wind industry in Scotland is a future where:
- > An additional 12 GW of new onshore wind generation is constructed by 2030.
 - > Onshore wind continues to play a key role in decarbonising the power sector, reducing consumer costs and ensuring security of supply whilst playing a key role in the electrification of heat and transport.
 - > The selection of wind farm locations and technologies enables the use of the most productive modern turbines and balances the need to respect biodiversity and natural heritage.
 - > Land use for onshore wind is optimised and combined with other initiatives including reforestation and peatland restoration, as well as providing enhanced access to green space for recreation.
 - > New and repowering projects consistently receive high levels of public support.
 - > High skilled and sustainable jobs are created, including long term jobs in the operational phase.
 - > Material use is optimised, and carbon impact is minimised, through the principles of a circular economy.
 - > Community benefit and shared ownership provides lasting social and economic benefits; and
 - > Onshore wind plays a central role in ensuring a just transition for communities and people.
- 2.5.24 The Vision Statement states (page 67) that:
- “Onshore wind remains vital to meeting this increasing demand, providing fast deployment whilst minimising cost to the consumer. This will be achieved by deploying the most productive modern turbines that are taller than older models, by re-powering existing sites where possible and by maximising the use of our exceptional natural wind resource where environmental effects are acceptable.”*
- Balancing Environmental Considerations and Benefits**
- 2.5.25 Chapter 3 of the OWPS “Environmental Considerations: Achieving Balance and Maximising Benefits” refers to matters relating to specific environmental topics as follows:
- > Shared Land Use;
 - > Peat and Carbon-Rich Soils;
 - > Forestry;
 - > Biodiversity;
 - > Landscape and Visual Amenity; and
 - > Noise.
- 2.5.26 Landscape and Visual Amenity is addressed at Section 3.6 in Chapter 3 of the OWPS with direct cross references to NPF4. Paragraph 3.6.1 states (original emphasis):
- “Meeting our climate targets will require a rapid transformation across all sectors of our economy and society. This means ensuring the right development happens in the right place. Meeting the ambition of a minimum installed capacity of 20 GW of onshore wind in Scotland by 2030 will require taller and more efficient turbines. This will change the landscape.”* (original emphasis)

- 2.5.27 As referenced below, NPF4 policy expressly recognises that significant landscape and visual impacts are to be expected and the OWPS emphasises that as a result there will be changes in Scotland's landscape.
- 2.5.28 Paragraph 3.6.2 of the OWPS, in cross-referencing NPF4, makes it clear that outside of National Parks and National Scenic Areas *"the criteria for assessing proposals have been updated, including stronger weight being afforded to the contribution of the development to the climate emergency, as well as community benefits"*.
- 2.5.29 There is therefore express direction of greater weight being placed to the benefits of the development in terms of how it contributes to tackling the climate emergency. The removal of the Spatial Framework for onshore wind farms, as previously required by Scottish Planning Policy (SPP), also gives rise to fewer locational constraints.
- 2.5.30 Paragraph 3.6.5 makes reference to Landscape Sensitivity Studies and makes it clear that these should not be used in isolation to determine matters of acceptability but can be a useful tool in assessing specific sensitivities within an area. It should be noted that the term is now landscape sensitivity, in comparison with SPP paragraph 162 which encouraged Landscape Capacity Studies. This reflects NatureScot's 2022¹¹ guidance.
- 2.5.31 Paragraph 3.6.3 also makes reference to the NPF4 Policy 11 criteria with regard to energy development stating that *"where impacts are localised and/or appropriate design mitigation has been applied, they will generally be considered to be acceptable"*.

Energy Systems & Regulation

- 2.5.32 Chapter 8 of the OWPS deals with 'Onshore Wind, Energy Systems and Regulation'. Section 8.2 refers to network planning and delivery and states:
- "Delivering our ambition of 20GW of onshore wind by 2030 will create demands on our electricity infrastructure. New developments will need to connect quickly to Scotland's distribution and transmission networks. Networks must be able to invest quickly and ahead of need in order to ensure swift and efficient connections for onshore wind developments"*.
- 2.5.33 The Proposed Development could be built out within the 2030 target period. It should also be noted that NPF4 Policy 11 advises that grid capacity should not constrain renewable energy development, therefore any challenges facing developers in getting connected, including delays, are not matters for the planning decision makers to be concerned with.
- 2.5.34 Section 8.4 of the OWPS refers to security of supply and storage potential. Paragraph 8.4.1 recognises that onshore wind can play a greater part in helping to address the substantial challenges of maintaining security of supply and network resilience in a decarbonised electricity system.

Battery Storage

- 2.5.35 The OWPS makes specific reference to battery storage at Section 8.4 (Security of Supply and Storage Potential) and it states (paragraph 8.4.1) that the Scottish Government believes that: *"Onshore wind can play a greater part in helping to address the substantial challenges of maintaining security of supply and network resilience in a decarbonised electricity system"*.
- 2.5.36 At paragraph 8.4.5 the OWPS states that there has been an increase on onshore wind development co-located with battery storage facilities and:
- "as we continue to progress towards the decarbonisation of our energy system, battery storage will be more and more prevalent. On site battery storage not only reduces pressures from the grid, but enables more locally focused energy provision, and reduces costs to consumers."*

¹¹ NatureScot, Landscape Sensitivity Assessment Guidance, paragraph 8 (2022).

The Scottish Government will continue to support the co-location of both battery storage and hydrogen production facilities with onshore wind developments to help balance electricity demand and supply, add resilience to the energy system and support the production of renewable hydrogen to meet our future demands.”

OWPS Conclusions

2.5.37 Page 49 of the OWPS sets out overall conclusions and these include *inter alia* the following key points:

- > Deployment of onshore wind is “*mission critical for meeting our climate targets*”.
- > As an affordable and reliable source of electricity generation, “*we must continue to maximise our natural resource and deliver net zero in a way that is fully aligned with, and continues to protect our natural heritage and native flora and fauna*”.
- > A renewed commitment to this technology will ensure we keep “*leading the way in onshore wind deployment and support within the UK*”.
- > The Scottish Government has established “*a clear expectation of delivery with our ambition for a **minimum installed capacity of 20GW** of onshore wind in Scotland by 2030 and providing a vehicle for that delivery through the creation of [the] Onshore Wind Strategic Leadership Group*” (emphasis added).

2.5.38 It is stated that “*Onshore wind will remain an essential part of our energy mix and climate change mitigation efforts, but we are also in a nature crisis. Onshore wind farms must strike the right balance in how we care for and use our land...*”.

2.5.39 The term “mission critical” is strong language and indicates onshore wind is crucial and extremely important to the attainment of the Government’s policy and legislative objectives. This is fundamentally different policy language to that contained within National Planning Framework 3 (NPF3) and SPP.

2.6 The Draft Energy Strategy and Just Transition Plan

2.6.1 The Scottish Government published a new Draft ‘Energy Strategy and Just Transition Plan’ entitled ‘Delivering a fair and secure zero carbon energy system for Scotland’ on 10 January 2023. The new Strategy is to replace the one previously published in 2017. The consultation period ended in April 2023. As a draft document it can only be afforded limited weight. The draft document is however consistent with the adopted policy set out in the OWPS and NPF4 and the identification of the 2020s as a crucial decade for the large-scale delivery of renewable energy projects supporting urgent transition to net zero.

2.6.2 The Ministerial Foreword states:

“The imperative is clear: in this decisive decade, we must deliver an energy system that meets the challenge of becoming a net zero nation by 2045, supplies safe and secure energy for all, generate economic opportunities, and builds a just transition...”

The delivery of this draft Energy Strategy and Just Transition Plan will reduce energy costs in the long term and reduce the likelihood of future energy cost crises....

It is also clear that as part of our response to the climate crisis we must reduce our dependence on oil and gas and that Scotland is well positioned to do so in a way that ensures we have sufficient, secure and affordable energy to meet our needs, to support economic growth and to capture sustainable export opportunities....

For all these reasons, this draft Strategy and Plan supports the fastest possible just transition for the oil and gas sector in order to secure a bright future for a revitalised North Sea energy sector focused on renewables.”

- 2.6.3 The Foreword adds that the draft Strategy sets out key ambitions for Scotland's energy future including:
- > More than 20 GW of additional renewable electricity on and offshore by 2030.
 - > Accelerated decarbonisation of domestic industry, transport and heat.
 - > Generation of surplus electricity, enabling export of electricity and renewable hydrogen to support decarbonisation across Europe.
 - > Energy security through development of our own resources and additional energy storage.
 - > A just transition by maintaining or increasing employment in Scotland's energy production sector against a decline in North Sea production.
- 2.6.4 The draft Strategy states (page 7, Executive Summary) that the vision for Scotland's energy system is:
- "...that by 2045 Scotland will have a flourishing, climate friendly energy system that delivers affordable, resilient and clean energy supplies for Scotland's households, communities and business. This will deliver maximum benefit for Scotland, enabling us to achieve a wider climate and environmental ambitions, drive the development of a wellbeing economy and deliver a just transition for our workers, businesses, communities and regions.*
- In order to deliver that vision, this Strategy sets out clear policy positions and a route map of actions with a focus out to 2030".*
- 2.6.5 A fundamental part of the Strategy is expanding the energy generation sector. The Executive Summary states (page 8) that Scotland's renewable resources mean that:
- "...we can not only generate enough cheap green electricity to power Scotland's economy, but also export electricity to our neighbours, supporting jobs here in Scotland and the decarbonisation ambitions of our partners.*
- We are setting an ambition of more than 20 GW of additional low cost renewable electricity generation capacity by 2030, including 12 GW of onshore wind....*
- An additional 20 GW of renewable generation will more than double our existing renewable generation capacity by 2030....."*
- 2.6.6 In terms of policy and onshore wind, the Strategy cross refers to NPF4 and the recently published OWPS and reiterates the new ambition for a deployment of a minimum further 12 GW of onshore wind by 2030.
- 2.6.7 Section 3.1.2 (page 64) states:
- "Scotland will embrace the opportunity to increase onshore wind capacity through turbine improvements. Taller and more efficient turbines can be deployed at both new developments and when considering the repowering of existing sites, providing significantly increased capacity, often without increasing the footprint of an existing site".*
- Recognition of the role of Battery Storage**
- 2.6.8 The Draft Strategy reiterates the support for energy storage set out in NPF4 (page 130). It states that:
- "Batteries can be combined to provide energy storage: In a domestic setting supporting the energy efficiency of individual homes; In communities and neighbourhoods, supporting the energy efficiency of the local low energy network; In strategic locations and through aggregating a large number of fixed and vehicle batteries to support regional energy and grid balancing a high energy network".*

2.6.9 Furthermore, it adds:

“Utility scale battery storage offers fast responding, dispatchable power when required. As of September 2021, only 124 MW of the total 864 MW of energy storage was provided by Battery Energy Storage Systems (BESS) capacity installed in Scotland. However, there is a further 2.1GW that has secured planning permission. Typically, these systems use lithium-ion technology, and only contain energy to dispatch full power continuously for a short number of hours. They also provide a number of ancillary services required to maintain stability within the electricity networks”. (Page 130)

2.6.10 The Draft Strategy further recognises the potential contribution BESS can make to achieving Net Zero in summarising the key areas where it is considered that the UK Government needs to take action to support the delivery of the strategy with particular regard to energy system flexibility stating:

“We urge the UK Government to make ancillary markets more accessible for Battery Energy Storage Systems (BESS) and other low carbon technologies ahead of fossil fuel powered alternatives”.

2.7 The Onshore Wind Sector Deal

2.7.1 The Onshore Wind Sector Deal (the ‘Sector Deal’) for Scotland was finalised in September 2023. It sets out a series of key measures which will support the Scottish Government in reaching its target of 20 GW of onshore wind by 2030. It describes how the Scottish Government, and the onshore wind sector will work together to deliver onshore wind farms quickly, sustainably and to the benefit of local communities and with the overall objective of attaining Scotland’s net zero target.

2.7.2 The foreword sets out that:

“The Government is committed to working with developers and stakeholders, understanding the operational barriers to delivering onshore wind projects and setting out processes to help reduce them. We also commit to speeding up consenting decisions, working with planning authorities and statutory consultees to increase skills and resources, as well as streamlining approaches.

Jointly, we will work together on ensuring a balance is struck between onshore wind and the impacts on land use and the environment. We will collaborate to enable information to be collected and shared from monitoring and evidence purposes, and we jointly want to capitalise on the unique opportunity for Scotland to become a world leader in decommissioning, re-manufacturing and recycling of onshore wind assets.”

2.7.3 It further adds that:

“The Sector Deal is more than just a document; it is a testament to our determination, a celebration of our potential, and a promise to future generations. Let us work together to usher in an era where innovation, sustainability, and prosperity converge, as we power Scotland’s greener future through the boundless energy of onshore wind.”

2.7.4 The matters within the Sector Deal to be actioned by a collaborative approach and also by specific actions from the sector and Government relate to:

- > Supply chain, skills and the circular economy;
- > Community and benefits;
- > Land use and the environment;
- > Planning;
- > Legislative and regulatory actions; and

> Technical actions.

2.7.5 In terms of land use and the environment, the Sector Deal sets out that NPF4 Policy 1 makes it clear that significant weight needs to be given to the global climate and nature crisis and that “New onshore wind projects in Scotland will enhance biodiversity and optimise land use and environmental benefits” (page 11).

2.7.6 It further adds that:

“Balancing the need for more wind farms with the safeguards defined in NPF4 will be a crucial aspect of achieving the 2030 onshore wind ambition. Scotland will continue to be a world leader in responsible onshore wind development, demonstrating how onshore wind can co-exist with a diversity of species, sensitive habitats, peatland, carbon rich soils and forestry, ensuring positive outcomes for the climate and nature.”

2.7.7 In terms of planning, a key matter is that there is an ambition to reduce the time it takes to determine Section 36 applications. The Sector Deal also states (page 13) in relation to planning that:

“The ambition of 20 GW of installed onshore wind capacity by 2030 will require a significant number of new sites, the repowering and extension of existing sites and the realisation of unbuilt consented sites. Meeting this ambition will require the determination of applications to be made much more quickly than in recent years.”

2.8 Conclusions on the Renewable Energy Policy & Legislative Framework

2.8.1 The Applicant’s position is that the Proposed Development is strongly supported by the current renewable energy policy and legislative framework.

2.8.2 The trajectory, in terms of the scale and pace of action required to reduce emissions, grows ever steeper than before and it is essential that rapid progress is made through the 2020s. The rate of emission reductions must increase otherwise the legally binding target of an interim 75% reduction of GHG emissions by 2030 will not be met.

2.8.3 It is clear from the UK Energy White Paper and the forecasts by the CCC that electricity demand is expected to grow substantially (scenarios vary but potentially by a factor of three or four) as carbon intensive sources of energy are displaced by electrification of other industry sectors, particularly heat and transport.

2.8.4 Decisions through the planning system must be responsive to this changed position. Decision makers can do this by affording substantial weight to the energy policy objectives articulated above, in the planning balance. This is now very evident in the recent Section 36 decisions taken following adoption of NPF4. This is further referenced below in Chapter 6 where some quotations are drawn from recent decisions.

2.8.5 In the most recent renewable energy policy documents referred to, there is a consistent and what might be termed a ‘green thread’ which ties a number of related policy matters together: namely the urgent challenge of Net Zero and the need to substantially increase renewable capacity, notably onshore wind.

2.8.6 Overall, the Draft Energy Strategy forms part of the new policy approach alongside the new OWPS, the recent Sector Deal and the adopted NPF4. These documents confirm the Scottish Government’s policy objectives and related targets, reaffirming the crucial role that onshore wind will play in response to the climate crisis which is at the heart of all these policies.

3. The Benefits of the Proposed Development

3.1 The Benefits: Summary

3.1.1 This Chapter summarises the benefits that would arise from the Proposed Development.

Renewable Energy Generation

- > With an overall installed capacity in the region of **158 MW** (including approximately 50 MW of battery storage), the Proposed Development would make a valuable and nationally important contribution to the attainment of the UK and Scottish Government policies of encouraging renewable energy developments; and in turn contribute to the achievement of UK and Scottish Government targets. As explained, there is now a distinct shift in policy emphasis from the displacement of higher carbon electricity generation to extending the use of electricity as the critical energy response to the Climate Emergency.
- > The UK legally binding target of net zero GHG emissions by 2050 and the Scottish Government target of a 75% reduction of such emissions by 2030 and net zero by the earlier date of 2045 are major challenges. The Scottish Government has made it clear that onshore wind plays a vital and indeed “*mission critical*” role in the attainment of future targets in relation to helping to combat the crisis of global heating.
- > The earlier that steps towards decarbonisation are introduced, the greater their contribution to limiting climate change. The Proposed Development’s delivery of renewable capacity in the near term will have a disproportionately higher benefit than the same capacity delivered later.
- > Based on the Proposed Development’s location and estimated capacity factor, the annual indicative total electricity output for the site would be 411 Giga-watt hours (GWh) per annum¹². The Proposed Development would generate enough electricity to power approximately 124,899 average Scottish households¹³.

Emissions Savings

- > Appendix 14.1 of the EIAR makes reference to the carbon reduction benefits of the Proposed Development. The carbon balance calculations establish that the Proposed Development could result in the saving of approximately 412,368 tonnes of carbon dioxide equivalent emissions per annum if a fossil fuel mix of electricity generation were used as the counterfactual.

3.1.2 It is expected to take 0.5 years for the carbon loss (again on a fossil fuel basis) during wind farm construction (including through turbine manufacture, construction of foundations and excavation of peat) to be ‘paid back’ by the carbon saved through generating electricity from a renewable energy source.

Security of Supply

- > The British Energy Security Strategy has been referenced. It provides an increase to the requirements for both the scale and the urgency of delivery of new low carbon generation

¹² Calculated from 108 MW x 8760 (number of hours per year) x 0.435 (expected onshore wind load factor for the Proposed Development).

¹³ Based on average annual Scottish household electricity consumption of 3.295 MWh, from BEIS Subnational Electricity and Gas Consumption Statistics, Regional and Local Authority, Great Britain, 2021 (UK Government, December 2022)

capacity, by refocussing the requirement for low-carbon power for reasons of national security of supply and affordability, as well as for decarbonisation.

- > With this context, the attractiveness of onshore wind, a proven technology which will deliver significant benefits to consumers through decarbonisation, security of supply and affordability this decade, becomes clear, especially when co-located with battery storage.
- > The Proposed Development, if consented, would provide a valuable contribution to security of supply for the north-east region, Scotland and for the wider Great Britain (GB) area. Consenting the Proposed Development, would contribute to an adequate and dependable Scottish and GB generation mix, through enabling the generation of more low carbon power from indigenous and renewable resources, and would enable the proposed development to make a significant contribution to Scottish and wider UK energy security and decarbonisation needs.

Battery Storage

- > In Scotland in particular, there is, as explained in the previous Chapter, very strong support for renewable generation, which is inherently intermittent. The BESS element of the Proposed Development (circa 50 MW) would therefore help to smooth over peaks and troughs in electricity supply, being able to respond at short notice to requests from National Grid to generate, such as periods when renewable sources are not generating, are constrained off, or fossil fuel plants are unexpectedly offline. There is a clear requirement to balance the peaks and troughs associated with electricity supply and demand, to manage the strain on the transmission and distribution networks.
- > The Proposed Development would be able to respond at short notice to requests from National Grid to balance the network, such as periods when renewable sources are not generating, and backup sources are required to counteract the intermittency of renewable sources such as wind energy. The flexibility and support for existing renewable sources is vital to ensure further use and deployment of renewable energy sources throughout Scotland. The benefits of co-locating wind energy generation and BESS has been set out in the previous Chapter with reference to the OWPS and the Draft Energy Strategy and Just Transition Plan.

Economic & Community Socio-Economic Benefits

- > The Proposed Development would support jobs during construction and during operation across the Scottish economy. Overall, the socio-economic effects of the capital investment, employment and GVA to the economy would be beneficial (short term during construction, long term during operation).
- > Chapter 13 of the EIAR (Socio Economics, Recreation and Tourism) addresses socio economic effects. In addition, **Appendix 1** to this Statement contains a 'Socio-Economic Impact Assessment' of the Proposed Development which has been prepared by Biggar Economics. Key benefits would include the following:
 - The Proposed Development would involve an estimated overall capital investment of approximately £128.5 million.
 - The assessment of the economic impacts associated the Proposed Development estimated that the expenditure associated with development and construction activity could generate:
 - £10.2 million Gross Value Added (GVA) and 135 jobs in Midlothian; and
 - £37.2 million GVA and 543 jobs in Scotland.
 - The expenditure required for the operations and maintenance of the Proposed Development could generate each year:

- £1.1 million GVA and nine jobs in Midlothian; and
- £2.3 million GVA and 25 jobs across Scotland.
- A large proportion of the direct benefits associated with the Proposed Development are likely to be focused around the construction phase, as this will provide the largest increase in economic activity. The operations and maintenance phase in contrast, while over a longer period of time, will involve a different type of work and therefore does not offer as many direct economic benefits to Scotland and Midlothian.
- The direct socio-economic impacts will give way to wider economic impacts. This is due to 'ripple' effects created throughout the wider supply chain of the Proposed Development and the local and national economies.

Local supply chain opportunities.

- The Applicant will host 'Meet the Buyer' events and suitably qualified local firms invited to bid for different aspects of construction, such as foundation laying and electrical works. Construction materials are normally sourced locally (i.e. within the Lothians). The Applicant has committed to prioritise local companies in the provision of contracts associated with the Proposed Development.

Community Benefits & Shared Ownership

- The intended community benefit package for the Proposed Development includes a community benefit fund and an opportunity for the local community to invest in the Proposed Development once operational. Income streams from this community benefits package could provide long term revenue to support local community initiatives.
- Depending on the initiatives and projects brought forward by the local community these could provide positive benefits to the local economy, local facilities and the general quality of life for local residents.
- The Applicant commits to a community benefit fund of up to £0.5 million per annum throughout the operational period of the Proposed Development.
- As part of this offering, the Applicant is consulting on a unique Local Electricity Discount Scheme (LEDS) which offers an annual discount to the electricity bills of Midlothian residents.
- The Applicant is also willing to explore the possibility of enabling the local community to purchase a share in the project, in line with Scottish Government aspirations on community ownership.

Biodiversity Enhancement

- > Biodiversity enhancements are proposed by way of an Outline Biodiversity Enhancement and Management Plan (OBEMP¹⁴). It details the proposed enhancement measures and aims of prescribed habitat measures looking to significantly improve the biodiversity associated with the site from the baseline conditions.
- > The OBEMP will be developed as an iterative document and implemented during the construction and operation phases.

¹⁴ Technical Appendix 8.5 of the EIAR.

4. Appraisal against NPF4

4.1 Introduction

4.1.1 NPF4 was approved by resolution of the Scottish Parliament on 11 January 2023 and came into force at 9am on 13 February 2023.

4.1.2 A Chief Planner's Letter was issued on 8 February 2023 entitled 'Transitional Arrangements for National Planning Framework 4'. It contains advice intended to support consistency in decision making ahead of new style Local Development Plans being in place.

4.1.3 The Letter confirms with regard to the Development Plan that from 13 February, NPF3 and Scottish Planning Policy (SPP) no longer represent Scottish Ministers' planning policy and should not form the basis for or be a consideration to be taken into account when determining planning applications.

4.2 Development Management

4.2.1 For the purposes of Section 36 decision making, acknowledging that Section 25 of the 1997 Act is not engaged, NPF4 in its approved form is a significant material consideration in the overall decision-making process.

4.2.2 Section 13 of the Planning (Scotland) Act 2019 Act amends Section 24 of the 1997 Act regarding the meaning of the statutory 'development plan', such that for the purposes of the 1997 Act, the Development Plan for an area is taken as consisting of the provisions of:

- > The National Planning Framework; and
- > Any Local Development Plan (LDP).

4.2.3 Therefore, the statutory Development Plan covering the site consists of NPF4 and the Midlothian Local Development Plan (adopted 07 November 2017) (the 'MLDP').

4.2.4 The publication of NPF4 coincided with the implementation of certain parts of the 2019 Act. A key provision is that in the event of any incompatibility between a provision of NPF4 and a provision of an LDP, then whichever of them is the later in date will prevail. That will include where an LDP is silent on an issue that is now provided for in NPF4.

4.2.5 Section 13 of the 2019 Act amends Section 24 of the Town and Country Planning (Scotland) Act 1997 (the 1997 Act) to provide that:

"In the event of any incompatibility between a provision of the National Planning Framework and a provision of a local development plan, whichever of them is the later in date is to prevail."

4.2.6 In terms of emerging LDPs prepared prior to the adoption and publication of NPF4, the Chief Planner's Letter of 08 February states that it may be that there are opportunities to reconcile identified inconsistencies with NPF4 through the Examination process.

4.2.7 The Chief Planner's Letter also states with regard to Supplementary Guidance associated with LDPs which were in force before 12 February 2023 (the date on which Section 13 of the 2019 Act came into force) that they will continue to be in force and be part of the Development Plan.

4.3 How NPF4 is to be used

4.3.1 Annex A (page 94) of NPF4 explains how it is to be used. It states:

"The purpose of planning is to manage the development and use of land in the long-term public interest ... Scotland in 2045 will be different. We must embrace and deliver radical change so

we can tackle and adapt to climate change, restore biodiversity loss, improve health and wellbeing, reduce inequalities, build a wellbeing economy and create great places."

4.3.2 Annex A states that NPF4 is required by law to set out the Scottish Ministers' policies and proposals for the development and use of land. It adds:

"It plays a key role in supporting the delivery of Scotland's national outcomes and the United Nations Sustainable Development Goals¹⁵. NPF4 includes a long-term spatial strategy to 2045."

4.3.3 NPF4 contains a spatial strategy and Scottish Government development management policies to be applied in all consenting decisions, and it identifies national developments which are aligned to the strategic themes of the Government's Infrastructure Investment Plan¹⁶ (IIP).

4.3.4 NPF4 therefore for the first time, introduces centralised development management policies which are to be applied Scotland wide. It also provides guidance to Planning Authorities with regard to the content and preparation of LDPs.

4.3.5 Annex A adds that NPF4 is required by law to contribute to six outcomes. These relate to meeting housing needs, health and wellbeing, population of rural areas, addressing equality and discrimination and also, of particular relevance to the Proposed Development, *"meeting any targets relating to the reduction of emissions of greenhouses gases, and, securing positive effects for biodiversity"*.

4.4 The National Spatial Strategy – Delivery of Sustainable Places

4.4.1 Part 1 of NPF4 sets out the Spatial Strategy for Scotland to 2045 based on six spatial principles which are to influence all plans and decisions. The introductory text to the Spatial Strategy starts by stating (page 3):

"The world is facing unprecedented challenges. The global climate emergency means that we need to reduce greenhouse gas emissions and adapt to the future impacts of climate change."

4.4.2 The principles are stated as playing a key role in delivering the United Nation's Sustainable Development Goals and the Scottish Government's National Performance Framework¹⁷.

4.4.3 The Spatial Strategy is aimed at supporting the delivery of:

- > 'Sustainable Places': *"where we reduce emissions, restore and better connect biodiversity"*;
- > 'Liveable Places': *"where we can all live better, healthier lives"*; and
- > 'Productive places': *"where we have a greener, fairer and more inclusive wellbeing economy"*.

4.4.4 Page 6 of NPF4 addresses the delivery of sustainable places. Reference is made to the consequences of Scotland's changing climate, and it states, *inter alia*:

"Scotland's Climate Change Plan, backed by legislation, has set our approach to achieving net zero emissions by 2045, and we must make significant progress towards this by 2030...Scotland's Energy Strategy will set a new agenda for the energy sector in anticipation of continuing innovation and investment."

¹⁵ The 17 UN Sustainable Development Goals are set out at page 95 of NPF4 and include *inter alia* 'affordable and clean energy' and 'climate action'.

¹⁶ The Scottish Government's five-year Infrastructure Investment Plan (2021-22 to 2025-26) was published in February 2021. It set out a vision for Scotland's future infrastructure in order to support and enable an inclusive net zero emissions economy.

¹⁷ The Scottish Government National Performance Framework sets out 'National Outcomes' and measures progress against a range of economic, social and environmental 'National Indicators'.

- 4.4.5 The new Energy Strategy and Just Transition Plan for Scotland (as referenced in NPF4) was published as a consultative draft on 10 January 2023 (see below).
- 4.4.6 The National Spatial Strategy in relation to 'sustainable places' is described (page 7) as follows:
"Scotland's future places will be net zero, nature-positive places that are designed to reduce emissions and adapt to the impacts of climate change, whilst protecting, recovering and restoring our environment.
Meeting our climate ambition will require a rapid transformation across all sectors of our economy and society. This means ensuring the right development happens in the right place.
Every decision on our future development must contribute to making Scotland a more sustainable place. We will encourage low and zero carbon design and energy efficiency, development that is accessible by sustainable travel, and expansion of renewable energy generation."
- 4.4.7 Six National Developments (NDs) support the delivery of sustainable places, one being 'Strategic Renewable Electricity Generation and Transmission Infrastructure'.
- 4.4.8 A summary description of this ND is provided at page 7 of NPF4 as follows:
"Supports electricity generation and associated grid infrastructure throughout Scotland, providing employment and opportunities for community benefit, helping to reduce emissions and improve security of supply".
- 4.4.9 Page 8 of NPF4 sets out 'Cross-cutting Outcome and Policy Links' with regard to reducing greenhouse gas emissions. It states:
"The global climate emergency and the nature crisis have formed the foundations for the spatial strategy as a whole. The regional priorities share opportunities and challenges for reducing emissions and adapting to the long-term impacts of climate change, in a way which protects and enhances our natural environment."
- 4.4.10 A key point in this statement is that the climate emergency and nature crisis are expressly stated as forming the foundations of the national spatial strategy. Recognising that tackling climate change and the nature crisis is an overriding imperative which is key to the outcomes of almost all policies within NPF4.

4.5 National Developments

Overview

- 4.5.1 Page 97 of NPF4 sets out that 18 National Developments have been identified. These are described as:
"significant developments of national importance that will help to deliver the spatial strategy ... National development status does not grant planning permission for the development and all relevant consents are required".
- 4.5.2 It adds that:
"Their designation means that the principle for development does not need to be agreed in later consenting processes, providing more certainty for communities, businesses and investors. ... In addition to the statement of need at Annex B, decision makers for applications for consent for national developments should take into account all relevant policies".
- 4.5.3 Annex B of NPF4 sets out the various NDs and related Statements of Need. It explains that NDs are significant developments of national importance that will help to deliver the Spatial Strategy. It states (page 99) that:

"The statements of need set out in this annex are a requirement of the Town and Country Planning (Scotland) Act 1997 and describe the development to be considered as a national development for consent handling purposes".

National Development 3 “Strategic Renewable Electricity Generation and Transmission Infrastructure”

4.5.4 Page 103 of NPF4 describes ND3 and it states:

"This national development supports renewable electricity generation, repowering, and expansion of the electricity grid.

A large and rapid increase in electricity generation from renewable sources will be essential for Scotland to meet its net zero emissions targets. Certain types of renewable electricity generation will also be required, which will include energy storage technology and capacity, to provide the vital services, including flexible response, that a zero carbon network will require. Generation is for domestic consumption as well as for export to the UK and beyond, with new capacity helping to decarbonise heat, transport and industrial energy demand. This has the potential to support jobs and business investment, with wider economic benefits.

The electricity transmission grid will need substantial reinforcement including the addition of new infrastructure to connect and transmit the output from new on and offshore capacity to consumers in Scotland, the rest of the UK and beyond. Delivery of this national development will be informed by market, policy and regulatory developments and decisions."

4.5.5 The location for ND3 is set out as being all of Scotland and in terms of need it is described as:

"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."

4.5.6 Reference is made to the designation and classes of development which would qualify as ND3, and it states in this regard:

"A development contributing to ‘Strategic Renewable Electricity Generation and Transmission’ in the location described, within one or more of the Classes of Development described below and that is of a scale or type that would otherwise have been classified as ‘major’ by ‘The Town and Country Planning (Hierarchy of Developments) (Scotland) Regulations 2009’, is designated a national development:

(a) on and off shore electricity generation, including electricity storage, from renewables exceeding 50 megawatts capacity;

(b) new and/or replacement upgraded on and offshore high voltage electricity transmission lines, cables and interconnectors of 132kv or more; and

(c) new and/or upgraded Infrastructure directly supporting on and offshore high voltage electricity lines, cables and interconnectors including converter stations, switching stations and substations." (emphasis added)

4.5.7 As regards the Proposed Development, having an installed capacity of over 50 MW, it satisfies the minimum threshold set for a ND therefore it would have national development status. The Proposed Development is of national importance for the delivery of the national Spatial Strategy.

4.5.8 The Strategy requires a “large and rapid increase” in electricity generation from renewables and the National Spatial Strategy makes it clear (NPF4, page 6) that “we must make significant progress” by 2030.

4.5.9 The Proposed Development could make a meaningful contribution to targets within this key timescale and that is a very important consideration.

4.6 National Planning Policy

4.6.1 Part 2 of NPF4 (page 36) addresses national planning policy by topic with reference to three themes formulated with the aim of delivering sustainable, liveable and productive places.

4.6.2 In terms of planning, development management and the application of the national level policies, NPF4 states:

"The policy sections are for use in the determination of planning applications. The policies should be read as a whole. Planning decisions must be made in accordance with the development plan, unless material considerations indicate otherwise. It is for the decision maker to determine what weight to attach to policies on a case by case basis. Where a policy states that development will be supported, it is in principle, and it is for the decision maker to take into account all other relevant policies".

4.6.3 In terms of "sustainable places" the relevant policies to the Proposed Development include the following:

- > Policy 1: Tackling the Climate and Nature Crisis;
- > Policy 3: Biodiversity;
- > Policy 4: Natural Places;
- > Policy 5: Soils;
- > Policy 6: Forestry, Woodland and Trees;
- > Policy 7: Historic Assets and Places;
- > Policy 11: Energy;
- > Policy 22: Flood Risk and Water Management; and
- > Policy 33: Minerals.

4.6.4 These policies are addressed below.

4.6.5 The Chief Planner's Letter of 08 February 2023 provides advice in relation to applying NPF4 policy. It states that the application of planning judgement to the circumstances of an individual situation remains essential for all decision making, informed by principles of proportionality and reasonableness. It states:

"It is important to bear in mind NPF4 must be read and applied as a whole. The intent of each of the 33 policies is set out in NPF4 and can be used to guide decision making. Conflicts between policies are to be expected. Factors for and against development will be weighed up in the balance of planning judgement."

4.6.6 The Letter adds:

"It is recognised that it may take some time for planning authorities and stakeholders to get to grips with the NPF4 policies, and in particular the interface with individual LDP policies. As outlined above, in the event of any incompatibility between the provision of NPF and the provision of an LDP, whichever of them is the later in date is to prevail. Provisions that are contradictory or in conflict would be likely to be considered incompatible".

4.7 NPF4 Policy 1: Tackling the Climate and Nature Crisis

Policy 1 & Principles

4.7.1 The intent of Policy 1 is "to encourage, promote and facilitate development that addresses the global climate emergency and nature crisis".

4.7.2 **Policy 1** directs decision makers that “*when considering all development proposals significant weight will be given to the global climate and nature crises.*”

4.7.3 This is a radical departure from the usual approach to policy and weight, and clearly denotes a step change in planning policy response to climate change. The matter of weight is no longer left entirely to the discretion of the decision maker. Significant weight should therefore be attributed to the Proposed Development given it would be consistent with the intent of Policy 1 and would make a positive contribution by helping to attain its outcome of net zero.

4.7.4 The Chief Planner’s Letter of 08 February 2023 refers to Policy 1. It states:

“This policy prioritises the climate and nature crises in all decisions. It should be applied together with the other policies in NPF4. It will be for the decision maker to determine whether the significant weight to be applied tips the balance in favour for, or against a proposal on the basis of its positive or negative contribution to the climate and nature crises.”

4.7.5 This statement from the Chief Planner confirms that the decision maker must apply significant weight, but it is for the decision maker to decide if it is for or against the proposal. The Proposed Development’s contribution is positive and therefore the significant weight in this case is for the Proposed Development.

4.7.6 The term “Tackling” the respective crises in Policy 1 is also important – this means that decision makers should ensure an urgent and positive response to these issues and take positive action. Furthermore, NPF4 (page 8) refers to cross cutting outcomes and states with regard to Policy 1 that the policy gives significant weight “*to the global climate emergency in order to ensure that it is recognised as a priority in all plans and decisions.*”

The Application of Policy 1

4.7.7 Given the nature of the Proposed Development it would make a valuable contribution in relation to targets. It will directly further the policy intent and outcomes of Policy 1 and should be afforded significant positive weight in terms of tackling the climate and nature crises. The specific emission and carbon saving benefits (set out in Chapter 3 above) also need to be recognised in the context of NPF4 Policy 11 (Energy) which requires the contribution that a development would make to targets to be taken into account.

4.7.8 A further important point is the need to recognise that the greatest threat to biodiversity is climate change. The principal and essential benefit of the Proposed Development is a significant contribution of renewable energy, to facilitate the earliest possible decarbonisation of the energy system and the achievement of “net zero” no later than 2045, in accordance with the objectives of the Climate Change (Scotland) Act 2009 (as amended). The purpose of net zero is to protect biodiversity and the earlier it can be achieved, the greater the benefits to biodiversity.

4.7.9 The Reporter’s comments on this particular policy in the Sanquhar II Inquiry Report¹⁸ are informative. At paragraph 2.48 of the Supplementary Report, the Reporter addresses NPF4 Policy 1 and states that:

“tackling the nature crisis is required to be given significant weight alongside the climate crisis. There is no indication that one strand should be given greater priority over the other. That does not necessarily mean that an individual proposal must be shown to respond to both crises in equal measure, however. The two matters are also inextricably linked, with the nature crisis being, in part, exacerbated by climate change.”

4.7.10 Furthermore, as explained below with reference to NPF4 Policy 3, biodiversity enhancement measures are proposed as part of the Proposed Development.

¹⁸ Sanquhar II Wind Farm, Section 36 Decision dated 31 August 2023, Supplementary Report of Inquiry dated 20 February 2023 (Case Reference WIN-170-2006) and Scottish Ministers’ Decision dated 31 August 2023.

4.8 NPF4 Policy 11: Energy

Policy 11 & Principles

4.8.1 For the consideration of wind energy development, Policy 11 'Energy' (page 53) is the lead policy. Policy 11's intent is set out as:

"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 emission technologies including hydrogen and carbon capture utilisation and storage."

4.8.2 Policy Outcomes are identified as: *"expansion of renewable, low carbon and zero emission technologies"*.

4.8.3 Policy 11 is as follows:

"a) Development proposals for all forms of renewable, low-carbon and zero emissions technologies will be supported. These include:

- i. wind farms including repowering, extending, expanding and extending the life of existing wind farms;*
- ii. enabling works, such as grid transmission and distribution infrastructure;*
- iii. energy storage, such as battery storage and pumped storage hydro;*
- iv. small scale renewable energy generation technology;*
- v. solar arrays;*
- vi. proposals associated with negative emissions technologies and carbon capture; and*
- vii. proposals including co-location of these technologies.*

b) Development proposals for wind farms in National Parks and National Scenic Areas will not be supported.

c) Development proposals will only be supported where they maximise net economic impact, including local and community socio-economic benefits such as employment, associated business and supply chain opportunities.

d) Development proposals that impact on international or national designations will be assessed in relation to Policy 4.

e) In addition, project design and mitigation will demonstrate how the following impacts are addressed:

- i. impacts on communities and individual dwellings, including, residential amenity, visual impact, noise and shadow flicker;*
- ii. significant landscape and visual impacts, recognising that such impacts are to be expected for some forms of renewable energy. Where impacts are localised and/ or appropriate design mitigation has been applied, they will generally be considered to be acceptable;*
- iii. public access, including impact on long distance walking and cycling routes and scenic routes;*
- iv. impacts on aviation and defence interests including seismological recording;*

- v. impacts on telecommunications and broadcasting installations, particularly ensuring that transmission links are not compromised;*
- vi. impacts on road traffic and on adjacent trunk roads, including during construction;*
- vii. impacts on historic environment;*
- viii. effects on hydrology, the water environment and flood risk;*
- ix. biodiversity including impacts on birds;*
- x. impacts on trees, woods and forests;*
- xi. proposals for the decommissioning of developments, including ancillary infrastructure, and site restoration;*
- xii. the quality of site restoration plans including the measures in place to safeguard or guarantee availability of finances to effectively implement those plans; and*
- xiii. cumulative impacts.*

In considering these impacts, significant weight will be placed on the contribution of the proposal to renewable energy generation targets and on greenhouse gas emissions reduction targets.

Grid capacity should not constrain renewable energy development. It is for developers to agree connections to the grid with the relevant network operator. In the case of proposals for grid infrastructure, consideration should be given to underground connections where possible.

f) Consents for development proposals may be time-limited. Areas identified for wind farms are, however, expected to be suitable for use in perpetuity”.

- 4.8.4 The intent and desired outcome of the policy is expressly clear – the expansion of renewable energy, through encouragement, promotion and facilitation, all of which the Proposed Development will help to deliver.
- 4.8.5 The wording of Policy 11 Paragraph (a)(i) makes it clear that the policy supports new wind farms and paragraph (vii) provides clear support for proposals including co-location of the wind farms and energy storage technology.

Differences with Scottish Planning Policy

- 4.8.6 **Paragraph a) of Policy 11** states a position of express “support” for wind farm development.
- 4.8.7 The development management topic provisions within Policy 11 largely reflect those of the former SPP, but there are some significant differences, namely:
 - > the role of renewable energy generation and greenhouse gas emissions reduction targets and a specific instruction to decision makers to apply significant weight to that consideration;
 - > wind farms will not be supported in National Parks or National Scenic Areas but outside of these areas the policy is one, as noted, of “general support”. There is no longer any ‘spatial framework’ approach. This is a fundamental shift in approach;
 - > the statement that significant landscape and visual impacts are “to be expected” i.e. they are to be treated as normal, and an understood and tolerable outcome of the policy objective;
 - > “generally” acceptable development in terms of landscape and visual impacts is where landscape impacts are “*localised and / or appropriate design mitigation has been applied*”;

- > renewed emphasis on economic benefits and the need to maximise economic impact including local and community socio-economic benefits; and
- > the omission of references to tourism which is likely to be an acceptance of the lack of impact on tourism from wind farms.

The application of Policy 11

- 4.8.8 **Paragraph c) of Policy 11** requires socio-economic benefits to be maximised, rather than just taken into account.
- 4.8.9 Socio-economic effects are set out in Chapter 13 (Socio-Economics, Recreation and Tourism) of the EIAR and the various benefits that would arise have been summarised in Chapter 3 above and in the appended appraisal (**See Appendix 1**). Socio-economic benefits have been maximised.
- 4.8.10 **Paragraph d) of Policy 11** states that development proposals that impact on international and national designations “*will be assessed in relation to Policy 4*”. Policy 4 also deals with impacts in relation to local landscape designations. Therefore, the matter of the impacts of the Proposed Development in relation to such national and local designations is examined further below with specific regard to the provisions of Policy 4.
- 4.8.11 **Paragraph e) of Policy 11** states that project design and mitigation “will demonstrate how” impacts are addressed. These are listed in the quotation of the policy above and are addressed in turn below.

Impacts on Communities and Individual Dwellings - Residential Visual Amenity

- 4.8.12 As set out in the EIAR Chapter 6 (Landscape and Visual) a landscape and visual impact assessment (LVIA) has been undertaken and careful consideration has been given to the visual effects of the Proposed Development from settlements and individual dwellings through the LVIA and by way of the Applicant’s Residential Visual Amenity Assessment (RVAA).
- 4.8.13 In terms of the effects on residential properties within 2.5 km, twelve of the properties or property groups assessed would experience a significant visual effect from either a part of their house, garden or principal access route.
- 4.8.14 In relation to settlements, the assessment found that of the settlement brought forward into detailed assessment North Middleton and Gorebridge would experience a significant visual effect during daylight hours and Gorebridge would also experience a significant visual effect during dark sky hours.
- 4.8.15 It is concluded however that when the experience from each property is considered in the round, none of the residents of any of the properties would experience such an overbearing or overwhelming effect on their visual amenity that their properties would become unattractive places in which to live.
- 4.8.16 It is not considered that the visual effects on settlements or individual properties would be so severe to breach the residential visual amenity threshold whether considered on individual or community basis. This is confirmed in the Applicant’s RVAA contained at Appendix 6.6 of the EIAR.

Noise and Shadow Flicker

- 4.8.17 Noise is addressed in Chapter 12 (Acoustics) of the EIAR. The acoustic impact for the operation of the Proposed Development on nearby residential properties has been assessed in accordance with the guidance on wind farm noise as issued in the DTI publication ‘The Assessment and Rating of Noise from Wind Farms’, otherwise known as ETSU-R-97, and Institute of Acoustics Good Practice Guide (IoA GPG), as recommended for use by relevant planning policy.

- 4.8.18 To establish baseline conditions, background noise surveys were carried out at nearby properties and the measured background noise levels used to determine appropriate noise limits, as specified by ETSU-R-97 and the IoA GPG.
- 4.8.19 The assessment states that operational noise levels were predicted using the recommended noise propagation model. The predicted noise levels for the Proposed Development operating in isolation and cumulatively with the existing Carcant Wind Farm and proposed Wull Muir Wind Farm are within the adopted noise limits for all relevant wind speeds and all properties with the exception of a very marginal potential exceedance at one location and subject to the corresponding caveats. The Proposed Development therefore complies with the relevant guidance on wind farm noise and the resultant impact is considered not significant as a result and the impact on the amenity of all nearby residential properties would be regarded as acceptable.
- 4.8.20 The assessment explains that construction noise has been addressed with reference to BS 5228 and it has been determined that onsite construction noise levels are highly unlikely to exceed typical limiting noise criteria at nearby properties although appropriate mitigation measures will be adopted as a matter of due course. The access route for the proposed wind farm is expected to pass reasonably close to some dwellings and with some upgrade works to existing access tracks and local roads potentially occurring in close proximity to some dwellings. In these instances, the level of noise generated by construction works could be close to typical limits for relatively brief periods. As a result, typical and enhanced construction noise mitigation measures are proposed which aim to minimise noise as far as reasonably practicable.
- 4.8.21 Shadow flicker is addressed in Chapter 14 (Aviation, Radar and Other Issues) of the EIAR. The assessment identifies that based on the worst-case scenario, 10 inhabited properties were identified that could theoretically experience shadow flicker. Seven of these properties are not financially involved.
- 4.8.22 Any complaints received during operation can be investigated against the worst-case scenario and mitigation measures can be implemented if necessary. Mitigation measures include the planting of tree belts or the shutting down of individual turbines during periods when shadow flicker could theoretically occur.

Landscape and Visual Considerations

- 4.8.23 Before examining the landscape and visual effects of the Proposed Development, Part e(ii) of Policy 11 makes it clear and recognises that in terms of significant landscape and visual impacts, such impacts are to be expected for some forms of renewable energy. This is a very different starting point compared to the position in the former SPP and there is a very clear steer that significant effects are to be expected, and where localised and/or subject to appropriate design mitigation, they should generally be acceptable.

Overview of Design Approach

- 4.8.24 As set out in Chapter 2 (Site Selection and Design) of the EIAR, the design of the Proposed Development has progressed through various layout iterations.
- 4.8.25 It is explained that the overall siting and design has been to achieve a coherent and compact design for the wind farm which minimises direct and indirect adverse effects on the local and wider landscape, while balancing commercial considerations and maximising energy production.
- 4.8.26 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 of the underlying landscape and its scale;

- > consideration of operational, consented and proposed wind turbines in the context area;
- > consideration of 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 turbine locations;
- > optimising the alignment of new access tracks and hardstands taking due consideration of the topography of the site, to minimise cut and fill, minimise the impact on sensitive peatland 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;
- > identifying areas for enhancement onsite including biodiversity;
- > inclusion of borrow pit search areas to minimise the volume of the stone required to be imported to the site;
- > using the latest 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 Proposed Development through the employment of co-located technology in optimal locations (wind and BESS).

4.8.27 Therefore, overall, the design approach has been responsive to the various environmental and technical opportunities and constraints presented by the site and its immediate context. It is considered that the overall approach to the design of the project has implemented appropriate design mitigation in arriving at the final layout. This is an important requirement of NPF4 Policy 11 (Energy).

Landscape Character

- 4.8.28 The Proposed Development would be sited on the scarp slopes of the Moorfoot Hills that form a notable topographical feature experienced in many views from the wider surrounding landscape. The proposed turbines and associated infrastructure are partly located within LCT 266 Plateau Moorland – Lothians and partly within LCT 269 Upland Fringes - Lothians
- 4.8.29 The Proposed Development would result in direct and significant effects on the part of the landscape character types within which it is located. Indirect and significant effects would extend to approximately 3.7 km to the north-east and 7.5 km to the north-west within LCT 269 Upland Fringes – Lothians.
- 4.8.30 Indirect and significant effects would extend to approximately 4.1 km to the north-east and 6.5 km to the south-east within LCT 91 Plateau Grassland – Borders, to approximately 7 km within LCT 104 Upland Fringe Rough Grassland, to approximately 8.5 km within LCT 270 Lowland River Valleys – Lothians, to approximately 6 km to the north-east within LCT 272 Lowland Hills and Ridges and 9.4 km to the north-west.

Designated Landscapes

- 4.8.31 There are no national landscape designations covering the site. The nearest national landscape designation is Upper Tweeddale National Scenic Area (NSA) located approximately 14.8 km to the south-west. The Proposed Development is located within the Gladhouse Reservoir & Moorfoot Scarp Special Landscape Area (SLA).

- 4.8.32 In terms of effects on SLAs, the assessment found that the Gladhouse Reservoir & Moorfoot Scarp SLA, the South Esk & Carrington Farmlands SLA, a limited part of the Tyne Valley SLA and a very limited part of The Pentland Hills SLA would experience significant effects, but that the effects would not undermine the key characteristics of the SLAs to such an extent that they would be compromised or that there would be an adverse effect on the integrity of the designations.
- 4.8.33 As noted above, effects in relation to landscape designations is also referenced below in relation to NPF4 Policy 4.
- Visual Effects
- 4.8.34 The LVIA addresses the likely visibility of the Proposed Development in detail in relation to key visual receptors, including:
- > Residents, including views from isolated properties, scattered communities or defined settlements;
 - > Road users (including tourists); and
 - > Those engaged in recreational activities (e.g. walkers and cyclists).
- 4.8.35 In relation to visual effects, it is accepted that the Proposed Development would be visible from various nearby properties, settlements as well as parts of the surrounding road, footpath and cycle networks.
- 4.8.36 The LVIA includes a detailed assessment of visual effects from a series of predetermined Viewpoint locations. It has been assessed that there would be significant visual effects experienced at nine of the 22 representative viewpoints during daylight hours and at eight viewpoints during the hours of darkness.
- 4.8.37 These are as follows (daylight hours):
- > Viewpoint 2 – B7007, Broad Law Corner;
 - > Viewpoint 3 – B6372, Mount Lothian area;
 - > Viewpoint 8 – A7, North Middleton;
 - > Viewpoint 9 – Gladhouse Reservoir;
 - > Viewpoint 12 – Minor road, near Yorkston Farm;
 - > Viewpoint 13 – Whiteside Law;
 - > Viewpoint 14 – Blackhope Scar;
 - > Viewpoint 16 – Gorebridge; and
 - > Viewpoint 21 – B6372, Fountainside.
- 4.8.38 These are as follows (for hours of darkness):
- > Viewpoint 2 – B7007, Broad Law Corner;
 - > Viewpoint 3 – B6372, Mount Lothian area;
 - > Viewpoint 9 – Gladhouse Reservoir;
 - > Viewpoint 12 – Minor road, near Yorkston Farm;
 - > Viewpoint 13 – Whiteside Law;
 - > Viewpoint 14 – Blackhope Scar;

- > Viewpoint 16 – Gorebridge; and
- > Viewpoint 21 – B6372, Fountainside.

4.8.39 The assessment of routes found that receptors would experience significant visual effects from core paths located within 5 km, from core paths located between 5 and 7.5 km to the north-west of the Proposed Development and from parts of NCNR1.

4.8.40 The assessment of roads found that receptors would experience significant effects from parts of the B7007, the B6357 and the B6372.

The Effects of Aviation Lighting

4.8.41 The Civil Aviation Authority (CAA) requires that 'en-route obstacles' at or above 150 m above ground level are lit with visible lighting to assist their detection by aircraft.

4.8.42 Mitigation has been designed into the proposed aviation lighting to reduce the intensity of the 2,000 candela (cd) steady state lights in certain atmospheric conditions by reducing their intensity and attenuating the amount of vertical downwards lighting in order to reduce the visual impact experienced by receptors below the lights.

4.8.43 Furthermore, a reduced visible aviation lighting scheme has been agreed with the CAA. The reduced scheme means only seven wind turbine needs to be lit.

Cumulative Effects

4.8.44 Regarding cumulative effects, it is acknowledged that wherever more than one wind farm is visible at any given location in the landscape, there will be a greater overall or cumulative effect on landscape character than if just one wind farm was visible in the landscape. Likewise, it is acknowledged that the more wind turbines that are constructed in any given landscape, the greater the magnitude of overall (or combined) change to the landscape character.

4.8.45 Regarding cumulative effects, the LVIA found that there would be the potential for cumulative landscape character effects to arise within part of LCT 90 Dissected Plateau Moorland and that although there would be increased visibility of turbines within part of LCT 269 Upland Fringes – Lothians, there would be no additional significant cumulative effects as significant effects were already identified in that part of the landscape in the main assessment.

4.8.46 It is important to acknowledge that localised significant effects on landscape character and visual amenity are inevitable as a result of commercial wind energy development and indeed Policy 11 makes this clear. Whilst the LVIA identified some significant landscape and visual effects it is considered that these are generally localised and that the landscape has the capacity to accommodate the effects identified, particularly when the consented but as yet unbuilt wind farms are taken into account.

Public Access

4.8.47 The LVIA has addressed visual amenity considerations in relation to public access and recreation. Whilst there would therefore be some visibility of the Proposed Development from some walking and recreational routes, these are not considered to be unacceptable.

4.8.48 Public Right of Way (PRoW) LM173 and Scottish Hill Track 39: Leadburn to Heriot (HT43) cross the south-western boundary of the site, approximately 250 m from the closest proposed turbine location and outwith all proposed infrastructure and access requirements. PRoW BE1 is located immediately adjacent to the south-western boundary, providing a link to LM173.

4.8.49 Prior to construction of the Proposed Development, an Outdoor Access Management Plan (OAMP) will be prepared in consultation with the Council. It will detail the maintenance of safe public access routes within and around the site during construction and long-term public access during operation of the Proposed Development.

- 4.8.50 No issues would arise in terms of any access route being obstructed either in the construction or operational period of the Proposed Development. The access tracks would be open for non-vehicular public access during the operational phase.

Aviation, Defence Interests and Telecommunications

- 4.8.51 Chapter 14 (Aviation, Radar and Other Issues) of the EIAR addresses aviation and radar matters. The assessment was undertaken in relation to the potential effects of the Proposed Development on existing and planned military and civil aviation activities, including those resulting from impacts to radar.
- 4.8.52 In relation to military and civil aviation assets the assessment considers potential impacts on the military Air Defence (AD) Radar at Brizlee Wood, the military Air Traffic Control (ATC) Radars at RAF Spadeadam (Deadwater Fell and Berry Hill), RAF Leuchars Radars, NATS En Route Ltd (NERL) radars at Lowther Hill, and Edinburgh Airport, and the potential mitigation measures identified to address these. The potential impact on the Edinburgh Air Traffic Control Surveillance Minimum Altitude chart (ATCSMAC) is also considered.
- 4.8.53 In relation to military assets, the assessment considers potential impacts on the Eskdalemuir Seismic Array (EKA). The Proposed Development is approximately 40 km north of the EKA and eleven of the turbines are within the 50 km safeguarded zone. The MOD maintains that the Eskdalemuir 'noise budget' within the 50 km zone has been fully allocated to other wind farm sites and there are numerous other sites in the queue. This restriction will therefore apply to the Proposed Development.
- 4.8.54 Although the Proposed Development will impact the EKA, it is expected that the impact can be mitigated once the MOD and Scottish Government has agreed on the updated technical 'noise budget' and allocation policy. This mitigation could be secured through an appropriately worded suspensive planning condition.
- 4.8.55 No significant effects in relation civil or military aviation and radar matters were identified in the assessment.
- 4.8.56 Infrared lighting will be agreed with the Defence Infrastructure Organisation (DIO) for the Ministry of Defence (MOD) low flying requirements and a reduced visible lighting scheme has been agreed with the CAA.
- 4.8.57 The Proposed Development is not anticipated to have any effects on telecommunications infrastructure.

Impacts on Road Traffic and Trunk Roads

- 4.8.58 Chapter 11 (Traffic and Transport) of the EIAR addresses access, traffic and transport. As set out in the assessment, there are no significant impacts predicted and the Proposed Development is considered to be satisfactory in relation to this topic.
- 4.8.59 Whilst the Proposed Development would lead to a temporary increase in traffic volumes on the study area road network during the construction phase, traffic volumes would decrease considerably outside peak periods of construction. Overall, the construction period would be transitory in nature and all impacts would be short lived and temporary. Appropriate mitigation can be secured by way of a Construction Traffic Management Plan (CTMP).

Historic Environment

- 4.8.60 Chapter 7 (Archaeology and Cultural Heritage) of the EIAR considers the archaeological and historic environment value of the site and assesses the potential both for direct and setting effects on archaeological features and heritage assets resulting from the construction and operation of the Proposed Development.

- 4.8.61 The assessment deals with the potential for direct impact on heritage assets and, in particular, examines the potential effects in relation to the setting of heritage assets. Effects in relation to the historic environment are further examined below in terms of NPF4 Policy 7 (Historic Assets and Places).

Hydrology, the Water Environment and Flood Risk

- 4.8.62 Chapter 10 (Geology, Hydrology and Hydrogeology) of the EIAR assesses the potential impacts of the Proposed Development on geology, hydrogeology and peat. This includes potential impacts on surface watercourses, groundwater, water abstractions, designated receptors and flood risk within the local area. Potential impacts to peat, including peat slide risk, are also assessed.
- 4.8.63 The assessment sets out that a number of mitigation measures have been committed to in order to ensure the protection of peatland and watercourses. No significant potential effects on hydrological, geological and peat receptors have been predicted when taking account of mitigation by design and also embedded mitigation. As such, all residual effects on hydrological, geological and peat receptors are assessed as being not significant in EIA terms.
- 4.8.64 Mitigation measures will also be included within a Construction Environment Management Plan (CEMP) 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. Peat management is proposed by way of a Peat management Plan (PMP) – this and the CEMP would be secured by way of a planning condition.

Biodiversity

Ornithology

- 4.8.65 Chapter 9 (Ornithology) of the EIAR assesses the potential significant effects on important bird species associated with the construction, operation and decommissioning of the Proposed Development.
- 4.8.66 Overall, no significant adverse effects to the bird community associated with the site are expected during the construction, operational and decommissioning stages.
- 4.8.67 It is explained in the assessment that the operational ornithological impacts of the Proposed Development will be mitigated (and there will also be a net gain) through a combination of the enhancements that will be delivered through the proposed Outline Biodiversity Enhancement Management Plan (OBEMP) and further measures that the Applicant will provide that will be developed and implemented in consultation with the RSPB, NatureScot and the Southern Uplands Partnership (SUP). These will include the development and implementation of a regional plan for breeding waders, and a contribution to the SUP Black Grouse project.

Ecology

- 4.8.68 Chapter 8 (Ecology) of the EIAR addresses ecology and the potential significant effects on important ecological interests associated with the construction, operation and decommissioning of the Proposed Development.
- 4.8.69 The assessment explains that following good practice and taking account of embedded mitigation, it is not predicted that there will be any significant adverse effects as a result of the construction phase of the Proposed Development. The CEMP would detail mitigation measures to be followed during construction. In addition, the presence of an Ecological Clerk of Works (ECoW) will ensure the necessary advice is given to ensure that the predicted effects would not worsen, resulting in any unexpected significant impact.
- 4.8.70 Overall, in terms of ecology, there is not expected to be any significant impacts to habitats or protected species as a result of the Proposed Development, providing that best practice and embedded mitigation is followed.

4.8.71 Proposed biodiversity enhancement measures are described below with regard to NPF4 Policy 3 (Biodiversity).

Balancing the Contribution of a Development and Conclusions on Policy 11

4.8.72 Part e(ii) of Policy 11 makes it clear and recognises that in terms of significant landscape and visual impacts, such impacts are to be expected for some forms of renewable energy. This is a very different starting point compared to the position in SPP and there is a very clear steer that significant effects are to be expected, and where localised and/or subject to design mitigation, they should generally be acceptable.

4.8.73 The Proposed Development is considered to be acceptable in relation to all of Policy 11's environmental and technical topic criteria.

4.8.74 The second last paragraph **of Paragraph e) of Policy 11** is expressly clear that in considering any identified impacts of developments, significant weight must be placed on the contribution of the proposal to renewable energy generation targets and greenhouse gas emissions reduction targets. In particular, the Policy recognises that landscape and visual impacts are to be expected but provided they are localised and / or appropriate design mitigation has been applied, they are likely to be considered acceptable.

4.8.75 The “contributions” are inextricably related to the scale of a proposed development and policy recognises that any identified impacts must be assessed in the context of these contributions.

4.8.76 In terms of contribution to targets, as a national development, the proposal's contributions have been set out in Chapter 3 above. The scale of the energy output and emissions savings are of national importance.

4.9 NPF4 Policy 3: Biodiversity

Policy 3 & Principles

4.9.1 In summary, there are no unacceptable effects arising in relation to biodiversity matters, nor in relation to nature conservation designations which NPF4 **Policies 3 and 4** (the latter in terms of designations – see below) respectively address.

4.9.2 **Policy 3** requires developments to, wherever feasible, provide nature-based solutions that have been integrated and made best use of and for significant biodiversity enhancements to be provided.

4.9.3 It should be noted that Policy 3 does not provide any guidance on how ‘significant enhancements’ will be measured and assessed, simply referring to “*best practice assessment methods*”. In addition, in relation to the relevant wording in Policy 3, the Explanatory Report (as noted, issued alongside NPF4) states:

“The Scottish Government have commissioned research to explore options for developing a biodiversity metric or other tool, specifically for use in Scotland. This work is at early stages, we will work with NatureScot on a programme of engagement with stakeholders as this work progresses.”

4.9.4 Therefore, exactly how enhancement is to be measured in the longer-term is to be the subject of further guidance, but a timescale for the production of this is at present unclear.

4.9.5 As per the Chief Planner Letter of 30 June 2023 this continues to be the position. The Scottish Government also issued a draft Biodiversity Strategy in December 2022 and a final draft in September 2023. However, it does not contain national biodiversity targets.

4.9.6 The letter from the Chief Planner issued on 08 February 2023 provides guidance on the application of new policy where specific supporting guidance / parameters for assessment are not yet available to aid assessments.

4.9.7 NPF4 Policy 3 Biodiversity is specifically recognised as one such policy area where final guidance is not yet available. The Chief Planner letter of February 2023 states:

“recognising that currently there is not single accepted methodology for calculating and / or measuring biodiversity ‘enhancement’ – we have commissioned research to explore options for development a biodiversity metric or other tool, specifically for use in Scotland. There will be some proposals which will not give rise for opportunities to contribute to the enhancement of biodiversity, and it will be for the decision maker to take into account the policies in NPF4 as a whole, together with material considerations in each case”. (underlining added)

4.9.8 NatureScot Guidance was issued in Summer 2023 in support of NPF4 Policy 3 c). This states that the selection and design of enhancement measures will be a matter of judgment based on the circumstances of the individual case but should take into account a number of considerations. These considerations include:

- > The location of the development site and the opportunities for enhancing biodiversity;
- > The character and scale of development;
- > The requirements and cost of maintenance and future management of the measures proposed;
- > The distinctiveness and scale of the biodiversity damaged or lost; and
- > The time required to deliver biodiversity benefits and any risks or uncertainty in achieving this.

The application of Policy 3

4.9.9 Notwithstanding the lack of policy guidance at the present time, in terms of environmental benefit, there will also be a permanent enhancement delivered through the Applicant’s proposed enhancements to the natural habitat.

4.9.10 Technical Appendix 8.6 of the EIAR contains an Outline Biodiversity Enhancement and Management Plan (OBEMP). It details the proposed enhancement measures and aims of prescribed habitat measures looking to significantly improve the biodiversity associated with the site from the baseline conditions.

4.9.11 Enhancement and restoration of habitats through the delivery of a final Biodiversity Enhancement Management Plan (BEMP) would also further reduce effects on habitats. Overall, the BEMP would aim to achieve significant biodiversity enhancement. The BEMP would include provisions for the protection, maintenance, restoration and/or enhancement of bog habitats locally. Furthermore, the BEMP would deliver broadleaved woodland creation, hedgerow creation, species-rich grassland creation, and bracken control for grassland restoration.

4.9.12 The OBEMP is based on a number of identified search areas for each respective habitat management and biodiversity enhancement proposal. These search areas will likely be refined following further specialist surveys and feedback from relevant consultees, and all search areas may not be taken forward for the final BEMP, and other search areas and/or proposals may also be considered; however, the Applicant remains committed to delivering significant biodiversity enhancement at the site.

4.9.13 In summary the OBEMP includes the following proposals:

- > 36.69 ha of peatland restoration/enhancement in Search Area A, likely primarily delivered through livestock exclusion/management, peat hagg reprofiling, drain blocking and removal of self-seeding trees;
- > 17.27 ha of broadleaved woodland creation through the replacement of conifer plantation with native broadleaves in Search Area B;

- > 45.16 ha of grassland restoration through the removal and management of dense/continuous bracken in Search Area C;
- > 5.69 ha of species-rich meadow/grassland creation through the conversion of arable land in Search Area D; and
- > Creation of approximately 2,500 m of new native species-rich hedgerows in Search Area E.

- 4.9.14 As part of the OBEMP a Biodiversity Net Gain (BNG) assessment was undertaken using a BNG metric. This demonstrates the measures proposed for the creation and enhancement of habitats would result in an increase in the biodiversity value of the site post construction. The BNG metric was applied to the Proposed Development's baseline habitats, considered predicted habitat losses, and the habitat creation and enhancement measures as proposed in the OBEMP. The BNG metric indicates that following construction, site restoration, BEMP implementation and subsequent habitat management, the Proposed Development would compensate for predicted habitat and biodiversity losses and provide further enhancement that would result in an increase and net gain for biodiversity of 11.8% over and above the baseline and pre-development value.
- 4.9.15 The detailed BEMP will be agreed with Midlothian Council and NatureScot in advance of construction and would ensure the Proposed Development secures significant biodiversity enhancements through restoring degraded habitats and strengthening nature networks.
- 4.9.16 The proposals would therefore result in the site, from a biodiversity perspective, being in a "*demonstrably better state*" than without intervention, consistent with the provisions of Policy 3.
- 4.9.17 It is important to keep in mind that the greatest threat to biodiversity is climate change. The principal and essential benefit of the Proposed Development is a significant contribution of renewable energy, to facilitate the earliest possible decarbonisation of the energy system and the achievement of "net zero" no later than 2045, in accordance with the objectives of the Climate Change (Scotland) Act 2009 (as amended). The purpose of net zero is to protect biodiversity and the earlier it can be achieved, the greater the benefits to biodiversity.

4.10 NPF4 Policy 4: Natural Places

Policy 4 & Principles

- 4.10.1 **Policy 4, Paragraph c)** deals with national landscape designations and has a similar approach in relation to the former SPP in terms of how a proposal that affects a National Park or National Scenic Area (NSA) should be addressed.
- 4.10.2 Policy 4, Part c) states that:
- "Development proposals that will affect the National Park or National Scenic Area...will only be supported where:*
- > *the objectives of designation and the overall integrity of the areas will not be compromised;*
or
 - > *any significant adverse effects on the qualities for which the area has been designated are clearly outweighed by social, environmental or economic benefits of national importance."*
- 4.10.3 There would be no significant effects arising in relation to national level designations.
- 4.10.4 **Policy 4, Paragraph d)** deals with local landscape designations and contains a different policy approach to that which was contained within the former SPP. Policy 4, Paragraph d) is as follows:
- "Development proposals that affect a site designated as ...a local landscape area in the LDP will only be supported where:*

- > *i Development will not have significant adverse effects on the integrity of the area or the qualities for which it has been identified; or*
- > *ii Any significant adverse effects on the integrity of the area are clearly outweighed by social, environmental or economic benefits of at least local importance”.*

4.10.5 The policy now follows a similar construct to that which deals with national level designations. The first limb of the policy refers to significant effects on the “*integrity*” of the area or “*the qualities for which it has been identified*”.

4.10.6 The policy set out in the second limb of NPF4 Policy 4, Paragraph d) provides that development proposals that affect a site designated as a local landscape area will only be supported where any significant adverse effects on the integrity of the area are clearly outweighed by social, environmental or economic benefits of at least local importance. It must be noted that:

- > this is a new policy provision, reflecting the wider NPF4 policy that adverse effects (including adverse landscape and visual effects outside of a National Park or NSA) must be balanced against the benefits of a proposed development;
- > the second limb is independent of the first (“or”) and is to be applied where a decision-maker concludes that a proposed development will have significant adverse effects on the integrity of a local designation;
- > NPF4, Policy 4, Paragraph d) now expressly includes a balancing mechanism (“*clearly outweighed by social, environmental or economic benefits*”) and sets out the threshold to be used (“*of at least local importance*”).

4.10.7 In considering this policy it is informative to note the Reporter’s position in the Sanquhar II Supplementary Inquiry Report. In that case (paragraph 2.70 of the Report) the Reporter made reference to the impact of the proposed development in relation to a Local Landscape Area, which in that case was a Regional Scenic Area (RSA). The Reporter had concluded that the proposed development would not affect the integrity of the designation but would result and some significant adverse effects. The Reporter stated:

“even if the opposite conclusion was reached and the integrity of the RSA was considered to be significantly adversely affected by this proposal, I consider part (d)(ii) of the policy would continue to give support to the development. This is because, in my view, a national development which by definition supports the delivery of the national spatial strategy, must offer benefits of more than local importance. Having regard to the benefits of the development in the round, as outlined in chapter six of my original Report, I am firmly of the view that this proposal is capable of support under policy 4(d)(ii).”

4.10.8 In terms of effects on SLAs, as noted above in the context of NPF4 Policy 11 whilst there would be some significant effects in relation to some special qualities of SLAs, there would not be an adverse effect on their integrity.

4.10.9 Policy 4 Paragraph g) also deals with Wild Land Areas and states that the effects of development outwith WLAs “*will not be a significant consideration*”. There are no issues arising with regard to impacts on any Wild Land Areas.

The application of Policy 4

4.10.10 Given the above position in relation to landscape designations it is considered that the Proposed Development is in accordance with Policy 4.

4.11 NPF4 Policy 5: Soils

Policy 5 & Principles

- 4.11.1 In terms of soils, **Policy 5** states that where development on peatland or carbon rich soils or priority peatland habitat is proposed, a detailed site-specific assessment is required to identify baseline, likely effects and net effects. The policy intent is to protect carbon rich soils, restore peatlands and minimise disturbance to soils from development. This is very similar to the policy position that was in SPP; however, a key difference is that renewable energy proposals are one of the types of development expressly envisaged to be acceptable in principle on peatlands (Paragraph c) reflecting the net benefits in carbon emissions and peatland restoration potential which can be gained.

The application of Policy 5

- 4.11.2 Chapter 10 (Geology, Hydrology, Hydrogeology) of the EIAR assesses the potential impacts of the Proposed Development on geology, hydrogeology and peat.
- 4.11.3 As explained above with regard to NPF4 Policy 11, the Applicant has proposed an appropriate approach to peatland resources going beyond mitigation and restoration and incorporating significant enhancement of peatland. Appropriate planning conditions can be attached to a grant of consent in relation to peatland and carbon rich soil matters. The Proposed Development is considered to be in accordance with Policy 5.

4.12 NPF4 Policy 7: Historic Assets and Places

Policy 7 & Principles

- 4.12.1 Finally, in terms of **Policy 7** which deals with Historic Assets and Places, the policy is very similar to that which was in SPP (paragraph 145).
- 4.12.2 The intent of the policy is to protect and enhance the historic environment, assets and places and to enable positive change. Key parts of the policy include the following:
- > **Paragraph c)** states that “*development proposals affecting the setting of a Listed building should preserve its character, and its special architectural or historic interest*”.
 - > **Paragraph d)** states that “*development proposals in or affecting Conservation Areas will only be supported where the character and appearance of the Conservation Area and its setting is preserved or enhanced*”.
 - > **Paragraph h)** states that “*development proposals affecting Scheduled Monuments will only be supported where:*
 - i) *direct impact on the Scheduled Monument are avoided;*
 - ii) *significant adverse impacts on the integrity of the setting of the Scheduled Monument are avoided; or*
 - iii) *exceptional circumstances have been demonstrated to justify the impact on a Scheduled Monument and its setting and impact on the monument or its setting have been minimised.*
 - > **Paragraph i)** states that “*development proposals affecting nationally important Gardens and Designed Landscapes will be supported where they protect, preserve or enhance their cultural significance, character and integrity and where proposals will not significantly impact on important views to, from and within the site or its setting*”.
 - > **Paragraph o)** states that “*non designated historic environment assets, places and their setting should be protected and preserved in situ wherever feasible. Where there is potential for non-designated buried archaeological remains to exist below a site,*

developers will provide an evaluation of the archaeological resource at an early stage so that planning authorities can assess impact”.

The application of Policy 7

- 4.12.3 The assessment set out in Chapter 7 (Cultural Heritage) of the EIAR has considered the presence of cultural heritage assets which may be affected by the Proposed Development. The potential effects on the identified assets, mitigation measures for protecting known heritage assets during construction, and the residual effect of the Proposed Development have all been considered.
- 4.12.4 The assessment identifies that the Proposed Development would have a moderate and significant effect on the setting of two Schedule Monuments: Jeffries Corse Cairn (SM3527) and Dundreich Cairn (SM2777). The assessment explains that these impacts are not considered to be of such significance that they would reduce the ability to understand or appreciate those assets, and the integrity of their settings would therefore not be overly adversely affected.
- 4.12.5 As the integrity of both assets settings would be preserved, the Proposed Development is considered to be in accordance with Paragraph h) of NPF4 Policy 7.
- 4.12.6 In summary, the Proposed Development would not unacceptably affect the fabric or setting of any Listed Buildings, or the integrity of the setting of any Scheduled Monuments. The Proposed Development is considered to be in accordance with Policy 7.

4.13 NPF4 Policy 33: Minerals

- 4.13.1 The intent of Policy 33 is to support the sustainable management of resources and minimise the impacts of extraction of minerals on communities and the environment.
- 4.13.2 Paragraph e) of the policy states “*Development proposals for borrow pits will only be supported where:*
- i. The proposal is tied to a specific project and is time limited;*
 - ii. The proposal complies with the above mineral extraction criteria taking into account the temporary nature of the development; and*
 - iii. Appropriate restoration proposals are enforceable.”*
- 4.13.3 The mineral extraction criteria within the policy states that proposals for the sustainable extraction of minerals will only be supported where they will not result in significant adverse impacts on biodiversity, geodiversity and the natural environment with reference to sensitive habitats and the historic environment, as well as landscape and visual impacts.
- 4.13.4 It is considered that the Proposed Development would not result in any unacceptable effects arising in terms of the relevant extraction criteria and appropriate safeguards for the environment have been put forward which can be secured by way of suitable planning conditions.

4.14 Other NPF4 Policies

- 4.14.1 In relation to other NPF4 policies such as Policy 13 (Sustainable Transport), Policy 23 (Health & Safety) and Policy 25 (Community Wealth Benefits), it is considered that these policies are of very limited relevance and there would be no conflict with their provisions.
- 4.14.2 In relation to Policy 22 (Flood risk and water management) the intent of policy 22 is to strengthen resilience to flood risk and reducing the vulnerability of existing and proposed development to flooding. It is considered that there are no flood risk issues arising.
- 4.14.3 Similarly, in terms of Policy 6 (Forestry, Woodland and Trees) there are no issues arising in relation to this topic.

4.15 Conclusions on NPF4 Appraisal

- 4.15.1 The Proposed Development is considered to be acceptable in relation to all of Policy 11's environmental and technical topic criteria.
- 4.15.2 A key point within Policy 11 (Energy) is that any identified impacts have to be weighed against a development's specific contribution to meeting targets – which attracts significant positive weight in this case.
- 4.15.3 Significant weight is also afforded in relation to Policy 1 (Tackling the climate and nature crisis). This policy direction fundamentally alters the planning balance compared to the position that was set out in NPF3 and SPP.
- 4.15.4 The term “tackling” the respective crises in Policy 1 is also important – this means that decision makers should ensure an urgent and positive response to these issues and take positive action.
- 4.15.5 Overall, the Proposed Development, as a National Development, is considered to be one that would make a valuable contribution to the NPF4 Spatial Strategy and would help deliver a 'sustainable place'. Overall, it is considered that Proposed Development would accord with relevant policies of NPF4, and with NPF4 when read as a whole.

5. Appraisal against the Local Development Plan

5.1 Introduction

- 5.1.1 The other element of the statutory Development Plan covering the development site comprises the Midlothian LDP (MLDP) adopted in 2017.
- 5.1.2 The MDLP was prepared and adopted prior to NPF4 coming into force and reflects the provisions of NPF3 and SPP, both now superseded. Where conflicts or contradictions exists between the MLDP and NPF4, or where the MLDP is silent, NPF4 takes precedence.
- 5.1.3 Relevant policies from the MLDP are referenced below. This Chapter does not present a detailed assessment of the Proposed Development as that has been covered in Chapter 4 above against the policy provisions of NPF4. An appraisal of key policy and consideration of areas of conflict or contradictions with NPF4 is provided.

5.2 The Lead MLDP Policies

- 5.2.1 **Policy NRG1: ‘Renewable and Low Carbon Energy Projects’ and Policy NRG2 ‘Wind Energy’** are the ‘lead’ MLDP policies for the assessment of the Proposed Development.
- 5.2.2 Policy NRG1 states:

“Renewable and low carbon energy projects will be permitted provided any proposal will not:

- a) *Cause an unacceptable significant adverse effect on the historic environment including the following designations/features and, where relevant, their settings: Inventory of Gardens and Designed Landscapes; Conservation Areas; Listed buildings; Scheduled Monuments and other significant archaeological sites, or historic battlefields;*
- b) *Cause an unacceptable significant adverse effect upon natural heritage, including the nature conservation interests and degree of protection afforded these interests, defined by Policies ENV12 – ENV15;*
- c) *Cause an unacceptable significant adverse effect upon Green Belt, the Pentland Hills Regional Park or its setting, or the Special Landscape Areas;*
- d) *Cause an unacceptable significant adverse effect on peat/carbon rich soils or prime agricultural farmland (reference should be made the relevant Scottish Government Carbon Calculator and any updated information in relation to known peat/carbon rich soil in the development and assessment of proposals);*
- e) *Have an unacceptable effect on the amenity of nearby communities or residential properties including noise and impact on telecommunications;*
- f) *Cause or increase pollution or flood risk, or have an unacceptable effect on the water environment or water catchment areas;*
- g) *Require infrastructure for access or power transmission, which itself has a significantly unacceptable environmental impact;*
- h) *Cause an unacceptable significant adverse effect upon landscape or visual impact;*
- i) *Result in unacceptable cumulative impacts;*
- j) *Lead to the loss of public access routes and, if routes require diversion, alternatives acceptable to the Council must be provided;*
- k) *Comprise telecommunications and broadcasting installations and transmission links;*
- l) *Lead to unacceptable impact on the road network, including traffic generation and road safety; and/or*
- m) *Demonstrably damage the local economy in terms of tourism or recreation.*

Any proposal must:

- 1) *Include a robust mechanism for decommissioning to ensure operators and/or site owners achieve site restoration to a standard satisfactory to the Council, including the removal of all related equipment;*
- 2) *Accord with any other relevant Local Development Plan policies or proposals and;*
- 3) *Consider the potential to connect new projects to off-grid areas.*

In assessing all renewable energy and low carbon technology proposals, the following will be important considerations, net economic impact, including at the local and community scale; the scale of contribution from the development to renewable energy generation targets; and the effect on greenhouse gas and carbon emissions. However, these considerations will not necessarily carry more weight where there may be likely significant environmental effects arising from a development. Where there are potentially significant environmental effects from a development, the Council will require full justification that the economic benefits, contribution to renewable energy targets and carbon reduction outweigh the environmental consequences.

5.2.3 The LDP refers to the Council's supplementary guidance at Section 7.2. Of relevance is the Wind Energy Development in Midlothian guidance. The scope and content of this, as described within the LDP, is that it:

“sets out national planning policy on wind energy; the operation and application of the spatial framework, including mapped areas of significant protection and locations with possible landscape capacity for wind energy; the application of policies NRG1 and NRG2 to the development and assessment of proposals; the siting of wind turbines in Midlothian; and guidance and information on the cumulative effect of wind energy development in Midlothian.”

5.2.4 **Policy NRG2 ‘Wind Energy’** states:

“All wind energy proposals will be assessed against the requirements of Policy NRG1 and, in addition to these requirements, will be permitted provided they will not:

- a) *Increase the risk of shadow flicker or driver distraction;*
- b) *Adversely affect civil and defence aviation interests and seismological recording; or*
- c) *Cause interference to qualifying species of Special Protection Areas.*

Proposals for turbines above 30m in height to the blade tips should take account of the spatial framework for windfarms.

The supplementary guidance on wind energy development in Midlothian should be consulted in the formulation and assessment of all wind energy proposals regardless of scale.”

5.2.5 The criteria in Policies NRG1 and NRG2 are all matters that are contained within NPF4 Policy 11 (Energy) (with the exception of tourism matters). These matters have all been addressed in the previous Chapter against NPF4 Policy 11.

5.3 Other relevant MLDP Policies

5.3.1 A summary of other relevant MLDP policies is provided in **Table 5.1**.

Table 5.1: Summary of MLDP Policies relevant to the Proposed Development

MLDP Policy	Policy Summary	Comment re NPF4
Policy RD1 Development in the Countryside	Restricts development in the countryside but allows for development if it accords with policies NRG1 or NRG2 therefore it allows for renewable energy developments.	No conflict or contradiction.
Policy ENV5 Peat and Carbon Rich Soils	The provisions seek to avoid unacceptable effects on peat and / or carbon rich soils and requires assessments of development in relation to CO2 emissions.	No conflict or contradiction.
Policy ENV6 Special Landscape Areas	The Policy states that development proposals affecting SLAs will only be permitted where they incorporate high standards of siting and design and where they will not have an unacceptable impact on the special landscape qualities of the area	The policy is largely consistent with NPF4 Policy 4 (Natural Places) however NPF4 provides explicit guidance on proposals that affect sites designated as a local landscape areas and impacts arising from a proposal would also need to be considered in the context of significant weight being placed on the contribution of the proposal, as per NPF4 Policy 11.
Policy ENV7 Landscape Character	The Policy states development will not be permitted that would have an unacceptable effect on landscape character.	No conflict or contradiction.
Policy ENV9 Flooding	The Policy states that development will not be permitted which would be at unacceptable risk of flooding or would increase the risk of flooding elsewhere. Flood Risk Assessments would be required for most forms of development in areas of medium to high risk, but may also be required in other locations, depending on the circumstances of the proposed development. The Policy makes specific reference to the former SPP.	No conflict or contradiction but the references to SPP no longer apply.
Policy ENV10 The Water Environment	The policy requires sustainable drainage to be provided and seeks to protect water quality.	No conflict or contradiction.
Policy ENV11 Woodland, Trees and Hedges	The seeks to protect woodland resources and states that any woodland, trees or hedges lost will be replaced with an equivalent. Removal of woodland, trees and hedges will only be permitted where it will achieve significant and clearly defined additional public benefits. If a	No conflict or contradiction.

MLDP Policy	Policy Summary	Comment re NPF4
	development would result in the severing or impairment of connectivity between important woodland habitats, workable mitigation measures should be identified and implemented, preferably linked to a wider green network.	
Policies ENV12, 13 and 14 International, National and Regional / Local Nature Conservation Sites	The Policies seek to protect designated sites from unacceptable development.	No conflict or contradiction.
Policy ENV19 Conservation Areas	The Policy states that within or adjacent to a Conservation Area, development will not be permitted which would have any adverse effect on its character and appearance.	No conflict or contradiction.
Policy ENV20 Nationally Important Gardens and Designed Landscapes	The Policy states that development should protect, and where appropriate, enhance gardens and designed landscapes. Development will not be permitted which would harm the character, appearance and/or setting of a garden or designed landscape as identified in the Inventory of Historic Gardens and Designed Landscapes.	No conflict or contradiction.
Policy ENV22 Listed Buildings	The Policy states that development will not be permitted which would adversely affect the character or appearance of a Listed Building, its setting, or any feature of special architectural or historic interest.	No conflict or contradiction.
Policy ENV23 Scheduled Monuments	The Policy states that development which would have an adverse effect on a Scheduled Monument, or the integrity of its setting, will not be permitted.	The policy is broadly consistent with the provisions of NPF4, however, the policy approach set out within NPF4 Policy 7 (Historic Assets and Places) set more specific development management tests.
Policy ENV24 Other Important Archaeological or Historic Sites	The Policy seeks to protect regionally and locally designated heritage assets.	The policy is broadly consistent with the provisions of NPF4, however, the policy approach set out within NPF4 Policy 7 (Historic Assets and Places) set more specific development management tests.

5.3.2

It is considered that the Proposed Development would be in accordance with all of the other relevant policies in the ALDP as set out in **Table 5.1** above.

5.4 Conclusions on the MLDP

- 5.4.1 The environmental and topic considerations within the MLDP policies are encompassed within the broad remit of NPF4 Policy 11 Part e). Each of the relevant development management considerations have been addressed above (Chapter 4) in the context of NPF4 Policy 11 and are not repeated.
- 5.4.2 It is considered that the effects arising from the Proposed Development would be acceptable in terms of the matters identified by Policies NRG1 and 2 and there is no conflict with any other relevant policies within the MLDP. It is therefore considered that the Proposed Development accords with the MLDP when it is read as whole.
- 5.4.3 The policy provisions of the MLDP are based on those of NPF3 and the former SPP. This means, as per the amendments made to the 1997 Act, that where there are any incompatibilities, the provisions of NPF4 will prevail.
- 5.4.4 Insofar as there are other relevant policies within the MLDP, these are considered to be generally consistent with those of NPF4 and given the appraisal set out above in Chapter 4, there would be no conflict with their terms.

6. Conclusions

6.1 The Electricity Act 1989

6.1.1 Paragraph 3 of Schedule 9 to the 1989 Act provides a specific statutory requirement on the Scottish Ministers to have regard to various matters when considering development proposals for consent under section 36 of the 1989 Act.

6.1.2 The information that is contained within the individual topic sections of the EIAR therefore enables Scottish Ministers to be satisfied that the obligations under Schedule 9 are met and that suitable mitigation has been identified. It is also considered that the detailed work undertaken in the formulation of the EIA overall has confirmed and provides confidence that the Proposed Development would be undertaken in an environmentally acceptable manner.

6.2 The Climate Crisis & Renewable Energy Policy Framework

6.2.1 The urgent need for onshore wind has been set out: a large increase in the deployment of this renewable energy technology is supported through a number of policy documents and by Scottish Government commitments – most recently expressed in the new OWPS and in NPF4.

6.2.2 Onshore wind was already viewed and described as “vital” to the attainment of targets in 2017. This imperative has only increased since a ‘climate emergency’ was declared by the Scottish First Minister in April 2019, in line with the recommendations made by the CCC (2019) ‘net zero’ publication¹⁹. Furthermore, the drive to attain net zero emissions is now legally binding at the UK and Scottish Government levels by way of amendments to the Climate Change Act 2008 and in Scotland through the provisions of the Climate Change (Scotland) Act 2009 and the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019.

6.2.3 Achieving net zero is a legal requirement, and the Scottish Government has recognised, most recently in the new OWPS, that a very substantial quantity of new onshore wind is required to meet the legal emissions reduction requirement by 2030 – namely a minimum of 20 GW of operational capacity. Deployment of more onshore wind is described as being “*mission critical for meeting our climate targets*” in the OWPS.

6.2.4 The nationally important benefits of the Proposed Development have been set out in the context of the current climate emergency and they would help address the issue of global warming and very challenging ‘net zero’ targets and contribute to improving security of supply.

6.3 The Planning Balance

6.3.1 In NPF4 there is a clear recognition that climate change must become a primary guiding principle for all plans and decisions. Significant weight is to be given to the climate emergency and the contribution of individual developments to tackling climate change.

6.3.2 The revised OWPS was published in December 2022. NPF4 came into force on 13 February 2023. Both are up to date statements of Scottish Government policy, directly applicable to determination of this application. Both should be afforded very considerable weight in decision-making.

6.3.3 NPF4 and the OWPS are unambiguous as regards the policy imperative to combat climate change, the crucial role of further onshore wind in doing so, and the scale and urgency of onshore wind deployment required. As described in this Statement:

¹⁹ CCC, Net Zero, The UK’s contribution to stopping global warming (May, 2019).

- > The global climate emergency and the nature crisis are the foundations for the NPF4 Spatial Strategy as a whole. The twin global climate and nature crises are “*at the heart of our vision for a future Scotland*” so that “*the decisions we make today will be in the long-term interest of our country*”²⁰. The policy position, and the priority afforded to combatting the climate emergency, is different to that which was set out in NPF3 and SPP;
- > NPF4 Policy 1 (Tackling the climate and nature crises) directs decision-makers to give significant weight to the global climate emergency in all decisions. This is a radical departure from the usual approach to policy and weight, and clearly denotes a step change in planning policy response to climate change. The matter of weight is no longer left entirely to the discretion of the decision maker; and
- > Both NPF4 and the OWPS are clear that further onshore wind development, of scale and utilising modern, larger turbines, has a crucial role in combatting climate change, transitioning to a net zero Scotland and ensuring security of energy supply. NPF4 Policy 11 (Energy) strongly supports proposals for all forms of renewable, low-carbon and zero emissions technologies, including onshore wind farms.

- 6.3.4 It is important to fully recognise both the scale and urgency of the challenge set out in these documents, and the required response from decision-makers. NPF4 is clear that significant progress must be made by 2030 requiring, as set out in the OWPS, that “*we must now go further and faster than before. We expect the next decade to see a substantial increase in demand for electricity to support net zero delivery across all sectors, including heat, transport and industrial processes*”²¹.
- 6.3.5 Publication of the OWPS followed and cross-refers to NPF4 and, for the first time, sets an onshore wind target: a Scottish Government ambition for a minimum of 20 GW of installed onshore wind capacity by 2030. New policy therefore supports an increase in the installed capacity of onshore wind in Scotland by a minimum amount equivalent to about 130% of the entire installed capacity of all current operational onshore wind farms in Scotland in a period of around 8 years. This is also embedded in the Scottish Government’s consultative draft Energy Strategy and Just Transition Plan, together with the commitment to “***place the climate and nature at the centre of our planning system***”²² (original emphasis) in line with the NPF4.
- 6.3.6 By any measure, the identified need for delivery of this additional capacity is a massive challenge requiring an urgent and positive response. As noted above, unless projects are in the planning system now, there is a high likelihood that they will not contribute to this ambition before 2030. The ‘window’ until the key date of 2030 for Scottish Government targets is also getting narrower.
- 6.3.7 This change in policy is also seen in the designation of individual renewable development applications as National Developments. National Developments are significant developments of national importance that will help to deliver the spatial strategy. As the Statement of Need for Strategic Renewable Electricity Generation and Transmission Infrastructure explains²³ “*A large and rapid increase in electricity generation from renewable sources will be essential for Scotland to meet its net zero emissions targets.*”

²⁰ NPF4, page 2.

²¹ OWPS 2022, paragraph 1.1.2.

²² Energy Strategy and Just Transition Plan, page 55

²³ NPF4, page 103.

6.3.8 The recognition of National Development status relates to the attainment of Government renewable generation and emission reduction targets. Moreover, it relates to the importance of developing electricity supplies which are not dependent on volatile international markets and are located within the UK's national boundaries. The urgency for an electricity system which is self-reliant and not reliant on fossil fuels is now enormous, in order to protect consumers from high and volatile energy prices. Moreover, such a system would reduce opportunities for destructive geopolitical intrusion into national electricity supplies and this matter has grown in importance in recent months.

6.3.9 Other policy support for development of large-scale wind farms and the deployment of larger turbines is found in NPF4 and the OWPS:

- > In addition to the cross-cutting NPF4 Policy 1, NPF Policy 11 (Energy) directs that in considering the identified impacts of an onshore wind proposal significant weight will be placed on the contribution of the proposal to renewable energy generation targets and on greenhouse gas emissions reduction targets;
- > The OWPS expressly recognises that meeting the ambition of a minimum installed capacity of 20GW of onshore wind in Scotland by 2030 will require taller and more efficient turbines and that *"this will change the landscape"*;

On this specific point it is relevant to take into account the Reporter's position on the target as referenced in the OWPS in the Meall Buidhe Appeal Decision Notice. The Reporter set out with regard to the OWPS at paragraph 87 of the Decision that:

"It also provides some further supporting detail on increasing the installed capacity of onshore wind in Scotland by a minimum amount equivalent to about 130% of the entire installed capacity of all current operational wind farms in Scotland in the period of around 8 years. This is clearly a challenging target and there is an acceptance in the Policy Statement of the consequent change in the landscape. I find this further supports my conclusion above in terms of consistency with relevant provisions of NPF4. This policy statement does not form part of the Development Plan but is a material consideration in this case."

- > NPF4 Policy 11 confirms that significant landscape and visual impacts are to be expected for some forms of renewable energy. Scottish Government policy, which forms part of the Development Plan, is that where such impacts are localised and / or appropriate design mitigation has been applied, they will generally be considered to be acceptable. Notably, policy recognises that significant landscape and visual effects are inevitable and generally acceptable;
- > NPF4 Policy 4 provides in principle support for wind farm development in all locations with the exception of National Parks and NSAs, unless the conditions in NPF4 Policy 4 c) are met;
- > NPF4, Policy 4, Part d) specifically relates to a proposed development that may adversely affect the integrity of a local landscape designation. It provides that development will be supported where significant adverse effects on the integrity of the area are clearly outweighed by social, environmental or economic benefits of at least local importance.

6.3.10 The Applicant has gone to considerable lengths to ensure a satisfactory layout, design and composition for the Proposed Development. In short, appropriate design mitigation has been applied. Potentially significant adverse landscape and visual effects resulting from the proposal have been addressed through an iterative design process (i.e. 'mitigation by design') in which the number of turbines has reduced from first stage layouts and various other considerations have been taken into account.

- 6.3.11 NPF4 and the OWPS require that the decision-maker must also identify and weigh the adverse effects of a proposed development. The way that decision makers can recognise the strengthening policy imperative, and the increased weight given to the benefits of the proposed development, is by giving stronger weight in the planning balance to the seriousness and importance of energy policy related considerations and the contribution of the Proposed Development in meeting green energy targets.
- 6.3.12 It is considered that this approach is very clearly reflected and articulated in NPF4 and the OWPS (subject to Scottish Government policy now expressly stating that significant weight will be given to the global climate and nature crises and a proposed development's contribution towards meeting targets). Moreover, Section 3.6 of the OWPS states that the criteria for assessing proposals (in NPF4) have been updated "*including **stronger weight being afforded to the contribution of the development to the climate emergency***".
- 6.3.13 In considering the change to policy which has been introduced by NPF4, the conclusions of the Reporter in his supplementary Inquiry Report in relation to the Sanquhar II development are informative. At paragraph 4.5 of the Report (Overall Conclusions) the Reporter stated:
- "in paragraph 8.50 of my original report I found that, at the time of writing "...I do not consider that at this present time there has been a tangible shift in policy of a scale or nature which would be capable of being pivotal..." having reviewed the terms of NPF and the OWPS, I now consider that a tangible shift in planning policy has been made at the national level. In my view it is likely that this shift may be sufficient to result in some wind farm proposals, which would previously have been refused under the former policy regime, to potentially now be granted consent."* (underlining added)
- 6.3.14 In the Clashindarroch II²⁴ Section 36 decision, the Reporter in the Supplementary IR with reference to the new policy position and with specific regard to 'changes to the balancing exercise' (paragraph 2.45) with reference to the OWPS stated that:
- "The new policy approach is clearly guiding decision makers towards supporting wind farm proposals that would make a meaningful contribution to the onshore wind target, unless those adverse effects were of such significance that they would override the imperative for more onshore wind capacity. The natural consequence of this approach must lead to changes in the scale or extent of adverse effects that the decision maker might now deem to be acceptable."* (underlining added)
- 6.3.15 In addition, the Reporter stated at paragraph 2.51:
- "The balancing exercise is integral to the OWPS, NPF4 and the draft Scottish Energy Strategy and Just Transition Plan 2023 but the heightened priority of tackling climate change as expressed in the national and UK energy policy context must inevitably increase the weight given to those matters. Particularly now when NPF4 directs the decision maker to give significant weight to these matters within Policies 1 and 11."* (underlining added)
- 6.3.16 Furthermore, the Reporter added at paragraph 2.90 that "*The new policy expects me to give less importance to such [landscape and visual] effects in unprotected areas.*" (underlining added)

²⁴ Clashindarroch II, Section 36 Decision dated 26 June 2023, Supplementary Report of Inquiry dated 3 March 2023 (Case Reference WIN-110-2).

- 6.3.17 In the Shepherds Rig²⁵ Section 36 case, the Reporters in their original Inquiry Report considered that the adverse effects of that development were such that it was contrary to national planning policy and the Development Plan, and a position of objection was recommended to the Scottish Ministers. However, in the Supplementary Report of Inquiry which considered the implications of NPF4 and the OWPS, the Reporters changed their position. At paragraph 3.14 of the Supplementary Report the Reporters stated:
- “Taking into account all of the above, we recognise the urgent policy imperative in the OWPS and NPF to deliver additional installed wind farm capacity. These recently published policy statements demonstrate a significant strengthening of policy support for renewable energy development, to which the proposal would make an obvious contribution. In our original report, we found that the significant effects on the area’s recreational resources should be given significant weight, to the extent that they outweighed the aims of delivering renewable energy. In the updated policy context, we find that the proposal’s obvious contribution to renewable energy targets causes the benefits as a whole to now clearly outweigh the significant landscape and visual effects.”*
- 6.3.18 The Reporter added at paragraph 3.4:
- “National policy has a clear expectation that more renewable proposals may be granted consent, focusing down on a tighter set of circumstances under which proposals would not be supported.”*
- 6.3.19 It is accepted that each individual application needs to be considered on its respective merits, however it is evident from these recent Section 36 decisions, that the Reporters have recognised that there has been a material and tangible shift in planning policy support for onshore wind development and that this has clear implications for the planning balance and changes the calculus regarding the scale and extent of adverse effects which may now be found acceptable.
- 6.3.20 In this case, the Proposed Development is one of national importance that will help to deliver the National Spatial Strategy set out in NPF4. The Proposed Development would make a valuable and near-term contribution to help Scotland and the UK attain Net Zero, security of supply and related socio-economic objectives. It is submitted that very substantial weight should be given to this contribution when weighing the need for the Proposed Development and its identified effects within the planning balance.
- 6.3.21 The effects of the Proposed Development, including how relevant effects listed in NPF4 Policy 11 Paragraph (e) have been addressed, are detailed in the supporting information to the application. In terms of Policy 11, in considering the identified impacts of the proposal, significant weight must be placed on its nationally important contribution to renewable energy generation and greenhouse gas emissions reduction targets.

²⁵ Shepherd’s Rig, Section 36 Decision dated 21 August 2023, Supplementary Report of Inquiry dated 2 March 2023 (Case Reference WIN-170-2005).

6.4 Overall Conclusion

- 6.4.1 The policy set out in NPF4 and the OWPS requires a rebalancing of the consenting of onshore wind developments in response to the challenges of tackling the climate and nature crises. Having regard to the weight to be ascribed to the important benefits of the Proposed Development, it is considered that the benefits that would result clearly outweigh its adverse effects.
- 6.4.2 The up-to-date policy set out in NPF4 and the OWPS and the policy being consulted upon in the draft Energy Strategy provide strong and increased support for the grant of consent.
- 6.4.3 The Proposed Development is an opportunity to deliver a nationally important renewable energy contribution, whilst additionally helping to balance electricity demand and supply and adding resilience to the wider energy system through the incorporation of co-located battery storage capability.
- 6.4.4 The conclusion is that the Proposed Development would be consistent with all relevant policies of the Development Plan, and with the Development Plan when read as a whole insofar as that is a relevant matter in a Section 36 application.

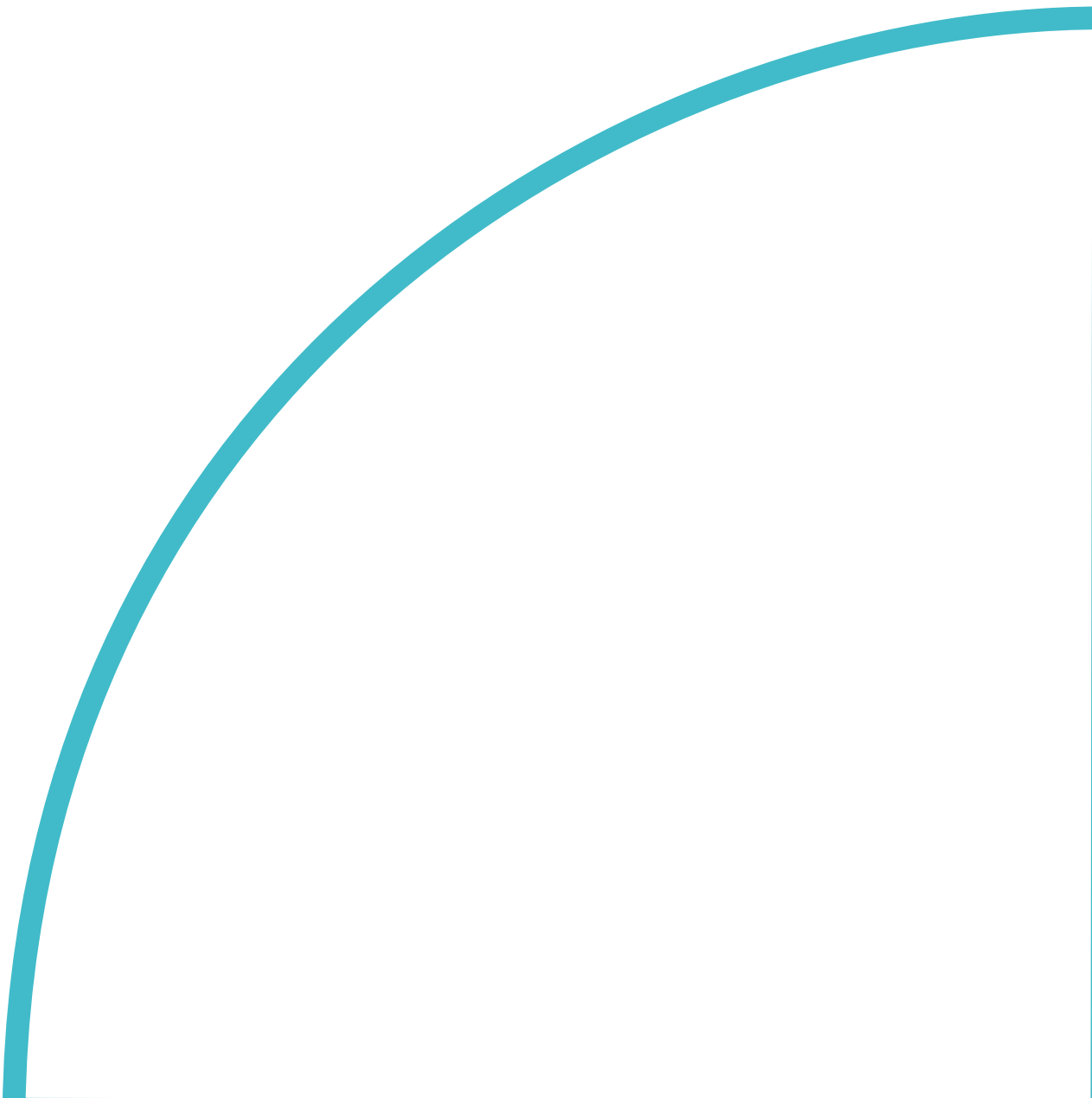
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Socio-Economic Impact Assessment of Torfichen Wind Farm

A report to RES
October 2023



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1.

Executive Summary

Scotland has committed to ambitious climate change targets, with the Climate Change (Emissions Reductions) Act 2019¹ committing Scotland to the reduction of emissions to net zero by 2045. This commitment to a net zero economy is now central to economic policy. This transformation will require an increase in renewable energy generation, to replace other forms of generation and to facilitate the decarbonisation and electrification of the economy.

The development of onshore wind projects such as Torfichen Wind Farm (the Proposed Development) offer an opportunity to generate economic impact regionally and nationally while driving the delivery of a more sustainable economy in Scotland.

The Proposed Development could deliver a series of economic benefits during the phases of development and construction and following operations. In particular, it was estimated that during its development and construction, the Proposed Development could generate:

- £10.2 million Gross Value Added (GVA) and 135 jobs in Midlothian; and
- £37.2 million GVA and 543 jobs in Scotland.

During its operations and maintenance, each year the Proposed Development could generate:

- £1.1 million GVA and nine jobs in Midlothian; and
- £2.3 million GVA and 25 jobs across Scotland.

The Applicant has committed to prioritise local companies in the provision of contracts associated with the Proposed Development. Suppliers which are located within the local area will be guaranteed contracts during the development and construction and operational phases.

The Proposed Development will also contribute to public finances through the payment of non-domestic rates, which could amount to £1.3 million annually, or £64.8 million over a 50-year operational lifetime. This will support the funding of local public services in the context of challenging public sector finances.

To support local ambitions and needs, it has become common practice to offer community benefit funding, with Scottish Government guidance suggesting £5,000 per annum per installed MW. This level of funding would generate around £0.5 million every year for the local economy, equivalent to £27.0 million over the lifetime of the wind farm and could support up to 10 jobs locally.

The local area will also have the opportunity to take part in the Applicant's Local Electricity Discount Scheme, reducing the household energy bills in the community.

¹ Scottish Government (2019), Climate Change (Emissions Reduction Targets) (Scotland) Act 2019



Over time, research evidence has consistently found that there is no relationship between onshore wind developments and tourism activity in Scotland. In 2021, BiGGAR Economics produced a report analysing the relationship between the construction of onshore wind farms and tourism employment at the local, regional and national level.² The report concluded that there was no pattern or evidence suggesting that the development of onshore wind farms in Scotland had any negative effects on the tourism economies of the country as a whole, local authority areas or the immediate areas surrounding wind farms.

An assessment has also been undertaken focusing on tourism assets that are located within 15 km of the Proposed Development. It found that the wind farm proposals are not expected to affect the local accommodation providers, recreation trails and tourism attractions.

The development of the Proposed Development can make a significant contribution to Scotland's economic strategy, which is now being driven by climate change commitments and deliver a range of local economic and community benefits, without any adverse effects on other aspects of the economy such as tourism.

As well as generating economic impacts regionally and nationally, the Applicant's commitment to ensuring the local community benefits from the Proposed Development would support wider economic and social impacts. By committing to prioritising local contractors, as well as the Applicant's innovative approach to community benefits and Electricity Discount Scheme, the Proposed Development will support local economic development and enable the community to support projects and address the priorities of the area. On this basis, it can be concluded that the Proposed Development maximises net economic impact.

² BiGGAR Economics (2021), Wind Farms & Tourism Trends in Scotland: Evidence from 44 Wind Farms

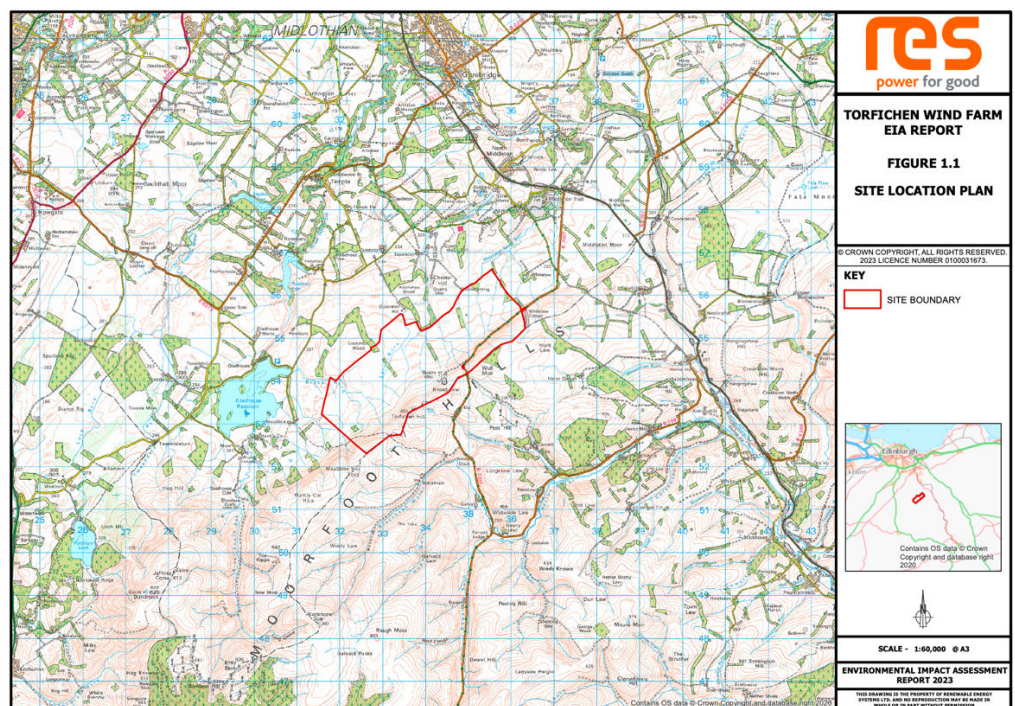
2. Introduction

BiGGAR Economics was commissioned by RES to assess the potential economic impact associated with the Proposed Development.

2.1 Background

The Proposed Development is an onshore wind farm development by RES (the Applicant) located approximately 4 km south of Gorebridge and 9.5 km south-east of Penicuik, within the northern edge of the Moorfoot Hills in Midlothian.

Figure 2-1: Proposed Development Site



Source: Torfichen Wind Farm EIA Report, Figure 1.1 Site Location Plan

The socio-economic assessment has been based on a Proposed Development comprising 18 turbines, each with a generating capacity of approximately 6 MW, and a 50MW battery energy storage system.

The objectives of this study are to:

- quantify the potential economic impacts of the Proposed Development for the local and national economies;



-
- assess the potential for any effects on the local economy such as changes to tourism activity as a result of the Proposed Development; and
 - outline the potential for the local community to benefit from the Proposed Development.

2.2 Report Structure

The report is structured as follows:

- section 3 places the development in the context of national and local economic strategies;
- section 4 provides a socio-economic context;
- section 5 considers the economic impact from the Proposed Development;
- section 6 sets tourism in the area in context and considers the relationship between the proposed wind farm and the local tourism economy;
- section 7 considers potential community benefits; and
- section 8 contains a conclusion on net economic benefit.



3. Strategic Context

This section sets out the national and local context and how the Proposed Development would support strategic aims.

3.1 National Strategic Context: Economic and Related Policies

3.1.1 Scotland's National Performance Framework

The National Performance Framework³ sits at the top of the policy hierarchy in Scotland, with all other policies and strategies designed to meet its purpose and outcomes. The purpose of the National Performance Framework is:

“To focus on creating a more successful country with opportunities for all of Scotland to flourish through increased wellbeing, and sustainable and inclusive economic growth.”

The National Performance Framework explicitly includes ‘increased well-being’ as part of its purpose and combines measurement of how well Scotland is doing in economic terms with a broader range of well-being measures. The National Performance Framework is designed to give a more rounded view of economic performance and progress towards achieving sustainable and inclusive economic growth and well-being across Scotland and aims to:

- create a more successful country;
- give opportunities to all people living in Scotland;
- increase the well-being of people living in Scotland;
- create sustainable and inclusive growth; and
- reduce inequalities and give equal importance to economic, environmental and social progress.

The National Performance Framework sets out 11 outcomes, underpinned by 81 indicators, that combine to give a better picture of how the country is progressing towards these goals. As well as Gross Domestic Product (GDP) and employment measures, the Framework’s outcomes reflect the desired fabric of communities and culture, education, the environment, health and well-being and measures to help

³ Scottish Government (2023), Scotland’s National Performance Framework.



tackle poverty. It is these indicators on which the Scottish Government focuses its activities and spending to help meet the national outcomes.

The 11 national outcomes are that people:

- **children and young people:** grow up loved, safe and respected so that they realise their full potential;
- **communities:** live in communities that are inclusive, empowered, resilient and safe;
- **culture:** are creative and their vibrant and diverse cultures are expressed and enjoyed widely;
- **economy:** have a globally competitive, entrepreneurial, inclusive and sustainable economy;
- **education:** are well educated, skilled and able to contribute to society;
- **environment:** value, enjoy, protect and enhance their environment;
- **fair work and business:** have thriving and innovative businesses, with quality jobs and fair work for everyone;
- **health:** are healthy and active;
- **human rights:** respect, protect and fulfil human rights and live free from discrimination;
- **international:** are open, connected and make a positive contribution internationally; and
- **poverty:** tackle poverty by sharing opportunities, wealth and power more equally.

The Proposed Development would contribute to the achievement of the national outcomes set out in the National Performance Framework. Investment in renewable energy can increase productivity in the economy and by creating jobs in the local area the Proposed Development will contribute to inclusive growth. It also supports sustainability and the transition to Net Zero, by increasing the generation of renewable energy.

3.1.2 Scotland's National Strategy for Economic Transformation

In March 2022, the Scottish Government published the National Strategy for Economic Transformation⁴, which set out its ambition for Scotland's economy over the next decade. The Scottish Government's vision is to create a wellbeing economy where society thrives across economic, social and environment dimensions, which delivers prosperity for all Scotland's people and places. Of particular importance is the ambition to be greener, with a just transition to net zero, a nature-positive economy and a rebuilding of natural capital.

To deliver its vision and address the economy's challenges, five programmes of action have been identified (with a sixth priority of creating a culture of delivery), including:

- establishing Scotland as a world-class entrepreneurial nation;

⁴ Scottish Government (2022), Scotland's National Strategy for Economic Transformation



- strengthening Scotland's position in new markets and industries, generating new, well-paid jobs from a just transition to net zero;
- making Scotland's businesses, industries, regions, communities and public services more productive and innovative;
- ensuring that people have the skills they need to meet the demands of the economy, and that employers invest in their skilled employees;
- reorienting the economy towards wellbeing and fair work.

The strategy notes that Scotland has substantial energy potential and that it has developed a growing green industrial base. This provides a strong foundation for securing new market opportunities arising from the transition to Net Zero, and will need continuing investment and support. Renewable energy also has a role to play in supporting productive businesses and regions across Scotland.

3.1.3 National Planning Framework 4

The Fourth National Planning Framework (NPF4)⁵ is Scotland's national spatial strategy, setting out the principles to be applied to planning decisions, regional priorities and national developments.

The first of six spatial principles to be applied is a just transition that ensures the transition to Net Zero is fair and inclusive, as is rural revitalisation, supporting sustainable development in rural areas. Applying these and other principles is intended to support the planning and delivery of sustainable places, where emissions reduce, and biodiversity is restored and better connected.

As part of the policy 11(a), all forms of renewable technologies, including onshore wind and energy storage, will be supported. This is subject to the test outlined in Policy 11(c), which states that: *"development proposals will only be supported where they maximise net economic impact, including local and community socio-economic benefits such as employment, associated business and supply chain opportunities"*. The Proposed Development will support employment and create opportunities for local businesses at both the construction, and operation and maintenance phases. The assessment includes a conclusion on whether this project maximises the net economic impact in the context of NPF4 Policy 11(c).

Policy 11(e) also sets out a number of impacts that should be addressed during project design and mitigation. That list does not include tourism. Whilst not required by NPF4, Section 6 of this report does consider whether there could be any implications for tourism.

3.1.4 Local Energy Policy Statement

The Scottish Government's latest statement on Local Energy Policy⁶ highlights the role of localised energy solutions as part of a green recovery to the Covid-19 pandemic and towards a net-zero and decarbonised economy. The strategy is

⁵ Scottish Government (2023). National Planning Framework 4.

⁶ Scottish Government (2021). Local Energy Policy Statement.



interlinked with other strategic documents in a concerted effort to increase energy efficiency; reduce emissions and eradicate fuel poverty.

The statement identifies the wide range of stakeholders involved in local energy and sets out the following key principles:

- **people:** engaging with stakeholders from the outset and supporting the different ways each of these will want to be involved;
- **places:** local energy projects should reflect the features of the local area and work in collaboration with others;
- **network and infrastructure:** consider the existing energy infrastructure in the area and secure high level and quality of supply to all;
- **pathway to commercialisation:** create projects that are commercially viable, can be replicated in the future and support net zero emissions; and
- **opportunity:** projects should create high value jobs and support the wider industry and its workforce.

3.1.5 Onshore Wind Sector Deal

The Onshore Wind Sector Deal⁷, published in September 2023, outlines the commitment from the Scottish Government and the onshore wind sector to reach 20 GW of onshore wind by 2030, ensuring maximisation of benefits to Scotland. The Deal highlights the increased potential of onshore wind for a low-carbon and prosperous future, the creation of high-quality job opportunities and the empowerment of local communities in Scotland.

The document emphasises the following aspects, and the collaborative, sector and government action required to support the development of onshore wind in each of the following:

- **supply chain, skills and the circular economy:** support the enhancement of the current skills and training provision to deliver the needs of the wind industry;
- **community:** onshore wind will continue to collaborate with local communities, offering impactful community benefits;
- **land use and environment:** onshore wind projects will enhance biodiversity and optimise land use and environmental benefits;
- **planning:** reduce the time it takes to determine applications for onshore wind projects by increasing skills and resources;
- **legislative and regulatory:** develop evidence to support a strategic approach to delivering investment and transporting wind turbine components, and improve network connections;
- **technical:** enable cooperative coexistence between onshore wind and safe aviation operations; and
- **implementation and governance:** key milestones to be delivered by agreed dates.

⁷ Scottish Government (2023). Onshore Wind Sector Deal.



Taking these into consideration, the Deal shed light to the importance of onshore wind in accelerating the transition to Net Zero, driving economic growth, creating better job opportunities, and benefitting communities in Scotland. The Proposed Development would directly contribute to all the above increasing onshore wind generating capacity in Midlothian and Scotland.

3.1.6 Tourism Strategy: Scotland's Outlook 2030

Following on from the Tourism Scotland 2020 (TS2020) strategy, a collaborative network of industry experts created Scotland's Outlook 2030, which is focused on creating a world-leading tourism sector in Scotland that is sustainable in the long-term.

The strategy is focused on four key priorities: people, places, businesses and experiences. The strategy recognises the effects of climate change, technological advancements, Brexit and changing consumer behaviour on tourism and highlights the need for collaboration between government, communities and the public and private sectors.

There are six conditions that the strategy has highlighted as being crucial for success:

- using technological advancements and information to understand changes and trends in tourist behaviours;
- ensuring policies are in place that support the vision;
- enabling investment opportunities into Scotland's tourism market;
- improving transport and digital infrastructure;
- greater collaboration between businesses in the industry; and
- positioning Scotland as a great place to live and visit locally and globally.

A main commitment of the strategy is to address the effects of energy demand associated with tourism and make the sector commit fully to Scotland's ambition of becoming a net-zero society by 2045.

3.2 Local Strategies

3.2.1 Midlothian Economic Development Strategy for Growth 2020 - 2025

The Midlothian Economic Development Strategy⁸ outlines an overarching vision for Midlothian to be a 'great place to grow', by recognising its unique assets and raising the area's profile. The document highlights four key pillars for the area which will inform all strategic action carried out by Midlothian Council:

- Innovation: identify challenges, be proactive in finding solutions, act in a sustainable way and be resilient to change;
- Inclusion: ensure community benefit is achieved through our ambition to grow Midlothian's economy. Education providers, businesses and partner agencies

⁸ Midlothian Council (2020). Midlothian Economic Development Strategy for Growth 2020 – 2025.



will contribute to develop and harness the skills of the citizens to create a strong economic base;

- Partnership working: continue to foster partnerships and engage with stakeholders to enable good growth and inclusivity and enhance the reach and impact of messaging; and
- Ambition: recognise and capitalise on the opportunity that exists for Midlothian, by creating a platform for digital development, internationalisation, and new channels for inward investment.

As part of the innovation pillar, Midlothian Council highlights that as an area with many former mining villages, it is important to support alternative renewable energy solutions and to take advantage of the natural resources in the area. The strategy also highlights opportunities available to the region in the development of public transport and low carbon sectors and emphasises the need for local jobs that would create opportunities through a fair and inclusive job market. Importantly, it seeks to reverse the current trend of residents out-commuting for work by generating high-quality economic opportunities within the region.

The Proposed Development would significantly contribute towards these goals, generating jobs in the local area in sectors associated with development and construction, as well as long-term roles in the local economy associated with the operation of the Proposed Development. Projects such as the Proposed Development would also support the goal of establishing a sustainable local economy for Midlothian, allowing the region to benefit from the low carbon renewable energy sector while generating economic impacts in the local economy.

3.2.2 Single Midlothian Plan 2023 – 2027

The Community Planning Partnership's (CPP) Single Midlothian Plan⁹ shares the vision of Midlothian striving to be a 'great place to grow', bringing together the views of public, voluntary and private sector bodies, and the wider local communities to deliver a shared plan for the region.

Within the plan, CPP highlights their agreement to reach Net Zero by 2030 and outlines actions to take to achieve this, including:

- establishing a Midlothian Climate Hub (to educate and raising awareness for the climate crisis across local communities);
- investing in greener travel;
- developing renewable energy generation projects;
- improving heating efficiency in Midlothian; and
- supporting and encouraging climate adaptation/resilience projects.

As part of the objective to promote sustainable development, the plan emphasises that it is vital to support renewable energy generation opportunities in Midlothian. The Proposed Development would also contribute to the objective of developing

⁹ Midlothian Council (2023). The Single Midlothian Plan



renewable energy generation projects and reducing carbon emissions to accelerate the Net Zero transition.

3.3 Summary of Strategic Context

The Proposed Development is aligned with policies at a national and local level. The Proposed Development would directly contribute to the themes within the National Performance Framework surrounding the economy, business, and the environment, as well as the wider goal of the Scottish Government to transition to a Net Zero economy by 2045 while establishing Scotland as a leader in renewable energy.

The Proposed Development would also contribute to the established aims of the local area. Midlothian strategies highlight the opportunities which renewable energy projects present for the area. The Proposed Development would support the wider aim of the area to establish a more sustainable economy, as well as generating high-quality, sustainable jobs in Midlothian.

The following sections of this report consider whether the Proposed Development delivers net economic impact for Midlothian and Scotland.



4. Local Economic Context

This section considers the socio-economic context of the Proposed Development, including population structure, economic activity, skills and relative deprivation.

4.1 Study Areas

The aim of the socio-economic baseline is to set the Proposed Development and its potential for economic benefits within existing socio-economic conditions. This section considers the socio-economic structure of three study areas:

- Midlothian South (the Council ward);
- Midlothian (the local authority area of Midlothian); and
- Scotland.

4.2 Demographics

4.2.1 Population Estimates

In 2021, the population of Midlothian was 94,700, accounting for 1.7% of the total population of Scotland. The population of Midlothian South was 14,485, 15.3% of the population of Midlothian. Midlothian South, Midlothian and Scotland have similar population structures, with the working age population accounting for 62-64% of the total.

Table 4-1: Population Estimates, 2021

	Midlothian South	Midlothian	Scotland
Total	14,485	94,700	5,479,900
0-15	20%	19%	17%
16-64	63%	62%	64%
65+	17%	19%	20%

Source: National Records of Scotland (2022), Mid-2021 population estimates Scotland.

4.2.2 Population Projections

Over the period between 2021 and 2043, the population of Midlothian is projected to increase from 94,700 to 119,637, a 26.3% increase. This trend is much greater than Scotland as a whole, where the population is expected to increase by 0.4% over the same period.



Although the proportion of Midlothian residents aged 16-64 years old is expected to decrease over time, with the share of working age population declining to 61% by 2043, the region is projected to experience an absolute increase in the number of those of working age, by over 14,000. This change differs from Scotland, where a decline of almost 95,000 is projected.

As a result of Midlothian’s increase in the working age population and its proximity to Edinburgh City, it will be important to balance job opportunities in the region to retain workers in the area and to reverse the current trend of residents out-commuting. The economic opportunities created by the Proposed Development will contribute towards this.

Table 4-2: Population Projections, 2021 - 2043

	Midlothian		Scotland	
	2021	2043	2021	2043
Total	94,700	119,637	5,479,900	5,503,019
0-15	19%	18%	17%	13%
16-64	62%	61%	64%	62%
65+	19%	22%	20%	25%

Source: National Records of Scotland (2022), Population Projections 2018-2043.

4.3 Industrial Structure

The employment structure of Midlothian South, Midlothian and Scotland is considered in Table 4-3.

Construction is the largest employer in Midlothian South, where it employs 21.2% of those in work, compared to 10.4% in Midlothian and 6.0% in Scotland. The large percentage of workers within this sector could benefit the development and construction phase of the Proposed Development as there will be numerous local contractors.



Table 4-3: Industrial Structure, 2021

	Midlothian South	Midlothian	Scotland
Construction	21.2%	10.4%	6.0%
Manufacturing	11.3%	8.9%	6.8%
Human health and social work activities	11.3%	11.1%	15.3%
Wholesale and retail trade	9.8%	19.2%	14.1%
Education	9.1%	11.1%	8.3%
Administrative and support services	7.0%	6.7%	7.7%
Transportation and storage	6.4%	1.9%	4.1%
Arts, entertainment and recreation	5.7%	2.2%	2.4%
Accommodation and food services	5.4%	5.5%	7.5%
Professional, scientific and technical	5.4%	7.4%	6.4%
Real estate activities	2.4%	1.5%	1.5%
Other service activities	2.4%	2.2%	1.8%
Information and communication	1.2%	1.8%	3.0%
Water supply; sewerage, waste	0.6%	0.6%	0.8%
Agriculture, forestry and fishing	0.3%	1.9%	3.4%
Financial and insurance activities	0.2%	0.4%	3.0%
Public administration and defence	0.2%	7.0%	6.3%
Total Employment	3,250	34,000	2,617,000

Source: Office for National Statistics (2022), Business Register and Employment Survey (BRES) 2021.

4.4 Economic Activity

In 2022, the unemployment rate in Midlothian (1.7%) was below the Scottish average (3.4%). Midlothian has a greater share of its working age population that was economically active (80.9%) compared to Scotland as a whole (77.1%) and full-time annual gross wages for residents of Midlothian are similar to the Scottish average.

Table 4-4: Economic Activity Rates, 2021/22

	Midlothian	Scotland
Economically Active (%)	80.9%	77.1%
Unemployment Rate (%)	1.7%	3.4%
Median Annual Gross Wage (resident analysis)	£27,559	£27,698

Source: ONS (2023), Annual Population Survey Jan 2022-Dec 2022 and Annual Survey of Hours and Earnings – resident analysis 2022.



4.5 Education

The population of Midlothian has higher levels of qualifications on average than that of Scotland as a whole. In Midlothian, 51.7% of those aged 16-64 hold NVQ4+ qualifications compared to 50.0% in Scotland as a whole. There are also more residents in Midlothian (68.1%) that hold NVQ3+ qualifications compared to the entirety of Scotland (64.8%). A similar proportion of those aged 16-64 hold NVQ2+ qualifications, with 85.3% in Midlothian and 79.6% in Scotland as a whole. Midlothian also has a lower proportion of residents aged 16-64 years old with no qualifications (4.4%) compared to the national average (7.8%).

Table 4-5: Qualification Levels, 2022

	Midlothian	Scotland
NVQ4+	51.7%	50.0%
NVQ3+	68.1%	64.8%
NVQ2+	85.3%	79.6%
NVQ1+	89.1%	86.4%
Other Qualifications	6.5%	5.8%
No Qualifications	4.4%	7.8%

Source: ONS (2023), Annual Population Survey Jan 2022 – Dec 2022.

4.6 Scottish Index of Multiple Deprivation

The Scottish Index of Multiple Deprivation (SIMD) is a relative measure of deprivation which ranks small areas of Scotland across seven dimensions: income, employment, education, health, access to services, crime and housing. These areas can be ranked based on which quintile (fifth of the distribution) they belong to, with a small area in the first quintile being in the 20% most deprived areas in Scotland.

Midlothian has 115 small areas in total, of which 9% are in the most deprived quintile, and 15% are in the least deprived quintile. Most of the small areas are clustered in the second quintile and the middle of the distribution, with 37% being in the second quintile, and 23% in the third. The remaining 17% are within the fourth quintile.



Table 4-6: Scottish Index of Multiple Deprivation by Quintile, 2020

	Proportion
1 (most deprived quintile)	9%
2	37%
3	23%
4	17%
5 (least deprived quintile)	15%

Source: Scottish Government (2020), Scottish Index of Multiple Deprivation 2020.

4.7 Summary of Socio-Economic Context

The working age population of Midlothian is projected to increase over the next two decades, in contrast to a projected decline for Scotland as a whole.

The local economy has a relatively large construction sectors and so will have the opportunity to benefit from contracts for the construction of the Proposed Development.

The expansion of the onshore wind sector in the area could provide an opportunity for a further diversification of its economic base. In addition, the sector could contribute to the retention of young people in the area through high skilled and high paying jobs.



5.

Economic Impact

This section estimates the economic impact that could be generated by the Proposed Development.

5.1 Economic Impact Methodology

5.1.1 Modelling the Economic Impact of Onshore Wind Farm Developments

The approach followed in estimating the economic impact from onshore wind developments is based on industry best-practice. In particular, it draws on evidence on the construction and operational costs associated with a range of onshore wind farm projects across the UK conducted in 2015 by BiGGAR Economics on behalf of RenewableUK¹⁰ and other more recent case studies of actual construction and operational costs in the sector.

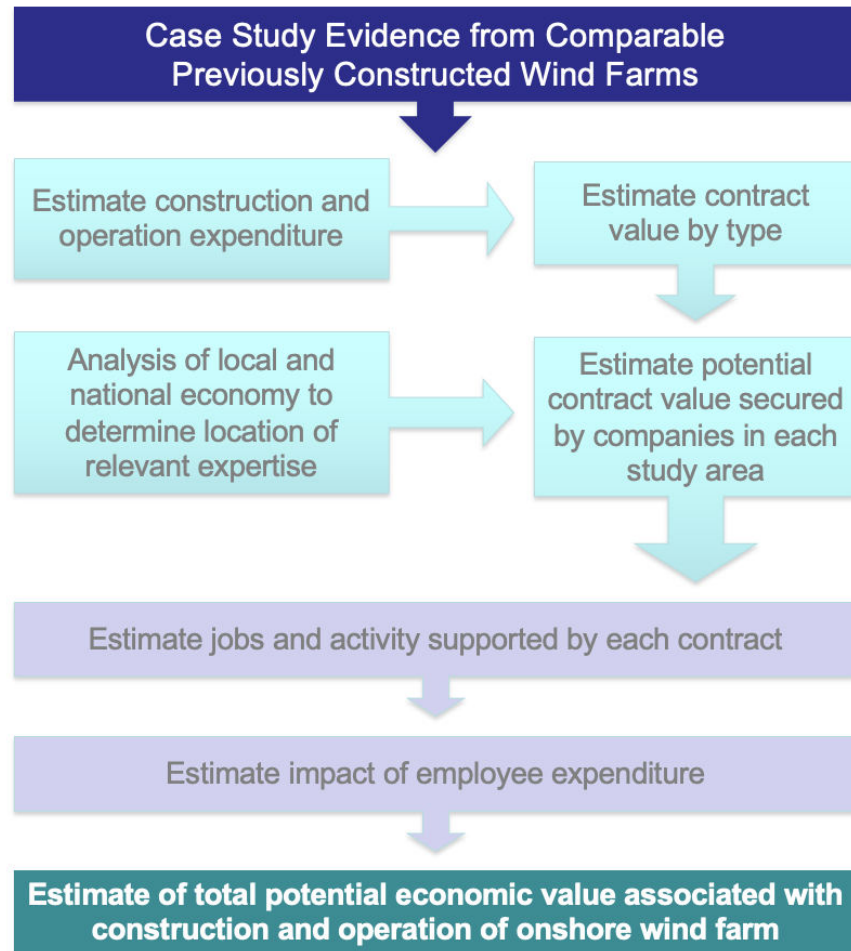
This method has been used over time to estimate the economic impact associated with a number of onshore wind developments. As shown in Figure 5-1, the modelling exercise consists of five stages:

- development and planning;
- balance of plant;
- grid connection;
- turbines; and
- battery storage.

To account for the different ability of businesses across Scotland in fulfilling onshore wind contracts, assumptions are adjusted based on BiGGAR Economics' experience working with developers in the Lothians and South of Scotland.

¹⁰ RenewableUK (2015), Onshore Wind: Economic Impacts in 2014.

Figure 5-1: Approach to Economic Impact



Source: BiGGAR Economics.

5.1.2 Measures of Economic impact

Economic impacts are reported with respects to the following measures:

- **Gross Value Added (GVA):** a commonly used measure of economic output, GVA captures the contribution made by an organisation to national economic activity. This is usually estimated as the difference between an organisation’s turnover and its non-staff operational expenditure; and
- **Employment:** this is expressed as years of employment for temporary contracts and as annual jobs for operations and maintenance contracts. Years of employment are used to report the short-term employment that is supported by the development and construction of the Proposed Development. As an example, a job that lasts for 18 months would support 1.5 years of employment.

5.1.3 Sources of Economic Impact

The assessment will consider the following sources of economic impact:



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- direct impacts: the economic value generated through the contracts associated with the Proposed Development;
 - indirect impacts: the impact from the spending of contractors within their supply chains; and
 - induced impacts: the impact from the spending of those workers carrying out contracts for the Proposed Development and on behalf of its contractors.

5.1.4 Study Areas

Economic impacts were estimated with respects to the following study areas:

- Midlothian; and
- Scotland.

5.2 Development and Construction

The estimation of economic benefits from the development and construction of the Proposed Development draws on the extensive work that BiGGAR Economics has carried out in the onshore wind sector. This includes an evaluation of existing wind farm developments carried out in 2015 by BiGGAR Economics on behalf of RenewableUK. The analysis has been updated over time based on evaluations of individual wind farm developments and on experience with developers working across Scotland. This body of evidence allows to estimate costs per MW based on a development's number of turbines, its capacity or a combination of the two.

Based on the development of the Proposed Development comprised of 18 turbines, each with a capacity of 6 MW and a 50MW battery energy storage system, it was estimated that the total development and construction expenditure could be £128.5 million.

Expenditure was then split according to the following component contracts:

- development and planning;
- turbine;
- balance of plant;
- grid connection; and
- the battery storage component.

The largest expenditure component was associated with turbines, equivalent to £59.6 million, or 46% of total development and construction spend. Contracts associated with the battery storage component would contribute around 19% of total expenditure. Balance of plant could account for 21% of total expenditure, with development and planning and grid connection accounting for 7% and 6%, respectively.



Table 5-1: Development and Construction by Contract Type

	% Capex	Value (£m)
Development and Planning	7%	9.2
Turbines	46%	59.6
Balance of Plant	21%	26.4
Grid Connection	6%	8.3
Battery Storage	19%	25
Total	100%	128.5

Source: BIGGAR Economics Analysis of case study evidence from comparable previously constructed wind farms. Note: Totals may not sum due to rounding.

To estimate the economic impacts from development and construction, it was first necessary to make assumptions on the ability of businesses within each study area to carry out contracts.

The assumptions were based on the average from the RenewableUK research, analysis of the industries and professions in each study area, and BIGGAR Economics' previous experience undertaking such analysis for other wind energy projects in the Lothians and South of Scotland.

On this basis, it was estimated that around 33% of the contracts could be carried out by Scottish businesses, with a value of £43.0 million. It was estimated that spending on businesses based in Midlothian would be around £14.9 million, equivalent to 12% of total development and construction expenditure.

The largest opportunity for Scottish businesses could be in contracts associated with balance of plant, which could be worth £22.7 million. Balance of plant would also be the largest opportunity for businesses in Midlothian, worth up to £8.2 million.

Table 5-2: Development and Construction Expenditure by Study Area

	Midlothian		Scotland	
	%	£m	%	£m
Development and Planning	33%	3.0	62%	5.8
Turbines	2%	1.0	8%	4.6
Balance of Plant	31%	8.2	86%	22.7
Grid Connection	26%	2.2	71%	6.0
Battery Storage	2%	0.5	16%	4.0
Total	12%	14.9	33%	43.0

Source: BIGGAR Economics Analysis. Note: Totals may not sum due to rounding.



Having estimated the size of the contracts that could benefit each of the study areas, it was possible to consider the Gross Value Added (GVA) and short-term employment that these could support. This was done by splitting each contract category into its component contracts and assigning each to an industrial sector, based on its Standard Industrial Classification (SIC)¹¹ code, Direct GVA was then estimated by applying the relevant turnover per GVA from the UK Annual Business Survey (ABS)¹².

In this way, it was estimated that development and construction contracts associated with the Proposed Development could generate £7.9 million GVA in Midlothian and £21.8 million GVA across Scotland.

Table 5-3: Development and Construction, Direct GVA by Study Area (£m)

	Midlothian	Scotland
Development and Planning	2.1	3.7
Turbines	0.6	2.3
Balance of Plant	4.1	11.3
Grid Connection	1.0	2.6
Battery Storage	0.2	1.8
Total	7.9	21.8

Source: BIGGAR Economics Analysis. Note: Totals may not sum due to rounding.

In a similar way, it was possible to estimate the number of direct jobs supported by spending in development and construction contracts. This was done by dividing the expenditure in each contract by the turnover per job ratio for the relevant sector. In this way, it was estimated that the development of the Proposed Development could generate 106 direct years of employment in Midlothian and 331 direct years of employment in Scotland.

¹¹ Office for National Statistics (2009), Standard Industrial Classification of industrial activities (SIC 2007)

¹² Office for National Statistics (2020), Annual Business Survey 2018 – Revised



Table 5-4: Development and Construction, Direct Employment by Study Area and Contract Type (Years of Employment)

	Midlothian	Scotland
Development and Planning	7	29
Turbines	15	47
Balance of Plant	61	168
Grid Connection	19	52
Battery Storage	4	34
Total	106	331

Source: BiGGAR Economics Analysis. Note: Totals may not sum due to rounding.

Expenditure in development and construction contracts is also expected to generate 'knock-on' effects across the economy. In particular, it will be associated with further rounds of expenditure along the supply chain and with the spending of the wages and salaries of those involved in the development and construction. These are referred to as 'indirect' and 'induced' impacts, respectively.

To estimate indirect and induced impacts it was necessary to apply the relevant Type 1 and Type 2 GVA and employment multipliers from the Scottish Government Input-Output Tables¹³ to direct GVA and direct employment. Since the multipliers refer to sectoral interactions occurring at the level of the Scottish economy, it was necessary to adjust them when considering impacts taking place in Midlothian.

Adding up direct, indirect and induced impacts, it was estimated that the development and construction of the Proposed Development could generate:

- £10.2 million GVA and 135 jobs in Midlothian; and
- £37.2 million GVA and 543 jobs in Scotland.

5.3 Operations and Maintenance

The first step in estimating the economic impact from the operations and maintenance of the Proposed Development was to consider the total expenditure required for its operation each year. Based on the number of turbines and their, it was estimated that the annual cost of operations and maintenance could be around £3.3 million.

It was further assumed that businesses in Midlothian could benefit from a total £1.6 million in operations and maintenance contracts (48%) each year, whereas annual expenditure in Scottish contractors could be up to £2.7 million (83%).

¹³ Scottish Government (2022), Supply, Use and Input-Output Tables.



Table 5-5: Operations and Maintenance Spending by Study Area

	Midlothian		Scotland	
	%	£m	%	£m
Operations and Maintenance	48	1.6	83	2.7

Source: BIGGAR Economics Analysis.

The total turnover generated in each study area was then divided by the turnover per GVA and turnover per job ratios of the sectors expected to carry out operations and maintenance contracts. In this way, it was estimated that the Proposed Development could generate £0.8 million direct GVA and seven direct jobs in Midlothian, and £1.3 million GVA and 14 direct jobs in Scotland.

As for development and construction, it was necessary to estimate the indirect and induced impacts associated with operations and maintenance contracts. This was done by applying the relevant Type 1 and Type 2 GVA and employment multipliers.

Adding up direct, indirect and induced impacts, it was estimated that during its annual operations and maintenance, the Proposed Development could generate:

- £1.1 million annual GVA and nine jobs in Midlothian; and
- £2.3 million annual GVA and 25 jobs in Scotland.

5.4 Non-Domestic Rates

The Proposed Development is expected to provide a stream of revenue to the public sector through the annual payment of non-domestic rates. This revenue will, in turn, fund public services. To estimate the economic impact generated by non-domestic rates it was first necessary to consider the rateable value of the development and apply the appropriate poundage rate. This was done by applying guidance developed by the Scottish Assessors Association¹⁴ to information about the performance of the Proposed Development. On this basis, it was estimated that the Proposed Development could generate each year £1.3 million in non-domestic rates.

For the period 2022/23, Midlothian Council has a budget of about £251 million (£184.2 million comes from Scottish Government and £58.5 million from Council Tax)¹⁵. About 75% of council's budget comes from the Scottish Government however, funding is declining every year, and the population is rapidly growing and changing, increasing the demand for essential goods and services and the costs to supply them. Midlothian Council estimated that the budget gap will be £13.9 million in 2023/24 rising to £25.9 million by 2027/28¹⁶.

¹⁴ Scottish Assessors Association (2023). Practice Note 2: Valuation of Onshore Wind Turbines

¹⁵ Midlothian Council (2023). Our Spending Choices 2022/23.

¹⁶ Midlothian Council (2023). Our Budget Challenge 2023/24.



The non-domestic rates associated with the Proposed Development would contribute to the equivalent of around 0.5% of council's 2022/23 budget and would be equivalent to closing 9% of the identified 2022/23 budget gap. Over its lifetime, the contribution towards non-domestic rates could be up to around £64.8 million.



6.

Tourism and Recreation

This section provides a baseline of tourism activity in the area and assesses the potential impact of the Proposed Development on tourism and recreation.

6.1 Tourism Baseline

6.1.1 Visitors to Midlothian

A range of statistics are available on tourism visitor numbers and visitor spend in Midlothian and Scotland, including the Great Britain Day Visitor Survey, the Great Britain Tourism Survey and the International Passenger Survey which are averages over a 3-year period (2017-2019).

In 2019, there were 1.3 million annual day visitors to Midlothian, spending £29.2 million in total, an average of £23 per trip. Midlothian accounted for 0.9% of day visits to Scotland, where there were 144.9 million visitors, spending a total of £5,186.6 million, an average of £36 per trip.

There were 46,000 annual domestic overnight visitors to Midlothian, with a total spend of £5.3 million. Domestic overnight visitors spent more on average compared to day visitors, spending an average £166 per trip. This was also the case for domestic overnight visits across Scotland as a whole. The total 12.4 million domestic overnight visitors spent £2,989.3 million across Scotland, an average of £241 per trip.

There were 29,038 international overnight visitors to Midlothian, contributing £8.6 million in spending, accounting for 0.8% and 0.3% of total international overnight visits and spending respectively. International visitors spent the most on average per trip. In Midlothian, international overnight visitors spent an average of £295 per trip, compared to £694 per trip spent by international overnight visitors across Scotland.

So, almost all visitor activity in Midlothian is accounted for by day trips, with limited overnight tourism.



Table 6-1: Visits and Visitor Spending, 2019

	Midlothian	Scotland
Visitor Numbers (million)		
Day Visitors	1.3	144.9
Domestic Overnight Visitors	<0.1	12.4
International Overnight Visitors	<0.1	3.5
Spend (£ million)		
Day Visitors	29.2	5,186.6
Domestic Overnight Visitors	5.3	2,989.3
International Overnight Visitors	8.6	2,458.6

Source: Great Britain Tourism Survey (2019), Great Britain Day Visits Survey (2019).

6.1.2 Sustainable Tourism GVA and Employment

In its 2015 economic strategy¹⁷ the Scottish Government identified six sectors as growth sectors, that is, economic sectors where Scotland had a comparative advantage. Sustainable tourism was one of the sectors identified.

In 2019, the sector generated £28.6 million GVA in Midlothian, equivalent to 0.6% of the total £4,503.7 million GVA generated by the sector across Scotland that year. The sector also employed 2,000 people in Midlothian, accounting for 0.9% of the total employment of 229,000 in the sustainable tourism sector in Scotland, despite the region accounting for 1.7% of the total population of Scotland (Table 6-2). These proportions indicate that tourism is less important for Midlothian than Scotland as a whole.

With International Overnight Visitors spend in Midlothian only accounting for 0.3% of the Scottish total (Table 6-1), it is also likely that employment in the Sustainable Tourism sector within the region is largely supported by residents and day visitors.

Table 6-2: Sustainable Tourism: Employment and GVA, 2019

	Midlothian	Scotland
GVA (£m)	28.6	4,503.7
Employment	2,000	229,000

Source: Scottish Government (2022), Growth Sector Database.

¹⁷ Scottish Government (2015), Scotland's Economic Strategy.



6.1.3 Local Visitor Attractions

The top ten most visited tourist attractions in Edinburgh and the Lothians, are shown below in Figure 6-1. Of the most visited attractions in the region, none were located within 15km of the Proposed Development. The closest attraction, The National Museum of Scotland, was located in Edinburgh approximately 19km away. The remaining nine most popular attractions in the region are in Edinburgh.

Figure 6-1: Regional Tourist Attractions (Number of Visits in thousands)



Source: Visit Scotland (2021), Insight Department: Edinburgh and Lothians Factsheet 2019

There are some local visitor attractions within a 15km radius are set out in Table 6-3 below, alongside a description of them and their distance from the Proposed Development. These were identified through the VisitScotland portal and include both indoor and outdoor tourist attractions in the local area.

Table 6-3: Local Visitor Attractions

	Description	Distance to Site (km)
Hirendeand Castle	Ruins of 16 th century peel tower	3
Rosebery Reservoir Fishery	52-acre water for fishing and wildlife viewing	3
Julie Hill	Working dog demonstrations	3
Arniston House	Palladian style mansion set in parkland	4
Borthwick Castle	Refurbished 1430 castle available for private hire and events	4



Crichton Castle	Ruins of 14 th century castle	6
Crichton Collegiate Church	Medieval church built in 1449	6
SKÓGR Axe Throwing	Offering axe throwing activities	7
Vogrie Golf Course	9-hole golf course within Vogrie Country Park	8
National Mining Museum Scotland	Illustrates the history of coal in Scotland	8
Vogrie Country Park	Victorian mansion surrounded by woodland and café	8
Earth & Nature Adventures	Multi-activity outdoor centre	8
Whitehill House Golf Course	Historic A-listed house and golf course	8
Falconry Scotland	Offering outdoor activities, including falconry flying and archery	8
Ryze	Indoor activity centre including trampolines	8
Tyne Esk Trails	Horse riding trails	9
Penicuik Papermaking Museum	Museum illustrating the history of papermaking	10
Great Polish Map of Scotland	A large (50m x 40m) three-dimensional outdoor scale model of Scotland	10
Edinburgh Falconry & Fishing	Facility for various falconry and fishing activities	10
Rosslyn Chapel	15 th -century chapel welcoming visitors	10
Roslin Glen Country Park	Previously home to Scotland's largest gunpowder mill, and now diverse with wildlife	10
Rosslyn Castle	Ruins of castle built in 1450	10
Edinburgh Off Road	Mountain biking activities	10
Broomieknowe Golf Club	18-hole golf course	11
Melville Golf Centre, Toptracer Range	All weather driving range with automatic powertees	11
Melville Golf Centre Golf Course	9-hole golf course	11



Glencorse Golf Club	18-hole golf course	11
Penicuik House	Neo-Palladian Mansion in country estate	12
Stewart Brewing	A local brewery which produces craft beer	12
Performance Portfolio	Facility providing supercars to be driven	12
Loanhead Leisure Centre	Fitness and leisure centre	12
Kings Acre Golf Course	18-hole golf course	12
Dalkeith Country Park	1,000-acre park offering a range of indoor and outdoor activities	12
Fort Douglas Adventure Park	Adventure Park offering outdoor activities	12
Eden Rock Edinburgh	Indoor climbing centre facility	12
Go Ape Dalkeith	Outdoor tree top activities including zip wires	12
Go Ape Peebles	Outdoor tree top activities including zip wires	13
Pentland Plants	Unique selection of plants with café	13
Cousland Smiddy & Heritage Hub	18 th century blacksmith's workshop and Victorian cottage	13
Anna Urban Photography	Photographer specialising in adventurous photoshoots for visitors coming to Scotland	14
Peebles Golf Club	Golf course and driving range with additional facilities such as restaurant	14
Innerleithen Golf Club	18-hole golf course	14
Glenkinchie Distillery	Whisky distillery and orchard garden	14
Midlothian Snow Sports Centre	Dry ski slope facilities offering a range of activities including skiing and tubing	15
Peggyslea Clydesdales	Centre allowing guests to ride and spend time with Clydesdale horses	15

Source: VisitScotland (2023)



6.1.4 Local Accommodation Providers

Some accommodation providers were identified in the area surrounding the Proposed Development, identified through online research on the VisitScotland portal, Bookings.com, and Google Maps. They are primarily clustered around a few locations and settlements and the surrounding areas including Peebles, West Linton, Penicuik, Roslin, Lasswade and Dalkeith.

As shown in Table 6-4, of the 107 providers, just nine were located within 5km of the site, all of which are self-catering.

Table 6-4: Local Accommodation Providers

Distance from the Site	Number of Accommodation Providers				Total
	Self-Catering	Holiday Parks	B&B	Hotels	
0-5km	9	0	0	0	9
5-10km	6	6	1	4	17
10-15km	32	9	19	21	81
Total	47	15	20	25	107

Source: Visit Scotland (2023) Accommodation Midlothian. Booking.com. Google Maps.

6.1.5 Recreational Trails and Core Paths

There are multiple core paths¹⁸ within 15km of the site of the Proposed Development, including:

- Path 4-3, East of Danderhall;
- Path 4-8, North-West of Dalkeith;
- Path 4-16, North-East of Dalkeith;
- Path 7-1, South-East of Cousland;
- Path 2-3, West of Easter Howgate;
- Path 2-4, West of Easter Howgate;
- Path 2-6, North of Penicuik;
- Path 36, West of Bilston;
- Path 39, North of Hillend;
- Path 48, North-West of Milton Bridge;
- Path 48a, North-West of Milton Bridge;
- Path 2, North-East of Straiton;
- Path 5, North of Loanhead;
- Path 7, West of Polton;
- Path 7a, South of Polton;
- Path 8, North-East of Roslin;

¹⁸ Midlothian Council (2023), Core paths. Available at: https://www.midlothian.gov.uk/info/200226/walking_and_cycling/395/midlothian_core_paths



Path 10, West of Polton;
Path 11, South-West of Polton;
Path 17, South of Bliston;
Path 17a, East of Bliston;
Path 17b, South of Bliston;
Path 17c, East of Bliston;
Path 19, South-West of Loanhead;
Path 20, North-East of Roslin;
Path 23, North-East Roslin;
Path 29, North of Roslin;
Path 35, West of Bliston;
Path 41, West of Loanhead;
Path 42, West of Loanhead;
Path 47a, West of Roslin;
Path 3-5, East of Roslin;
6-27, South of Bonnyrigg;
6-27a, South of Bonnyrigg;
6-35, South of Bonnyrigg;
6-42, South of Bonnyrigg;
4-16, North-East of Dalkeith;
4-25, West of Dalkeith;
4-34, East of Dalkeith;
4-52, South-East of Lasswade;
6-42, South of Lasswade;
4-34a, West of Dalkeith;
4-35, North-West of Dalkeith;
4-35a, North-West of Dalkeith;
4-36, West of Dalkeith;
4-38, West of Dalkeith,
4-39, South of Dalkeith;
4-44, South of Dalkeith;
4-47, South of Dalkeith;
4-48, South of Dalkeith;
4-50, South of Dalkeith;
4-52a, South of Dalkeith;
4-52b, South-East of Lasswade;
5-3, East of Dalkeith;
5-4, East of Dalkeith;
5-12, South of Dalkeith;
5-12a, South of Dalkeith;
5-13, South-East of Dalkeith;
5-14, South-East of Dalkeith;
5-17, South-East of Dalkeith;
5-18, South of Dalkeith;
5-19, South of Dalkeith;
5-30, South-East of Dalkeith;



6-0, North of Lasswade;
6-4, North of Lasswade;
6-8, North-West of Lasswade;
6-14, West of Lasswade;
6-15, West of Lasswade;
6-16, East of Lasswade;
6-18, South of Lasswade;
6-22, South of Lasswade;
6-27, South of Lasswade;
6-27a, South of Lasswade;
6-31, South of Lasswade;
6-35, South of Lasswade;
8-1, West of Newtongrange;
8-18a, South of Newtongrange;
4-32, East of Whitehall;
5-10, North of Mayfield;
5-11, North of Mayfield;
5-24, South-East of Mayfield;
7-1, North of Pathhead;
7-4, North-East of Whitehall;
7-8, East of Mayfield;
7-18, South of Pathhead;
7-21, West of Pathhead;
7-21a, North-West of Pathhead;
7-22, West of Pathhead;
7-24, North of Crichton;
7-24a, North-West of Crichton;
7-27, North of Crichton;
7-27a, North-West of Crichton;
7-40, North of Crichton;
7-28, North of Newlandrig;
7-29, South-East of Mayfield;
7-30, South of Mayfield;
2-6, North of Penicuik;
2-50, West of Penicuik;
2-62, North of Penicuik;
2-23, North of Penicuik;
2-11, North of Penicuik;
2-13, North of Penicuik;
2-14a, North of Penicuik;
2-24, North of Penicuik;
2-26, North-East of Penicuik;
2-42, East of Penicuik;
2-33, Penicuik and surrounding area;
2-33a, Penicuik and surrounding area;
2-34, West of Penicuik;



2-34a, West of Penicuik;
2-37, Penicuik and surrounding area;
2-39, Penicuik and surrounding area;
2-39a, Penicuik and surrounding area;
2-41, South of Penicuik;
2-44, South-West of Penicuik;
34, South of Roslin;
2-31c, South of Roslin;
32, South of Roslin;
32a, South of Roslin;
33, South-East Roslin;
33a, South-East Roslin;
3-6, East of Rosewell;
3-6a, South-East of Rosewell;
3-7, East of Rosewell;
3-10, South of Rosewell;
3-10a, South of Rosewell;
3-32, South of Rosewell;
7-33, North of Gorebridge;
7-33a, North of Gorebridge;
7-35, East of Gorebridge;
7-36, East of Gorebridge;
8-18, North-West of Gorebridge;
8-18b, West of Gorebridge;
8-22a, West of Gorebridge;
8-23, West of Gorebridge;
8-25, South and Gorebridge;
8-26, South of Gorebridge;
8-36, East of Temple;
8-39, South of Arniston;
8-43, East of North Middleton;
8-43a, East of North Middleton;
8-37, North of Crichton;
7-47, East of Fala Dam;
3-26, East of Howgate;
8-60, East of Leadburn;
8-59, East of Whitelaw
7-48, East of Tynehead;
8-56, East of Leadburn;
8-58, East of Leadburn;

A series of recreational trails within 15km of the Proposed Development were identified through the portal Walkhighlands. They are set out in Table 6-5 alongside a description of them and their distance from the Proposed Development.



Table 6-5: Recreational Trails

	Description	Distance to Site (km)
Gladhouse Reservoir circuit	An 8km circular route around the Gladhouse Reservoir.	1
Blackhope Scar and the Moorfoots	This 17.75km route starts at the Gladhouse Reservoir before summiting Blackhope Scar and two further Donalds.	3
West Linton to Balerno	The 19.25km section of the Scottish National Trail begins in West Linton before passing through the Pentland Hills.	4
The Great Map of Scotland circuit, Eddleston	The 5km loop visits the Great Polish Map of Scotland.	9
Roslin Glen and Rosslyn Chapel, Roslin	A 4.25km route which passes Rosslyn Glen, Rosslyn Castle and Rosslyn Chapel.	10
Dalkeith Country Park circuit	This 7.25km walk through the country park.	11
Glencorse View and Castlelaw, Flotterstone	A 5.65km circuit from the Pentland hills Information Centre, looking over Glencorse Reservoir.	12
Scald Law and Carnethy Hill, Flotterstone	A 12.25km walk summiting Scald Law, the highest of the Pentland Hills.	13
Capital View walk and Swanston	A 4km route, hiking up the northern slopes of the Pentland Hills.	14
West Kip, East Kip and Scald Law from Threipmuir	A 11.75km circuit summiting two of the Pentland Hills, West Kip and East Kip.	14
Monks Rigg and Braid Law, Nine Mile Burn	A 7.5km hill walk up over Cap Law into the heart of the Pentlands.	15
Allermuir Hill and Swanston	A 6km summit to the top of Allermuir Hill.	15
Traprain Law, near Haddington	A short 3.2km hill walk to the top of Traprain Law, a small volcanic hill.	15

Source: Walkhighlands (2023)

In addition, Public Rights of Way (PRoW) LM173 and BE1 are close to the site of the Proposed Development. More specifically, Scottish Hill Tracks' route 39 Leadburn to



Heriot (HT43) crosses the south-western boundary of the site, approximately 250 m from the closest proposed turbine location.

6.2 Assessing the Relationship Between a Wind Farm Development and the Tourism Economy

Tourism and recreation assessments focus on the tourism economy, as defined by the spending of visitors and the employment supported by the sector. For a change in spending to take place, it is necessary that, as a result of a wind farm development, visitors change their behaviour. This may result, for instance, in deciding not to visit the area, not recommending the area or not visiting again. In turn, this decision has to lead to a fall in the employment and spending by visitors at a given attraction or accommodation provider.

As recorded in visitors' surveys, visitors tend to spend time in a given area for a range of reasons. These include, for instance, scenery and landscape; history and culture; and the place's reputation.

When considering individual tourism sites, the extent to which they are susceptible to change in their surroundings varies, based on:

- their relative importance for the local tourism economy;
- their users; and
- the reasons behind the attraction's appeal (its views, its heritage value, its historical value, its value in relation to local folklore etc.).

In addition, the scale of the impact on the surroundings of a wind farm development is expected to depend on factors, including:

- distance from the wind farm; and
- the interaction between the wind farm and the assets' features.

The interaction between the susceptibility to change of an attraction and the extent to which it will be impacted by the development determine the wind farm's relative impact. For these changes to have an effect, it is then required that they have an impact on the tourism economy, through reduced spending and a reduction in the employment supported by the sector.

6.3 Evidence on Wind Farms and Tourism

Over time, a series of works have considered the relationship between wind farm developments and tourism activity.

A study of potential effects of wind farms on tourism was undertaken in 2008 by the Moffat Centre at Glasgow Caledonian University¹⁹. The study was based on what

¹⁹ Moffat Centre (2008), The Economic Impact of Wind Farms on Scottish Tourism.



could happen and found that, although there may be minor effects on tourism providers and a small number of visitors may not visit Scotland in the future, the overall effect on tourism expenditure and employment would be very limited.

Since this study, wind farms have become a more common feature in Scotland and any negative effects on the tourism economy as a result of their existence would now be apparent.

In 2021, BiGGAR Economics produced a report analysing the relationship between the construction of onshore wind farms and tourism employment at the national, regional and local level.²⁰

Nationally, the report found that, while Scotland had experienced a significant increase in onshore wind energy (with the number of turbines increasing from 1,082 in 2009 to 3,772 in 2019) whilst employment in tourism-related sectors had increased by 20%. At the local authority level, those which had seen the largest increase on onshore wind energy also experienced increases in tourism employment equal to, or greater than other areas across Scotland.

The report included case studies of 44 onshore wind farms constructed between 2009 and 2019. This included an updated analysis of 28 wind farms included in a previous report²¹ constructed prior to 2015, and 16 additional wind farms constructed between 2015 and 2019. The study reported on changes in tourism-related employment in the small areas within 15km of each wind farm. Of the 28 wind farms previously analysed, the surrounding local areas of 18 experienced an increase in tourism employment above the Scottish average in the years following the construction. Of the 16 local areas surrounding the additional 16 onshore wind farms, 11 experienced increases in tourism employment which outperformed the Scottish average. These results suggested that tourism employment in local areas across Scotland changed independently of wind farms located in the area.

The report concluded that, there was no pattern or evidence suggesting that the development of onshore wind farms in Scotland had any negative effects on the tourism economies of the country as a whole, local authority areas or the immediate areas surrounding wind farms.

These conclusions are not a surprising finding given that:

- there are high levels of public support for renewable energy;²²
- as wind farms are well-established in Scotland, tourists might already expect to see wind farms when visiting Scotland, especially rural Scotland;
- the factors that determine the success of the tourism sector do not include the presence or otherwise of an onshore wind farm; and

²⁰ BiGGAR Economics (2021), Wind Farms & Tourism Trends in Scotland: Evidence from 44 Wind Farms

²¹ BiGGAR Economics (2017), Wind Farms and Tourism Trends in Scotland

²² BEIS (2022). Public Attitudes Tracker: Energy Infrastructure and Energy Sources. Winter 2021, UK.



- issues that influence tourism include the ability and willingness to travel, economic performance (and so whether tourists have disposable income available for leisure trips), exchange rates, the quality of the overall tourism product, the effectiveness of destination marketing and the quality and value for money of the services offered by tourism businesses.

6.4 Impact on Local Tourism and Recreation Sites

Having considered impacts on the local tourism economy over time, the analysis here focuses on whether the Proposed Development could have any impacts on individual attractions, accommodation providers and recreational trails.

6.4.1 Visitor Attractions

The tourism and recreation baseline has identified 44 visitor attractions.

There are four visitor attractions located within 5km from the proposed sit of the Proposed Development. **Hirendean Castle**, **Rosebery Reservoir Fishery**, and **Julie Hill** are located 3km from the site, and **Arniston House** is located 4 km away. The motivations to visit these attractions, such as an interest in history, fishing or agriculture will not be impacted by the Proposed Development, and therefore it is not expected that the attractions will experience any negative effects on activity.

Between 5 and 10km from the Proposed Development, there are eleven attractions. This includes **Crichton Castle** and **Crichton Collegiate Church** located 6 km away. Motivations to visit both attractions include an interest in Scottish history. Visits to **SKÓGR Axe Throwing**, located 7km from the Proposed Development, would be motivated through an interest in the activity offered. **Vogie Golf Course**, **National Mining Museum Scotland**, **Vogie Country Park**, **Earth Nature Adventures**, **Whitehall House Golf Course**, **Falconry Scotland**, and **Ryze** are all located 8km from the Proposed Development. **Tyne Esk Trails** is located 9km away.

Tourists may be motivated to visit these attractions due to wanting to participate in outdoor activities such as golf and horse-riding, or having an interest in history and wildlife. As these motivations would not be impacted by the presence of the Proposed Development, it is not expected that the Proposed Development would affect tourism activity at any of the attractions between 10 and 15km from the Proposed Development.

The remaining 29 visitor attractions are located between 10 and 15 km away. **Penicuik Papermaking Museum**, **Great Polish Map of Scotland**, **Edinburgh Falconry & Fishing**, **Rossllyn Chapel**, **Roslin Glen Country Park**, **Rossllyn Castle** and **Edinburgh Off Road** are all located 10km from the site. Motivations to visit these attractions include an interest in art, history, wildlife and nature. The Proposed Development would not impact any of the reasons visitors may choose to visit these attractions, and therefore it is not expected that the Proposed Development would negatively impact these attractions.



Visits to **Broomieknowe Golf Club, Melville Golf Centre Toptracer Range, Melville Golf Course, and Glencorse Golf Club**, all located 11km away from the Proposed Development, would be motivated by an interest in golf. As this motivation would not be impacted by the proposed development, it is not expected that they will experience any negative impact on their activity.

Visitor attractions located 12km from the Proposed Development include Penicuik House, Stewart Brewing, Performance Portfolio, Loanhead Leisure Centre, Kings Acre Golf Course, Dalkeith Country Park, Fort Douglas Adventure Park, Eden Rock Edinburgh, and Go Ape Dalkeith. The motivations to visit these attractions, such as an interest in brewing beer, supercars, Scottish history or outdoor activities would not be impacted by the Proposed Development, and therefore it is not expected that the attractions will experience any negative effects on activity.

13km away from the site are **Go Ape Peebles, Pentland Plants, and Cousland Smiddy & Heritage Hub**. The motivations to visit these attractions include an interest in botany, history and outdoor activities. **Anna Urban Photography, Peebles Golf Club, Innerleithen Golf Club, and Glenkinchie Distillery**. Visitors may choose to visit these attractions as a result of an interest in photography, golf or distillation of whisky. The remaining two attractions, **Midlothian Snow Sports Centre and Peggyslea Clydesdales**, are located 15km away from the Proposed Development. Motivations to visit these two sites are likely to be an interest in outdoor winter spots or horses. The Proposed Development would not impact any of the reasons visitors may choose to visit these attractions, and therefore it is not expected that the development would negatively impact these attractions.

6.4.2 Tourism Accommodation

The tourism baseline has identified 107 accommodation providers located within 15km of the Proposed Development for the Proposed Development, most of which are located West of the site. They are clustered primarily around the areas of Peebles, West Linton, Penicuik, Roslin, Lasswade and Dalkeith. Most of the accommodation available in the area is from self-catering providers.

Nine accommodation providers are located within 5km of the Proposed Development, all of which were self-catered cottages. Two of the providers, **Middleton Inn** and **Harvieston Hall**, highlight their luxury amenities, including private patio space and hot-tubs, while four other providers market themselves around their view of, and proximity to, tourist attractions, such as Borthwick Castle and Arniston House. The remaining two highlight their modern amenities and their countryside setting. As none of the motivations to stay in these accommodation providers would be impacted, it is not expected that the Proposed Development would affect the activity of these providers.

An additional 17 providers are located between 5 and 10km away from the Proposed Development. This includes six self-catering providers, six holiday parks, one B&B, and four hotels. Of the six self-catering providers, **Pentland Lodge** highlights its modern amenities and sauna. Both **The Mansion House of Kirkhall** and **Gorton**



House & Cottages highlight their spacious grounds, with the latter also describing its view of the Pentland Hills and proximity to Roslin Glen. The remaining three self-catering providers market themselves as being a base for exploring Edinburgh and the nearby tourist attractions. As the motivations to visit these providers would not change as a result of the Proposed Development, it is not expected that they will experience any negative impacts as a result of the Proposed Development.

Of the six holiday parks located between 5 and 10 km away, four providers market themselves as luxury glamping pods with modern amenities, surrounded by natural landscapes, whilst the other two campsites market their beautiful locations. As the presence of the Proposed Development would not impact these motivations, it is not expected that the Proposed Development would have a negative impact on the activity of these providers. The B&B markets itself as a cosy homestay and highlights its proximity to Bonnyrigg town. As the presence of the Proposed Development would not impact the motivations to visit the B&B, it is not expected that it would experience any negative impacts as a result of the Proposed Development.

Of the four hotels located between 5 and 10 km from the Proposed Development, **Crookston House** and **Dalhousie Castle Hotel and Spa** market themselves as being secluded and relaxing ambience. Both providers also highlight their modern amenities as well as the spa facilities at **Dalhousie Castle**. As the motivations to visit these providers would not change as a result of the Proposed Development, it is not expected that they will experience any negative impacts as a result of the Proposed Development.

The remaining 81 providers are located between 10 and 15km away, including 32 self-catering providers, 19 B&Bs, 21 hotels, and 9 holiday parks. Of the self-catering providers, many highlighted their tranquil ambience and countryside location, using descriptive words such as 'retreat' and 'escape'. Providers also marketed their modern amenities, some of which including luxury features such as hot tubs. As the presence of the Proposed Development would not impact these motivations, and given the distance from the Proposed Development, it is not expected that the Proposed Development would have a negative impact on the activity of these providers.

Of the 19 B&Bs, many market their proximity to local walks, including the Pentland Hills, as well as being an ideal base to explore the city of Edinburgh. Other providers also highlight their locally sourced Scottish Breakfast, and picturesque surroundings. As the motivations to visit these providers would not change as a result of Proposed Development it is not expected that providers will experience any negative impacts. The hotel providers marketed aspects such as their luxury facilities, quality restaurants and access to local walks. Some providers also highlighted their proximity to Edinburgh City Centre and other attractions such as golf courses. Various hotels, such as **Carberry Tower**, are also situated within estates and highlight their secluded and tranquil ambience. As the presence of the Proposed Development would not impact these features, it is not expected that the Proposed Development would have a negative impact on the activity of these providers.



Of the 9 holiday parks, 6 are caravan and camping parks, and the remaining 3 are glamping pod providers. Many of the caravan and camping parks highlight their facilities and their proximity to both Edinburgh City Centre, whilst being located within woodland and countryside. The glamping pod providers market their luxury amenities and cosy ambience. Some providers, such as **Wilding on a Whim** also highlight their eco-friendly pods and access to rewilding activities on site. As the presence of the Proposed Development would not impact the motivations to visit any of these sites, it is not expected that the Proposed Development would have a negative impact on any of these providers.

6.4.3 Recreational Trails and Core Paths

The closest recreational trail to the Proposed Development is **Gladhouse Reservoir Circuit**, an 8km route to the east of the Proposed Development, featuring picturesque views of the reservoir. The Proposed Development will not obstruct the views of the water, and therefore it is not expected that the presence of the Proposed Development would impact activity along this route.

Additionally, within 5km of the Proposed Development of the Proposed Development is **Blackhope Scar and the Moorfoots**, located 3km away. This route begins at Gladhouse Reservoir before submitting three Moorfoot peaks, providing extensive views of the reservoir and surrounding landscape. This trail already passes closely by an existing windfarm, and therefore it is not expected that the presence of the Proposed Development would affect activity along these routes. **West Linton to Balerno**, located 4km from the Proposed Development, is a 19.25km section of the Scottish National Trail, running the length of Scotland. This particular section ascends through the Pentland Hills. Motivations to take this route are likely to be associated with the Scottish National Trail and therefore are unlikely to be affected by the Proposed Development.

The Great Map of Scotland Circuit, Eddleston is a 5km circuit located 9km from the Proposed Development. The route takes hikers to the Great Polish Map, before looping back through woodlands. These features will not be impacted by the Proposed Development and is therefore not expected that the route will experience any impacts on activity.

Located 10km from the site of the Proposed Development is **Roslin Glen and Rosslyn Chapel, Roslin**, a 4.25km route passing various tourist attractions in Roslin, including Rosslyn Castle and Rosslyn Chapel. It is unlikely that the motivations to visit these sites will be impacted and therefore it is not expected that the Proposed Development would affect activity along this route. **Dalkeith Country Park** is located 11km from the site and is mainly made up of woodland paths. There are many features included in this walk, including outdoor activities, a cafe and woodland paths, none of which would be impacted by the Proposed Development. It is therefore not expected that the Proposed Development would affect activity along this route.



Also located between 10 and 15km of the Proposed Development is **Glencorse View and Castlelaw, Flotterson**, located 12km away, and **Scald Law and Carnethy Hill, Flotterstone**, located 13km away. These walks benefit from the ascent up the Pentland Hills, as well as additional picturesque features such as the Glencorse Reservoir. These features will not be impacted by the Proposed Development and therefore it is not expected that these routes will experience any impacts on activity. Both **Capital View walk and Swanston** and **West Kip, East Kip and Scald Law from Threipmuir** are located 14km from the Proposed Development. Both routes also summit various Pentland Hills, including Scald Law, the highest of the range. The routes provide picturesque views of Edinburgh, Lothian and across to the Moorfoot Hills. As the presence of the Proposed Development would not impact these features, and given the distance from the Proposed Development, it is not expected that the Proposed Development would have a negative impact on the activity along these trails.

The three remaining trails, Monks Rigg and Braid Law, nine Mile Burn, Allermuir Hill and Swanston, and Traprain Law, near Haddington, are all located 15km from the Proposed Development. Monks Rigg and Braid Law, nine Mile Burn and Allermuir Hill and Swanston summit Pentland Hills, providing extensive views of Edinburgh City and the Pentland range, whilst Traprain Law, near Haddington summits a small volcanic hill. None of these features will be affected by the presence of the Proposed Development, and therefore activity on these routes would not be impacted.

There are also several core paths in the area. These core paths tend to be used by local residents, or are part of the recreational trails described above. As a result, the Proposed Development is unlikely to have an impact on activity along them.

Scottish Hill Tracks' route 39 Leadburn to Heriot (HT43) crosses the south-western boundary of the site however, this section is relatively short and outwith all proposed infrastructure. PRow BE1 is also located immediately adjacent to the south-western boundary, providing a link to LM173. Thus, there would be no expected impact on access to this route as a result of the Proposed Development and no intense levels of effect which would damage the recreation resource.

6.5 Summary of Local Tourism and Recreation Sites

The Tourism Baseline (Section 6.1) shows that the tourism sector within Midlothian is not as important as it is to wider Scotland, with a relatively small proportion of visitor spending within the region and the sector being underrepresented in terms of employment.

The closest of the ten most visited tourist attractions in Edinburgh and the Lothians is 19km away, and therefore will not be affected by the Proposed Development. The impact of the Proposed Development on local visitor attractions, recreational trails, core paths and accommodation within 15km, was also found to be negligible.



7. Community Benefits and Opportunities

This chapter considers how the Applicant aims to maximise the local economic benefits generated by the Proposed Development.

7.1 Maximising Economic Benefits

Developers can play a transformational role within the communities where they operate and can make an important contribution to their economic development. This fosters a collaborative relationship with the local community and ensures that a lasting legacy of economic development can be created.

The Applicant proposes various commitments which aim to maximise economic benefits to the local area. This section sets out a series of initiatives that the Applicant would undertake to maximise its local economic impact. Interventions provide a series of overlapping benefits, including:

- providing funding to support local ambitions and needs;
- increasing local resilience;
- strengthening the local business base; and
- delivering skills.

All these benefits can contribute to local strategic goals to attract people to live and work in Midlothian, providing sustainable jobs.

7.2 Community Benefit Package

Community benefits, an annual payment that is made by the Applicant to those communities in the proximity of a wind farm, have become a common practice to support local ambitions and needs. While they do not constitute a material consideration at the planning stage, commitment to a comprehensive package of community benefits has a role in fostering a good relationship between the Applicant and the community hosting the development.

To provide a framework on how to deliver community benefits, in 2019 the Scottish government released its 'Good Practice Principles for Community Benefits from Onshore Renewable Energy Developments'²³, which updated previous guidance issued in 2015. The Scottish Government recommends onshore wind developers to

²³ Scottish Government (2019), Scottish Government Good Practice Principles for Community Benefits from Onshore Renewable Energy Developments.



deliver community benefit funding worth £5,000 per MW of installed capacity. The document also encourages developers to engage in holistic ways to maximise benefits locally, going beyond a purely monetary approach.

Following this recommendation, the Applicant is proposing a tailored package of benefits for the community from the Proposed Development and according to the current layout design and installed capacity of about 108 MW, this could equate to a community benefit funding for the local area worth £540,000 annually, which is equivalent to £27 million over the project's lifetime. This could support local aspiration and projects and generate economic impacts. The presence of the Proposed Development would provide local communities with additional funding, which could support them in delivering larger interventions.

7.3 Local Electricity Discount Scheme (LEDS)

As part of the community benefit offering, the Applicant is committed to providing funding to reduce the energy bills of households proximate to the Proposed Development. The details of the LEDS will be finalised at a later date.

The practical effect of these discounts will be to enable the households affected to spend more on other goods and services such as food, clothing, transport, and leisure. The value of the energy discounts therefore represents additional turnover for the sectors that benefit from household expenditure, the money spent by households to meet their everyday needs. Household spending patterns²⁴ show that those with higher incomes spend a greater proportion of their total expenditure on recreation and hospitality. By enabling residents to spend more on leisure, the provision of support with energy bills for the local community is therefore likely to generate economic benefits and support jobs in the local hospitality and leisure sectors.

7.4 A Commitment to Local Suppliers

7.4.1 Renewable UK Guidance

In 2014, RenewableUK published the "Local Supply Chain in Onshore Wind, Good Practice Guide"²⁵, which includes guidance for onshore wind developers on how to maximise local content. The report made the following suggestions:

- **maximise your local presence and begin early:** start identifying potential suppliers early by being active and visible locally;
- **partnerships work:** look for partnerships with business groups and local authorities;
- **the developer's role is that of an enabler:** use information on potential suppliers to ensure primary contractors maximise local opportunities;

²⁴ ONS (2023), Family spending in the UK: April 2021 to March 2022.

²⁵ RenewableUK (2014), Local supply chain in onshore wind, good practice guide.



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- **provide the right information, at the right time:** consider adopting an iterative process when communicating with businesses and leave them time to learn and adjust;
 - **communicate technical requirements early:** this will give the opportunity for upskilling or the emergence of consortia to occur; and
 - **if you can, demonstrate local content in planning:** where possible include a demonstrable commitment to local content in planning and carry out ex-post auditing.

In line with these suggestions, the Applicant has committed to prioritising local companies in the provision of contracts during the development and construction and operational phases. The Applicant will promote the opportunities available to local suppliers, including by holding “meet the buyer” events.

In recent years, the Applicant has typically invested about £279,000 per wind turbine in the local community, including stakeholders, suppliers, and service providers, throughout all phases of the development. The Proposed Development is anticipated to bring economic benefits to the area, including job opportunities, employment and the utilisation of local services. The increased concentration of activity in the construction sector in Midlothian will be of particular importance.



8. Conclusion: Net Economic Benefits

The Proposed Development delivers a comprehensive package of economic and wider benefits and so maximises net economic benefits for the local community.

NPF4 establishes as a requirement for renewable energy proposals that they “maximise net economic impact, including local and community socio-economic benefits such as employment, associated business, and supply chain opportunities”²⁶.

As set out throughout this report, the Applicant has a strong track record in delivering economic and wider benefits to the communities hosting its developments. The benefits of the Proposed Development and the commitments of the Applicant include:

- economic benefits during the development and construction phase of:
 - £10.2 million GVA and 135 jobs in Midlothian; and
 - £37.2 million GVA and 543 jobs in Scotland.
- annual economic benefits during the operations and maintenance of:
 - £1.1 million GVA and nine jobs in Midlothian; and
 - £2.3 million GVA and 25 jobs in Scotland.
- contribution to public finance through the payment of non-domestic rates, which could amount to £1.3 million each year, equivalent to approximately 0.5% of Midlothian Council’s 2022/23 budget;
- commitments to maximise local economic benefits, including a community fund which could support 10 jobs in the local economy;
- a Local Electricity Discount Scheme, which will reduce the household energy bills of the community; and
- maximising the economic content that is sourced locally by guaranteeing to work with local contractors.

The Proposed Development would generate economic impacts locally and nationally. The Applicant’s commitment to ensuring the local community benefits from the Proposed Development would also support wider economic and social

²⁶ Scottish Government (2023), National Planning Framework 4 (Policy 11c)



impacts. By committing to prioritising local contractors, as well as the Applicant's innovative approach to community benefits and Electricity Discount Scheme, the Proposed Development will support local economic development and enable the community to support projects and address the priorities of the area. On this basis, it can be concluded that the Proposed Development maximises net economic impact.

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