

# **Socio-economics, Tourism and Recreation Assessment of Hare Hill Windfarm Repowering and Extension**

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A report to ScottishPower Renewables (UK) Ltd.  
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# Contents

<b>1. Executive Summary</b>	<b>2</b>
<b>2. Introduction</b>	<b>4</b>
<b>3. Strategic and Policy Context</b>	<b>5</b>
<b>4. Local Economic Context</b>	<b>16</b>
<b>5. Assessment Methodology</b>	<b>24</b>
<b>6. Economic Impact</b>	<b>28</b>
<b>7. Maximising Socio-economic Benefits</b>	<b>34</b>
<b>8. Tourism and Recreation</b>	<b>41</b>



## Acronyms

Acronym	Full Text
MW	Megawatt
SPR	ScottishPower Renewables
GVA	Gross Value Added
FTE	Full Time Equivalent
GDP	Gross Domestic Product
NPF4	Fourth National Planning Framework
CWB	Community Wealth Building



## 1.

# Executive Summary

Hare Hill Windfarm Repowering and Extension could deliver a total of £48.5 million Gross Value Added (GVA) and 547 years of employment in Scotland during the development and construction phase.

Scotland has signed up to ambitious climate change targets, with the Climate Change (Emissions Reductions) Act 2019<sup>1</sup> 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 projects such as Hare Hill Windfarm Repowering and Extension (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, construction, and following operations. In particular, it was estimated that during its development and construction, the proposed Development could generate:

- **£16.5 million GVA and 174 years of employment in East Ayrshire and Dumfries and Galloway; and**
- **£48.5 million GVA and 547 years of employment across Scotland.**

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

- **£1.7 million GVA and 10 jobs in East Ayrshire and Dumfries and Galloway; and**
- **£3.7 million GVA and 29 jobs across Scotland.**

The proposed Development will also contribute to public finances through the payment of non-domestic rates, which could amount to approximately £1.6 million annually, or £62.4 million over a 40-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 for onshore wind projects to offer community benefit funding, with Scottish Government guidance suggesting £5,000 per annum per installed Megawatt (MW). This level of funding would generate around £0.7 million every year for the local economy,

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<sup>1</sup> Scottish Government (2019), Climate Change (Emissions Reduction Targets) (Scotland) Act 2019



equivalent to £26.0 million (not including indexation) over the lifetime of the wind farm.

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 windfarms and tourism employment at the local, regional and national level.<sup>2</sup> The report concluded that there was no pattern or evidence suggesting that the development of onshore windfarms in Scotland had any negative effects on the tourism economies of the country as a whole, local authority areas or the immediate areas surrounding windfarms.

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

The creation 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.

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



# 1.

# Introduction

BiGGAR Economics was commissioned by ScottishPower Renewables to assess the potential socio-economic, tourism, and recreational impacts of the Hare Hill Windfarm Repowering and Extension.

## 1.1 Background

Hare Hill Windfarm Repowering and Extension (the proposed Development) is a planned onshore windfarm project in East Ayrshire and Dumfries and Galloway. It involves repowering and extending the existing Hare Hill and Hare Hill Extension Windfarms, which has been operational since 1999 and 2017 respectively. The proposed Development is expected to consist of 23 turbines, each with a generating capacity of between 4.5 MW to 6 MW across turbine types, resulting in a total installed capacity of up to 130.0 MW.

This study aims to:

- contributing to existing analysis by quantifying the potential economic impacts of the proposed Development;
- assessing the potential for any impacts on the local economy such as changes to tourism activity as a result of the proposed Development; and
- outlining the potential for the local community to benefit from the proposed Development.

## 1.2 Report Structure

The report is structured as follows:

- Section 3 places the proposed Development in the context of national and regional economic strategies;
- Section 4 provides a socio-economic context;
- Section 5 describes the assessment methodology used;
- Section 6 considers the economic impact from the proposed Development;
- Section 7 describes how the proposed Development will maximise socio-economic benefits; and
- Section 8 sets tourism in the area in context and considers the relationship between the proposed Development and the local tourism economy.



## 2.

# Strategic and Policy Context

This section sets out the national and regional context and how the proposed Development would support strategic aims.

## 2.1 National Strategic Context: Economic and Related Policies

### 2.1.1 Scotland's National Performance Framework

The National Performance Framework<sup>3</sup> is the policy document that guides the Scottish nation, with all other policies designed to meet its purpose and outcomes. The purpose of the National Performance Framework is:

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**“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.”**

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The National Performance Framework is designed to provide a more complete outline of development in Scotland beyond the traditional metrics of GDP growth with the purpose 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 Indicator 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 tackle poverty. It is these indicators which the Scottish Government focuses its activities and spending to help meet the national outcomes.

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<sup>3</sup> Scottish Government (2023), Scotland's National Performance Framework.



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.

### **2.1.2 Programme for Government 2024-25: Serving Scotland**

Published in September 2024, the Programme for Government<sup>4</sup> sets out the Scottish Government's commitments with the purpose of improving people's lives by focusing on four clear priorities, including:

- eradicating child poverty;
- growing the economy;
- tackling the climate emergency; and
- ensuring high quality and sustainable public services.

The programme outlines key initiatives under each of the four priorities, several with relevance to the proposed Development. In particular, the Scottish Government highlights the economic opportunities associated with the path to Net Zero, and the importance of creating the right enabling environment to support businesses which generate jobs and wealth for communities.

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<sup>4</sup> Scottish Government (2024), Programme for Government 2024-25: Serving Scotland.



### **2.1.3 Green Industrial Strategy**

The Green Industrial Strategy<sup>5</sup>, published by the Scottish Government in September 2024, aims to help Scotland realise the economic benefits of the global transition to Net Zero. The strategy highlights Scotland's strengths and opportunities during the transition and outlines six key enabling factors that the Scottish Government and partners will do to foster a positive environment for investment and growth. These include:

- supporting investment, ensuring an investment-friendly ecosystem;
- investing in strong research and development foundations;
- supporting the development of a skilled workforce;
- helping supply chain businesses to seize opportunities;
- delivering an agile planning and consenting system; and
- delivering required housing and enabling infrastructure.

The strategy provides a clear direction and focus, highlighting the importance of prioritising resources and investment. The strategy also emphasises the need for coordinated policies to create the right environment and for working collaboratively with partners to maximise economic benefit from the opportunities created by the global transition to Net Zero.

As the largest contributor to Scotland's renewable electricity generation, maximising the wind economy is a key component of this strategy.

### **2.1.4 Scotland's National Strategy for Economic Transformation**

In March 2022, The Scottish Government published the National Strategy for Economic Transformation<sup>6</sup>, which set out its ambition for Scotland's economy over the next decade. The strategy lays out how it intends to deliver economic growth that makes Scotland prosperous, productive, and internationally competitive. Of particular importance is the ambition to be greener, through a just transition to Net Zero, a nature-positive economy and rebuilding natural capital.

To deliver its vision, five programmes of action have been identified (with a sixth priority of creating a culture of delivery), including:

- establishing Scotland as an entrepreneurial nation;
- strengthening Scotland's position in new markets and industries, generating new, well-paid jobs from a 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.

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<sup>5</sup> Scottish Government (2024), Green Industrial Strategy.

<sup>6</sup> Scottish Government (2022), Scotland's National Strategy for Economic Transformation.



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 continued investment and support. Renewable energy also has a role to play in supporting productive businesses and regions across Scotland.

### **2.1.5 National Planning Framework 4 (Sustainable Places Project No 3 and Policy 25)**

The Fourth National Planning Framework (NPF4)<sup>7</sup> is Scotland's national spatial strategy, setting out the principles to be applied to planning decisions, regional priorities and national developments.

The first of the 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 range of impacts that should be addressed during project design and mitigation. That list does not include tourism. Whilst not required by NPF4, Section 7 of this report does consider whether there could be any implications for tourism.

### **2.1.6 Climate Change (Emissions Reduction Targets) (Scotland) Act**

The Scottish Government amended its 2009 climate legislation by publishing The Climate Change (Emissions Reduction Targets) (Scotland) Act 2024<sup>8</sup> (the Act) that set into law a legally binding requirement to achieve net-zero in Scotland by 2045. The Act includes a list of responsibilities the Scottish Government is tasked with completing which includes considering the impacts the energy transition will have on the economy.

The Act requires the Scottish Government to abide by the Just Transition Principles in attaining its net-zero targets, which are to:

- support sustainable jobs;

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<sup>7</sup> Scottish Government (2023). National Planning Framework 4.

<sup>8</sup> Scottish Government (2024) Climate Change (Emissions Reduction Targets) (Scotland) Act 2024.



- support low-carbon investment and infrastructure;
- engage with communities;
- generate fair and high-value work; and
- address inequality and poverty.

The Act specifies specific sectors the Scottish Government must produce a Climate Change plan to determine how the decarbonization efforts will take place, these include:

- energy;
- transportation;
- business and industrial activity;
- residential and public buildings;
- waste management;
- land use and forestry; and
- agriculture.

This Act serves as the legal foundation for the transition to Net-Zero with the proposed Development able to contribute towards the decarbonization efforts of the energy supply, moreover, an increased supply of affordable renewable energy will facilitate decarbonization in other sectors mentioned in the Act such as transportation or buildings. The proposed Development would also align with the Just Transition Principles by providing long-term high-paying jobs throughout its life cycle contributing to the presence of sustainable jobs.

### **2.1.7 Onshore Wind Policy Statement**

The Onshore Wind Policy Statement<sup>9</sup> published by the Scottish Government in 2022 set a target to deploy 20 GW of onshore wind energy in Scotland by 2030. The Policy Statement outlines a framework of considerations the Scottish Government will take when striving to achieve its onshore wind targets, these are:

- environment: ensure access to renewable energy whilst tackling climate crises;
- communities: abide by the just transition principles to guarantee communities across Scotland benefit from the transition to a net zero economy;
- Scotland: support opportunities in the supply chain, skills and tourism;
- aviation: evaluate and mitigate impact on aviation operations;
- technical considerations: including abnormal loads and seismological monitoring; and
- energy systems and regulations: work with relevant stakeholders to develop electricity infrastructure.

The Policy Statement establishes a list of considerations the onshore wind sector and Scottish Government will monitor over the course of the deployment of 20 GW of onshore energy. The Policy Statement sets an expectation that onshore wind energy developments will support supply chains and develop workforce skills ensuring that

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<sup>9</sup> Scottish Government (2022). Onshore Wind Policy Statement.



the transition towards Net-Zero creates employment, growth and benefits to the local communities across Scotland.

### **2.1.8 Onshore Wind Sector Deal**

The Onshore Wind Sector Deal<sup>10</sup>, published in September 2023, outlines the commitment of the Scottish Government and onshore wind sector to reach 20 GW of onshore wind by 2030. 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.

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 Scotland.

### **2.1.9 Scottish Energy Strategy**

The Scottish Energy Strategy<sup>11</sup>, outlines Scotland's vision for its energy system through 2050, emphasizing decarbonization, renewable energy, and economic growth. It has implications for various sectors, including electricity, heating, and transport, while also promoting energy efficiency and new technologies like energy storage and low-emission vehicles. The key themes of the strategy are:

- decarbonization: by 2030, 50% of energy for heat, transport and electricity to come from renewables;

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<sup>10</sup> Scottish Government (2023). Onshore Wind Sector Deal.

<sup>11</sup> Scottish Government (2017). The Scottish Energy Strategy: The future of energy in Scotland.



- economic opportunities: capitalize on global low-carbon markets, create jobs, and stimulate investments in green energy;
- whole-system approach: utilise renewable energy across heat, transport, and electricity sectors;
- just transition and inclusivity: ensure vulnerable groups are not left behind; and
- energy efficiency: make buildings more energy-efficient, reduce energy demand and tackle fuel poverty.

The proposed Development in East Ayrshire aligns with the Scottish Energy's focus on increasing renewable electricity generation. Wind energy, a major contributor to Scotland's electricity mix, supports the goal of producing 50% of energy from renewable sources by 2030. The proposed Development will help decarbonize electricity while contributing to local economic growth and job creation in the region.

### **2.1.10 Tourism Strategy: Scotland Outlook 2030**

The Scotland Outlook 2030 emerged out of a collaborative effort between industry experts to outline the national plan towards 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 on tourism of climate change, technological advancements, Brexit and changing consumer behaviour and highlights the need for collaboration between government, communities, and the public and private sectors<sup>12</sup>.

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.

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<sup>12</sup> Scottish Tourism Alliance (2020). Scotland's Outlook 2030



## 2.2 Regional Strategic Context

### 2.2.1 The East Ayrshire Local Development Plan 2

East Ayrshire's second Local Development Plan<sup>13</sup> (LDP2) published by East Ayrshire Council, focuses on a number of strategic priorities, including contributing to net zero targets, stimulating population growth and driving inclusive economic recovery and growth, over the next 10-20 years.

Under the theme of Energy, Resources and Resilience within the Plan's Spatial Strategy, East Ayrshire Council commits to supporting all forms of renewable energy, and in particular, support for wind energy developments such as the proposed Development.

To support inclusive economic growth, the Plan recognises the requirement to embed a CWB approach, and in particular encouraging developers to support the local supply chain by committing to buying goods and services locally. Developers are also encouraged to actively engage with the Community Renewable Energy (CoRE) Project and its implementation to deliver low carbon energy solutions.

### 2.2.2 Dumfries and Galloway Council Plan 2023-2028

The Council Plan<sup>14</sup> aims to create a successful, healthy, and well-connected region with a sustainable and fair economy that promotes new opportunities, provides high quality public services that target prosperity and attracts people in the area.

The Plan established the following key principles to deliver its vision:

- economy: creation of an attractive region for businesses and skilled people, promotion of inclusive growth and empowerment of communities;
- travel, connectivity and infrastructure: flood management, improvements in roads, paths and recreation networks, promotion of active travel for a low-carbon future, better access to services and digital connectivity;
- education and learning: provision of high-quality learning opportunities from an early age that will boost confidence and future career prospects; and
- health and wellbeing: provision of affordable and good quality housing, alleviation of poverty, inequality and increased cost of living.

The proposed Development will provide community benefits that would support the objective to empower local communities and improve the quality of life. By strengthening the renewables sector, the local economy will flourish due to the provision of better job opportunities that would attract investment and skilled people in the area.

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<sup>13</sup> East Ayrshire Council (2024). Local Development Plan 2 - Volume 1

<sup>14</sup> Dumfries and Galloway Council (2023). Council Plan 2023-2028.



### **2.2.3 South Scotland Regional Economic Strategy**

The South of Scotland's Regional Economic Strategy<sup>15</sup>, sets a vision for the region to be *"Green, Fair and Flourishing"* by 2031. It seeks to improve the region's economic performance and distribution of wealth amongst its residents by capitalising on the core assets in the region including its natural beauty, cultural heritage, economic diversity and its resilient people and communities.

The strategy outlines six themes:

- skills and ambition;
- innovation;
- fair work;
- cultural and creativity;
- green economy; and
- thriving communities;

The strategy highlights that more could be done to create green jobs and supply chain opportunities from investments, the proposed Development would contribute towards these challenges, 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 support the goal establishing a green economy for the South of Scotland while also generating positive economic impacts in the local area.

### **2.2.4 Ayrshire Regional Economic Strategy**

The Ayrshire Regional Economic Strategy<sup>16</sup> is focused on creating a thriving, inclusive and sustainable economy in the region. The strategy is committed to its community wealth building endeavours ensuring that economic benefits are retained and shared within the local area by collaborating with local councils, businesses, and public institutions.

The strategy outlines six priorities:

- support for enterprise: a region where businesses can grow both domestically and globally;
- fair work: a region which offers all individuals and effective voice, opportunity, security, fulfilment and respect in work;
- innovation: a region where enterprises and the public sector adopt innovative solutions to address economic problems;
- good health and wellbeing: a region where people of all ages have the access to resources to live a healthy, full and purposeful life;
- stronger places and communities: where local economies can sustain thriving communities and deliver good public and private services; and

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<sup>15</sup> South of Scotland Regional Economic Partnership (2021). South of Scotland Regional Economic Strategy

<sup>16</sup> East Ayrshire Council (2023). Ayrshire Regional Economic Strategy.



- enhancing natural capital: preserving and enhancing Ayrshire's natural capital and to meet Scotland's commitments to Net Zero.

The document highlights several challenges towards delivering a prosperous region including an ageing workforce, a high level of employment in lower paying sectors and a higher incidence of deprivation. The proposed Development by creating higher paid jobs in the region would address the challenges incentivising and retaining working age population to work in Ayrshire as well as increase the overall quality of life of residents through the higher paid jobs. The proposed Development would also contribute towards the strategy's ambition towards Net Zero.

### **2.2.5 Ayrshire Growth Deal**

The Ayrshire Growth Deal is a £251 million collaborative investment supported by the UK and Scottish Governments alongside Ayrshire's three councils.

The Growth Deal outlines four objectives:

- attract and develop innovative international businesses;
- position Ayrshire as the 'go-to' for smart manufacturing and digital skills;
- improve key elements of strategic transport and digital infrastructure; and
- provide training and access to jobs for the local communities.

The Growth Deal aims to stimulate economic growth and tackle regional challenges by investing into seven core areas:

- aerospace and space;
- economic infrastructure;
- digital infrastructure;
- energy, circular economy and environment;
- skills and inclusion;
- tourism; and
- community wealth building.

The proposed Development would help address the challenges identified in the Deal by increasing the wages and productivity in the regional economy through the jobs that would be created in the development, construction and operational phases of the proposed Development.

Furthermore, the proposed Development may also synergise with key strategic investments being made in the Deal including the Ayrshire Manufacturing Investment Corridor by stimulating higher demand in the manufacturing for onshore wind components. Another project the proposed Development may complement is the National Energy Research Demonstrator Project being developed in Cumnock, having the goal of developing technologies to harness local intermittent energy transmission which the proposed Development may be able to provide.



## 2.3 Summary of Strategic and Policy Context

The proposed Development is expected to have various socio-economic benefits in line with national and regional strategic policy documents. Through its generation of renewable energy, the project will contribute to the decarbonisation of the Scottish economy and towards Scotland's net-zero target. The proposed Development will also deliver on some of the issues covered by Scotland's NPF, including the economy, communities, and the environment.

At regional and local level, the proposed Development will create high-quality employment opportunities, helping to stabilise and grow the population, and generate spend in the local economy. The proposed Development will also support businesses within the local supply chain, building more sustainable and resilient communities through the diversification of income streams.



### 3.

## Local Economic Context

This section considers the socio-economic context of the proposed Development, including population and economic indicators.

### 3.1 Study Areas

The purpose of the socio-economic baseline is to provide the context in which the proposed Development is situated in as well as the potential economic benefits it may have. This section will cover the socio-economic structure of following study areas:

- Cumnock and New Cumnock, and Mid and Upper Nithsdale (the 'Local Area' surrounding the proposed Development);
- East Ayrshire;
- Dumfries and Galloway; and
- Scotland.

### 3.2 Demographics

#### 3.2.1 Population Estimates

In 2022, the Local Area had a total population of 23,658, 19.4% relative to the population size of East Ayrshire and 0.4% of the population of Scotland. Of the total population of the Local Area, 16.4% of them were aged under 16 years old. This proportion is of similar magnitude to East Ayrshire (17%) and Scotland (16.6%), slightly higher than Dumfries and Galloway (15.4%).

The proportion of the population aged 16 to 64 (in the Local Area) was 59.5%, which was lower than East Ayrshire (62.0%) and Scotland (63.8%), but higher than Dumfries and Galloway (58.0%). The share of the population in Local Area that was aged 65 and over was 24.2%, which was above East Ayrshire (21.0%) and Scotland as a whole (18.6%), but lower than Dumfries and Galloway (26.6%).



**Table 3-1 Population Estimates, 2022**

Age Group	Local Area	East Ayrshire	Dumfries and Galloway	Scotland
Total	23,658	122,200	148,800	5,479,900
0-15	16.4%	17.0%	15.4%	16.6%
16-64	59.5%	62.0%	58.0%	63.8%
65+	24.2%	21.0%	26.6%	18.6%

Source: ONS (2023), Population Estimates – Local authority based by five-year age band.

### 3.2.2 Population Projections

Over the period between 2022 and 2043, the population of East Ayrshire is projected to decrease from 122,200 to 113,792, which is equivalent to a decrease of 6.7%. Dumfries and Galloway is projected to experience a similar trend, with the population falling from 148,800 to 136,286 – a decline of 8.4%. In contrast, the population of Scotland as a whole is projected to increase by 5.9% over the same period.

The proportion of residents aged 16–64 years old – the working-age population – is also projected to decline in both East Ayrshire and Dumfries and Galloway. In East Ayrshire, the working-age population is expected to fall from 62.0% to 57.5%, a reduction of over 10,000 people (from 75,700 to 65,400). In Dumfries and Galloway, the working-age share is projected to decrease even further, from 58.0% to 53.0%. For comparison, Scotland's working-age population is also expected to decline, but at a slower rate, from 63.5% to 61.1%.

All areas are projected to experience an ageing population. In East Ayrshire, the proportion of residents aged 65 and over is forecast to rise to 27.0% by 2043. In Dumfries and Galloway, the shift will be even more pronounced, with the share of residents aged 65+ increasing from 26.6% to 33.7%. This compares with a national average of 24.8% across Scotland in 2043.

If the current differences in population structure between the Local Area and East Ayrshire remain, the Local Area may be even more susceptible to pressures on public services in future years. Similarly, Dumfries and Galloway's sharper demographic decline and ageing profile highlight the need for interventions that can attract and retain working-age residents. By creating well-paid employment opportunities, the proposed Development could help to offset some of the projected population decline and support the resilience of local communities.



**Table 3-2 Population Projections, 2022-2043**

	East Ayrshire		Dumfries and Galloway		Scotland	
	2022	2043	2022	2043	2022	2043
Total	122,200	113,792	148,800	136,286	5,447,000	5,570,152
0-15	17.0%	15.5%	15.4%	13.2%	16.4%	14.1%
16-64	62.0%	57.5%	58.0%	53.0%	63.5%	61.1%
65+	21.0%	27.0%	26.6%	33.7%	20.1%	24.8%

Source: ONS (2023), Population Estimates – Local authority based by five-year age band; National Records of Scotland (2025), Projected Population of Scotland (2022-based); National Records of Scotland (2020), Population Projections for Scottish Areas (2018-based).

### 3.3 Industrial Structure

In 2023, 14.5% of those employed in the Local Area work in the manufacturing sector, significantly above the share of people in the sector in East Ayrshire (5.8%), Dumfries and Galloway (7.6%), and in Scotland as a whole (6.7%). Accommodation and food services, the second largest sector in the Local Area, comprising of 13.1% of employment, is also larger compared to those in East Ayrshire (8.1%), Dumfries and Galloway (9.2%) and Scotland (8.6%).

Construction, a sector which could particularly benefit from contracts relating to the proposed Development, accounted for 5.2% of employment in the Local Area, which was around the same compared to East Ayrshire (5.2%), Dumfries and Galloway (4.6%), and Scotland (5.1%).

In East Ayrshire and Dumfries and Galloway, the most significant employers were human health and social work accounting for 25.5% and 16.8% of the total employment respectively.

**Table 3-3 Industrial Structure, 2022**

Industry	Local Area	East Ayrshire	Dumfries and Galloway	Scotland
Manufacturing	14.5%	5.8%	7.6%	6.7%
Accommodation and food services	13.1%	8.1%	9.2%	8.6%
Human health and social work	11.7%	25.5%	16.8%	15.6%
Wholesale and retail	11.0%	13.9%	15.3%	13.2%
Education	10.4%	7.0%	7.6%	8.2%



Public administration and defence	8.8%	7.0%	7.6%	6.2%
Arts, entertainment and recreation	5.5%	2.9%	2.3%	2.7%
Construction	5.2%	5.2%	4.6%	5.1%
Transportation and storage	3.5%	3.5%	4.6%	4.5%
Real estate activities	3.5%	0.8%	1.5%	1.5%
Professional, scientific and technical activities	3.5%	4.1%	3.8%	7.2%
Agriculture, forestry and fishing	2.6%	4.6%	13.7%	3.4%
Administrative and support service activities	2.2%	5.8%	4.6%	6.8%
Other service activities	1.9%	1.4%	1.5%	1.7%
Information and communication	1.3%	1.0%	0.9%	3.1%
Water supply, sewerage and waste management	0.8%	2.1%	1.1%	0.8%
Electricity, gas, steam and air conditioning	0.3%	0.5%	0.5%	0.8%

Source: ONS (2025), Business Register and Employment Survey, 2023.

From the Business Register and Employment Survey<sup>17</sup>, the tier 2 SIC industry breakdown of the Local Area was identified to determine the type of manufacturing and construction in the local area that would benefit from the proposed Development. The manufacturing sector in the local area is mainly comprised of the manufacturing of food products (59.2%) and textiles (18.0%), 77.2% of those employed in the Local Area would not be directly affected by the proposed Development. However, 14.2% of the manufacturing sector in the Local Area is employed in the manufacturing of machinery and equipment and 3.8% in the manufacturing of fabricated metal products which may benefit from the proposed Development.

While a large majority of the population in the Local Area that work in the manufacturing sector may not see contracts associated from the proposed Development, higher economic activity associated to onshore windfarm manufacturing may lead to higher demand for local upskilling with individuals seeking to pursue jobs in more productive manufacturing activities in the area.

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<sup>17</sup> ONS (2025), Business Register and Employment Survey.



## 3.4 Economic Activity

In 2024, the economic activity rate in East Ayrshire was 76.3%, and for Dumfries and Galloway 78.7%, which was similar to compared Scotland where the economic activity was 76.7%. The unemployment rate in East Ayrshire was 3.1%, while in Dumfries it was 2.7%, which was lower than in Scotland as a whole (3.3%). The median annual gross salary of residents of East Ayrshire was £30,394 and for Dumfries and Galloway £28,102, which was lower for both than across Scotland (£31,891).

**Table 3-4 Labour Market Indicators**

	East Ayrshire	Dumfries and Galloway	Scotland
Economically Active (%)	76.3%	78.7%	76.6%
Unemployment Rate (%)	3.1%	2.7%	3.3%
Median Annual Gross Wage (resident analysis)	£30,394	£28,102	£31,891

Source: ONS (2025), Annual Population Survey Oct 2023-Sept 2024; ONS (2025), Annual Survey of Hours and Earnings – resident analysis; ONS (2025), Model-Based Estimates of Unemployment Oct 2023 – Sept 2024.

## 3.5 Education

The workforce in East Ayrshire and Dumfries and Galloway have lower levels of qualifications than the wider Scottish population. Across East Ayrshire as well as Dumfries and Galloway, 51.9% and 52.9%, respectively, of the population have achieved at least a Regulated Qualification Framework level four (RQF4), equivalent to a first year bachelors degree. The proportion of people who have achieved no qualifications in East Ayrshire (12.6%) is higher, while Dumfries and Galloway (6.9%) is slightly lower than across Scotland as a whole (8.2%).

**Table 3-5 Qualification Levels, 2023**

	East Ayrshire	Dumfries and Galloway	Scotland
RQF4+	51.9%	52.9%	55.1%
RQF3+	67.8%	73.5%	73.7%
RQF2+	81.2%	89.7%	87.1%
RQF1+	82.9%	91.4%	87.9%
Other Qualifications	4.4%	1.7%	3.9%
No Qualifications	12.6%	6.9%	8.2%

Source: ONS (2025), Annual Population Survey Jan 2023 – Dec 2023.



## 3.6 Scottish Index of Multiple Deprivation

This 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.

The Local Area has higher levels of deprivation compared to East Ayrshire and Dumfries and Galloway as a whole. There are 37 small areas in the Local Area, 32.4% of which are in the most deprived quintile and only 2.7% are in the least deprived quintile. Small areas in the Local Area are more concentrated towards the more deprived end of the distribution, with 59.4% of the small areas in the first and second quintiles and with 81.0% in the first, second and third quintiles.

There are 163 small areas in East Ayrshire and 201 small authorities in Dumfries and Galloway, of which 31.3% and 9.5%, respectively, are in the most deprived quintile, while 10.4% and 8.5% are in the least deprived quintiles respectively. Small areas in East Ayrshire are concentrated towards the more deprived end of the distribution while Dumfries and Galloway concentrate its distribution around the centre.

Both the Local Area and East Ayrshire have more small areas concentrated in the most deprived quintiles compared to the national average and less small areas concentrated in the least deprived quintiles compared to the national average. However, Dumfries and Galloway have more small areas concentrated in the middle quintiles, specifically second and third, compared to the national average.

**Table 3-6 Scottish Index of Multiple Deprivation by Quintile, 2020**

	Local Area	East Ayrshire	Dumfries and Galloway
1 (most deprived quintile)	32.4%	31.3%	9.5%
2	27.0%	25.2%	24.4%
3	21.6%	16.6%	37.8%
4	16.2%	16.6%	19.9%
5 (least deprived quintile)	2.7%	10.4%	8.5%

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

## 3.7 Fuel Poverty

The proportion of households living in fuel poverty, where at least 10% of income is spent on heating, is higher in East Ayrshire and Dumfries and Galloway than in the rest of Scotland. In East Ayrshire, 27% of households (15,000) live in fuel poverty, compared to 24% across Scotland. Residents over 65 are most affected by fuel

poverty, as they are more likely to be living on a fixed income, spending long periods of time at home, and living in substandard housing.

The proportion of households in extreme fuel poverty, where at least 20% of income is spent on energy, is also higher in East Ayrshire than in the rest of Scotland. In East Ayrshire, 9% of households (5,000) and Dumfries and Galloway, 15% of households (11,000) live in extreme fuel poverty, compared to 12% across Scotland.

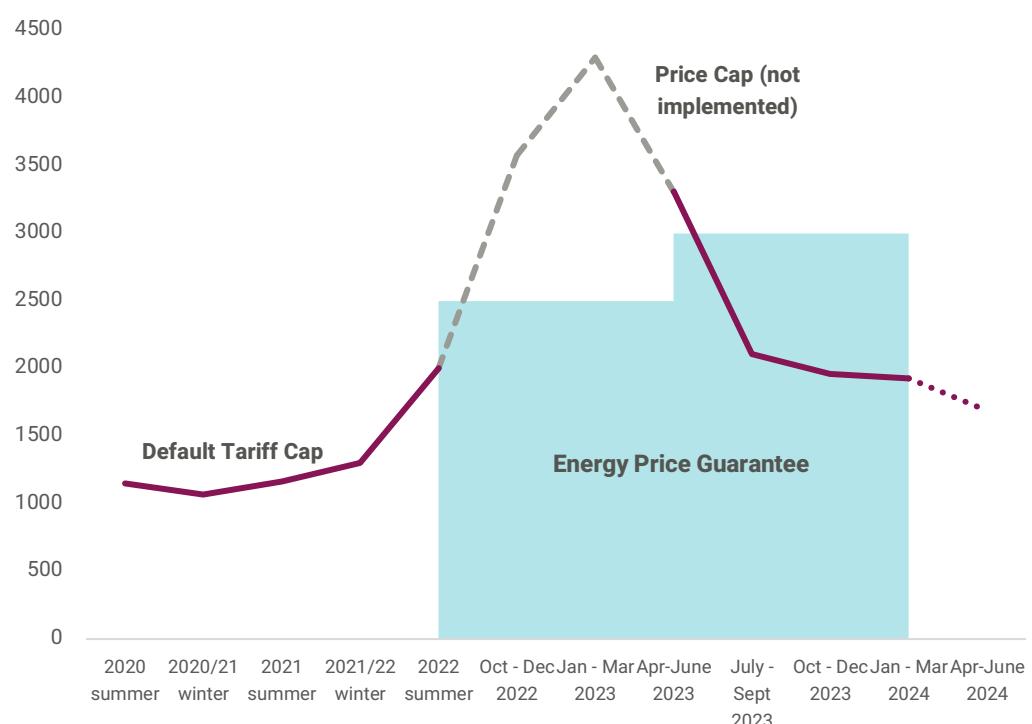
**Table 3-7 Fuel Poverty, 2019**

	East Ayrshire	Dumfries and Galloway	Scotland
Fuel Poverty	27%	29%	24%
Extreme Fuel Poverty	9%	15%	12%

Source: Scottish Government (2021), Scottish House Condition Survey: Local Authority Analysis 2019.

It is likely, given the rise in energy prices beginning in 2022, that there has been a further increase in the number of households that are in fuel poverty. Figure 3-1 shows the alterations to the default tariff cap for direct debit customers in Great Britain. The price caps of £2,500 and £3,000 (equal to the Energy Price Guarantees) were more than double the price compared to summer 2020. Despite a recent reduction in the price cap to around £1,900 between January and March 2024, annual bills for typical energy consumption remain at least 50% higher than in winter 2021/22.

**Figure 3-1 Annual Energy Price Cap (£), 2019/20-2024**





Source: Ofgem (2024), Retail market indicators – Breakdown of the default tariff price cap (GBP £, direct debit).

The Scottish Government<sup>18</sup> published scenario modelling of national fuel poverty rates under each Energy Price Guarantee. It was estimated that from October 2022 approximately 860,000 Scottish households (35%) are fuel poor, equivalent to a 10-percentage-point increase from the latest available data in 2019 (Table 3-7). This is expected to increase to 39% (980,000 households) after the rise in the Energy Price Guarantee to £3,000 in April 2023.

These significant increases in the fuel poverty rates will also be reflected in East Ayrshire and Dumfries and Galloway.

### 3.8 Summary of Socio-Economic Context

Between 2022 and 2043, the population of East Ayrshire is expected to decline with the share of the working age population to be lower than the average in Scotland. This suggests that there is a lack of opportunities for workers in the area, which leads to migration and a relatively older population structure. In addition, the median annual gross income of full-time workers is lower than the Scottish average. The proposed Development could contribute to addressing these challenges and offsetting population trends by creating a vibrant onshore wind sector in the area which could favour the retention of young people through high-skilled and high-paying jobs.

At the local level, the manufacturing sector, which is likely to benefit from contracts associated with the proposed Development, account for an above average share of employment compared to East Ayrshire, Dumfries and Galloway and Scotland as a whole. While much of the manufacturing sector in the Local Area is not engaged in activities directly associated to the proposed Development, the increased demand for onshore windfarm manufacturing may lead to individuals seeking to reskill and transfer to more productive manufacturing in the area.

The construction sector, while also projected to benefit from the contracts associated with the proposed Development, accounts for similar levels of employment across East Ayrshire, Dumfries and Galloway and Scotland as a whole. This suggests local businesses could benefit from the construction of the proposed Development.

Fuel poverty levels are higher in East Ayrshire and Dumfries and Galloway than in Scotland and are expected to have increased due to the recent energy crisis. The proposed Development, and its associated community benefits, could provide an opportunity to address this.

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<sup>18</sup> Scottish Government (2023), Cost of Living (Tenant Protection) (Scotland) Act 2022: first report to the Scottish Parliament.



## 4.

# Assessment Methodology

This section describes the methodology used to assess the economic impact from the proposed Development as well as the contribution to the maximisation of net economic benefits.

## 4.1 Economic Impact Methodology

### 4.1.1 Modelling the Economic Impact of Onshore Windfarm Developments

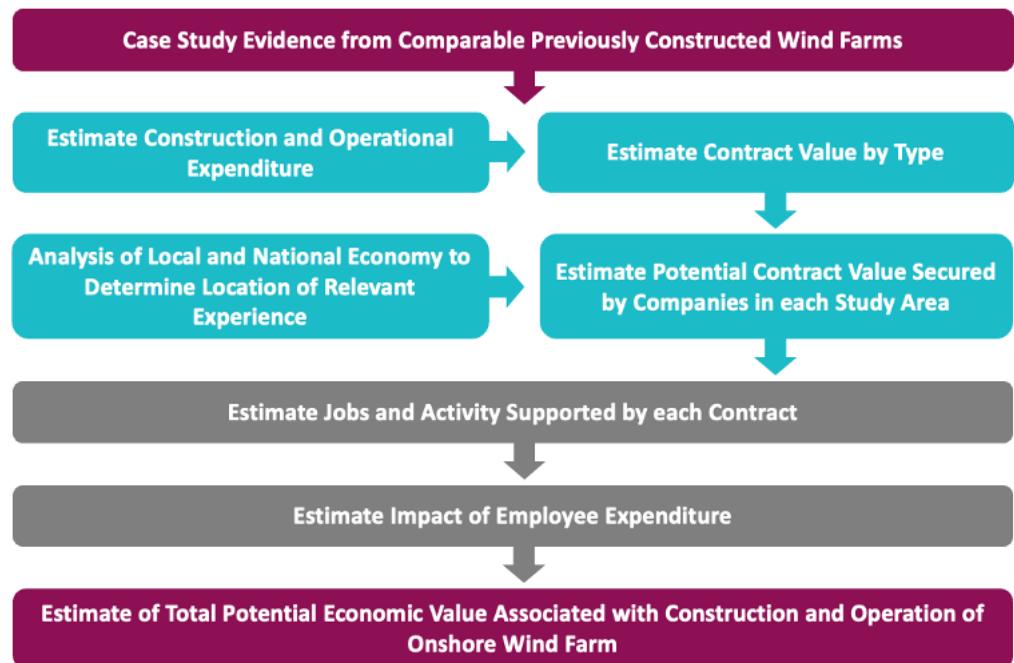
The methodology employed to assess the economic impact of onshore wind developments adheres to industry best practice. It leverages research, conducted by BiGGAR Economics in 2015 on behalf of RenewableUK (reference), on the construction and operational costs from numerous onshore windfarm projects across the UK. Furthermore, the approach draws on more recent evidence gathered from a multitude of case studies of construction and operational costs in the sector.

The methodology has now been used to assess the economic impact associated with numerous onshore wind development across Scotland, and the UK. The economic modelling methodology comprises the following stages:

- development and planning;
- turbine;
- balance of plant; and
- grid connection.

The economic impact methodology adjusts the assumptions to account for varying capacities of businesses throughout Scotland to fulfil onshore wind contracts.

**Figure 4-1 Approach to Economic Impact**



Source: BiGGAR Economics.

#### 4.1.2 Measure of Economic Impact

The 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. Year of employment are used to report the short-term employment that is supported by the construction and development of the windfarm. As an example, a job that lasts for 18 months would support 1.5 years of employment.

#### 4.1.3 Sources of Economic Impact

The assessment will consider the following sources of economic impact:

- **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 spending of those workers carrying out contracts for the proposed Development and on behalf of its contractors.

#### 4.1.4 Study Areas

The assessment of economic impacts considered the following study areas:



- East Ayrshire;
- Dumfries and Galloway; and
- Scotland.

## 4.2 Maximisation of Net Economic Impact

### 4.2.1 Approach

There is no specific legislation, policy or guidance available on the methods that should be used to assess the socio-economic impacts of a proposed onshore windfarm development. The assessment focuses on evaluating whether the proposed Development meets the specific requirements outlined in NPF4 11 (c) concerning the maximisation of net economic impacts.

However, there is also no guidance on maximising net economic impact in the context of the NPF4. The structured approach provided below ascertains the net economic impact of the onshore wind development through the following aspects:

- **alignment with policy statements:** clarity on the desired outcomes can be obtained from other policies such as Onshore Wind Policy Statement and the Onshore Wind Sector Deal for Scotland which identify the collective vision to use the rapid development of the onshore wind sector to drive long-term economic growth, create high-quality supply chain opportunities, reduce carbon emissions, and ultimately benefit the communities in Scotland.
- **evaluation of applicant commitments:** Commitments made by the Applicant regarding economic contributions, including investments, job creation, and support for local businesses and communities, form an important component of the evaluation process.
- **consideration of application control:** There are factors within and outside the control of the applicant that may affect the realisation of the socio-economic benefits. For example, benefits from Applicant's commitments to the local suppliers will only be realised if the local suppliers utilise the opportunities provided.

Based on the above, the following criteria are considered for the maximisation of the net economic benefits from onshore wind development:

- rapid deployment of projects needed to deliver Scotland's 20GW target of onshore wind installed capacity by 2030;
- high local supply chain content to maximise the value of local expenditure;
- bespoke opportunities for local employment and skills development that reflect the characteristics of the local labour market;
- fair contributions to the cost for enabling infrastructure and other interventions necessary to support the sector;
- fair community benefit packages that generate tangible benefits for the host community while remaining affordable for the developer; and
- continued innovation to support the process of continuous improvements, including opportunities for community ownership, recreational use of site



infrastructure, electricity discount schemes, non-cash benefits, community-led housing development, training.

The assessment concludes on whether the proposed Development maximises the net economic impact in the context of NPF4 Policy 11(c) based on these criteria.



## 5.

# Economic Impact

This section assesses the economic impact that could be generated by the proposed Development during development, construction, and operation.

## 5.1 Development and Construction

The assessment of the economic impact of the development and construction of the proposed Development draws on BiGGAR Economics' extensive experience in the onshore wind sector. This includes a 2015 evaluation of existing windfarm developments conducted on behalf of RenewableUK. Over time, the analysis has been updated using evaluations of individual windfarm projects and insights from developers working across Scotland. This body of research and experience provides the basis for estimating costs per MW, considering both the number of turbines and total capacity of the development.

The proposed Development is expected to consist of 23 turbines with a total generating capacity of up to 130 MW. The total development and construction expenditure is estimated to be £182.1 million, allocated across the following key components:

- Development and Planning;
- Turbines;
- Balance of Plant; and
- Grid Connection.

The largest expenditure is associated with turbines, amounting to £130.1 million (71% of total development and construction costs). The next largest component is balance of plant, estimated at £26.0 million (14% of total expenditure). Development and planning and grid connection are each expected to account for 7% of total spending.



**Table 5-1 Development and Construction Expenditure by Contract Type**

	% CAPEX	Value (£m)
Development and Planning	7%	£12.4
Turbines	71%	£130.1
Balance of Plant	14%	£26.0
Grid Connection	7%	£13.6
<b>Total</b>	<b>100%</b>	<b>£182.1</b>

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

In assessing the economic impacts arising from the development and construction of the proposed Development, it was necessary to make assumptions on the ability of business within each study area to carry out contracts.

In assessing the economic impacts of the development and construction of the proposed Development, assumptions were made regarding the capacity of businesses within each study area to undertake contracts.

Drawing on evidence from similar developments in East Ayrshire and Dumfries and Galloway, as well as ScottishPower Renewables' established relationships with contractors, it is estimated that 31% of the proposed Development's contracts will be awarded to Scottish businesses, with a total value of £56.1 million. Local businesses in East Ayrshire and Dumfries and Galloway are expected to secure contracts worth approximately £22.8 million, representing 13% of total development and construction expenditure.

The greatest opportunities for Scottish businesses are expected in Balance of Plant contracts, valued at up to £23.8 million. This category also presents the largest opportunity for businesses in East Ayrshire and Dumfries and Galloway, with contracts worth up to £9.6 million.



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

	East Ayrshire and Dumfries and Galloway		Scotland	
	%	£m	%	£m
Development and Planning	36%	£4.4	75%	£9.4
Turbines	3%	£3.5	10%	£12.5
Balance of Plant	37%	£9.6	91%	£23.8
Grid Connection	38%	£5.2	77%	£10.5
<b>Total</b>	<b>13%</b>	<b>£22.8</b>	<b>31%</b>	<b>£56.1</b>

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

After estimating the size of the contracts that could benefit each study area, the Gross Value Added (GVA) and short-term employment impacts were assessed. This involved breaking down each contract category into its component contracts and assigning them to an industrial sector based on their Standard Industrial Classification (SIC)<sup>19</sup> code. Direct GVA was then calculated by applying the relevant turnover-to-GVA ratio from the UK Annual Business Survey (ABS)<sup>20</sup>.

It is estimated that the development and construction of the proposed Development will generate £13.2 million in direct GVA in East Ayrshire and Dumfries and Galloway and £30.3 million in direct GVA across Scotland.

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

	East Ayrshire and Dumfries and Galloway	Scotland
Development and Planning	£3.4m	£6.2m
Turbines	£1.8m	£6.5m
Balance of Plant	£5.3m	£12.1m
Grid Connection	£2.7m	£5.5m
<b>Total</b>	<b>£13.2m</b>	<b>£30.3m</b>

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

Similarly, the number of direct jobs supported by spending on development and construction contracts was estimated by dividing the expenditure for each contract by the turnover-per-job ratio for the relevant sector. It is estimated that the development and construction of the proposed Development will generate 143 direct

<sup>19</sup> Office for National Statistics (2009), Standard Industrial Classification of Industrial Activities (SIC 2007).

<sup>20</sup> Office for National Statistics (2020), Annual Business Survey 2018 – Revised.



years of employment in East Ayrshire and Dumfries and Galloway and 357 direct years of employment across Scotland.

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

	<b>East Ayrshire and Dumfries and Galloway</b>	<b>Scotland</b>
Development and Planning	9	44
Turbines	32	100
Balance of Plant	65	142
Grid Connection	36	71
<b>Total</b>	<b>143</b>	<b>357</b>

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

Spending on development and construction contracts is also expected to create knock-on effects throughout the economy. Specifically, it will generate additional rounds of expenditure along the supply chain and from the wages and salaries of those involved in the project. These effects are referred to as 'indirect' and 'induced' impacts.

To estimate these impacts, Type 1 and Type 2 GVA and employment multipliers from the Scottish Government Input-Output Tables were applied to direct GVA and employment figures. Since these multipliers reflect sectoral interactions at the national level, adjustments were made when assessing impacts at the East Ayrshire and Dumfries and Galloway level.

By combining direct, indirect, and induced impacts, it is estimated that the development and construction of the proposed Development will generate:

- £16.5 million GVA and 174 years of employment in East Ayrshire and Dumfries and Galloway; and
- £48.5 million GVA and 547 years of employment across Scotland.

The estimated figures suggest that the proposed Development will contribute to the provision of high-quality local employment opportunities during the Development and Construction phase and help maximise the value of local expenditure. These impacts align with the requirements of NPF4 Policy 11(c).

The employment impacts across Scotland are expected to peak during the construction phase, particularly during the initial balance of plant works. It is estimated that up to 297 jobs will be supported across the Scottish economy during this phase.



## 5.2 Operations and Maintenance

The first step in assessing the economic impact of the operations and maintenance phase of the proposed Development was to estimate the total annual expenditure required for its operation. Based on the number of turbines and the project's total capacity, the annual operations and maintenance cost is estimated to be approximately £5.3 million.

It is further estimated that businesses in East Ayrshire and Dumfries and Galloway could secure up to £2.4 million in operations and maintenance contracts annually, representing 45% of total Operating Expense (OPEX). Meanwhile, Scottish contractors as a whole could receive up to £4.5 million per year, accounting for 85% of total OPEX.

**Table 5-5 Operation and Maintenance Expenditure by Study Area**

	East Ayrshire and Dumfries and Galloway		Scotland	
	%	£m	%	£m
Operations and Maintenance	45%	£2.4	85%	£4.5

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

The total turnover generated in each study area was divided by the turnover-to-GVA and turnover-to-jobs ratios of the sectors expected to carry out the operations and maintenance contracts. Based on this, it is estimated that the proposed Development will generate £1.4 million in direct GVA and 8 jobs in East Ayrshire and Dumfries and Galloway, and £2.4 million in direct GVA and 18 jobs across Scotland.

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

By combining the direct, indirect, and induced impacts, it is estimated that the operations and maintenance of the proposed Development will generate:

- £1.7 million GVA and 10 jobs in East Ayrshire and Dumfries and Galloway; and
- £3.7 million GVA and 29 jobs across Scotland.

Similar to the development and construction phase, the estimated figures indicate that the proposed Development will contribute to providing high-quality local employment opportunities and help maximise the value of local expenditure throughout its operational lifetime. These impacts align with the requirements of NPF4 Policy 11(c).



## 5.3 Non-Domestic Rates

The proposed Development is expected to generate a stream of revenue for East Ayrshire Council through the annual payment of non-domestic rates. The proposed Development would be liable for non-domestic rates, the payment of which would contribute directly to public sector finances and infrastructure investments supporting the requirements of the NPF4 Policy 11(c).

To estimate the economic impact of non-domestic rates, it was first necessary to determine the rateable value of the development and apply the appropriate poundage rate. This was done using guidance developed by the Scottish Assessors Association<sup>21</sup>, alongside information about the performance of the proposed Development.

Using this approach, it is projected that, over its operational period, the proposed Development will contribute approximately £1.6 million annually to public finances. Over its 40-year operational lifespan, this contribution is expected to total around £62.4 million.

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<sup>21</sup> Scottish Assessors Association (2023). Practice Note 2: Valuation of Onshore Wind Turbines



## 6. Maximising Socio-economic Benefits

This section demonstrates how the Applicant aims to maximise the socio-economic benefits of the proposed Development.

### 6.1 Maximising Economic Benefits

Developers have the potential to play a transformative role in the communities where they operate, contributing meaningfully to local economic development. By fostering strong, collaborative relationships with local stakeholders, they can help ensure that the positive impacts of a project are sustained long after construction is complete.

The Applicant has outlined a series of commitments aimed at maximising economic benefits for the local area. This section describes the key initiatives the Applicant intends to undertake, which are designed to deliver a range of interlinked outcomes, including:

- Providing funding to support local priorities and ambitions;
- Increasing economic resilience within the community;
- Strengthening the local business base; and
- Supporting skills development and training.

Together, these benefits can help support broader strategic goals, such as attracting people to live and work in East Ayrshire and Dumfries and Galloway and creating long-term, sustainable employment opportunities.

While there is currently no formal definition or guidance on what constitutes "maximising benefits," emerging best practice is beginning to shape expectations. Scottish Renewables is expected to publish sector-wide guidance in 2025, which is likely to identify several core principles for assessing whether a development is delivering maximum net economic impact. These principles are anticipated to include:

- **Bespoke:** Tailoring benefits to the specific needs and capacity of the local community, recognising that every project and place is different;
- **Innovative:** Encouraging continued innovation at the project level to unlock new opportunities and maximise value;
- **Collaborative:** Working in partnership with local authorities, businesses, and the third sector to deliver shared outcomes;
- **Transparent:** Building trust through openness and accountability in how decisions are made and benefits delivered; and



- **Flexible:** Responding to change and adapting plans to ensure maximum benefit as project circumstances evolve.

These principles suggest that assessing the Applicant's approach to maximising economic benefits involves not just evaluating the scale of projected economic impacts but also considering how those impacts are being delivered – in particular, whether the approach aligns with community needs and ambitions.

This assessment therefore focuses on four key areas of activity: **supply chain development, skills and workforce development, community empowerment, and environmental protection and enhancement.**

## 6.2 Supply Chain Development

There are a number of well-established best practices for maximising the benefits of local supply chain engagement. These include:

- Undertaking research to understand the capacity and capabilities of the local business base in order to identify and unlock opportunities for participation;
- Implementing measures to maximise the proportion of project expenditure retained within the local supply chain;
- Adopting progressive procurement practices that make it easier for small local businesses and social enterprises to compete for contracts;
- Encouraging Tier 1 contractors to engage with and procure from local suppliers wherever possible; and
- Supporting the development of regional supply chain capacity and sectoral clusters by regularly reporting on local content.

The Applicant is committed to maximising local procurement opportunities and has begun to implement practices aligned with these principles. However, the extent to which local procurement can be achieved will depend on the ability of the local supply chain to meet the technical and logistical demands of the project. This will vary by contract type.

For example, while highly specialised equipment may need to be sourced from outside the region, there is significant potential for local businesses to contribute to Balance of Plant contracts. In addition, services such as accommodation, catering, scaffolding, facilities management, and project coordination are likely to be sourced from within the local area.

To support local engagement, the Applicant intends to host a series of Meet the Buyer events in partnership with the Tier 1 Principal Contractor. These events will provide early visibility of upcoming contract opportunities and enable local businesses to better prepare and position themselves to compete.



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## **The Applicant is committed to taking practical steps to reduce barriers to entry for local SMEs and to support their participation in the onshore energy supply chain**

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During the construction phase, all contractors will be required to submit monthly local spend reports. These reports will detail key indicators of local economic impact, including:

- The number of individuals working on site;
- The use of local contractors, sub-contractors, and suppliers;
- The value of goods and services procured locally; and
- Expenditure on local shops, fuel stations, vehicle servicing, accommodation, and related services.

This data will help the Applicant to monitor performance, ensure accountability, and continuously refine its supply chain strategy to maximise local benefits.

### **6.3 Skills and Workforce Development**

Developers can make a significant contribution by supporting skills development and workforce inclusion. Best practice in this area includes:

- Making long-term commitments to progressive employment and recruitment practices that meet or exceed industry standards;
- Conducting labour market research to understand local capacity and identify skills gaps;
- Establishing strong relationships with education and training providers to support the implementation of national and regional skills strategies; and
- Collaborating with education partners, training providers, and community stakeholders to co-develop tailored labour market solutions, including apprenticeships where appropriate.

The Applicant has established a dedicated Workforce Planning team to assess the skills required for key roles and develop a strategy to ensure sufficient talent is available to support its onshore wind projects. The company actively engages with industry and government partners, contributing to initiatives such as the Onshore Wind Sector Deal Skills Report and participating in networks like the COP26 Net Zero Pact.

One of the most impactful ways the Applicant supports community wealth building is through investment in education and skills development, particularly in partnership with local institutions. Their STEM outreach programme, delivered through internal



teams and external partnerships with organisations such as Dumfries and Galloway Council and Skills Development Scotland, aligns closely with both industry and community objectives.

In 2023/2024 alone, these initiatives reached more than 15,000 students and 100 educators through internal programmes, and over 36,000 students and 1,000 educators through external collaborations. The Applicant also sponsored 55 STEM events across the UK, helping to promote diversity and sustainability in STEM education.

In Dumfries and Galloway specifically, the Applicant supports several targeted initiatives:

- **The King's Foundation at Dumfries House:** Delivers engineering-focused workshops to primary and secondary school students and teacher CPD sessions across Dumfries and Galloway, Ayrshire, and South Lanarkshire. These are jointly funded with three major partners, including ScottishPower.
- **DYW Dumfries and Galloway 'Bang Goes DG! 2024':** An event designed to raise awareness of local STEM opportunities among young people, delivered in collaboration with local colleges, universities, and home-schooling networks.

The Applicant is also developing age-specific STEM lesson plans for schools across the UK and has introduced several trainee programmes within its onshore business to help build a diverse and skilled future workforce. These include:

- **Year in Industry:** Delivered in partnership with the Engineering Development Trust, offering young people hands-on experience to guide their career choices (for both school leavers and university students);
- **Summer placements;**
- **The Power Academy;**
- **Apprenticeship programmes;** and
- **Master Scholars Programme.**

In addition, a Pre-Apprenticeship Programme has been introduced to support students who did not achieve standard academic qualifications. Technical training is delivered at Dealain and Hoylake, and successful candidates are assessed for permanent roles, with approximately 50% expected to be hired annually. In 2023/2024, the Operations and Maintenance team recruited two candidates from Ayrshire and Dumfries and Galloway through this route.

The Applicant also partners on a number of social inclusion initiatives to broaden access to employment for underrepresented groups:

- **Breaking Barriers:** A programme run in partnership with charities to help young people with learning disabilities access mainstream university education and gain work placements within the company.
- **Barnardo's Works Programme:** Designed to support disadvantaged young people (aged 16–24), this initiative equips them with the skills, confidence, and



experience required to access sustainable employment, while tackling social exclusion and poverty-related challenges.

These initiatives contribute meaningfully to the maximising the socio-economic benefits of renewable energy developments by supporting local labour market development, bridging skills gaps, and creating inclusive pathways to employment for young people in the region.

## 6.4 Community Empowerment

Developers can make a meaningful contribution to community empowerment by taking a proactive and collaborative approach. Best practice in this area includes:

- Engaging with local communities **to understand their needs, aspirations, and capacity** to participate in community benefit opportunities;
- Developing tailored **community benefits packages** aligned with local priorities and consistent with best practice principles;
- Working closely with local communities **to build relationships** that support the emergence of innovative ideas and approaches;
- Collaborating with community bodies to establish **effective governance**, administration, monitoring and evaluation arrangements consistent with best practices; and
- Engaging with regional partners in the public and third sectors to identify and develop opportunities to generate **regional benefits**.

To date, the Applicant's operational onshore wind farms have contributed over £73 million to communities across the UK. Of this, over £19 million has supported community-led initiatives in Dumfries and Galloway, and £14 million has been invested into communities in East Ayrshire. The repowering and extension of Hare Hill Wind Farm is expected to further increase the level of funding available to neighbouring communities in these areas.

For this proposed Development, the Applicant is offering a community benefit package of £5,000 per MW (index linked) of installed capacity. This funding could support a wide range of community aspirations and local projects, generating direct and indirect economic impacts.



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## ScottishPower Renewables will encourage communities to maximise the potential created by community benefit by leveraging access to match funding to create opportunities for new and innovative strategic projects and net zero initiatives

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Examples of recent projects supported by the Applicant in South West Scotland include FitFest 2023 and 2024, Ayrshire's first health and wellbeing event, which provided new opportunities for community engagement. Another example is a £1,560 grant awarded to the Crawick and Nithsdale Wheelers Cycle Club, which funded the design and purchase of new cycling kits, strengthening the club's identity and supporting its members.

These types of initiatives and the Applicant active engagement in the region reflect a commitment to community empowerment that goes beyond financial contributions – they enable local people to shape the future of their communities. As such, they play an important role in maximising the socio-economic benefits of renewable energy developments and are an important consideration within this assessment.

### 6.5 Environmental Protection and Enhancement

Developers can deliver both natural and built environmental benefits throughout the lifecycle of their projects. Best practice in this area includes:

- Clearly demonstrating actions taken to **protect and enhance biodiversity**;
- **Investing in local infrastructure**, such as road improvements, particularly during the construction phase;
- Repurposing access tracks to create new leisure and recreation opportunities, **improving community access to green and blue spaces**;
- Engaging communities in shaping post-operational land use to **ensure long-term value**; and
- Establishing steps taken to **collaborate with developers** working nearby on projects to coordinate environmental issues.

The Applicant has outlined a range of environmental protection and enhancement measures that will be delivered through the Hare Hill Wind Farm Repowering and Extension project. These include a comprehensive peatland restoration plan that exceeds regulatory requirements and applies proven techniques from the Applicant's other sites. In addition to ecological benefits, the restoration works have the potential to create local employment opportunities, offering dual benefits for the community and the environment.



Improved road surfaces and hardstanding areas may also support recreational uses of the site, such as stargazing and walking. The project presents opportunities to enhance regional tourism, particularly through the integration of the site's upgraded tracks with nearby paths and the Southern Upland Way. A total of 29 km of track will be made accessible, with the potential for standardised signposting to encourage public use and connectivity between sites.

Looking ahead to the decommissioning phase, the Applicant has committed to engaging the local community through formal consultation. This will ensure residents have a voice in shaping the future use of the site and that their suggestions are meaningfully considered.

These activities make an important contribution to maximising socio-economic benefits from renewable developments by helping to create pathways to diversifying land use of these sites to benefit local ecosystems and local communities.

## 6.6 Summary

In conclusion, the NPF4 and the Onshore Sector Deal provide a clear framework that developers can integrate into their project strategies to maximise the net economic impacts of their developments.

As evidenced the Applicant is working to maximise the socio-economic benefits for the supply chain, skills and workforce, community empowerment, and environment surrounding the proposed Development, and the wider Scottish context. The committed and planned measures have been developed in consultation with local communities.



## 7.

# Tourism and Recreation

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

## 7.1 Local Tourism Context

### 7.1.1 Sustainable Tourism GVA and Employment

In its 2015 economic strategy<sup>22</sup> the Scottish Government identified six key sectors as growth sectors, economic sectors where Scotland had a comparative advantage. Sustainable tourism was one of the sectors identified.

In 2022, around 3,000 and 7,000 people were employed in sustainable tourism in East Ayrshire, and Dumfries and Galloway, equivalent to approximately 1.3% and 3.1% of the total employment in the sector across Scotland (229,000). It was estimated that the sector generated £23.8 and £93.7 million GVA in East Ayrshire and Dumfries and Galloway and over £3.4 billion GVA across Scotland.

**Table 7-1 Sustainable Tourism: Employment and GVA, 2022**

	East Ayrshire	Dumfries and Galloway	Scotland
GVA (£m)	£23.8	£93.7	£3,365.8
Employment	3,000	7,000	229,000

Source: Scottish Government (2024), Growth Sector Database.

### 7.1.2 Visitors

Tourism data was not available for the Local Area. However, a range of statistics are available on visitor numbers and visitor spend for East Ayrshire and Arran, Dumfries and Galloway, and Scotland, including the Great Britain Tourism Survey and the International Passenger Survey. These can be used to form a view of more localised trends.

Table 7-2 shows the latest data available on visitors and level of spending across Scotland. In 2023, Ayrshire and Arran attracted 705,000 domestic overnight visitors who spend a total of £142 million. This accounted for 4.8% of the total spend in Scotland from domestic overnight visits in 2023.

<sup>22</sup> Scottish Government (2015), Scotland's Economic Strategy.



Ayrshire and Arran also attracted 64,000 international overnight visitors in 2023, accounting for 1.8% of all international overnight visitors to Scotland and contributing £33 million in spending.

**Table 7-2: Visits and Visitor Spending, 2023**

	Ayrshire and Arran	Dumfries and Galloway	Scotland
<b>Visitor Numbers (million)</b>			
Domestic Overnight Visitors	0.7	0.7	12.4
International Overnight Visitors	<0.1	<0.1	3.5
<b>Spend (£ million)</b>			
Domestic Overnight Visitors	142.0	130.7	2,989.3
International Overnight Visitors	33.0	16.0	2,458.6

Source: Kantar (2023) Great Britain Tourism Survey, ONS (2023), International Passenger Survey.

### **7.1.3 Regional Attractions**

The most visited attractions in Ayrshire and Arran and Dumfries and Galloway are shown in Table 7-3.

Of these attractions, Dean Castle Country Park was the most visited attraction in the regional area, attracting over 1.3 million visitors in 2019. Looking at the ten most visited attractions in the region, none of them fell within 15 kilometres of the proposed Development.



**Table 7-3 Top 10 Attractions in Ayrshire and Arran and Dumfries and Galloway**

Attraction	Annual Visitors	Distance to site (km)
Dean Castle Country Park	1,365,246	36
Gretna Green Famous Blacksmiths Shop	772,448	75
Culzean Castle and Country Park	333,965	41
Robert Burns Birthplace Museum	261,283	31
Threave Garden	120,840	46
Scottish Maritime Museum	73,310	43
Brodick Castle & Country Park	68,423	68
Mabie Forest	63,291	44
Dalbeattie Forest	55,042	49
Grey Mare's Tail	45,945	49

Source: Visit Scotland (2021), Insight Department: Ayrshire and Arran Factsheet, 2019; Visit Scotland (2021), Insight Department: Dumfries and Galloway Factsheet, 2019.

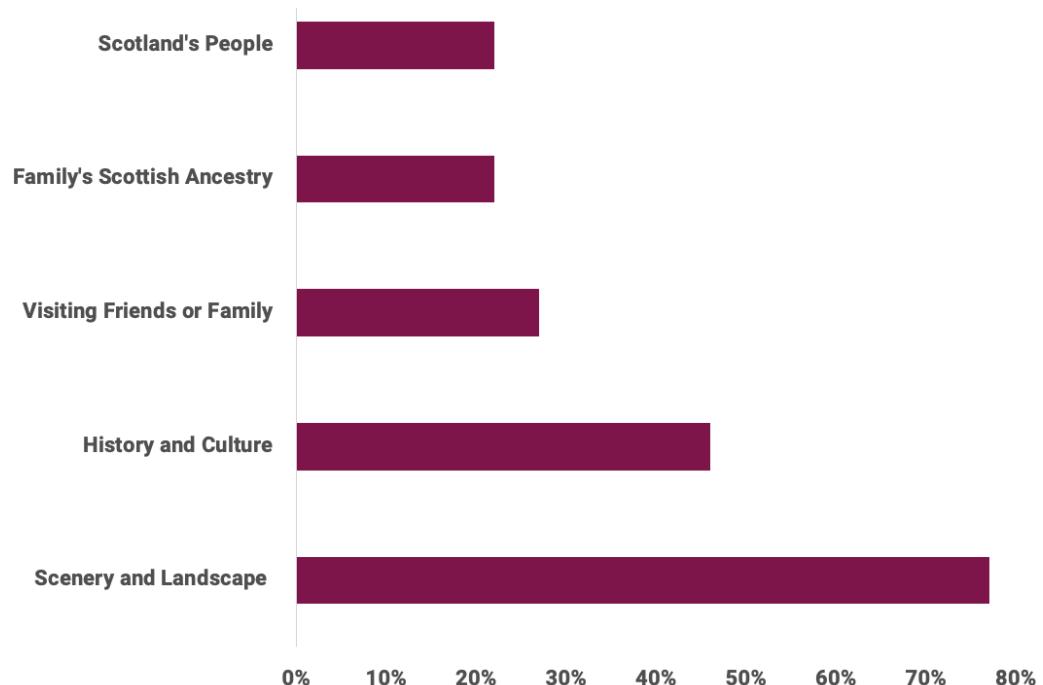
#### **7.1.4 Motivations to Visit**

In 2023, Visit Scotland published the results from a visitor survey considering why people were motivated to visit Scotland from a sample of visitors in the regional area.

The survey found that 77% of the visitors sampled from Ayrshire and Arran were attracted because of its scenery and landscape while almost half mentioned the history and culture.

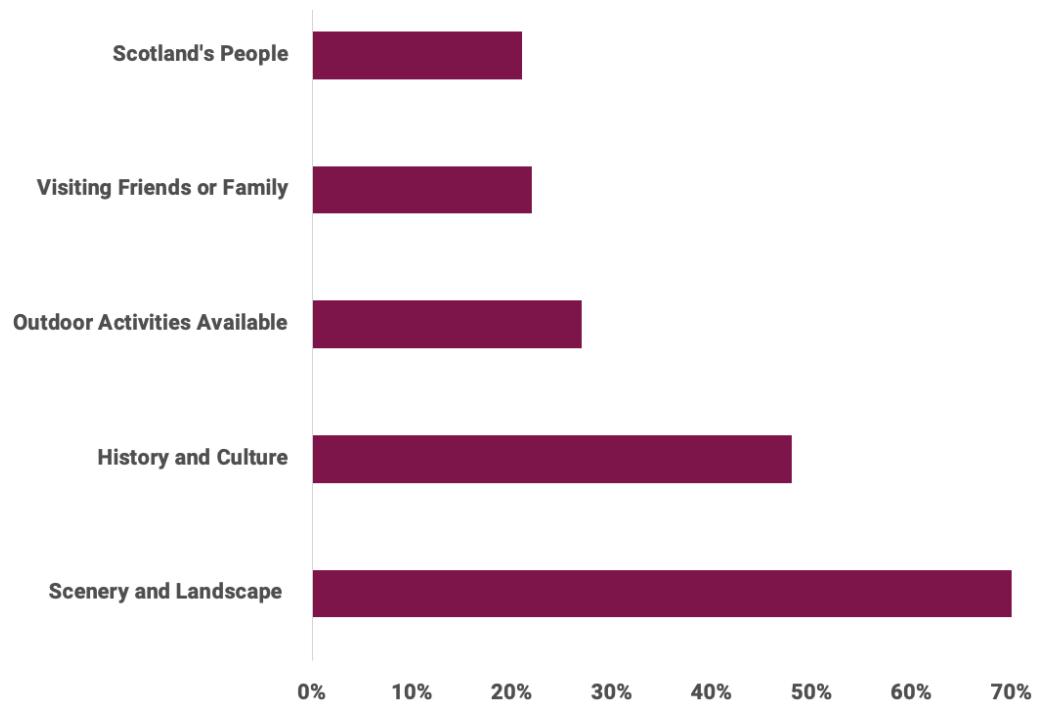
The survey also found that 78% of the visitors surveyed from Dumfries and Galloway were attracted because of its scenery and landscape as well and over half stated due to the history and culture. Notably almost a third of those surveyed from Dumfries and Galloway highlighted the outdoor activities available.

**Figure 7-1: Motivations to Ayrshire and Arran**



Source: Visit Scotland (2023), Local Area Factsheet: Ayrshire and Arran.

**Figure 7-2: Motivations to Visit Dumfries and Galloway**



Source: Visit Scotland (2023), Local Area Factsheet: Dumfries and Galloway.



### 7.1.5 Local Visitor Attractions

Using Visit Scotland and Google Maps, local visitor attractions are set out in Table 7-4 below, alongside a short description of them and their distance. These also include historical and cultural activities, such as museums and historical artefacts, which are relatively popular in the area.

There is a relatively small number of local attractions located near the proposed Development with most of the attractions located in Cumnock (11-13 km from the Site) and Sanquhar (9-12 km from the Site).

**Table 7-4 Local Visitors Attractions**

Attraction Name	Description	Distance to Site (km)
Robert Burns Cairn	Historical landmark on a natural path that overlooks the Afton Water.	3
Knockshinnoch Lagoons	An important wildlife reserve for birdlife in the Nith Valley. Highlights include observing migratory birds and wildflowers.	4
Burns Cottage	The first home of Robert Burns, currently part of the Robert Burns Birthplace Museum.	6
Sanquhar Golf Club	9-hole golf course with views of the rolling hillside of northern Dumfries and Galloway.	8
The Fun Pool	A 4-lane swimming pool along with gym facilities and a sauna open to the public.	9
Sanquhar Tolbooth Museum	18 <sup>th</sup> century tolbooth showcasing how people lived in Sanquhar and Kirkconnel.	9
Striding Arches	Three sandstone arches located on the hilltops near Cairnhead.	9
De'il's Back Door	Scenic views consisting of a river and waterfall.	9
Crawick Multiverse	Former open cast coal mine converted into 55-acre art project with science attractions and geometric landforms.	10
Sanquhar Castle	A ruined castle from the 13 <sup>th</sup> century.	11
Cumnock Factory Outlet	Custom designed 27,000 square foot shopping outlet with a broad catalogue of gifts and household goods.	11
Heritage Centre Cumnock	Visitor attraction containing wide range of historic artefacts.	11
The Thistle Inn	Family friendly and value for money newly established pub company.	11



Murray Park	Park for walks with water views.	12
St John R C Church	19 <sup>th</sup> century Catholic church.	12
Baird Institute	Leisure facility for local people holding a collection of pottery items and wide range of historical resources related to Cumnock and Doon Valley area.	12
The Studio at Millbank	Educational workspace for jewellery making classes.	13
Woodroad Park	Peaceful park with woodland and river walks.	13
Blackstone Clydesdales	Visitor attraction to experience one of Scotland's rare horse breeds.	13
DIG-a-Day	Attraction allowing visitors to operate a wide range of excavators.	14
Dumfries House	Historical 18 <sup>th</sup> century stately home open daily to the public.	15
Dastardly Deed	Fun attraction to explore the beautiful grounds of Dumfries House.	15
Queen Elizabeth Walled Garden	Interior walled garden at the historic Dumfries House.	15
Brockloch Tower	Modern castle built to resemble medieval architectural constructions.	15

Source: Visit Scotland (2024). Google Maps.

#### **7.1.6 Local Accommodation Providers**

Through online research on the VisitScotland portal and Google Maps, a number of accommodation providers were identified in the area surrounding the proposed Development. There are 37 accommodation providers within 15 km from the proposed Development. The majority of them are in Sanquhar and some around Cumnock, Kirkconnel, and other rural areas around the region.



**Table 7-5 Local Accommodation Providers (Distance to proposed Development)**

Provider	0-5 km	5-10 km	10-15 km	Total
Self-Catering Providers	3	10	13	26
B&Bs	1	1	1	3
Campsites or Caravan Parks	1	0	0	1
Hotels	0	5	2	7
<b>Total</b>	<b>5</b>	<b>16</b>	<b>16</b>	<b>37</b>

Source: Visit Scotland (2024), Accommodation Dumfries and Galloway; Visit Scotland (2024), Accommodation East Ayrshire; Google Maps.

### 7.1.7 Recreational Trails and Core Paths

There are 24<sup>23</sup> core paths within 15 km of the proposed Development, including:

- C11: Knockshinnoch Lagoons;
- C12: New Cumnock Circular;
- Path 84: Kirkconnel to Mynwhirn Hill;
- Path 86: Kelloholm to Kirkconnel (Via River);
- Path 443: Bank Hill to Graystone Hill;
- Path 87: Guildhall Bridge Kirkconnel;
- Path 88: Kirkconnel to Black Law (Via Fingland & Kirkland);
- Path 215: Lorg Trail;
- Path 112: Euchan Fall;
- Path 6000: Southern Upland Way;
- Path 109: Sodjers Bridge Walk;
- Path 183: Carsphairn Forest and Windy Standard;
- Path 114: Sanquhar Town Walk;
- Path 111: Sanquhar Castle Circular;
- Path 188: Corlae;
- Path 51: Benbuie to Troston Hill;
- Path 108: Bogg to Auchentaggart Moor;
- Path 113: Eliock Grange Walk;
- Path 110: Mossholm to Wanlock Water (Via Cogshead);
- Path 446: Benbrack;
- Path 52: Cairnhead to Blackmark Hill;
- Path 216: Manquhill Hill;
- Path 487: Cairnsmore of Carsphairn by the Green Well; and
- Path 182: Cairnsmore of Carsphairn by Craig of Knockgrey.

Hillwalking and cycling play a relatively important role in outdoor tourism in the area. As such, 7 recreational trails were identified within 15 km from the windfarm through the portal Walkhighlands.

<sup>23</sup> Scottish Government SpatialData (2024), Core Paths - Scotland



**Table 7-6: Recreational Trails**

Trail Name	Description	Distance to Site (km)
Blackcraig Hill	Blackcraig Hill is located to the east of Glen Afton and is one of the higher hills in the Southern Uplands.	0
Southern Upland Way, 4: Dalry to Sanquhar	A 42 km walk much of it crossing open moorland with fine views.	4
Striding Arches, near Moniaive	A 10 km walk that climbs up through the forest to visit one of the Striding Arches with the possibility of extending the route.	7
Southern Upland Way, 5: Sanquhar to Wanlockhead	A 13 km that passes by the old mining district along Wanlock Water.	10
Cairnsmore of Carsphairn	A 12 km ascent to a grassy summit that rises above its nearest neighbours providing excellent views.	10
Twa' brigs walk, Muirkirk	A 5 km circular walk providing views of two historic bridges.	14
River Ayr Way 1: Glenbuck to Sorn	A 29 km walk following the River Ayr through moorland until the village of Sorn.	14
Cairn Table	A 9 km hill walk to the summit of a hill.	14

Source: Walkhighlands (2024), recreational trails Scotland.

## 7.2 Evidence on Windfarms and Tourism

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

A study of potential effects of windfarms on tourism was undertaken in 2008 by the Moffat Centre at Glasgow Caledonian University<sup>24</sup>. The study was based on what 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.

<sup>24</sup> Moffat Centre (2008), The Economic Impact of Wind Farms on Scottish Tourism



Since this study, windfarms 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 windfarms and tourism employment at the national regional and local level<sup>25</sup>. 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 in onshore wind energy also experience increases in tourism employment equal to, or greater than other areas across Scotland.

The report included case studies of 44 onshore windfarms constructed between 2009 and 2019. This included an updated analysis of 28 windfarms included in a previous report<sup>26</sup> constructed prior to 2015, and 16 additional windfarms constructed between 2015 and 2019. The study reported on changes in tourism-related employment in the small areas within 15 km of each windfarm. Of the 28 windfarms 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 windfarms, 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 windfarms located in the area.

The report concluded that, there was no pattern or evidence suggesting that the development of onshore windfarms in Scotland had any negative effects on the tourism economies across the country as a whole, the local authority areas or immediate areas surrounding windfarms. These conclusions are not surprising given that:

- There are high levels of public support for renewable energy;<sup>27</sup>
- As windfarms are well-established in Scotland, tourists might already expect to see windfarms 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 windfarm; and
- 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.

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<sup>25</sup> BiGGAR Economics (2021), Wind Farms & Tourism Trends in Scotland: Evidence from 44 Wind Farms

<sup>26</sup> BiGGAR Economics (2017), Wind Farms and Tourism Trends in Scotland

<sup>27</sup> BEIS (2022). Public Attitudes Tracker: Energy Infrastructure and Energy Sources. Winter 2021, UK.



## 7.3 Impact on Tourism and Recreation

The research considered in the previous section points to the lack of a relationship between the tourism economy and windfarm developments. Given the importance of the tourism economy in East Ayrshire and Dumfries and Galloway, it seems appropriate to consider whether the proposed Development will have any impact on it. The focus in this report is on a high-level account of the key motivations leading visitors to spend time at the attractions identified earlier.

Considerations of the tourism economy in this context is based on spending of visitors and employment supported by the sector. For a change in spending to take place it is necessary that, as a result of a windfarm 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. The changed behaviour would, in turn, affect visitors' spending.

As recorded in visitors' surveys, visitors tend to spend in an area for a range of reasons. These may include scenery and landscape; history and culture; and the place's reputation. Views are just one of these factors and are more likely to be an important reason when it comes to the choice of recreational walks and outdoor nature-based attractions. Even in those cases, however, they may be one among a host of factors influencing visitors' choice.

The extent to which a given attraction is susceptible to change in its surroundings varies based on:

- Its relative importance for the local tourism economy;
- Its 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.).

The extent to which a windfarm development may impact on a tourism asset is expected to depend on factors, including:

- Distance from the windfarm, as a proxy for how visible the wind farm is; and
- The interaction between the wind farm and the asset's features.

Overall, existing evidence suggests that at wind farm sites across Scotland there have not been any negative impacts on tourism activity. As windfarms are well established within Scotland, any negative impacts on the tourism economy would have been apparent by now. This is not a surprising finding given that:

- There are high levels of public support for renewable energy;<sup>28</sup>
- As windfarms are well-established in Scotland, tourists might already expect to see windfarms when visiting Scotland, especially rural Scotland;

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<sup>28</sup> Department for Energy Security and Net Zero (March 2025) Public Attitudes Tracker: Renewable Energy Winter 2024



- The factors that determine the success of the tourism sector do not include the presence or otherwise of an onshore windfarm; and
- 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.

### 7.3.1 NatureScot Guidance

The proposed method to assess the effects on recreational assets will follow the guidance provided by NatureScot<sup>29</sup>. This approach takes into consideration a number of potential effects, including direct effects on facilities, such as limitations or restrictions on access, and effects on the intrinsic quality of the resources enjoyed by people. In general, this guidance would consider recreational and access impacts to potentially be significant if:

- permanent or long-term effects on the resources on which enjoyment of the natural heritage depends, in particular where facilities have been provided by SNH or others under statutory powers;
- permanent or long-term change that would affect the integrity and long-term sustainable management of facilities which were provided by SNH or others under statutory powers;
- where there are recreational resources for open air recreation pursuits affected by the proposal which have more than local use or importance, especially if that importance is national in significance;
- major constraints on or improvements for access or accessibility to designated natural heritage sites; and
- where mitigation and/or compensatory or alternative recreational provision is considered to be inadequate.

The guidance outlines factors which would influence how the scale of any effect is assessed, including:

- the magnitude of impacts on access, or on settings in which recreation takes place;
- the potential for the effects to increase over time; and
- the scarcity value of the recreation assets, for example if there are multiple alternative paths that can be used.

While this report is not part of an Environmental Impact Assessment, the same approach has been applied to this assessment.

### 7.3.2 Identified Environmental Impacts

The Environmental Impact Assessment has found that there is the potential for tourism and recreation receptors to experience environmental effects. In particular, it

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<sup>29</sup> natureScot (2018) Environmental Impact Assessment Handbook Version 5



has identified that there may be significant landscape and visual effects on some core paths and from some hills, including Blackcraig Hill.

### **7.3.3 Tourist Attractions**

In assessing the potential impact of the proposed Development on the drivers of tourism, the key features of individual attractions have been considered, and examples of relevant attractions are provided below.

The proposed Development is located on Hare Hill with a number of outdoor attractions located in the region, most attractions are located more than five kilometres away. Tourists looking to have a closer experience with the natural environment have several options, with places such as Knockshinnoch Lagoons offering a unique opportunity to watch birdlife in their natural habitat and migratory patterns. Other attractions include De'il's Back Door with its scenic views of East Ayrshire with small waterfalls.

Tourists seeking outdoor and physical activity are also interested in golf clubs like Sanquhar Golf Club, set in the picturesque rolling hills of Dumfries and Galloway (located in the east of the proposed Development). Visitors can also enjoy the beautiful landscape by participating in outdoor activities such as Blackstone Clydesdales allowing tourists to experience riding one of Scotland's native horse breeds. Other outdoor activities include visiting Crawick Multiverse, an open air art and science attraction that features a variety of geometric landforms. Other physical activities include going to Sanquhar's public swimming pool, exploring the grounds of Dumfries House through their interactive mystery question or practice construction skills by participating in the DIG-a-Day outdoor attraction. These motivations to visit such attractions are unlikely to be altered in the presence of the proposed Development.

Tourists interested in arts and culture explore attractions like Burns Cottage, where they can see the birthplace of Robert Burns or Sanquhar Tolbooth Museum where visitors can discover the interesting past of the local area through artefacts and activities. Those interested in the historical past of Cumnock can visit the Heritage Centre to view a vast collection of historic memorabilia on a wide range of industrial instruments. Dumfries House is one of the main cultural and historic attractions in the region, boasting a beautiful 18<sup>th</sup> century house showcasing how life was centuries ago. These attractions highlight the diverse offerings in the local area, with features related to history, arts, and culture, motivations that are unlikely to be affected by the proposed Development

Those seeking retail visit Cumnock Factor Outlet, a former Bata shoe factory, having been reconverted into a modernized outlet shop with a broad catalogue selection including items for women, men, children, household goods and gifts. The Thistle Inn is also visited for its family friendly and value for money food locale in the area. These motivations would not be affected by the proposed Development and therefore, no adverse effect is expected.

#### 7.3.4 Local Accommodation Providers

The baseline identified 37 accommodation providers within 15 km of the proposed Development. There are 5 providers located within 5 km of the proposed Development, 16 located between 5-10 km away and 16 located between 10-15 km from the proposed Development.

The majority of providers are self-catering (26), of which 3 are located within 5 km, 10 are between 5-10 km away, and 13 are located between 10-15 km away from the proposed Development. Self-catering providers in the area marketed the amenities they provide, such as private gardens, patios, BBQ areas, hot tubs and contemporary and high-standard facilities. Many accommodation providers emphasised their proximity to areas suitable for outdoor historical activities such as visiting castles like Sanquhar castle ruins or Drumlanrig Castle. Other nature activities commonly emphasised include Galloway Forest Park and the Southern Upland Way for walking and mountain biking. Those looking for less remote outdoor activities were also informed of their ability to access golf clubs such as Sanquhar Golf Club and other places such as Crawick Multiverse. These providers were also eager to mention their proximity to activities of a cultural nature including Dumfries House and Wanlockhead Lead Mines. Those

A further 7 providers within 15 km of the proposed Development are hotels of which 5 are located between 5-10 km from the proposed Development, and 2 are located between 10-15 km away. These providers emphasised their proximity to activities of a cultural or historic nature including Robert Burns birthplace museum, Drumlanrig Castle, Dumfries House and the Museum of Lead Mining. They also mentioned their proximity to physically engaging attractions such as FUN Pool, Sanquhar Golf Club and Crawick Multiverse. As these major motivations would not be impacted by the presence of a windfarm, it is not expected that the proposed Development would result in any change in activity.

There are 3 B&Bs within 15 km of the proposed Development. Of these providers, 1 is located within 5 km of the proposed Development, 1 located between 5-10 km away and 1 located between 10-15 km away. These providers commonly emphasize their proximity to outdoor experiences such as mountain biking at Ae, Drumlanrig horse riding, River Nith or the Southern Upland Way. As these benefits to staying with these providers would not be impacted by the presence of a windfarm, it is not expected that the proposed Development would have an impact on activity.

There is only one Caravan park located within 15 km of the proposed Development, it is located less than 5 km to the west of the proposed Development, this accommodation provider highlights reasons to visit including the tranquillity and breathtaking scenery of the area as well as the warmth of the community. Given that windfarms are already visible and in near proximity from the location it is not expected that the proposed Development would have an impact on activity.



### 7.3.5 Recreational Trails and Core Paths

The baseline identified eight recreational trails within 15 km of the proposed Development. This includes Blackcraig Hill in the immediate vicinity, one route located within 5 km, one between 5–10 km, and the remaining five between 10–15 km away. Based on visitors' motivations and the types of views offered, the recreational trails can be grouped as follows:

#### Scenic Routes and River Walks with Historic and Cultural Motivations:

- Striding Arches, Moniaive (7 km away)
- Twa' Brigs Walk, Muirkirk (14 km away)

#### Nature Trails and Hikes Offering Varied Terrain and Panoramic Views:

- Southern Upland Way 4: St John's Town of Dalry to Sanquhar (4 km away)
- Southern Upland Way 5: Sanquhar to Wanlockhead (10 km away)
- Cairnsmore of Carsphairn (10 km away)

These trails provide a diverse range of recreational experiences, from cultural exploration to immersive natural walks. Considering the broad range of trail types and the availability of alternatives, it is unlikely that the presence of the proposed Development would deter recreational use across these routes. Most trails are located more than 10 km from the proposed Development, and none intersect with it directly.

The Landscape and Visual Impact Assessment (LVIA) found no significant effects along the Southern Upland Way, as the proposed Development would be located within a landscape where other onshore wind farms are already present. As such, the visual change is not considered substantial or unexpected.

The LVIA did identify significant visual effects for users of Blackcraig Hill, which lies in close proximity to the proposed Development. While visibility of the turbines from this route will increase, Blackcraig Hill is already located within a landscape where wind energy infrastructure is a known and accepted feature. The primary motivation for walking Blackcraig Hill – such as physical challenge, scenic views, and nature appreciation – remains intact. Despite the increased visibility of turbines, these motivations are unlikely to be diminished, and the hill is expected to continue attracting walkers.

There are also several core paths in the area, which are typically used by local residents. Although some paths – such as those around Knockshinnoch Lagoons and the New Cumnock Circular – would experience significant visual effects, access will not be impeded. Over time, the visual prominence of the turbines is likely to become less noticeable as they are assimilated into the everyday landscape. Given the range of alternative routes available in the vicinity, no significant long-term effects on core path usage as recreational routes are anticipated.

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