

Socio-Economic Impact Assessment of Killean Wind Farm

A report to RES July 2024





Contents

1.	Executive Summary	1
2.	Introduction	3
3.	Strategic Context	6
4.	Local Economic Context	12
5.	Economic Impact	17
6.	Tourism and Recreation	24
7.	Community Benefits and Opportunities	43
8.	Conclusion: Net Economic Benefits	47



1.

Executive Summary

Scotland has committed to ambitious climate change targets, with the Climate Change (Emissions Reductions) Act 2019 ¹ committing Scotland to the reduction of emissions to net zero by 2045. This commitment to a net zero economy is now central to economic policy. This transformation will require an increase in renewable energy generation, to replace other forms of generation and to facilitate the decarbonisation and electrification of the economy.

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

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

- £5.9 million Gross Value Added (GVA) and 80 jobs in Argyll and Bute; and
- £18.1 million GVA and 260 jobs in Scotland.

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

- £0.3 million GVA and three jobs in Argyll and Bute; and
- £1.1 million GVA and 12 jobs across Scotland.

Through local partnerships, the Applicant will support communities to develop the skills sought after within the onshore wind sector, to secure jobs and optimise the opportunities associated with the Proposed Development. The Applicant has also committed to prioritise local companies in the provision of contracts during the development and construction, and operational phases.

The Proposed Development will also contribute to public finances through the payment of non-domestic rates, which could amount to ± 0.7 million annually, or ± 35.6 million over a 50-year operational lifetime. This will support the funding of local public services in the context of challenging public sector finances.

To support local ambitions and needs, it has become common practice to offer community benefit funding, with Scottish Government guidance suggesting £5,000 per annum per installed MW. This level of funding would generate around £0.3 million every year for the local economy, equivalent to £14.9 million over the lifetime of the wind farm and could support up to five jobs locally.

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



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

As well as generating economic impacts regionally and nationally, the Applicant's commitment to ensuring the local community benefits from the Proposed Development would support wider economic and social impacts. By committing to prioritising local contractors and supporting local skills, as well as the Applicant's innovative approach to community benefits, shared ownership, and the Electricity Discount Scheme, the Proposed Development will support local economic development and enable the community to support projects and address the priorities of the area.

Whilst not required by NPF4, this assessment will consider whether there could be any implications for tourism since it is an important contributor to the local economy. Over time, research evidence has consistently found that there is no relationship between onshore wind developments and tourism activity in Scotland. In 2021, BiGGAR Economics produced a report analysing the relationship between the construction of onshore wind farms and tourism employment at the local, regional and national level.² The report concluded that there was no pattern or evidence suggesting that the development of onshore wind farms in Scotland had any negative effects on the tourism economies of the country as a whole, local authority areas or the immediate areas surrounding wind farms. This report also includes an updated area-specific analysis of the relationship between wind farms and tourism in Argyll, which found the same conclusion.

Although tourism assessments usually focus on tourism assets which are located within 15 km of the Proposed Development, this assessment has extended the radius to 25km to incorporate the west coast of Arran and other areas identified in the zone of theoretical visibility. It found that the wind farm proposals are not expected to affect the local accommodation providers, recreation trails and core paths, and tourism attractions.

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



Introduction

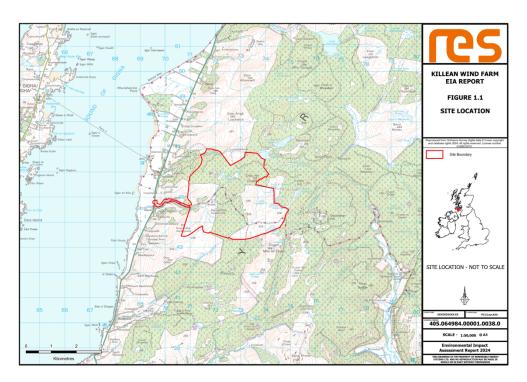
BiGGAR Economics was commissioned by RES to assess the potential economic impact associated with the Proposed Development.

2.1 Background

The Proposed Development is an onshore wind farm development by RES (the Applicant) located approximately 1.8 km east of Tayinloan, on Killean Estate, Kintyre in Argyll and Bute.

The socio-economic assessment has been based on a Proposed Development comprising 9 turbines, generating a total capacity of approximately 59.4 MW.

Figure 2-1: Proposed Development Site



Source: Killean Wind Farm, Figure 1 Site Location

BiGGAR Economics was commissioned to undertake the socio-economics, recreation and tourism elements of the Proposed Development. Socio-economic and tourism assessments of onshore windfarms over the last decade have found no significant socio-economic effects in EIA terms. Since there is no reason to expect significant effects in respect to the Proposed Development, socio-economics, tourism and recreation have been scoped out of the EIA Report.



Nevertheless, noting that socio-economics, tourism and recreation were included within the scoping report and that socio-economic and tourism issues are of interest to key stakeholders and local authorities, this section of Chapter 13 provides an assessment of those effects.

The objectives of this study are to:

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

Socio-economics effects are considered following the requirements outlined in NPF4 Policy 11(c) regarding the maximisation of the net economic impact. The assessment evaluates whether the Proposed Development meets these requirements and supports a high local supply chain content, the provision of local employment and skills development opportunities, the contribution to the cost for enabling infrastructure and other interventions, the provision of a community benefit package and the promotion of the continuation of innovative processes to enhance community wealth.

This assessment has also considered the Scoping Opinion as relevant to socioeconomics, tourism and recreation. The responses received and where this has been considered in the report can be found in Table 2-1.

Consultee	Consultation Response	Considered in
Campbeltown Community Council – Scoping Opinion	The assessment should set out the Applicant's intention to offer Community Benefit Funds and Shared Ownership options.	Considered in Section 7
Campbeltown Community Council – Scoping Opinion	Consideration of the impact on mountain bikers.	Considered in the assessment of recreational trails (Section 6.1.5), of which mountain bikers use.
Campbeltown Community Council – Scoping Opinion	Acknowledge that tourists are attracted to the region to enjoy its peace and tranquillity.	Considered in Section 6.4
Campbeltown Community Council – Scoping Opinion	Include assessment of St John's Church, an important asset in the history of Medieval	Considered in Section 6.5.1

Table 2-1 Scoping Opinion Response



	Kintyre and visited by many tourists.	
East Kintyre Community Council– Scoping	Conclusions rely on outdated study.	Tourism and Recreation
Opinion	Request for Cumulative Assessment for Tourism Impact.	Assessment including in Section 6
	Assessment of the impact of the wind farm on tourism attractions, such as the area's 'Dark Skies'.	
West Kintyre Community Council – Scoping Opinion	Area specific analysis of relationship between wind farms and tourism.	Considered in Section 6.4

2.2 Report Structure

The report is structured as follows:

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



Strategic Context

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

3.1 National Strategic Context: Economic and Related Policies

3.1.1 Scotland's National Performance Framework

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

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

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

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

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

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



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

The 11 national outcomes are that people:

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

3.1.2 Scotland's National Strategy for Economic Transformation

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

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

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

⁴ 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, requiring continued investment and support. Renewable energy also has a role to play in supporting productive businesses and regions across Scotland.

3.1.3 National Planning Framework 4

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

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

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

Policy 11(e) also sets out a number of impacts that should be addressed during project design and mitigation. That list does not include tourism. Whilst not required by NPF4, Section 6 of this report considers whether there could be any implications for tourism since it is an important contributor to the local economy.

3.1.4 Local Energy Policy Statement

The Scottish Government's latest statement on Local Energy Policy⁶ highlights the role of localised energy solutions as part of a green recovery to the Covid-19 pandemic and towards a net-zero and decarbonised economy. The strategy is interlinked with other strategic documents in a concerted effort to increase energy efficiency; reduce emissions and eradicate fuel poverty.

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

 people: engaging with stakeholders from the outset and supporting the different ways each of these will want to be involved;

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

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



- places: local energy projects should reflect the features of the local area and work in collaboration with others;
- network and infrastructure: consider the existing energy infrastructure in the area and secure high level and quality of supply to all;
- pathway to commercialisation: create projects that are commercially viable, can be replicated in the future and support net zero emissions; and
- opportunity: projects should create high value jobs and support the wider industry and its workforce.

3.1.5 Onshore Wind Sector Deal

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

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

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

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.

3.1.6 Draft Energy Strategy and Just Transition Plan

The Plan⁸ seeks to leverage Scotland's renewable energy resources to transition towards a 'flourishing, climate-friendly energy system by 2045' delivering affordable, resilient and clean energy for households, communities and businesses. It

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

⁸ Scottish Government (2023), Draft Energy Strategy and Just Transition Plan.



emphasises the importance of preparing for a just energy transition, ensuring that all sectors of society benefit from Scotland's renewable energy potential and driving the development of a wellbeing economy.

Onshore wind development plays a pivotal role in realising this vision and objectives. The Plan sets ambitious targets for expanding renewable electricity generation capacity, with a focus on onshore wind. By 2030, Scotland aims to add more than 20GW of additional low-cost renewable electricity generation capacity. This expansion strengthens Scotland's energy security and supports job creation, economic growth and the transition away from fossil fuels.

In addition, the Plan underscores the importance of maximising community benefits and ownership of renewable energy projects, ensuring that local communities actively participate in Scotland's net-zero energy future.

3.1.7 Tourism Strategy: Scotland's Outlook 2030

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

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

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

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

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



3.2 Local Strategies

3.2.1 Argyll & Bute, Economic Strategy 2019-2023

In 2019, Argyll and Bute Council published the 'Argyll & Bute, Economic Strategy 2019-2023'⁹. The strategy seeks to help deliver the vision included in the 'Argyll and Bute Outcome Improvement Plan 2013-2023' and is aligned with the areas of investment part of the Rural Growth Deal¹⁰, an investment package supported by the Scottish and UK Governments. The strategy is built around three themes:

- critical economic infrastructure: providing connections to national and international markets;
- place and people: attracting skills, residents, visitors and businesses; and
- smart growth: growing, doing more that works.

The strategy mentions renewables as a sector with a proven track-record in the region and an area of economic activity that should be supported. It also features a commitment to capitalise on the region's low carbon economy. The Council will work through Argyll and Bute Renewable Alliance to ensure constraints to generation, distribution and the realisation of local economic benefits are addressed. This work will be informed by the Council's 'Renewable Energy Action Plan'¹¹.

Argyll and Bute Council are currently refreshing its economic strategy with a 10-year outlook, from 2024 – 2034.

3.3 Summary of Strategic Context

Whilst NPF4 Policy 11(c) does not offer a definition for maximising net economic benefits, other policies including the Onshore Wind Sector Deal, provide context for the intended meaning of maximising economic benefits. This includes supporting the enhancing current skills and training provisions to deliver the needs of the wind industry, prioritising local contractors and supply chains, and collaborating with local communities to offer impactful community benefits and practical routes to shared ownership.

The following sections of this report consider the net economic benefits that the Proposed Development would deliver for Argyll and Bute, and Scotland.

⁹ Argyll & Bute Council (2019), Argyll & Bute Economic Strategy 2019-2023.

¹⁰ Argyll & Bute Council (2021), Argyll and Bute Rural Growth Deal.

¹¹ Argyll & Bute Council, Renewable Energy Action Plan.



4.

Local Economic Context

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

4.1 Study Areas

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

- The Local Area (defined as the electoral ward of Kintyre and the Islands):
- Argyll and Bute (the local authority area); and
- Scotland.

4.2 Demographics

4.2.1 Population Estimates

In 2022, the Local Area had a population of 6,623. Argyll and Bute as a whole had a population of 86,200, accounting for 1.6% of the total population of Scotland (5,479,900). The share of the working age population in the Local Area was 57.0%, and in Argyll and Bute this demographic accounted for 59.2% of the total population. This is below the average accounted for by working age people across Scotland (63.8%).

The share of the population older than working age in the Local Area (29.2%) is higher than average compared to the entirety of Scotland (19.6%). At 26.5%, the share accounted for by this demographic across Argyll and Bute is also higher than the Scottish average (19.6%).

Table 4-1: Population Estimates, 2022

	Local Area	Argyll and Bute	Scotland
Total	6,623	86,200	5,479,900
0-15	13.8%	14.4%	16.6%
16-64	57.0%	59.2%	63.8%
65+	29.2%	26.5%	19.6%

Source: Population estimates – local authority based by five year age band – Data for 2022



4.2.2 Population Projections

From 2022 to 2043, the population of Argyll and Bute is expected to decline by 14.8%, from 86,200 to 73,452, whilst Scotland's population is projected to grow by 1.7% from 5,479,900 to 5,574,819.

A critical aspect of these demographic changes is the shift in the working age population, defined as individuals aged 16 to 64. During this period, the working age population of Argyll and Bute is expected to reduce by 6.6 percentage points, with an overall reduction of almost 12,400 working age people. Scotland is also projected to experience a decrease in its working age population, with an expected decline of around 133,500 individuals, representing a -3.8% change.

Over the same period, the share of the population older than working age in Argyll and Bute is projected to increase from 26.5% to 34.7%. Scotland follows a similar but less marked trend, with an expected increase of 5.3 percentage points, from 19.6% to 24.9%.

Given the relatively similar population structure of the Local Area compared to Argyll and Bute, it is likely that the Local Area will experience similar demographic trends. the anticipated reduction in the working age population in Argyll and Bute presents a challenge to economic and labour market stability. The creation of employment in the onshore wind sector will be an important driver in retaining people of working age in the region, which will be key in supporting an increasingly older population.

	Argyll and Bute		ute Scotland	
	2022	2043	2022	2043
Total Population	86,200	73,452	5,479,900	5,574,819
0-15	14.4%	12.7%	16.6%	14.8%
16-64	59.2%	52.6%	63.8%	60.3%
65+	26.5%	34.7%	19.6%	24.9%

Table 4-2: Population Projections, 2022 - 2043

Source: National Records of Scotland (2022), Population Projections for Scottish Areas (2018-based)

4.3 Industrial Structure

The employment structure of the Local Area, Argyll and Bute, and Scotland is considered in Table 4-3. In 2022, there were 3,000 jobs in the Local Area and 41,00 jobs in Argyll and Bute, representing around 1.6% of the 2.6 million jobs in the Scottish economy.

In the Local Area, 19.2% of jobs were accounted for by accommodation and food services, a sector associated with tourism. This is higher than average compared to Argyll and Bute (13.5%) and Scotland as a whole (8.2%).



Sectors relevant to the construction phase of the Proposed Development, including manufacturing and construction, support 22% of jobs in the Local Area. This is above the average compared to Argyll and Bute (10.1%) and Scotland as a whole (12.2%).

Manufacturing is one of the largest employers in the Local Area, employing 15.7% of those in work, compared to 4.6% in Argyll and Bute, and 6.6% in Scotland as a whole. Construction is also overrepresented in the Local Area (6.3%), compared to the rest of Argyll and Bute (5.5%) and wider Scotland (5.6%).

Table 4-3: Industrial Structure, 2022

	Local Area	Argyll and Bute	Scotland
Accommodation and food service activities	19.2%	13.5%	8.2%
Manufacturing	15.7%	4.6%	6.6%
Wholesale and retail trade	14.8%	12.2%	12.8%
Education	8.4%	6.7%	8.4%
Construction	6.3%	5.5%	5.6%
Human health and social work activities	6.3%	11.0%	15.1%
Agriculture, forestry and fishing	5.9%	10.4%	3.4%
Transportation and storage	5.6%	4.0%	4.0%
Arts, entertainment and recreation	4.5%	3.4%	2.9%
Public administration and defence; compulsory social security	3.8%	9.8%	6.2%
Professional, scientific and technical activities	2.4%	4.6%	7.4%
Real estate activities	1.6%	1.3%	1.4%
Administrative service activities	1.6%	8.0%	7.8%
Other service activities	1.4%	1.2%	1.7%
Information and communication	1.2%	1.6%	3.1%
Mining and quarrying	0.3%	0.5%	1.0%
Total Jobs	3,000	41,000	2,622,000

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

4.4 Economic Activity

In 2022/23, the economic activity rate in Argyll and Bute was 74.7%, lower than the rate across Scotland (77.9%). The unemployment rate in Argyll and Bute (3.0%) was also lower than the Scottish average (3.4%).



At £26,121, the median annual gross income of residents of Argyll and Bute is lower than Scotland as a whole (\pm 29,842).

Table 4-4: Economic Activity Rates, 2023

	Argyll and Bute	Scotland
Economically Active (%)	74.7%	77.9%
Unemployment Rate (%)	3.0%	3.4%
Median Annual Gross Wage (resident analysis)	£26,121	£29,842

Source: Annual Population Survey – Data for Oct 2022 – Sep 2023. Annual Survey of Hours and Earnings – resident analysis data for 2023.

4.5 Education

Of the those aged 16-64 in Argyll and Bute, 50.2% have an NVQ4+ qualification, close to the Scottish average of 50.0%. Similarly, with 79.5% and 79.6% of residents in Argyll and Bute and Scotland possession an NVQ2+ qualification, respectively, the region follows a similar trend to that of the whole of Scotland.

However, Argyll and Bute has a slightly lower proportion of residents aged 16-64 years old with no qualifications (6.2%) compared to the national average (7.8%).

Table 4-5: Qualification Levels, 2022

	Argyll and Bute	Scotland
NVQ4+	50.2%	50.0%
NVQ3+	66.2%	64.8%
NVQ2+	79.5%	79.6%
NVQ1+	87.6%	86.4%
Other Qualifications	6.2%	5.8%
No Qualifications	6.2%	7.8%

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

4.6 Scottish Index of Multiple Deprivation

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



The Local Area contains 10 small areas, of which none are in the most deprived or least deprived quintiles. 80% of the small areas are clustered in the middle of the distribution in quintile 3, with the remaining 20% split equally between quintile 2 and 4.

Argyll and Bute has 125 small areas in total, of which 10% are in the most deprived quintile, and 9% are in the least deprived quintile. Most of the small areas are clustered in the middle of the distribution, with 39% being in the third quintile, and 25% in the fourth. The remaining 17% are within the second quintile.

	Local Area	Argyll and Bute
1 (most deprived quintile)	0%	10%
2	10%	17%
3	80%	39%
4	10%	25%
5 (least deprived quintile)	0%	9%

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

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

4.7 Summary of Socio-Economic Context

The socio-economic structure of the local area and Argyll and Bute highlights the need for the creation of job opportunities. This is reflected in the local demographic profile, with older population structures and worse labour market outcomes than Scotland, on average. Future demographic pressures are expected to exacerbate these trends making job creation a priority to retain the existing population and attract more working age people to the area.

Given that manufacturing and construction account for 22% of total employment, the Local Area is well-placed to receive contracts for construction works.



Economic Impact

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

5.1 Economic Impact Methodology

5.1.1 Modelling the Economic Impact of Onshore Wind Farm Developments

The approach followed in estimating the economic impact from onshore wind developments is based on industry best-practice. In particular, it draws on evidence on the construction and operational costs associated with a range of onshore wind farm projects across the UK conducted in 2015 by BiGGAR Economics on behalf of RenewableUK¹² and other more recent case studies of actual construction and operational costs in the sector.

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

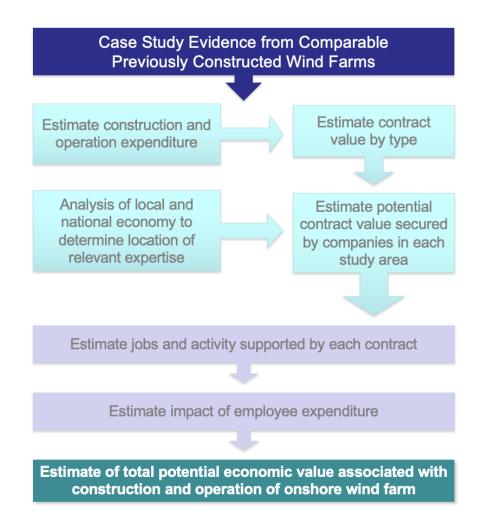
- development and planning;
- balance of plant;
- grid connection;
- turbines; and
- battery storage.

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

¹² RenewableUK (2015), Onshore Wind: Economic Impacts in 2014.



Figure 5-1: Approach to Economic Impact



Source: BiGGAR Economics.

5.1.2 Measures of Economic impact

Economic impacts are reported with respects to the following measures:

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

5.1.3 Sources of Economic Impact

The assessment will consider the following sources of economic impact:



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

5.1.4 Study Areas

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

- Argyll and Bute; and
- Scotland.

5.2 Development and Construction

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

Based on the development of the Proposed Development comprised of 9 turbines, each with a capacity of 6.6 MW, it was estimated that the total development and construction expenditure could be £55.7 million.

Expenditure was then split according to the following component contracts:

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

The largest expenditure component was associated with turbines, equivalent to £32.1 million, or 58% of total development and construction spend. Balance of plant could account for 25% of total expenditure, with development and planning and grid connection accounting for 9% and 8%, respectively.



	% Capex	Value (£m)
Development and Planning	9%	4.9
Turbines	58%	32.1
Balance of Plant	25%	14.2
Grid Connection	8%	4.5
Total	100%	55.7

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

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

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

On this basis, it was estimated that around 37% of the contracts could be carried out by Scottish businesses, with a value of £20.7 million. It was estimated that spending on businesses based in Argyll and Bute would be around £8.5 million, equivalent to 15% of total development and construction expenditure. This is associated with the Applicant's commitment to contribute to a high local supply chain content providing local employment opportunities that would need to be utilised by the suppliers in order for the benefits to be maximised.

The largest opportunity for Scottish businesses could be in contracts associated with balance of plant, which could be worth £11.5 million. Balance of plant would also be the largest opportunity for businesses in Argyll and Bute, worth up to £3.6 million.

	Argyll and Bute		Scotland	
	%	£m	%	£m
Development and Planning	35%	1.7	75%	3.7
Turbines	7%	2.1	10%	3.2
Balance of Plant	25%	3.6	81%	11.5
Grid Connection	23%	1.1	51%	2.3
Total	15%	8.5	37%	20.7

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

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



Having estimated the size of the contracts that could benefit each of the study areas, it was possible to consider the Gross Value Added (GVA) and short-term employment that these could support. This was done by splitting each contract category into its component contracts and assigning each to an industrial sector, based on its Standard Industrial Classification (SIC)¹³ code, Direct GVA was then estimated by applying the relevant turnover per GVA from the UK Annual Business Survey (ABS)¹⁴.

In this way, it was estimated that development and construction contracts associated with the Proposed Development could generate £4.5 million GVA in Argyll and Bute, and £10.6 million GVA across Scotland.

	Argyll and Bute	Scotland
Development and Planning	1.2	2.3
Turbines	1.1	1.7
Balance of Plant	1.7	5.7
Grid Connection	0.5	1.1
Total	4.5	10.6

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

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

In a similar way, it was possible to estimate the number of direct jobs supported by spending in development and construction contracts. This was done by dividing the expenditure in each contract by the turnover per job ratio for the relevant sector. In this way, it was estimated that the development of the Proposed Development could generate 60 direct years of employment in Argyll and Bute, and 160 direct years of employment in Scotland.

⁻⁻⁻⁻⁻

 ¹³ Office for National Statistics (2009), Standard Industrial Classification of industrial activities (SIC 2007)
¹⁴ Office for National Statistics (2020), Annual Business Survey 2018 – Revised



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

	Argyll and Bute	Scotland
Development and Planning	<10	20
Turbines	20	40
Balance of Plant	30	80
Grid Connection	10	20
Total	60	160

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

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

To estimate indirect and induced impacts it was necessary to apply the relevant Type 1 and Type 2 GVA and employment multipliers from the Scottish Government Input-Output Tables¹⁵ to direct GVA and direct employment. Since the multipliers refer to sectoral interactions occurring at the level of the Scottish economy, it was necessary to adjust them when considering impacts taking place in Argyll and Bute.

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

- £5.9 million GVA and 80 jobs in Argyll and Bute; and
- £18.1 million GVA and 260 jobs in Scotland.

The estimated figures show that the Proposed Development would contribute to the provision of high-quality local employment opportunities during the Development and Construction phase and help maximise the value of local expenditure.

5.3 Operations and Maintenance

The first step in estimating the economic impact from the operations and maintenance of the Proposed Development was to consider the total expenditure required for its operation each year. Based on the number of turbines, it was estimated that the annual cost of operations and maintenance could be around £1.8 million.

¹⁵ Scottish Government (2022), Supply, Use and Input-Output Tables.



It was further assumed that businesses in Argyll and Bute could benefit from a total £0.4 million in operations and maintenance contracts (25%) each year, whereas annual expenditure in Scottish contractors could be up to £1.3 million (73%).

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

	Argyll and Bute			Scotland
	%	£m	%	£m
Operations and Maintenance	25	0.4	73	1.3

Source: BiGGAR Economics Analysis.

The total turnover generated in each study area was then divided by the turnover per GVA and turnover per job ratios of the sectors expected to carry out operations and maintenance contracts. In this way, it was estimated that the Proposed Development could generate £0.2 million direct GVA and two direct jobs in Argyll and Bute, and £0.7 million GVA and seven direct jobs in Scotland.

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

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

- £0.3 million annual GVA and three jobs in Argyll and Bute; and
- £1.1 million annual GVA and 12 jobs in Scotland.

Similarly to the Development and Construction phase, the estimated figures show that the Proposed Development would contribute to the provision of high-quality local employment opportunities and help maximise the value of local expenditure throughout its operational lifetime.

5.4 Non-Domestic Rates

The Proposed Development is expected to provide a stream of revenue to the public sector through the annual payment of non-domestic rates. This revenue will, in turn, fund public services, supporting the requirements of the NPF4 Policy 11(c). To estimate the economic impact generated by non-domestic rates it was first necessary to consider the rateable value of the development and apply the appropriate poundage rate. This was done by applying guidance developed by the Scottish Assessors Association¹⁶ to information about the performance of the Proposed Development. On this basis, it was estimated that the Proposed Development could generate £0.7 million each year in non-domestic rates.

¹⁶ Scottish Assessors Association (2023). Practice Note 2: Valuation of Onshore Wind Turbines



Tourism and Recreation

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

6.1 Tourism Baseline

6.1.1 Sustainable Tourism GVA and Employment

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

In 2019, the sustainable tourism sector employed 5,000 people in Argyll and Bute. The area accounted for 2.2% of employment in the sector across Scotland, where 229,000 people worked in sustainable tourism. The sector generated £124.3 million GVA in Argyll and Bute, equivalent to 2.8% of the £4.5 billion GVA generated across Scotland.

Table 6-1 Sustainable Tourism, 2019

	Argyll and Bute	Scotland
Employment	5,000	229,000
GVA (£ million)	124.3	4,503.7

Source: Scottish Government (2022), Growth Sector Statistics

6.1.2 Visitors to Argyll and Bute

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

The latest figures show that there were 4.8 million annual day visitors to Argyll and Bute, spending £95.6 million in total, an average of £20 per trip. Argyll and Bute accounted for around 3.3% of day visits to Scotland, where there were 144.9 million day visitors, spending a total of £5,186.6 million, an average of £36 per trip.

There were 846,000 domestic overnight visitors to Argyll and Bute, accounting for 6.8% of domestic overnight visitors in Scotland. These visitors to Argyll and Bute had a total spend of £199 million, an average of £235 per trip. This was slightly below average compared to Scotland as a whole, where the total 12.4 million domestic

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



overnight visitors spent a total \pounds 2,989.3 million across Scotland, an average of \pounds 241 per trip.

There were 147,000 international overnight visitors to Argyll and Bute, accounting for around 4.2% of total international overnight visitors to Scotland (3.5 million) and contributing a total £62 million in spending. International visitors spent the most on average per trip. In Argyll and Bute, international overnight visitors spent an average £422 per trip, significantly below the average across Scotland, where international overnight visitors spent an average £694 per trip.

	Argyll and Bute	Scotland
	Visito	or Numbers (million)
Day Visitors	4.8	144.9
Domestic Overnight Visitors*	0.8	12.4
International Overnight Visitors**	0.1	3.5
		Spend (£ million)
Day Visitors	96	5,187
Domestic Overnight Visitors*	199	2,989
International Overnight Visitors**	62	2,459

Table 6-2 Visits to Argyll and Bute by Visitor Type

Source: Kantar TNS (2020), The Great Britain Day Visitor Survey Annual Report 2019. Data for Argyll and Bute represent the average between 2017 and 2019. *Source: Kantar TNS (2020), The Great Britain Tourism Survey Annual Report 2019. **Visit Scotland (2020), Insight Department: Argyll and Bute Factsheet 2019.

6.1.3 Local Visitor Attractions

As identified by Visit Scotland, the top ten most visited tourist attractions in Argyll and Bute, are shown below in Figure 6-1. Of these attractions, the closest to the Proposed Development is Mount Stuart, located in Bute over 40km away.



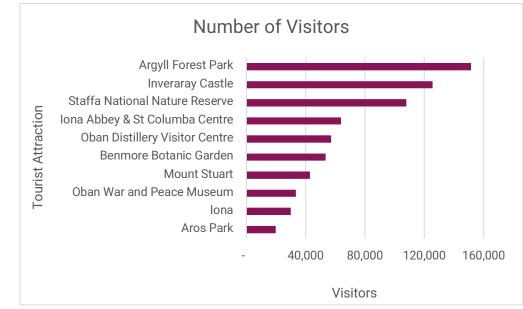


Figure 6-1: Regional Tourist Attractions (Number of Visits in Thousands)

Source: Visit Scotland (2021), Insight Department: Argyll and Bute Factsheet 2019

Although tourism assets within a 15km radius are usually considered as part of the tourism assessment, this radius has been extended to 25km for this study to incorporate the west coast of Arran and other areas identified in the zone of theoretical visibility¹⁸.

The local visitor attractions within a 25km radius of the Proposed Development are set out in Table 6-3 **Error! Reference source not found.** below, alongside a description of them and their distance from the Proposed Development. These were identified through the VisitScotland portal and include both indoor and outdoor tourist attractions in the local area.

Table 6-3 Local Visitor Attractions

	Description	Distance to Site (km)
St John's Church	Remains of the former parish church of Killean from the 1200s, and an important asset in the history of Medieval Kintyre	3
Ardminish Bay	Bay located on the east coast of Gigha	7
Ballochroy Standing Stones	Three standing stones with a backdrop of the Paps of Jura	7

⁻⁻⁻⁻⁻

¹⁸ RES (2023) Killean Wind Farm <u>https://www.killean-windfarm.co.uk/</u>



	Description	Distance to Site (km)
Isle of Gigha Moorings	Gigha Moorings has welcomed yachts for many years, offering 22 moorings	8
Achamore Gardens	54 acre garden on the Isle of Gigha hosting unusual plants and trees from around the world	8
Gigha Boats and Activity Centre	Activity centre offering equipment hire including boats and bikes on Gigha	8
South Pier	Viewpoint from working pier in Gigha, home to a home bakery and honesty box	8
Gigha Golf Course	9 hole golf-course offering panoramic views of Gigha	8
Leim Shore	A beach featuring blue/green volcanic rocks, pools and white sand on Gigha	9
Glenbarr Stores, Cafe, and Garden Centre	A garden centre, store and café offering local produce and stunning scenery	9
Palm Tree Beach	An idyllic beach on the north coast of Gigha	10
Seal Point	A viewpoint with the opportunity for seal watching	10
Carradale Golf Club	18 hole golf course on the east coast of Kintyre featuring the western profile of Arran	10
Port Mòr – Dark Sky Trail	Dark Sky Discovery site at the north end of the Isle of Gigha	11
The Twin Beaches	Back-to-back sandy beaches forming a thin strip of land between Gigha mainland and the north-west of the island	11
Fishermans Cave	Scenic walk to a cave filled with carvings on the Isle of Gigha	11



	Description	Distance to Site (km)
Port Righ Bay	A sandy bay offering views of the west coast of Arran	11
Dragons tooth standing stone	Standing stone on the west coast of Arran	18
Auchagallon Stone Circle Cairn	Ancient stone circle site	18
King's Caves	Cave located on a shingle beach with inscriptions. Legend says Robert the Bruce sheltered in the cave before the Battle of Bannockburn	20
The Doon Fort	Arran's largest fort, located on the west-coast of Arran	20
Machrie Moor Standing Stones	Standing stones in dramatic moorland	22
Shiskine Golf & Tennis Club	12 hole course set in magnificent scenery	22
Skipness Castle	Showcasing architectural form in Scottish Castles between 1200s and 1500s	22
Port Ban – Dark Sky Trail	Dark Sky Discovery site at Cretshengan Bay, offering views of sunsets behind the silhouette of the Paps of Jura	24

Source: VisitScotland (2023)

6.1.4 Local Accommodation Providers

123 accommodation providers were identified in the area surrounding the Proposed Development, identified through online research on the VisitScotland portal, Bookings.com, and Google Maps. They are primarily clustered around the west coast of the mainland in settlements including Bellochantuy, Glenbarr, Mausdale, Killean, Ronachan and Clachan. On the east coast, clustering is found in Carradale, and a small cluster on the Isle of Gigha. The radius was also extended to capture the west coast of Arran.

As shown in Table 6-4, of the 123 providers, just 19 were located within 5km of the site, of which almost 80% were self-catering providers.



Number of Accommodation Providers					
Distance from the Site	Self- Catering	Holiday Parks / Hostels	B&B	Hotels	Total
0-5km	15	2	1	1	19
5-10km	15	2	4	0	21
10-15km	20	3	3	4	30
15-20km	13	2	1	0	16
20-25km	17	5	7	8	37
Total	80	14	15	14	123

Source: Visit Scotland (2023) Accommodation Argyll and Bute. Booking.com. Google Maps.

6.1.5 Recreational Trails and Core Paths

Multiple core paths¹⁹ within 25km of the site of the Proposed Development, including those identified in the North-West of Arran and the Isle of Gigha, are provided below:

Path C088, East coast, Campbeltown to Cloanaig; Path C093, North-West Carradale; Path C095, South-East Leim; Path C096, North-East Ardminish; Path C094, North of Killean; Path C102, North-West of Clachan; Path C293, North-East of Muasdale; Path C303, East to West coast, South-East of Clachan; Path C304, East of Glenbarr; Path C461, North-West of Clachan; Path C462, North of Clachan; Path C463, North-West of Clachan; Path C495, North of Isle of Gigha; Path C533, West of Tayinloan; Path C534, South Ardminish; Path C539, East of Ardailly; Path AR02, West of Newton; Path AR13, North-East of Lochranza; Path AR21, East Lochranza; Path AR23, North-West of Lochranza; Path AR81, West Thundergay; Path AR208, South-West of Tormore; Path AR215, South-West of Tormore;

¹⁹ Argyll and Bute Council (2023), Core paths. Available at: <u>https://argyll-</u> <u>bute.maps.arcgis.com/apps/webappviewer/index.html?id=7fa23d13020b4a2cab6485b39a22986d</u>



Path AR218, North-West of Blackwaterfoot; Path AR219, North-West of Blackwaterfoot; and Path AR221, North-East of Shiskine.

Table 6-5 provides a series of recreational trails within 25km of the Proposed Development that were identified through the portal Walkhighlands. These also include those located on Arran and the Isle of Gigha.

Table 6-5 Recreational Trails

	Description	Distance to Site (km)
Kintyre Way Stage 4: Tayinloan to Carradale	24km section of the Kintyre Way	<1
Kintyre Way Stage 3: Clachan to Tayinloan	15km section of the Kintyre Way from Calchan to Tayinloan	2
Gigha north end and the twin beaches	16km route visiting the Twin Beaches and summiting Cnoc nan Gobhar.	8
Achamore Gardens and Ardminish circuit	5km circuit passing through Achamore Gardens	8
Cuddyport beach and the Quernstone Quarry	7km walk to the bay at Cuddyport.	8
Gigha south coast circular	10km loop along the south west coastline of Gigha	8
Creag Bhan and the Old Mill	9km summit of the highest hill on Gigha	8
Deer Hill (Cnoc nan Gabhar), Carradale	6km summit of Cnoc nan Gabhar, providing a view of Arran and Ailsa Craig	9
Kintyre Way Stage 2: Skipness to Clachan	20km section of the Kintyre Way from Skipness to Clachan	10
Carradale Bay and Point	8km walk along Carradale Bay, visiting Carradale Point	10
Dùn Skeig, Clachan	6km summit of Dùn Skeig, with an ascent of 153m	11
Saddell Bay and sculptures, Saddell	3.5km route along Saddell Bay	13
Lochranza to Imachar (part of Arran Coastal Way)	15km section of the Arran Coastal Way	13



	Description	Distance to Site (km)
Pirnmill Hills: Mullach Buidhe of Beinn Bharrain	14km summit of Beinn Bharrian	14
Coire Fhionn Lochan	5km moorland walk to a mountain lochan	15
Sail Chalmadale, from Dougarie	11km hike passing two lochs	17
Glen Iorsa, from Dougarie	7km route along the glen to Loch lorsa	17
West Port Beach (Machrihanish Bay)	5km walk along beach with views of Machrihanish Dunes	19
Machrie Moor stone circles	4km walk passing the archaeological site of Machrie Moor stone circles	20
King's Cave circuit, near Blackwaterfoot	5km circuit passing the historical King's Cave site	20
Skipness Castle	4km walk visiting Skipness Castle and chapel, before reaching Skipness Point	21
Drumadoon Point, Blackwaterfoot	4km circular route along the shoreline of Backwaterfoot	21
Caisteal Abhail, via North Glen Sannox	11km hike peaking the most northerly Arran Corbett, Caisteal Abhail	23
Blackwaterfoot to Lagg	11km coastal path from Blackwaterfoot to Lagg	23
Kintyre Way Stage 6: Campbeltown to Southend	25km section of the Kintyre Way between Campeltown and Southend	23
Davaar Island and the Crucifixion Cave	7km tidal walk along the causeway to Davaar island	23
Preaching Cave and Cashel, Kilpatrick	4km route to visit Preaching Cave and the remains of Kilpatrick Cashel	24
Glenramskill Old Road, near Campbeltown	6km circuit with views of Davaar Island	24
North Glen Sannox pools and falls	5km route showcasing views of North Glen Sannox	24



	Description	Distance to Site (km)
Machrihanish and the Gauldrons	5km coastal walk with views to Rathlinn Island AND Ireland with bird watching opportunities	25

Source: Walkhighlands (2023)

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

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

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

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

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

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

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

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



6.3 Evidence on Wind Farms and Tourism

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

A study of potential effects of wind farms on tourism was undertaken in 2008 by the Moffat Centre at Glasgow Caledonian University²⁰. 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.

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

In 2021, BiGGAR Economics produced a report analysing the relationship between the construction of onshore wind farms and tourism employment at the national, regional and local level.²¹

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

The report included case studies of 44 onshore wind farms constructed between 2009 and 2019. This included an updated analysis of 28 wind farms included in a previous report²² constructed prior to 2015, and 16 additional wind farms constructed between 2015 and 2019. The study reported on changes in tourism-related employment in the small areas within 15km of each wind farm. Of the 28 wind farms previously analysed, the surrounding local areas of 18 experienced an increase in tourism employment above the Scottish average in the years following the construction. Of the 16 local areas surrounding the additional 16 onshore wind farms, 11 experienced increases in tourism employment which outperformed the Scottish average. These results suggested that tourism employment in local areas across Scotland changed independently of wind farms located in the area.

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

²⁰ Moffat Centre (2008), The Economic Impact of Wind Farms on Scottish Tourism.

 ²¹ BiGGAR Economics (2021), Wind Farms & Tourism Trends in Scotland: Evidence from 44 Wind Farms
²² BiGGAR Economics (2017), Wind Farms and Tourism Trends in Scotland



These conclusions are not a surprising finding given that:

- there are high levels of public support for renewable energy;²³
- as wind farms are well-established in Scotland, tourists might already expect to see wind farms when visiting Scotland, especially rural Scotland;
- the factors that determine the success of the tourism sector do not include the presence or otherwise of an onshore wind farm; and
- issues that influence tourism include the ability and willingness to travel, economic performance (and so whether tourists have disposable income available for leisure trips), exchange rates, the quality of the overall tourism product, the effectiveness of destination marketing and the quality and value for money of the services offered by tourism businesses.

6.4 Evidence on Wind Farms and Tourism in Argyll and Bute

Recognising that there have been several wind farms developed within Argyll and Bute since the initial study, we carried out additional analysis specific to the region, using the same approach detailed above.

Table 6-6 provides a list of the wind farm developments included in the study.

Wind Farm	Installed Capacity (MW)	Number of Turbines	Year Operational
Allt Dearg	10.8	12	2016
Tangy Wind Farm / Tangy 1	12.8	15	2010
Clachan Flats Wind Farm	15	9	2008
Cnoc Donn Arnicle	15	26	2001
Deucheran Hill	15.8	9	2016
An Suidhe	19.3	23	2004
Cour Wind Farm	20.5	10	2001
Freasdail	22.5	11	2002
Beinn an Turc	30	46	1999

Table 6-6 Wind Farms in Argyll and Bute (Over 10 MW, 2022)

²³ BEIS (2022). Public Attitudes Tracker: Energy Infrastructure and Energy Sources. Winter 2021, UK.



Blary Hill35142Beinn an Turc P243.7162Carraig Gheal46202A'Chruach Phase 148.3212	Total	418	281	
Blary Hill35142Beinn an Turc P243.7162Carraig Gheal46202	Beinn an Turc P3	50	14	2021
Blary Hill 35 14 2 Beinn an Turc P2 43.7 16 2	A'Chruach Phase 1	48.3	21	2013
Blary Hill 35 14 2	Carraig Gheal	46	20	2018
	Beinn an Turc P2	43.7	16	2011
Cruach Mhor 33.3 35 2	Blary Hill	35	14	2022
	Cruach Mhor	33.3	35	2015

Source Department for Energy Security and Net Zero (2024). Renewable Energy Planning Database, January 2024.

The most accurate indicator of the health of the tourism industry at a local level is based on employment in tourism. The Scottish Government has defined tourismrelated employment as consisting of 14 sub-sectors (which it terms 'sustainable tourism'). To assess the impact of development and operation of these wind farms on the local tourism economy, it was necessary to consider the levels of tourismrelated employment in Argyll and Bute between 2015 and 2022, as provided by National Statistics' Business Register and Employment Survey.

Table 6-7 demonstrates tourism-related employment trends between 2015 and 2022 within a 15km radius of the wind farms identified in Table 6-6, relative to the Scottish and regional averages. Of the fifteen study areas, six experienced a greater growth in tourism employment than the Scottish average of a 3% increase. A further five study areas experienced no change in tourism employment over the same period, compared to Argyll and Bute's regional average decline of 8% in tourism-related employment. These findings show that there is no relationship between tourism employment and wind farm development in the Argyll and Bute region, or near the wind farm sites.

Wind Farm Area	Tourism Employment 2015	Tourism Employment 2022	2015-2022
Blary Hill	110	200	82%
Beinn an Turc P2	190	275	45%
Beinn an Turc	200	275	38%
Cruach Mhor	600	700	17%
Cnoc Donn Arnicle	150	170	13%

Table 6-7 Change in Tourism-related Employment, 2015-2022



Deucheran Hill	250	275	10%
Scotland	221,500	228,500	3%
A Chruach	850	850	0%
Allt Dearg	600	600	0%
An Suidhe	750	750	0%
Cour Wind Farm	350	350	0%
Freasdail	500	500	0%
Argyll and Bute	6,500	6,000	-8%
Clachan Flats Wind Farm	1,375	1,250	-9%
Tangy Wind Farm / Tangy 1	400	350	-13%
Beinn an Turc P3	400	350	-13%
Carraig Gheal	2,000	1,625	-19%

Source: ONS (2024), Business Register and Employment Survey 2022. Italicised entries indicate wind farms which went into operation during the study period, between 2015 and 2022.

6.5 Impact on Local Tourism and Recreation Sites

Having considered the impact of wind farms on the local tourism economy in Argyll and Bute over time, the analysis here focuses on whether the Proposed Development is likely to have any impacts on individual attractions, accommodation providers, and core paths and recreational trails, within a 25km radius.

6.5.1 Visitor Attractions

The tourism and recreation baseline has identified 25 visitor attractions. Only one of which is within a 5km radius of the Proposed Development.

The closest tourism attraction, **St John's Church**, is located 3km to the west of the Proposed Development. On record from the beginning of the 1200s, the site is known for being the former parish church of Killean. Being an important medieval asset in the region, the motivation to visit the attraction is associated with an interest in Scottish heritage and history. Since the Proposed Development is not expected to affect this motivation, its impact on the site has been assessed as **negligible**.

There are nine visitor attractions located within 10km of the Proposed Development. **Ballochroy Standing Stones**, located 7km from the Proposed Development, is an archaeological site famous for its backdrop of the Paps of Jura, attracting tourists with an interest in this particular view as well as the history of the stones. Since the



Proposed Development is located 7km to the south of the attraction, it will not affect either of these features and therefore, the impact has been assessed as **negligible**.

The key features of **Glenbarr Stores, Café and Garden Centre**, located 9km from the Proposed Development, are its use of local produce and local amenities. The motivation to visit this attraction is likely to be associated with an interest in gardening, and since the Proposed Development is not expected to affect this motivation, the impact has been assessed as **negligible**.

The remaining seven attractions located within 10k of the Proposed Development are based on the Isle of Gigha. The attractions on Gigha, including **Ardminish Bay**, **Isle of Gigha Moorings**, **Achamore Gardens**, **South Pier**, and **Leim Shore**, are associated with the island's famous white sandy bays and coastal landscapes. The motivation to visit the island and these attractions is likely to be associated with an interest in the Isle of Gigha itself, and its idyllic scenery. The **Gigha Boats and Activity Centre** and **Gigha Golf Course** attract those with an interest in golf or outdoor activities. Since the Proposed Development is not expected to affect the motivation for tourists to visit the island and these attractions, its impact has been assessed as **negligible**.

The remaining attractions on Gigha include **Palm Tree Beach, The Twin Beaches** and **Fisherman's Cave**, located between 10 and 15km from the Proposed Development. The motivation to visit these attractions is similarly associated with the wider appeal of the Isle of Gigha and its coastline, which the Proposed Development is not expected to affect. Therefore, the impact of the Proposed Development has been assessed as **negligible**.

Port Mor and **Port Ban Dark Sky Trails**, located 11km and 24km from the Proposed Development, respectively, are sites to see night skies without light pollution, attracting tourists with an interest in star gazing. The Proposed Development is not expected to affect this motivation; therefore, the impact has been assessed as **negligible**. However, for this attraction, it will be important to consider the conclusion of the LVIA chapter and the implications this could have on tourism.

Of the 22 attractions, six are based on the west coast of the Isle of Arran. One of which being **Shiskine Golf & Tennis Club**, which attracts tourists with an interest in playing golf or tennis on the island. The remaining attractions located on Arran include **Auchagallon Stone Circle Cairns**, **Machrie Moor Standing Stones**, **Dragons Tooth Standing Stone**, **King's Caves**, and **The Doon Fort**. The motivation to visit these attractions is likely to be associated with an interest in Scottish history or archaeological sites. The Proposed Development is not expected to affect these motivations, and therefore the impact of the Proposed Development on these attractions located on Arran, has been assessed as **negligible**.

Seal Point, and **Port Righ Bay**, are both coastal attractions on the Kintyre peninsula, located 10km and 11km from the Proposed Development, respectively. The main motivation to visit these attractions is associated with their views of nearby islands



and the opportunity to see local sea life. Since the site of the Proposed Development is inland from both of these attractions, it is not expected to affect the motivation to visit either attraction. Therefore, the impact of the Proposed Development has been assessed as **negligible**.

The remaining two attractions on the mainland include **Carradale Golf Club**, which attracts tourists with an interest in playing golf, and **Skipness Castle**, showcasing historical architecture. The Proposed Development is not expected to affect the key features of either attraction and therefore the impact of the Proposed Development has been assessed as **negligible**.

6.5.2 Tourism Accommodation

The tourism baseline identified 123 accommodation providers located within 25km of the Proposed Development, primarily along the region's west and east coasts. Around 20% of the identified providers were also based on the Isle of Gigha (8%) or Arran (13%).

19 accommodation providers are located within 5km of the Proposed Development, of which 15 are self-catering accommodation. Many of these providers highlight their luxury amenities, while others market themselves around their views of the Paps of Jura and other points of interest on the west coast. Also located within 5km is a campsite and holiday park (**Point Sands Caravans** and **Point Sands Holiday Park**), which both highlight the nearby beach and stunning sunsets visible from the sites. Given the location of the Proposed Development, the coastal views associated with these providers will not be affected. As such, it is expected that the Proposed Development would have a **negligible** impact on these accommodation providers.

The remaining two providers within 5km of the Proposed Development are a hotel (**Killean Estate**) and the **Ferry Farm Bed & Breakfast**. These providers advertise similarly advertise their proximity to the beach and views of the west coast of Scotland. As none of these features would be affected by the Proposed Development, the impact has been assessed as **negligible**.

An additional 21 accommodation providers are located between 5 and 10km from the Proposed Development, including 15 self-catering providers, four B&Bs, and two holiday parks. Almost half of the providers within this radius are based on the Isle of Gigha.

Many of the self-catering providers advertise their coastal views (including **Beach View Cottage** and **Seaview Accommodation**), whilst others highlight their luxury amenities (such as **Gigha Luxury Self Catering**). The four B&Bs, all of which are based on the Isle of Gigha, highlight their proximity to attractions on the island including the Achamore Gardens (such as **Achamore Lodge, Achamore House**, and **Springbank Bed & Breakfast**), or their sea views (**Mary Allan's B&B**). As none of these features are expected to be affected by the Proposed Development, the impact on these accommodation providers has been assessed as **negligible**.



Isle of Gigha Camp and Motorhome Site, located on the east coast of Gigha, and **Muasdale Holiday Park**, located on the west-coast of the Kintyre peninsula, both advertise their modern amenities and their access to 'sandy beaches'. Since these features will not be directly affected by the Proposed Development, the impact has been assessed as **negligible**.

The tourism baseline identified an additional 30 accommodation providers located between 10 and 15km from the Proposed Development, with 20 being self-catering, four being hotels, three being holiday parks, and three being B&Bs. Many of these providers are clustered on the east coast of the Kintyre peninsula, in villages such as Carradale. The motivation to visit this area is associated with its reputation of being peaceful and tranquil, much of which is attributed to its coastal location and views of the Isle of Arran, which the Proposed Development is not expected to affect. For this reason, the impact of the Proposed Development on these accommodation providers has been assessed as **negligible**.

53 accommodation providers are located within the extended radius of 15 to 25km from the Proposed Development. Clusters of these providers can be found largely to be based around Kennacraig in the north of the Kintyre peninsula, Campbeltown and Machrihanish in the south, and along the west coast of Arran. Many of these accommodation providers similarly highlight their coastal locations, and access to beaches and sea views, at the forefront of their advertisement. As the presence of the Proposed Development would not impact these coastal features, and given the distance from the Proposed Development, it is expected that the Proposed Development would have a **negligible** impact on these accommodation providers.

6.5.3 Recreational Trails and Core Paths

Kintyre Way Stage 4: Tayinloan to Carradale is a 24km section of the 161km Kintyre Way which runs down the entire Kintyre peninsula. Although this section of the route passes through the boundary of the Proposed Development and will have visibility of the turbines, it is not expected that this short stretch through the boundary (<3km) will affect the motivation to complete the Kintyre Way. Therefore, the impact of the Proposed Development on activity along this route has been assessed as **negligible**.

Similarly, **Stage 2**, **Stage 3**, and **Stage 6** of the Kintyre Way are also located within the 25km radius of the Proposed Development. Similarly, it is not expected that the motivation to complete the Kintyre Way, or these sections, will be affected by the Proposed Development. Therefore, the impact of the Proposed Development has been assessed as **negligible**.

Several recreational trails have also been identified on the Isle of Gigha. Many of which are located along the coasts of the islands, including **Gigha north end and the twin beaches**, a 16km visiting the Twin Beaches, before summiting Cnoc nan Gobhar, and **Gigha south coast circular**, a 10km route hugging Gigha's southern coastline. The motivations for tourists to visit these trails is likely to be associated with an interest in the beaches it visits and coastal features offered by the trails. Since the



Proposed Development will not affect these features, its impact on these trails has been assessed as **negligible**.

Other trails identified on the Isle of Gigha include the 5km circuit, **Achamore Gardens** and Ardminish Circuit, which visits the Achamore Gardens, and Cuddyport Beach and the Quernstone Quarry, leading to the bay at Cuddyport. The motivation to use these trails is likely to be associated with an interest in the attractions to which they lead, of which the Proposed Development would not affect. As such, the impact of the Proposed Development on these trails has been assessed as **negligible**.

The final trail located on Gigha is the **Creag Bhan and the Old Mill**, a 9km route summitting Creag Bhan, the highest peak on the island. From this viewpoint, Jura, Islay, Kintyre, Knapdale, Mull, and even Northern Ireland and the entire Isle of Gigha can be seen on a clear day. The motivation to use this trail is likely to be associated with an interest in hiking and therefore it is not expected to be affected by the Proposed Development. As a result, the impact of the Proposed Development has been assessed as **negligible**.

Deer Hill (Cnoc nan Gabhar) trail, located on the Kintyre peninsula 10km from the Proposed Development, is a 6km forestry walk that climbs up to the summit of Cnoc nan Gabhar to the north of Carradale. The trail offers stunning views of the east coast of Kintyre, the Arran mountains, and Ailsa Craig. The motivation to use this trail are likely to be associated with an interest hiking, or the views of points of interest such as Ailsa Craig, which are not expected to be affected by the Proposed Development. As such, the impact of the Proposed Development has been assessed as **negligible**.

Also located 10km from the Proposed Development is **Carradale Bay and Point**, an 8km walk exploring the surroundings of Carradale, including the ancient fort at Carradale Point, and the sandy beach at Carradale Bay. The motivation to use this trail is likely to be associated with the bay to which it leads, or the coastal features of the walk itself. These features are not expected to be affected by the Proposed Development, and therefore the impact of the Proposed Development has been assessed as **negligible**.

Dùn Skeig, a 6km path that climbs the prominent rocky hill that guards the entrance to West Loch Tarbert, is located 11km from the Proposed Development and is in the north of the Kintyre peninsula. Once reaching the Dùn Skeig, a prehistoric fort on a prominent hilltop position, there are spectacular views of Knapdale and the Isle of Jura. The motivation to use this trail is likely to be associated with the site at its summit, or the views it can offer. These features are not expected to be affected by the Proposed Development, and therefore the impact has been assessed as **negligible**.

Also located in the north of the Kintyre peninsula is the trail associated with **Skipness Castle**, a 4km route visiting the 13th century Skipness Castle and chapel before arriving at a beautiful beach on Skipness Point. Since the key motivation to



use this trail is likely to be associated with the attractions to which it leads, the impact of the Proposed Development on this trail has also been assessed as **negligible**.

There are also several recreational trails located to the south of the Proposed Development which are located on the coasts of the Kintyre Peninsula, including **Saddell Bay and Sculptures, West Port Beach (Machrihanish Bay), Machrihanish and the Gauldrons**. Since the motivation to use these trails is likely to be associated with their coastal locations, of which the Proposed Development will not affect, the impact has been assessed as **negligible**.

Two of the trails identified in the baseline are associated with either views of Davaar Island (**Glenramskill Old Road (near Campbeltown**) or visiting it (**Davaar Island and the Crucifixion Cave**). The motivation to use these trails is likely to be associated with an interest in the tidal island itself or the coastal features of the routes, of which the Proposed Development will not affect. Furthermore, given that the Proposed Development is located more than 20km from the nearest points of these routes, their impact has been assessed as **negligible**.

A number of the identified trails are located on the Isle of Arran, including **Caisteal Abhail, via North Glen Sannox**, summiting the most northerly peak of the Arran Corbetts, and the **Pirnmill Hills** trail, offering views of the Arran landscape. The motivation to use these trails is likely to be associated with an interest in hiking on Arran. The Proposed Development will not affect this motivation, and therefore, the impact on these trails has been assessed as **negligible**.

Also located nearby is **North Glen Sannox pools and falls**, offering views of the North Glen Sannox, and **Coire Fhionn Lochan**, a 5km moorland walk. These trails lead to attractions on Arran such as the Glen and Coir Fhionn Lochan, located inland from the Arran coast. Since the Proposed Development will not affect either of these features, the impact on these trails has been assessed as **negligible**.

Recreational trails located to the south-west of Arran include Sail Chalmadale, from Dougarie, Glen Iorsa, from Dougarie, Machrie Moor stone circles, King's Cave circuit, near Blackwaterfoot, Drumadoon Point, Blackwaterfoot, Preaching Cave and Cashel, Kilpatrick, and Blackwaterfoot to Lagg. Motivations for visiting these trails are likely related to the coastal views, historical sites, and natural landscape of Arran that they offer. The Proposed Development will not interfere with trailgoers' access to these views and sites, and therefore, the impact has been assessed as negligible.

Finally, a part of the Arran Coastal Way, **Lochranza to Imachar** is a 14.5km walk along offering beautiful views of Arran's western coastline. The Proposed Development is unlikely to interfere with the enjoyment of the Arran coastline offered by this walk. The Proposed Development is therefore not expected to impact activity along this trail.



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

6.6 Summary of Local Tourism and Recreation Sites

Although the updated study (Section 6.4) found no relationship between tourism employment and wind farm development, neither at the level of the Argyll local authority nor in the locality of wind farm sites, the tourism assessment was extended to consider assets within 25km of the Proposed Development to incorporate the west coast of Arran and other areas identified in the zone of theoretical visibility.

Whilst it is important to recognise that tourism in the region is largely associated with the peace and tranquillity of the area, the tourism assessment found that since many of the assets identified were clustered on nearby islands or coastal locations, the Proposed Development is not expected to affect the features associated with many of the attractions. Therefore, the impact of the Proposed Development on these attractions was found to be **negligible**.

With many of the accommodation providers being clustered along the coasts of the Kintyre peninsula and the others located on the Isle of Gigha and the Isle of Arran, many of the providers advertise their coastal location and access to beaches and sea views as a key feature. Since the coastal location of the accommodation providers is likely to be a key motivator for tourists, and the site of the Proposed Development is inland, it is not expected to affect the motivation for tourists to visit the identified providers. For these reasons, the impact of the Proposed Development has been assessed as **negligible**.

Similarly to the location of the accommodation providers, many of the recreational trails within the vicinity of the Proposed Development were located coastally, or on nearby islands. Since the motivation to use these trails is likely to be associated with these features, the impact of the Proposed Development was also assessed as **negligible**.

The impacts on tourism assets within 25km of the Proposed Development have been found to have negligible effects and are therefore not significant in EIA terms.



Community Benefits and Opportunities

This section describes the local economic benefits generated by the Proposed Development.

7.1 Maximising Economic Benefits

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

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

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

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

7.2 Community Benefit Package

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

To provide a framework on how to deliver community benefits, in 2019 the Scottish government released its 'Good Practice Principles for Community Benefits from Onshore Renewable Energy Developments'²⁴, which updated previous guidance issued in 2015. The Scottish Government recommends onshore wind developers to deliver community benefit funding worth £5,000 per MW of installed capacity. The

²⁴ Scottish Government (2019), Scottish Government Good Practice Principles for Community Benefits from Onshore Renewable Energy Developments.



document also encourages developers to engage in holistic ways to maximise benefits locally, going beyond a purely monetary approach.

Following this recommendation, the Applicant is proposing a tailored package of benefits for the community from the Proposed Development and according to the current layout design and installed capacity of about 59.4 MW, this could equate to a community benefit funding for the local area worth £297,000 annually, which is equivalent to £14.9 million over the project's lifetime. This could support local aspirations and projects and generate economic impacts. The Proposed Development will provide local communities with additional funding, which could support them in delivering larger interventions.

7.3 Shared Ownership

An option for shared ownership with local communities is proposed to be offered. This type of commercial arrangement usually involves one or more of the local communities taking a stake in the proposed wind farm and receiving profits from it. East Renewable Energy Group (EKREG) has expressed an interest in the case of Killean Wind Farm²⁵ to fund Community development plans, and the Applicant is willing to investigate potential shared ownership models and opportunities, with details being finalised at a later stage.

In 2019, the Scottish Government²⁶ published guidance on the shared ownership of onshore renewable developments. This aims to advise communities, developers, local authorities, and other stakeholders on how to deliver a shared ownership scheme, with the Scottish Government's ambition being that by 2030 there will be 2 GW of community and locally owned energy. To aid in the process of community shared ownership in the case of Killean Wind Farm, and other local wind farm developments in the area, EKREG Ltd has been formed to facilitate discussions between the Applicant and the community.

7.4 Local Electricity Discount Scheme (LEDS)

As part of the community benefit offering, the Applicant is committed to providing funding to reduce the energy bills of households proximate to the Proposed Development. Although the details of the LEDS are yet to be finalised, an example of an existing scheme in the region initiated by the Applicant, under Freasdail Wind Farm, can provide context of the Applicant's intentions with this scheme.

Under this existing scheme, an annual discount of £235 is applied to the electricity bill of all residential, business, and community buildings within a 5km radius of the

⁻⁻⁻⁻

²⁵ EKREG (2023), Kintyre Wind.

²⁶ Scottish Government (2019), Scottish Government Good Practice Principles for Shared Ownership of Onshore Renewable Energy Developments.



Proposed Development. This discount is paid directly to the electricity supplier for the operational lifetime of the wind farm and is taken off their electricity bill.

The practical effect of these discounts will enable the closer households to spend more on other goods and services such as food, clothing, transport, and leisure. The value of the energy discounts therefore represents additional turnover for the sectors that benefit from household expenditure, the money spent by households to meet their everyday needs. Household spending patterns²⁷ show that those with higher incomes spend a greater proportion of their total expenditure on recreation and hospitality. By enabling residents to spend more on leisure, the provision of support with energy bills for the local community is therefore likely to generate economic benefits and support jobs in the local hospitality and leisure sectors.

7.5 A Commitment to Local Suppliers

7.5.1 Renewable UK Guidance

In 2014, RenewableUK published the "Local Supply Chain in Onshore Wind, Good Practice Guide"²⁸, which includes guidance for onshore wind developers on how to maximise local content. The report made the following suggestions:

- maximise your local presence and begin early: start identifying potential suppliers early by being active and visible locally;
- partnerships work: look for partnerships with business groups and local authorities;
- the developer's role is that of an enabler: use information on potential suppliers to ensure primary contractors maximise local opportunities;
- provide the right information, at the right time: consider adopting an iterative process when communicating with businesses and leave them time to learn and adjust;
- communicate technical requirements early: this will give the opportunity for upskilling or the emergence of consortia to occur; and
- if you can, demonstrate local content in planning: where possible include a demonstrable commitment to local content in planning and carry out ex-post auditing.

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

In recent years, the Applicant has typically invested about £279,000 per wind turbine in the local community, including stakeholders, suppliers, and service providers, throughout all phases of the development. The Proposed Development is anticipated to bring economic benefits to the area, including job opportunities, employment and

²⁷ ONS (2023), Family spending in the UK: April 2021 to March 2022.

²⁸ RenewableUK (2014), Local supply chain in onshore wind, good practice guide.



the utilisation of local services. The increased concentration of activity in the construction sector in Argyll and Bute will be of particular importance.

All the above highlight the Applicant's commitments to ensure a high local supply chain content, provide high-quality local employment and skills development opportunities tailored to the characteristics of the local labour market.

7.6 Skills Development

The more jobs that can be secured locally, the higher the local economic impact will be. The extent to which it is possible to make use of local labour depends on whether the local labour market has the skills needed to perform the work, or the capacity to develop them.

By aligning the skills of the local economy with the needs of developers, communities can secure jobs and optimise the opportunities associated with the Proposed Development. This demand-led skills strategy can maximise opportunities for local economic development by aligning training programmes with the needs of employers and developing skills that are actively sought after within the onshore wind sector.

The Applicant has an existing apprenticeship programme that it plans to expand into Scotland, designed to prepare its workforce with the necessary skills and training to meet the wind industry's needs. By supporting such training opportunities, the Applicant can enhance the local workforce's capabilities, allowing the region to secure employment opportunities and maximise the opportunities associated with the Proposed Development and the wider sector.

The Applicant has also partnered with the University of the Highlands and Islands (UHI) to support students from a diverse range of backgrounds to develop the skills sought after within the onshore wind sector. The partnership will support a minimum of 60 students through the Applicant's Student Development Fund, offering financial support to overcome the barriers to accessing learning opportunities and gaining new skills.



Conclusion: Net Economic Benefits

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

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

- economic benefits during the development and construction phase of:
 - £5.9 million GVA and 80 jobs in Argyll and Bute; and
 - £18.1 million GVA and 260 jobs in Scotland.
- annual economic benefits during the operations and maintenance of:
 - £0.3 million GVA and three jobs in Argyll and Bute; and
 - £1.1 million GVA and 12 jobs in Scotland.
- contribution to public finance through the payment of non-domestic rates, which could amount to £0.7 million each year;
- commitments to maximise local economic benefits, including a community fund which could support five jobs in the local economy;
- a Local Electricity Discount Scheme, which will reduce the household energy bills of the community; and
- maximising the economic content that is sourced locally by guaranteeing to work with local contractors.

As well as generating economic impacts regionally and nationally, the Applicant's commitment to ensuring the local community benefits from the Proposed Development would support wider economic and social impacts. By committing to prioritising local contractors and supporting local skills, as well as the Applicant's innovative approach to community benefits, shared ownership, and the Electricity Discount Scheme, the Proposed Development will support local economic development and enable the community to support projects and address the priorities of the area.



BiGGAR Economics, Shandwick House, 67 Shandwick Place, Edinburgh, Scotland, EH2 4SD

info@biggareconomics.co.uk

biggareconomics.co.uk

© Copyright 2024. BiGGAR Economics Ltd. All rights reserved.

