

13 Socio-economics, Recreation and Tourism

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13 Socio-economics, Tourism and Recreation

13.1 Executive Summary

13.1.1 The Proposed Development consists of 14 turbines of around 6 MW each, resulting in a total generating capacity of around 84 MW. This chapter has assessed the potential socio-economic, recreation and tourism effects of the Proposed Development. It found that the local area has a population older than the South Lanarkshire and Scottish averages with limited opportunities for young people and employment concentrated in relatively low value sectors. The local economy has been adversely affected by the decline of coal mining and other local industries. There are a limited number of tourism assets and accommodation providers in the local area.

13.1.2 The economic impact of the Proposed Development was estimated to be:

- during the development and construction phase the Proposed Development would generate up to:
 - £17.1 million and 152 job years of employment in South Lanarkshire; and
 - £46.1 million and 423 job years in Scotland (including South Lanarkshire).
- during each year of the operational phase the Proposed Development would generate up to:
 - £0.7 million and 6 jobs in South Lanarkshire; and
 - £1.1 million and 9 jobs in Scotland (including South Lanarkshire).

13.1.3 There would also be wider benefits associated with the Proposed Development as a result of the offer to the local communities of up to 5% shared ownership, in addition to Community Benefit funding of £5,000 per MW per year (so a total of up to £420,000 per year, based on a total installed capacity of 84 MW). This would enable the local communities surrounding the Proposed Development, such as Douglas, Glespin, Coalburn, Rigside and Douglas Water, to invest in the local area, and meet the objectives set out in their community action plans. This could involve developing the area's adventure sports offering (particularly mountain biking), resulting in increased visitor numbers and tourism. The socio-economic impact of the shared ownership scheme could support up to 9 jobs and GVA of up to £370,000 per year, including the benefits from leveraged funding.

13.1.4 There would also be benefits to the public sector from payment of non-domestic rates estimated to be worth £0.9 million each year.

13.1.5 A review of the latest research suggests that there is no evidence of wind farm developments adversely affecting the tourism economy of Scotland. A specific assessment of the potential effect of the Proposed Development on local tourism assets, accommodation providers and tourism routes also found that there were not expected to be any adverse effects. The assessment notes that there may be positive effects on the tourism economy as revenue from the community benefit / shared ownership is invested in developing the local area's adventure tourism offering.

13.1.6 Overall, there were no significant adverse effects identified.

13.2 Introduction

13.2.1 This chapter considers the potential socio-economic, recreational and touristic effects from the development. This includes a consideration of existing land uses within the site, local tourism activity, employment generation and any indirect economic effects from the development.

13.2.2 This chapter evaluates the Proposed Development on socio-economics, tourism and recreation and has been prepared by BiGGAR Economics.

- 13.2.3 The assessment has been undertaken on the basis of the proposal for a 14-turbine development. This includes a consideration of local tourism and recreation activity, employment generation, and any indirect economic effects from the Proposed Development.
- 13.2.4 The individual turbine capacity will be around 6 Megawatts (MW), therefore, the total installed capacity of the wind farm will be around 84 MW.
- 13.2.5 This chapter is structured as follows:
- Section 13.3 considers the legislation, policy and guidelines that have informed the analysis;
 - Section 13.4 discusses consultations undertaken to inform the assessment.
 - Section 13.4.2 provides the methodology used to undertake the assessment, including the baseline and estimation of effects, as well as the criteria used to determine significance.
 - Section 13.6 outlines the socio-economic and tourism baseline of the local area, South Lanarkshire and Scotland, based on available statistics and strategic documents.
 - Section 13.7 assesses the potential socio-economic and tourism effects arising from the construction and operation of the Proposed Development.
 - Section 13.8 discusses measures that may be needed to mitigate effects.
 - Section 13.8.1 summarises the residual effects.
 - Section 13.9 assesses the cumulative effects arising from the Proposed Development.
 - Section 13.11 provides a summary of the assessment.
 - Section 13.12 lists the references used in the assessment.

13.3 Legislation, Policy and Guidelines

- 13.3.1 There is no specific legislation, policy or guidance available on the methods that should be used to assess the socio-economic impacts of a proposed onshore wind farm development. The proposed method has however been based on established best practice, including that used in UK Government and industry reports on the sector.
- 13.3.2 In particular this assessment draws on two studies by BiGGAR Economics on the UK onshore wind energy sector, a report published by RenewableUK and DECC in 2012 on the direct and wider economic benefits of the onshore wind sector to the UK economy (BiGGAR Economics, 2012) and a subsequent update to this report published by RenewableUK in 2015 (BiGGAR Economics, 2015).
- 13.3.3 Similarly, there is no formal guidance on the methods that should be used to assess the effects that wind farm developments may have on tourism and leisure interests.

13.4 Consultation

- 13.4.1 The Applicant has held pre-application discussions with the Scottish Government Energy Consents Unit (ECU), South Lanarkshire Council (SLC), and various local community groups, including Douglas and Coalburn Community Councils regarding the Proposed Development and matters to be addressed within the EIA. During these discussions it was agreed that it is important to understand the various socio-economic impacts of the Proposed Development, and any potential impact it may have on tourism assets in the local area (positive or negative).
- 13.4.2 The Applicant has also held two pre-application public consultation events into the Proposed Development, one in Douglas on 12th September 2018 and one in Coalburn on 13th September 2018. Strong views were expressed from both communities that any community benefit monies from the Proposed Development should be managed locally.

13.5 Assessment Methodology and Significance Criteria

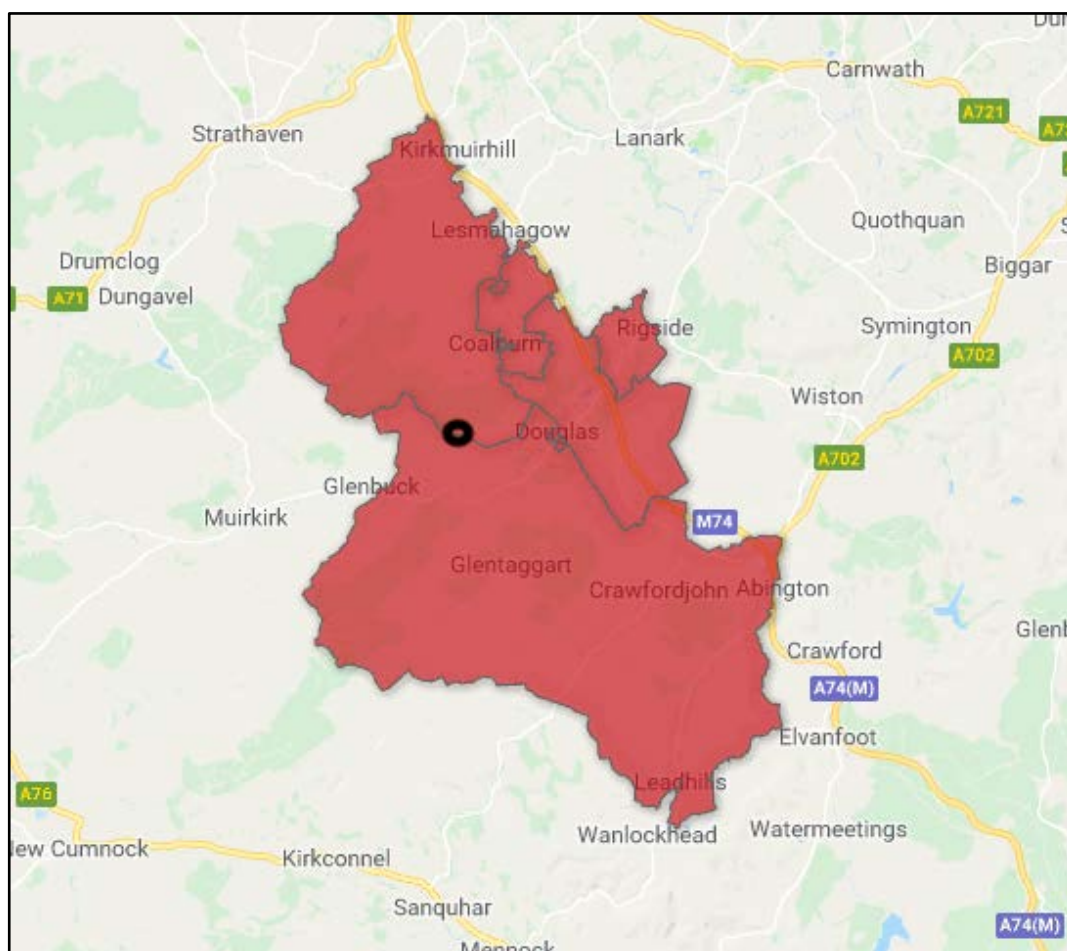
Study Area

13.5.1 The Study Area will cover three areas for analysis and comparison, namely:

- Scotland;
- South Lanarkshire; and
- The 'Local Area', constructed from the 2011 Scottish census data zones: Douglas, Coalburn and Rigside 01, 02, 03, 04 and 05, Chapelton, Glengavel and Sandford 01 and Clydesdale South 01.

13.5.2 Graphic 13-1 below displays the 'Local Area' with the 2011 census data zones used to construct the area shown in red, and the approximate location of the site circled in black.

Graphic 13-1 – Illustration of the 'Local Area' Study Area.



Desk Study

13.5.3 To assess the effects on socio-economic, tourism and recreation factors on the baseline conditions, the following desk study approach has been performed:

- a review of economic strategies in Scotland, South Lanarkshire and the Local Area;
- an analysis of socio-economic statistics for Scotland, South Lanarkshire and the Local Area;
- an analysis of tourism statistics in Scotland, South Lanarkshire and the Local Area; and

- identification of local tourism and recreation assets, including accommodation providers and public paths.

Site Visit

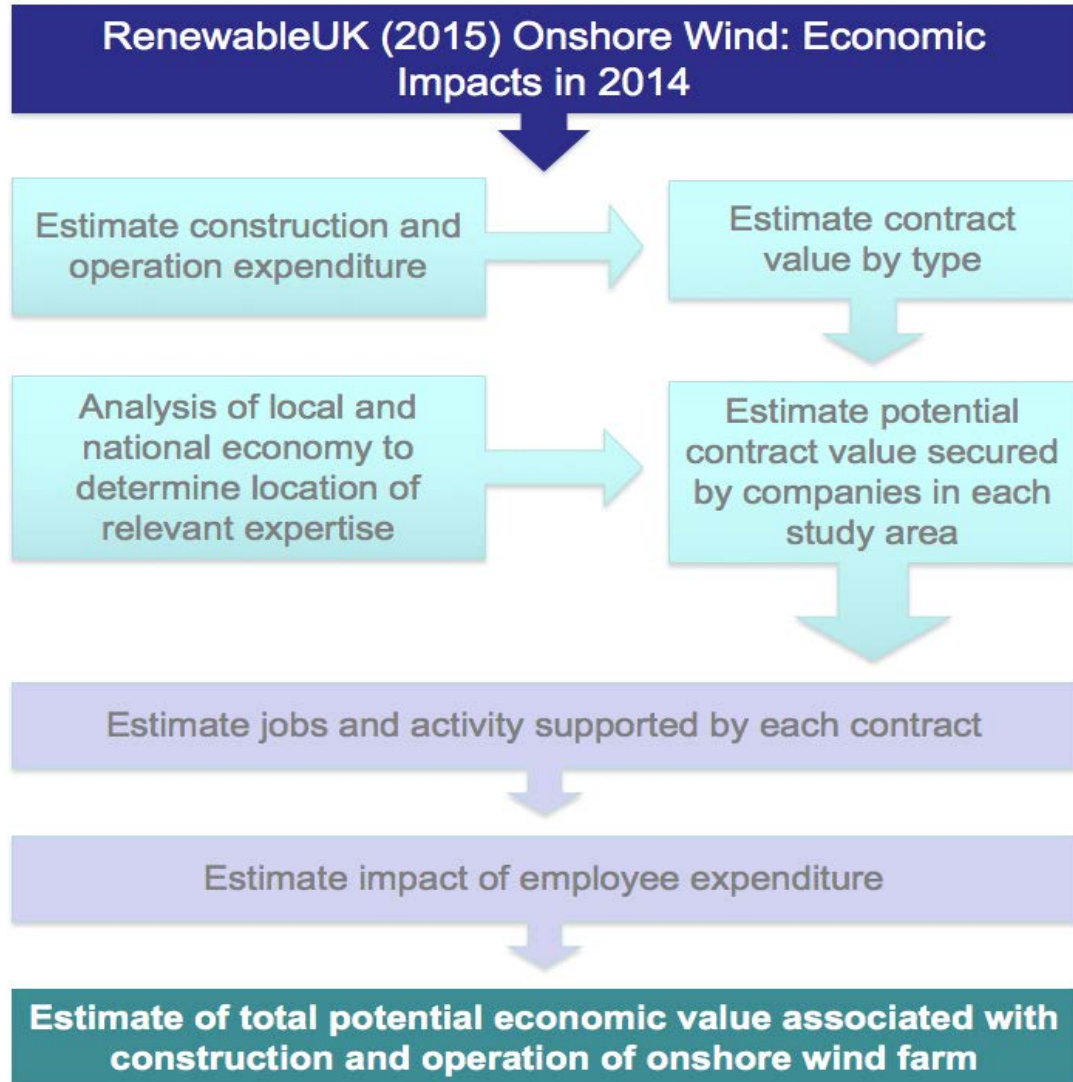
- 13.5.4 No site visits were conducted as part of the study, as the necessary information could be collected solely through a desk study approach. However, the authors are familiar with the site and the Local Area from previous work.

Stages in Socio-economic Analysis

- 13.5.5 There is no specific legislation or guidance available on the methods that should be used to assess the socio-economic effects of a proposed onshore wind farm development for the purposes of an EIA. Therefore, to identify and assess the significance of predicted socio-economic effects, the assessment has been based on professional judgement for the degree of change resulting from the proposals, using methods commonly used in EIAs for proposed renewable energy developments, as outlined below.
- 13.5.6 The assessment of economic effects was undertaken using a model that has been developed by BiGGAR Economics specifically to estimate the socio-economic effects of wind farm developments. This model was also the basis of an assessment of the UK onshore wind sector for the then Department of Energy and Climate Change (DECC) and RenewableUK in 2012 (RenewableUK, 2012), which was subsequently updated in 2015 (RenewableUK, 2015). These assessments were based on case studies of the local, regional and national socio-economic effects of wind farms that have been developed in the UK in recent years.
- 13.5.7 This approach is considered industry best practice in the assessment of the socio-economic effects of the onshore wind sector, being used in reports for the DECC and RenewableUK. This model has been used by BiGGAR Economics to assess the socio-economic effects of numerous windfarms across the UK, with the results being accepted as robust at several public inquiries.
- 13.5.8 The assumptions made have been based on two main sources:
- Firstly, the analysis undertaken in the 2015 report on behalf of RenewableUK, which uses evidence from previous wind farms around the UK. This report examined the size and location of contracts for their development, construction, and operation & maintenance phases.
 - Secondly, bespoke evaluation of the economies of the relevant study areas undertaken for this assessment. This was based on analysis of local, regional and national statistics.
- 13.5.9 To begin estimating the economic activity supported by the Proposed Development, it is first necessary to calculate the expenditure during the construction and development, and operation and maintenance phases. The total expenditure figure is then divided into its main components using calculated assumptions regarding the share that could be expected by main and sub-contractors. This provides an estimate for each main component contract that can be secured by companies in the Local Area, South Lanarkshire, and Scotland.
- 13.5.10 There are two sources of economic activity:
- First, the activity arising from each component contract and the jobs supported by them; and
 - Second, the anticipated spending of wages in the study area from employees of the component contracts, also known as the income effect.
- 13.5.11 There are four key stages of this model:
- estimation of total capital expenditure;
 - estimation of the value of component contracts that make up total expenditure;

- assessment of the capacity of businesses in the study area to perform and complete component contract; and
- estimation of economic impact from resultant figures.

Graphic 13-2 – Illustrated Stages of Socio-economic Analysis



Tourism and Recreation Assessment

- 13.5.12 The potential effects of wind farm developments on the tourism and recreation sector is well-researched, and as such, key studies have been included for reference, including:
- Wind Farms and Tourism Trends (BiGGAR Economics, 2016);
 - A Report on the Achievability of the Scottish Government's Renewable Energy Targets (Scottish Parliament Economy, Energy and Tourism Committee, 2012);
 - The Economic Impacts of Wind Farms on Scottish Tourism (Glasgow Caledonian University and Moffat Centre, 2008); and
 - Mountaineering Scotland's Survey of Members (Mountaineering Scotland, 2014 and 2016).
- 13.5.13 Tourist attractions and accommodation are identified within the vicinity of the Proposed Development. Tourist attractions include permanent fixtures (e.g. museums, castles and trails) as well as temporary events (e.g. music or arts festivals).

- 13.5.14 Important attractions attributed to South Lanarkshire are also identified due to their increased sensitivity, even if they are within the vicinity of the Proposed Development.

Assessment of Potential Effect Significance

Effects Evaluation Methodology

- 13.5.15 The significance of the effect of the Proposed Development on each tourism and recreation asset and the economy for each study area is considered by determining the type and magnitude of change on each.
- 13.5.16 The impact magnitude is assessed using the economic model and professional judgement, considering socio-economic effects from the Proposed Development on South Lanarkshire and Scotland.
- 13.5.17 The significance of effects from the Proposed Development on tourism and recreation assets are assessed with reference to evidence from research and comparable wind farm developments.
- 13.5.18 The significance of effect on each economic, tourism and recreational asset is determined on the basis of the criteria provided below, in Table 13.1.
- 13.5.19 Major and moderate effects are considered significant in relation to EIA Regulations.

Table 13.1 – Significance Criteria

Significance	Description
Major	Major loss/improvement to key elements/features of the baselines conditions such that post development character/composition of baseline condition will be fundamentally changed. For example, a major long-term alteration of socio-economic conditions, a major reduction/improvement of recreational assets, or a substantial change to tourism spend
Moderate	Loss/improvement to one or more key elements/features of the baseline conditions such that post development character/composition of the baseline condition will be materially changed. For example, a moderate long-term alteration of socio-economic conditions, a moderate reduction/improvement in the recreational asset, or a moderate change to tourism spend
Minor	Changes arising from the alteration will be detectable but not material; the underlying composition of the baseline condition will be similar to the pre-development situation. For example, a small alteration of the socio-economic conditions, a small reduction/improvement in the recreational asset, or a small change in tourism spend
Negligible	Very little change from baseline conditions. Change is barely distinguishable, approximating to a “no change” situation

Requirements for Mitigation

- 13.5.20 Where applicable mitigation has been identified, although there are mitigation requirements in socio-economics, tourism and recreation assessments are generally limited.

Assessment of Residual Effect Significance

- 13.5.21 The significance of residual effects has been assessed based on the same criteria as outlined in Table 13.1.

Limitations to Assessment

- 13.5.22 The assessment is based on the experience of comparable development elsewhere and a review of the local socio-economic context. In order to maximise the economic effects associated with the

Proposed Development it will be necessary for local contractors to engage with opportunities that arise, which can be aided by the Developer increasing awareness of these opportunities.

13.6 Baseline Conditions

13.6.1 Relevant strategic and policy documents have been reviewed and considered as part of this assessment. Of particular relevance are:

- Scotland's Economic Strategy; (Scottish Government, 2015);
- Promote – An Economic Strategy for South Lanarkshire 2013-23 (South Lanarkshire Council, 2014);
- Tourism Scotland 2020 (Scottish Tourism Alliance, 2012);
- South Lanarkshire Tourism Action Plan 2016-2020 (South Lanarkshire Council, 2016);
- Scottish Government Good Practice Principles for Shared Ownership of Onshore Renewable Energy Developments (Scottish Government, 2015);
- Coalburn, Douglas and Glespin: Community Action Plans (Coalburn Miners Welfare Charitable Society and St Bride's Centre, 2016); and
- Rigside & Douglas Water: Community Action Plan 2018-2023 (Coalfields Community Futures, 2018).

Strategic Economic Context

Scotland's Economic Strategy

13.6.2 In March 2015, the Scottish Government published its economic strategy with the two main purposes of increasing competitiveness and tackling inequality. The strategy outlined four main priorities to achieve these aims:

- investing in Scotland's people, infrastructure and assets;
- promoting inclusive growth, which creates opportunity through a fair and inclusive jobs market, and regional cohesion to provide economic opportunities across all of Scotland;
- fostering a culture of innovation, which is open to change and new ways of doing things; and
- enabling Scotland to take advantage of international opportunities.

13.6.3 In 2017, 69% of all electricity in Scotland was generated from renewable sources, with a target of producing 100% from renewable sources by 2020.

13.6.4 Additionally, the Scottish Government has emphasised the importance of communities benefitting from renewable energy generation, including through community benefit funds and shared ownership.

Promote – An Economic Strategy for South Lanarkshire 2013-23

13.6.5 The South Lanarkshire economy suffered from the decline in economic activity following the 2008 financial crisis, with important sectors such as manufacturing, retail and construction particularly suffering. To strengthen the economy, SLC aims to diversify the area's economy into more resilient high value sectors such as finance and business, and the creative industries. Agriculture continues to be a major source of land use and contributor to the strength of rural communities.

13.6.6 The region has also tried to boost the level of economic activity by capitalising better on existing assets, such as opportunities for local small and medium enterprises (SMEs) to compete for public sector contracts, through the Supplier Development Plan, which involves Meet the Buyer events

and information on how to secure local procurement contracts. This is particularly relevant given the importance of small companies to the overall mix of companies in South Lanarkshire.

13.6.7 In addition, the region is responding to the needs of businesses by improving skills provision through new schools and colleges, including the South Lanarkshire Energy Academy. This forms part of the region's approach to the Low Carbon Economy, which it hopes will develop the supply chain in the local economy. Some skills provision is financed by the Renewable Energy Fund, which is funded by wind farm community benefits.

13.6.8 The region also encourages business growth through its development of commercial premises and vibrant town centres. It aims to provide a full service for businesses in the area, with particular support for high value, export-oriented businesses. To achieve this, it is necessary to collaborate with national organisations such as Scottish Enterprise, organisations in the wider Lanarkshire region such as Lanarkshire Chamber of Commerce, and local organisations such as the Business Gateway.

Coalburn, Douglas and Glespin: Community Action Plans

13.6.9 In August 2016, the Coalburn, Douglas and Glespin Community Action Plans were released (Urban Animation, 2016) which discuss the current socio-economic context of the local area and provide a series of aims and objectives for how the local community would like to see their villages develop over the coming years.

13.6.10 The villages considered have populations that are somewhat older than the national average as well as higher levels of unemployment and benefits claimants. There are also higher incidences of some forms of poor health. The communities have an industrial heritage with significant employment previously provided by textiles and mining, with some former colliery bings still remaining which form a proud part of the landscape. Given the decline of these industries, as well as more recent closures such as Ramage Distribution in 2008, the communities are in an ongoing period of transition.

13.6.11 Members of the community, including children at the local schools, were asked to contribute their aspirations for the community. From these discussions action plans for each of the communities were produced. The major themes for these strategies were:

- **helping people into work** – this will focus on improving local skills, developing existing support, creating incentives and premises for businesses locating in the area, and maximising opportunities for local people in planned projects;
- **improve local transport** – improve access to facilities locally and regionally through grant assistance, and ventures by local community groups and social enterprises;
- **improve quality of life, health and well-being** – work with Healthy Valleys Community Health Matters to improve health and activity levels, make each village a more attractive place to live and build on specific strengths and assets, including places and people;
- **build community capacity** – increase local participation and ensure that each community can lead change, develop/consolidate community anchor organisations, and build capacity in other organisations, such as community groups and third sector organisation;
- **promote easy access to funding** – channel the flow of funding, particularly from wind farms so that it creates the most benefit, for example through funding social enterprises or specific local projects. In order to do this processes need to be put in place to ensure fairness, as well as ensuring sustainability; and
- **building sustainable community assets** – ensure that assets that are invested in can secure income sources on a long-term basis, and improve community assets so that the villages are a good place to do business, and local people and agencies have the skills and support to seize opportunities.

- 13.6.12 In Coalburn, this means developing and consolidating the Miners Welfare and Leisure Centre as hubs of community activity, with new opportunities for outdoor recreation such as cycling and hill walking developed and promoted. It would also mean more green spaces, paths and bus shelters, which could be complemented by a range of other facilities such as housing and shops.
- 13.6.13 In Douglas, this would involve developing St Brides Centre and Universal Connections as community hubs, giving the main street a facelift, including maintaining current buildings and developing gap sites, and cleaning up old factory sites for new uses. New facilities, such as an all-weather pitch and rural walking and cycling paths were also identified as significant opportunities.
- 13.6.14 In Glespin, the main aims are to increase the population (or halt decline), through improved housing policies and employment opportunities, and improving quality of life, for example by reducing vehicle speeds, controlling odorous emissions from sewage sludge, and improving parking and maintenance. The other main aim was to improve employment and training, mainly through improving the use of the land and supporting employers who locate in Glespin.

Rigside and Douglas Water: Community Action Plan 2018-23

- 13.6.15 Rigside and Douglas Water’s action plan was developed by Coalfields Community Futures (Coalfields Community Futures, 2017). It consists of an analysis of the community as it stands, a shared vision and priority themes and actions for the future. The action plan was informed by 52 household surveys and a community event attended by 160 people.
- 13.6.16 The Rigside and Douglas Water area is associated with high levels of poor health, low economic activity, low educational qualifications and a low proportion of owner occupied homes. The main employers locally are two transport and haulage companies. Public transport links are very limited, making accessing employment opportunities difficult for those without cars. Local people feel that more could be done to integrate new residents from outside the area, and better housing would encourage people who currently travel into the area for work to live there permanently.
- 13.6.17 The community has a shared vision where the Rigside and Douglas Water area is a friendly place with strong community spirit, is attractive with good shops and houses, interacts strongly with the environment through walks and other outdoor activities, and supports families and the elderly.
- 13.6.18 The community action plan identifies a number of activities across four themes where the community can be improved. Many of these will require working with partners, such as South Lanarkshire Council, as well as identifying funding sources. The four themes are:
- **amenities** – more shops, gym for all ages indoor and outdoor, improve the path network, improve parks, ponds and woodland, and a community noticeboard;
 - **community activities and facilities** – more activities for children and young people, annual activities, more activities for the elderly, better use of the existing community hall and employability initiatives;
 - **roads and transport** – create a safe crossing across the A70, road maintenance, speed calming measures, improve bus times, more affordable public transport, a community bus and upgrading the roads; and
 - **village environment** – clean up the village, specifically litter and fly tipping, improve the housing situation, a safer community, community garden/allotments and floral enhancement/encouraging biodiversity.

Baseline Economic Context

Population

- 13.6.19 The combined population of the local area, as defined, is 5,842, which corresponds to 1.8% of the total population (317,100) of South Lanarkshire. Almost a quarter of the population, 23.4%, is over the age of 65, compared to 18.7% in South Lanarkshire and 18.5% in Scotland. As a result, the

proportion of the population of working age is 59.7% in the local area, compared to 64.0% in South Lanarkshire and 64.6% in Scotland. If the proportion of working age was similar to the Scottish level, this would entail a further 250 people aged 16-64.

Table 13.2 – Population and Demography (2016)

	Local Area	South Lanarkshire	Scotland
Total	5,842	317,100	5,404,700
0-15	16.9%	17.3%	16.9%
16-64	59.7%	64.0%	64.6%
65 and over	23.4%	18.7%	18.5%

Source: National Records of Scotland (2017), Population Estimates 2016

- 13.6.20 Between 2016 and 2041 the population of South Lanarkshire (data is not available at the local area level) is expected to increase slightly from 317,100 to 328,494, a 3.6% increase, compared to an overall increase of 5.3% in Scotland. The population is also projected to become significantly older, with 27.1% of the population aged 65 and over, compared to 18.7% currently, higher than the projected level of 25.3% in Scotland as a whole. The working age population is projected to fall from 64.0% of the total to 56.7%. Given that the population of the local area is currently older than the population of South Lanarkshire it is likely that the population will continue to age.

Table 13.3 – Population change (2016-2041)

	South Lanarkshire		Scotland	
	2016	2041	2016	2041
Total	317,100	328,494	5,404,700	5,693,201
0-15	17.3%	16.2%	16.9%	15.8%
16-64	64.0%	56.7%	64.6%	58.9%
65 and over	18.7%	27.1%	18.5%	25.3%

Source: National Records of Scotland (2017), Population Projection 2016-2041

Economic Activity

- 13.6.21 Although data is not available at the local area, South Lanarkshire has a similar rate of economic activity as Scotland (77.6%, compared to 77.5%), and has an unemployment rate of 3.7%, which is lower than the level of 4.1% in Scotland. The median annual wage is also slightly higher at £28,760, compared to £28,371.

Table 13.4 – Economic Indicators (2017)

	South Lanarkshire	Scotland
Economic Activity Rate	77.6%	77.5%
Unemployment Rate	3.7%	4.1%
Median Annual Wage (£)	28,760	28,371

Source: ONS (2018), Annual Population Survey Jan 2017 – Dec 2017. ONS (2018), Annual Survey of Hours and Earnings

Industrial Structure

- 13.6.22 As can be seen in Table 13.5, there are approximately, 1,200 people employed in the local area, equal to about 1% of all the jobs in South Lanarkshire. The single largest industry is human health and social work, which accounts 21.3% of employment, compared to 13.8% regionally and 15.9%

nationally. This may in part reflect the presence of the Lady Home hospital in Douglas, as well as the overall poorer health of the inhabitants.

13.6.23 The next largest employer is accommodation and food services, accounting for 13.4% of employment, compared to 6.2% in South Lanarkshire and 7.3% in Scotland. Transport accounts for 12.0% of employment, more than double the rate for South Lanarkshire (6.2%) and Scotland (7.3%), reflecting the presence of transport and logistics firms in the area.

13.6.24 A larger than average proportion of the population is employed in mining and quarrying (2.9%, compared to 0.1% and 1.2%), although a lower proportion are employed in high value sectors such as manufacturing (5.9%, compared to 9.2% and 7.0%), professional and scientific services (3.8%, compared to 5.0% and 6.9%), and information and communication (0.8%, compared to 1.8% and 2.9%).

Table 13.5 – Business Register and Employment Survey, 2016

	Local Area	South Lanarkshire	Scotland
Agriculture, forestry and fishing	1.7%	0.2%	3.0%
Mining and quarrying	2.9%	0.1%	1.2%
Manufacturing	5.9%	9.2%	7.0%
Electricity, gas, steam and air conditioning	0.0%	3.8%	0.7%
Water supply, sewerage, waste management etc.	0.0%	0.7%	0.7%
Construction	8.4%	8.8%	5.4%
Wholesale and retail trade	10.5%	17.1%	14.4%
Transportation and storage	12.1%	5.0%	4.2%
Accommodation and food services	13.4%	6.2%	7.3%
Information and communication	0.8%	1.8%	2.9%
Financial and insurance activities	0.0%	2.1%	3.3%
Real estate activities	0.4%	1.2%	1.5%
Professional, scientific and technical services	3.8%	5.0%	6.9%
Administrative and support services	6.3%	7.9%	7.3%
Public administration and defence	0.0%	5.8%	5.9%
Education	5.4%	6.2 %	7.3%
Human health and social work activities	21.3%	13.8%	15.9%
Arts, entertainment and recreation	6.3%	2.9%	3.1%
Other service activities	0.8%	2.3%	2.1%
Total	1,200	120,035	2,588,000

Source: ONS (2017), Business Register and Employment Survey 2016

Baseline Economic Context Summary

13.6.25 The local area is relatively older than the Scottish average, and it is likely that the average age of the inhabitants is likely to increase in the future, which may reflect a lack of opportunities for young people. Employment is concentrated in a few key sectors, such as healthcare, accommodation and food services, and transport, although there is a relative under-representation in high value sectors such as information and communication, and manufacturing. The local area is an ongoing transition

away from sectors such as coal mining and textiles, which dominated employment in the 20th century.

Strategic Tourism Context

Tourism Scotland 2020

13.6.26 Tourism Scotland 2020, created and maintained by the Scottish Tourism Alliance, is the national tourism strategy for Scotland. It was created in 2012 with the goal of increasing visitor-spend by one billion pounds, from £4.5 billion to £5.5 billion, by 2020. There are five key performance indicators associated with this goal to measure progress, which are:

- grow visitor-spend by £1 billion from £4.5 billion to £5.5 billion by 2020;
- increase the advocacy score for Scotland from 25%;
- increase the average visitor-spend from £358.56;
- increase the total tourism employment figures from 185,100; and
- increase total tourism turnover from £6.2 billion.

13.6.27 Activities and adventure, and mountain biking were identified as areas with growth potential as part of the nature, heritage and activities.

13.6.28 The strategy was reviewed in 2016 at the mid-term point of the policy with further priorities being identified to achieve the targets for 2020 set in 2012, including:

- strengthening digital capabilities;
- strengthen industry leadership;
- enhance the quality of the visitor experience; and
- influence investment, specifically flight access & transport connectivity, built infrastructure, digital connectivity and business growth finance.

South Lanarkshire Tourism Action Plan 2016-2020

13.6.29 The tourism strategy for Lanarkshire (Tourism Lanarkshire, 2016) (which includes both North and South Lanarkshire) stresses the continuance of the region's partnership-based approach. Tourism businesses are encouraged to operate through the VisitLanarkshire website, those who cater to business tourists are encouraged to operate through VisitLanarkshireVenues, and BeLanarkshire provides training to customer service staff. By focusing on the three areas of leisure tourism, business tourism and training, the region hopes to grow tourism spend by 2.5% annually (a compound growth rate of over 10% between 2016 and 2020).

13.6.30 Through this joined up approach and collaboration, with groups such as the Lanarkshire Area Tourism Partnership, which considers strategy, and Lanarkshire Tourism Association, which is an organisation for tourism businesses in the area, the area is able to focus on building capability in areas such as skills and marketing intelligence. This also allows the region to focus on delivering parts of the customer journey such as experiences of accommodation, and food and drink, and develop a competitive edge in areas where they see the most potential, such as events and festivals, day trippers and business tourists.

Baseline Tourism Context

Tourist Attractions

13.6.31 The Moffat Centre produces an annual Visitor Attraction Monitor, which supplies detailed data on visitor attractions in Scotland. None of the top 20 paid attractions in Scotland are located in South Lanarkshire.

13.6.32 Table 13.6 lists the main tourist attractions according to their straight-line distance from closest part of site boundary of the site.

Table 13.6 – Tourist Attractions

	Location	Attraction/Leisure Asset
5-10 km	Rigside	Douglas Water Golf Club
	Lesmahagow	Hollandbush Golf Club
	Lesmahagow	Kypeside Fishery
10-15 km	New Lanark	New Lanark World Heritage Site and Visitor Centre
	New Lanark	Falls of Clyde Visitor Centre and Wildlife Reserve
15-20 km	Lanark	Lanark Golf Club
	Lanark	Lanark Loch
	Crossford	Clyde Valley Family Park
	Blackwood	Craignethan Castle

13.6.33 There are three tourist attractions or leisure assets within 10 km of the Proposed Development, and they are mainly used by locals, such as Douglas Water Golf Club. A further two attractions are within 15 km.

13.6.34 The village of New Lanark (a UNESCO World Heritage Site), by the banks of the River Clyde, grew up around 18th century mills where cotton was manufactured. The last mill closed in the 1960s but a restoration programme was undertaken during the 1980s and 1990s to restore the village and a visitor centre and hotel were established at the site. The site is surrounded by native woodlands and is the gateway to the Falls of Clyde wildlife reserve.

13.6.35 The Falls of Clyde Wildlife Reserve stretches from New Lanark to Bonnington Weir. The visitor centre is situated within the village of New Lanark and allows people to learn about the historic village, waterfalls, woodlands and animals that live there. There are also regular badger and bat walks throughout the year. Also located in the reserve is Britain's first commercial Hydro-Electric Power Station. Bonnington Power Station was constructed in 1926 and is still in use today. It has the capacity to generate 11 megawatts (MW) harnessing the power of the Bonnington and Corra Linn waterfalls.

13.6.36 There are an additional four tourist attractions that are around 15-20 km from the Proposed Development. These include the Lanark Golf Course and Lanark Loch, which are predominantly used for local golf, walking and fishing. Similarly, Clyde Valley Family Park near Crossford, which includes trampolines and animal feeding, is likely to be used mainly by locals.

13.6.37 Craignethan Castle is a ruined castle located above the River Nethan, dating back to around 1530. It is notable as the last private stronghold to be constructed in Scotland. Craignethan Castle is considered to attract some visitors to the region.

Tourist Accommodation

13.6.38 Table 13.7 lists the accommodation providers (individual hotels, bed and breakfasts, self-catering and other accommodation facilities) located within the vicinity of the Proposed Development. Accommodation is grouped by cluster and approximate straight-line distance from the site.

Table 13.7 – Tourist Accommodation

	Location	Places to Stay	Approximate Distance from Site (km)
0-5 km	Douglas	1	3 km
5-10 km	M74	1	7 km
	Muirkirk	2	9km
10-15 km	Kirkmuirhill	1	11 km
	Abington	1	12 km
	A70	1	12 km
	New Lanark/Lanark	8	14-16 km
	Kirkfieldbank	2	14-16 km

- 13.6.39 Of these only one, the Old Doctor’s Cottage in Douglas is within 5 km of the Proposed Development. It advertises its cosiness and good location as a site for touring.
- 13.6.40 A small number of accommodation providers are located 5 to 10 km away, including the Redmoss Hotel off the M74, which is 7 km from the Proposed Development, and two in Muirkirk to the west (the Old Church B&B and the Muirkirk Caravan Park), which are 9 km away.
- 13.6.41 The majority of accommodation providers are over 10 km from the Proposed Development, such as Dykecroft Farm, 11 km to the north near Kirkmuirhill. Approximately 12 km to the south-east is the Days Inn off the M74 near Abingdon, and 12 km to the north-east is the Station House, a self-catered accommodation provider near the A70.
- 13.6.42 To the north-east, approximately 14 to 16 km away, is New Lanark/Lanark, where there are eight accommodation providers. These include three providers in New Lanark, the Westport B&B and Summerlea B&B in the centre of Lanark, the Scottish Equestrian Hotel and the Scottish Equestrian B&B on the eastern outskirts, and Bankhead Farm Cottages in the south part of Lanark.
- 13.6.43 At Kirkfieldbank on the western outskirts of Lanark, approximately 14 to 16 km from the Proposed Development, are the Clyde Valley Caravan Park and the Best Western Cartland Bridge Hotel.

Tourist Routes

Driving Routes

- 13.6.44 VisitScotland promotes a series of 12 signposted tourist routes throughout Scotland. The National Tourist Routes are designed to provide tourists with an alternative to the main trunk roads and motorways. One of these routes passes through South Lanarkshire, the Clyde Valley Tourist Route. This 67 km route follows the River Clyde through Lanark but the route does not pass along any of the roads close to the Proposed Development.
- 13.6.45 The M74 is the only major trunk road close to the Proposed Development and is 6 km away at its closest point. This is not a recognised tourist route and as such any visual impact on this route would have a negligible effect on the local tourism sector.

Walking Routes

- 13.6.46 Walkhighlands is a website dedicated to promoting walking routes across Scotland. It includes a searchable database of walks in every region of Scotland and is an important information source for tourists. The study area of this assessment corresponds to the Lanarkshire region used by Walkhighlands where 13 walks are listed. Of these, five pass within the vicinity of the Proposed Development.

- 13.6.47 The closest route to the Proposed Development is the Douglas Explorer walk, which is 6 km in length and explores the village of Douglas as well as the parkland and woods around it.
- 13.6.48 The Falls of Clyde and New Lanark walk is also 6 km in length and follows a route along the River Clyde from the Heritage Site of New Lanark, passing waterfalls and a peregrine falcon watching area. The starting point of this walk is approximately 10 to 15 km from the site.
- 13.6.49 There are also two other walks, each between 6 to 8 km in length, climbing the summit of Tinto, which is an outlying hill of the Southern Uplands, around 10 to 15 km to the east of the site.
- 13.6.50 Scotland's Great Trails is a network of 26 nationally promoted trails in Scotland. Each trail is waymarked, largely off-road, with the potential for multi-day journeys on foot. The Clyde Walkway is a 65 km long route running between Partick in Glasgow and New Lanark. The stretch of the route from the Falls of Clyde to New Lanark is approximately 10 to 15 km from the Proposed Development.
- 13.6.51 The River Ayr Way is a 65 km route that traces the length of the River Ayr from its source, Glenbuck Loch, to the sea at Ayr. The start/end of the route at Glenbuck Loch is located in East Ayrshire, approximately 4 km to the west of the Proposed Development.
- 13.6.52 The Great Trails are considered to be somewhat important to the region.
- 13.6.53 In addition to these routes there is also a network of core paths in the local area (refer to Figure 13.1). Under Scottish access legislation, each local authority in Scotland has a duty to draw up a plan of core paths in their area. These plans are informed by consultation with local communities, land managers and path users. The core paths in the study area include:
- A path leading to Hagshaw Hill Wind Farm and a number of paths around Hagshaw Hill Wind Farm, which begins at Douglas West Wind Farm;
 - A series of paths to the south east of Coalburn passing Wallace's Cave (CL/5734, CL/5735);
 - A path (CL/5192, CL/5193) passing to the east of the Proposed Development through the former Dalquhandy Opencast workings; and
 - Three paths in and around Coalburn.
- 13.6.54 Although core paths can be used by anyone, including tourists and day visitors, in practice the routes included tend to be those that are most popular with local residents and as such should be considered primarily as local leisure assets rather than tourism assets.

Cycling Routes

- 13.6.55 Sustrans is a charity dedicated to sustainable travel choices. It publicises a network of cycle routes around the UK. One of these is National Cycle 7, which goes from Sunderland to Inverness. Route 74 is an offshoot of this route and is intended to connect Gretna and Glasgow via Lockerbie and Abington. Between Gretna and Douglas the route follows large sections of the old A74 (B7078) and passes Lockerbie and Moffat before arriving in Douglas, though the section directly north of Lesmahagow is not complete.

Summary

- 13.6.56 The area immediately surrounding the Proposed Development has limited tourism activity, and most of the nearby attractions, such as New Lanark, are a substantial distance from the site. Furthermore, there are limited designated driving or cycling routes nearby, although there are a number of local walking routes, including a section of the River Ayr Walkway. There is potential to develop further walking and cycling/mountain biking routes in the area, including across the Proposed Development site, which could develop the tourism offering in the local area.

13.7 Potential Effects

Construction

- 13.7.1 The construction and development cost of the Proposed Development was estimated by multiplying the expected installed capacity (MW) by the industry average construction and development costs per MW.
- 13.7.2 The application is for 14 turbines with a capacity of around 6 MW each, giving a combined generating capacity of around 84 MW. Using research undertaken by BiGGAR Economics on behalf of RenewableUK in 2015 (RenewableUK, 2015), the average expenditure on the construction and development of wind farms can be estimated based on the average spend per MW, the average spend per turbine, or a combination of the two, as appropriate. On the basis of this methodology the total construction and development cost is estimated to be £112.3 million.
- 13.7.3 This expenditure is split into four main categories of contracts:
- development and planning;
 - balance of plant;
 - turbines; and
 - grid connection.
- 13.7.4 The proportion of construction and development spending that is spent on each of the main categories was also informed by BiGGAR Economics research into wind farms that are currently in operation in the UK. This found that the largest proportion of capital expenditure (capex) was on turbine related contracts (63.5%), followed by balance of plant (23.2%), development and planning (7.5%) and grid connection (5.8%).

Table 13.8 – Construction and Development Expenditure by Contract Type

	% Capex	Value (£m)
Development and Planning	7.5%	8.4
Turbine	63.5%	71.3
Balance of Plant	23.2%	26.1
Grid Connection	5.8%	6.5
Total	100%	112.3

Source: BiGGAR Economics Analysis of RenewableUK (2015), Onshore Wind: Economic Impacts 2014

- 13.7.5 The economic impact of the construction and development phase was estimated for South Lanarkshire and Scotland as a whole. In order to do this, it was necessary to estimate the proportion of each type of contract that might be secured in each of the study areas. 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. To estimate the expenditure for each contract in each of the study areas these percentages were applied to the estimated size of each component contract.
- 13.7.6 This suggested that South Lanarkshire could secure contracts worth up to £16.5 million, which is equivalent to 15% of the total capital expenditure. The largest opportunity for South Lanarkshire would be with the balance of plant contracts as companies in the area could secure 29% of contracts, worth up to £7.6 million.
- 13.7.7 Scotland could secure up to 38% of total capex, worth up to £43.0 million (Table 13.9). This estimate was based on the assumption that the contract for the turbine towers would be secured by a Scottish manufacturer and that a significant amount of the civil and project management costs would also be secured by Scottish companies.

Table 13.9 – Construction and Development Expenditure by Study Area and Contract Type

	South Lanarkshire		Scotland	
	%	£m	%	£m
Development and Planning	17%	1.4	77%	6.5
Turbine	6%	4.6	17%	12.4
Balance of Plant	29%	7.6	68%	17.6
Grid Connection	44%	2.8	100%	6.5
Total	15%	16.5	38%	43.0

Source: BiGGAR Economics Analysis

- 13.7.8 The contract values potentially awarded in each area would represent an increase in turnover of businesses in these locations. The impact that this increase in turnover would have on employment was estimated using industry-specific data from the Annual Business Survey (Office for National Statistics, 2018). The survey gives the turnover per employee each of the industries involved, which allows the employment from any increase in turnover to be estimated.
- 13.7.9 The employment impacts during the construction and development phase are reported in job years, rather than full-time equivalents (FTEs) because the contracts would be short-term. Job years measures the number of years of full-time employment generated by a project. For example, an individual working on this project for 18 months would be reported as 1.5 job years.
- 13.7.10 In this way, the construction and development impacts were estimated to support up to 139 job years of employment in South Lanarkshire, of which up to 65 job years of employment would be on balance of plant contracts. It was estimated that up to 360 job years of employment would be supported across Scotland.

Table 13.10 – Construction and Development Employment by Study Area and Contract Type

	South Lanarkshire	Scotland
Development and Planning	15	69
Turbine	41	108
Balance of Plant	65	141
Grid Connection	18	42
Total	139	360

Source: BiGGAR Economics Analysis

- 13.7.11 There would also be knock on effects from the direct employment during the Proposed Development because the people who are employed on the project will have an impact on the wider economy when they spend their salaries. The research undertaken for RenewableUK in 2012 found that the average salary for employees in the onshore wind sector is £34,600. It was therefore estimated that up to £4.8 million would be paid in salaries to staff directly employed during the construction and development phase of the Proposed Development in South Lanarkshire.
- 13.7.12 In order to estimate the economic impact of these salaries in each of the study areas it was necessary to make assumptions regarding the location of employee expenditure. It was assumed that employees that live in South Lanarkshire would spend 40% of their salaries inside South Lanarkshire and workers living in the rest of Scotland would spend 74% of their salaries in Scotland. The assumption for each of the location of spend in Scotland is based on data provided in the Scottish Government's Input-Output Tables (Scottish Government, 2017).
- 13.7.13 The economic impact of the increased expenditure was estimated using the average GVA/turnover and turnover/employee for the whole economy as reported in the Annual Business Survey. In this

way it was possible to estimate the induced impact direct employees would create during the construction and development phase. In South Lanarkshire employees could spend £1.9 million, supporting 13 job years and £0.7 million GVA. In Scotland, direct employees could spend £9.2 million, supporting 63 job years, and £3.2 million GVA.

Table 13.11 – Construction and Development Spending Impact

	South Lanarkshire	Scotland
Employee Spend (£m)	1.9	9.2
GVA (£m)	0.7	3.2
Employment (job years)	13	63

Source: BiGGAR Economics Analysis

- 13.7.14 The total impact during the construction and development phase of the Proposed Development is the sum of the direct impacts and the induced impacts from the expenditure of direct employees. The total combined impact was estimated to be up to £17.1 million and 152 job years of employment in South Lanarkshire, and up to £46.1 million and 423 job years of employment in Scotland.
- 13.7.15 The effect of construction on the South Lanarkshire economy was assessed as temporary, beneficial and **minor**, and therefore not significant. At the Scottish level it was assessed as **negligible** and not significant.

Table 13.12 – Total Economic Impact during Construction and Development Phase

	South Lanarkshire	Scotland
Economic Impact (£m)	17.1	46.1
Employment (job years)	152	423

Source: BiGGAR Economics Analysis

- 13.7.16 The developer is committed to maximising the local economic impact from the Proposed Development and will work to ensure that local enterprise have an opportunity to bid for contracts. To that end, the Applicant proposes to operate a Responsible Contracting Policy to ensure that the sourcing of local contractors is given the highest priority. As a business based in the local area, the Applicant is committed to using suppliers as close to the Proposed Development as possible and to delivering a high percentage of construction contracts to local companies. Construction companies would also be encouraged to offer local apprenticeship or work experience places. It is proposed that this would take the form of a Responsible Contracting Policy, which would ensure that tenders submitted by contractors offering substantial community and local employment benefits would be more highly rated during the tender process evaluation than those without such benefits.
- 13.7.17 A copy of the Applicant’s Responsible Contracting Policy for the Proposed Development is included in Appendix 13.1.

Operation

Operation and Maintenance

- 13.7.18 The operation and maintenance impact of the Proposed Development was estimated annually as the impact that would persist throughout the 30-year life-span of the Proposed Development.
- 13.7.19 Annual expenditure on operations and maintenance was estimated based on analysis undertaken in the 2015 RenewableUK report (RenewableUK, 2015). It was estimated that the annual operations and maintenance expenditure associated with the Proposed Development could be up to £2.2 million. Over the 30 year life of the project this could amount to £66.2 million. This excludes non-domestic rates and community benefit, which are considered further below.

13.7.20 In order to estimate the economic impact of the operations and maintenance expenditure, in each of the study areas, it was first necessary to estimate the proportion of the contracts that could be secured in each of these areas. These assumptions were based on the contract proportions reported in the RenewableUK report and the analysis of the industries present in each of the study areas.

13.7.21 Based on this information, it was assumed that South Lanarkshire could secure 32% of operations and maintenance contracts, and that Scotland could secure 47% of contracts (the remainder of the contracts, which may for example include supplies such as replacement parts, were assumed to be sourced from outside of Scotland). In this way it was estimated that annual operations and maintenance expenditure would generate up to £0.7 million in South Lanarkshire, and up to £1.0 million in Scotland.

Table 13.13 – Operational and Maintenance Expenditure by Study Area

	South Lanarkshire		Scotland	
	%	£m	%	£m
Operation and Maintenance	32%	0.7	47%	1.0

Source: BiGGAR Economics Analysis

13.7.22 As with the construction phase, the contract values awarded in each of the study areas represent an increase in turnover in those areas. The economic impact of the increase in turnover on employment was estimated in the same way as the construction expenditure, using the Annual Business Survey (Office for National Statistics, 2018), although as the impact on employment would be long-term it is presented as jobs.

13.7.23 In this way it was estimated that turnover generated by the operation and maintenance of the Proposed Development could support up to 5 jobs in South Lanarkshire and 8 jobs in Scotland per year.

Table 13.14 – Employment from Operation and Maintenance (jobs)

	South Lanarkshire	Scotland
Operation and Maintenance	5	8

Source: BiGGAR Economics Analysis

13.7.24 As with the construction expenditure, there will also be knock on effects from the direct employment during the operation of the Proposed Development. The people who will be employed will have an impact on the wider economy by spending their salaries. This was estimated using the same method as for the construction and development phase.

13.7.25 Adding together direct and induced impacts arising from the operation and maintenance phase, it is estimated that the Proposed Development could create a total economic impact of up to £0.7 million and 6 jobs in South Lanarkshire, and up to £1.1 million and 9 jobs in Scotland per year.

13.7.26 The effect of annual operations and maintenance on the economy of South Lanarkshire and the economy of Scotland was considered beneficial, but **negligible** and therefore not significant.

Table 13.15 – Total Annual Economic Impact during Operation and Maintenance Phase

	South Lanarkshire	Scotland
GVA (£m)	0.7	1.1
Employment (job years)	6	9

Source: BiGGAR Economics Analysis

Community Benefit

- 13.7.27 The Applicant has committed to provide community benefit funding in line with Scottish Government Guidance (Scottish Government, 2017), which is £5,000 per MW of installed capacity per year. As the scheme is expected to have a capacity of around 84 MW, this suggests an annual contribution around £420,000. Over the 30 year lifetime of the Proposed Development this would equate to a total of £12.6 million.

Table 13.16 – Community Benefit Fund

	Value
Funding per MW (£)	5,000
Installed Capacity (MW)	84
Annual Contribution (£)	420,000
Lifetime Contribution (£m)	12.6

Source: BiGGAR Economics Analysis

- 13.7.28 As an illustration of the level of employment that could be supported by a Community Benefit Fund, the Scottish Council of Voluntary Organisations gives a total turnover of £4.9 billion in Scotland’s voluntary sector, which supports a full-time equivalent staff of 83,350. This means that the turnover per full time staff member in the voluntary sector is £58,788 (Scottish Council of Voluntary Organisation, 2014).
- 13.7.29 By applying this ratio to the annual funding, it was estimated that 7 full-time equivalent jobs could be supported in the voluntary sector by a community fund of this scale.
- 13.7.30 In particular, it is anticipated that the Community Benefit contribution from Proposed Development would fund a full-time Local Development Officer, who would significantly increase the capacity of the local communities and be dedicated to delivering a Community-Led Investment Strategy for each village, based on the aspirations of the community set out in the Community Action Plans. The officer would be based in Coalburn, Douglas or Lanark, and would work closely with a range of local partners including South Lanarkshire Council.
- 13.7.31 The Applicant is currently consulting with the local community in Douglas, Glespin, Coalburn, Rigside and Douglas Water about establishing a new Douglas Valley Development Trust which would receive the community benefit income from the Proposed Development which would yield the financial resources to deliver the Community-Led Investment Strategy.
- 13.7.32 The community benefit revenue from the wind farm would deliver the financial resources to make this possible, so that each community would have a dedicated pot of money ring-fenced by the Trust. This could be used to fund projects 100% or as part of match funding arrangements for larger schemes.
- 13.7.33 The focus of the Trust would be to deliver strategic, large-scale projects/initiatives which create tangible and lasting benefits for Douglas Valley communities. Initial possibilities that have been raised are developing a mountain biking destination and Adventure Tourism offering in the local area and assisting small business start-ups and social enterprises in this sector. This would capitalise on wind farm infrastructure, local heritage assets and the proximity to the M74, stimulating job creation and economic activity in the local area. Delivering strategic improvements in the physical and recreational environment of Douglas, Glespin, Coalburn, Rigside and Douglas Water, and improving transport links to/from the Douglas Valley communities, have also been suggested.
- 13.7.34 Community benefit payments are not considered as part the EIA process and therefore the significance of effect has not been assessed.

Shared Ownership

- 13.7.35 In addition to the traditional community benefit funding, the local community could also financially benefit from the Proposed Development through the participation in a shared ownership scheme.
- 13.7.36 The Scottish Government Good Practice Principles for Shared Ownership of Onshore Renewable Energy Developments (Scottish Government, 2015) sets out the Scottish Government's view that shared ownership should become the standard in the renewables industry, and how this can be achieved. This commitment to shared ownership was renewed in the 2017 Onshore Wind Policy Statement (Scottish Government, 2017).
- 13.7.37 The Scottish Government is committed to shared ownership because it can strengthen relations between developers and communities, build the capacity of communities and empower their members, and support Scotland's ambitious targets for locally owned renewable energy.
- 13.7.38 There are multiple options through which a community can be involved in a shared ownership scheme of an onshore wind farm in their area. The different options for developers and communities to explore are outlined in the Good Practice Principles for Shared Ownership of Onshore Renewable Energy Developments (Scottish Government, 2015). Option 2 from this document (community group acquiring a revenue share) is associated with the lowest level of risk for the community.
- 13.7.39 All modes will require the community to raise the funds required to meet the shared ownership requirements. The methods for raising finance will vary depending on the particulars of the project and the community but may include either community share offers, commercial lending, crowdfunding or through soft loans such as Scottish Government funding.
- 13.7.40 In the case of the Proposed Development, the Applicant is exploring Option 2 with the local community whereby the Applicant owns the project and the community group(s) buys a revenue stream. In this context the community group(s) is not a shareholder of the project. The community group(s) has a financial stake and a share of the revenue (minus operating costs); however, the community group does not own a physical asset. As noted above, this is the lowest risk shared ownership model for the community.

Economic Impact of Shared Ownership Revenue Sources

- 13.7.41 The returns to the community from any involvement with a shared ownership scheme will vary depending on the anticipated operational costs and any costs associated with raising the finance needed to fund the community investment.
- 13.7.42 A 5% revenue share in the Proposed Development would be equivalent to the output of 4.2 MW. The returns that a community share of this size would vary depending on the output of the wind farm, the value of the electricity sold in the open market, the operating costs of the wind farm, and the costs to the community from financing the project. Similarly, the value of the revenue is likely to fluctuate between years. A shared ownership scheme of this style could potentially see the community earn an average of up to £129,000 per annum (however the sum received will be less in the earlier years when the project is repaying large finance costs).
- 13.7.43 Any income received from shared ownership would be in addition to the £420,000 community benefit funding paid by the Applicant.
- 13.7.44 The newly established Douglas Valley Development Trust could use these revenue streams to support economic development projects in the local area, with the support of the Local Development Officer and in line with the Community Action Plans discussed in Section 13.6.
- 13.7.45 In addition to directly supporting employment, the income received from an ownership share in the Proposed Development could also be used to leverage in more private funding to support other wider economic development projects. Experience of Community Development Trusts to date have found that the availability of local revenue streams, such as those provided by a shared ownership scheme can result in leverage of five to ten times the resources under the control of the local organisation. Therefore, even at the lower end of the scale, the revenues from the community share could be used to leverage in funding of up to £650,000.

- 13.7.46 The economic impact associated with these revenues would be dependent on the projects in which the funds were spent. The Community Action Plans describe investments in a variety of areas including:
- skills development;
 - community organisations;
 - leisure centre development;
 - physical regeneration; and
 - community activities.
- 13.7.47 The above projects would likely require a mixture of individuals involved in both the construction and the services sectors (in particular, the subsector Creative, Cultural, Sports and Recreation). For the purposes of this assessment it was assumed that that 50% of the total funding (including that which was leveraged) would be spent in the construction sector and 50% would be spent in the creative, cultural, sports or recreation sectors.
- 13.7.48 On this basis, the socio-economic impact of the shared ownership scheme could support up to 9 jobs and GVA of up to £370,000 per year, including the benefits from leveraged funding.
- 13.7.49 Given the possibility of direct job creation, as well as the meeting of the goals of each community, the effect of the shared ownership scheme was assessed as **moderate** and therefore significant (beneficial).

Non-Domestic Rates

- 13.7.50 The Proposed Development will be liable for non-domestic rates, the payment of which will contribute directly to public sector finances. These non-domestic rates, by providing an additional revenue stream, will support the delivery of government services.
- 13.7.51 An analysis of the rateable values paid by several wind farms in South Lanarkshire indicates that the average rateable value per MW is £20,958.
- 13.7.52 Given that the development will be around 84 MW, it is estimated that the total rateable value will be up to £1.76 million. Given a poundage rate of £0.518 per £1 of rateable value for business with a rateable value over £51,000 (Scottish Parliament Information Centre, 2017). it is estimated that the development could contribute £0.9 million annually to public finances, and over 30 years could contribute £26.0 million. However, the actual contribution will depend on variables such as the actual load factor, and the potential for any relief from non-domestic rates.
- 13.7.53 The contribution to public finances was assessed as **negligible** and therefore not significant.

Evidence on the Relationship between Tourism and Wind Farms

- 13.7.54 The extent to which the development of the onshore wind sector effects the tourism sector is a well-researched topic, with several studies published over the last decade.

Glasgow Caledonian Centre (2008), The Economic Impacts of Wind Farms on Scottish Tourism

- 13.7.55 In 2008, Glasgow Caledonian University's Moffat Centre published a report (Glasgow Caledonian University/Moffat Centre, 2008), which incorporates a literature review, an intercept survey of tourists in the study area, an internet survey, a Geographic Information Systems (GIS) study about the effect on accommodation and economic analysis of the results. The study area for this report included Caithness and Sutherland, Perth Kinross and Stirling, Dumfries and Galloway, and the Scottish Borders.
- 13.7.56 The literature review found that most of the studies concluded no significant negative outcomes of wind farms on tourism in sensitive areas, as they generally don't have wind farms approved.

- 13.7.57 The intercept survey of tourists carried out in Scotland found 25% viewed wind farms negatively, but the majority had neutral or positive opinions, with negative views being less widely held among hill walkers. Respondents who had already seen a wind farm were also less likely to be hostile to them.
- 13.7.58 Although a significant minority (20-30%) preferred landscapes without wind farms, very few would change their future intention to revisit Scotland based on them.
- 13.7.59 A 2012 report commissioned by the Scottish Government (ClimateXchange, 2012) subsequently found that the findings of the Glasgow Caledonian report were robust, and that there had been no adverse effect on tourism in the areas considered in the original report.

Scottish Parliament Economy, Energy and Tourism Committee (2012), Reports on the Achievability of the Scottish Government's Renewable Energy Targets

- 13.7.60 Also in 2012, following an inquiry into the achievability of the Scottish Government's renewable energy targets, the Scottish Parliament's Economy, Energy and Tourism Committee (Scottish Parliament Economy, Energy and Tourism Committee, 2012) concluded that:

"Several witnesses made assertions that there would be a negative impact on Scotland's tourism industry from renewable developments. However, these assertions were contradicted by research evidence from VisitScotland and others.

Whilst care always needs to be taken in terms of the planning process and decisions on the siting of individual projects in areas popular with tourists and in our more rural and remote rural areas, no witness has provided the Committee with robust, empirical evidence, as opposed to anecdotal comment and opinion, that tourism is being negatively affected by the development of renewable projects."

VisitScotland (2012), Wind Farm Consumer Research

- 13.7.61 A survey commissioned by VisitScotland in 2011 (VisitScotland, 2012) looked at the attitudes of tourists towards wind farms. It surveyed 2,000 people in the UK and 1,000 people in Scotland, who had visited Scotland recently. The majority (86-91%) were in agreement about the importance of the natural scenery and landscape, for most of the respondents (80-83%) their decision to stay in the UK for a short holiday would not be affected by the presence of a wind farm. In general, the respondents did not feel that wind farms ruined the tourism experience.

Mountaineering Scotland Surveys

- 13.7.62 A study published in 2014 by Mountaineering Scotland (Mountaineering Scotland, 2014), a membership body that represents Scottish hillwalkers and mountaineers, conducted a survey of its members. It found that wind farms had an adverse effect on Scottish mountaineering, with many responding that they would avoid areas with wind farms and that they were also found to reduce the scale of Scottish tourism.
- 13.7.63 Following criticisms about the impartialness of the original findings Mountaineering Scotland conducted another survey of its members in 2016 (Mountaineering Scotland, 2016). When asked about the impact of wind farms on plans to walk and climb, 75% of respondents answered that wind farms have no effect on their plans, although some expressed that they may decrease their enjoyment. 22% responded that they go as often, but avoid areas with wind farms, while 1% go to the mountains less. However, 2% of respondents said they go to the mountains more often and like to see wind farms.

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

- 13.7.64 A study undertaken by BiGGAR Economic in 2017 (BiGGAR Economics, 2017), analysed the effects of wind farms on the tourism sector in Scotland at a National, Regional and Local level. This was an updated study of work previously published in 2016.

- 13.7.65 The report found that while the capacity of wind farms has more than doubled over the study period, employment in sustainable tourism had increased by more than 15%. Furthermore, the analysis found no correlation between tourism employment and the number of turbines at the Local Authority level. The study also considered the impact on employment up to 15 km from developments, and the wind farms considered were those constructed between 2009 and 2015.
- 13.7.66 The study concludes that national statistics suggest there is no relationship between the development of onshore wind farms and tourism employment in Scotland, the Local Authority in which the wind farms are located or the local area surrounding the development.

Tourist Attractions

- 13.7.67 It should be noted that given that the Proposed Development is a repowering, and not a new development, the presence of a wind farm at this location has already been established, and the Existing Development has been in place for over 20 years. If the Existing Development was to be decommissioned and removed, the Hagshaw Hill Extension and other established wind energy developments in the immediate vicinity would remain in place for many years to come. This suggests that any effect of the Proposed Development on tourism would be limited as a wind farm landscape has already been established at this location.
- 13.7.68 Several of the tourist attractions near the Proposed Development are of a local nature, for example Douglas Water Golf Club, Hollandbush Golf Club and Kypeside Fishery, as well as Lanark Golf Course, Lanark Loch and Clyde Valley Family Park near Lanark. The nature of the attractions and their comparative distance from the site indicate that there would be limited impacts resulting from the Proposed Development. Therefore, the effect on each of these attractions was assessed as **negligible** and therefore not significant.
- 13.7.69 The attractions in New Lanark, including the New Lanark World Heritage Site and Visitor Centre and the Falls of Clyde Visitor Centre and Wildlife Reserve, as well as Cragneithan Castle, are considered to be important to the regional or national tourism offering by attracting visitors from outside the area. Visitors to Cragneithan Castle for example are likely to be interested in the history of the site and it is reasonable to assume that visitors to New Lanark would primarily be interested in the social and industrial historical significance of the site. As a result, it is considered unlikely that the Proposed Development will affect the visitor experience. This is particularly true given the considerable distance from the Proposed Development and that the turbines would not be visible from the village itself. Therefore, the effect was assessed as **negligible** and not significant for both attractions.
- 13.7.70 Attractions in and near Lanark, such as the Lanark Golf Course, Lanark Loch and Clyde Valley Family Park, which are a substantial distance from the site and likely to be of mainly local use, are considered unlikely to be affected by the Proposed Development. It is unlikely that Cragneithan Castle, which is also a substantial distance from the Proposed Development, will be affected as its main attractions are its historical significance and views over the River Nethan. Therefore, the effect was assessed as **negligible**.

Tourism Accommodation

- 13.7.71 The impact on tourism businesses would depend on the extent to which the additional views, that they may acquire, may influence the behaviour of tourists visiting the businesses. Views of the Proposed Development from accommodation providers are likely to be limited, given the relative distances to sites such as Muirkirk, Kirkmuirhill, New Lanark, Lanark and Kirkfieldbank. There are also a small number of accommodation providers near the M74 or A70, and it is likely that their main attraction is their relative proximity to these transport routes. Therefore, the effect on accommodation providers in these areas is assessed as **negligible**.
- 13.7.72 There is only one tourism accommodation business within 5 km of the Proposed Development. It appears to have been set up relatively recently, suggesting that it is not discouraged by the presence of the Existing Development and other nearby wind farms, and advertises itself in part for its location. This suggests that any effect is likely to be **negligible**.

13.7.73 It is also possible that the construction of the Proposed Development could have a temporary beneficial effect on local tourism businesses as a result of employees either staying locally and/or purchasing food and other supplies while working on site. The relatively low number of accommodation businesses in the local area suggests that the effect on these business would be **moderate** and beneficial.

Tourist Routes

13.7.74 Potential permanent adverse effects on walking and cycling routes in the local area (both short-distance and longer distance) would depend on the extent to which the Proposed Development might change the existing character of the routes and tourists’ enjoyment of them. The fact that there are already operational wind farms in the study area, and indeed on the Proposed Development site, means that this type of development is already an established part of the local environment. This means that walkers and cyclists visiting the area should already have a reasonably high expectation of seeing a wind farm during their trip.

13.7.75 The magnitude of the effect of any additional views of wind turbines that may be acquired as a result of the Proposed Development would therefore be low and this implies that the overall significance of this effect would be **negligible** and therefore not significant.

13.7.76 In terms of future Tourist Routes, it is noted that SLC and Scottish Natural Heritage (SNH) are exploring plans to link Glasgow with the River Ayr Way and the Southern Upland Way as part of the Clyde Walkway Extension Project.

13.7.77 The development of the Clyde Walkway Extension would therefore join up multiple long distance routes through central and southern Clydesdale. The Douglas/Coalburn area could play an important part in these new routes with the potential for the east – west route from Glenbuck to New Lanark to pass through the Proposed Development site, and there is also potential for a further route south to the Southern Upland Way from the Douglas area via Crawfordjohn.

13.7.78 Graphic 13-3 illustrates the location of Douglas and Coalburn relative to the missing links between the Clyde Walkway, the River Ayr Way and the Southern Upland Way.

Graphic 13-3 – Strategic Walking Routes of Scotland



13.7.79 Existing long distance path networks have been shown to boost tourism, the economy, the health of local people and the environment of communities through which they pass. Facilitation of the Clyde Walkway Extension through the site and the Applicant’s adjoining land could provide an interesting part of the new route which could enhance the existing tourism and recreation offering in the local area and bring more passing trade and visitors to Douglas and Coalburn. This would create the opportunity to build on existing marketed walks around Douglas such as the ‘Douglas Explorer’ walk promoted by Walkhighlands.

13.7.80 The potential effect of the proposed network was assessed as **moderate** and therefore significant.

Proposed Investment in Adventure Tourism

13.7.81 As noted there are limited tourism assets within the vicinity of the Proposed Development. The Applicant has proposed community benefit and shared ownership schemes that could result in significant community investment, and be used to create new assets such as a mountain biking destination or similar adventure tourism opportunities, which have been identified as potential growth areas in Scotland's tourism offering. Similar destinations include Glentress near Peebles. Given the proximity to the M74, and existing walking/cycling trails, this could result in a noticeable increase in visitors to the area, and opportunities for local employment.

13.7.82 Although the potential effect of this employment has been considered previously, it is worth noting that the Proposed Development could strengthen and catalyse the area's tourism offering and create new opportunities for employment. Therefore, this has been assessed as a **moderate** beneficial effect to the local community

Decommissioning

13.7.83 To date there has been limited decommissioning of onshore wind installations in the UK, therefore the effects are not well known and have not been estimated. However, it is likely that the socio-economic effects will be similar in scope to construction and development.

13.8 Mitigation

13.8.1 The assessment has not identified any significant effects associated with the Proposed Development and therefore it is unnecessary to consider mitigation.

13.9 Residual Effects

13.9.1 The residual effects identified in this assessment include:

- a temporary, **minor** beneficial effect on the regional economy as a result of construction related expenditure;
- a temporary, **negligible** beneficial effect on the national economy as a result of construction related expenditure;
- a temporary, **moderate** beneficial effect on local accommodation providers as a result of contractors paying of accommodation;
- a permanent, **negligible** beneficial effect on the regional and national economy due to operations and maintenance expenditure;
- a permanent, **negligible** effect on local tourism assets and accommodation providers from the operation of the Proposed Development;
- a permanent, **moderate** beneficial effect on local communities arising from increased investment and capacity building as a result of the shared ownership and community benefit proposals; and
- a permanent, **moderate** beneficial effect on local communities arising from increased investment in local tourism infrastructure;
- a permanent, **moderate** beneficial effect on local arising from investment in the local path network.

13.10 Cumulative Assessment

- 13.10.1 There are three main ways in which the Proposed Development could contribute to cumulative socio-economic effects. Two of these could result in beneficial cumulative effects and the other could result in an adverse cumulative effect.
- 13.10.2 Adverse cumulative effects on tourism, recreation and socio-economics could occur if the Proposed Development was expected to have a significant cumulative visual impact on important tourism receptors. The cumulative visual impact of the Proposed Development is assessed in Chapter 6, Landscape and Visual. It is however, important to note that even if such effects were to occur, they would not necessarily be significant. This is because landscape is likely to be a somewhat less of an important driver of tourism in South Lanarkshire than it is for other parts of Scotland.
- 13.10.3 The Proposed Development also has the potential to generate beneficial cumulative impacts if it were to help encourage the development of a significant local renewable energy supply chain. Initial investigations undertaken by the Applicant have identified a number of potential suppliers in the local area so there is some evidence that this effect may already be occurring.
- 13.10.4 The development of a strong local supply chain would help to increase the economic benefits of the Proposed Development and similar projects in the local area, which could help to increase the magnitude of the long-term beneficial economic effects considered in this chapter. The Applicant's Responsible Contracting Policy and stated preference for securing supplies locally wherever possible should help to support this.
- 13.10.5 Additionally, if additional community benefit and shared ownership income was secured from other similar developments in the area this would enable the local community to leverage more funding and investment into the area. Physical infrastructure such as roads could also become part of the network of access paths around Junction 11 off the M74, attracting more people to the area.

13.11 Summary

- 13.11.1 The socio-economic baseline indicates that the local area is relatively older than the Scottish average, and it is likely that the average age of the inhabitants will increase in the future, which may reflect a lack of opportunities for young people. Employment is concentrated in a few key sectors, such as healthcare, accommodation and food services, and transport, although there is a relative under-representation in high value sectors such as information and communication, and manufacturing. The local area is in an ongoing transition away from sectors such as coal mining and textiles, which dominated employment in the 20th century.
- 13.11.2 The Proposed Development will result in a substantial investment in South Lanarkshire and Scotland, and is therefore expected to generate economic impacts:
- during the development and construction phase the Proposed Development would generate up to:
 - £17.1 million and 152 job years of employment in South Lanarkshire; and
 - £46.1 million and 423 job years in Scotland (including South Lanarkshire).
 - during each year of the operational phase the Proposed Development would generate up to:
 - £0.7 million and 6 jobs in South Lanarkshire; and
 - £1.1 million and 9 jobs in Scotland (including South Lanarkshire).
- 13.11.3 The Applicant has also committed to contributing £5,000 per MW per year in Community Benefit payments, in line with the Scottish Government guidance, which would be around £420,000 per year.
- 13.11.4 The Developer has also indicated that there will be a Shared Ownership offer made to the local community, up to a 5% revenue share in the Proposed Development.

- 13.11.5 The community benefit / shared ownership revenues would enable the local communities surrounding the Proposed Development, such as Douglas, Glespin, Coalburn, Rigside and Douglas Water, to invest in the local area, and meet the objectives set out in their community action plans. This could involve developing the area's adventure sports offering, resulting in increased visitor numbers and tourism.
- 13.11.6 The socio-economic impact of the shared ownership scheme could support up to 9 jobs and GVA of up to £370,000 per year, including the benefits from leveraged funding.
- 13.11.7 There will also be income to the public sector associated with the Proposed Development due to the payment of Non-Domestic Rates. Given the rates paid by similar development it was estimated that the annual contribution of the Proposed Development would be £0.9 million.
- 13.11.8 The area immediately surrounding the Proposed Development has limited tourism activity at present, and most of the nearby attractions, such as New Lanark, are a substantial distance from the site. Furthermore, there are limited driving or cycling tourist routes nearby, although there are a number of local walking routes, including a section of the River Ayr Walkway.
- 13.11.9 It was assessed that there would be limited effects on tourism assets in the local area, such as tourism accommodation and tourism routes.
- 13.11.10 As this assessment did not identify any potentially significant adverse effects it was not necessary to consider mitigation.

Table 13.17 – Summary Table

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		Comparison with the Existing Development
	Significance	Beneficial/ Adverse		Significance	Beneficial/ Adverse	
During Construction / Decommissioning						
Economic impact of £17.1 million and 152 job years in South Lanarkshire	Minor	Beneficial	n/a	Minor	Beneficial	Additional investment in South Lanarkshire economy
Economic impact of £46.1 million and 423 job years in Scotland	Negligible	Beneficial	n/a	Negligible	Beneficial	Additional investment in Scottish economy
Expenditure of construction workers in local economy	Moderate	Beneficial	n/a	Moderate	Beneficial	Additional short-term expenditure in the local area
During Operation						
Annual economic impact of £0.7 million and 6 jobs in South Lanarkshire	Negligible	Beneficial	n/a	Negligible	Beneficial	Additional investment in South Lanarkshire economy
Annual economic impact of £1.1 million and 9 jobs in Scotland	Negligible	Beneficial	n/a	Negligible	Beneficial	Additional investment in Scottish economy
Revenue from shared ownership	Moderate	Beneficial	n/a	Moderate	Beneficial	Additional investment and capacity building in the local area
Payment of an estimated £0.9 million in Non-Domestic Rates	Negligible	Beneficial	n/a	Negligible	Beneficial	Additional public sector revenue

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		Comparison with the Existing Development
	Significance	Beneficial/ Adverse		Significance	Beneficial/ Adverse	
Effect on tourism assets	Negligible	Adverse	n/a	Negligible	Adverse	No difference
Effect on accommodation providers	Negligible	Adverse	n/a	Negligible	Adverse	No difference
Effect on tourism routes	Negligible	Adverse	n/a	Negligible	Adverse	No difference
Effect of proposed investment in tourism infrastructure	Moderate	Beneficial	n/a	Moderate	Beneficial	Additional investment in the area's tourism infrastructure
Effect on proposed investment in path network	Moderate	Beneficial	n/a	Moderate	Beneficial	Improved public access and recreational offering

13.12 References

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