Section 5
SOCIO-ECONOMICS, POPULATION & COMMUNITY INVOLVEMENT

Contents

Tables

Figures

Charts

Plates

Glossary

Term	Definition
Community assets	Tangible community benefits rather than monetary, for example infrastructure
Community consultation	The process of formally consulting or discussing with the local community
Data zone	Small geographic areas of equal population, used to assess deprivation across Scotland
Deprivation	The damaging lack of material benefits considered to be basic necessities in a society
Domain	The seven characteristics used to measure deprivation in Scotland
Public Exhibitions	The process of displaying information for the benefit of the public
Socio-economic	Relating to or concerned with the interaction of social and economic factors
Sustainable	Avoidance of the depletion of natural resources in order to maintain an ecological balance
Wards	A local authority area, typically used for electoral purposes

Abbreviations

Abbreviation	Description
CDM	Construction Design and Management
CO_2	Carbon Dioxide
CWL	Community Windpower Limited
EIAR	Environmental Impact Assessment Report
HGV	Heavy Goods Vehicle
MoU	Memorandum of Understanding
SIMD	Scottish Index of Multiple Deprivation
TMP	Transport Management Plan

Section 5: Socio-Economics, Population & Community Involvement

5.1 Introduction

5.1.1 This section considers the potential social and economic impacts of the proposed Scoop Hill Community Wind Farm and assesses the impacts associated with the development, construction, operation and decommissioning phases. Estimated employment generation, business-related opportunities and impacts are presented. The section also assesses the likely impacts of the proposed wind farm on the local tourism industry, in light of published findings by a range of studies including the Scottish Government, VisitScotland and RenewableUK.

5.1.2 This assessment comes at a time when the COVID 19 pandemic has brought about unprecedented social and economic challenges. Provisional Scottish Government statistics suggest Scotland's GDP fell by 19.7% during April to June 2020 and unemployment levels are continuing to rise with estimates that it could reach 10% later in 2020.

5.1.3 This assessment aims to measure potential social and economic impacts of the proposed Scoop Hill Community Wind Farm however, it should be noted that the full impact of this current economic crisis has yet to be fully realised. In this regard this section includes reference to 'Economic Prospects' which focuses on the most up to date assessments of the impact of the COVID 19 on the Scottish economy.

5.1.4 This section should be read in conjunction with the accompanying 'Commitment to Communities' report which sets out how the proposed development will support local communities through economic investment, employment, the development of tourist attractions and facilities in the form of a possible 'Visitor Centre' and 'Wind Farm Walk' and voluntary contributions to the local community.

5.1.5 Relevant planning policies are identified and briefly summarised, however detailed assessments are provided separately in the Planning Statement, which accompanies and supports the planning application to the Scottish Government under Section 36 of the Electricity Act 1989.

5.1.6 To complete this assessment, baseline social and economic conditions are taken into consideration and from this, potential effects of the proposed development are highlighted, and mitigation methods are discussed in relation to the potential effects. Further to this, the economic, community, educational and environmental benefits of the development are discussed, alongside the potential impacts of wind farms on tourism.

5.1.7 This section includes information on the factors of population, in line with Regulation 4(3) of The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017. However, elements of this are also discussed in other sections of this EIAR where applicable, such as Section 11: Noise, and Section 14: Other Considerations.

5.2 Scope of the Assessment

5.2.1 The assessment study area will include all of Dumfries and Galloway but where statistics and information allow, a more localised assessment of 20km from the development site will be incorporated to assess the economic and social impacts of the proposed wind farm.

5.2.2 Scoping responses received via the Scoop Hill Scoping Opinion by the Energy Consents Unit with regards to socio-economics and population matters are presented in Table 5.1 below.

Table 5.1 – Socio-Economics, Population & Community Involvement Scoping Opinion Responses

Consultee	Scoping Response	Respective Paragraph
Dumfries and Galloway Council	No Response provided on social, economic or community involvement grounds	
VisitScotland	Suggests consideration is given to the Scottish Government's 2008 research on the Impact of Wind Farms on Tourism. Ensure consideration is given to the UNESCO Galloway and Southern Ayrshire Biosphere based on the outstanding level of biodiversity in the community. Minimise negative effects on tourism by considering the following factors: • The number of tourists travelling past en route elsewhere; • The views from accommodation in the area; • The relative scale of tourism impact i.e. local and national; • The potential positives associated with the development; • The views of the tourist organisations, i.e. local tourist businesses or VisitScotland. Recommend any potential detrimental impact of the proposal on tourism (visually, environmentally and economically) be identified and considered in full. Also, consideration given to proliferation (cumulative) effect on local tourism industry and therefore the economy.	The impacts of the proposed wind farm on tourism and recreation can be found in sub-section 5.6. Views from various viewpoints around the site can be found in Section 6: LVIA.
North Milk Community Council (NMCC)	NMCC requested a timetable of public exhibitions to be made available. NMCC suggests consulting more local communities as a whole, especially Boreland residents. Requests consultation with local Pony Driving Centre.	Public exhibition details provided. Details can be found in the Commitment to Communities Report and the Pre-Application Consultation Report. The local Pony Driving Centre have been consulted.
ScotWays	DA5, DA6, DA11 and DA 14-16 are affected by the area within the Site Boundary marked on the Scoping Report's Figure 4 *Indicative Turbine Layout.* Runners, mountain bikers, walkers and equestrians use the area. Request made to contact British Horse Society Scotland. Viewpoints requested on the *Southern Upland Way, Romans and Reivers Route* and at Dryfehead bothy.	Information and assessment on core paths and rights of way can be found in Section 14: Other Considerations. The British Horse Society Scotland have been consulted. Views from various viewpoints around the site can be found in Section 6: LVIA.

5.3 Legislation, Policy and Guidance

Tourism: Dumfries and Galloway

5.3.1 The relevant guidance in the documents listed below has been used to assess the legislation, policy and guidance on tourism in Dumfries and Galloway Council area:

- Dumfries and Galloway Council, Local Development Plan 2, 2019 (LDP2);
- Dumfries and Galloway Council, Council Plan, 2017 – 2022.

5.3.2 Dumfries and Galloway LDP2 Policy ED9 'Tourism', states that Dumfries and Galloway Council will favourably consider the development of indoor and outdoor tourist attractions and recreational facilities subject to the other policies in the Plan (Dumfries and Galloway Council, 2019).

5.3.3 Further to this, in Policy OP3 'Developer Contributions', the LDP2 states '*developer contributions will be sought where a development proposal (or a combination of developments) creates an identified need: to secure the mitigation required to address an adverse environmental impact; or to provide for new, extended or upgraded public infrastructure facilities or services. Developers will be required to make a fair and reasonable contribution (financial or "in kind"), proportionate to the scale and nature of the development, towards these additional costs or requirements, relative to:*

- *Affordable housing;*
- *Open space and green networks;*
- *Leisure,*
- *Recreation and tourism infrastructure;*
- *Education;*
- *Biodiversity;*
- *Community facilities, including health facilities;*
- *Waste management infrastructure; and*
- *Offsite infrastructure works including transport infrastructure.'*

5.3.4 An additional policy of note, LDP2 IN1 'Renewable Energy', states that the Council will support development proposals for all renewable energy generation and/or storage which are located, sited and designed appropriately. The acceptability of any proposed development will be assessed against a number of factors, one of which being the impact on tourism, recreational interests and public access (Dumfries and Galloway Council, 2019).

5.3.5 Dumfries and Galloway Council have also set out policies in their Council Plan 2017 – 2022 (2017). Here they have pledged to support small and medium sized businesses to be established and grow by continuing to support investment in marketing support for the tourism sector, more innovatively promoting Dumfries and Galloway to visitors, including reviewing Council funding for tourism. The Council Plan outlines how the region will be promoted as a destination for outdoor activities, such as recreational cycling, mountain biking and active tourism.

Tourism: Community Councils

5.3.6 The relevant guidance in the documents listed below has been used to assess the legislation, policy and guidance on tourism in the local community council areas:

- Dumfries and Galloway Council, Local Development Plan 2, 2019;
- Moffat and Beattock Community Action Plan, 2016;
- Upper Eskdale Development Group Business Plan and 5 Year Trading Forecast, 2013.

5.3.7 In both the Dumfries and Galloway Council Local Development Plan 2 (2019) and the Moffat and Beattock Community Action Plan (2016), planning objectives highlight the need to encourage tourism to benefit the community.

5.3.8 More specifically in the Moffat and Beattock Community Action Plan (2016), there is a call for "*a community that can support itself through tourism as the economic mainstay*". Expanding on this, they aim to achieve this objective through the following:

- Maximise potential: arts and culture, heritage, cycling, walking;
- Market more widely;
- Refresh the 'offer' for families and younger people; and
- Lengthen visitor stays.

5.3.9 Similarly, the Upper Eskdale Development Group Business Plan and 5 Year Trading Forecast (2013) aims to open up their community hub to tourists, in the form of a tourism information point and a place for visitors to get resources.

Economy: Dumfries and Galloway

5.3.10 The relevant guidance in the documents listed below has been used to assess the legislation, policy and guidance on the economy in the Dumfries and Galloway Council area:

- Dumfries and Galloway Council, Local Development Plan 2, 2019.

5.3.11 Sustainable economic growth is a key element of the Dumfries and Galloway Local Development Plan 2 (2019). It also recognises that the generation of renewable energy is a new and increasingly significant part of the area's economy and is therefore keen to support the growth and development of this sector.

5.3.12 Many of the policies set out here reflect the need to provide opportunities to grow, develop, diversify and regenerate the economy in a sustainable manner whilst at the same time protecting the natural and built environment upon which so much of the region's economy depends (Dumfries and Galloway Council, 2019).

Economy: Community Councils

5.3.13 The relevant guidance in the documents listed below has been used to assess the legislation, policy and guidance on the economy in the local community council areas:

- Dumfries and Galloway Council, Local Development Plan 2, 2019;
- Moffat and Beattock Community Action Plan, 2016;
- Upper Eskdale Development Group Business Plan and 5 Year Trading Forecast, 2013.

5.3.14 In both the wider Dumfries and Galloway Council Local Development Plan (2019), and the localised community plans, there is a focus on the development and diversification of business in rural areas. Policy ED2 in the Dumfries and Galloway Local Development Plan suggests that proposals which expand existing businesses or create new ones in the rural area will be considered favourably.

5.3.15 This is further reflected in both the Upper Eskdale Development Group Business Plan and 5 Year Trading Forecast (2013) and the Moffat and Beattock Community Action Plan (2016), as it highlights how the rural economy is dominated by primary industries, low pay and low skill levels, which could be helped by a more diverse economy.

5.4 Assessment Methodology

Method of Assessment

5.4.1 A desk-based assessment has been undertaken with information obtained from various appropriate sources on the current socio-economic and tourism climate within the Dumfries and Galloway area. In addition to this, a more concentrated area of 20km radius from the development site, including the relevant community council areas has also been assessed, where information has been publicly available. These community council areas are shown in Figure 5.3.

Data Sources

5.4.2 The socio-economic baselines were established from the most recent, publicly available national statistics. The sources used include:

- Scottish Government (2020), Gross Domestic Product (GDP) monthly estimate: June 2020;
- National Records of Scotland (2020), Dumfries and Galloway Council Area Profile;
- Office for National Statistics (2019 - 2020), NOMIS Labour Market Profile – Dumfries And Galloway;
- Scottish Government (2008), The Economic Impacts of Wind Farms on Scottish Tourism Scottish Government; and
- Scottish Government (2020), Scottish Index of Multiple Deprivation 2020.

5.4.3 Data informing the tourism and recreation baseline was gathered from a range of publicly available online sources, including:

- Dumfries and Galloway (2016), Regional Tourism Strategy 2016 – 2020;
- Eskdalemuir Community Council (2013), Upper Eskdale Development Group Business Plan and 5 Year Trading Forecast;
- Johnstonebridge Community Council (2019), Johnstonebridge Community Action Plan;
- Moffat and Beattock Community Council (2016), Moffat and Beattock Community Action Plan;
- Moffat Centre (2008), The Economic Impacts of Wind Farms on Scottish Tourism;
- VisitScotland (2019), Insight Department: Dumfries and Galloway Factsheet 2018.

Significance Criteria

5.4.4 Criteria for determining the significance of social and economic impacts are provided in Table 5.2. This table mainly considers the magnitude of the impacts, for example the number of people impacted. As these are subjective descriptions of significance, they have been applied using professional judgement.

5.4.5 Impacts judged to be of major or moderate significance are considered to be significant impacts.

Table 5.2 Significance Criteria

Significance Criteria	Description of Significance
Major	Where the extent of the impacts on economic activities, local businesses and tourism and recreation or the local population is large in scale or magnitude, and a large number of people or activities will be affected (either positively or negatively).
Moderate	Where the extent of impacts on the economic actives, local businesses, tourism and recreation or the local population is small in scale or magnitude, but a large number of people will be affected (either positively or negatively). or Where the extent of impacts on the economic actives, local businesses, tourism and recreation or the local population is large in scale or magnitude, but a small number of people will be affected (either positively or negatively).
Minor	Where the extent of impacts on the economic actives, local businesses, tourism and recreation or the local population is small in scale or magnitude and will only affect a small number of people (either positively or negatively).
Negligible	Where the extent of impacts on economic activities, local businesses, tourism and recreation or the local population is barely noticeable in scale or magnitude, and will only affect a small number of people or activities (either positively or negatively).

5.5 Baseline Conditions

5.5.1 This section presents information on the existing social and economic conditions in Dumfries and Galloway and also the smaller community council areas. The social conditions refer to:

- Population,
- Demographics, and
- Deprivation.

5.5.2 The economic conditions refer to:

- Industry; and
- Employment.

5.5.3 It also provides information on tourism and recreational activities in the area and also the current land use of the proposed wind farm site.

Social Baseline Conditions

<u>Population and age structure: Dumfries and Galloway</u>

5.5.4 The proposed Scoop Hill Community Wind Farm is situated within the Dumfries and Galloway Council area, and is approximately 5km south east of Moffat and 11km north east of Lockerbie, as shown in Figure 5.1.

5.5.5 Dumfries and Galloway is divided into 12 wards. The proposed Scoop Hill Community Wind Farm development is located within the Annandale North Ward, as depicted in Figure 5.2.

5.5.6 In June 2019, the population of Dumfries and Galloway was 148,860 which equates to 2.72 percent (%) of Scotland's population (National Records of Scotland, 2020).

5.5.7 The age structure of Dumfries and Galloway in 2019 can be found in Table 5.3.

Table 5.3 – Dumfries and Galloway Population Structure

	Dumfries and Galloway Population	% of Dumfries and Galloway's population	% of Scotland
Total	147,860	100%	100%
0-15	23,243	15.6%	16.9%
16-64	87,047	58.5%	64.1%
65 and over	37,570	25.9%	19%

5.5.8 The population in Dumfries and Galloway has decreased in the last three years; in 2016 the population was 149,520, giving a decrease of 0.44% by 2019. By 2028, the population of Dumfries and Galloway is projected to fall a further 3.3%, from the total population in 2016 down to 144,575 (National Records of Scotland, 2020).

5.5.9 Overall, Dumfries and Galloway has a higher than average percent of over 65s and a decreasing population.

Population and age structure: Community Councils

5.5.10 The population of Moffat and the surrounding areas has grown quickly in recent years, according to census data, far quicker than elsewhere in Dumfries and Galloway and Scotland as a whole (Moffat and Beattock Community Council, 2016).

5.5.11 The percentage increase in residents in Moffat (21%) is over ten times that of Dumfries and Galloway (2%) as well as over four times that of Scotland as a whole (5%) (Moffat and Beattock Community Council, 2016).

5.5.12 The local population is generally ageing, but not as quickly as across Dumfries & Galloway as a whole. In fact, both Moffat and Beattock are less '*retirement settlements*' and more '*commuter places*' with the biggest population growth being people in their 40s and 50s (Moffat and Beattock Community Council, 2016).

Deprivation

5.5.13 The Scottish Index of Multiple Deprivation (SIMD) is the Scottish Government's official tool for identifying areas with relatively high levels of deprivation across Scotland. The SIMD ranks small areas of around 760 people, called *data zones*, from most deprived to least deprived, where 1 is the most deprived and 6,976 is the least deprived (Scottish Government, 2020a).

5.5.14 The SIMD uses seven categories to assess the deprivation levels, which are: income, employment, health, education, access to services, crime, and housing (Scottish Government, 2020a).

5.5.15 It is important to note that this deprivation data is relative and cannot be used to assess how much more deprived one area is from another, as the difference between two ranks can differ greatly. Therefore, it is used only to provide an overview of the amount of deprived areas within the councils, and not to assess how deprived the specific *data zones* are.

5.5.16 Dumfries and Galloway is divided into 201 *data zones*, 17 of which are in the 20% most deprived ranking within the council area. This equates to 1.22% of the total 20% most deprived *data zones* in Scotland (Scottish Government, 2020b). None of these 17 *data zones*, are within or surrounding the proposed site boundary.

5.5.17 Of the 201 zones in Dumfries and Galloway, eight are identified as within or surrounding the proposed site boundary. Figure 5.4 shows these *data zones* with their proximity to the proposed site boundary. Table 5.4 shows these eight *data zones*, along with their ranking for each of the seven deprivation categories (Scottish Government, 2020b).

5.5.18 Of these eight *data zones*, access to services and crime show the most significant deprivations, with the most deprived ranking as 39 for access to services and 166 for crime.

Table 5.4 Data Zones Within and Surrounding the Proposed Site Boundary

Data Zone	Area	Rank							
		Overall	Income	Employ-ment	Health	Educati-on	Access to Services	Crime	Housing
S01007640	Lockerbie	2823	3680	4123	4762	2984	506	166	2830
S01007641	Moffat	3482	3417	3695	4175	4635	1039	2049	4338
S01007642	Moffat	4150	3620	3637	3640	5599	5768	1137	3472
S01007643	Moffat	5093	4233	4544	4843	4241	5355	4289	5416
S01007644	Moffat	3635	3608	2520	3471	4044	3475	6400	5309
S01007645	Moffat	4588	4434	5459	5435	5721	357	5601	4818
S01007646	Langholm and Eskdale	2675	2470	3183	5641	5631	54	5103	4311
S01007655	Annandale East	3191	4379	4331	4697	3645	39	4383	3845

5.5.19 Of the seven categories used to measure deprivation by the SIMD, access to services and crime come up as the most deprived domains. These are defined in the following paragraphs.

5.5.20 Access to services takes into account the average drive time and the time it takes on public transport (in minutes) to get to the following services:

- Petrol Station;
- GP Surgery;
- Post Office;
- Primary School;
- Retail Centre;
- Secondary School.

5.5.21 Access to services also accounts for the percentage of premises without access to superfast broadband (Scottish Government, 2020).

5.5.22 Crime is assessed by taking into account the crime count: *number of recorded crimes of violence, sexual offences, domestic housebreaking, vandalism, drugs offences, and common assault*, and the crime rate: *recorded crimes of violence, sexual offences, domestic housebreaking, vandalism, drugs offences, and common assault per 10,000 people* (Scottish Government, 2020c).

5.5.23 Access to services is the most deprived domain of the eight *data zones* within and surrounding the proposed site boundary, with five of the eight zones falling into the most deprived quintile for this domain. This is reflected in Dumfries and Galloway as a whole, with 79 *data zones* in the 20% most deprived ranking for this Access to Service category (Scottish Government, 2020b).

Economic Baseline Conditions

Industry: Dumfries and Galloway

5.5.24 The dominant industries within Dumfries and Galloway from 2018 are 'Wholesale and Retail' and 'Human Health and Social Work', accounting for 17.5% and 19.3% of employment respectively (NOMIS, 2019-2020).

5.5.25 According to 2019 figures, the largest employment sectors in Dumfries and Galloway, using the Standard Occupational Classification (Office for National Statistics, 2010), are 'Professional Occupations', for example, teachers and health professionals, and 'Skilled Trades Occupations', for example, construction workers and agricultural workers, which account for 18.3% and 14.1% of the workforce respectively. This can be compared to 21.5% and 10.5% respectively for Scotland as a whole (NOMIS, 2019-2020).

5.5.26 Dumfries and Galloway show above average employment levels, not only for 'Wholesale and Retail' and 'Human Health and Social Work', which are both 3.6% higher than Scotland as a whole; but also for the 'Manufacturing' industry, which puts Dumfries and Galloway 3.3% higher in this sector than Scotland. These are presented in Table 5.5. (NOMIS, 2019-2020).

Table 5.5 – Dumfries and Galloway Employment Sectors

Industry	Dumfries and Galloway (%)	Scotland (%)	Difference (%)
Wholesale and Retail Trade	17.5	13.9	3.6
Human Health and Social Work	19.3	15.7	3.6
Manufacturing	10.5	7.2	3.3

5.5.27 Dumfries and Galloway demonstrates lower than average employment levels for the 'Administrative and Support Services' and 'Financial and Insurance' sector, with these sectors showing a decrease by 2.9% and 2.4% in Dumfries and Galloway respectively (NOMIS, 2019-2020).

5.5.28 Further to this, Dumfries lies within the Galloway and Southern Ayrshire Biosphere Reserve. According to UNESCO (2012), there has been a steady decline in the area's traditional industries of livestock farming, textiles, mining, energy generation and iron smelting, which has resulted in geographic shifts in investment, jobs and population and significant landscape changes.

Industry: Community Councils

5.5.29 In Moffat the main industries surround tourism, agricultural services and mechanical engineering (Moffat and Beattock Community Council, 2016).

Employment: Dumfries and Galloway

5.5.30 The total number of employed people in Dumfries and Galloway is 66,500, whereas the total number of unemployed people is 2,000 (NOMIS, 2019-2020).

5.5.31 Dumfries and Galloway have an unemployment rate equivalent to 2.9% of the working-age population, this is lower than the unemployment rate for Scotland, which is 3.3% (NOMIS, 2019-2020).

5.5.32 The average Gross Weekly Pay for a full-time worker in Dumfries and Galloway is £470.30 (£24,455 per annum). This is considerably lower than the average for Scotland, which is £576.70 (£29,988 per annum). These are presented in Table 5.6 below (NOMIS, 2019-2020).

Table 5.6 – Dumfries and Galloway Employment

	Dumfries and Galloway	Scotland
Unemployment Rate	2.9%	3.3%
Gross Annual Pay	£24,455	£29,988

Employment: Community Councils

5.5.33 In Moffat there is a mix of professional and non-professional jobs and of those with higher and lower educational attainment. Part-time work and self-employment are important for many residents (Moffat and Beattock Community Council, 2016).

5.5.34 Tourism is the major employment sector in Moffat. Hotels and other accommodation account for more than two-thirds (69%) of Moffat's tourism jobs. Nearly one-third (30%) are found in restaurants, cafes and bars (Moffat and Beattock Community Council, 2016).

5.5.35 There around 400 to 500 jobs based in Moffat but around 1,100 residents hold jobs, suggesting that around at least 600 people commute outside of Moffat or are able to work from home (Moffat and Beattock Community Council, 2016).

Recreation and Tourism: Dumfries and Galloway

5.5.36 Tourism plays an important role within the Dumfries and Galloway area, as it is provides an estimated £302 million to the local economy and employs around 7,000 people (Dumfries and Galloway Council, 2016). The most popular visitor attraction is the Gretna Green Famous Blacksmith's Shop, with 700,602 people visiting in 2018, alongside Galloway Forest Park, Mabie Forest, Dalbeattie Forest, Grey Mare's Tail and Threave Garden which together attracted a further 630,008 visitors between them in 2018 (VisitScotland, 2019).

5.5.37 In 2018, Dumfries and Galloway hosted 750,000 domestic visitors, staying over 2.5 million nights and spending £141 million. There were 39,000 international visitors, totalling 287,000 nights and spending £12 million (VisitScotland, 2018).

Recreation and Tourism: Community Councils

5.5.38 Across the Moffat and Beattock communities, tourism accounts for more than one third of jobs. Around 8.5% of jobs in Scotland are in 'sustainable tourism businesses'. Using this definition, sustainable tourism accounts for about 36% of tourism for Moffat. This is more than three times higher than the proportion in Dumfries and Galloway or Scotland as a whole (Moffat and Beattock Community Council, 2016).

5.5.39 Moffat has long been supported by tourism. Its growth from a small village in the 17th century to a fashionable resort in the 19th century, was largely thanks to its development as a spa town in the 18th and 19th centuries (Moffat and Beattock Community Council, 2016).

5.5.40 Further to this, on the VisitScotland Dumfries and Galloway Page (2016), key destinations surrounding the proposed site boundary are found to be Lockerbie and Moffat. According to the VisitScotland site, Lockerbie is a key destination as it is the first sizeable town north of the Scottish Border and is on the main road and rail routes between Glasgow and Carlisle, and Moffat is a historic spa town in the Annandale Valley, 21 miles from Dumfries, and just three minutes from the M74 (Moffat and Beattock Community Council, 2016).

Current Land Use

5.5.41 The proposed wind farm site itself comprises of a large area of commercial forestry as well as agricultural and grazing land. Additionally, the land is covered by general access rights under the terms of the Land Reform (Scotland) Act 2003.

5.5.42 Consultation with Dumfries and Galloway Council and ScotWays has identified that there are a number of public rights of way and core paths within the site boundary (see Figure 5.5), these are:

- DA5;
- DA6;
- DA11;
- DA14;
- DA15;

5.5.43 The Southern Upland Way lies about two kilometres north of the proposed site.

5.5.44 For more information regarding the commercial forestry, see Section 13: Forestry and for more information regarding the recreational use of the site, see Section 14: Other Considerations of the EIAR.

5.6 Potential Effects

5.6.1 The proposed development of Scoop Hill Community Wind Farm can be split into three distinct phases, construction, operation and decommissioning. It is envisaged that the construction of the wind farm will be completed within 18 months. The wind farm will operate for a period of 40 years, after which the site will be decommissioned, which will take up to 24 months.

Potential Construction and Decommission

5.6.2 Potential impacts that could arise during the construction and decommissioning of the proposed wind farm include the following:

- Economic impacts on the local community as a result of direct employment (250 jobs created);
- Economic impacts on the local community as a result of indirect employment and increased spending ability;
- Public safety management related impacts resulting from felling and construction;
- Public access across the proposed wind farm site may be temporarily restricted;
- Temporary traffic and transport impacts on the local community as a result of increased vehicles in the area (for details of the transport and traffic assessment and Traffic Management Plan, see Section 12 of the EIAR).

Potential Operational Impacts

5.6.3 Potential impacts that could arise during the operation of the proposed wind farm include the following:

- Direct and indirect impacts on recreation and tourism as a result of changes in the landscape, views to and from the proposed wind farm site and personal opinion relating to the wind farm development;
- Direct and indirect impacts on the perceived amenity value of the area depending on personal opinion relating to the wind farm development;
- Direct and indirect impacts from enhanced tourism and recreational assets in the form of a possible 'Visitor Centre' and 'Wind Farm Walk';
- Direct employment created during the operation of the proposed wind farm (11 jobs created);
- Direct economic impacts on the local communities through the establishment of a £500,000 per annum community benefits fund;
- Direct economic impacts on the wider area through payments of £6.56 million per annum for business rates;
- Direct social and economic impacts on the area through potential onsite assets for example the proposed Wind Farm Walk, Visitor Centre and car park (more assets outlined in the Commitment to Communities Chapter);
- Indirect economic impacts on the local community as a result of increased spending ability;
- Direct impact on education, through use of the wind farm and potential Visitor Centre as an educational tool;
- Direct economic impacts for landowners as a result of the new income stream provided by the operation of the proposed wind farm.

5.6.4 Taking this into account, it is CWL's aim to ensure that the operation of the wind farm will not significantly disrupt the existing land use and, given evidence from other wind farms that occupy farming land and commercial forestry, there is no reason to believe that coexistence is not possible (Bhatia, 2014).

5.7 Mitigation

Mitigation during design

5.7.1 As described in Section 3: Site Selection, Design and Evolution, the proposed wind farm has been designed with potential impacts on the landscape and visual amenity in mind. While designing this site, the aim to reduce landscape and visual impacts whilst achieving the appropriate landscape fit, and avoiding areas constrained by other environmental consideration such has hydrology and ecology, has been at the forefront of the design process.

5.7.2 CWL have also extensively consulted the communities surrounding the proposed site with regard to community benefits and how these can be used to generate positive assets for those who need it.

Mitigation during the construction and decommissioning

<u>Direct Employment</u>

5.7.3 Community Windpower will seek to ensure positive benefits for the local area during the construction of the proposed wind farm by endeavouring to use local labour, manufacturers and suppliers where possible. This is reinforced by their '*Buy Scottish'* policy. This policy was designed to ensure that economic investment and

employment from the wind farm during development, construction and operation stays within the local area, wider region and Scotland.

Land Use

5.7.4 During construction, areas undergoing work, specifically around the turbine foundations, would be fenced off to protect stock, where appropriate. While land use within the proposed site boundary may undergo slight disruption during the construction of the wind farm, the land use itself will not change.

5.7.5 A 'phased construction' programme will be implemented minimising the scale of disruption at any one time. This 'phased construction' will comprise of the site being split into sections. Section one will have the basic infrastructure laid down first (access tracks, borrow pits, hardstands etc.), once this is complete then the turbines can be constructed while section two undergoes the construction of basic infrastructure, and so on.

5.7.6 The phasing of the construction programme, both in terms of time and location, will be discussed and agreed with the landowners to minimise disruption to planned agricultural activities.

Risk to Public Safety

5.7.7 No core paths will be diverted without prior approval from the managing authority, in this instance Dumfries and Galloway Council. Should any core path require a diversion, notification and signage will be put in place before and during construction. This ensures that the Public Right of Way (PROW) can remain open, where possible, during the construction process.

5.7.8 The construction of the proposed wind farm must comply with the requirements of the Construction Regulations 2007. These regulations oblige the Developer to notify the Health and Safety Department Executive of the project, and to establish a safety management system encompassing risk assessment, design measures and management instructions to ensure the safety of construction and operational staff and the public.

5.7.9 To reduce the risk of traffic and transport-related matters on public safety, CWL will prepare a Traffic Management Plan, and more information on this can be found in Section 12.

Mitigation during Operation

Direct Employment

5.7.10 During the operation of the proposed wind farm, Scoop Hill Community Wind Farm would provide up to 11 long term jobs in the area, in the form of:

- Six wind turbine engineers;
- One supervisor engineer to maintain and manage the wind turbines during its operational phase; and
- Four maintenance staff to maintain the wind farm site and undertake habitat management work as required.

5.7.11 These 11 jobs will have a lifespan of 40 years as they are all associated to the operation of the wind farm.

Risks to public safety

5.7.12 CWL are an experienced wind farm operator and will adhere to the highest standards of operational safety at all times.

Visitor Centre

5.7.13 The application for the proposed wind farm will be supported by a separate outline planning application for a Visitor Centre. The proposed Visitor Centre will be subject to further consultation and community engagement to establish its viability and preferred uses. Notwithstanding this, CWL believe a Visitor Centre, located within the Scoop Hill Community Wind Farm, could provide a valuable tourist attraction, a local and regional educational facility and a recreational asset that would act not only as a catalyst for tourist growth but would facilitate healthy outdoor recreational activity in a diverse and safe environment. Further outline information of the proposed Visitor Centre is provided in the accompanying 'Commitment to Communities' report.

Enhancement of Shared Recreation Public Access

5.7.14 The Applicant also proposes to construct a 'Multi-Purpose Wind Farm Walk', which will pass through the Scoop Hill Community Wind Farm site area and has potential to link to other nearby walking routes and core paths as well as offering circular walking routes. The paths will provide, walkers, equestrians and cyclists with the opportunity to explore the wind farm in a safe and managed environment.

5.7.15 CWL proposes a path that links with the Southern Upland Way from the north of the site and goes through the proposed site. By using the Southern Upland Way as a linking path, there is the potential to bring tourism to the area and increase public access, with 80,000 people using the Southern Upland Way per annum (NatureScot, 2018).

5.7.16 The walk will include information/display boards at suitable locations along the route, displaying facts and figures about the turbines, route maps, and some health and safety guidelines since the walk is situated on an operational wind farm. The information boards are also a useful educational tool, as they can be used to display information about the surrounding landscape, cultural heritage and the local flora and fauna.

5.7.17 Figure 5.5 shows the various potential 'Multi Use Wind Farm Walk' routes.

5.8 Wind Farms and their Perceived Impacts on Tourism

5.8.1 The presence of wind farms can divide public opinion, particularly when sited in close proximity to areas with an active tourism industry. Many business owners have concerns that an operational wind farm will undermine tourism and will result in a negative impact on tourism dependant businesses.

5.8.2 A number of studies and assessments have been undertaken investigating the economic impact of wind farms and whether the 'perceived' negative impact of wind farms is actually justified.

5.8.3 One such study, 'The Economic Impacts of Wind Farms on Scottish Tourism' states that "*sensitively located renewable energy can also bring social and economic benefits to communities and to local businesses*" (Moffat Centre, 2008). More recently, this statement was taken further to say that these "*social and economic benefits*" will "*outweigh the objections*" (Bartlett and Celliers, 2017)

5.8.4 This assessment is supported by the ClimateXChange study (2015) commissioned by the Scottish Government. The report analysed data from regions comparable to those studied by the Moffat Centre (2008) and found no evidence to suggest that subsequent wind farm development in these areas has had an adverse economic effect on tourism. Overall, the report found no new evidence to suggest that wind farms are having a discernible negative economic impact on tourism in Scotland.

5.8.5 In the Scottish Government's 'Economic Impacts of Wind Farms on Scottish Tourism', visitor intentions at four case study areas were surveyed and results suggest that the prospect of further wind farm developments would not have any effect on whether visitors would return or not. In fact, some tourists showed an increase in likelihood of return, rather than decrease. Furthermore, the study states that 75% of people surveyed were positive or neutral about wind farms being developed in Scotland (Moffat Centre, 2008).

5.8.6 In 2017, BiGGAR Economics commissioned a study into the impact of the development of onshore wind farms on the Scottish tourism sector. As part of this research, they analysed the trends in sustainable tourism employment from 2009 - 2015, within a 15km radius of 28 wind farms with a capacity of at least 10MW, that were constructed between 2010 and 2014; including CWL's own Millour Hill Community Wind Farm near Dalry in North Ayrshire. These trends were then compared with the overall trend in Scottish sustainable tourism employment within this timeframe. The research found that there was no relationship between the growth in the number of wind turbines and the level of tourism employment at the local authority level (BiGGAR Economics, 2017).

5.8.7 Overall the study concluded that wind farms do not cause a decrease in tourism employment either, at a local or national level (BiGGAR Economics, 2017).

5.8.8 Scotland's tourism sector has grown alongside the onshore wind sector; between 2009 and 2015 the installed capacity of onshore wind in Scotland rose from 2.0 GW to 5.3 GW, whilst employment in sustainable tourism grew by 15%, indicating that both sectors are able to grow and 'coexist' (BiGGAR Economics, 2017).

5.8.9 Further to this, a study conducted by the University of Edinburgh (2012), 'Tourism Impact of Wind Farms' surveyed people who visited tourism spots around wind farms. They found that approximately 86% of those surveyed, who were aware of the wind farms, either left the area with a more positive impression because of their presence, or felt that the wind farms made no difference to their overall impression of the area.

5.8.10 During the analysis, the report revealed some important findings which are relevant to this proposal:

- Sustainable tourism employment in 2017 accounted for 7.5% of total employment for Dumfries and Galloway;
- Sustainable tourism employment increased in Dumfries and Galloway between 2009 and 2015, with Dumfries and Galloway experiencing a 13% increase; and
- The onshore wind capacity also increased between 2009 and 2015, with an increase of 113 turbines and 193.9 MW for Dumfries and Galloway.

5.8.11 Wind farms can have a positive impact on visitor numbers. Whitelee Wind Farm, on Eaglesham Moor in East Renfrewshire (Europe's second largest wind farm) has become an eco-tourist attraction aided by the construction of its own Visitor Centre on-site which is managed by Glasgow Science Centre. The exhibition and education centre includes interactive displays such as 'build your own wind farm' which is aimed at helping people understand how the turbines work.

5.8.12 Open since 2009, the Visitor Centre, which is situated in a remote area of Scotland, received its 500,000th visitor in 2016. The centre is unlikely to attract passing tourists due to its remoteness, meaning that visitors would have made a special trip to see the wind farm and its Visitor Centre. The area had not previously attracted much tourist attention, so the visitor figures for Whitelee are particularly impressive. As a result, Whitelee became the first wind energy project to join the Association of Scottish Visitor Attractions. On top of this, in 2015 the Visitor Centre was awarded a Gold Green Business Tourism award for its sustainable tourism methods.

5.8.13 A 90km network of walking and cycle paths at the Whitelee site has also been established for the public to use to encourage active recreation and more recently have hosted long distance running and cycling challenges. Feedback from visitors has been positive, demonstrating that wind farms can have a positive draw for tourists and can themselves be a tourist attraction.

5.8.14 For the Scoop Hill Community Wind Farm, CWL are proposing a similar Visitor Centre to that at Whitelee, with 46 km of walking and cycling tracks. The Visitor Centre could offer a range of facilities including an information centre, educational support facilities, outdoor recreation activities, as well as a café and gift shop, which CWL hope will emulate Whitelee and create a tourism hub which will attract substantial visitors, benefitting the surrounding area. Additional information on the Visitor Centre can be found in the 'Commitment to Communities' report.

5.8.15 The research into tourism and wind farms demonstrates that both the wind and tourism industries can coexist together as tourists are able to appreciate the beauty of the natural landscape whilst also responding positively to the presence of wind farms to minimise the impacts of climate change and the need to generate electricity without emitting harmful greenhouse gases or relying on imports from overseas. It is considered that this represents a negligible to minor impact.

5.9 Economic Benefits of the Development

5.9.1 Since 2006, Community Windpower Ltd (CWL) has invested over £375 million for its seven operational wind farms in Scotland. This will increase to £625 million by the end of 2023 and £1.5 billion by 2025.

5.9.2 CWL are committed to investing in Scotland and the Scottish economy and have established a successful '*Buy Scottish*' initiative which is already being implemented for CWL's operational wind farm portfolio, and also includes the Scoop Hill Community Wind Farm proposal and the work undertaken to date during the development stage. The development, construction and operation of the proposed Scoop Hill Community Wind Farm will provide a large volume of financial investment into the local and regional economies, throughout the 18 month construction phase and the 40-year operational lifetime of the wind farm. This is estimated to be an initial investment of £530 million through development and construction, and a further £32.9 million per annum to operate the wind farm per annum. Overall, Scoop Hill Community Wind Farm will provide economic investment of over £1.8billion over its lifetime.

5.9.3 The provision of 11 permanent, long term jobs in the form of six turbine engineers, one supervisor and four maintenance workers would also be needed to support the project throughout. Expenditure via business rates to the local authority; rents, and contracts with contractors and sub-contractors during the construction phase, will also deliver a significant and positive financial boost to the local areas surrounding the wind farm.

5.9.4 The financial rewards and benefits of the development will positively impact the local communities both directly and indirectly, which will help to establish the wind farm as an asset amongst local businesses and local residents.

5.9.5 In terms of quantifying the proportion of the total investment from wind farms which stays in the local area, it was calculated that of the investment for the development, construction, operation and maintenance for a

typical wind farm in 2014, nearly half (48%) remains in the region, and of this over a quarter (27%) is retained within the local authority in which it is built (RenewableUK, 2015). This is without considering the community benefits local communities also receive from developers.

5.9.6 The percentage of investment into local areas from development, construction, operation and maintenance is improving year on year due to efforts by developers to use local firms to ensure that any benefits to the local economy are concentrated (RenewableUK, 2015).

5.9.7 The known and predicted financial spending at each stage of the development process for Scoop Hill Community Wind Farm is detailed in the following paragraphs.

Scoping and Pre-Planning Phases

5.9.8 The wind farm proposal has employed a variety of specialists and useful services, with preference given to local and Scottish companies wherever possible, as detailed in Table 5.7.

Table 5.7 – Scoping and Pre-Planning Investment

Investment, Consultants, Services	Company/Venue
Ecology & Ornithology Consultant	Starling Learning, *Lochwinnoch*
Landscape and Visual Consultant	Optimised Environments (OPEN), *Edinburgh*
Aviation Consultant	Aviatica Group, *Midlothian*
Borrow Pit Stone Testing	Grange Quarry and Concrete, *Lockerbie*
Cultural Heritage Consultant	Headland Archaeology, *Edinburgh*
Fisheries Consultant	River Annan Trust, *Lockerbie*
Hydrology, Hydrogeology & Geology Consultant	Natural Power Consultants Ltd, *Stirling*
Legal Services & Land Agents	Lindsays Solicitors, *Edinburgh* DWF, *Edinburgh* Turcan Connell, *Edinburgh* Brodies LLP, *Edinburgh* Bidwells, *Perth* Savills, *Edinburgh* Anderson Strathern, *Edinburgh* AMS Associates, *Cupar*
Transport Consultant	Collett, *Grangemouth*
Local Facilities & Services	**Company/Venue**
Hall Hire for Public Exhibitions and Community Council Meetings	Boreland Village Hall Beattock Village Hall Johnstonebridge Community Centre Moffat Town Hall Wamphray Village Hall
Advertising	Eskdale and Liddesdale Advertiser Dumfries and Galloway Standard Annandale Herald
Accommodation	Kagyu Samye Ling Monastery and Tibetan Centre - *Eskdalemuir* Black Bull - *Moffat* The Famous Star Hotel - *Moffat* Best Western - *Lockerbie* Buccleuch Arms - *Moffat* Hartfell House - *Moffat*
Local Amenities	Buccleuch Centre – Langholm Rumblin' Tums – *Moffat* The Townhead Hotel – *Lockerbie* Annandale Services – *Johnstonebridge* Green Frog - *Moffat* Buccleuch Arms - *Moffat* Hartfell House - *Moffat*

Construction Phase

5.9.9 A significant investment of £530 million will be required to facilitate the development and construction of the wind farm.

5.9.10 The Applicant is committed to creating long-standing relationships with Scottish companies to construct wind farms and ensures a strong focus on Scotland. The Applicant operates a '*Buy Scottish*' policy which places a strong emphasis on employment and working with businesses in Scotland and the local region where the wind farm is located. This involves active engagement with Scottish civil, electrical and engineering contractors and suppliers to construct and maintain our wind farms.

5.9.11 CWL is proud to have worked with Scottish companies through recent projects as per the '*Buy Scottish*' policy and are committed to continue using Scottish companies to deliver Scoop Hill Community Wind Farm. Glasgow based Civil Contractors R J McLeod, amongst others, have constructed our operational wind farms and electrical connections have been undertaken by Scottish Power and Scottish Hydro; all utilising a Scottish-based workforce. Dumfries-based AMD Contract Services Limited constructed 14km of access tracks for Sanquhar Community Wind Farm and took on the main civil works contract (value of £2 million), enabling them to take on more staff and apprentices from the local area.

5.9.12 Steel turbine towers are fabricated in Campbeltown, Argyll and Bute, by CS Wind UK; they produced the towers for CWL's first wind farm in Dalry, North Ayrshire in 2006 and have provided them for the majority of CWL's operational schemes, including Sanquhar Community Wind Farm in 2017. This is further reinforced by the Memorandum of Understanding (MoU) that CWL entered in to with CS Wind UK, confirming that steel turbine towers will be sourced from them at their Campbeltown facility for all our future wind farm projects. The Applicant will be adopting this MoU to include Scoop Hill Community Wind Farm.

5.9.13 The Applicant will invite numerous Scottish civil, electrical and engineering contractors, to tender, with preference being given to companies based in Dumfries and Galloway as there will be a strong focus on using local civil and electrical companies.

5.9.14 In order to make Scottish companies and contractors aware of the opportunities Scoop Hill Community Wind Farm would provide, the Applicant will hold a '*Meet the Buyer*' event, whereby local and regional suppliers and sub-contractors will be invited to learn about the project, register their details on the Contractor's Database and confirm their potential for the supply of products and services for the construction of the wind farm.

5.9.15 Associated employment opportunities will also be made available for local people, through contracts for work such as fencing, road improvements/surfacing and local plant hire. Again, more information will be made available at the '*Meet the Buyer'* event, where companies and individuals can register their interest and confirm their services. The Applicant can also assist with linking jobseekers and apprentices with potential employers as part of the '*Buy Scottish*' initiative.

5.9.16 During the construction phase, the proposed Scoop Hill Community Wind Farm would support over 250 jobs, in both the construction and supply industry. As seen previously during the construction of Sanquhar Community Wind Farm, apprenticeships were provided to local people for plant hire operatives as undertaken by AMD Contract Services of Dumfries – this is an arrangement which the Applicant will strive to continue during the construction of Scoop Hill Community Wind Farm providing more opportunities for apprenticeships.

5.9.17 Table 5.8 outlines the work requirements during the construction period and the associated predicted economic benefits.

Table 5.8 – Predicted Services required during the construction period

Contractor/Required Services	Details
Accommodation	Personnel working on the construction of the wind farm will require the use of local accommodation providers. It is anticipated that 250 people would be involved with the construction of the site.
Ecological Clerk of Works, Site Engineer and other professionals	To oversee and manage the construction works, monitoring requirements etc. local professionals/consultants will be appointed for these positions.
Electrical switchgear design	The wind farm requires complicated electrical system design and expensive equipment to be installed. The Energy Storage Facility will also require design and installation.
Fencers	Any alterations or temporary dismantling of fences marking land boundaries will be corrected/reinstated by a local experienced fencer. Dry stone wallers may be required, along with providers of gates and cattle grids and styles for walking routes.
Fibre optic communication design	The wind farm requires high specification communication devices both on and off site.
Fuel supplies and delivery	Machinery used during construction will require fuel supplies provided by a local distributor. Along with fuel for construction personnel vans, cars etc.
Grid capacity study	A detailed capacity study will be undertaken to identify the best location to connect the wind farm to the local grid distribution network. This will be carried out by Scottish Power.
Local amenities	All workers during the construction period will require food, drink and other provisions, bringing trade to the local area.
Lightning protection survey and design	Electrical earthing studies will be required to analyse the conductivity of the soil and to design the correct lightning protection system.
Materials supply and delivery	Materials for the construction phase will be sourced from local suppliers where possible including bricks, mortar, sand, cement, concrete, stone, wood, steel, cabling, electricity poles, marker posts etc.
Meteorological mast installation	A company will be required to install the meteorological mast and monitoring equipment.
Power line design	All underground electrical cabling will need to be designed by a specialist company and accepted by Scottish Power, the Scottish Government and Dumfries & Galloway Council.
Track construction	New access tracks within the wind farm development and road improvements will be required. A local tarmac supplier will be required for local public road surfacing.
Security & Health and Safety	Security services may be required including CCTV cameras, security lighting and palisade security fencing. Fire alarms and extinguishers will also be required along with first aid kits and a defibrillator.
Signage	On-site signage will be required for the construction phase and information/display boards will be required on-site during the operational phase.
Sub-contractors	Electrical fitters, carpenters, painters & decorators, plumbers will be required during the construction phase for various tasks.
Substation design and construction	The substation houses all of the electrical and communications equipment and requires many sub-contractors and building supplies to complete it.
Turbine foundation design and construction	The final design of the foundations depends on the ground conditions and exact specifications. Local supplier required to mix and deliver concrete, or to construct and operate a temporary onsite batching plant.
Turbine manufacture and erection	Turbine manufacturer is to be confirmed, but potential suppliers include Siemens Gamesa, Vestas or Enercon.
Webcam design and installation	Webcam design/installation to be performed by a specialist company.

Operational Phase

5.9.18 Once the wind farm is complete and operational, investment to the local area and Scotland will continue. Over its 40-year operational life, over £1.8 billion will be invested into the local and Scottish economies which will include:

- Business Rates of £6.56 million to be paid to and Dumfries & Galloway Council;
- Operations and maintenance of the wind turbines including regular servicing;
- Operations and maintenance of electrical connection to the grid network;
- Funding for Community Benefits at £500,000 per annum.
- Creation of seven permanent jobs: six wind turbine technicians and one supervising engineer;
- Creation of four permanent jobs for an onsite maintenance crew to undertake onsite general maintenance works and habitat management;

- Requesting that any Civil contractor takes on and fully trains a minimum of six apprentices;
- Preference for employment and apprenticeships will be given to people from the local area, and then from the wider Dumfries and Galloway areas.

5.9.19 Furthermore, there will be additional indirect financial expenditure in terms of purchasing fuel, local accommodation and general amenities by the turbine engineers and the Applicant who will make regular visits to the site to monitor the wind farm's operation, for business purposes, meetings, as well as attending community events at the wind farm and in the local area.

5.9.20 The operation of Scoop Hill Community Wind Farm will create and deliver a direct, positive and long-term economic benefit to the local area.

Employment Opportunities

5.9.21 Scoop Hill Community Wind Farm would provide up to 11 new permanent jobs in the area, in the form of six wind turbine technicians and one supervisor engineer, to maintain and manage the wind turbines through its 40 year operational life, and a maintenance crew of four to maintain the wind farm site. This is in addition to the support and creation of permanent and temporary jobs arising from the project during construction, as described in the previous paragraphs.

5.9.22 The Applicant will also request that any Civil contractor takes on and fully trains a minimum of six apprentices, with preference given to people from the local area, and then from the wider Dumfries and Galloway areas. This will give school leavers and young adults from the community opportunities to learn new skills by working on local projects, gain qualifications and thus increases their employment opportunities in the area.

5.9.23 Due to the proposed size of the development and from experience of operating other wind farm developments, it is anticipated that works would be required throughout the year, and for the entirety of the operational phase, on a wide variety of different tasks and responsibilities.

5.9.24 While maintenance will be required on the civil aspect of the scheme such as roads and hardstands, it will also be required on the ecological assets such as habitats, watercourse crossings and other environment assets such as trees and shrubs. Therefore, there are opportunities for local contractors to tender for works maintaining such assets throughout the lifetime of the wind farm.

5.9.25 Throughout the wind farms operational lifetime, CWL will look to aid with creating jobs, whether directly or indirectly from the wind farm, with preference always given to local people.

5.10 Community Benefits

5.10.1 As a company, CWL are extremely proud to support a wide variety of local events, community groups, schools, charities and community initiatives as part of the community benefits packages from the company's seven operational wind farms.

5.10.2 Up to the end of August 2020, CWL have donated circa £5 million to the host communities of CWL's portfolio of onshore wind farm projects. Further information on the benefits which have already been provided to communities across Scotland is available in the separate 'Commitment to Communities' report which accompanies this EIAR.

5.10.3 The Applicant will continue CWL's commitment to communities and ensure that community benefits and assets are generated and implemented as part of Scoop Hill Community Wind Farm.

Community Funding and Assets for Scoop Hill Community Wind Farm

5.10.4 During the operation of the proposed Scoop Hill Community Wind Farm, the Applicant will provide £500,000 per annum for the community benefit fund and community projects. The funding will be provided to support the economic, environmental and social requirements of local residents, businesses and community groups throughout the 40-year operational lifetime of the wind farm.

5.10.5 Consultation has been held with the local authority, Community Councils, and community members, along with existing Development Trusts or local organisations, to discuss the funding and appropriate distribution amongst the host communities. This was done through scoping, public exhibitions and also through joint and individual presentations to the Community Councils. Further to this, Community Council Action Plans were reviewed, where publicly available, to give an idea of the deficiencies for specific community areas.

5.10.6 Further information on the proposed community assets is provided in the 'Commitment to Communities' report which accompanies the EIAR.

5.10.7 The Applicant will continue to liaise with local people and communities throughout the development process of the wind farm and will look to move forward with further material benefits to the local host communities.

5.11 Educational Benefits

5.11.1 A key ethos for the Applicant and CWL is the education and training of local people to provide them with knowledge and skills for the future. This in turn assists them with seeking employment and improving the socio-economic levels of the local area.

5.11.2 Through their '*Buy Scottish*' policy and working partnerships with a variety of companies and organisations, the Applicant and CWL will, through the development of Scoop Hill Community Wind Farm, commit to supporting education and training resource requirements for residents of the local host communities for the lifetime of the wind farm.

5.11.3 A summary of each educational aspect surrounding CWL wind farms follows. For a full and detailed description, please see the 'Commitment to Communities' report which accompanies the EIAR.

Educational Wind Farm Site Visits

5.11.4 CWL already offer guided site visits for local schools and groups in conjunction with their operational wind farms, which enable the wind farm and its surrounding environments and habitats to be used as a teaching resource for pupils of all ages and abilities, and for adult groups who want to learn more about wind farms. This would be a service that is rolled out at Scoop Hill Community Wind Farm, once the wind farm is operational, so local schools and other groups can arrange to have a guided visit around Scoop Hill Community Wind Farm site and learn about wind farms and renewable energy.

Primary and Secondary Schools

5.11.5 CWL value the creation of working relationships with local schools in conjunction with their operational wind farms. Plates 5.5 to 5.8 show examples of their previous work with various schools in Scotland.

5.11.6 As part of CWL's ongoing commitment to the local communities and education, engagement with local schools has already commenced and we would look to create working partnerships and MoUs with these

schools which are located in Moffat, Lockerbie and Boreland to bring the educational benefits to a wider region.

Working Partnerships with Colleges

5.11.7 In conjunction with the company's operational wind farms in North Ayrshire, a long term partnership has been established with West College Scotland and Ayrshire College that offers engineering students a two week work placement with CWL, designed to teach both the 'Project' and 'Technical' aspects of the Company and our portfolio of wind farms.

5.11.8 The work placements are designed for students on engineering courses who wish to pursue careers within the renewable energy industry. The placements cover different areas of the business, including working with live data from our operational wind farms and project development such as wind farm site design and constraints assessments.

5.11.9 Following the success of these partnerships, CWL is seeking to establish a similar working partnership with Dumfries and Galloway College in Dumfries, in association with the proposed Scoop Hill Community Wind Farm. Dialogue is already underway with representatives at Dumfries College to discuss the potential opportunities for educational and employability presentations at their campuses.

Developing the Young Workforce (DYW) Dumfries and Galloway

5.11.10 In conjunction with Developing the Young Workforce (DYW) Dumfries and Galloway, careers related presentations were delivered for students of Wallacehall Academy and Dumfries and Galloway College in September 2018.

5.11.11 Following on from the partnership work in 2018, CWL continue to work alongside DWY Dumfries and Galloway to deliver effective career events and provide educational benefits. For example, CWL attended Work Ready events at Moffat Academy and Langholm Academy in September 2019.

5.11.12 These talks provided pupils and students with an insight into careers in the renewable energy sector. The Applicant will strive to continue working with DYW Dumfries and Galloway, in order to bring similar educational and careers presentations to the schools and colleges in the wider area of Dumfries and Galloway in which Scoop Hill Community Wind Farm will lie.

5.11.13 CWL are continuing to work with DYW Dumfries and Galloway to look at way's companies can work with schools and colleges post Covid-19. Work is ongoing to providing a virtual wind farm visit, organising online webinars for students and teachers and offering online sessions, such as Q&As with CWL staff and an insight in the renewable energy industry, to schools as CWL staff are unable to visit schools given the current restrictions.

Educational Presentations

5.11.14 Educational presentations are also available for after school clubs, youth groups, local adult groups and any other community groups as desired by group leaders and members. Topics for the presentations can be on any subject related to the environment and are not limited to wind energy, but can include all types of renewable energy sources, energy efficiency, climate change, recycling, the environment, sustainability and Eco-Schools initiatives. The Applicant is also keen to support local schools who are trying to achieve Eco School Status and thus be more environmentally friendly.

5.11.15 As mentioned above, careers related presentations are also available and have already been deployed through partnership work with DYWDG's Work Ready days. Through the progression of Scoop Hill Community Wind Farm, CWL will ensure this service will continue to be offered to local schools and colleges in the area including but not limited to: Lockerbie Academy and Primary; Applegarth Primary School; Hutton Primary School and Moffat Academy.

5.11.16 The secondary school presentations CWL have provided, such as at Lockerbie Academy, focused on careers and the process of developing a wind farm. Talking about careers in the renewable energy sector is important for students to see how their interests and classroom subjects could link to lots of different careers. We have also delivered sessions on turbine placement using different computer programmes and chaired debates between students on topics relating to climate change and renewable energy.

5.11.17 CWL have already demonstrated their commitment to educational benefits in the surrounding areas of Scoop Hill Community Wind Farm and this engagement and support will continue throughout the development and operational phases of the project.

5.12 Environmental Benefits

Renewable Energy Provision and CO_2 Savings

5.12.1 Scoop Hill Community Wind Farm will have an installed generating capacity of 525 MW and therefore would be able to generate electricity for over 572,000 homes for each year of its 40-year operational life. This will contribute substantially to renewable electricity targets and net-zero carbon targets by 2025 for the Dumfries and Galloway Council area as well as Scotland as a whole.

5.12.2 Scoop Hill Community Wind Farm is anticipated to annually prevent around 931,000 tonnes of CO_2 (equivalent to over 37 million tonnes of CO_2 over the 40-year operational lifetime) from being emitted into the atmosphere, which would otherwise be emitted if a coal or gas-fired power station was used to generate the electricity. Therefore, due to there being less CO_2 released into the atmosphere, it will not contribute to the acceleration of climate change and will help to slow down the predicted impacts of climate change.

5.12.3 For a more detailed breakdown of the environmental benefits, please see Section 2: Detailed Project Description. For further information relating the Dumfries and Galloway Climate Action Plan, please see Section 4: Renewables, Planning and Policy.

5.13 Summary

5.13.1 An assessment of the proposed wind farm's effect on socio-economics has been undertaken, including impacts on recreation and tourism, land use, employment, the economy, public safety and public access during the construction, operation and decommissioning of the proposed wind farm. A summary of the likely impacts, mitigation, and the residual impact can be found in Table 5.9.

5.13.2 During the construction and decommissioning phases, it is considered that a minor positive impact will arise as a result of direct and indirect employment. It is anticipated that a temporary workforce of 250, would be utilised during the construction phase, of which a majority would be sourced from within the local region. Indirect employment as a result of supply chain benefits for local businesses, sub-contacted work relating to the transportation of labour and materials and expenditure by construction employees in the local economy is considered to represent a minor positive impact. In order to ensure positive benefits for the local area

during construction of the proposed wind farm, CWL will seek to use local labour, manufacturers and suppliers wherever possible.

5.13.3 The potential for impacts to commercial activities on site, risk to public safety and restrictions to public access have also been identified during the construction, decommissioning and operation phases. However, the residual significance of such issues is considered negligible. Construction actives will be controlled and manged through a CEMP which will identify measures to mitigate against the identified potential impacts. During operation, the proposed wind farm will be operated in accordance with the highest levels of operational safety measures, and residual impacts on public safety are considered highly unlikely.

5.13.4 Once the proposed wind farm is operational, the potential for adverse impacts on tourism and recreation have been identified. Perceptions and attitudes towards wind farms have been subject to may studies and discussions over the years. However, as summarised in a University of Edinburgh report (2012), approximately 86% of those who did this survey and who were aware of the wind farms, either left the area with a more positive impression because of their presence, or felt that the wind farms made no difference to their overall impression of the area.

5.13.5 Whilst it is hard to provide a definitive judgement, in light of the discussion above, impacts on tourism and recreation due to the operation of the wind farm are considered to be of minor significance. And can be either positive or negative, depending on personal opinions.

5.13.6 Direct and indirect economic impacts during the operation phase of the proposed wind farm as a result of direct and indirect employment, business rates and a community benefit fund have also been identified. These are considered to be of positive significance.

Table 5.9 Summary of Potential Impacts of the proposed wind farm, Mitigation and Residual Impacts

Likely Significant Impact	Mitigation proposed	Outcome/Residual Impact
Construction and Decommissioning		
Direct employment	CWL will seek to ensure positive benefits for the local area by using local labour, manufacturers and suppliers, as per their "Buy Scottish" policy.	Minor, Positive
Indirect employment	CWL will seek to ensure positive benefits for the local area by using local labour, manufacturers and suppliers, as per their "Buy Scottish" policy.	Minor, Positive
Disturbance of commercial activities onsite	Minimise disruption through appropriate construction phasing.	Minor, adverse
Risk to public safety	The construction of the proposed wind farm will be subject to the requirement of the Construction Regulation 2007. Best practice health and safety guidelines published by the Renewable UK (2015a) will be adhered to and speed limits will be put in place to regulate traffic flows.	Negligible
Public Access	Paths will be temporarily diverted where possible. Relevant notification and signage during construction and decommission.	Negligible
Operation		
Recreation and Tourism	None required	Minor, positive or negative
Direct economic	None required	Minor, positive
Indirect economic – indirect employment and increased spending	None required	Minor, positive
Public safety	CWL is an experienced wind farm developer and operator and will adhere to the highest standards of operational safety.	Negligible
Public Access	The affect paths during construction, will return to normal use with parts of the routes consisting of upgraded tracks. Introduction of a new 'Wind Farm Walk' and a 'Visitor Centre' to add information about the wind farm and the surrounding area.	Minor, positive

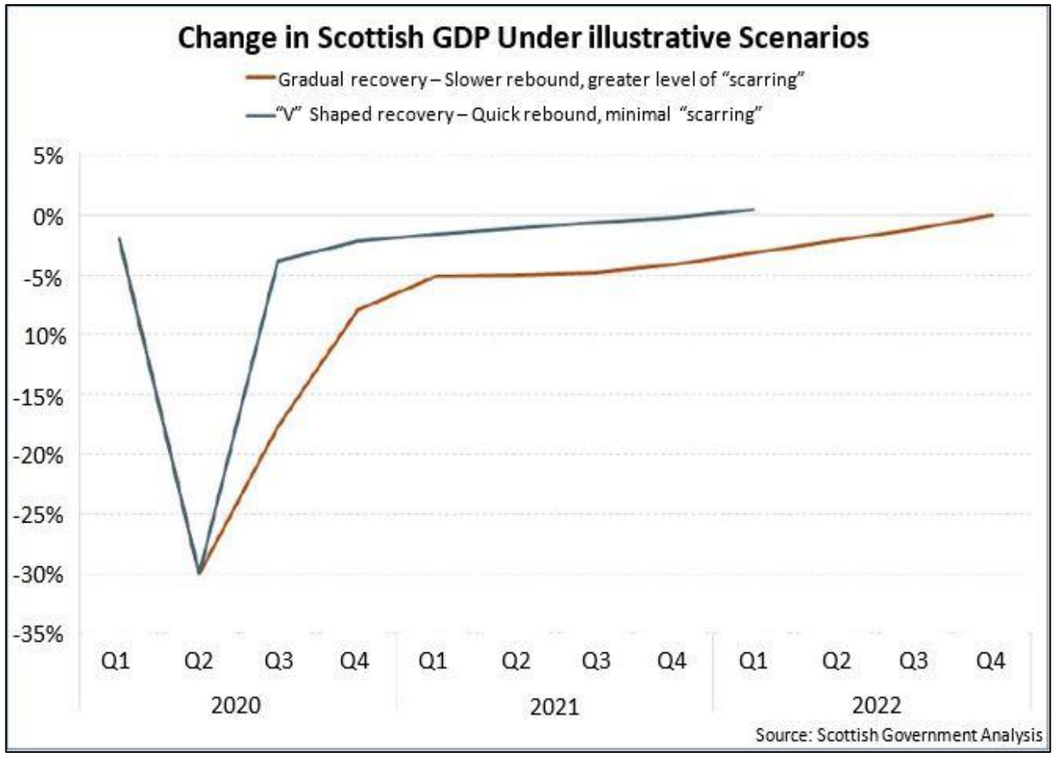
5.14 Economic Prospects

5.14.1 The onset of the COVID 19 pandemic has triggered a monumental social and economic shock. The UK economy has now suffered its biggest slump on record between April and June 2020 as coronavirus lockdown measures pushed the country officially into recession. At the time of submission Scotland's GDP was 17.6% below the level in February 2020, while the UK's GDP as a whole has reduced by 17.2% compared with February 2020. Unemployment levels are rising and there is a marked decline in confidence in Scotland's economic outlook.

5.14.2 This now dictates that a renewed focus on establishing a robust economy matters more than ever. The report 'Towards a robust resilient wellbeing economy for Scotland' published in June 2020 by the Advisory Group on Economic Recovery states '*the Scottish Government's most recent assessment of the impact on the Scottish economy by the Chief Economist in June 2020 suggests a fall in GDP in Scotland of a third over the current period of distancing and 14% over the year. The Scottish Government's scenario analysis suggests unemployment could reach 10% later in 2020'.*

5.14.3 This report presents a number of statistical illustrations showing the effects of the economic downturn. One example is presented below (Chart 5.1) in which two economic recovery scenarios are presented. The first scenario a 'V-Shaped Recovery' presents a sharp fall in GDP and then a strong recovery; where unemployment rises to 10% in late 2020, before returning to pre-pandemic levels after around a year.

Chart 5.1 Change in Scottish GDP

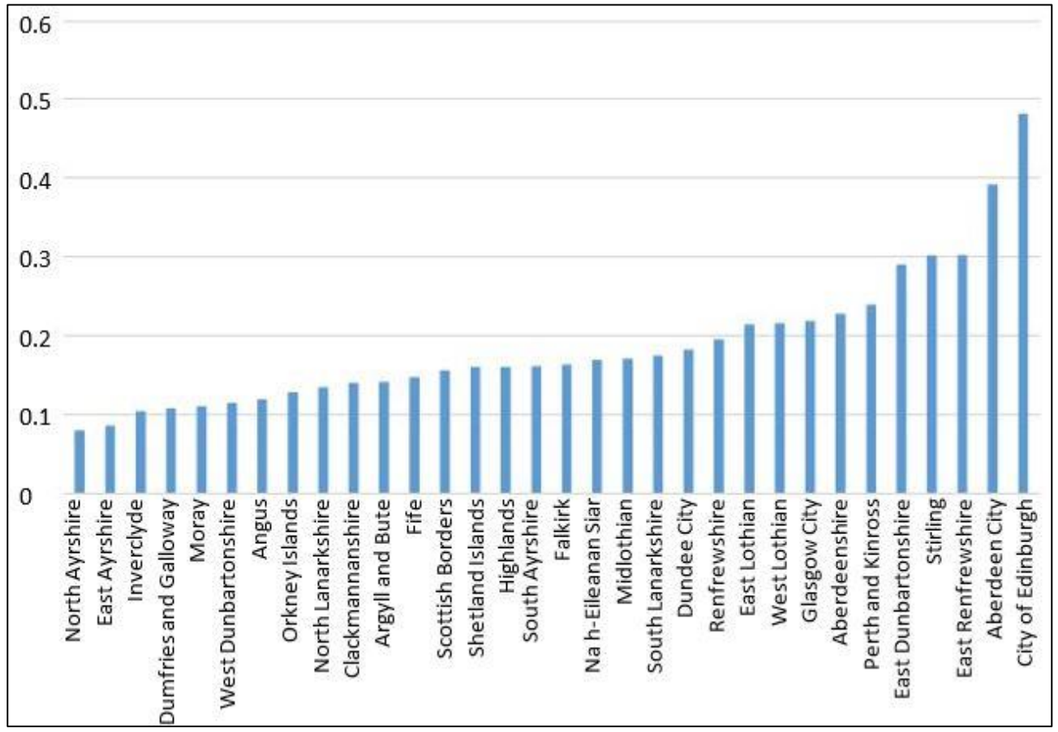


5.14.4 In the second scenario, 'Gradual Recovery', a greater degree of scarring is assumed and sectors recover at different speeds as restrictions are gradually lifted. Despite both scenarios having the same profile up to 2020 Q2, the medium-term pathway looks very different. In the 'Gradual Recovery' scenario, the slower rebound in demand causes the short-term downturn to be more protracted, and more importantly the greater degree of scarring means economic output does not recover to pre-crisis levels until the start of 2023.

5.14.5 The report describes how the Scottish Government has developed an index to assess relative resilience of local authorities across Scotland which considers the business base, existing deprivation and income levels, digital connectivity and productivity, factors which are likely to make areas more resilient to shocks.

5.14.6 Figure 5.2 below presents the potential resilience of areas based on pre-crisis characteristics. It does not account for the relative severity of the impacts that regions will face, for example due to sectoral exposure, however what is clear is that there is wide divergence in exposure to resilience and that Dumfries and Galloway would appear to have a low level of resilience.

Chart 5.2 Index of Regional Resilience



5.14.7 The Report makes a number of recommendations that will make the most immediate impact on the course of Scotland's Recovery, supporting jobs, protecting and developing education and skills and thereby also tackling inequality. Many of the recommendations are directed at the Scottish Government. Paragraph 5.11 makes specific reference to the 'prioritisation and delivery of green investments' and states: *'there is also now an opportunity for Scotland to lever some of its natural advantages: the almost limitless quantities of renewable energy potential from wind, wave and tidal power can be used to generate electricity surpluses to export to the rest of the UK and elsewhere and to generate 'green' hydrogen to be used in both the heat and transport sectors.'*

5.14.8 The Scottish Council for Development and Industry (SCDI) has published (30 June 2020) its plan for a Green Recovery from the COVID-19 crisis with a call for the Scottish and UK governments to deliver an ambitious 'green stimulus' to kick-start the economy, create new green jobs and fuel 'clean growth' It makes a number of recommendations that can deliver rapid recovery.

5.14.9 One such recommendation states: 'planning authorities should implement a new 'net-zero presumption in favour', alongside other reforms and incentives, for low- or zero-carbon Place-making, infrastructure and development which is essential to achieving net-zero, like new active travel routes, onshore wind farms, pumped storage hydro or sustainable housing. By accelerating the approval and delivery of plans and projects which meet the highest environmental standards, Scotland can also help the housing and construction sectors to recover and decarbonise.'

5.15 Testimonials

Employment Benefits

5.15.1 CWL's work with CS Wind UK has been invaluable for the company, ensuring jobs and investment are retained in the local area. The nine Scottish Steel turbine towers for Sanquhar Community Wind Farm from the CS Wind UK Campbeltown facility were secured early, to help fill a production gap in CS Wind's work programme. Lesley Black, UK Sales and Marketing Manager at CS Wind UK commented:

'We are delighted to have signed another order to supply towers for a Community Windpower project… The support from Community Windpower to secure this order to be manufactured in Scotland and their working together with Vestas to bring the timing of the project forward to help with any order gaps, is invaluable.'

5.15.2 AMD Contract Services Limited have been similarly grateful for the income and employment opportunities created by CWL. Director of AMD, Fraser Dykes, has stated:

"Thanks to renewable energy projects, and in particular, the work involved on Sanquhar Community Wind Farm, we have not only survived the Recession but have seen our company expand and develop. Community Windpower gave us the opportunity to take on the major civil works contract for their wind farm, something which is normally offered to bigger companies. Through this opportunity we have been able to provide a significant boost to the local economy, and train up members of the local community."

Community Benefits

5.15.3 The community benefits delivered by CWL's operational wind farms have been extremely well received by the local host communities. As part of the community benefits for Millour Hill Community Wind Farm, £100,000 was donated to fund construction of the Girlguiding Ayrshire North Activity Centre. Betty Wilson, Guide Leader for the North Ayrshire Guides, has shared her appreciation:

'Community Windpower's donations and input should not be underestimated. Without them this would not have happened… North Ayrshire Guides can't thank the Community Windpower team and members of the Trust enough.'

5.15.4 Many residents have expressed their gratitude to CWL for the community benefits already provided to local communities as part of the fund for the operational Sanquhar Community Wind Farm, particularly the sponsorship of Sanquhar's annual Riding of the Marches event:

"Thanks once again for your support to the Riding of the Marches".

5.15.5 A representative from the Nithsdale Times, praised the *'important part Community Windpower has played in the daily running of our newspaper'*:

"From the start, Community Windpower were active and with a grant from them which assisted in obtaining the necessary equipment the "Nithsdale Times" has continued to this day. We are currently working on Edition 122 which, for a fortnightly magazine is an indication of its success. In every edition, there is a strip with the words: "The Nithsdale Times is grateful to the generosity of Community Windpower and Element Power for their support".

Educational Benefits

5.15.6 CWL work in partnership with Developing the Young Workforce Dumfries and Galloway (DYWDG). Programme Manager at DYWDG, Justin Thomas, commented that:

DYWDG "*is delighted to be working closely with Community Windpower to inform our region's young people about this sector which will carry hundreds of them into exciting and prosperous careers"* through the successful educational presentations at Wallacehall Academy and D&G College.

Furthermore, the Applicant *"continues to build on its success, taking advantage of technological advances to ensure a continuous, sustainable industry for the future"* and will do so for Scoop Hill Community Wind Farm.

5.15.7 CWL have already committed fully to providing educational benefits in the area of the Development. CWL funded a trip for the entire Beattock Primary School pupils to visit the operational Sanquhar Community Wind Farm. This included an interactive workshop on climate change, energy and wind farms. Following its success, Beattock Primary School's Class Teacher, Lisa Young, stated:

"Our school thoroughly enjoyed our workshops and wind farm visit. The pupils learned a lot about renewable energy, climate change and how a turbine works. Community Windpower presenters were engaging and provided practical activities which ensured that the concepts were understood by all pupils. The pupils were in awe of the turbines and it made the learning experience more meaningful when we were on-site. Our pupils also interviewed the staff about their jobs and careers in this industry, therefore it was also a good opportunity for the pupils to learn about the world of work. We feel very fortunate to have established a partnership with Community Windpower who are keen to support us with future projects to help our pupils learn about Energy."

5.15.8 CWL has also received excellent feedback regarding the work placements held for students of Ayrshire College. Below are some examples of the comments received from students who have participated in the scheme:

"The two week placement with Community Windpower gave me a better understanding of the bigger picture i.e. locations, types of turbines used for those environments, which company has which responsibility, availability and costs etc. I did learn a lot when I was on the placement in relation to the planning and operation of windfarms." – Andrew Brown, former student.

"The placement with CWL gave me an invaluable insight into the planning and operation of windfarms in Ayrshire. Although employed as a service technician within the industry the experience at CWL helped me understand other aspects of the industry" – Miren Basabe-Kerr, former student.

"I took full advantage of the opportunity given to me to learn more about the wind turbine industry. The experience gained while working with the team at Community Windpower will help me as I work towards my goal of gaining employment within the sector" – Hamad Rafiq, Progressed to HNC Electrical Engineering at Ayrshire College.

5.15.9 The Applicant will continue CWL's ongoing commitment to local groups, communities, schools and businesses. Further information can be found in the Commitment to Communities Report, which supports this planning application.

5.16 Conclusion

5.16.1 This assessment presented an overview of the current socio-economic status of Dumfries and Galloway, along with the potential benefits resulting from the development of the proposed Scoop Hill Community Wind Farm and the Developer's *'Buy Scottish'* policy which would be implemented.

5.16.2 This report also discussed the tourism and recreational industries of Dumfries and Galloway, as a key component of the local economies, along with an assessment of any possible effects from the proposed development.

5.16.3 This report included information on the factors of Population, in line with Regulation 4(3) of The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017. However, elements of this are also discussed in other sections of this EIAR where applicable, such as Section 11: Noise, and Section 14: Other Considerations.

5.16.4 Finally this assessment assesses the future prospects of the Scottish economy in light of the COVID 19 crisis and makes reference to recent guidance presented to the Scottish Government on actions that could enable a swift economic recovery. One such action presented to the Scottish Government relates specifically to renewable energy potential from wind power that can be used to generate electricity surpluses to export to the rest of the UK and elsewhere and to generate 'green' hydrogen to be used in both the heat and transport sectors.

5.16.5 Scoop Hill Community Wind Farm would have a positive impact on the socio-economic status in the area of Dumfries and Galloway, by creating employment and training opportunities thus helping to reduce unemployment rates; investing in the local economy; providing education and careers advice to local schools and colleges; and investing in community assets to improve the local area's access to services and facilities. Finally, the proposed development of a 'Visitor Centre' and 'Multi purpose Wind Farm Walk' will create a tourist facility capable of supporting the local economy and delivering a long term legacy.

References

Bartlett, D. and Celliers, L. 2017. *Geoinformatics for Marine and Coastal Management.* CRC Press.

Bhatia, S.C. 2014. *Advanced Renewable Energy Systems.* Woodhead Publishing India Pvt. Ltd.

BiGGAR Economics. 2017. *Wind Farms and Tourism Trends in Scotland.* [ONLINE] Available at: https://biggareconomics.co.uk/wp-content/uploads/2020/01/Wind-farms-and-tourism-trends-in-Scotland.pdf

Climate X Change. 2015. *Comparative Review of Methodologies for Assessing Wind Farms' Impact on Tourism*. [ONLINE] Available at: https://www.climatexchange.org.uk/media/1688/wind_farms__tourism_-_march_2015.pdf [Accessed 12 May 2020];

Dumfries and Galloway Council. 2016. *Dumfries and Galloway Regional Tourism Strategy 2016 - 2020.* [ONLINE] Available at: http://www.dumgal.gov.uk/article/16714/Regional-Tourism-Strategy. [Accessed 7 May 2020];

Dumfries and Galloway Council. 2019. *Dumfries and Galloway Local Development Plan 2.* [ONLINE] Available at: https://www.dumgal.gov.uk/media/21885/Adopted-Local-Development-Plan-2/pdf/Adopted_LDP2_OCTOBER_2019_web_version.pdf?m=637060550180970000 [Accessed 11 May 2020];

Eskdalemuir Community Council. 2013. *Upper Eskdale Development Group Business Plan and 5 Year Trading Forecast.* [ONLINE] Available at: http://btckstorage.blob.core.windows.net/site2164/Website%202013-15/Business%20Plans%202013/Business%20Plan%20July%202013%20update.pdf [Accessed 11 May 2020];

Moffat Centre. 2008. *The Economic Impacts of Wind Farms on Scottish Tourism.* [ONLINE] Available at: https://www2.gov.scot/resource/doc/214910/0057316.pdf [Accessed 12 May 2020];

Moffat and District Community Council and Kirkpatrick Juxta Community Council. 2016. *Moffat and Beattock Community Action Plan.* [ONLINE] Available at: https://issuu.com/nwplanning/docs/moffat_beattock_cap_2016 [Accessed 11 May 2020];

National Records of Scotland. 2020. *Dumfries and Galloway Council Area Profile*. [ONLINE] Available at: https://www.nrscotland.gov.uk/files/statistics/council-area-data-sheets/dumfries-and-galloway-council-profile.html#household_projections. [Accessed 7 May 2020];

NOMIS. 2020. *Labour Market Profile - Dumfries And Galloway*. [ONLINE] Available at: https://www.nomisweb.co.uk/reports/lmp/la/1946157410/report.aspx. [Accessed 16 September 2019];

Office for National Statistics. 2010. *Standard Occupational Classification*. [ONLINE] Available at: https://www.ons.gov.uk/file?uri=/methodology/classificationsandstandards/standardoccupationalclassificationsoc/soc2010/soc2010volume1structureanddescriptionsofunitgroups/soc2010volume1webtcm77181317.pdf [Accessed 7 May 2020];

Renewable UK. 2015. *Onshore Wind: Economic Impacts in 2014*. [ONLINE] Available at: https://cdn.ymaws.com/www.renewableuk.com/resource/resmgr/publications/reports/onshore_economic_benefits_re.pdf. [Accessed 13 May 2020];

Renewable UK. 2015a. *Onshore Wind Health and Safety Guidelines.* [ONLINE] Available at: https://cdn.ymaws.com/www.renewableuk.com/resource/collection/AE19ECA8-5B2B-4AB5-96C7-ECF3F0462F75/OnshoreWind_HealthSafety_Guidelines.pdf [Accessed 14 May 2020];

Scottish Government. 2020a. *Scottish Index of Multiple Deprivation 2020* [ONLINE] Available at: https://www.gov.scot/collections/scottish-index-of-multiple-deprivation-2020/ [Accessed 7 May 2020];

Scottish Government. 2020b. *Scottish Index of Multiple Deprivation 2020v2 data zone lookup file.* [ONLINE] Available at: https://www.gov.scot/publications/scottish-index-of-multiple-deprivation-2020v2-data-zone-look-up/ [Accessed 7 May 2020];

Scottish Government. 2020c. *Scottish Index of Multiple Deprivation 2020v2: indicators.* [ONLINE] Available at: https://www.gov.scot/publications/scottish-index-of-multiple-deprivation-2020v2-indicator-data/ [Accessed 19 May 2020];

Scottish Government, *Gross Domestic Product (GDP) Monthly Estimate: June 2020.* [ONLINE] Available at: https://www.gov.uk/government/news/scottish-gdp-figures-june-2020#:~:text=The%20estimates%20show%20Scotland's%20economic,June%20and%202.3%25%20in%20May. [Accessed 21/10/2020].

NatureScot. 2018. *Scotland's networks of paths and trails: key research findings.* [ONLINE] Available at: https://www.nature.scot/sites/default/files/2018-09/Research%20Consolidation%20Report.pdf [Accessed 14 May 2020];

UNESCO. 2012. *Galloway and southern Ayrshire*. [ONLINE] Available at: http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/europe-north-america/united-kingdom-of-great-britain-and-northern-ireland/galloway-and-southern-ayrshire-biosphere/ [Accessed 18 May 2020];

The University of Edinburgh. 2012. *Tourism Impact of Wind Farms.* [ONLINE] Available at: http://www.parliament.scot/S4_EconomyEnergyandTourismCommittee/Inquiries/20120426_uni_of_ed.pdf [Accessed 13 May 2020];

VisitScotland. 2016. *Dumfries and Galloway: Destination and Maps.* [ONLINE] Available at: https://www.visitscotland.com/destinations-maps/dumfries-galloway/ [Accessed 12 May 2020]

VisitScotland. 2019. *Insight Department: Visitors to Dumfries & Galloway.* [ONLINE] Available at: https://www.visitscotland.org/binaries/content/assets/dot-org/pdf/research-papers-2/regional-factsheets/dumfries-and-galloway-factsheet-2018.pdf [Accessed 12 May 2020].

East Renfrewshire
North Lanarkshire
Midlothian
South Lanarkshire
East Ayrshire
Scottish Borders
Dumfries and Galloway
Northumberland
Carlisle District (B)
Allerdale District (B)
Eden District

255000 270000 285000 300000 315000 330000 345000 360000 375000

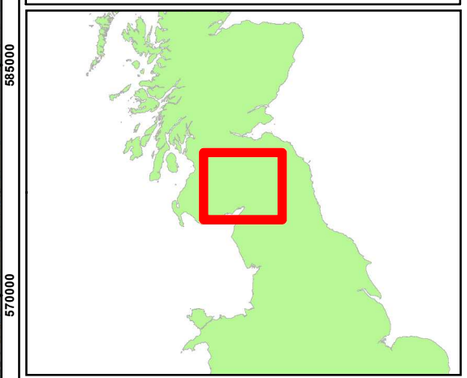
645000 630000 615000 600000 585000 570000 555000

374 Scoop Hill

Legend

- Site Location
- Council Area Boundary

Notes:
Central coordinates for the site are: 316498, 596716
Revisions: N/A



0 3,750 7,500 15,000 m

Scale: 1:400,000 @ A3

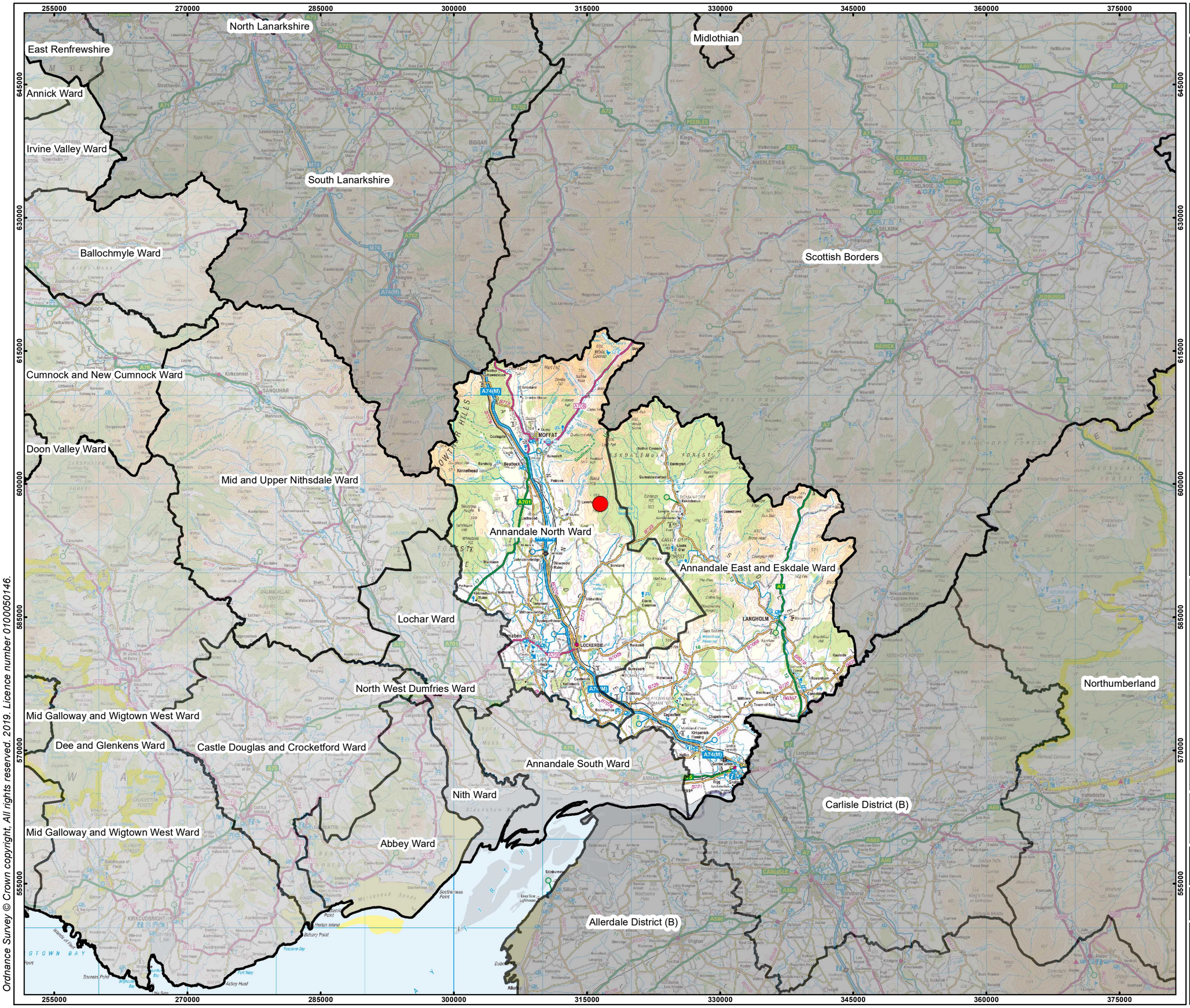
N

Figure 5.1: Council Areas

Date: 08/04/2020 Ref: 374-190823-7178-A

Produced: RE Reviewed: DR Approved: GC

community windpower
Godscroft Lane
Frodsham - WA6 6XU
t: 01928 734544 f: 01928 734790
e: info@communitywindpower.co.uk w: www.communitywindpower.co.uk

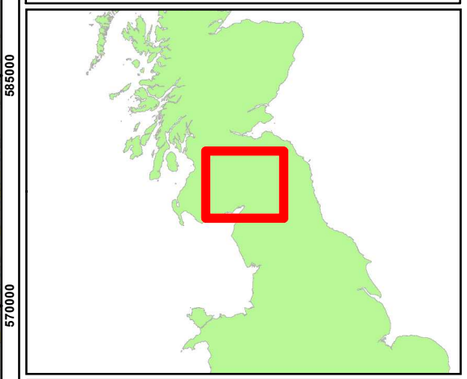


374 Scoop Hill

Legend

- Site Location
- Ward Area Boundaries

Notes:
Central coordinates for the site are: 316498, 596716
Revisions: N/A



0 3,750 7,500 15,000 m

Scale: 1:400,000 @ A3

N

Figure 5.2: Ward Areas

Date: 08/04/2020		Ref: 374-190823-7179-A
Produced: RN	Reviewed: DR	Approved: GC

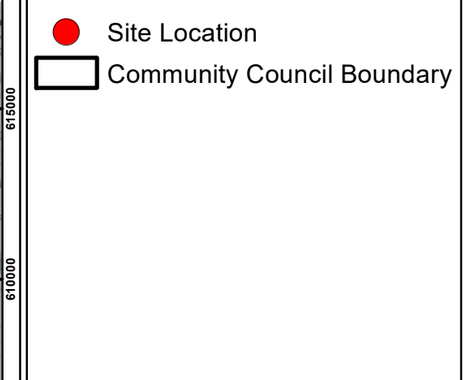
community windpower
Godscroft Lane
Frodsham - WA6 6XU
t: 01928 734544 f: 01928 734790
e: info@communitywindpower.co.uk w: www.communitywindpower.co.uk

374 Scoop Hill

Legend

- Site Location
- Community Council Boundary

Notes:
Central coordinates for the site are: 316498, 596716
Revisions: N/A



0 1,250 2,500 5,000 m

Scale: 1:180,000 @ A3

N

Figure 5.3: Community Council Areas

Date: 08/04/2020 Ref: 374-190823-7180-A

Produced: RE Reviewed: DR Approved: GC

community windpower
Godscroft Lane
Frodsham - WA6 6XU
t: 01928 734544 f: 01928 734790
e: info@communitywindpower.co.uk w: www.communitywindpower.co.uk

374 Scoop Hill

Legend

Site Boundary

Data Zones

- S01007640
- S01007641
- S01007642
- S01007643
- S01007644
- S01007645
- S01007646
- S01007655

Notes: N/A
Revisions: N/A
Layout: 374-191212-9018

0 2,000 4,000 8,000 m

Scale: 1:160,000 @ A3

N

Figure 5.4: SIMD Data Zones

Date: 21/05/2020	Ref: 374-200521-7300-A	
Produced: DW	Reviewed: SM	Approved: GC

community windpower
Godscroft Lane
Frodsham - WA6 6XU
t: 01928 734544 f: 01928 734790
e: info@communitywindpower.co.uk w: www.communitywindpower.co.uk

374 Scoop Hill

Legend

- Site Boundary

Potential Wind Farm Route

- A
- A & B
- B
- C
- D
- D & Route to Visitor Centre
- Route to Visitor Centre
- Potential Notice Board Locations
- Core Paths & Public Rights of Way
- Wind Turbines
- Permanent Met Masts
- Access Tracks

Notes: N/A
Revisions: N/A
Layout: 374-191212-9018

0 500 1,000 2,000 m
Scale: 1:50,000 @ A3

N

Figure 5.5: Potential Multi-Use Wind Farm Path Routes

Date: 23/01/2020		Ref: 374-200123-7221-C
Produced: DW	Reviewed: RE	Approved: GC

community windpower
Godscroft Lane
Frodsham - WA6 6XU
t: 01928 734544 f: 01928 734790
e: info@communitywindpower.co.uk w: www.communitywindpower.co.uk

Plate 5.1 - Public Exhibition Display Boards at Boreland Village Hall, Dumfries and Galloway, 23rd July 2019

Plate 5.2 – Public Exhibition Display Boards at Moffat Town Hall, Dumfries and Galloway, 24th July 2019

Plate 5.3 – Public Exhibition Display Boards at Wamphray Village Hall, Dumfries and Galloway, 24th July 2019

Plate 5.4 – Community Council presentation at Moffat Town Hall, Dumfries and Galloway, 25th February 2020

374 Scoop Hill

Date: 18/05/2020 Ref: 374-200518-7297

Produced: DW Reviewed: SM Approved: GC

community windpower
Godscroft Lane
Frodsham - WA6 6XU
t: 01928 734544 f: 01928 734790
e: info@communitywindpower.co.uk w: www.communitywindpower.co.uk

Plate 5.5 – CWL's educational trip to Sanquhar Wind Farm with Beattock Primary School, October 2019

Plate 5.6 – Steve Milburn, Senior Project Manager at Community Windpower, with students at Langholm Academy, 29th January 2020

Plate 5.7 – Community Windpower Projects Assistant, Rebecca Elliott, presenting the children of Beattock Primary school with their new iPads

Plate 5.8 – CWL Educational Ranger, Pete Boustead, taking part in Sanquhar Primary School's Gardening Day

Date: 18/05/2020 Ref: 374-200518-7298

Produced: DW Reviewed: SM Approved: GC

community windpower
Godscroft Lane
Frodsham - WA6 6XU
t: 01928 734544 f: 01928 734790
e: info@communitywindpower.co.uk w: www.communitywindpower.co.uk

Plate 5.9 – Civil contractor - Local Scottish company, AMD of Dumfries

Plate 5.10 – Civil contractor - Local Scottish company, Windhoist, Irvine

Plate 5.11a – Principal Contractor - Scottish-based Collett Transport, appointed to transport the turbine sections for Sanquhar Community Wind Farm

Plate 5.11b – Principal Contractor - Scottish-based Collett Transport, appointed to transport the turbine sections for Sanquhar Community Wind Farm

Date: 18/05/2020 Ref: 374-200518-7299

Produced: DW Reviewed: SM Approved: GC

community windpower
Godscroft Lane
Frodsham - WA6 6XU
t: 01928 734544 f: 01928 734790
e: info@communitywindpower.co.uk w: www.communitywindpower.co.uk