

Contents

16.	Socio-economics	16-1
16.1	Introduction	16-1
	Limitations and assumptions	16-1
16.2	Relevant legislation, planning policy and technical guidance	16-2
	Legislation	16-2
	Planning Policy	16-2
	Technical Guidance	16-5
16.3	Consultation and Engagement	16-5
	Overview	16-5
	Scoping Direction	16-5
	Technical Engagement	16-6
16.4	Data gathering methodology	16-6
	Study area	16-6
	Desk Study	16-7
	Survey work	16-9
16.5	Overall baseline	16-9
	Current baseline	16-9
	Future baseline	16-24
16.6	Embedded measures	16-25
16.7	Scope of the assessment	16-28
	The Proposed Development	16-28
	Spatial Scope	16-28
	Temporal Scope	16-29
	Likely significant effects	16-29
16.8	Assessment methodology	16-30
	Significance evaluation methodology	16-30
16.9	Preliminary assessment of socio-economic effects: Climate change and energy security	16-32
	Baseline conditions	16-32
	Predicted effects and their significance	16-32
16.10	Preliminary assessment of socio-economic effects: Economy and community	16-33
	Baseline conditions	16-33
	Predicted effects and their significance	16-34
16.11	Preliminary assessment of socio-economic effects: Tourism and recreation	16-35
	Baseline conditions	16-35
	Predicted effects and their significance	16-35
16.12	Preliminary assessment of socio-economic effects: Land use	16-37
	Baseline conditions	16-37
	Predicted effects and their significance	16-37
16.13	Preliminary assessment of cumulative (inter-project) effects	16-38
	Overview	16-38
	Cumulative socio-economic effects	16-39
16.14	Preliminary significance conclusions	16-40
16.15	Further work to be undertaken	16-44



16. Socio-economics

16.1 Introduction

16.1.1 This chapter presents the preliminary assessment of the likely significant effects of the Proposed Development with respect to socio-economics, including tourism and recreation, and land use. The preliminary assessment is based on information obtained to date. It should be read in conjunction with the Proposed Development description provided in **Chapter 4: Description of the Proposed Development** and with respect to relevant parts of the following chapters:

- **Chapter 6: Landscape and Visual Impact Assessment** which assesses the visual effects on tourism and recreational receptors including Public Rights of Way (PRoW).

16.1.2 This chapter describes:

- the legislation, policy and technical guidance that has informed the assessment (**Section Error! Reference source not found.**);
- consultation and engagement that has been undertaken and how comments from consultees relating to socio-economics have been addressed (**Section Error! Reference source not found.**);
- the methods used for baseline data gathering (**Section Error! Reference source not found.**);
- overall baseline (**Section Error! Reference source not found.**);
- embedded measures relevant to socio-economics (**Section Error! Reference source not found.**);
- the scope of the assessment for socio-economics (**Section Error! Reference source not found.**);
- the methods used for the assessment (**Section Error! Reference source not found.**);
- the preliminary assessment of Socio-economics effects: Climate change and energy security (**Section Error! Reference source not found.**);
- the preliminary assessment of Socio-economics effects: Economy and community (**Section Error! Reference source not found.**);
- the preliminary assessment of Socio-economics effects: Tourism and recreation (**Section Error! Reference source not found.**);
- the preliminary assessment of Socio-economics effects: Land use (**Section Error! Reference source not found.**);
- preliminary assessment of cumulative (inter-project) effects (**Section Error! Reference source not found.**);
- a summary of the preliminary significance conclusions (**Section Error! Reference source not found.**);
- an outline of further work to be undertaken for the Environmental Statement (ES) (**Section Error! Reference source not found.**).

Limitations and assumptions

- 16.1.3 The information provided in this Draft ES is preliminary; the final assessment of likely significant effects will be reported in the ES. The Draft ES has been produced to fulfil the Applicant's consultation duties and enable consultees to develop an informed view of the likely significant effects of the Proposed Development.
- 16.1.4 There are no limitations relating to socio-economics that affect the robustness of the preliminary assessment of the potential likely significant effects of the Proposed Development.

16.2 Relevant legislation, planning policy and technical guidance

- 16.2.1 This section identifies the legislation, planning policy and technical guidance that has informed the assessment of effects with respect to socio-economics. Further information on policies relevant to the Proposed Development is provided in **Chapter 5: Legislation and policy overview**.

Legislation

- 16.2.2 A summary of the relevant legislation is given in Error! Reference source not found.

Table 16.1 Technical guidance relevant to the Socio-economics assessment.

Legislation	Legislative context
Climate Change Act 2008 (as amended)	The Climate Change Act 2008 (as amended) introduces a clear, credible, long-term framework for the UK to achieve its goals of reducing carbon dioxide emissions and for adapting to the impacts of climate change. One of the key provisions of the amended Act is the introduction of legally binding targets on greenhouse gas emissions comprising reductions of at least 100% greenhouse gas emissions by 2050, against a 1990 baseline. The generation of electricity by renewable means such as wind energy is considered to be a key contributor towards meeting these targets.
Well-being of Future Generations (Wales) Act 2015	This Act places a duty on public bodies (including Welsh Ministers) to carry out sustainable development through their decision making. The Act puts in place seven well-being goals to help ensure that public bodies are all working towards the same vision of a sustainable Wales. The wellbeing goals act together to ensure outcomes across economic, environmental and social sustainability strands.
Environment (Wales) Act 2016 (as amended)	The Environment (Wales) Act 2016 (as amended), under Part 2, places a duty on the Welsh Ministers to ensure that the net Welsh greenhouse gas emissions account in 2050 is at least 100% lower than the 1990 baseline.

Planning Policy

16.2.3 A summary of the relevant national and local planning policy is given in Error! Reference source not found..

Table 16.2 Planning policy relevant to the Socio-economics assessment.

Technical guidance document	Context
National planning policy	
Future Wales: The National Plan 2040¹	<p>Policy 17 Renewable and Low Carbon Energy and Associated Infrastructure states that decision makers must give significant weight to the need to meet international climate change commitments and Welsh Government targets to generate 70% of consumed energy by renewable means by 2030. The policy sets a presumption in favour of large-scale wind farms being developed in Pre-Assessed Areas for Wind (the Proposed Development Site is within PAA 10).</p> <p>Policy 18 Renewable and Low Carbon Energy Developments of National Significance states that proposals qualifying as Developments of National Significance will be permitted subject to Policy 17 and the criteria listed under Policy 18. Criteria 2 requires that there are no unacceptable adverse visual impacts on nearby communities and individual dwellings. The cumulative impacts of existing and consented renewable energy schemes should also be considered.</p> <p>Policy 33 National Growth Area – Cardiff, Newport and the Valleys sets out the overall strategic view for development in the South East which includes the area covered by Blaenau Gwent County Borough Council. Amongst other provisions, the Policy sets out support for investment in the Valleys that improves well-being, increases prosperity and addresses social inequalities.</p>
Planning Policy Wales, Edition 11, (2021)²	<p>Paragraph 5.5.1 states that tourism can be a catalyst for investment, growth and job creation whilst 5.5.2 states that the planning system should encourage sustainable tourism where it contributes to economic regeneration.</p> <p>Paragraph 5.5.5 states that (inter alia) rights of way are important tourism and recreation assets both in their own right and as part of linking other attractions.</p> <p>Paragraph 6.3.18 states that Common Land is a finite resource that should not be developed unnecessarily, that it is important for a number of reasons and that access should not be impeded unnecessarily.</p>

¹ Welsh Government (2021) Future Wales: The National Plan 2040 (Online) available at: <https://gov.wales/future-wales-national-plan-2040> (Accessed August 2023).

² Welsh Government (2021) Planning Policy Wales, Edition 11. (Online) Available at: https://gov.wales/sites/default/files/publications/2021-02/planning-policy-wales-edition-11_0.pdf (Accessed August 2023)

TAN 16: Sport, Recreation and Open Space (2009)³

TAN 16 sets out the importance to Public Rights of Way (PROW) and their ability to connect wider open space and recreational corridors.

TAN 23: Economic Development (2014)⁴

TAN 23 supports the economic development of Wales and highlights the importance of delivering sustainable growth in rural areas.

Common Land Consents Guidance (2014)⁵

Guidance sets out how the Welsh Ministers and PINS Wales will process and determine applications under section 38(1) and section 16(1) and, so far as is relevant, in relation to other statutory provisions. It notes that every application to the Welsh Ministers must, however, be considered on its own merits and that a determination may, in exceptional circumstances, depart from the guidance if it appears appropriate to do so.

Local planning policy
Caerphilly County Borough Local Development Plan up to 2021⁶ (adopted November 2010)

Policy SP2 Development Strategy – Development in the Northern Connections Corridor provides criteria that ensures development is sustainable and well sited, alongside being accessible and not compromising the accessibility of its surroundings.

Policy SP3 Development Strategy – Development in the Southern Connection Corridor ensures development encourages sustainable forms of travel, improves the accessibility of an area, well designed and does not compromise the social, economic and heritage functions/character of the area.

Policy SP6 Place Making seeks to ensure development contributes positively to an area through the creation of sustainable places that have regard to the local natural, historic and current built environment. The policy contains eight criteria to help ensure development is sustainable and range in their scope from a criteria relating to developments being a high standard of design to the efficient use of resources.

Policy CW2 Amenity ensures that development is in accordance with its neighbouring land uses. Development cannot result in unacceptable impacts upon the amenity and function of neighbouring land uses or constrain their future development.

Policy CW22 Minerals seeks to prevent development which may impact on minerals safeguarding areas.

³ Welsh Government (2009) TAN 16: Sport, Recreation and Open Space. (Online) Available at: <https://gov.wales/sites/default/files/publications/2018-09/tan16-sport-recreation-open-space.pdf> (Accessed August 2023).

⁴ Welsh Government (2014) TAN 23: Economic Development (Online). Available at: <https://gov.wales/sites/default/files/publications/2018-09/tan23-economic-development.pdf> (Accessed August 2023).

⁵ Welsh Government (2014): Common Land Consents Guidance (Online) Available at: <https://gov.wales/sites/default/files/publications/2018-01/common-land-consents-guidance.pdf> (Accessed October 2023).

⁶ Caerphilly County Borough Council (2010) Caerphilly County Borough Local Development Plan up to 2021. (Online) Available at: [https://www.caerphilly.gov.uk/business/planning-and-building-control-for-business/local-development-plan/local-development-plan-2010-\(adopted\)/the-adopted-ldp](https://www.caerphilly.gov.uk/business/planning-and-building-control-for-business/local-development-plan/local-development-plan-2010-(adopted)/the-adopted-ldp) (Accessed August 2023).

Policy CW23 Mineral Site Buffer Zones seeks to protect these areas from sensitive or minerals development.

Policy MN1 identifies a buffer zone around Hafod Fach Quarry (MN1.3)

Technical Guidance

- 16.2.4 There is no specific guidance for undertaking an assessment of socio-economic effects and no prescribed method for determining either the sensitivity of socio-economic receptors or the significance of effects on receptors. However, the guidance in National Policy Statement (NPS) EN1 (DECC, 2011) section 5.12 (and restated in Draft NPS EN-1 section 5.13 (DESNZ, 2023))⁷ has been considered in forming the scope of the assessment which focuses on the number of jobs created, the economic value of the scheme, effects on tourism and cumulative effects. The NPS also notes that socio-economic impacts may be linked to other impacts (notably visual impacts on tourism).

16.3 Consultation and Engagement

Overview

- 16.3.1 The assessment has been informed by consultation responses and ongoing stakeholder engagement. An overview of the approach to consultation is provided in **Section 2.4 of Chapter 2: Approach to Environmental Impact Assessment**.

Scoping Direction

- 16.3.2 A Scoping Direction was issued by Planning and Environment Decisions Wales (PEDW), on behalf of the Welsh Ministers, on 2 December 2022. A summary of the relevant responses received in the Scoping Direction in relation to socio-economics and confirmation of how these have been addressed within the assessment to date is presented in **Table 16.3**.
- 16.3.3 The information provided in the Draft ES is preliminary and not all of the Scoping Direction comments have been addressed at this stage, however, all comments will be addressed within the ES.

Table 16.3 Summary of EIA Scoping Direction Responses for Socio-economics

Consultee	Consideration	How addressed in this Draft ES
PEDW ID.50	Draws attention to Caerphilly County Borough Council (CCBC)'s PRoW officer	This chapter considers the effects on users of the PRoW are considered in Section Error! Reference source not

⁷ Department of Energy and Climate Change (2011) Overarching National Policy Statement for Energy (EN-1). It is recognised that the NPS no longer forms part of the policy provisions against which the Proposed Development will be assessed however the guidance on assessment of socio-economics is considered relevant as an approach. The Department for Energy security and Net Zero published a series of revised NPS in March 2023. The Draft NPS1 sets out a similar approach to the assessment of socio-economic effects as the extant NPS.

comments and that consultation should be undertaken with interested parties.

found. of this Draft ES chapter. Visual impacts are considered in **Chapter 6: Landscape and Visual Impact Assessment**. Further consultation will take place as part of the statutory consultation prior to finalising the ES.

PEDW ID.51

The intention to cover aspects of population and human health within relevant technical chapters rather than as a stand alone chapter welcomed.

Aspects of population and health within the context of socio-economic factors are considered in **Sections 16.5 and 16.9 to 16.12** of this Draft ES chapter. Other aspects are considered in other chapters of the Draft ES where relevant.

CCBC

Consideration should be given to how the proposed development could directly affect the PRoW network, whether secondary consent is required, and consultation with interested parties.

This chapter considers the effects on users of the PRoW are considered in **Section Error! Reference source not found.** of this Draft ES chapter. Visual impacts are considered in **Chapter 6: Landscape and Visual Impact Assessment**. Further consultation will take place as part of the statutory consultation prior to finalising the ES.

Technical Engagement

- 16.3.4 To date no specific engagement has taken place with consultees in relation to socio-economics. However, engagement will take place with officers of CCBC to consider the proposed approach to the embedded measures to avoid or reduce effects on users of PRoW.

16.4 Data gathering methodology

- 16.4.1 There is no prescribed methodology or standard guidance for this aspect of an EIA. The method adopted is therefore one of determining the existing circumstances (the baseline) through desk-based analysis, utilising a range of statistical information. This statistical information has been drawn from a number of sources and covers various geographies, from ward level through to the national level.

Study area

- 16.4.2 The study area for baseline data covers the Site contained within the proposed red line application boundary ('Site boundary'), together with the wider county borough, regional and national context.

Climate change and energy security

- 16.4.3 The baseline study covers the national (Wales) area as a whole.

Economy and Community

- 16.4.4 The baseline study covers Wales, CCBC, Torfaen County Borough Council (TCBC) and Blaenau Gwent (BGCBC) areas and the wards of:
- Abercarn (CCBC);
 - Newbridge (CCBC);
 - Crosskeys (CCBC);
 - Ynysddu (CCBC);
 - Pontllanfraith (CCBC);
 - Crumlin (CCBC);
 - Greenmeadow (TCBC);
 - Two Locks (TCBC);
 - Wainfelin Ward (TCBC);
 - Llanhilleth Ward (BGCBC).

Tourism and recreation

- 16.4.5 The tourism baseline study considers tourism at local (CCBC), regional (South East Wales) and national (Wales) level. The recreation baseline, related to PRow and open access land, has focussed on the local context within 5km as informed by the LVIA in **Chapter 6**.

Land use

- 16.4.6 Consideration of potential effects upon land use includes for land directly affected (within the Site) and the wider Mynydd Maen Common. With regard to minerals (aggregates) this is extended to consider the CCBC area as the study area.

Desk Study

- 16.4.7 A summary of the organisations that have supplied data, together with the nature of that data is outlined in **Table 16.4**.

Table 16.4 Data sources used to inform the Socio-economics assessment

Organisation	Data source	Data provided
Department for Business, Energy and Industrial Strategy	Renewable electricity by local authority 2014-2020 ⁸	Installed capacity of renewable energy for CCBC.

⁸ BEIS (2021) Renewable electricity by local authority 2014-2020. (Online) Available at: <https://www.gov.uk/government/statistics/regional-renewable-statistics> (Accessed August 2023).

Organisation	Data source	Data provided
Welsh Government	Energy Generation in Wales 2020 Report ⁹ The Energy Generation in Wales 2021 report ¹⁰	Renewable energy generation stats
Nomisweb StatsWales	Local Authority Profile ¹¹ Population estimates by local authority, region, and age ¹² 2011 Ward Profiles ¹³	Data related to demography, occupations, employment/unemployment, out-of-work benefits for CCBC, TCBC, BGBC and at ward level.
Welsh Government StatsWales	Welsh Index of Multiple Deprivation 2019 ¹⁴	Data for measures of deprivation by Lower Super Output Area (LSOA) and district level.
Welsh Government	Welsh Government Tourism profiles for South East Wales Region ¹⁵ and Local Authorities ¹⁶	Data for spend and visitor trips by region and local authority area.
Natural Resources Wales	GIS of PRow	The location of PRow was confirmed using the Definitive maps. The presence or absence of Open Access areas designated under the

⁹ (Regen for) Welsh Government (2022) Energy Generation in Wales 2020. (Online) Available at: <https://www.regen.co.uk/wp-content/uploads/Energy-Generation-in-Wales-2020-Final.pdf> (Accessed August 2023).

¹⁰ Welsh Government (2022) Energy Generation in Wales 2021. (Online) Available at: <https://www.gov.wales/sites/default/files/publications/2022-12/energy-generation-in-wales-2021.pdf> (Accessed August 2023).

¹¹ Nomisweb (2021) Local Authority Profiles (Online). Available at: <https://www.nomisweb.co.uk/reports/lmp/la/contents.aspx> (Accessed August 2023).

¹² StatsWales (2020) Population estimates by local authority, region and age. (Online) Available at: <https://statswales.gov.wales/Catalogue/Population-and-Migration/Population/Estimates/Local-Authority/populationestimates-by-localauthority-region-age> (Accessed August 2023).

¹³ Nomisweb (2021) 2011 Ward Profiles (Online) Available at: <https://www.nomisweb.co.uk/reports/lmp/ward2011/contents.aspx> (Accessed August 2023).

¹⁴ Welsh Government (2019) Welsh Index of Multiple Deprivation (Online). Available at: <https://statswales.gov.wales/Catalogue/Community-Safety-and-Social-Inclusion/Welsh-Index-of-Multiple-Deprivation/WIMD-2019#:~:text=The%20Welsh%20Index%20of%20Multiple,several%20different%20types%20of%20deprivation.> (Accessed August 2023).

¹⁵ Welsh Government (2021) Tourism profile – South East Wales 2017-2019 (Online). Available at: <https://gov.wales/sites/default/files/statistics-and-research/2021-03/tourism-profile-south-east-wales-2017-2019.pdf> (Accessed August 2023).

¹⁶ Welsh Government (2021) Tourism profile – Wales Local Authorities 2011-19 (Online). Available at: <https://gov.wales/sites/default/files/statistics-and-research/2021-03/tourism-profile-wales-local-authorities-2011-19.pdf> (Accessed August 2023).

Organisation	Data source	Data provided
		Countryside and Rights of Way Act 2000 were obtained from Natural Resources Wales website.

Survey work

- 16.4.8 No survey work has been undertaken to inform the assessment of potentially significant effects related to socio-economics. The assessment is based on published data sources.

16.5 Overall baseline

Current baseline

Renewable energy – economic value in Wales

- 16.5.1 A study of the economic opportunities from onshore wind development in Wales was undertaken in 2013 for the Welsh Government (Regeneris Consulting Ltd and Welsh Economy Research Unit, 2013)¹⁷. The research highlighted the potential economic benefits from onshore wind development which may be felt in the local areas in which wind farms are developed and within the wider Welsh economy. Economic benefits derive from investment involved in the planning and development of schemes, construction of the turbines and in operation through ongoing maintenance. The research noted that the extent to which economic benefits from construction will flow directly into the Welsh economy will partly depend on the availability of skilled labour and manufacturing capacity, but that local suppliers are often well placed to supply some types of goods, such as aggregates and non-specialist engineering services. There are generally greater opportunities for investment in operations and maintenance to remain in the Welsh economy, including opportunities for locally-based maintenance staff.
- 16.5.2 Overall, the study concluded that there is an opportunity for Wales to secure gross value added (GVA) of £2.3 billion between 2012 and 2050, with over 2,000 full time equivalent (FTE) jobs created in this period based on delivering 2GW of onshore wind capacity by 2025. It was noted that this would require measures to overcome barriers in the planning system and in the grid and road infrastructure, as well as a proactive approach to supply chain development. It was also noted that those local economies that stood to gain the most from development were those with a strong presence of construction and manufacturing firms.

¹⁷ Regeneris Consulting Ltd and Welsh Economy Research Unit, Cardiff Business School for Renewables UK Cymru, Welsh Government (2013) Economic Opportunities for Wales from Future Onshore Wind Development (Online) Available at: <https://www.renewableuk-cymru.com/wp-content/uploads/Wales-Onshore-economic-benefit.pdf> (Accessed August 2023).

Renewable energy – capacity in Wales

- 16.5.3 Welsh Government Ministers have a duty to ensure the Welsh carbon emissions in 2050 are 100% lower than the 1990 baseline (alternatively known as ‘net zero’); placed on them by the Environment (Wales) Act 2016 (as amended). Additionally, in September 2017, the Welsh Cabinet Secretary for Energy, Planning and Rural Affairs (Welsh Government, 2017)¹⁸ proposed the following targets for Wales:
- Wales to generate 70% of its electricity consumption from renewable energy by 2030.
 - 1GW of renewable electricity capacity in Wales to be locally owned by 2030.
 - By 2020 all new renewable energy projects to have at least an element of local ownership.
- 16.5.1 In January 2023 the Welsh Government (Welsh Government, 2023a)¹⁹ announced an updated target to meet 100% of its electricity needs from renewable sources by 2035 and to achieve 1.5GW of renewable energy capacity within local ownership by 2035. These targets were adopted in July 2023 (Welsh Government, 2023b)²⁰.
- 16.5.2 The Energy Generation in Wales 2021 report (Welsh Government 2022)²¹ sets out the data on energy generation from renewables. The report states that capacity has increased in Wales in recent years. It set out that 7.7TWh of energy in Wales was from renewables and by the end of 2021 Wales had 1,266MW of onshore wind capacity, equivalent to 36% of renewable generation capacity in Wales.
- 16.5.3 The Energy Generation in Wales 2021 report (Welsh Government 2022) identified that the Cardiff Capital region contributed 25% of Wales renewable energy generated within 2021, with the CCBC area contributing 2% of this. Renewable energy capacity continued to grow across all 22 Welsh local authorities in 2021, and that the CCBC area has an installed capacity originating from wind farms of 17MW across 21 projects.

Economy and community – employment and benefit claimant status

- 16.5.4 As described in **Section** Error! Reference source not found. the study area includes the ward level geographies that will be used to assess the potential impact of the Proposed Development. The Proposed Development is entirely located within the CCBC area, which had a population of approximately 176,000 in 2021²². The Site location across the CCBC wards of Abercarn, Newbridge and Crumlin. However, consideration has also been given to neighbouring and wards in close proximity, given the Proposed Development location (including wards within different local authority areas: TCBC and BGBCB):
- Crosskeys (CCBC)

¹⁸ Welsh Government (2017) Welsh Cabinet Secretary for Energy, Planning and Rural Affairs - Energy Generation Targets for Wales: Statement to Assembly Members (Online) Available at: <https://gov.wales/lesley-griffiths-high-ambition-clean-energy> (Accessed August 2023).

¹⁹ Welsh Government (2023a) Climate Change Minister - Wales aims to meet 100% of its electricity needs from renewable sources by 2035 (Online) Available at: <https://www.gov.wales/wales-aims-meet-100-its-electricity-needs-renewable-sources-2035> (Accessed August 2023)

²⁰ Welsh Government (2023b) Written Statement: Publication of Summary of Responses to the Consultation on Wales' Renewable Energy Targets(Online) Available at: <https://www.gov.wales/written-statement-publication-summary-responses-consultation-wales-renewable-energy-targets> (Accessed October 2023)

²¹ Welsh Government (2022) Energy Generation in Wales 2021. (Online) Available at: <https://www.gov.wales/sites/default/files/publications/2022-12/energy-generation-in-wales-2021.pdf> (Accessed August 2023).

²² ONS (2023) Census 2021 – How life has changed in Caerphilly. (Online) Available at: <https://www.ons.gov.uk/visualisations/censusareachanges/W06000018/> (Accessed August 2023).

- Ynysddu (CCBC)
- Pontllanfraith (CCBC)
- Greenmeadow (TCBC)
- Two Locks (TCBC)
- Wainfelin Ward (TCBC)
- Llanhilleth Ward (BGCBC)

16.5.5 The labour market profiles of the wards set out above, the CCBC, TCBC and BGCBC areas as a whole and Wales as a whole, are therefore included in Error! Reference source not found.5.

Table 16.5 Labour Market Profiles (Key Statistics)

Area		Population age 16-64*	Employed (economically active)*+	Unemployed **	Out of work claimants** (Universal Credit)
Wales	Total	1,897,371	1,391,379	63,634	60,807
	Percentage	61%	73%	3.4%	3.7%
Caerphilly County Borough Council	Total	108,074	79,503	3,704	3,610
	Percentage	61%	73%	3.4%	3.3%
Torfaen County Borough Council	Total	55,956	41,766	2,003	2,065
	Percentage	61%	75%	3.5%	3.7%
Blaenau Gwent County Borough Council	Total	41,600	32,100	1,200	1,690
	Percentage	62.1%	72.7%	3.6%	4.1
Abercarn	Total	3,601	2,671	205	95
	Percentage	3.3%	76.5%	7.7%	2.6%
Newbridge	Total	4,181	2,897	250	125

Area		Population age 16-64*	Employed (economically active)*+	Unemployed **	Out of work claimants** (Universal Credit)
	Percentage	3.8%	71.9	8.6%	3%
Crosskeys	Total	2,103	1,526	117	60
	Percentage	1.9%	68.3%	7.7%	2.8%
Ynysddu	Total	2,598	1,934	163	75
	Percentage	2.4%	75.3%	8.4%	3%
Pontllanfraith	Total	5,228	3,895	317	175
	Percentage	4.8%	73.1%	8.1%	3.3%
Crumlin	Total	3,699	2,890	233	100
	Percentage	3.4%	75.8%	8.1%	2.7%
Greenmeadow	Total	2,414	1,995	192	110
	Percentage	4.3%	75.5%	9.6%	4.6%
Two Locks	Total	3,852	3,147	204	105
	Percentage	6.8%	76.8%	6.5%	2.7%
Wainfelin	Total	1,568	1,264	86	50
	Percentage	2.8%	78.4%	6.8%	3.1%
Llanheilleth	Total	2,096	2,096	296	130
	Percentage	5%	66.8%	14.1%	4.4%

Source: Nomisweb (2023) Labour Market Profiles

*2021 ONS Census population data for Wales and LAs.

**2011 Census data for ward figures.

** As at August 2023.

- 16.5.6 CCBC and TCBC have a considerably different working age (16-64) population, with Caerphilly (108,074) having nearly double the working age population of Torfaen (55,956) in 2021. BGCBC has the lowest working age population at 41,600, making it similar to Torfaen, though the difference between the two areas working age population is still considerable.
- 16.5.7 The number of people who were economically active in Caerphilly was 79,503, which equated to 73% of the population being economically active. For Torfaen, 41,766 were economically active, which equated to 75% of its population being economically active in 2021, which is similar to Caerphilly. Within Blaenau Gwent, 32,100 people were economically active in 2021, which equated to 72.7% of its population being economically active. This is not dissimilar from Caerphilly or Torfaen, though it does have the lowest number of active workers and the lowest level of economic activity out of the three regions.
- 16.5.8 These regions have a similar unemployment rate to that of wider Wales in 2021 (3.4%), though the region of Torfaen (3.5%) and Blaenau Gwent (3.6%) do have higher unemployment rates.
- 16.5.9 The Proposed Development is entirely located across the Caerphilly wards of Abercarn, Newbridge and Crumlin. Abercarn has 76.5% of its working age population as economically active, with Newbridge having 71.9% and Crumlin 75.8%. This is not too dissimilar to the economic activity of the other identified wards, though it is important to note that the Caerphilly ward of Newbridge is slightly lower at 71.9% and the Blaenau Gwent ward of Llanhilleth is considerably lower at 66.8%.
- 16.5.10 The economic activity rates of the identified wards are also not too dissimilar from that of the Caerphilly and Torfaen areas, though the wards all experience higher individual unemployment rates than these areas (especially Llanhilleth 14.1%, which is quite different from the other wards and counties). It is important to note that ward data has relied on the 2011 Census, whilst the data used for Wales and the local authority areas rely on the 2021 Census, which has yet to make ward information available. As a percentage of an areas total population, the number of people on Universal Credit is, broadly, very similar to one another. There are a number of outliers, such as Abercarn Ward only have 2.6% of its working age population on Universal Credit, which is quite low. Similarly, Crumlin Ward and Two Locks Ward both have only 2.7% of its working age population on Universal Credit. Another outlier is the BGCBC having 4.1% of its working age population on Universal Credit as this is rather high and the Greenmeadow Ward (4.6%) and Llanhilleth Ward (4.4%) have similarly high levels of people on Universal Credit when considered against the other areas.

Economy and community – Local Economic Activity

- 16.5.11 The working age population of the CCBC, TCBC and BGCBC areas is broadly similar to the Welsh average (see Error! Reference source not found.5). However, there are differences in occupation groups (see Error! Reference source not found.).
- 16.5.12 When compared to Wales (40.5%), the CCBC (37%), TCBC (37.1%) and BGCBC (36.2%) areas have similar profiles but have a slightly lower percentage of their respective economically active population in management and professional occupations (groups 1-3). The profile for the remaining occupations in these regions is broadly similar to the Wales average. However, these areas have higher percentages of those employed in process plant and machinery (especially in BGCBC) (group 8) than across Wales as a whole.
- 16.5.13 There are variations across the wards identified. With regards to the percentage of people occupied in professional occupations (group 1-3) only the ward of Two Locks (36.7%) is similar to CCBC, TCBC and Wales. The remaining wards all have a considerably lower

proportion of its working age population within these professions, especially the ward of Greenmeadows (25.3%) and Llanhilleth (19.4%).

- 16.5.14 The majority of the wards have a higher proportion of its working age population in administrative and secretarial (group 4) employment than of Wales and the counties, especially the Abercarn (13.3%) and Ynysddu (13.6%) wards.
- 16.5.15 All of the wards, counties and Wales score similarly with regard to the proportion of their working age population in a skilled trader occupation (group 5), though the wards of Wainfelin (14.8%) and Llanhilleth (14.4%) have a higher proportion of their working age population in these roles than the other wards.
- 16.5.16 The wards of Abercarn (9.3%) and Two Locks (9.4%) have a lower proportion of their working age population in Caring, leisure and other service occupations (group 6) when compared to Wales, the counties and other wards.
- 16.5.17 With regard to sales and customer service occupations (group 7), the ward of Ynysddu (6.9%) has a lower proportion of its working age population within such occupations than Wales, the counties, and other wards. The ward of Greenmeadows (12.1%) however, has a considerably higher proportion of its working age population within such roles.
- 16.5.18 Overall, the wards have a much higher proportion of their working age population in process plant and machine operatives (group 8) and elementary occupations (group 9) when compared to Wales and the county borough areas as a whole. This is especially true with regard to the wards Ynysddu (14%) and Crumlin (14.4%) for group 8 occupations and the ward of Greenmeadows (13.9%) with regard to group 9 occupations.

Table 16.6 Employment by occupation (percentage)

Occupation Group	Wales*	Caerphilly County Borough*	Torfaen County Borough*	Blaenau Gwent County Borough	Abercarn Ward**	Newbridge Ward**	Crosskeys Ward**	Ynysddu Ward**	Pontllanfraith Ward**	Greenmeadow Ward**	Two Locks Ward**	Crumlin Ward**	Wainfelin Ward**	Llanhilleth Ward**
1. Managers, directors and senior officials	10.5	9.4	9.7	7	7.1	8.2	7.5	8	7.8	6	9.3	9	7.9	5.3
2. Professional occupations	18.2	15.5	15.1	15.2	13.4	12	9.5	10.3	12.4	10.8	14.8	10.5	12.7	7.4
3. Associate professional and technical occupations	11.8	12.1	12.3	14	12.1	9.2	11.1	10.7	10.8	8.5	12.6	10.9	10	6.7
Group 1- 3 total	40.5	37	37.1	36.2	32.6	29.4	28.1	29	31	25.3	36.7	30.4	30.6	19.4
4. Administrative and	9.4	10.3	10.3	11.9	13.3	11.5	12.3	13.6	12.4	11.4	12.9	11	11.3	8.9

Occupation Group	Wales*	Caerphilly County Borough*	Torfaen County Borough*	Blaenau Gwent County Borough	Abercarn Ward**	Newbridge Ward**	Crosskeys Ward**	Ynysddu Ward**	Pontllanfraith Ward**	Greenmeadow Ward**	Two Locks Ward**	Crumlin Ward**	Wainfelin Ward**	Llanhilleth Ward**
secretarial occupations														
5. Skilled trades occupations	12.2	11.7	11.8	12.8	12	13.4	14.1	13.6	12.7	13	11.8	13.5	14.8	14.4
6. Caring, leisure and other service occupations	11.2	11.2	11.5	11.6	9.3	10.4	10.2	10	9.7	11.9	9.4	10	11.8	10.7
7. Sales and customer service occupations	8.4	8.6	8.5	3.7	8.9	8.9	8.8	6.9	8.4	12.1	9.2	8.1	7.7	7.7
8. Process plant and machine operatives	7.9	10.1	9.6	12.7	11	12.7	12.3	14	12.6	12.6	9.1	14.4	10.6	20

Occupation Group	Wales*	Caerphilly County Borough*	Torfaen County Borough*	Blaenau Gwent County Borough	Abercarn Ward**	Newbridge Ward**	Crosskeys Ward**	Ynysddu Ward**	Pontllanfraith Ward**	Greenmeadow Ward**	Two Locks Ward**	Crumlin Ward**	Wainfelin Ward**	Llanhilleth Ward**
9. Elementary occupations	10.5	11.2	11.2	9.7	12.8	13.6	14.3	12.9	13.2	13.9	10.8	12.6	13.2	19

* Nomis 2021 – 2021 Census Area Profiles

** Nomis 2021 – 2011 Census Ward Profile

Economy and community – Earnings

- 16.5.19 The earnings by place of residence for CCBC, TCBC and BGCBC are shown in **Table 16.7**. The table shows that weekly earnings within CCBC (£589.10) earn slightly less than the average for Wales (£598.10), with BGCBC having considerably lower weekly earnings (£525.40).
- 16.5.20 The population of Torfaen (£631.80) have much higher weekly pay than the other two regions and Wales. Similarly, whilst the population of Caerphilly (£15.17) has a similar to the average for Wales (£15.19) hourly pay, the population of BGCBC has considerably lower hourly pay (£13.80). The hourly pay within Torfaen is much higher (£16.55), than both regions and Wales.

Table 16.7 Earnings by place of residence (2022)²³

	Wales	Caerphilly County Borough	Torfaen County Borough	Blaenau Gwent County Borough
Gross Weekly Pay (£)	598.10	589.10	631.80	525.40
Hourly Pay (£)	15.19	15.17	16.55	13.80

Source: StatsWales - Average (median) gross weekly/hourly earnings by Welsh local areas and year (2022b)

Economy and community – Business Enterprises

- 16.5.21 The Welsh Government measures active businesses within Wales each year. The percentage increase in the number of active businesses between 2010 and 2021 was highest in CCBC (24.86%), which is a significant increase and significantly higher than that for Wales (17%), BGCBC (16.10%) and TCBC (15.82%, the lowest) (see Error! Reference source not found.8).

Table 16.8 Active business enterprises actual/percentage change (2010-2021)²⁴

Location	2010	2015	2021	Percentage increase
Wales	90,435	95,010	105,815	17%

²³ StatsWales (2023) Average (median) gross weekly earnings by Welsh local areas and year (£). (online) Available at: <https://statswales.gov.wales/Catalogue/Business-Economy-and-Labour-Market/People-and-Work/Earnings/medianweeklyearnings-by-welshlocalareas-year> (Accessed August 2023).

²⁴ StatsWales (2023) Active Business Enterprises by area and year. (Online) Available at: <https://statswales.gov.wales/Catalogue/Business-Economy-and-Labour-Market/Businesses/Business-Demography/activebusinessenterprises-by-area-year> (Accessed August 2023).

CCBC	3,760	4,105	4,695	24.86%
TCBC	2,085	2,220	2,415	15.82%
BCBC	1,250	1,315	1,490	16.10%

Source: StatsWales Active Business Enterprises by area and year (2021b)

Economy and community – Deprivation

- 16.5.22 The Welsh Index of Multiple Deprivation (WIMD, 2019²⁵) is an official Welsh Government measure of deprivation in Wales. The WIMD includes a number of different measures in small geographic areas called Lower Super Output Areas (LSOA). The WIMD is designed to allow comparison of deprivation across the country with LSOAs ranked from 1 (most deprived) to 1,909 (least deprived).
- 16.5.23 As part of the WIMD a ranking for each LSOA is provided for eight measures of deprivation (income, employment, health, education, access to services, community safety, physical environment, and housing). An overall score is also given (the Index). Error! Reference source not found. sets out the ranking for the LSOAs covering the Site and the LSOAs that are in close proximity to the Proposed Development.

Table 16.9 Welsh Index of Multiple Deprivation (WIMD) Ranking

LSOA	Overall	Income	Employment	Health	Education	Access to services	Community safety	Physical environment	Housing
	Abercarn 1	1032	1241	1113	900	796	1321	353	737
Abercarn 2	718	646	573	643	581	1108	982	1413	794
Abercarn 3	720	785	822	628	363	1616	694	1380	280
Newbridge 1	1242	1186	1132	874	995	1547	781	612	1007
Newbridge 2	214	240	249	171	195	298	502	1166	1129
Newbridge 4	798	748	873	663	1108	1479	317	289	441
Upper Cwmbarn 2	1467	1453	1376	897	1115	1466	590	1234	1623

²⁵ Welsh Government (2019) Welsh Index of Multiple Deprivation (WIMD) 2019. (Online) Available at: <https://wimd.gov.wales/explore?lang=en#domain=overall&&z=12&lat=51.7260&lng=-3.3471> (Accessed August 2023).

Greenmeadow 2	1597	1479	1617	1490	1153	1591	287	1401	1665
Two Locks 2	1814	1825	1721	1698	1751	1056	1389	1160	1861
Fairwater (Torfaen) 4	1743	1801	1524	1412	1586	1855	1651	470	1893
Crosskeys 1	1275	1077	1042	1152	933	1340	1097	1487	771
Crumlin 1	1448	1525	1612	1230	1313	1494	1518	128	587
Crumlin 4	929	993	766	930	827	1272	656	546	512
Ynysddu 2	1083	1097	881	939	1035	658	804	1504	962
Pontllanfraith 1	664	676	525	767	545	676	648	681	1355
Upper Cwmbran 2	1467	1453	1376	897	1115	1466	590	1234	1623
Llanhilleth 1	215	233	121	187	472	436	822	1317	596
Wainfelin 2	530	629	732	460	611	335	615	981	316
Cwmyniscoy	208	437	352	386	71	288	237	256	290

Source: Welsh Index of Multiple Deprivation (2019)

- 16.5.24 The Proposed Development is located across Crumlin 4, Abercarn 2 and Newbridge 2 LSOAs. There are some considerable variations in terms of deprivation across these LSOAs. Crumlin 4 (929) scores well in terms of overall deprivation score, especially when compared to the Abercarn 2 (718) and Newbridge 2 (214) LSOAs. Overall, Newbridge 2 has high levels of deprivation against most of the WIMD categories, though scores well against the physical environment (1166) and housing (1129) categories.
- 16.5.25 Crumlin 4 is identified as having good access to services (1272), but scores poorly with regard to the LSOA's physical environment (546) and access to housing (512).
- 16.5.26 Newbridge 2 is in the top 10-20% most deprived LSOA within Wales, as are some of the wider LSOA's identified such as Cwmyniscoy and Llanhilleth 1. The LSOA's identified therefore have quite a range of overall deprivation and individual issues, with some LSOA's scoring well against the WIMD categories and others being highly deprived.
- 16.5.27 The WIMD health domain covers a number of specific indicators including GP recorded chronic conditions, limiting long term illness, premature deaths and cancer incidence. Within the CCBC area as a whole 12 LSOAs are in the 10% most deprived LSOAs in Wales including Newbridge 2 within the study area. Additionally, Llanhilleth 1 in neighbouring Torfaen CBC is within the 10% most deprived LSOAs.

Tourism and Recreation – Regional Tourism

- 16.5.28 Tourism is worth around £6.3 billion to the Welsh economy (Welsh Government, 2020)²⁶. The Welsh Government's strategy *Welcome to Wales: Priorities for the visitor economy 2020-25* (Welsh Government, 2020b)²⁷ sets out the overall approach to promoting and developing the visitor economy to deliver sustainable and ongoing benefits from tourism. Four Regional Tourism Fora have been established to help drive tourism strategies for North, Mid, South-West and South-East Wales to improve the competitive performance of tourism so that it makes a stronger contribution to the economic and social prosperity of Wales working with Visit Wales, local authorities, tourism businesses. In 2023, the Welsh Government considered that historically Wales has not received enough international visitors, as in 2019 it only received 1.02 million international tourists, which is considerably smaller than Scotland (3.46 million) and the wider UK (41 million)²⁸. The Welsh Government is currently in the process of reevaluating how it attracts tourists to Wales, especially international tourists.
- 16.5.29 The tourism sector contributes significantly to the region's economy. The latest regional tourism data in the Tourism Profile – South-East Wales 2017-2019 (Welsh Government, 2021a)¹⁵ shows that annual average tourism expenditure in South-East Wales stood at £2.17 billion in 2017-19, which was a 6% decrease in expenditure of £2.30 billion in 2016-18. Expenditure in South East Wales accounted for 35% of tourism expenditure in Wales as a whole. The effects of the Covid-19 are not reflected in these figures.
- 16.5.30 In 2020, during the pandemic, tourism related jobs as a proportion of overall employment within Wales was identified as being 11.3% with the following regional differences:
- North Wales: 13%;
 - Mid Wales: 13.2%;
 - South West Wales: 11.6%; and
 - South East Wales: 10%.²⁹
- 16.5.31 Whilst the median hourly pay in the financial year ending April 2021 was £12.82 within Wales, it is substantially lower in tourism related industries:
- Accommodation and food services median hourly pay: £8.91;
 - Arts, entertainment, and recreational jobs median hourly pay: £9.51; and
 - Travel agency and tour operator median hourly pay: £9.65³⁰.

²⁶ Welsh Government (2020) *Welcome to Wales: Priorities for the visitor economy 2020-2025 Summary of Evidence Base*. (Online) Available at: <https://gov.wales/sites/default/files/publications/2020-01/welcome-to-wales-priorities-for-the-visitor-economy-2020-to-2025-summary.pdf> (Accessed August 2023).

²⁷ Welsh Government (2020) *Welcome to Wales: Priorities for the visitor economy 2020-2025* (Online) Available at: <https://gov.wales/sites/default/files/publications/2020-02/welcome-to-wales-priorities-for-the-visitor-economy-2020-2025.pdf> (Accessed August 2023).

²⁸ Welsh Government (2023) *Wales as a global tourist destination – Fourth report of session 2022-23*. (Online) Available at: <https://committees.parliament.uk/publications/40824/documents/198909/default/> (Accessed August 2023).

²⁹ Welsh Government (2022) *Wales Visitor Economy Profile 2021*. (Online) Available at: <https://www.gov.wales/wales-visitor-economy-profile-2021-html> (Accessed August 2023).

³⁰ Welsh Government (2022) *Wales Visitor Economy Profile 2021*. (Online) Available at: <https://www.gov.wales/wales-visitor-economy-profile-2021-html> (Accessed August 2023).

- 16.5.32 In 2017-2019, South-East Wales accounted for 23% of overnight domestic trips, 50% of international visits and 40% of day visits to Wales. The tourism market indicates:
- The importance of international visitors with the visitor numbers spread evenly across many countries with France (10% of visitors), USA (9%), Ireland (9%) providing the largest percentage of visitors to the South-East.
 - The South-East region does not follow a typical high and low seasonal pattern with a larger proportion of overnight domestic trips between January and March than across other regions.
 - A large proportion of day visits are made by people living in Wales. The large percentage of day visits compared to other regions (40%) reflects the larger population base in the area.

Tourism and Recreation - Local Tourism

- 16.5.33 The latest local wide tourism data available is set out in the Welsh Government's Tourism Profile – Wales Local Authorities 2011-2019 (Welsh Government, 2021b)³¹¹⁶. This shows that CCBC has experienced a decline in domestic overnight trips, going from 73,000 between 2011-2013 to 50,000 in 2017-2019³². This has also occurred in Torfaen, which has fallen from 70,000 domestic overnight trips in 2011-2013 to 43,000 in 2017-2019³³.
- 16.5.34 In terms of tourism spend from domestic overnight visitors, this stood at £10million in 2011-2013 and has fallen to £7million in 2017-2019³⁴. Similarly, Torfaen has seen a decline in tourist spending from overnight visitors, going from £9million generated in 2011-2013 to £6million in 2017-2019³⁵.
- 16.5.35 International trips to CCBC have been steadily rising and falling over the past decade, starting at 10,000 visitors in 2011-2013, peaking at 15,200 visitors in 2014-2016 and then settling back to 10,500 visitors in 2017-2019³⁶. Torfaen however has seen, broadly, a steady increase in the number of international trips to the county, rising from 5,500 visitors in 2011-2013 to a peak of 7,700 visitors in 2015-2017 before falling slightly to 7,500 in 2017-2019³⁷.
- 16.5.36 International spend within CCBC in 2011-2013 was £2.7million, peaking at £6.3million 2015-2017, before falling to £4.1million in 2017-2019³⁸. Within Torfaen, international spend in 2011-2013 was £2.6million, falling to a low of £1.2million in 2012-2014, rising to a high of £2.7million in 2015-2017 and hitting £2.3million in 2017-2019³⁹.
- 16.5.37 The figures for the above all pre-date the Covid-19 pandemic.
- 16.5.38 **Plate 1** below identifies the impact of the Covid-19 pandemic on the Welsh tourism economy, highlighting the proportion of visitor attractions that were open each month from 2019-2021. The figure also identifies that 2021 saw visitor attractions open at levels not

³¹ Welsh Government (2021) Tourism profile – Wales local authorities 2011-19. (Online) Available at: <https://www.gov.wales/sites/default/files/statistics-and-research/2021-03/tourism-profile-wales-local-authorities-2011-19.pdf> (Accessed August 2023).

³² Welsh Government (2021) Tourism profile – Wales local authorities 2011-19. (Online) Available at: <https://www.gov.wales/sites/default/files/statistics-and-research/2021-03/tourism-profile-wales-local-authorities-2011-19.pdf> (Accessed August 2023). Page 7.

³³ Ibid. Page 7.

³⁴ Ibid. Page 9.

³⁵ Ibid. Page 9.

³⁶ Ibid. Page 12.

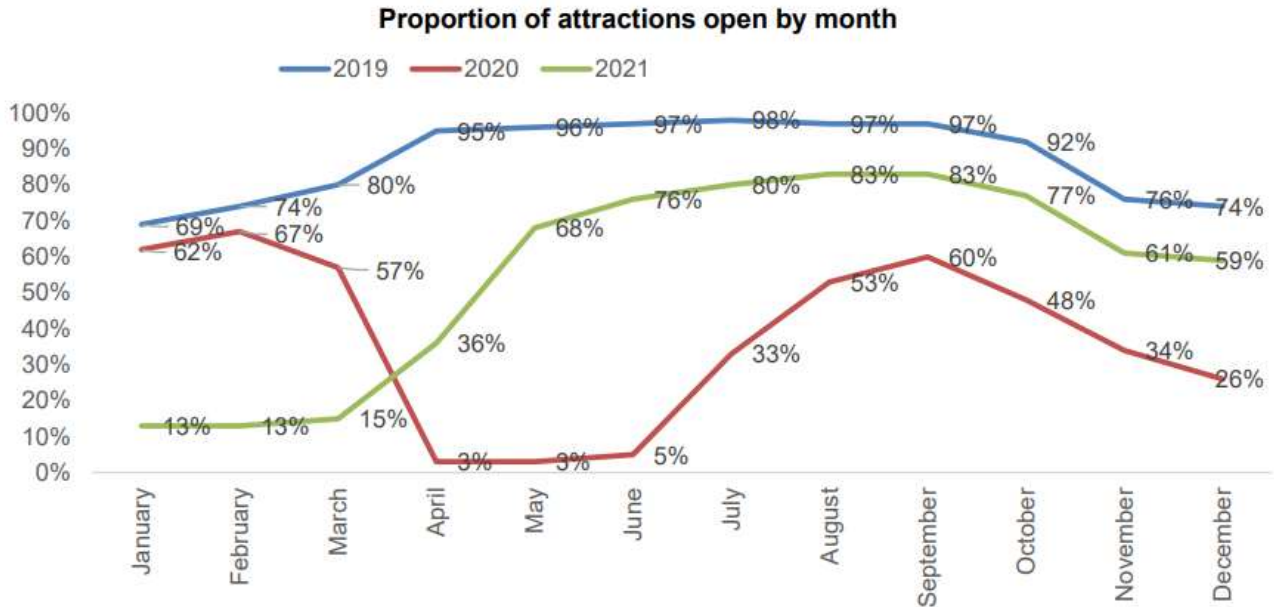
³⁷ Ibid. Page 12.

³⁸ Ibid. Page 14.

³⁹ Ibid. Page 14.

too dissimilar to 2019 after the month of May, showing Wales's emerging recovery from the pandemic.

Plate 1 Wales proportion of attractions open by month⁴⁰



Tourism and Recreation – Recreation

16.5.39 There are a number of Public Rights of Way (PRoWs) that cross or are in close proximity to the four turbines, which are illustrated in **Figure 16.1**:

- There are a range of footpaths in the north east of the site (CRUM/FP149/1, CRUM/FP157/1, CRUM/FP162/1, CRUM/FP163/1). Turbine 1 would cross the path of CRUM/FP149/1.
- There are Restricted Byways in the north west of the site (NWBG/RBW158/1 and NWBG/RBW160/1) which intersect the Site boundary.
- Restricted Byway in a north to south direction (comprising NWBG/RBW161/1, NWBG/RBW366/1, NWBG/RBW170/1, NWBG/RBW171/1, ABEC/RBW171/1) would provide the access road linking from the northern parcel to the southern parcel.
- Restricted Byway and Bridleway NWBG/RBW172/1; ABEC/BR179/1; ABEC/BR179/2 provides a loop of PRoW to the west of Turbine 2, off the Restricted Byway identified above.
- In the southern part of the site there are a range of footpaths ABEC/FP181/1, ABEC/FP388/1, ABEC/FP334/1 located in proximity to Turbine 3 and Turbine 4.

16.5.40 Open Access Land (Open Country) which relates to the Countryside and Rights of Way Act (CRoW Act) (2000) is located to the south west of Turbine 1 outside of the Site boundary.

⁴⁰ Welsh Government (2022) Visits to tourist attractions in Wales 2021 – Report for Visit Wales. (Online) Available at: <https://www.gov.wales/sites/default/files/statistics-and-research/2022-08/visits-to-tourist-attractions-in-wales-2021.pdf> (Accessed August 2023).

- 16.5.41 Beyond the Site lie a number of regional and national recreational trails. Within 5km to the south and east can be found the Cambrian Way, Cistercian Trail, and Torfaen Trail. The Cambrian Way is km footpath running from Cardiff Castle to Conwy Castle 478km. The Cistercian Trail is a 969km footpath running north to south through the Welsh border counties and mid-Wales. The Torfaen Trail is advertised as a 56km figure of eight route, with significant ascents which encompasses the whole of Torfaen, from Cwmbran in the south through Pontypool to Bleanavon in the north. The trail takes in ancient woodlands, forestry, country lanes and open mountain top.
- 16.5.42 To the north east of the Site lie the Tirpentwys Trails which is a selection of six mountain bike trails carved into the semi-forested hillside close to the Tirpentwys Nature Reserve. To the south lies Cwmcarn Forest which includes a range of mountain bike trails, walking routes and visitor facilities.
- 16.5.43 Approximately 5km to the north west is the Pen-y-Fan Pond Country Park with walking routes, recreational activities and visitor facilities.

Land Use

- 16.5.44 The Site is in agricultural use, used predominantly for the grazing of livestock. To the south west of T2 and to the west of T3 and T4 is the active Hafod Fach Quarry. The quarry is surrounded by the mineral site buffer identified under Policy MN1 of the CCBC LDP. The whole of the site is located within mineral safeguarding area for sandstone.

Common Land

- 16.5.45 A small area of land in the north of the Site is within Mynydd Maen Common which is designated as common land. Because work will take place within this designation the Applicant will be required to prepare and submit an application to the PEDW under the Commons Act 2006. The common land is in agricultural use, with commoners exercising grazing rights for sheep and cattle grazing. The common is also crossed by a network of PRowS which are used for recreation.

Future baseline

- 16.5.46 It is unlikely that the future socio-economic baseline will alter markedly in the short to medium term. With regards to climate change and renewable energy generation, there can be expected to be an ongoing gradual shift away from fossil fuels towards renewables.
- 16.5.47 The economic profile of the CCBC, TCBC and BGCBC areas is expected to be based largely on the same sectors as set out within the current baseline with a high proportion of its worker in managerial roles and then a relatively similar dispersion of its workforce across the other sectors. The number, and percentage, of those who are economically active is expected to continue as within the existing baseline with no significant changes to demographics or employment activities that would suggest changes to these key baseline statistics. The effects of the COVID-19 pandemic on the local economy, and whether any effects are likely to be temporary or permanent, are not fully known at this stage.
- 16.5.48 The wider South-East region draws a number of day visitors and has a high proportion of international visitors (primarily linked to visits to Cardiff). The trend for this type of visit is likely to continue in the medium term. The visitor economy has been affected by COVID-19 pandemic with restrictions placed on visitor attraction opening and both domestic and international travel. However, it is not possible to say with certainty whether these temporary effects on the visitor economy that have been experienced in the short term

during the pandemic may be reflected in the future baseline and engender shifts in tourism visits and spend in the area. It is important to note that though tourist attractions were quick to re-open during the pandemic, this does not necessarily correlate to the tourist economy of Wales having fully recovered.

- 16.5.49 With regards to land use there are not expected to be marked changes in the short to medium term. Quarrying is likely to continue at Hafod Fach Quarry with permission to continue working until 2027 following a planning application appeal in 2019.⁴¹

16.6 Embedded measures

- 16.6.1 A range of environmental measures have been embedded into the Proposed Development as outlined in **Chapter 4: Description of the Proposed Development**. **Table 16.11** outlines how these embedded measures will influence the Socio-economics assessment.

Table 16.10 Summary of the embedded environmental measures

Receptor	Potential changes and effects	Embedded measures	Compliance mechanism
Construction			
Recreation PRoW	Potential conflict between PRoW users and site traffic	Safety signs will be required during construction alerting users to the construction activities. However, it is not considered that formal closures (with the exception outlined below) will be required and specific, short term temporary restrictions necessary for abnormal loads can be managed as development takes place. Use of site staff to manage (banksman) deliveries to site.	Construction Environmental Management Plan (CEMP)
Recreation PRoW CRUM/FP149/1 Footpath	Potential conflict with PRoW users	PRoW CRUM/FP149/1 crosses the proposed location of the Turbine 1 and will need to be stopped up and diverted. Figure 16.2 shows the potential location of a diverted footpath to the north of Turbine 1. This will allow for users to avoid	Secondary consent through DNS via powers under section 247 of the Town and Country Planning Act 1990

⁴¹ Refs: Appeal A - Ref: APP/K6920/A/19/3225408 Appeal B - Ref: APP/K6920/A/19/3225409

Receptor	Potential changes and effects	Embedded measures	Compliance mechanism
		<p>conflict with the turbine and ensure that the footpath remains open to users. Signage will be installed to alert users to the diverted route.</p>	
<p>Recreation PRoW NWBG/RBW171/1 Restricted Byway</p>	<p>Potential conflict with PRoW users</p>	<p>PRoW NWBG/RBW171/1 runs close to the location of T2. There is an existing series of restricted byways and bridleways to the west of Turbine 2 that effectively already provide a diversion for users to avoid proximity to Turbine 2 during construction (NWBG/RBW172/1; ABEC/BR179/1; ABEC/BR179/2).</p> <p>During construction, signage placed at the junction of the NWBG/RBW171/1 with the NWBG/RBW172/1 to north of Turbine 2 and for junction of NWBG/RBW171/1 with the with ABEC/BR179/2 to the south of Turbine 2 to alert users to the presence of the construction activity and sign post the existing PRoW available to the west should users wish to use these routes. Additionally, measures outlined above would ensure that the PRoW can remain open during construction.</p>	<p>CEMP</p>
<p>Recreation Footpath ABEC/FP181/1, ABEC/FP388/1, ABEC/FP334/1</p>	<p>Potential conflict between PRoW users and site traffic</p>	<p>These footpaths are in the south of the site close to T3 and T4 (see Figure 16.1). It is not anticipated that these footpaths will require any diversions. However appropriate signage will be erected to notify recreational users of the</p>	<p>CEMP</p>

Receptor	Potential changes and effects	Embedded measures	Compliance mechanism
		construction works and identify alternative routes should users wish to use paths further from construction activities.	
Common Land	Potential conflict between grazing animals and commoners and site traffic	The use of signage for construction traffic to ensure safe access and avoid conflict with any grazing animals on the access road with the application of appropriate speed limits. Site briefings for construction workers to alert to potential presence of grazing animals and walkers. Use of site staff to manage (banksman) deliveries to site. Use of Section 38 application to related to temporary construction works required to existing road located between turbine 1 and 2 within common land.	CEMP and Secondary consent through DNS via powers under section 38 of the Commons Act 2006
Operation			
Recreation PRoW CRUM/FP149/1 Footpath	Potential conflict with PRoW users	The measures identified above (diversion of the footpath) are applicable during the operation phase.	Secondary consent through DNS via powers under section 247 of the Town and Country Planning Act 1990
Recreation PRoW NWBG/RBW171/1 Restricted Byway	Potential conflict with PRoW users	The signage measures identified above to alert users to the existing alternative routes to the west further from Turbine 2 would be applied in the operation phase, whilst the PRoW would remain fully open.	Condition of the DNS
Recreation Footpath ABEC/FP181/1, ABEC/FP388/1, ABEC/FP334/1	Potential conflict with PRoW users	The signage measures identified above to alert users to the existing alternative routes would be applied in the operation	Condition of the DNS

Receptor	Potential changes and effects	Embedded measures	Compliance mechanism
		phase, whilst the PRow would remain fully open.	

16.7 Scope of the assessment

The Proposed Development

- 16.7.1 All the activities and consequent environmental changes associated with the construction, operation and decommissioning of the Proposed Development, as set out in **Chapter 4**, have been considered.

Spatial Scope

- 16.7.2 The spatial scope of the assessment of socio-economic effects covers the area of the Site contained within the red line planning boundary together with the wider county, regional and national context, which has formed the basis of the study area described in **Section Error! Reference source not found.**:

- **Climate change and energy security** – the assessment covers the national (Wales) area as a whole;
- **Economy and community** - the assessment covers Wales, CCBC, TCBC and the wards of:
 - ▶ Abercarn (CCBC)
 - ▶ Newbridge (CCBC)
 - ▶ Crosskeys (CCBC)
 - ▶ Ynysddu (CCBC)
 - ▶ Pontllanfraith (CCBC)
 - ▶ Crumlin (CCBC)
 - ▶ Greenmeadow (Torfaen)
 - ▶ Two Locks (TCBC)
 - ▶ Wainfelin Ward (TCBC)
 - ▶ Llanhilleth Ward (BGCBC)
- **Tourism and recreation** – considers tourism at local (CCBC, TCBC and BGCBC), regional (South East Wales) and national (Wales) level. The recreation baseline related to Public Rights of Way (PRow) has focussed on the local context within 5km as informed by the LVIA in **Chapter 6**.
- **Land use** - considers minerals and common land and considers the Site and County Borough.

Temporal Scope

- 16.7.3 The temporal scope of the assessment of the socio-economic effects is consistent with the period over which the development would be carried out and therefore covers the construction and operational periods. It is assumed that the construction would take approximately 24 months with the start of development (and therefore completion) dependent on the consenting timescales. The scheme is designed for an operational lifespan of 30 years.

Potential Receptors

- 16.7.4 The principal Socio-economics receptors that have been identified as being potentially subject to effects are summarised in Error! Reference source not found.12.

Table 16.11 Socio-economics receptors subject to potential effects

Receptor	Reason for consideration
Climate change and energy security	The Proposed Development includes the provision of renewable energy which may have an effect on meeting targets for addressing climate change, renewable energy provision and energy security.
Economy and community	There is potential for effects through the provision of jobs and economic benefits for the local area.
Tourism and recreation	The Proposed Development has the potential for effects on the visitor economy and recreation, including the network of PRoWs within and close to the Site.
Land use	The Proposed Development may have the potential to restrict the ability to access future mineral supplies. The Proposed Development may also have the potential to temporarily affect the use of common land in construction.

Likely significant effects

- 16.7.5 The assessment is based on determining potential effects on the baseline conditions informed by an understanding of previous wind farm developments and using professional judgement. The effects on socio-economic receptors which have the potential to be significant and have been taken forward for detailed assessment are summarised in Error! Reference source not found..

Table 16.12 Socio-economic receptors scoped in for further assessment

Receptor	Likely significant effects
Climate change and energy security	Delivery of national climate change mitigation targets and renewable energy generation targets.

Receptor	Likely significant effects
Economic and community	Potential job creation; impacts on expenditure within the local community, region and nationally; community benefits accruing from the Proposed Development.
Effects on the attractiveness of the area as a tourist destination	Potential for impacts on tourism/visitor spend.
Impacts on Public Rights of Way	Impacts on the use of PRow that cross the Site for recreational purposes.

16.8 Assessment methodology

- 16.8.1 The generic project-wide approach to the assessment methodology is set out in **Chapter 2: Approach to Environmental Impact Assessment**, and specifically in **Sections 2.5 to 2.8**. However, whilst this has informed the approach that has been used in this socio-economics assessment, it is necessary to set out how this methodology has been applied, and adapted as appropriate, to address the specific needs of this socio-economics assessment.
- 16.8.2 As discussed in **Section** Error! Reference source not found., the assessment methodology adopted is based on determining potential effects on the baseline conditions using knowledge gained from previous wind farm developments and using professional judgement. Where possible, the significance will be assessed by way of a comparison of the factor (e.g. construction jobs) with the variance of related factors within the local economy. Where effects cannot be quantified, the assessment of significance will be undertaken using professional judgement and experience.

Significance evaluation methodology

- 16.8.3 The EIA Regulations require that a final judgement is made about whether or not each effect is likely to be significant. The effects have been evaluated on the basis of a professional assessment of the magnitude of the effect and the value of the receptor or importance of the policy. In this assessment, effects are considered to be significant or not significant according to the matrix in Error! Reference source not found.4.
- 16.8.4 In respect of the policy context the sensitivity definitions used for the socio-economic assessment are: National (Wales), Regional (South-East Wales), County (Caerphilly County Borough Council and Torfaen County Borough Council areas) or local (within the wards identified in **Section** Error! Reference source not found.).

Climate Change and energy security

- 16.8.5 The impact on climate change is assessed in the context of applicable policy and targets. The significance is based on the magnitude of change towards achievement of the policies and targets that apply to Wales.

Economy and Community

16.8.6 Conclusions on potential effects are reached based upon the magnitude of the predicted change likely to occur to the baseline situation. The sensitivity of the receptor is a further consideration to be taken into account.

Tourism and Recreation

16.8.7 The effect on tourism has been assessed using surveys commissioned by a range of organisations into the public perception of wind turbines both in Wales and other parts of the UK. For the purpose of this assessment a 5km study area was drawn around the Proposed Development in order to identify the main tourist facilities and recreational locations that have the potential to be affected by the Proposed Development. Effects are most likely to result from the visual impact of the Proposed Development upon tourism receptors. The 5km study area is based upon the groups of PRow, open access land, country parks, paths and trails, considered likely or certain to sustain significant visual effects as a consequence of operation of the proposed turbines as determined in the LVIA (**Chapter 6**). Potential effects have been considered using professional judgement.

Land use

16.8.8 The effect on land uses has been assessed based upon the proportion of land directly or indirectly affected as a percentage of the overall total available and the ability of landowners and occupiers to continue to use the land for its current purposes. With regard to minerals this includes consideration of the extent of buffer zones and safeguarding areas within the CCBC area with the potential for the Proposed Development to affect the aims of these designations.

16.8.9 How this results in a predicted level of significance is set out within Error! Reference source not found..

Table 16.13 Matrix of EIA Significance

		Magnitude of change			
		High	Medium	Low	Very low
Sensitivity	High – Wales	Major (Significant)	Major (Significant)	Moderate (Significant)	Minor (Not significant)
	Medium – Regional level (South East Wales)	Major (Significant)	Moderate (Significant)	Minor (Not significant)	Negligible (Not significant)
	Low – County level (CCBC)	Moderate (Significant)	Minor (Not significant)	Negligible (Not significant)	Negligible (Not significant)
	Very Low – local (within 5km)	Minor (Not significant)	Negligible (Not significant)	Negligible (Not significant)	Negligible (Not significant)

16.9 Preliminary assessment of socio-economic effects: Climate change and energy security

Baseline conditions

16.9.1 The current baseline is set out in **Section** Error! Reference source not found..

Predicted effects and their significance

Operation

- 16.9.2 The Proposed Development has an installed capacity of up to 20MW dependent on the final turbine chosen for the scheme. For the purposes of this assessment a 4.2MW turbine has been used. Based on this turbine model, the annual generation for a four-turbine scheme would equate to 16.8MW and be expected to supply the domestic electricity needs of approximately 11,492 average households^{42,43}. By way of comparison for the potential number of homes to be provided with power, the CCBC area is estimated to have 77,242 households as of 2020 (StatsWales, 2021c)⁴⁴.
- 16.9.3 In the context of national policy for greater renewable energy, the proposal makes a positive contribution. The Welsh Government revoked TAN 8 (and the approach to Strategic Search Areas (SSA)), which included nominal targets for energy generation within each SSA, on publication of Future Wales: The National Plan 2040 in February 2021. There are no specific targets set out for the delivery of renewable energy generation for Pre-Assessed Area for Wind Energy 10 (within which the Site is located). However, the Welsh Government does set out an overall target for generation of consumed power by 2030 of 70% by renewable sources, which was then updated in January 2023 for 100% of Wales's electricity needs to be met by renewable sources by 2035. This updated target further emphasises the continued need for renewable energy development. In 2021, it was estimated that this figure stands at 55% (down from 56% in 2021). The Energy Report (Welsh Government, 2022) notes that the conditions are challenging for delivery of renewable energy. Furthermore, it notes that the CCBC area has an installed capacity originating from wind farms of 17MW across 21 projects within a total generation of 69MW from renewables⁴⁵. The Report notes that CCBC accounts for an estimated 2% of all

⁴² Assuming maximum rated capacity of 16.8MW and load factor average of 27.4% for onshore wind which takes into account the intermittent nature of the wind, the availability of the wind turbines and array losses. The load factor is based on Department of Energy Security and Climate Change (2023) Digest of UK Energy Statistics (DUKES): renewable sources of energy - DUKES chapter 6: statistics on energy from renewable sources. (Online) Available at <https://www.gov.uk/government/statistics/renewable-sources-of-energy-chapter-6-digest-of-united-kingdom-energy-statistics-dukes> (Accessed October 2023).

⁴³ Homes Equivalent = rated capacity of wind farm (MW) x average load factor for wind x number of hours in a year / average household energy consumption (MWh) (annual UK average domestic household consumption is 3,509 kWh as at December 2022)

⁴⁴ StatsWales (2021) Households by Local Authority and Year (Online) Available at: <https://statswales.gov.wales/Catalogue/Housing/Households/Estimates/households-by-localauthority-year> (Accessed August 2023).

⁴⁵ Welsh Government (2022) Energy Generation in Wales 2021. (Online) Available at: <https://www.gov.wales/sites/default/files/publications/2022-12/energy-generation-in-wales-2021.pdf> (Accessed August 2023). Page 41.

renewable energy generation in Wales. Given the potential for up to 20MW capacity to be delivered via the Proposed Development, this is considered to be substantial within the context of existing local and regional renewable energy generation.

- 16.9.4 Additionally, targets have been set for local ownership of 1.5GW of renewable energy capacity within local ownership by 2035, and for new energy projects to have at least an element of local ownership. Currently 859MW of generated power from renewable sources is within local ownership (Welsh Government, 2022). The Applicant (Pennant Walters) is a business registered in Wales, and therefore meets the Welsh Government's definition of local ownership (Welsh Government, 2020c)⁴⁶. The Proposed Development would therefore contribute to the Welsh Government's local ownership target.
- 16.9.5 The scale of the Proposed Development will go some way to meeting national wind energy priorities and help ensure that Wales moves towards net zero carbon in 2050, which is a legal duty placed on Ministers under the Environment (Wales) Act 2016 (as amended). The social and economic benefits that are derived from the Proposed Development will include the strengthening of the nation's security of supply and the mitigation of climate change.
- 16.9.6 The Proposed Development is also relevant in the national and local policy context of action to tackle CO₂ emissions, with its potential to reduce the levels of CO₂ emitted to the air. Error! Reference source not found. shows how the proposed wind farm could reduce emissions going into the atmosphere by replacing that generated through fossil fuels.

Table 16.14 Emissions to atmosphere if wind farm output replaces fossil fuel output based on a 16.8MW wind farm operating at 27.4% average load factor

Emissions to atmosphere avoided (tonnes) ⁴⁷		
	Annual	Total (30 years)
Carbon dioxide (CO ₂)	17,097	512,910

Note: Carbon dioxide is the main gas implicated in global warming.

- 16.9.7 Overall, the Proposed Development is considered to have moderate positive (significant) effects on this receptor.

16.10 Preliminary assessment of socio-economic effects: Economy and community

Baseline conditions

- 16.10.1 The current baseline is set out in **Section** Error! Reference source not found..

⁴⁶ Welsh Government (2020) Policy Statement: Local ownership of energy generation in Wales – benefitting Wales today and for future generations. (Online) Available at: <https://gov.wales/sites/default/files/publications/2020-02/policy-statement-local-ownership-of-energy-generation-in-wales.pdf> (Accessed August 2023).

⁴⁷ Based on DESNZ Digest of UK Energy Statistics 2022 estimated carbon dioxide emissions per GWh of electricity supplied by all of fossil fuels of 424 tonnes per GWh of electricity supplied.

Predicted effects and their significance

Construction – Employment and expenditure

- 16.10.2 The total average construction phase cost for onshore wind farms in Wales has been estimated as £1.133m per MW of installed capacity (Regeneris Consulting Ltd and Welsh Economy Research Unit, 2013⁴⁸). The construction and development of the Trecelyn wind farm could involve an investment of approximately £19.03m (based on an output of 16.8MW) based on the 2013 estimations. The study estimated that 35% of the development cost would remain in Wales equating to an estimated £6.66m expenditure in Wales during construction.
- 16.10.3 The construction phase would create the opportunity for direct economic benefits to Wales, and in particular the local authority area of CCBC and wider South-East region through the opportunities available to local firms to bid for mechanical, electrical and civil engineering contracts. Criteria for selecting the wind turbine manufacturer and civil and electrical contractors would be based on price specifications and guarantees to ensure that performance and technical specifications are met in full.
- 16.10.4 The Regeneris Welsh Economic Research Unity Study 2013 recognises that across Wales it is the south east region with its industrial base which is best suited to take advantage of the opportunities presented by projects such as the Proposed Development. Most of the jobs associated with the Proposed Development would occur in the construction phase and there is the potential for some of the work to be undertaken by local firms given that the Applicant is headquartered in Hirwaun with an extensive local supply chain. The Proposed Development is expected to involve the creation of up to 28 jobs during construction (based on Renewables UK Working for a Green Britain 2001⁴⁹) or 202 FTE direct, indirect and induced jobs during the construction and project development phase based upon the research undertaken by Regeneris and the Welsh Economic Research Unit 2013. In addition, it is likely that some of the quarry materials needed for the development (e.g. for road aggregate and hardcore) could be procured from local quarries. In relation to the baseline, which shows higher unemployment in the wards around the Proposed Development (and CCBC more generally), the development may therefore support some local employment generation.
- 16.10.5 Other indirect benefits to the local economy would come through an increased spend in bed and breakfast and other accommodation and the use of other local services and facilities during the construction phase.
- 16.10.6 Overall, the construction of the wind farm is likely to have a minor (not significant) positive effect on the socio-economic profile of the area, as there is potential for economic benefit to local construction firms, quarries, accommodation establishments and other local services.

Operation - Employment and expenditure

- 16.10.7 It is expected that the Proposed Development would directly employ 2 FTE for maintenance during the operational phase. Their duties will include compliance with statutory environmental requirements. It has been estimated that the operation and maintenance of onshore wind farm involves an average expenditure of £38,600 per MW

⁴⁸ Regeneris Consulting and the Welsh Economic Research Unit. Economic Opportunities for Wales from Future Onshore Wind Development 2013. <https://www.renewableuk-cymru.com/wp-content/uploads/Wales-Onshore-economic-benefit.pdf> Accessed October 2023.

⁴⁹ Renewables UK. Working for a Greener Britain 2001. Volume 1. <https://www.renewableuk.com/news/309146/Working-or-a-Green-Britain---Volume-1.htm> Accessed November 2022.

per annum, with 76% of that expected to be retained in Wales (Regeneris Consulting Ltd and Welsh Economy Research Unit, 2013). For a scheme based on 16.8MW that would result in approximately £0.65m of expenditure annually, with approximately £0.49m being retained in Wales.

Operation - Business Rates

- 16.10.8 At present, all Non-Domestic Rates ('business rates') (NDR) are based on the rateable value of properties. The rates are collected by local authorities and are then given to the Welsh Government. The Welsh Government then distributes to the 22 local authorities based on different social and economic factors. Therefore, the local council (CCBC) would see no direct financial benefit from the wind farm but would benefit indirectly via the redistribution of rates from Welsh Government. However, it is difficult to quantify any direct benefit that would accrue for the local authority.

Operation - Community Benefits

- 16.10.9 The Applicant is conscious of its role and the Proposed Development's role within the community and wants to ensure that the local community shares some of the financial benefits of the having the wind farm in the area. This will be implemented by a Community Fund, the mechanism of which will be decided post consent, should the application be permitted. The Applicant across all of its wind farm projects currently is committed to providing £11,687,500 in community benefit funds⁵⁰.

16.11 Preliminary assessment of socio-economic effects: Tourism and recreation

Baseline conditions

- 16.11.1 The current baseline is set out in **Section** Error! Reference source not found..

Predicted effects and their significance

Construction

- 16.11.2 The PRowS that cross the Proposed Development Site are discussed in **Section** Error! Reference source not found.. As outlined in **Section** Error! Reference source not found. there will be a requirement for measures to address any effects on these PRowS, including via appropriate management, diversions and closures (where necessary) outlined in **Table 16.11**. There is potential for some disruption to the PRowS, although the measures identified under either of the options should reduce the likelihood of any significant issues for users.
- 16.11.3 Indirect effects resulting from the construction activities, such as the use of the local highway network for deliveries which could potentially affect visitors travelling to the area, are discussed within **Chapter 12** of this ES.

⁵⁰ See <https://pennantwalters.co.uk/site/> for details of community funds provided to other schemes.

Operation

- 16.11.4 The measures for closure and diversion of PRow to avoid Turbine 1 outlined in **Section Error! Reference source not found.** also apply during the operational phase. Additionally, measures would be retained for signage to alert users for alternative routes.
- 16.11.5 The diversion of PRow to avoid conflict with Turbine 1, and signage to alert users to the existing alternative route for walkers and horse riders around Turbine 2, will reduce the likelihood of significant issues for user experience over the lifetime of the development but there will be some inevitable effects on users through the use of new or amended routes. The implementation of the embedded measures should, however, ensure no significant effects on these receptors.
- 16.11.6 Visual effects on tourism and recreational receptors have been assessed in the LVIA section of the ES (**Chapter 6**). The assessment has concluded that, from consideration of the extensive network of national and regional trails significant visual effects would be experienced from:
- Regionally promoted footpaths from some locations along: Taith Torfaen Anytime Challenge; Ebbw Vale Walk; Cambrian Way; Cistercian Way (Wales); Torfaen Trail; Raven Walk; Celtic Way; Sirhowy Valley Ridgeway Walk; Monmouthshire Way; and Rhymney Valley Ridgeway Walk.
 - From a localized section of national cycle route NCN466 for the ~1.0km section through Swffryd.
 - From elements of Blackwood Golf Club and Sirhowy Valley Country Park.
 - Some parts of Open Access land and PRow within 5km of proposed turbines and some parts of Open Access land between 5km-10km.
- 16.11.7 Effects on heritage assets that may contribute to the tourism resource are considered in **Chapter 7: Historic Environment**. No significant effects on heritage assets have been identified in the assessment. There is no possibility for any shadow flicker effects on tourist accommodation (mitigation has been identified for residential receptors in **Chapter 15: Shadow Flicker**).
- 16.11.8 A number of studies have in the past been commissioned into the potential effects of wind turbines upon tourists. These are summarised within the British Wind Energy Association (now RenewableUK) study 'The impact of wind farms on the tourism industry of the UK' (BWEA, 2006)⁵¹. It found that surveys demonstrate that the effect of wind farms on tourism is negligible at worst, with many respondents taking a positive view to wind farms.
- 16.11.9 In 2013 a survey commissioned for RenewableUK Cymru (YouGov, 2013)⁵² found 64% of respondents in Wales supported the development of wind power in their local area. For South-East Wales this was higher at 74%. The survey also found that 65% of people said a wind farm would not put them off visiting an area whilst only 26% suggested that it might dissuade them. For South-East Wales, these figures stood at 72% and 19% respectively.

⁵¹ British Wind Energy Association (2006) The impact of wind farms on the tourism industry of the UK. (Online) Available at: <https://www.northumberland.gov.uk/NorthumberlandCountyCouncil/media/Planning-and-Building/planning%20policy/Core%20strategy/Evidence%20based/EB14-Evaluation-of-the-impacts-of-onshore-wind-farms-on-tourism.pdf> (Accessed September 2022).

⁵² YouGov (2013) YouGov RenewableUK Cymru Poll Results. Commissioned by RenewableUK Cymru

- 16.11.10 Furthermore, a 2014 study for Welsh Government (Regeneris Consulting and The Tourism Company for Welsh Government, 2014)⁵³ regarding the impact of wind farms and their associated grid infrastructure on the Welsh tourism sector, found that there is:
- A negligible impact on the national tourism sector from wind farms;
 - Limited evidence of local tourism impacts to date;
 - A clear majority of people that do not react negatively to wind farm developments or change their visiting behaviour as a result;
 - Complex reactions to wind farms which may change over time;
 - Higher sensitivity to wind farms for certain visitor markets;
 - Some potential for positive impacts, often requiring further investment;
 - No evidence that wind farms on visitor routes deter tourists; and
 - No negative impacts during construction.
- 16.11.11 The study found that there was no evidence of significant impacts on tourism to date in areas where wind farms have had an established presence for a number of years (Powys, Anglesey and the South Wales Valleys). Overall, there is no evidence to suggest that the tourism industry has been affected by wind farms operating in Wales or across the UK. Additionally, no significant effects have been identified on any cultural heritage assets that might support the tourism resource of the area (see **Chapter 7: Historic Environment**). It is concluded that the Proposed Development would not have a significant adverse effect upon the local tourism industry or recreational routes.

16.12 Preliminary assessment of socio-economic effects: Land use

Baseline conditions

- 16.12.1 The current baseline is set out in **Section** Error! Reference source not found..

Predicted effects and their significance

Construction – Common land

- 16.12.2 An area of the Site includes the Mynydd Maen Common. Commoners exercise their rights to graze sheep and cattle. Embedded mitigation measures would ensure that livestock is protected from site access activities through the use of measures applied during construction including signage, site briefings, speed limits, and use of banksmen. Furthermore, the Applicant would liaise with landowners and with commoners in advance of construction commencing to explain the proposed phasing of activities and to provide them with relevant information. No wind turbines or new access tracks would be

⁵³ Regeneris Consulting and The Tourism Company for Welsh Government (2014) Study into the Potential Economic Impact of Wind Farms and Associated Grid Infrastructure on the Welsh Tourism Sector (Online) Available at: https://gov.wales/sites/default/files/publications/2019-06/potential-economic-impact-of-wind-farms-on-welsh-tourism_0.pdf (Accessed September 2022).

constructed within the Common. A small portion of the access between turbines 1 and 2 falls within the common.

- 16.12.3 In view of the mitigation proposed, the effect of the Proposed Development during its construction is considered to be not significant. The means of managing the construction interface with the commoners will be set out in the CEMP whilst temporary construction works delivered via the Commons Act 2006.

Construction and Operation - Minerals

- 16.12.4 The southern part of the Proposed Development Site is close to the Hafod Fach Quarry and includes an area (of approximately 22ha) within the Hafod Fach Quarry Mineral Site Buffer Zone identified in the CCBC LDP. The access track for Turbine 3 and Turbine 4 would be partially located in in the Mineral Site Buffer Zone (with approximately 350m of new access track located in the buffer) although the turbines would be located outside of the zone. The aim of the policy is to ensure that no new mineral development is permitted within the buffer zone to prevent encroachment towards the sensitive land use (in this case, the Hafod Fach Quarry) and that new sensitive land uses are introduced that would provide a constraint to mineral working. The Proposed Development is not a sensitive or mineral development and would include only minimal development (approximately 350m length of access track) within the buffer zone itself. Therefore, the Proposed Development is not considered to impact upon the buffer zone.
- 16.12.5 The Site is wholly located in the mineral safeguarding area for sandstone identified in the CCBC LDP. The sandstone safeguarding area covers almost the entirety of CCBC's central area. The land where the Proposed Development would be sited represents a tiny fraction of the overall safeguarded area within the CCBC area (with the total area within the Proposed Development red line boundary totalling 86.4 ha) with the built development required for the Proposed Development substantially smaller. Furthermore, the Proposed Development has a finite life of 30 years at which point it may be decommissioned. Minerals would not therefore be sterilised permanently over the vast majority of the site.
- 16.12.6 Given that the land upon which the Proposed Development would be located presents a very small part of the substantial areas of land safeguarded for mineral extraction the effects arising from its construction and operation would not be significant.

16.13 Preliminary assessment of cumulative (inter-project) effects

- 16.13.1 A cumulative effects assessment (CEA) has been undertaken for the Proposed Development which considers the combined impacts with other developments on the same single receptor or resource (inter-project effects). The detailed method followed in identifying and assessing potential cumulative effects is set out in **Section 2.8** of **Chapter 2**.
- 16.13.2 Consideration has been given as to whether any of the socio-economic receptors that have been taken forward for assessment in this chapter are likely to be subject to cumulative socio-economic effects because of socio-economic effects generated by other developments.

Overview

- 16.13.3 The socio-economic cumulative assessment is concerned with the evaluation of the effects that could be generated were the Proposed Development to be constructed and operational along with other wind farm developments in the area.

Cumulative socio-economic effects

- 16.13.4 Cumulative effects can arise from the construction and operation of other wind farms, which can lead to cumulative economic, energy security and climate change benefits. The Proposed Development is located within 5km of two proposed Development of National Significance (DNS) wind farm applications: Mynydd Maen wind farm (up to 16 turbines) at scoping stage, and Mynydd Llanhilleth wind farm (12 turbines) at application stage, whilst Mynydd Carn-y-Cefn (8 turbines) currently under consideration by Welsh Ministers and Abertillery wind farm (7 turbines) at draft ES consultation stage are within 10km. The development of the Proposed Development along with the development of some or all of these proposed wind turbine developments would lead to an additional local and regional impact on the economy, which would be beneficial during construction and operation for:
- Employment (directly and indirectly); and
 - The related industries of wind energy and the supply chain.
- 16.13.5 Also, it is likely that local communities within the area would benefit from the generation of community funds.
- 16.13.6 The delivery of some or all of these wind farms would also support the achievement of positive effects in relation to meeting the Welsh Government's climate change commitments and renewable energy targets.
- 16.13.7 The proposed Mynydd Maen Wind Farm is sited on Mynydd Maen common land. There is therefore the potential for cumulative effects upon the Common although the extent of loss and the provision of compensatory land associated with the Mynydd Maen Wind Farm is unknown from the information provided within the prospective applicant's scoping report.
- 16.13.8 With regard to mineral sterilisation, significant proportions of the relevant local authority boundaries include areas safeguarded for mineral extraction (aggregate), including land identified for the Mynydd Carn y Cefn, Abertillery and Manmoel Wind Farms and in the case of Mynydd Maen Wind Farm for sandstone. However, should they be consented, this would be for a maximum of 30 years ensuring that longer term access to the aggregate would be possible. There are no known current proposals to extract minerals within or in the vicinity of these wind farms.
- 16.13.9 The cumulative visual effects could dissuade visitors from visiting the area and therefore impact on tourism and recreation. **Chapter 6: Landscape and Visual Impact Assessment** Error! Reference source not found. sets out the wind turbines that are proposed, consented or operational within the area that have been included in the cumulative assessment of visual effects on recreational receptors. The effects are assessed in **Section 6.12** and **6.13**.
- 16.13.10 The cumulative assessment considers where a magnitude of change could potentially result in a cumulative visual effect that would be significant with the Proposed Development's turbines present that would otherwise be not significant if the Proposed Development's turbines were not to become operational. The key consideration is the additional or incremental effect that would be generated by the introduction of the Proposed Development. The LVIA's cumulative assessment is informed by two scenario-based assessments⁵⁴.

⁵⁴ The Chapter LVIA cumulative assessment is based on two development scenarios as described in Chapter 6 Section 6.13: Scenario One includes other existing (and under construction) and consented wind energy developments, and Scenario Two includes other existing (and under construction), consented and proposed (subject of a formal planning application and Scoping Opinion) wind energy developments.

- 16.13.11 Under Scenario One, the assessment finds that the contribution of operational and consented wind energy schemes to the overall magnitude of turbines visible from recreational receptors identified as having Moderate or Moderate/Minor levels of visual effect (i.e. not a significant effect) is typically of a very low to low magnitude and the addition of the Proposed Development would not raise the overall magnitude to a significant level. It is assessed that there is no potential for the Proposed Development to result in significant visual effects where these would not arise in relation to either Proposed Development, or one of the other baseline wind farms, alone.
- 16.13.12 Under Scenario Two (the worst case scenario as in reality not all developments may be granted planning consent), the additional contribution of other proposed wind energy schemes to the overall magnitude of turbines visible from recreational receptors (parts of promoted footpaths and recreational open space predicted to experience Moderate or Moderate/Minor levels of visual effect) is frequently significant and the addition of the Proposed Development would typically only slightly reinforce an already significant visual effect.
- 16.13.13 Therefore, under both scenarios the visual effects on recreational receptors finds that there are no additional significant effects to those identified for the Proposed Development by itself (as considered in **Section 6.11**).

16.14 Preliminary significance conclusions

- 16.14.1 A summary of the results of the preliminary Socio-economics assessment is provided in **Error! Reference source not found.7**.

Table 16.15 Preliminary summary of significance of effects

Receptor and summary of predicted effects	Sensitivity / importance / value of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale
Climate change and energy security – operational phase	National	Low	Moderate (Significant)	Based on the current turbine model, the Proposed Development would provide 16.8MW of electricity which is enough to power around 11,492 homes. The installation of 16.8MW represents a considerable increase in installed capacity within the CCBC area and would contribute to the achievement of the Welsh Government's target of 70% of energy consumption to be provided by renewable sources by 2030 (and emerging target for 100% by 2035) and the target for local ownership of renewable energy generation in Wales.
Economy and community employment and expenditure – construction phase	Regional	Low	Minor (Not Significant)	Positive contribution to the Welsh economy with potential investment of £6.66m during the construction phase. Much of this spend would take place in the region. Creation of up to 28 jobs during would be expected in the construction phase.
Economy and community employment and expenditure – operational phase	National	Very low	Minor (Not significant)	Expenditure of approximately £0.49m in the Welsh economy. Expected ongoing employment of around 2 FTE.
Economy and community non domestic rates – operational phase	County	Low	Negligible (Not significant)	There is potential for boosts to CCBC funds from redistribution of increased business rate funds via the redistribution of funds by Welsh Government.
Tourism and recreation - construction	Local	High	Minor (Not significant)	A number of PRowWs cross the site. The implementation of suitable environmental measures as outlined in Table 16.11 would ensure no significant effects are experienced by receptors.

Receptor and summary of predicted effects	Sensitivity / importance / value of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale
Tourism and recreation – operational phase	County	Medium	Minor (Not significant)	<p>There would be some impact on the existing PRowWs and one footpath would require permanent diversion. However, the embedded environmental measures would ensure that the user experience is not significantly impacted.</p> <p>There would be some visual impact on some locations of existing recreational receptors including regional paths, open spaces and country parks. However, overall, given that studies suggest that wind turbines do not dissuade visitors no significant effects are assessed.</p>
Land use – common land – construction phase	County	Very Low	Negligible (Not Significant)	Measures would be put in place via the CEMP to protect grazing animals from construction activities. Secondary consent under Section 38 for temporary construction works.
Land use – Minerals – construction phase	County	Very Low	Negligible (Not Significant)	A small proportion of the site is within Mineral Buffer Zone (circa 22ha of Site area overall within which approximately 350m of new access track to access Turbine 3 and 4 will be developed) but the development is not sensitive or a mineral development. The Proposed Development is therefore likely to have a negligible effect on the reasons for the buffer.
Land use – Minerals – operational phase	County	Low	Negligible (Not Significant)	A sandstone safeguarding area covers much of the CCBC area. The area of land occupied as a proportion of the whole sandstone safeguarding area is exceptionally small (86.4 ha for the red line boundary as a whole). The wind farm is a temporary development (albeit with a lifespan of 30 years).

1. The sensitivity/importance/value of a receptor is defined using the criteria set out in Section 16.8 and is defined as very low (local), low (county), medium (regional) and high (national).

2. The magnitude of change on a receptor resulting from activities relating to the development is defined using the criteria set out in Section 16.8 and is defined as very low, low, medium and high.
3. The significance of the environmental effects is based on the combination of the sensitivity/importance/value of a receptor and the magnitude of change and is expressed as major (significant), moderate (potentially significant) or minor/negligible (not significant), subject to the evaluation methodology outlined in Section 16.8.

16.15 Further work to be undertaken

- 16.15.1 The information provided in this Draft ES is preliminary, the final assessment of likely significant effects will be reported in the ES. The final ES will be informed by engagement with officers of CCBC to explore the range of mitigation measures proposed to minimise effects on users of the PRow network.