
PARC TRAFFWLL

ECONOMIC BENEFITS STATEMENT

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CONTENTS

PAGE NO

1.0	INTRODUCTION	01
2.0	POLICY GUIDANCE	02
	i) Future Wales: The National Plan 2040	02
	ii) Planning Policy Wales Edition 11 (February 2021)	05
	iii) Prosperity for All: A Low Carbon Wales	06
	iv) Prosperity for All: Economic Action Plan	07
	v) A Growth Vision for the Economy of North Wales July 2016	07
	vi) Anglesey and Gwynedd Joint Local Development Plan 2011-2016	08
	vii) The Anglesey Energy Island Programme	09
	i) Business Wales	10
3.0	ENERGY GENERATION ACROSS WALES	11
4.0	SOLAR PV FARM VALUE CHAIN – OCCUPATION PROFILE	15
5.0	SOCIO-ECONOMIC BASELINE	22
	i) Age Structure	23
	ii) Economic Activity	24
	iii) Skills and Occupations	24
	iv) Industry of Employment	27
	v) Place of Work	28
	vi) Employment by sector	29
6.0	ECONOMIC BENEFITS	32
7.0	SUMMARY	39

1.0 INTRODUCTION

- 1.1 This Economic Benefits Statement has been prepared by Barton Willmore on behalf of Parc Solar Traffwll Ltd (the Applicant) in relation to the proposed planning application for the construction, operation and decommissioning of a solar farm. The proposed development encompasses 3 parcels of land (referred to as 'development areas') which are located to the west and south-east of the village Llanfihangel yn Nhowyn and to the south and south-east of the village Bryngwran. RAF Valley is situated to the south and the A55 Expressway lies to the north. The Application Site is situated within the administrative area of the Isle of Anglesey in Wales.
- 1.2 Section 2 of the Statement will review the relevant economic policy to understand how the Proposed Development can support and contribute to National, Regional, and Local economic growth aspirations.
- 1.3 Further to this, Section 3 will briefly review the current renewable energy generation across Wales. This will highlight how the Proposed Development could contribute to meeting energy production targets. Section 4 will set out the potential occupation profile that could be created by the Proposed Development, demonstrating the diversity of skills required across the development lifecycle.
- 1.4 Section 5 will evaluate the existing socio-economic context of the local to regional area. This will focus on how compatible the Proposed Development is with the existing labour market. Section 6 goes on to identify the economic benefits that could be generated by the Proposed Development.

2.0 POLICY GUIDANCE

- 2.1 This section considers the relevant economic policy guidance, reviewing how the Proposed Development could support economic growth aspirations across Wales, specifically the Northern Region and Isle of Anglesey.
- 2.2 It is evident from National policy guidance and growth planning that Wales recognises an increase in economic prosperity must contribute to the clean growth aim. In February the Welsh Government set out its legal commitment to achieve net zero emissions by 2050, but is pushing to “get there sooner” as it gets ready for COP26 (26th United Nations’ Climate Change Conference of the Parties) in November.
- a) National Context
- i) *Future Wales: The National Plan 2040*
- 2.3 Future Wales - the National Plan 2040 is the national development framework, setting the direction for development across Wales up to 2040 (February 2021). The Future Wales document is a spatial plan setting a direction for investment in infrastructure and development.
- 2.4 The Plan comments that Wales is well positioned to support the renewable sector, attract new investment and reduce carbon emissions. It refers to the ‘potential for solar generation’ and how the planning system has a key in leading renewable energy growth.
- 2.5 The Plan sets out ambitions for Wales to become a world leader in renewable energy technologies. It acknowledges that the natural wind and tidal resources, potential for solar generation, together with the support for both large and community scaled projects and our commitment to ensuring the planning system provides a strong lead for renewable energy development, equate to a well-supported renewables sector. This creates opportunity to attract new investment and reduce carbon emissions.
- 2.6 The energy is referred to as a key industry within the Plan. The Plan states that there must be alignment between the response to the climate emergency and the need to address the twin challenge for biodiversity.

- 2.7 The Plan recognises that decarbonisation commitments and renewable energy targets create an opportunity to build a more resilient and equitable low-carbon economy, develop clean and efficient transport infrastructure, improve public health and generate skilled jobs in new sectors.
- 2.8 Rural areas are credited within the Plan as playing a crucial role in helping decarbonise Wales by providing suitable environments for different forms of renewable energy. Policies 17 and 18 set out Future Wales' approach to renewable energy generation across Wales and its relationship with rural areas.
- 2.9 Policy 17 – Renewable and Low Carbon Energy and Associated Infrastructure states that the Welsh Government strongly supports the principle of developing renewable and low carbon energy from all technologies and at all scales to meet future energy needs. It states that decision-makers must give significant weight to the need to meet Wales' international commitments and targets to generate 70% of consumed electricity by renewable means by 2030 to combat the climate emergency.
- 2.10 Policy 17 also highlights that proposals should describe the net benefits the scheme, and what they will bring in terms of social, economic, environmental, and cultural improvements to local communities.
- 2.11 Policy 18 – Renewable and Low Carbon Energy Developments of National Significance refers to proposals for renewable and low carbon energy projects (including repowering) qualifying as Developments of National Significance being permitted subject to policy 17 and the following criteria:
- Outside of the Pre-Assessed Areas for wind developments and everywhere for all other technologies, the proposal does not have an unacceptable adverse impact on the surrounding landscape (particularly on the setting of National Parks and Areas of Outstanding Natural Beauty);
 - There are no unacceptable adverse visual impacts on nearby communities and individual dwellings;
 - There are no adverse effects on the integrity of Internationally designated sites (including National Site Network sites and Ramsar sites) and the features for which they have been designated (unless there are no alternative solutions, Imperative Reasons of Overriding Public Interest (IROPI) and appropriate compensatory measures have been secured);

- There are no unacceptable adverse impacts on national statutory designated sites for nature conservation (and the features for which they have been designated), protected habitats and species;
- The proposal includes biodiversity enhancement measures to provide a net benefit for biodiversity;
- There are no unacceptable adverse impacts on statutorily protected built heritage assets;
- There are no unacceptable adverse impacts by way of shadow flicker, noise, reflected light, air quality or electromagnetic disturbance; 8. there are no unacceptable impacts on the operations of defence facilities and operations (including aviation and radar) or the Mid Wales Low Flying Tactical Training Area (TTA-7T); 9. there are no unacceptable adverse impacts on the transport network through the transportation of components or source fuels during its construction and/or ongoing operation;
- The proposal includes consideration of the materials needed or generated by the development to ensure the sustainable use and management of resources;
- There are acceptable provisions relating to the decommissioning of the development at the end of its lifetime, including the removal of infrastructure and effective restoration.

2.12 The North Region comprises Conwy, Denbighshire, Flintshire, Gwynedd, the Isle of Anglesey, Snowdonia National Park and Wrexham and is home to around 700,000 people. Decarbonisation and responding to the threats of the climate emergency is described within the Plan as central to the areas regional planning.

2.13 The Plan considers Wales to be abundant in opportunities to generate renewable energy. The Welsh Government is committed to maximising this potential. The Plan comments that generating renewable energy is a key part of the commitment to decarbonisation and tackling the climate emergency. The Plan sets the following ambitious targets for the generation of renewable energy:

- For 70% of electricity consumption to be generated from renewable energy by 2030.
- For one gigawatt of renewable energy capacity to be locally owned by 2030.
- For new renewable energy projects to have at least an element of local ownership from 2020.

2.14 The Plan concludes it is 'vital the region plays its role in decarbonising society and supports the realisation of renewable energy'. Policies 17 and 18 set out Future Wales' approach to

renewable energy generation. They refer to a strong potential for wind, marine and solar energy generation. The Welsh Government wishes to see energy generation, storage and management play a role in supporting the regional economy in the North. Local ownership and distribution are important for ensuring communities in proximity to renewable energy development benefit from it and that our future energy system better serves Wales.

2.15 Policy 24 – North West Wales and Energy, the Welsh Government supports North West Wales as a location for new energy development and investment. New energy-related development in the region should support local and regional communities; provide jobs and investment in training and skills; and work with universities and businesses across the region and the North West of England to co-ordinate and maximise new investment to support the wider region.

2.16 The Plan refers to The Anglesey 'Energy Island' Programme. The Programme seeks to co-ordinate action in relation to new energy developments to maximise the benefits for the area. It was established by Isle of Anglesey County Council and is a collective effort between several stakeholders within the public, private and third sectors working in partnership, putting Anglesey at the forefront of low carbon energy research and development, production and servicing, and bringing with it potentially huge economic rewards.

ii) Planning Policy Wales Edition 11 (February 2021)

2.17 Planning Policy Wales (PPW) sets out the land use planning policies of the Welsh Government. The primary objective of the PPW is to ensure that the planning system contributes towards the delivery of sustainable development and improves the social, economic, environmental, and cultural well-being of Wales.

2.18 Amongst the key planning principles set out within the PPW is the aspiration to grow the economy in a sustainable manner. 'The planning system should enable development which contributes to long term economic well-being, making the best use of existing infrastructure and planning for new supporting infrastructure and services. Communities, national and local government, businesses, and the third sector must work together to take a long-term view, integrating and aligning priorities through greater collaboration to achieve sustainable economic benefits for all in line with the well-being goals'¹.

¹ Planning Policy Wales Edition 11 (February 2021), Page 17

- 2.19 PPW refers to the 'efficient use of resources, including land, underpinning sustainable development. The planning system has a vital role to play in making development resilient to climate change, decarbonising society, and developing a circular economy for the benefit of both the built and natural environments. Development plans and proposals should support the achievement of a more prosperous, low carbon, innovative and resource efficient wales.
- 2.20 One of the Welsh Government's key priorities is for low carbon electricity to become the main source of energy in Wales. PPW refers to renewable and low carbon energy developments offering significant potential for communities and small businesses.
- 2.21 PPW states that in determining applications for the range of renewable and low carbon energy technologies, planning authorities should consider the contribution a proposal will make to meeting identified Welsh, UK and European targets; the contribution to cutting greenhouse gas emissions; and the wider environmental, social and economic benefits and opportunities from renewable and low carbon energy development.
- 2.22 The Welsh Government defines economic development as the development of land and buildings for activities that generate sustainable long-term prosperity, jobs and incomes. Growth in innovative, emerging technology and high value-added sectors such as renewable and low carbon energy, are strongly supported. The PPW states that development plans should consider the role these sectors may play in terms of investment and job creation in their area.

iii) Prosperity for All: A Low Carbon Wales

- 2.23 This Plan sets out the Welsh Government's approach to cut emissions and increase efficiency in a way that maximises wider benefits for Wales. It states that the low-carbon economy across Wales is currently estimated to consist of 9,000 businesses, employing 13,000 people and generating £2.4 billion turnover in 2016. Over the past 20 years carbon GHG emissions have fallen, whilst Gross Value Added (GVA) has risen. The Plan recognises that to increase economic prosperity the Welsh economy must contribute to the clean growth aim.
- 2.24 The Plan discusses the significant economic leakage from Wales because of the current energy system. With technological advances and increased leadership, the Plan aims to create an energy system that retains more of the economic value for Wales. The Plan notes that through localised production more direct benefits can be directed to the local communities through skills, quality jobs and a greater retention of economic value.

2.25 The future skills profile is referred to within the Plan as the long-term challenge to the progress of decarbonisation. There is a need to transition the workforce and maximise the opportunities presented by global clean growth. The Plan states that for a low carbon economy there needs to be a focus around the up skilling and re-skilling of people around new technologies, industries, trades, and approaches.

iv) Prosperity for All: Economic Action Plan

2.26 The Economic Action Plan (EAP) published in December 2017, sets out Welsh Government's approach to the economy and business. The Plan recognises that the shift towards a low-carbon future offers huge opportunities for the economy to diversify and grow. It aims to support business, people and places in transitioning toward that low carbon future.

2.27 As part of the Plan's well-being objectives there is a drive to deliver sustainable growth and combat climate change. Businesses seeking support will be required to align with decarbonisation plans, acknowledging that market share will be influenced by businesses becoming carbon light or carbon free.

2.28 The Plan highlights the need to focus on effective use of resources. The renewables sector is identified as an 'enabler', driving the competitiveness for successful business. There are aspirations to work with companies that provide significant growth opportunities for Wales from the transition to a low carbon economy.

v) A Growth Vision for the Economy of North Wales July 2016

2.29 The Growth Vision, produced by the North Wales Economic Ambition Board, sets out the vision across North Wales up to 2035. The North Wales Economic Ambition Board is a partnership comprising of the 6 Local Authorities in the region, along with Bangor University, Glyndwr University, Coleg Cambria and Grŵp Llandrillo Menai. The Board was established in 2012 by the partners to develop a regional approach to economic growth and to addressing the challenges and barriers facing the North Wales economy. In 2016 the Board adopted A Growth Vision for the Economy of North Wales.

2.30 Delivery of the vision will be powered by high value economic clusters throughout North Wales. The energy cluster is a key part of the area's economic growth plans, with expertise around energy generation, low carbon technologies and processes.

- 2.31 The Growth Vision refers to North Wales as an area positioned to be one of the leading UK locations for energy generation and energy related supply chain investment. It aims to create expertise in business, with supportive academia to seize opportunities for the global demand for low or zero carbon energy.
- vi) Anglesey and Gwynedd Joint Local Development Plan 2011- 2026*
- 2.32 The Anglesey and Gwynedd Joint Local Development Plan was adopted in July 2017 and provides the overarching strategic planning framework for Anglesey and Gwynedd to 2026.
- 2.33 The Plan sets out the key issues to be tackled across the joint area. This includes the loss of young economically active residents, low productivity (Gross Value Added, per capita) within the local economy and the need to respond to business development needs and employment needs of existing/new employers. Appropriate training and skills were also highlighted as a barrier to growth.
- 2.34 The need to mitigate the effects of climate change, e.g., reduce greenhouse gas emissions, promote generating renewable energy and low carbon were referenced in the Plan as key issues.
- 2.35 The Plan states that by 2026, the Joint Local Development Plan area will boast an appropriately skilled workforce where residents and businesses are able to grasp new transformational economic opportunities to thrive and prosper, promoting economic activity amongst young people and responding positively to the challenges of climate change. The Plan seeks a varied, well connected, sustainable, and broad economic base that makes the best use of local strengths and opportunities, and where the benefits deriving from the varied economic base are kept local.
- 2.36 Strategic Policy PS 5- Sustainable Development refers to all development proposals needing to alleviate the causes of climate change. The Plan aims to facilitate both Councils' strategies to grow and diversify the Plan area's economy. Strategic Policy PS 13: Providing Opportunity for a Flourishing Economy states that the Councils will facilitate economic growth in accordance with the spatial strategy of the Plan by supporting economic prosperity and sustainability of rural communities.

vii) *The Anglesey Energy Island Programme²*

- 2.37 The Energy Island Programme was first conceived in 2008 at a time of announcements on the closure of the Anglesey Aluminium works in Holyhead and Magnox nuclear power station at Wylfa in north Anglesey. This would result in the loss of over 1,500 well paid jobs in the area.
- 2.38 The Programme responded as far as possible to the opportunities presented by proposed low-carbon energy generation projects. The Energy Island programme raised the profile of Anglesey as a place to develop low-carbon energy technologies. The programme has ensured that the local community is better placed to take full advantage and benefit from inward investment in the energy sector and encouraged local companies to up-skill their workforce.
- 2.39 In September 2012, the Isle of Anglesey County Council and Energy Island Programme signed a Memorandum of Understanding with six national sector skills councils, to enable the Energy Island Programme to plan for the skills that are needed to support new investments in the energy sector.
- 2.40 The development of a skilled workforce has been supported by training providers and businesses, with the latter working with the programme on developing a supply chain prepared to compete for the anticipated work contracts.
- 2.41 The programme has established a credible status with developers, through regular interaction throughout the developmental process. The 'brand' is recognised by key players at UK Government level and companies in the energy sector. The Energy Island Programme is strategic in nature, aligning with the corporate objectives of Isle of Anglesey County Council, with the ambition of raising the economic performance of the island.
- 2.42 The further development of the low-carbon energy sector has reinforced the role that Anglesey can play in contributing to the UK's increasing energy demands. The Isle of Anglesey County Council realised early on that a focus on a particular industry and product (low-carbon energy production in this case) had the potential to align priorities and retain a core purpose to achieve wider prosperity for the people of Anglesey and beyond. This plan has also received the support and 'buy-in' of agencies and government who have provided resources, when and where required, to assist with the delivery of the programme, and is timely due to the sector being a progressive area of industry and technology.

² Following text sourced from The Anglesey Energy Island Programme Case Study, crew Regeneration Wales.

viii) Business Wales³

2.43 Anglesey is one of ten Enterprise Zones across Wales. The vision for Anglesey Enterprise Zone is to create a world-renowned centre of excellence for the production, demonstration, and servicing of low carbon energy. This is emphasised within the context of Wales' national commitment to a low carbon future, with over 40,000 people employed in the sector contributing more than £3.2 billion to the economy annually. Business Wales highlights the following features relating to Anglesey:

- Continually developing, with local academic institutions working alongside industry to hone the skills businesses require and support workforce development.
- The dedicated Cwmni Prentis Menai Scheme, for example, delivers engineering and construction apprenticeships specifically for the energy supply chain.
- The European-funded Shaping the Future project, is already re-skilling the 600+ staff from the former Wylfa nuclear plant for potential employment by future companies locating to the Zone. These workers are becoming available as plant is decommissioned, and already have highly technical expertise - decommissioning work involves cutting edge technology and engineering capabilities - with a large proportion qualified to degree level.
- Bangor University has an international reputation in R&D across key departments such as Electronic Engineering and Psychology and Business and Ocean Sciences, as well as international links with Middle East, China, and Japan.

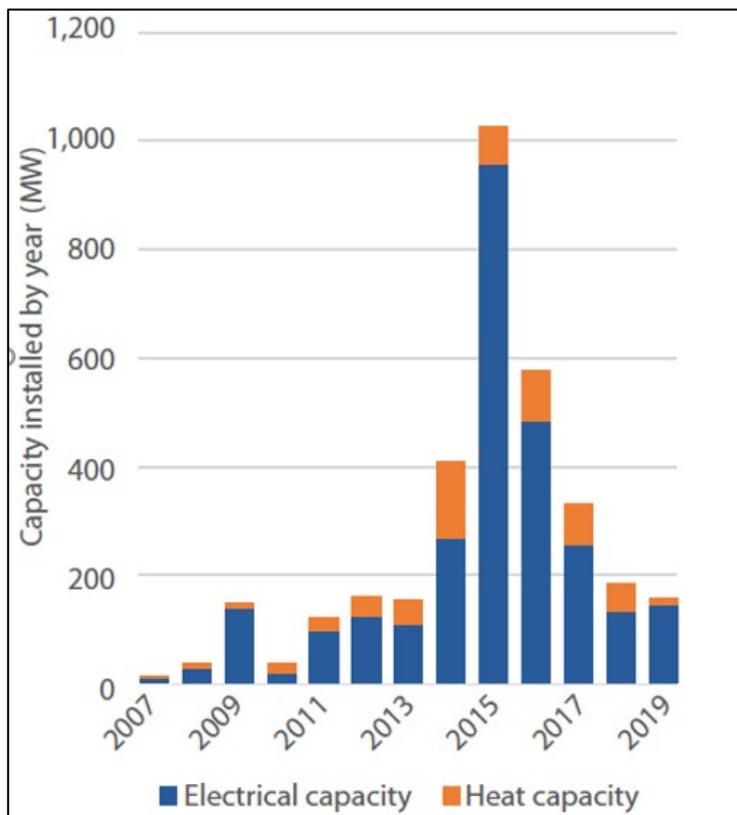
2.44 The Proposed Development would contribute to local and regional economic growth, supporting the progress of the area as an energy industry cluster. It would also provide significant progress in meeting national and global energy targets.

³ Business Wales is a free service provided by the Welsh Government that provides impartial, independent support and advice to people starting, running and growing a business in Wales. With regional centres across Wales, it offers a mixture of online and face-to-face support, as well as training workshops and individual advice.

3.0 ENERGY GENERATION ACROSS WALES

- 3.1 Section 3 will briefly review the current energy generation pattern across Wales. This will provide insight into how the Proposed Development could contribute to the meeting renewable energy targets and supporting economic growth ambitions with clean energy.
- 3.2 According to 'The Energy Generation in Wales 2019 Report', Wales is currently a net exporter of electricity, having consumed approximately 14.7 TWh of electricity in 2019, while generating approximately 27.9 TWh. Approximately 27% of electricity generation in Wales is from renewables, with much of the rest generated by gas fuelled power stations.
- 3.3 An additional 143 MW of new renewable electricity capacity was installed in 2019 across Wales, a small increase from 2018 when 133 MW was installed. However, this is significantly below the distribution levels seen previous years. This decrease in renewable energy generation is set out in Figure 3.1.

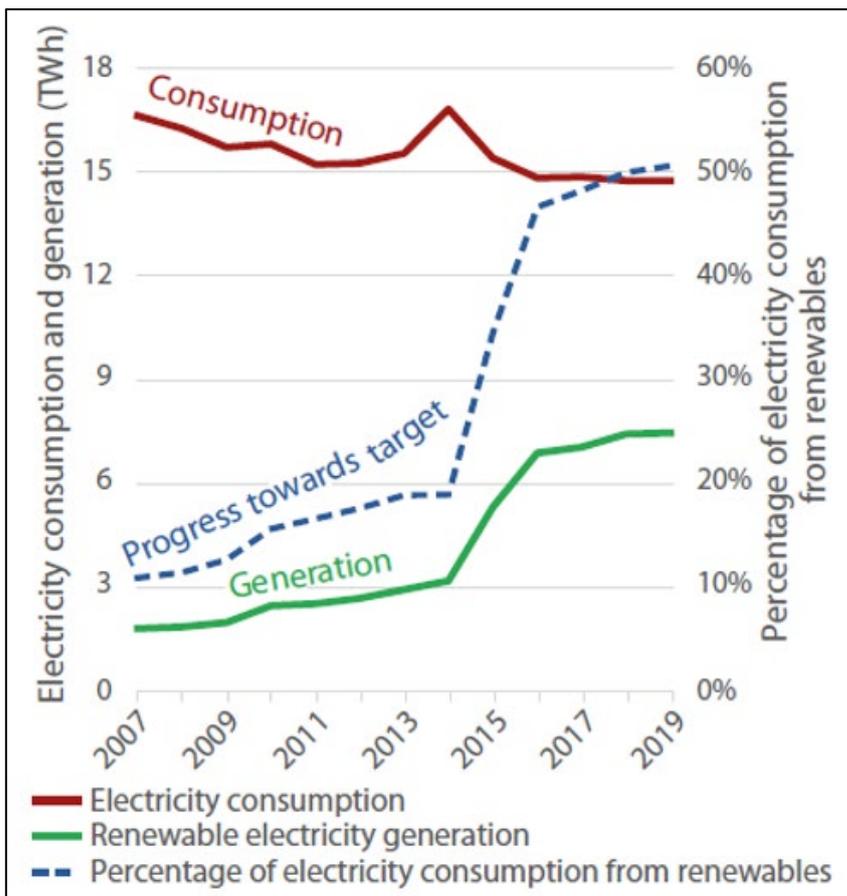
Figure 3.1: Renewable Energy Capacity Installation Rate across Wales



Source: The Energy Generation in Wales 2019

- 3.4 Solar PV now accounts for 12% of all renewable electricity generation in Wales. An additional 7 MW of solar PV capacity was commissioned in Wales in 2019. The two largest solar PV projects commissioned in 2019 both had a capacity of 0.5MW and were both installed in Powys.
- 3.5 The Energy Generation in Wales Report refers to the 2017 Government announcement setting the target of meeting the equivalent of 70% of Wales’ electricity demand from Welsh renewable electricity sources by 2030. In 2019, it is estimated that this figure equated to 51%. The Report states that renewable installation rates have significantly reduced because of reductions in support and electricity network constraints. Based on this, there remains significant challenges to meeting the 70% target by 2030. Figure 3.2 reviews the percentage of electricity consumption from renewable sources.

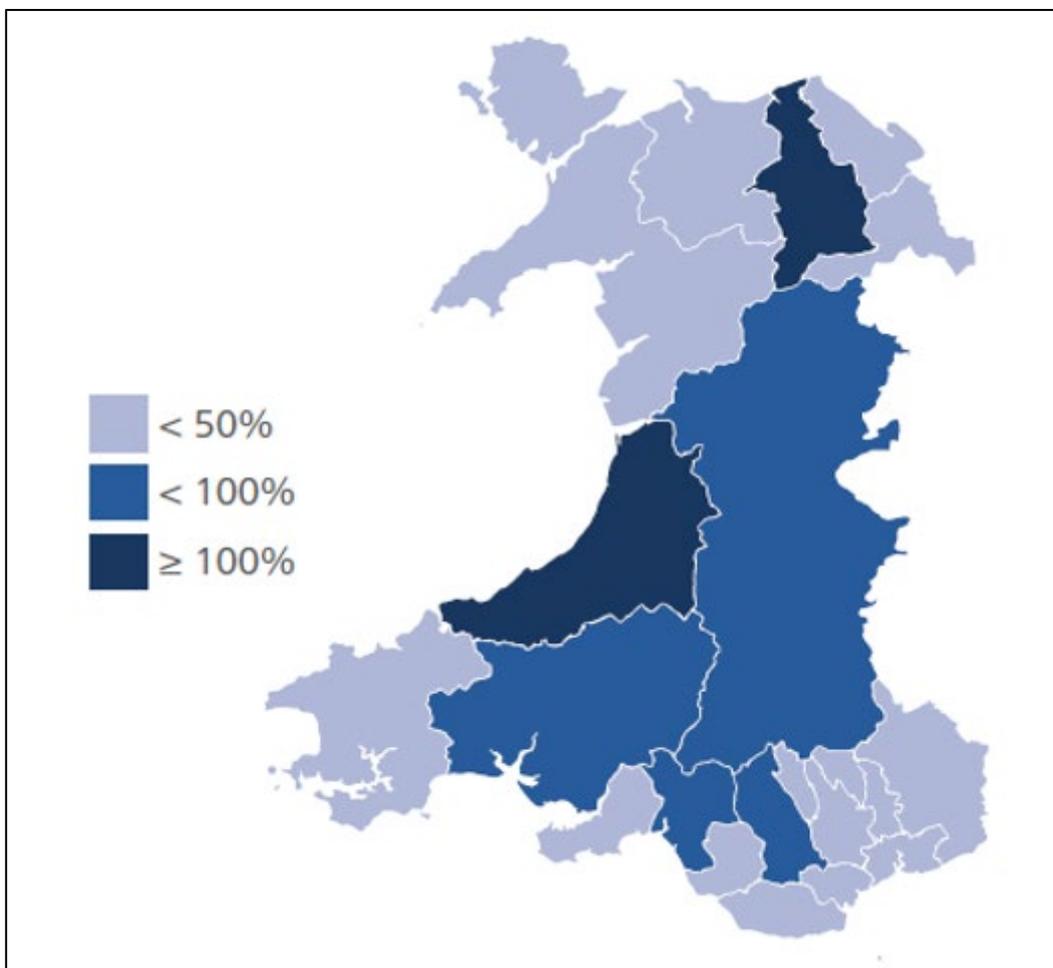
Figure 3.2: Growth in the Percentage of electricity consumption from renewable sources in Wales



Source: The Energy Generation in Wales 2019

3.6 The Welsh Government has set a target for at least 1 GW of renewable energy capacity to be locally owned by 2030. The Report comments that there is an expectation for all new energy projects in Wales to have at least an element of local ownership from 2020. As is evident from Figure 3.3 the Isle of Anglesey currently has less than 50% of its energy consumption delivered by local renewable generation by local authority. As is evident from Figure 3.3, the Isle of Anglesey currently has a lower percentage of energy delivered by renewables compared to other areas across the country.

Figure 3.3 Equivalent percentage of electricity consumption delivered by local renewable generation by local authority



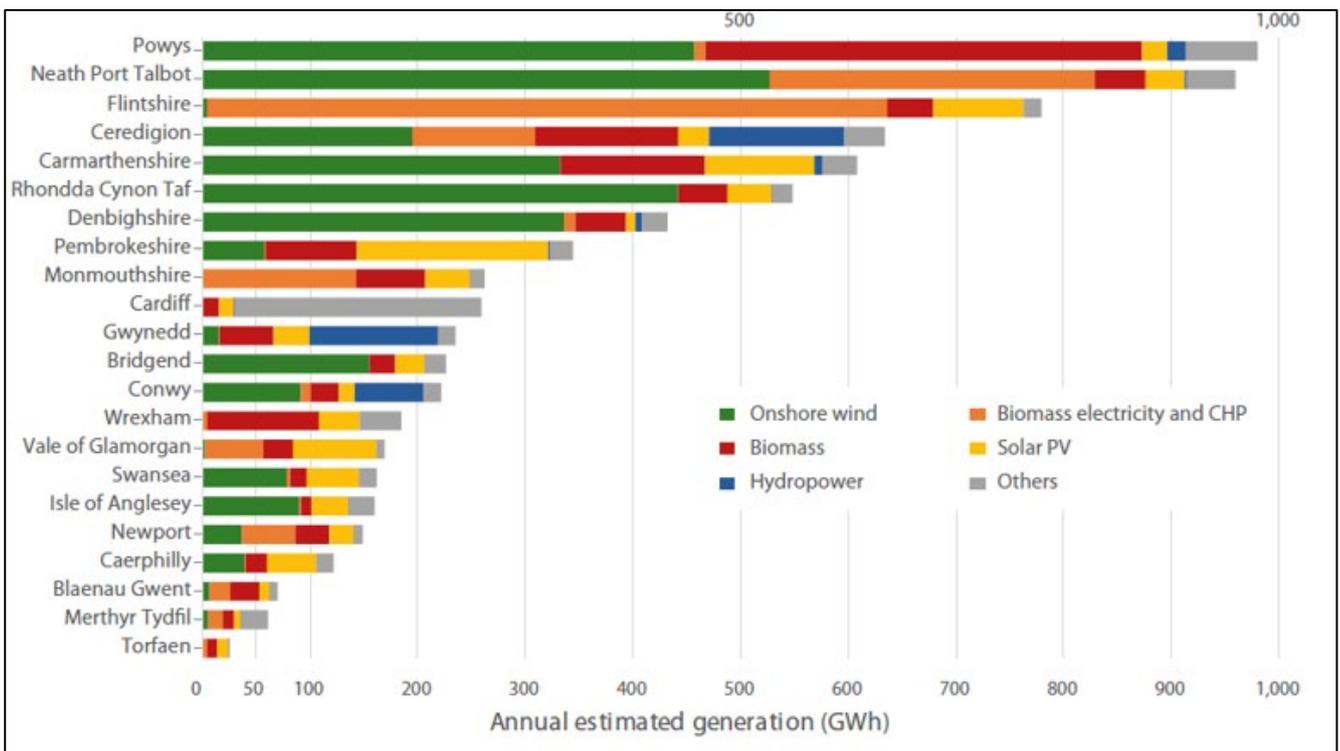
Source: The Energy Generation in Wales 2019

3.7 In 2019, 1,729 new locally owned renewable energy projects were installed; 54% of these were solar PV projects, 38% were heat pumps, 5% were biomass projects and the remaining 2% was a mix of other renewable technologies. Pembrokeshire remains the local authority area

with the most solar PV capacity and was the area in which the greatest number of projects were commissioned in 2019.

- 3.8 Figure 3.4 sets out the renewable energy generation by type across the local authorities. Onshore wind generation is the most common renewable energy form across the Isle of Anglesey, followed by solar PV.
- 3.9 The renewable energy generation across the Isle of Anglesey is currently dominated by onshore wind generation. Solar PV appears to be the second most common renewable energy source across the Island.
- 3.10 Importantly, The Energy Generation in Wales Report (2019) highlights the decrease in distribution over the last three years. The Proposed Development has the potential to significantly increase the level of renewable energy distribution.

Figure 3.4: Renewable Energy Generation by Local Authority



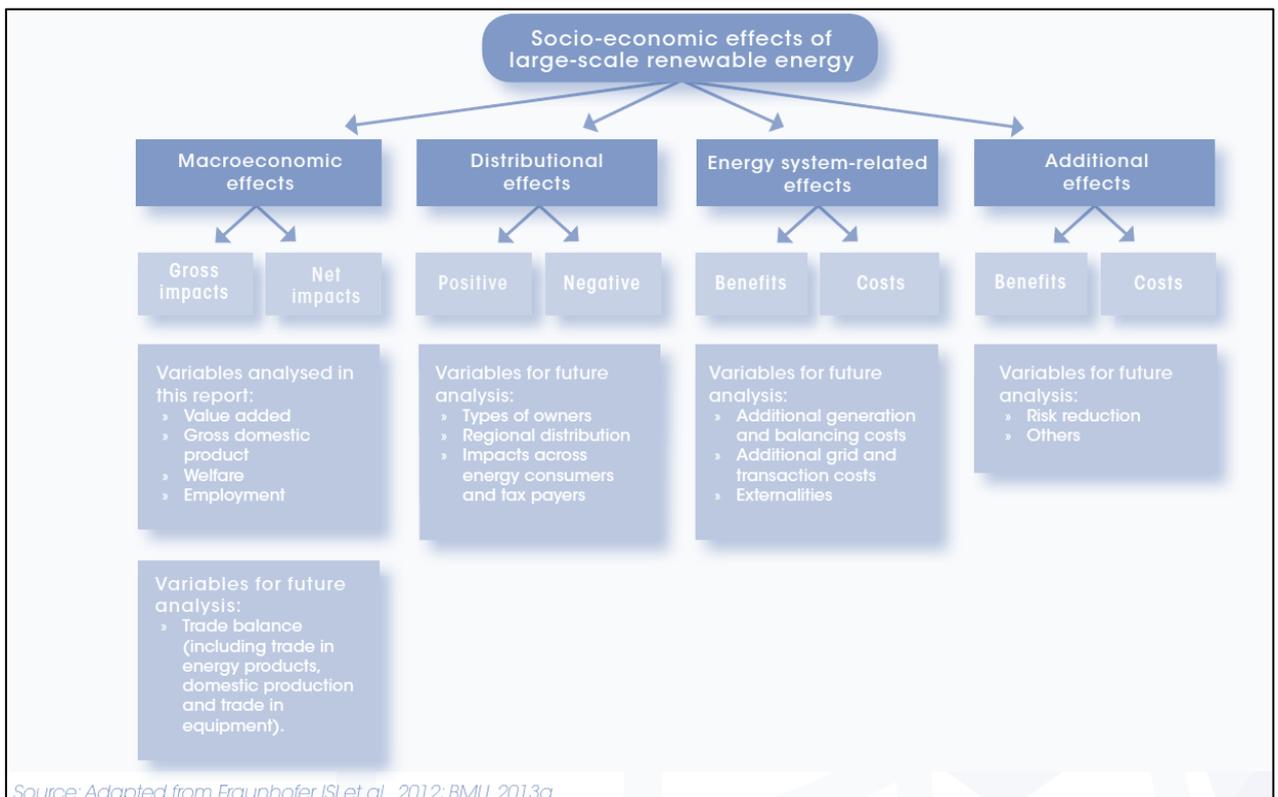
Source: The Energy Generation in Wales 2019

4.0 SOLAR PV FARM VALUE CHAIN – OCCUPATION PROFILE

4.1 The socio-economic and economic benefits of renewable energy are gaining importance. Section 4 will review the value chain of an example 30-40MW Solar PV project, highlighting the diverse employment opportunities and different occupations that contribute throughout the development lifespan. The focus of this section is to highlight the varying skill requirements along the value chain.

4.2 Figure 4.1 sets out the socio-economic impact of larger scale renewable energy projects, and how these projects have the potential to increase income, improve trade balance, contribute to industrial development, and job creation.

Figure 4.1: Socio-Economic effects of large-scale renewable Energy



Source ⁴

4.3 It is evident from Figure 4.1 that the Proposed Development has the potential to create macro and micro economic impacts, generating economic benefits on a local to global scale. The

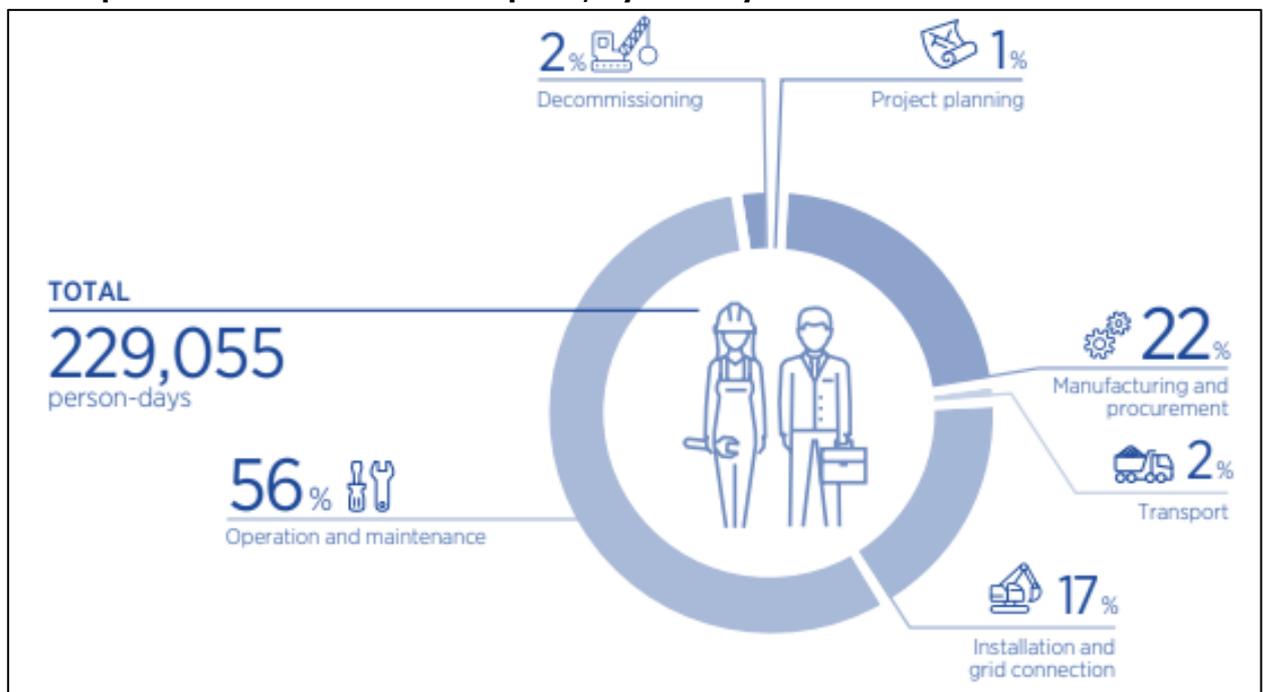
⁴ The Socio-economic Benefits of Solar and Wind Energy, Page 10, 2017

socio-economic impact and economic benefits of Solar PV are delivered at different segments of the value chain, including project planning, manufacturing, installation, grid connection, operation and maintenance and decommissioning. This creates opportunities across a wide occupation spectrum, requiring different levels of training and skills.

- 4.4 The socio-economic effects of solar PV development include gross value added, welfare improvement and employment generated. Figure 4.1 also highlights the importance of trade balance created by renewable energy. Trade in energy products includes final energy (e.g., electricity), in primary energy (e.g., crude oil) or in other natural resources needed to produce energy (e.g., raw uranium ore). For fuel-exporting countries renewable energy deployment could minimise domestic use of fuels and maximise the amount available for export.
- 4.5 The trade of 'renewable energy technologies' (RET) has also grown significantly in recent years. This does not just include energy products but also equipment for building RET factories etc. The potential of a country to domestically produce RET related goods and services depends on domestic capabilities, regional and international markets and the status of local renewable energy development.
- 4.6 Solar PV development therefore has the potential to create economic growth across a range of industries and occupations. Figure 4.2, based on an example 50MW Solar PV Plant, details the main segments of a Solar PV chain, setting out the contribution of different occupation groups throughout the value chain. It is estimated to take around 229,055 person-days a solar PV of 50MW⁵.
- 4.7 This diversity of the segments shown in Figure 4.2 increases the opportunity for many of the occupations be filled by a local labour force if they have a developed or developing energy cluster, such as that building across North Wales and the Isle of Anglesey Enterprise Zone.

⁵ Case study 50MW Solar Farm sourced from Renewable Energy Benefits: Leveraging Local Capacity for Solar PV, IRENA, June 2017, Page 12

Figure 4.2: Distribution of human resources required along the value chain for the development of a 50 MW solar PV plant, by activity⁶



- 4.8 As set out in Figure 4.2 around 1% of the occupation requirement is at the project planning stage. Labour requirement comprises site selection, technical and financial feasibility studies, engineering design and project development.
- 4.9 Figure 4.3 details the breakdown of occupation requirements throughout the project planning phase. Around 40% of the total person-days needed are for legal, energy regulation, real estate and taxation experts. These roles highlight the importance of local knowledge and training. They also represent high skill base and higher value occupations.
- 4.10 The majority of employment during the manufacturing and procurements stage is by factory workers and technicians (Figure 4.4). This stage also requires expertise in logistics, quality control and regulation and standardisation experts. The ability to generate employment during this phase is often dependant on access to subcomponents and raw material markets. This stage of the chain often takes place offsite, frequently outside the UK. This demonstrates the role of supply chains and the international network created within the energy industry.

⁶ Renewable Energy Benefits: Leveraging Local Capacity for Solar PV, IRENA, June 2017, Page 12

Figure 4.3: Distribution of human resources required for the project planning of a 50 MW solar PV plant (person-days), by occupation⁷

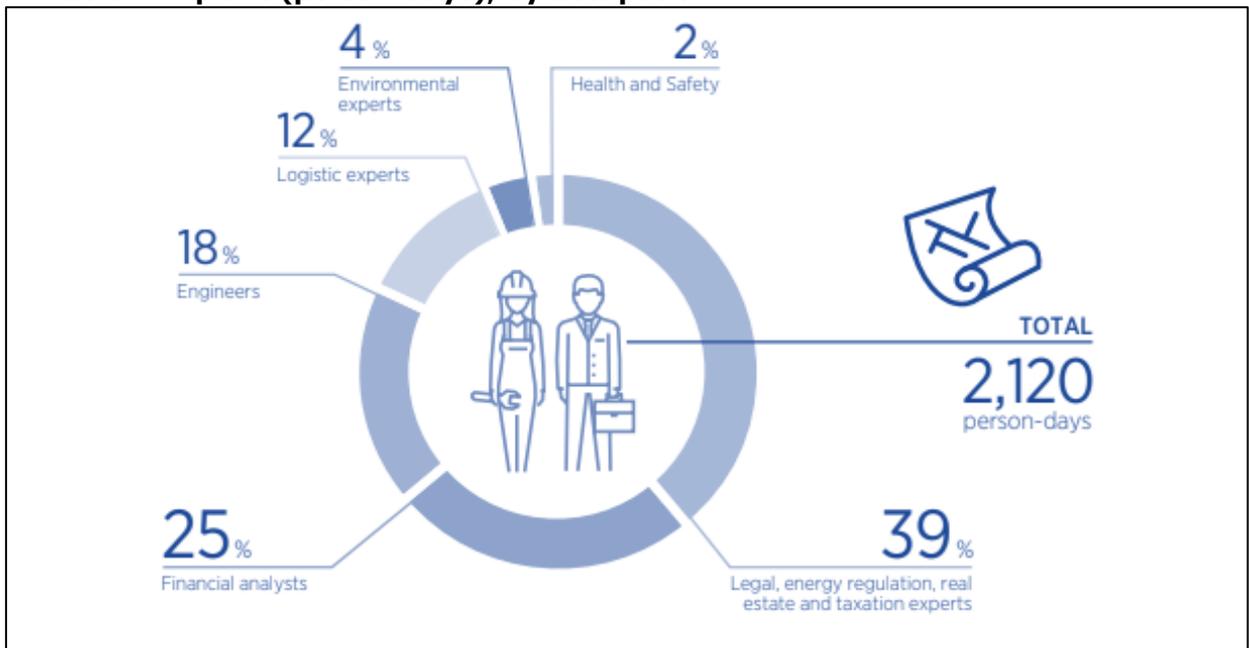
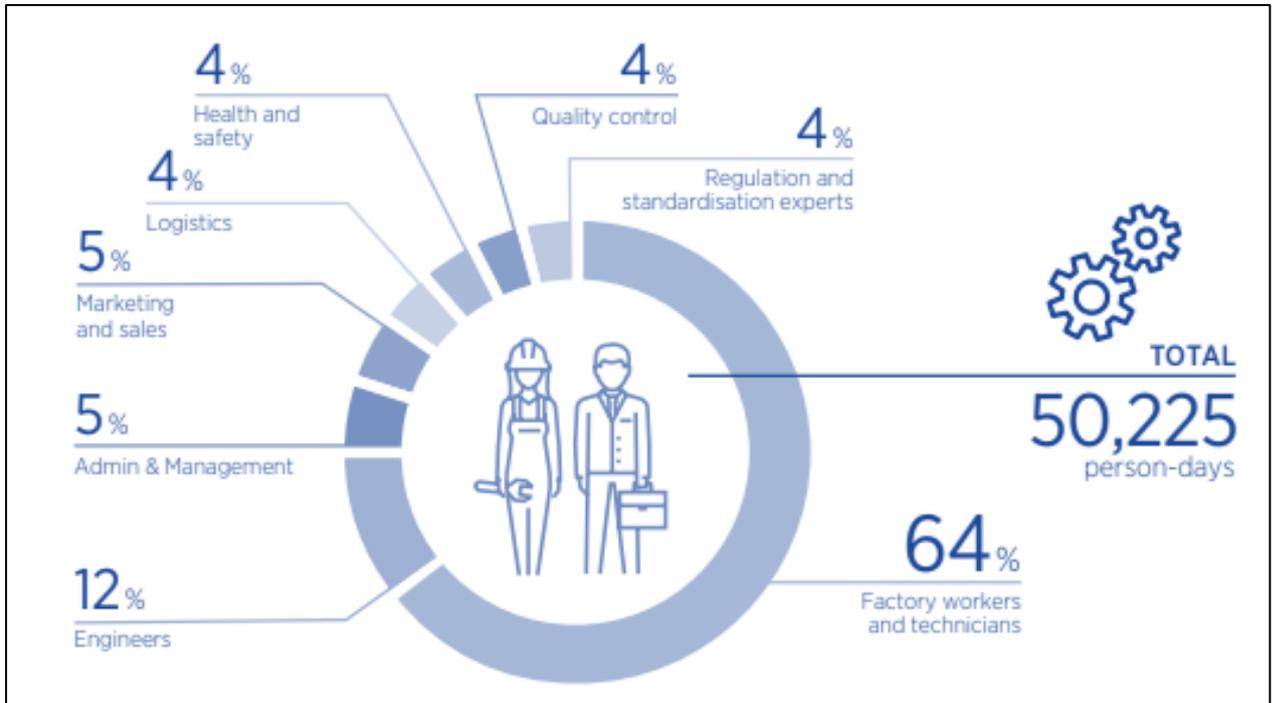


Figure 4.4: Distribution of human resources required to manufacture the main components of a 50 MW solar PV plant, by occupation⁸

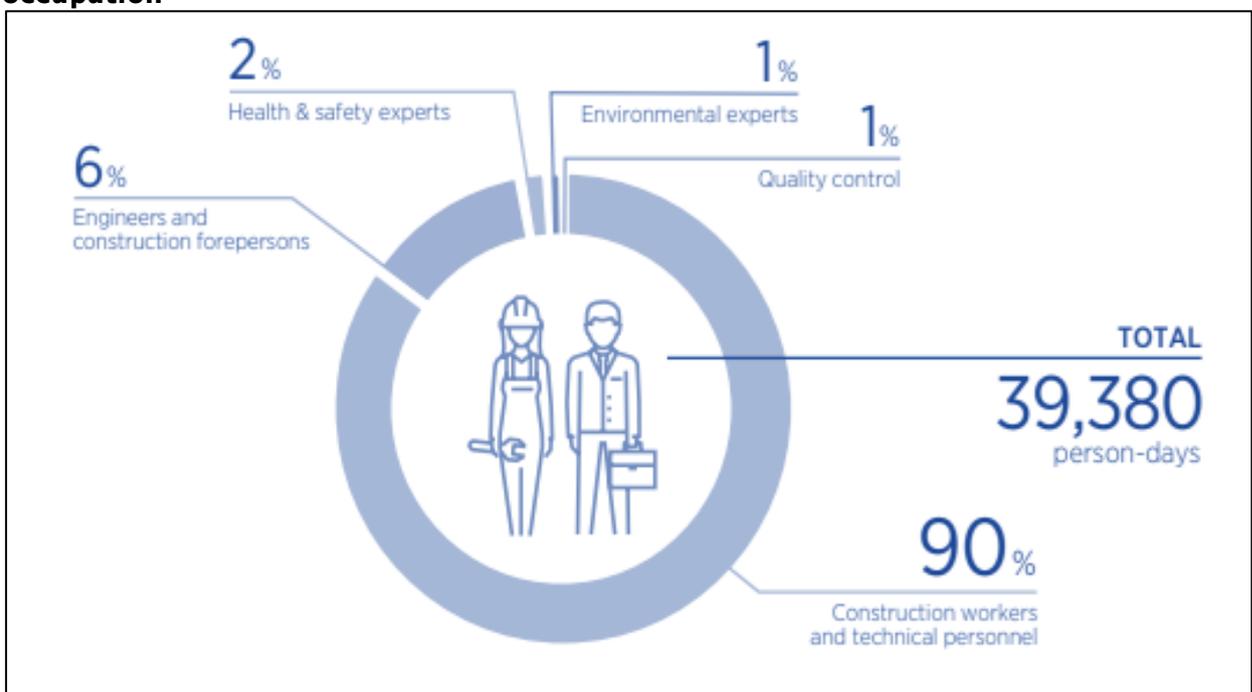


⁷ Renewable Energy Benefits: Leveraging Local Capacity for Solar PV, IRENA, Page 15

⁸ Renewable Energy Benefits: Leveraging Local Capacity for Solar PV, IRENA, Page 18

- 4.11 The most labour-intensive activity at the installation and grid connection stage is the site preparation and civil works. As detailed in Figure 4.5 around 90% of the employment profile at this stage are construction workers and technical personnel.
- 4.12 This stage of the value chain creates multiple opportunities for employment amongst low to medium skilled workers. Throughout the construction phase, ‘assembling equipment occupations’ accounts for around 24% of the total labour needed, followed by cabling and grid connection (16% of the total) and commissioning site selection (4%).

Figure 4.5: Distribution of human resources required to Install and Connect, by occupation⁹



- 4.13 A Solar PV plant has an expected lifetime of about 40 years. The majority of roles at the installation stage require a skilled workforce with knowledge of solar PV plant operations. Ongoing maintenance, such as cleaning the panels, is required. Technical personnel, engineers and construction workers also make up the occupation profile at this stage (Figure 4.6).

⁹ Renewable Energy Benefits: Leveraging Local Capacity for Solar PV, IRENA, Page 23

Figure 4.6: Figure Distribution of human resources required to operate and maintain a 50MW solar PV plant, by occupation¹⁰

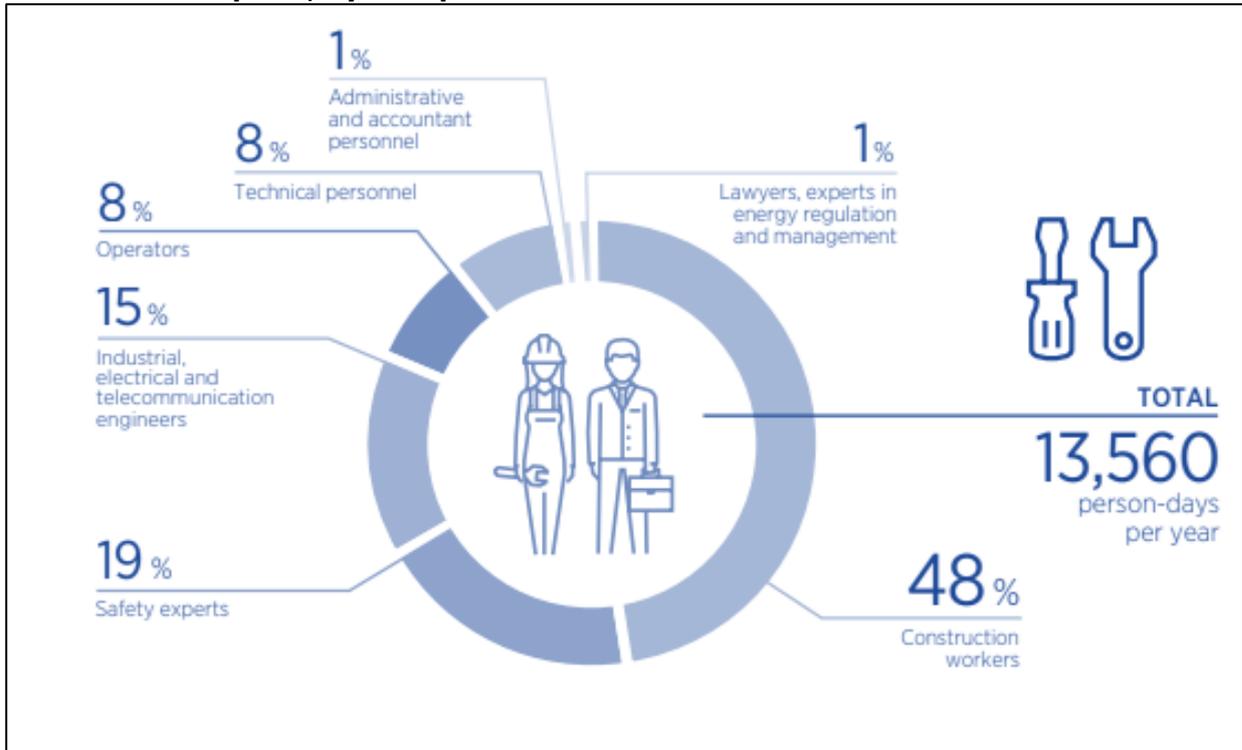
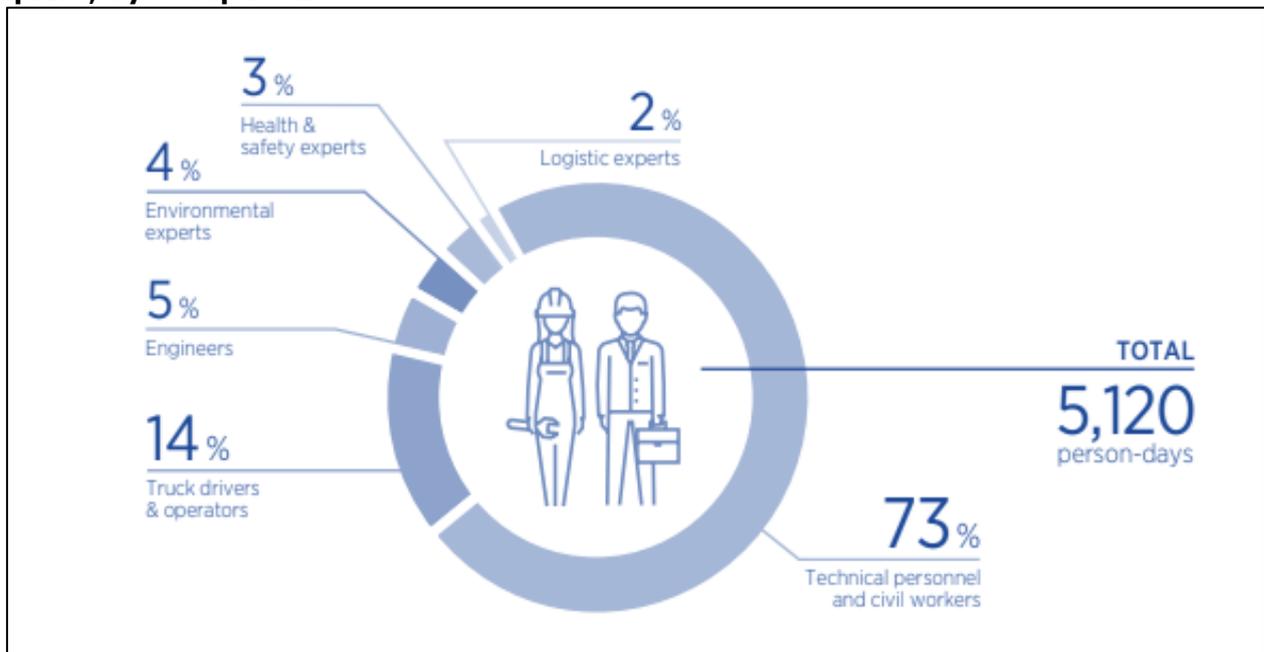


Figure 4.7: Distribution of human resources required to decommission a 50MW solar PV plant, by occupation¹¹



¹⁰ Renewable Energy Benefits: Leveraging Local Capacity for Solar PV, IRENA, Page 25

¹¹ Renewable Energy Benefits: Leveraging Local Capacity for Solar PV, IRENA, Page 27

- 4.14 Finally, decommissioning a PV plant involves planning the activity, dismantling the project, recycling/ disposing of the equipment, and clearing the site. The most labour-intensive activity is dismantling the project. Around 73% those employed during the decommissioning phase are technical personnel and civil workers (Figure 4.7).
- 4.15 The above graphics clearly identify the range of skills required at each stage of the Solar PV value chain. It is evident that a development such as the proposed Application has the potential to fuel economic growth and create domestic value in each segment of the chain.

5.0 SOCIO-ECONOMIC BASELINE

5.1 Section 5 will review the existing socio-economic context relating to the local and wider functional economic areas. Understanding the socio-economic profile will indicate how the Proposed Development will relate to the existing labour force and whether it can support future economic growth aspirations across the Isle of Anglesey and the wider North Region.

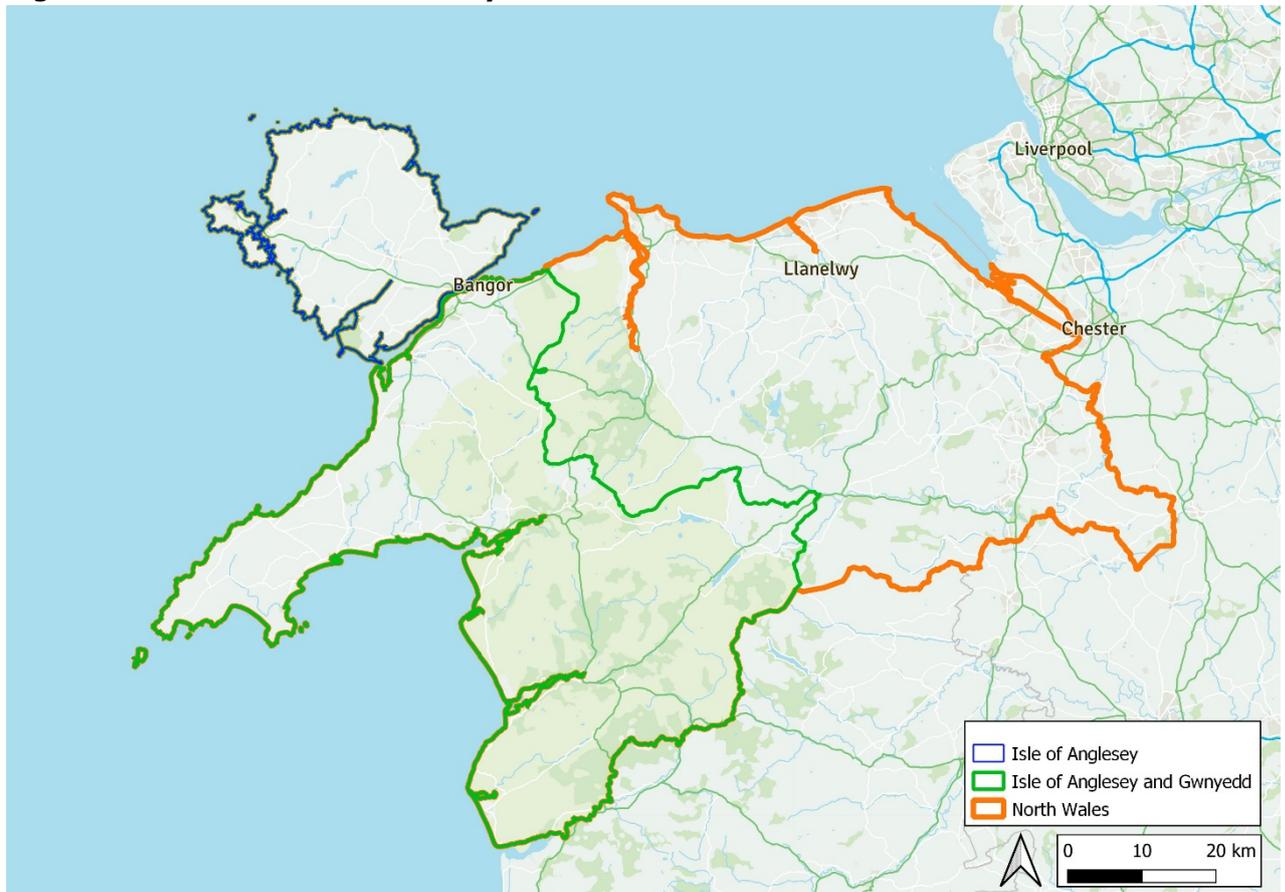
a) Assessment area

5.2 This Section will review the existing socio-economic profile of the most relevant functional economic area surrounding the proposed Site. This takes into account the growth regions and enterprise zones summarised in Section 2.

5.3 Figure 5.1 sets out the Functional Economic Areas considered necessary to understand the current socio-economic environment surrounding the Site. Based on this, Section 5 will assess the following geographies were possible:

- Isle of Anglesey and Gwynedd; and
- North Wales (Conwy and Denbighshire, Flintshire and Wrexham, Gwynedd, and Isle of Anglesey)
- Wales
- United Kingdom

Figure 5.1: Socio-Economic Study Areas



i) Age Structure

5.4 Table 5.1 compares the age profile of the Isle of Anglesey to the Regional and National profiles. The Isle of Anglesey has an older age profile than the Regional and National averages, and a lower proportion of working age people (57% compared to 59%, 61% respectively). Nonetheless, the Isle of Anglesey (17%) presents a similar proportion of 0-15 years olds compared to North Wales (17%), Wales (18%) and United Kingdom (18%).

5.5 The North Wales Skills and Employment Plan 2019-2022 (North Wales Regional Skills Partnership) notes that the demography of young people aged 14 to 18 years old has remained flat for the past 9 years. It states that from 2020 onwards there is forecast to be an increase which will be a key consideration for post 16 training opportunities and growth ambitions to up skill the population. The North Wales Regional Skills Partnership has been developed to inform Welsh Government’s strategic approach to the delivery of skills and employment provision by identifying skills gaps and shortages in the region.

Table 5.1: Age Structure – Wider Assessment Areas

Age Profile	0-15	16-64	65+
Isle of Anglesey	17%	57%	26%
Isle of Anglesey & Gwynedd	19%	60%	21%
Conwy and Denbighshire	17%	60%	23%
Flintshire and Wrexham	17%	56%	26%
North Wales	17%	59%	24%
Wales	18%	59%	23%
United Kingdom	18%	61%	21%

Source: Experian

ii) Economic Activity

5.6 As is evident from Table 5.2, the Isle of Anglesey and Gwynedd contain an economically active population representative of the National profile. North Wales, a collective of the Flintshire and Wrexham, Conwy and Denbighshire, and Isle of Anglesey and Gwynedd Local Authority areas, demonstrates a slightly higher proportion of the population as economically active and a slightly lower proportion as economically inactive.

Table 5.2: Economically Active Population – Wider Assessment Areas

Geography	Total Economically Active (Aged 16-74)	Total Unemployed (Aged 16-74)	Total Inactive) (Aged 16-74)
Isle of Anglesey	65%	2%	33%
Isle of Anglesey & Gwynedd	65%	2%	33%
Conwy and Denbighshire	65%	2%	33%
Flintshire and Wrexham	70%	2%	28%
North Wales	67%	2%	31%
Wales	65%	2%	32%
United Kingdom	69%	2%	29%

Source: Experian

iii) Skills and Occupations

5.7 Table 5.3 compares the qualification profile of the Isle of Anglesey and Gwynedd to the Regional and National profile. The Isle of Anglesey and Gwynedd presents a marginally lower proportion of the population to have attained no qualifications when compared to the Regional

average. The proportion having achieved a Level 4+ qualification (degree level or above) is higher when compared to the wider geography profile, whilst the fraction achieving Level 1 and 2 qualifications (1-4/5+ GCSEs or equivalent) appears representative of the Regional and National profile.

- 5.8 The Skills Plan notes, in relation to education specialising in energy and the environment, together Bangor University and Glyndwr University produced (over the year 2016/2017) 585 degrees gained in physical sciences and 420 across engineering courses. Bangor University also has a growing specialism in Nuclear and Low Carbon energy research and development. Across North Wales in the same year there were 1,055 apprenticeships within the construction industry and 840 in engineering roles. This highlights a growing interest in the energy sector across the Region.
- 5.9 The Plan states that across North Wales 16,789 people were employed in specialist energy and environment companies. Further to this, the Plan refers to around 13,000 people being needed to replace those leaving or retiring from the sector across North Wales up to 2024.
- 5.10 For the energy and environment sector the Plan aims to increase the STEM learners, upskill the workforce with new technology and improve apprenticeship opportunities. Together this will support aims to create an energy cluster.

Table 5.3: Qualification Profile – Wider Assessment Areas

	No Qualification	Level 1	Level 2	Apprenticeship	Level 3	Level 4	Other
Isle of Anglesey	21%	11%	14%	5%	16%	30%	4%
Isle of Anglesey & Gwynedd	20%	11%	14%	4%	17%	30%	4%
Conwy and Denbighshire	23%	12%	14%	4%	15%	28%	4%
Flintshire and Wrexham	22%	13%	15%	4%	16%	26%	4%
North Wales	22%	12%	14%	4%	16%	28%	4%
Wales	23%	12%	14%	4%	16%	28%	4%

United Kingdom	20%	13%	13%	3%	15%	31%	5%
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Source: Experian

- 5.11 Table 5.4 identifies the occupation profile across the study areas. The occupation refers to the type of work a person does. Most occupations can be found across a number of industries. Section 4 has demonstrated that the occupation profile across the value chain of a Solar PV project offers a diverse set of employment opportunities and varying skill requirements.
- 5.12 The Skills Plan seeks to promote the region as one of the leading locations for low carbon energy generation and energy related supply chain investment. Energy and the environment are considered one of the key growth sectors, echoed within the North Wales Growth Strategy.
- 5.13 The occupation profile across the Isle of Anglesey is largely reflective of the wider geography profiles, with the exception of a marginally higher fraction of skilled trade occupations (16%) compared to the Regional (14%) and National (13%) averages. The largest group across Anglesey, North Wales and Wales is the professional occupations. This is followed by skilled trades occupations.
- 5.14 It could be noted that the overall profile across the Isle of Anglesey and Gwynedd has a slightly higher proportion of residents working within the higher value occupations, compared with fewer employed across occupations such as sales, process/plant operatives, and elementary occupations.
- 5.15 The Skills Plan discusses an increasing 'replacement demand skills opportunity' within the energy and environment sector. The occupation profile across Isle of Anglesey and Gwynedd area is compatible with the needs of the energy and environment sector, providing a high proportion of professional and skilled trained occupations.

Table 5.4: Occupation Profile – Wider Study Areas

Occupations	UK	Wales	North Wales	Isle of Anglesey & Gwynedd	Isle of Anglesey
Managers, directors and senior officials	11%	10%	10%	11%	10%
Professional occupations	18%	16%	15%	16%	16%
Associate professional and technical occupations	13%	11%	10%	10%	10%
Administrative and secretarial occupations	11%	11%	10%	9%	10%
Skilled trades occupations	11%	13%	14%	16%	16%
Caring, leisure and other service occupations	9%	11%	11%	12%	12%

Occupations	UK	Wales	North Wales	Isle of Anglesey & Gwynedd	Isle of Anglesey
Sales and customer service occupations	8%	9%	8%	8%	7%
Process, plant, and machine operatives	7%	8%	9%	7%	8%
Elementary occupations	11%	12%	12%	12%	11%

Source: Experian

iv) Industry of Employment

- 5.16 Table 5.5 profiles the industries of employment across the study areas. The Isle of Anglesey has a notably high proportion of residents working within the electricity supply industry when compared to the Regional and National level. Across the Isle of Anglesey this accounts for around 1,000 residents working within the industry. Across the Isle of Anglesey and Gwynedd area this increases to 1,680, reaching 3,447 across North Wales. This indicates that a number of residents are already working within the energy industry, suggesting an existing skills base.
- 5.17 Notes this level of employment within the electricity sector could be distorted by power stations at Wylfa and Trawsfynydd, but the skills across the energy sector are transferable and therefore still offer a level of expertise.
- 5.18 The Isle of Anglesey and Gwynedd area also present a comparably high proportion of the population working in construction. Other industries such as public administration and transport and storage also seem to be important employers across the Isle of Anglesey.
- 5.19 The Skills Pan clearly notes a need to upskill the workforce in order to meet the energy and environment industry needs. It states that the population is expected to increase by 1.2% between 2018 and 2023, adding 8,126 people to the education and skill pipeline across the region. Together with the commitment to skills reworking, this will start to modify the industry of employment profile across the North Region.

Table 5.5: Resident Industry of Employment

	Conwy and Denbighshire	Flintshire and Wrexham	Gwynedd	Anglesey, Isle of	LA Anglesey and Gwynedd	North Wales	Wales	United Kingdom
Agriculture, forestry and fishing	2%	1%	4%	3%	4%	2%	2%	1%
Mining and quarrying	0%	0%	0%	0%	0%	0%	0%	0%
Manufacturing	7%	18%	6%	8%	6%	12%	10%	8%
Electricity, gas, steam and air conditioning supply	1%	1%	1%	3%	2%	1%	1%	1%
Water supply; sewerage, waste mgt. and remediation	1%	1%	1%	1%	1%	1%	1%	1%
Construction	8%	7%	10%	9%	9%	8%	8%	8%
Wholesale and retail; Repair of motor cycles and vehicles	14%	14%	13%	13%	13%	14%	14%	15%
Transport and storage	3%	3%	2%	4%	3%	3%	3%	5%
Accommodation and food service activities	9%	5%	10%	7%	9%	7%	7%	6%
Information and communication	3%	3%	3%	3%	3%	3%	4%	4%
Financial and insurance activities	2%	3%	1%	1%	1%	2%	3%	4%
Real estate activities	2%	1%	1%	1%	1%	1%	1%	2%
Professional, scientific and technical activities	5%	5%	4%	4%	4%	5%	5%	7%
Administrative and support service activities	4%	5%	4%	3%	4%	4%	4%	5%
Public administration, defence, compulsory social security	7%	6%	6%	9%	7%	6%	8%	5%
Education	10%	9%	12%	11%	12%	10%	10%	10%
Human health and social work activities	16%	12%	13%	14%	14%	14%	13%	13%
Other	6%	5%	6%	5%	6%	5%	5%	5%

Source: Experian (not accounting for industries representing <1% of the population)

v) *Place of work*

5.20 The following section will review the commuting behaviour of residents across the Isle of Anglesey. Table 5.6 presents the movement patterns of the resident workforce. As is evident from Table 5.6, around 49% of residents live and work on the Isle of Anglesey. 70% work within the joint authority area of Isle of Anglesey & Gwynedd. Almost three quarters of the resident work force are employed within North Wales, contributing to economic growth aspirations set out within Section 2.

Table 5.6: Resident Commuting Pattern

Resident Place of Work	
Isle of Anglesey	49% (14,939)
Isle of Anglesey & Gwynedd	70% (25,555)
Conwy and Denbighshire	3% (918)
Flintshire and Wrexham	0.3% (95)
North Wales	73% (22,568)
Wales	74% (22,867)

Source: 2011 Census

5.21 A review of the workplace population across the Isle of Anglesey suggests that around 83% of the workforce population on the Isle of Anglesey also live on the Island. 11% commute from neighbouring Gwynedd. 97% of the workforce commute and live with the North Region. Together this shows a high level of containment with the northern growth area.

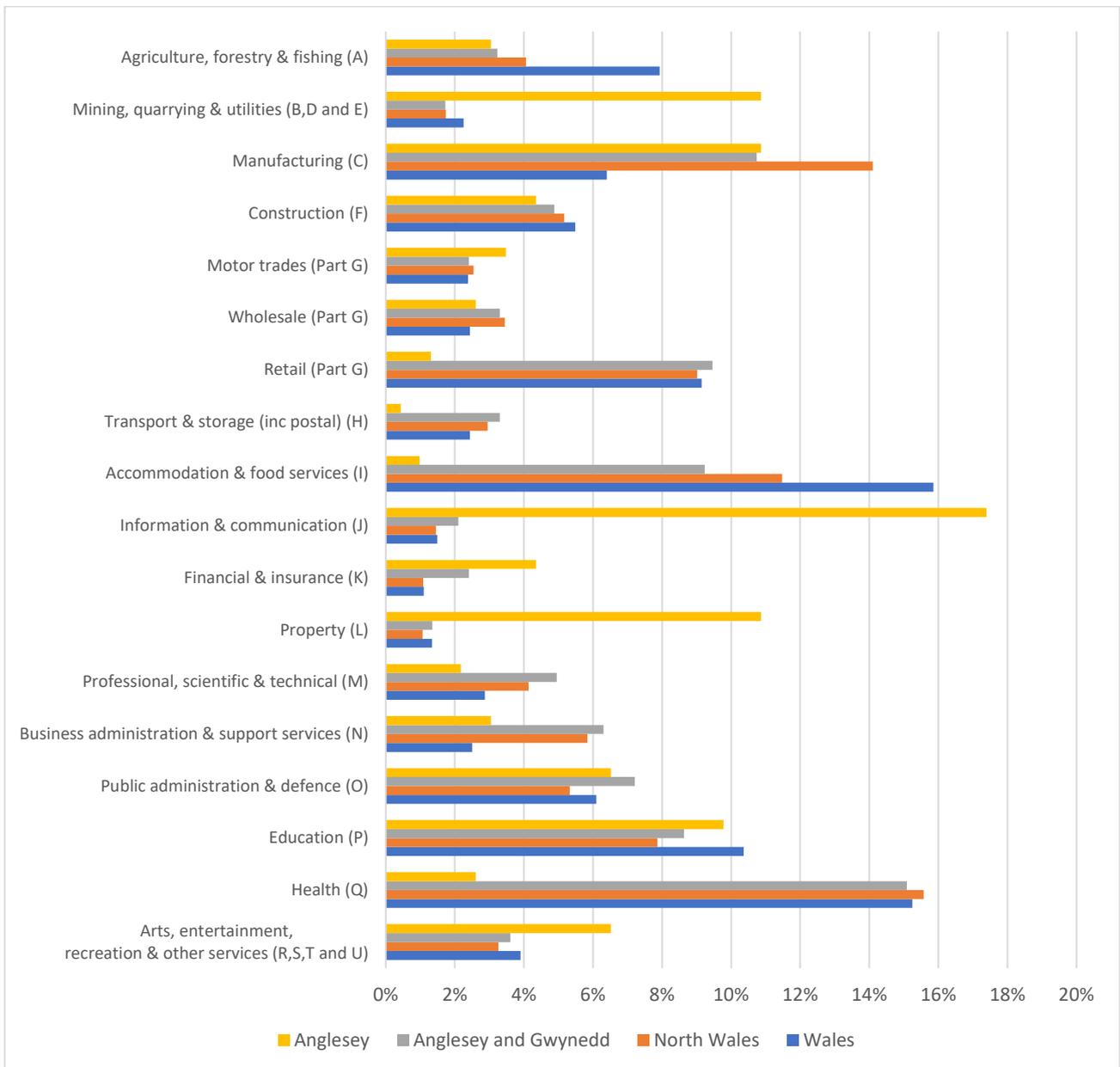
vi) Employment by sector

5.22 The 2019 Business Register and Employment Survey (BRES) concludes around 82,000 people are in employment across the Isle of Anglesey and Gwynedd, 305,000 people across North Wales, and 1,332,000 people across Wales.

5.23 It is evident that the main industry of employment across Isle of Anglesey and Gwynedd, North Wales and Wales is the health industry, followed by the accommodation & food services and manufacturing industries. These could perhaps be considered as industries that support a more local workforce. Further to this Figure 5.2 also highlights the education, retail, and public administration & defence industries as key employers across the three areas.

5.24 Notably Anglesey and Gwynedd, and the Northern Region, have a higher concentration of professional, scientific and technical jobs when compared to Wales as a whole. This is also the case for business administration, information communication and finance/insurance roles.

Figure 5.2: Employment by Industry %– Anglesey and Gwynedd, North Wales, and Wales



Source: BRES 2019

5.25 A focused review reveals that there are around 245 jobs within the Isle of Anglesey relating to energy employment. A further 765 jobs are located within Gwynedd. Across North Wales there are a total of 4,890 jobs within the sector.

5.26 As of April 2019, there were 2,255 local units (an individual site (for example a factory or shop) associated with an enterprise) relating to the following sectors:

- Electrical installation
- Regulation of and contribution to more efficient operation of businesses
- Manufacture of electronic components
- Production of electricity
- Transmission of electricity
- Distribution of electricity
- Trade of electricity

5.27 Table 5.7 sets out the number of local units relating to the electricity sector across Wales and the North Region authorities. This demonstrates an existing labour network that could support the Proposed Development.

Table 5.7: Local Units working within the Electricity sector

Study Area	Number of Local Units
Isle of Anglesey	55
Gwynedd	125
Conwy	90
Denbighshire	80
Flintshire	130
Wrexham	105
Wales	2,255

5.28 Section 5 has demonstrated that the labour force across the local and regional area present a strong labour supply of skilled trade, professional and construction occupations. It emphasises that the area has a high containment level, underlining the need to up-skill the population to meet modern and future skills requirements. It is also evident that there is an existing network across the area specialising in the energy sector.

6.0 ECONOMIC BENEFITS OF THE DEVELOPMENT

6.1 Section 6 will review the economic benefits generated by the Proposed Development. As set out in Section 3 the Development has the potential to generate multiple economic benefits throughout the value chain. These include the following:

- Employment created throughout the life cycle of the development.
- Economic output generated by those directly and indirectly employed;
- Generating economic output by directly support the local economy;
- Distributional benefits; and
- Supporting skills development within the sector.

a) *Distribution and Energy System Impacts*

6.2 The Applicant has an established track record and a growing pipeline of large-scale solar projects in development. This combined portfolio of more than 2GW of UK solar, has the potential to power 660,000 homes with clean energy and save in excess of 440,000 tonnes of CO₂ each year.

6.3 Each solar park goes through a rigorous planning procedure before they can be approved for construction. The Applicant follows a well-defined and structured process in developing high-quality, large-scale solar projects. This process takes into account factors such as the suitability of the specific site, any potential impact on the area and relevant renewable energy targets.

6.4 Parc Solar Traffwll will have an export capacity of circa 30 – 40MW of electricity. As set out in Section 3, the Welsh Government announced a target of meeting the equivalent of 70% of Wales' electricity demand from Welsh renewable electricity sources by 2030. In 2019, it is estimated that this figure stands at 51%. The Proposed Development would act as a significant contributor to achieving this target.

6.5 Further to this in February the Welsh Government set out its legal commitment to achieve net zero emissions by 2050, but is pushing to "get there sooner" as it gets ready for COP26 (26th United Nations' Climate Change Conference of the Parties) in November.

- 6.6 Power generated by the Proposed Development will go straight into the local network, instead of being fed into the National Grid level. At peak capacity, the proposed solar farm could generate enough electricity to power the equivalent of approximately 13,260 homes.
- 6.7 The Solar Farm would contribute to a reduction in the emissions of CO₂ of around 8,960 tonnes per annum, i.e. over 358,000 tonnes over the lifetime of the development (based on a 40 year lifespan). This is the equivalent of taking approximately 4,140 cars off the road each year.
- 6.8 Utilising the HM Treasury Green Book Central Government Guidance on Appraisal and Evaluation (2020) it is possible to understand greenhouse gas (GHG) values and therefore the value to society of a reduction in CO₂ emissions resulting from the Proposed Development.
- 6.9 According to the Green Book, GHG values are based on the economic cost of mitigating a unit of carbon. By applying the Department for Business, Energy and Industrial Strategy's Updated Short-Term Traded Carbon Values it is possible to calculate the annual carbon pricing saved as a result of the reduction of 8,960 tonnes of CO₂ emission per annum.
- 6.10 Up to and including the year 2030 the Proposed Development could prevent a carbon cost of around £4.5m. Table 6.1 sets out the potential carbon pricing per annum up to the year 2030. The Development is expected to operate for a period of up to 40 years, therefore the level of carbon pricing saved up to 2030 is only around a small proportion of what could be generated across the lifespan of the development.

Table 6.1: Carbon Pricing Levels 2021-2030

Year	£/tCO ₂ e	Carbon Price per Annum
2021	20.54	£184,038.40
2022	27.24	£244,070.40
2023	33.94	£304,102.40
2024	40.64	£364,134.40
2025	47.33	£424,076.80
2026	54.03	£484,108.80

Year	£/tCO2e	Carbon Price per Annum
2027	60.73	£544,140.80
2028	67.43	£604,172.80
2029	74.13	£664,204.80
2030	80.83	£724,236.80
Total		£4,541,286.40

Source: Department for Business, Energy and Industrial Strategy, Updated Short-Term Traded Carbon Values

b) *Employment Generation*

6.11 The Proposed Development will generate direct employment opportunities across a range of occupation types. As set out in Section 4 the occupation profile across the development lifecycle provides employment opportunities for a range of skill levels. Table 6.2 sets out the estimated employment generation throughout the Solar PV lifecycle.

6.12 The Proposed Development could generate between around 162 and 192 positions over the initial first four to five months phase. It will then go on to sustain the equivalent of two positions in maintenance roles.

Table 6.2: Gross Number of employees over the Development Lifecycle

Segment	Number of employees	Workforce Local / Other	Timeframe for work to take place
Land Preparation			Estimated 4 -5 Month Period
Civils, fencing	10-20	Local	
Installation			
Mounting of structures and panels	100	Local, UK & EU	
Project Managers	~ 2	Local, UK & EU	
AC Works	~ 20 - 30	Local, UK	
DC Works	~ 20	Local, UK & EU	
Grid Connection			

Segment	Number of employees	Workforce Local / Other	Timeframe for work to take place
Cable laying between connection and development areas	10-20	Local / UK	
Operation and Maintenance			Sustained over 40 years
Monitoring, Security, Electrical and Mechanical Maintenance, Grounds Maintenance	~ 2	Local / UK	

- 6.13 As set out in Section 5 the existing socio-economic profile of the Isle of Anglesey and wider Northern Region suggests an existing industry cluster, containing around 585 local enterprise units specialising in the electricity sector. 180 of these are situated within the Isle of Anglesey and Gwynedd authority area.
- 6.14 The Proposed Development will seek to draw on this local skills base throughout the development lifecycle. On previous projects the Applicant has actively encouraged communication with local enterprises, seeking to connect with the local labour force where possible. The majority of civil engineers, fencing and potentially some AC work will be sourced, where possible, from the local labour market.
- 6.15 Construction of the solar farm is expected to last around 4 to 5 months and will involve the erection of fencing and security cameras, piling and assembly of solar panel frames and tables, trenching and underground cabling, and the construction of hardcore tracks and transformer stations with concrete bases.
- 6.16 Following the completion of the proposed development, the on-going servicing and maintenance roles could support an estimated two jobs equivalent. This will involve maintenance activities.
- 6.17 Employment generated by the Proposed Development will provide economic benefits in the form of Gross Value Added (GVA) throughout the development lifecycle. It is estimated, utilising an average GVA per construction worker figure for Wales, that the labour force employed throughout

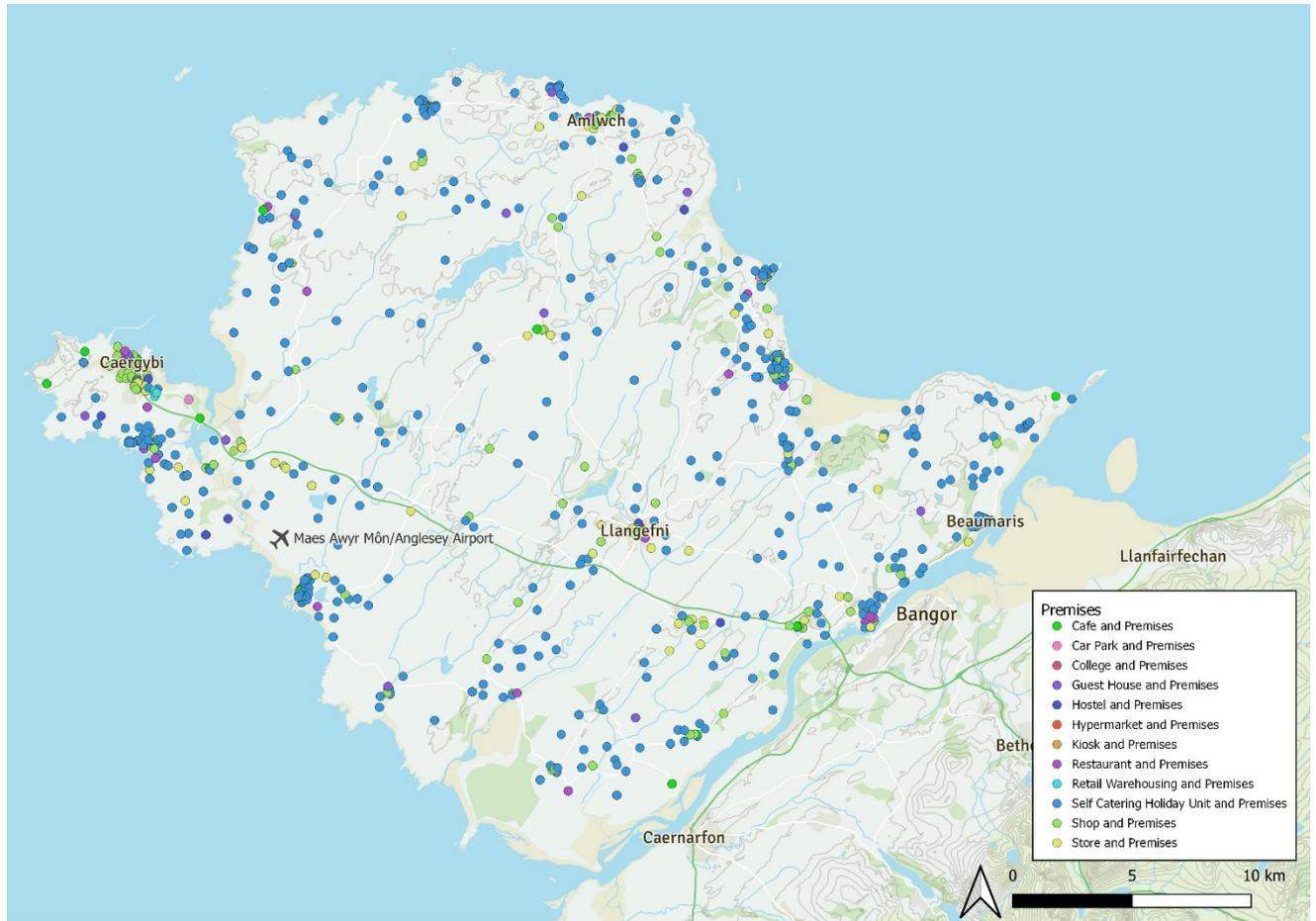
the initial 4 to 5 months construction stage could generate between £2.3m - £2.6m in GVA¹². The two employees working throughout the 40-year operation phase could generate a further £3.3m in GVA.

c) *Supporting the Local Economy*

- 6.18 As set out in Section 2, Wales is committed to clean economic growth. Power generated by the Proposed Development will go straight into the local network. This provides the ability for not only residents on the Isle of Anglesey to utilise this clean energy source, but also local businesses.
- 6.19 Local businesses could have the ability to operate their services and goods within the clean energy market. This energy consumption could be more attractive to clients and investment opportunities seeking to align with clean businesses. It could be particularly important for local businesses that are involved in procurement processes. Social justice through business practices could be a key criterion amongst investors/clients.
- 6.20 This could also have a positive impact on the tourism market across the Isle of Anglesey. Hotels/self-catering facilities could be more attractive to certain tourists if they run on clean energy, developing a new tourism sector.
- 6.21 It is estimated that a proportion of the workforce will require temporary accommodation whilst working on site. This will involve staying in a local hotel/self-catered facilities and utilising local shops and restaurants. Employees are afforded a lunchtime expenditure which will benefit local businesses.
- 6.22 Further to this the Applicant aligns with the conditions and circumstances unique to each site. Many of the solar parks are grazed by sheep or combined with other farming practices. This supports local farming practices.

¹² Figures based on FTE jobs working for 4 months.

Figure 6.1: Local Retail, Catering and Accommodation Businesses – Isle of Anglesey



d) *Skills Development*

- 6.23 The need to upskill the current and future workforce across Northern Wales is a key aspiration within policy guidance and growth strategies. The Proposed Development offers the opportunity to build awareness of the energy sector and expand the knowledge network.
- 6.24 Previously at other sites, the Applicant has supported site visits for schools. This provides education to younger generations on the importance of renewable energy and how solar PV contributes to decarbonising the local area.

- 6.25 Separately, the Applicant supports PHD education and research at the University of Lancaster. This study is assessing the biodiversity impacts and benefits of solar farms. Further to this the Applicant has created partnerships to assess the full carbon life-cycle of a solar farm.
- 6.26 A number of years ago, Low Carbon helped the 1851 Trust, an organisation set up to provide opportunities for young people, improving their education and skills in a number of areas. Low Carbon helped to create an education resource on climate change and renewables that could be offered to schools. Working with a teacher, the learning resources were developed to include education packs in English, Maths and Science, plus a separate Assembly Presentation using climate change and renewable energy as the subject matter. These can be rolled out for free to any schools which are interested, helping to improve pupils' understanding of these issues. They can also be translated into Welsh as required.

e) *Business Rates*

- 6.27 The Proposed Development will generate annual business rates, contributing to the funding of public services. Rateable values are provided by the Valuation Office Commercial and Industrial Floorspace and Rateable Value Statistics.
- 6.28 Based on a £/MW value of around £6,446 it is estimated that the Proposed Development could have a rateable value of around £226,000, equating to an annual business rates payment of around £115,500 per annum.

7.0 SUMMARY

- 7.1 National, regional and local economic growth policy refers to Wales being well positioned to support the renewable sector, attract investment and reduce carbon emissions. The North Region, and in particular the Isle of Anglesey are noted as developing clusters for the energy industry.
- 7.2 As is evident from Section 2, one of the Welsh Government's key priorities is for low carbon electricity to become the main source of energy in Wales. Not only is this a reaction the Welsh Government setting out its legal commitment to achieve net zero emissions by 2050, but also to the realisation that renewable and low carbon energy developments offer significant potential for communities and small businesses.
- 7.3 Of National concern is the significant economic leakage because of the current energy system. There is a need to create an energy system that retains more of the economic value for Wales. The Plan notes that through localised production more benefits can be directed to the local communities through skills, quality jobs and a greater retention of economic value.
- 7.4 At a local level the need to mitigate the effects of climate change, e.g., reduce greenhouse gas emissions, promote generating renewable energy and low carbon is accepted as a key issue. Anglesey is one of ten Enterprise Zones across Wales. The vision for Anglesey Enterprise Zone is to create a world-renowned centre of excellence for the production, demonstration, and servicing of low carbon energy.
- 7.5 Based on this the Proposed Development would contribute to local and regional economic growth aspirations, supporting the area as an energy cluster and providing progress in meeting energy targets.
- 7.6 The Solar PV network now accounts for around 12% of all renewable electricity generated in Wales. The Energy Generation in Wales Report 2019 suggests a significant decrease in renewable distribution levels compared to the last few years, therefore progress has slowed with regard to meeting targets and transitioning local economies to clean energy. Despite this it does highlight an existing internal network of knowledge and skills growth across Wales with regard to Solar PV development.

- 7.7 Section 2 identifies current skill levels as a barrier to growth within the energy industry. Section 5 clearly demonstrates that the across the lifecycle of Solar PV projects a range of skills and training are required. It highlights the transferability of skills from other sectors and the numerous entry points for employment across the different phases. It is evident that a development, such as the proposed, has the potential to create domestic value in each segment of the chain.
- 7.8 Notably the Isle of Anglesey and Gwynedd authority area, and the North Region, have a higher concentration of professional, scientific and technical jobs when compared to Wales as a whole. This is also the case for business administration, information communication and finance/insurance roles. This highlights the areas potential to meet the skills requirement.
- 7.9 It is also evident from higher education development and regional skills plans that the environment and energy are becoming attractive career paths. For example Bangor University has a growing specialism in Nuclear and Low Carbon energy research and development. By locating on the Isle of Anglesey the Solar Farm would be supporting the industries development as a key growth sector.
- 7.10 The Proposed Development could potentially generate numerous socio-economic and economic benefits throughout the 40 year lifespan.
- 7.11 The Proposed Development will deliver multiplier economic and socio-economic benefits throughout its lifecycle. With an export capacity of circa 35MW, which will be fed straight into the local network, at peak capacity this could generate enough electricity to power the equivalent of approximately 13,260 homes. The Solar Farm would contribute to a reduction in the emissions of CO₂ of around 8,960 tonnes per annum. This has a preventive carbon value of around £4.5m up to the year 2030.
- 7.12 The Development could employ between 162 and 192 people in the initial 4 to 5-month construction phase, followed by approximately two maintenance staff over the 40-year lifespan. The labour force employed throughout the initial construction stage could generate between £2.3m and £2.6m in GVA¹³. The two employees working throughout the 40-year operation phase could generate a further £3.3m in GVA.

¹³ Figures based on FTE jobs working for 4 months.

- 7.13 Employment onsite would support local business through daily expenditure and also any accommodation required for the temporary period. The Proposed Development could also allow local business to operate on clean energy. Allowing them to market themselves as low carbon businesses. It could be particularly attractive to investors, clients and the tourism market.
- 7.14 The need to upskill the current and future workforce across Northern Wales is a key aspiration within policy guidance and growth strategies. The Proposed Development offers the opportunity to build awareness of the energy sector and expand the knowledge network through potential collaboration with local schools. In addition to this the Applicant actively works with university research programs.
- 7.15 The Proposed Development will also contribute to local services and infrastructure through the payment of around £115,500 in business rates per annum.