

# Connah's Quay Low Carbon Power

Preliminary Environmental Information Report  
Volume II, Chapter 19: Socio-Economics, Recreation and Tourism

Uniper

The Planning Act 2008  
The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017  
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# 19. Socio-Economics, Recreation and Tourism

## 19.1 Introduction

### Overview

19.1.1 This chapter of the Preliminary Environmental Information Report (PEIR) presents the findings of the preliminary assessment of the likely significant environmental effects of the Proposed Development with respect to socio-economics, recreation and tourism during the construction, operation (including maintenance), and decommissioning phases. This assessment has been delivered in line with the methodology set out in the EIA Scoping Report (**Appendix 1-A PEIR Volume IV**) and PINS Scoping Opinion (**Appendix 1-B PEIR Volume IV**).

19.1.2 This chapter is supported by the following figures in **PEIR Volume III**:

- **Figure 19-1: Mapped 500m, 1 km, and 2 km radii from the Indicative Site Boundary;**
- **Figure 19-2: Mapped 60-minute drive time radius from the Indicative Site Boundary;** and
- **Figure 19-3: Mapped 30-minute drive time radius from the Indicative Site Boundary.**

19.1.3 Reference is also made within this chapter to **Figure 15-5: Public Rights of Way (PEIR Volume III)** and **Figure 14-1: Study Area (PEIR Volume III)**.

19.1.4 This chapter is supported by the following appendices in **PEIR Volume IV**:

- **Appendix 7-A: Legislative, Policy and Guidance Framework for Technical Topics;**
- **Appendix 19-A: List of Community Facilities Baseline Assessment;**
- **Appendix 19-B: List of Business Premises Baseline Assessment;** and
- **Appendix 19-C: Detailed Impact Assessment Methodology.**

### Legislation, Policy and Guidance

19.1.5 Legislation, planning policy, and guidance relating to socio-economics, recreation and tourism and pertinent to the Proposed Development are listed in **Table 19-1**. Further detail regarding these can be found in **Appendix 7-A: Legislative, Policy and Guidance Framework for Technical Topics (PEIR Volume IV)**.

**Table 19-1: Legislation, Planning Policy, and Guidance relating to Socio-Economics, Recreation and Tourism**

Type	Legislation, Policy and Guidance
Legislation	<ul style="list-style-type: none"> <li>• Infrastructure Planning (Environmental Impact Assessment (EIA)) Regulations 2017 (Ref 19-1)</li> <li>• Environment (Wales) Act 2016 (Ref 19-3)</li> <li>• The Planning (Wales) Act 2015 (Ref 19-4)</li> <li>• Well-being of Future Generations (Wales) Act 2015 (Ref 19-5)</li> <li>• Welsh Language (Wales) Measure 2011 (Ref 19-7)</li> <li>• Climate Change Act 2008 (Ref 19-20)</li> </ul>
National Planning Policy	<ul style="list-style-type: none"> <li>• The Overarching National Policy Statement (NPS) for Energy (EN-1) (Ref 19-8)</li> <li>• The NPS for Natural Gas Electricity Generating Infrastructure (EN-2) (Ref 19-9)</li> <li>• The NPS for Natural Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4) (Ref 19-10)</li> <li>• The NPS for Electricity Networks Infrastructure (EN-5) (Ref 19-11)</li> <li>• Planning Policy Wales (PPW) (Ref 19-12)</li> <li>• Build Back Better: our plan for growth (UK Government 2021) (Ref 19-13)</li> <li>• Building Better Places (Welsh Government 2020) (Ref 19-14)</li> <li>• Ten Point Plan for a Green Industrial Revolution (UK Government 2020) (Ref 19-15)</li> <li>• Energy White Paper – Powering Our Net Zero Future (BEIS 2020) (Ref 19-16)</li> <li>• Future Wales: The National Plan 2040 (Welsh Government 2020) (Ref 19-17)</li> <li>• Stronger, Fairer, Greener Wales - Net Zero Skills Action Plan (Welsh Government 2023) (Ref 19-18)</li> <li>• Net Zero Wales Carbon Budget 2 (2021-25) (Welsh Government 2021) (Ref 19-19)</li> <li>• Ref 19-20 Welcome to Wales - Priorities for the visitor economy 2020-25 (Welsh Government 2017) (Ref 19-21)</li> <li>• Welsh Government Economic Resilience and Reconstruction Mission (Welsh Government 2021) (Ref 19-22)</li> <li>• The UK's Integrated National Energy and Climate Plan (2020) (Ref 19-23)</li> </ul>
Regional Planning Policy	<ul style="list-style-type: none"> <li>• A Growth Vision for the Economy of North Wales (2016) (Ref 19-24)</li> <li>• North Wales Regional Economic Framework (2021) (Ref 19-25)</li> <li>• North Wales Energy Strategy (2020) (Ref 19-26)</li> </ul>
Local Planning Policy	<ul style="list-style-type: none"> <li>• Flintshire County Council (FCC) Local Development Plan (LDP) (Theme: Delivering growth and prosperity) (2015-2030) (Ref 19-27).</li> <li>• The FCC: Council Plan (2022) (Ref 19-28)</li> <li>• The Deeside Plan (2017) (Ref 19-29)</li> </ul>
National Guidance	<ul style="list-style-type: none"> <li>• Technical Advice Note (TAN) 13: Tourism (Planning Guidance Wales, 1997) (Ref 19-30)</li> <li>• TAN 16: Sport Recreation and Open Space (Planning Policy Wales, 2009) (Ref 19-31)</li> <li>• TAN 23: Economic Development (Welsh Government, 2015) (Ref 19-32)</li> </ul> <p><b>Other Guidance:</b></p>

Type	Legislation, Policy and Guidance
	<ul style="list-style-type: none"> <li>• Additionality Guide (4th Edition) (Homes and Communities Agency (HCA), 2014) (Ref 19-33)<sup>1</sup></li> <li>• Research to Improve the Assessment of Additionality (Department for Business, Innovation and Skills (BIS), 2009) (Ref 19-34)</li> <li>• The Green Book – Appraisal and Evaluation in Central Government (HM Treasury, 2022) (Ref 19-35)</li> <li>• The Magenta Book – Guidance for Evaluation (HM Treasury, 2020) (Ref 19-36)</li> </ul>

## 19.2 Consultation and Scope of Assessment

### Consultation

- 19.2.1 A request for an EIA Scoping Opinion was sought from the Secretary of State (SoS) through the Planning Inspectorate (PINS) in February 2024 as part of the EIA Scoping Process. The EIA Scoping Opinion was adopted on 20 March 2024 (**Appendix 1-B: Scoping Opinion PEIR Volume IV**).
- 19.2.2 **Appendix 2-B: Matters Raised in the Scoping Opinion (PEIR Volume IV)** provides a summary of how comments raised by stakeholders to date in relation to Socio-Economics, Recreation and Tourism have been considered and actioned where appropriate.
- 19.2.3 Detail of engagement activities has been included within this PEIR where undertaken outside of the scoping opinion. No further engagement has been undertaken in relation to the socio-economics assessment at this stage, and therefore, no supplementary information is provided in this regard.

### Scope of the Assessment

- 19.2.4 Following the scoping process that has been undertaken, the scope of the assessment considered in this chapter of the PEIR is as follows:

**Table 19-2: Scope of the Assessment<sup>2</sup>**

Scope	Construction Phase	Operational Phase	Decommissioning Phase
Local economy (direct, indirect, and induced impacts)	✓	✓	✓
Skills and training	✓	✓	✓
Temporary worker accommodation	✓	x	✓
Public Rights of Way (PRoW) and;	✓	✓	✓
Severance	✓	x	✓

<sup>1</sup> Although this document was officially withdrawn on 24<sup>th</sup> May 2022, without a replacement, it continues to serve as a cornerstone of best practice guidance for additionality benchmarks. The guide, while no longer officially endorsed, remains highly regarded within the industry due to its comprehensive framework and established benchmarks for assessing additionality. Its use ensures understanding of additional benefits beyond what would have happened without intervention, thereby maintaining standards of accountability and effectiveness in public and private sector initiatives alike.

<sup>2</sup> ✓ Scoped in; x Scoped out

Scope	Construction Phase	Operational Phase	Decommissioning Phase
Agriculture and soils	✓	✓	✓
Local amenities (residential properties, business premises, community facilities, and visitor attractions)	✓	✓	✓
Development land	✓	✓	✓
Crime and Safety	x	x	x

- 19.2.5 Severance effects in relation to the strategic road network, local roads, and links (operational phase) has not been considered within the scope of the assessment in this chapter as operational traffic effects were scoped out in **Chapter 8: Traffic and Transport** of the Scoping Report (**Appendix 1-A PEIR Volume IV**).
- 19.2.6 Professional judgement and experience of similar developments has scoped out impacts on crime and safety, as no significant effects are anticipated due to the nature of the project and its location on an existing operational site. This includes consideration of the likely established security measures and a controlled environment, reducing the likelihood of increased crime. This is underpinned by the delivery of a Framework Construction Environment Management Plan (CEMP), which details specific mitigation measures and construction methodologies, including comprehensive health and safety protocols.
- 19.2.7 Assessment of temporary worker accommodation is excluded during the operational phase. This is based on the fact that no temporary workforce will be present during this phase. As a result, the operational phase is not expected to impact temporary accommodation services, and no further analysis on this aspect is required.

## 19.3 Assessment Methodology

- 19.3.1 This section sets out the methodology for the preliminary assessment of the socio-economics, recreation and tourism impacts of the Proposed Development.

### Sources of Information

- 19.3.2 The following sources of information have been used to inform the baseline and preliminary assessment presented within this chapter.
- 19.3.3 Relevant policy has been considered at the local, regional and national levels to identify the key socio-economic, recreation and tourism issues of relevance to the Proposed Development.
- 19.3.4 Baseline data illustrating the existing socio-economic conditions within and surrounding the Indicative Site Boundary, including employment and the

economy, has been collected through a desk-based research exercise using publicly available sources, documents, and web-based applications. These sources are listed below:

- 2021 Census (Office for National Statistics (ONS))<sup>3</sup> (Ref 19-37);
- 2022 Business Register and Employment Survey (BRES) (Ref 19-38);
- 2019 Welsh Indicator of Multiple Deprivation (Ref 19-39);
- StatsWales (Welsh Government) (Ref 19-40);
- FCC Public Rights of Way Map (Ref 19-41);
- Predictive Agricultural Land Classification Map (Welsh Government) (Ref 19-42);
- FCC Local Development Plan and Land Allocation Map (Ref 19-45);
- Satellite Imagery (Google Earth) (Ref 19-46);
- Visit Wales (Ref 19-47);
- Population Projections (Welsh Government / ONS) (Ref 19-48);
- CoStar (Ref 19-49);
- 2024 Claimant Count (ONS) (Ref 19-50); and
- Regional gross value added (balanced) by industry: all ITL region (Office for National Statistics) (Ref 19-51).

## Additionality Assumptions

19.3.5 Additionality is the extent to which something happens as a result of an intervention that would not have occurred in the absence of the intervention, and is applied to calculate the net additional impact. The economic impact of the Proposed Development is considered relative to a 60-minute drive time (car or road-based public transport) to or from the Proposed Development in any direction. In accordance with best-practice, this is considered a reasonable timeframe to use as a baseline within which workers would commute to the Proposed Development. This is further discussed in **Table 19-5** in Section 19.2.

19.3.6 Additionality has been calculated by considering the overall job gains to the area, then factoring in the level of leakage, number of displaced jobs and multiplier effects, such as supply chains and worker spending related jobs. These assumptions have been informed by the HCA Additionality Guide (Ref 19-33).

19.3.7 **Table 19-3** outlines the values that have been allocated within the construction, operational and decommissioning phases' additionality formula, enabling the tailored calculation of the net additional employment and economic impacts. Justifications for the values have been considered and are summarised in the right-hand column of the table.

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<sup>3</sup> The ONS cautioned that the national lockdown as a result of the covid-19 pandemic will have impacted the data recorded in the 2021 Census. While the pandemic did influence certain aspects of the data, such as employment, mobility, and living arrangements, the Census offers invaluable insights into demographic trends, social conditions, and economic factors.



**Table 19-3: Construction, Operational and Decommissioning Phases Economic Additionality Assumptions Scale**

Additionality Factor	Value	Justification
Leakage (% of jobs that benefit those residents outside of the study area area).	55%	This is the proportion of jobs taken by people who live outside of the study area, defined as a 60-minute travel area. Based on professional judgment and other similar Proposed Developments, given the specialised nature of the construction, operation and maintenance roles, this has been estimated to be 55%.
Displacement (% of jobs that account for a reduction in related jobs in the study area).	25%	For the purpose of this assessment, a low level of displacement (25%) has been assumed, in line with the HCA Additionality Guide (Ref 19-33). This level of displacement reflects that there are expected to be some displacement effects, although these are only to a limited extent. This displacement level is assessed as appropriate for a construction project, as used in other comparable Proposed Developments.
Multiplier (further economic activity associated with the additional local income, supplier purchase and longer-term development effects).	1.5	The multiplier is a composite figure which takes into account both the indirect jobs created across the study area based on supply chain activity but also the induced employment created through increased spending across the study area. The HCA Additionality Guide (Ref 19-33) provides a 'ready reckoner' of composite multipliers. The study area is likely to have 'average' supply linkages and induced effects based on the scale of its economy. Therefore, a 'medium' multiplier of 1.5 is determined from the HCA guidance to be the most appropriate measure.

## Impact Assessment

19.3.8 **Chapter 2: Assessment Methodology and Consultation** provides a summary of the general impact assessment methodology applied in this PEIR. The following sections provide detail on the general methodology used to assess the potential impacts on socio-economic, recreation and tourism receptors. **Appendix 19-C: Detailed Impact Assessment Methodology (PEIR Volume IV)** includes the methodology for each impact assessed, providing detail relevant to each receptor to guide and inform the assessment.

19.3.9 There is currently no statutory guidance on the methodology for undertaking assessments of socio-economic, recreation and tourism effects. There is no accepted definition of what constitutes a likely significant (or not significant) socio-economic effect. It is recognised that 'significance' reflects the relationship between the scale of impact (magnitude) and the sensitivity (or value) of the affected resource or receptor. As such, the significance criteria for socio-economic effects has been assessed using the expert judgement of authors with professional experience in socio-economics, and relies on the following considerations:

- the sensitivity of a given receptor: the assessment takes account of the qualitative (rather than quantitative) 'sensitivity' of each receptor, particularly their ability to respond to change based on the given impacts of the Proposed Development; and

- the magnitude of the impact: this entails consideration of the size of the impact, for example, on people, businesses, users of PRow, private properties, employees and development land in the context of the area in which impacts will be experienced.

19.3.10 The sensitivity and magnitude of socio-economic receptors is assessed as high, medium, low or very low. These factors have then been combined to determine the consequent likely significance of the effect.

19.3.11 To determine the overall significance of effects of the Proposed Development, effects have been defined as beneficial; adverse; negligible; or no effect.

19.3.12 Duration of effect is also considered, with more weight given to permanent changes than to temporary ones. For the purposes of this assessment, short-term effects are one year or less, medium-term effects are one to five years and long-term effects are for durations over five years.

19.3.13 Where an effect is assessed as being beneficial or adverse, the effect has been classified as Major, Moderate, Minor or Negligible. The assessment of significance is informed by considering the sensitivity of the receptor and the magnitude of impact as set out in **Table 19-4**. For the purposes of this assessment, only likely Moderate and Major effects which are beneficial or adverse are considered to be 'significant'. Effects identified as negligible or minor are 'not significant'.

**Table 19-4: Significance of Effects Matrix**

Magnitude of Impact	Sensitivity of Receptor			
	Very Low	Low	Medium	High
High	Minor	Moderate	Moderate	Major
Medium	Negligible	Minor	Moderate	Moderate
Low	Negligible	Negligible	Minor	Moderate
Very low	Negligible	Negligible	Negligible	Minor

19.3.14 Assignment of significance is carried out with consideration of embedded mitigation measures relevant to socio-economics, recreation and tourism. Embedded mitigation measures (including project design measures and best practice) are presented within Section 19.5. Details on additional mitigation measures and associated definitions can be found in Section 19.7.

## Rochdale Envelope

19.3.15 The setting of design parameters using the 'Rochdale Envelope' approach is described in **Chapter 2: Assessment Methodology and Consultation**. Table 4-1 of **Chapter 4: The Proposed Development** sets out the maximum parameters currently envisaged for the principal components of the Proposed Development. These parameters, together with assumptions regarding the future plans for the existing Connah's Quay Power Station set out in **Chapter 2: Assessment Methodology and Consultation** have been used to inform the representative worst-case scenario that has been assessed in this chapter, in order to provide a robust assessment of the impacts and likely significance of environmental effects of the Proposed Development at its current stage of design.

19.3.16 In particular, focused use of the Rochdale Envelope has been adopted for the following aspects:

- the minimum scenario will be assessed for employment, skills and training (i.e. number of jobs created, level of training provision) as it is envisioned to be a beneficial impact; and
- in contrast, maximum parameters for impacts on other receptors (such as PRow, disruption to traffic, agriculture and soils, local amenity and development land) will be assessed, whereby the 'worst case scenario' is considered, as the effect of the Proposed Development is expected to be an adverse impact.

### Assessment Assumptions and Limitations

19.3.17 The assessment presented in this PEIR chapter is based on the available baseline and design information. Following statutory consultation, and further evolution of the design and development of baseline data, a full assessment will be undertaken as part of the EIA and will be reported in the Environmental Statement (ES) that will be submitted with the Development Consent Order (DCO) application.

19.3.18 The assessment of the significance of effects has been carried out against a benchmark of current socio-economic baseline conditions prevailing around the Proposed Development, as far as possible within the limitations of such a dataset. The most recently available data sources have been used in this PEIR, although it should be noted that baseline data can be subject to a time lag between collection and publication. As with any dataset, these conditions may be subject to change over time which may influence the findings of the assessment.

19.3.19 Information on current land use from the site occupiers within the Indicative Site Boundary will be required to determine existing employment generated within the existing Site. In the absence of this information, good practice guidance and professional judgment will be applied.

19.3.20 Effects on local assets and land use during the construction, operation and decommissioning phases are based on preliminary assessments, taking into consideration the results from the relevant environmental studies that can act in combination to cause effects to occur. These studies comprise the traffic and transport, noise and vibration, landscape and visual amenity, and air quality assessments. These will be further investigated in the ES. Where any two of these topics or more each record a significant effect on a receptor or group of receptors, it will be assumed as a worst-case that the effect could occur at the same time. Again, these will be further investigated in the ES.

19.3.21 As noted in **Chapter 5: Construction Programme and Management (PEIR Volume II)**, the main works phase for Train 1 and Train 2 to be constructed in a single phase is expected to take up to 3.5 years, and, subject to development consent being granted, consent construction is anticipated to start as early as Quarter (Q)4 2026 but may start up to Q4 2031. The timeframe of the main works phase (civil, mechanical, electrical and integration works) under the single phase construction works for the single phase approach has been adopted for socio-economic assessment as it reflects the worst-case scenario (i.e. Rochdale Envelope). This is expected to be a realistic worst-case

assumption for the consideration of amenity and accessibility effects within this socio-economic assessment, as it represents the expected minimum build time and therefore the most intense activity onsite (and therefore greatest impacts associated with traffic, noise, dust, visual amenity, etc.). This approach may mean the maximum number of jobs during peak construction has been overestimated; however, the overall amount of construction activity over the construction period and therefore the associated employment and spending benefits of the Proposed Development overall would remain unchanged.

## 19.4 Baseline Conditions and Study Area

19.4.1 This section describes the baseline environmental characteristics for the Site and surrounding areas with specific reference to socio-economics and land use.

### Study Area

19.4.2 The impacts of the Proposed Development with respect to socio-economics and land use are considered at varying spatial levels according to the likely extent of the effect under consideration. This approach is consistent with the HCA, now known as Homes England, guidance entitled 'Additionality Guide, A Standard Approach to Assessing the Additional Impact of Projects, 4th Edition' (Ref 19-33). **Table 19-5** presents the different components of the socio-economics and land use effects assessment for this PEIR, the geographical scale at which each component is assessed, and the rationale behind these geographical scales.

**Table 19-5: Study Area**

Impact	Geographical Study Area	Rationale for Study Area
Local economy (direct, indirect, and induced impacts)	60-minute drive area	Research by Chartered Institute of Personnel and Development (CIPD) found that 90% of national employees commuted for 60 minutes or less each way. This was reported by CIPD in the 2018 Employee outlook 'Employee views on working life'. The 60-minute drive area represents the principal labour market catchment area for the Proposed Development.
Skills and training	FCC Local Authority Area	Professional judgement and experience from other Proposed Developments in the UK.
Temporary worker accommodation	30 and 60-minute travel area (drive time estimated using GIS data, based on the Indicative Site Boundary)	Professional judgement and experience from other Proposed Developments in the UK.
PRoW severance and	Within, and up to 500 m radius from the Indicative Site Boundary including beyond this where routes extend outside this radius	Professional judgement and experience from other Proposed Developments in the UK.

Impact	Geographical Study Area	Rationale for Study Area
Agriculture and soils	The Indicative Site Boundary	Professional judgement and experience from other Proposed Developments in the UK.
Local amenities - residential properties	500 m radius from the Indicative Site Boundary	Professional judgement and location of sensitive receptors for impacts arising from the Proposed Development as informed by other assessments.
Local amenities - business premises	500 m radius from the Indicative Site Boundary	Professional judgement and location of sensitive receptors for impacts arising from the Proposed Development as informed by other assessments.
Local amenities - community facilities	2 km radius from the Indicative Site Boundary	Professional judgement and location of sensitive receptors for impacts arising from the Proposed Development as informed by other assessments. Community facilities are likely to be accessed by residents from a wider catchment, especially in rural areas, owing to a tendency for provision to be sparse. A wider radius has been considered for this receptor in order to fully appreciate the effect of severance on access to these facilities.
Local amenities - visitor attractions	2 km radius from the Indicative Site Boundary	Professional judgement and location of sensitive receptors for impacts arising from the Proposed Development as informed by other assessments. Visitor attractions are likely to be accessed by residents from a wider catchment, thus a wider radius has been considered for this receptor in order to fully appreciate the effect of severance on access to these facilities.
Development land	500 m radius from the Indicative Site Boundary	Professional judgement and experience from other proposed developments in the UK.

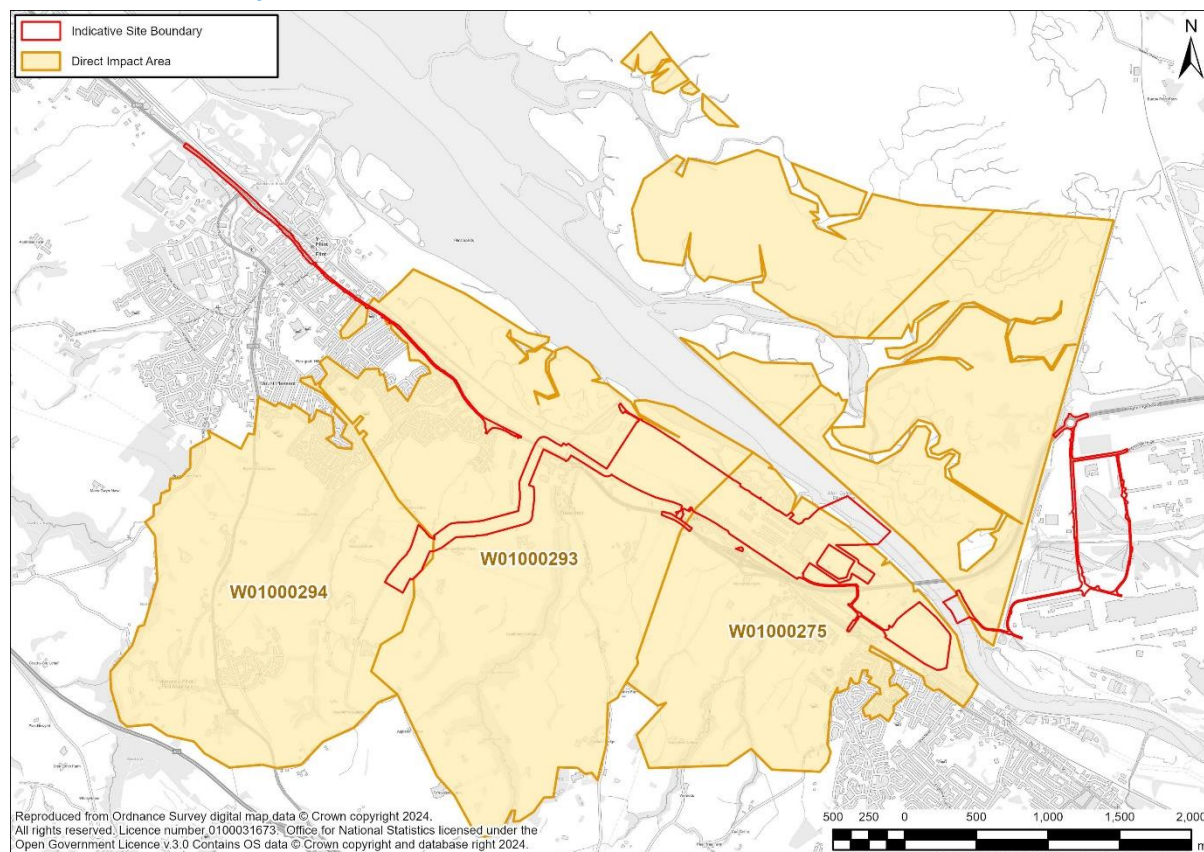
## Existing Baseline

- Potential effects arising from the Proposed Development are assessed relative to the following three geographies: the Direct Impact Area, defined using a best-fit approach, consisting of three Lower Layer Super Output Areas (LSOAs) in Flintshire<sup>4</sup>: W01000293, W01000294 and W01000275<sup>4</sup> (**Plate 19-1**);
- the Wider Impact Area, comprised of the FCC local authority area; and
- the national comparator, Wales.

<sup>4</sup> Output Areas (OAs) are the lowest level of geographical area for census statistics and were first created following the 2001 Census. Lower layer Super Output Areas (LSOAs) are made up of groups of OAs, usually four or five. They comprise between 400 and 1,200 households and have a usually resident population between 1,000 and 3,000 persons.



### Plate 19-1 Direct Impact Area

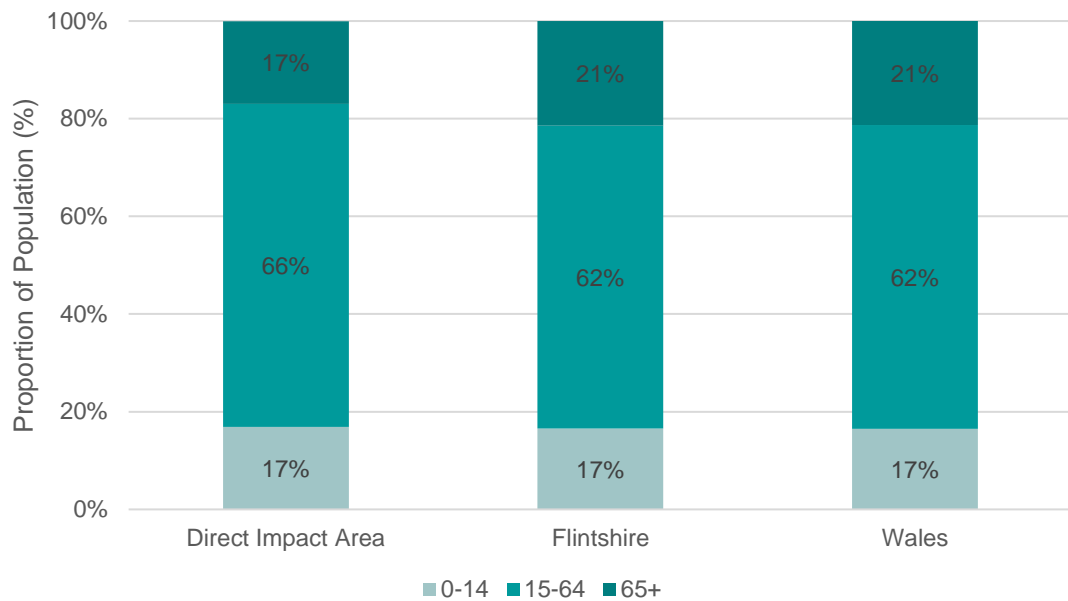


## Local Economy

### Population Demographics

19.4.3 The Census 2021 (Ref 19-37) provides data on populations and the age demographics within the study area. The population of the Direct Impact Area is 5,779, approximately 3.7% of Flintshire's 154,962 population and approximately 0.19% of Wales' 3,107,494 population. The Direct Impact Area exhibits the smallest proportion of individuals aged 65+ (17%), as well as the largest proportion of individuals aged 15 to 64 (66%), showcasing the large working-age population in the area. **Plate 19-2** visualises this data.

**Plate 19-2: Population Cohorts**

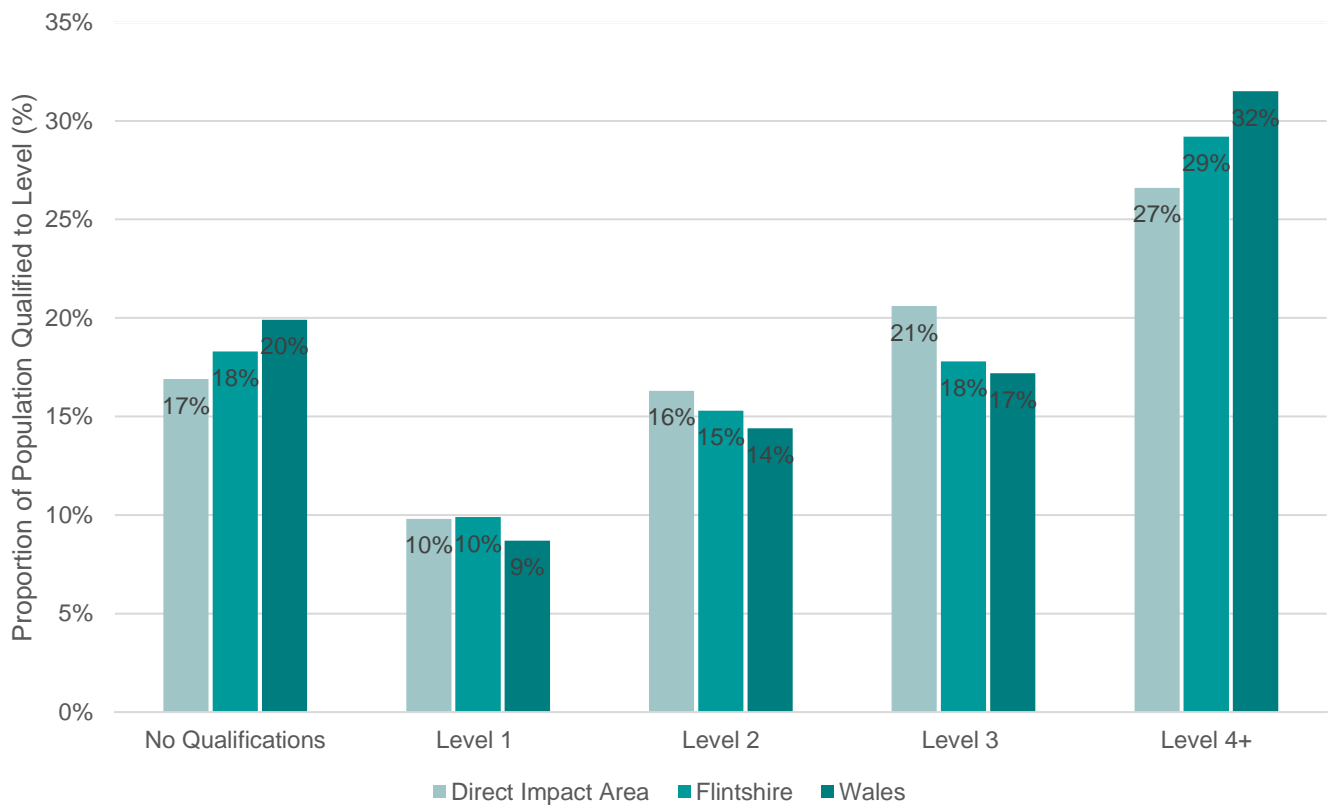


Source: Office for National Statistics, (2022); Census 2021.

**Qualifications**

19.4.4 displays data from the 2021 Census on the levels of qualifications throughout the Direct Impact Area and the comparator geographies. The Direct Impact Area workforce is predominantly intermediate, featuring the highest proportion of individuals qualified to level 1 (10%), level 2 (16%) and level 3 (21%). It also has the lowest proportion of individuals qualified to level 4+ (27%), but on the other hand the lowest proportion of individuals with no qualifications (17%). This underscores a workforce that has a notable proportion of mid-level qualifications with fewer at the extremes. Flintshire shares a similar profile with the Direct Impact Area, with a relatively intermediate workforce. It ties for the highest percentage of individuals qualified at level 1 (10%), whilst surpassing the Direct Impact Area in the proportion of individuals qualified to level 4+ (29%). In contrast, Wales demonstrates a more polarized workforce, recording the highest percentages of individuals lacking qualifications (20%) and holding level 4+ qualifications (32%) among the three geographies. However, in the remaining qualification categories, it presents the lowest proportions, highlighting a stark divide within its workforce.

### Plate 19-3: Qualifications



Source: Office for National Statistics, (2022); Census 2021

### Economic Activity

19.4.5 In the Direct Impact Area, 65.6% of the population are economically active, surpassing both Flintshire (58.9%) and Wales (54.4%). Notably, the Direct Impact Area has the highest proportions of both full-time employees (44.2%) and part-time employees (13.0%) among the geographies, yet it also exhibits the lowest proportion of self-employed individuals (6.2%). Overall, the Direct Impact Area performs well in terms of economic activity, with the highest proportion of economically active individuals.

19.4.6 Unemployment rates varied slightly across the three regions; the Direct Impact Area and Flintshire reported the lowest unemployment rate at 2.3%, while Wales recorded a slightly higher rate of 2.5%. **Table 19-6** presents a comprehensive overview of the Census 2021 economic activity data for the study area.

**Table 19-6: Economic Activity**

Economic Activity Indicator	Direct Impact Area	Flintshire	Wales
Economically Active (Excluding Full-time Students) (%)	65.6	58.9	54.4
Employee: Part-time (%)	13	11.9	11.8
Employee: Full-time (%)	44.2	37.3	31.9



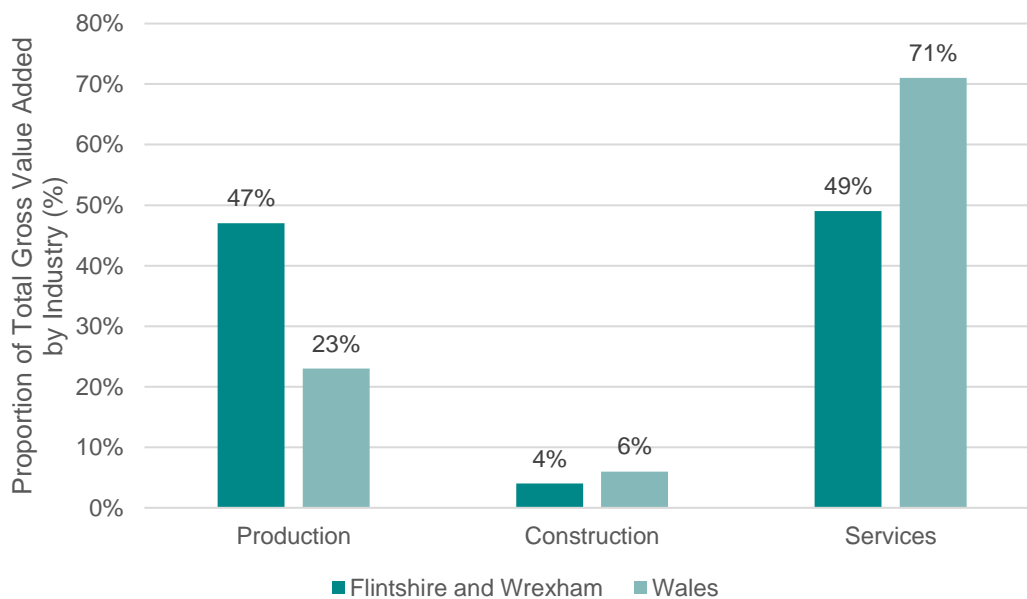
Economic Activity Indicator	Direct Impact Area	Flintshire	Wales
Self-employed (%)	6.2	7.3	8.2
Unemployed (%)	2.3	2.3	2.5
Economically Active Full-time Student (%)	2	1.8	2.2
Economically Inactive (%)	32.3	39.4	43.5

Source: Office for National Statistics, (2022); Census 2021.

### Gross Value Added

19.4.7 Data from the Office for National Statistics is only available for Flintshire and Wrexham combined for GVA. Wales demonstrates a significant reliance on services (Sectors G, H, I, J, K, L, M, N, O, P, Q, R, S, and T), comprising 71% of its total GVA, compared to Flintshire and Wrexham's combined 49%. Conversely, production (encompassing Sectors A, B, C, D, and E) represents a higher share of total GVA in Flintshire and Wrexham compared to Wales, with percentages of 47% and 23% respectively. Construction (Sector F) contributes the smallest proportion to total GVA in both regions, accounting for 6% in Wales and 4% in Flintshire and Wrexham. **Plate 19-4** visualises this GVA data.

**Plate 19-4: Gross Value Added**



Source: StatsWales, ONS, (2021); gross value added in Wales by industry

### Employment by Industry

19.4.8 Sector P (education) dominates employment in the Direct Impact Area, comprising a substantial 57.1% of its workforce. This is followed by Sector C (health) comprising 7.1% of total employment. In contrast, Sector P (education) employs only 9% of Wales' workforce and 6.9% of Flintshire's. Sector C (manufacturing) is a much larger industry in Flintshire and Wales, taking up 26.4% and 10.7% of employment respectively, in comparison to only

2.9% in the Direct Impact Area. More data on industry employment can be found in **Table 19-7**.

**Table 19-7: Employment by Industry**

Industry	Direct Impact Area	Flintshire	Wales
Agriculture, forestry & fishing (A) (%)	0	0.6	1.2
Mining, quarrying & utilities (B,D and E) (%)	2.5	1.4	1.7
Manufacturing (C) (%)	2.9	26.4	10.7
Construction (F) (%)	4.3	4.9	4.8
Motor trades (Part G) (%)	0.9	1.7	1.9
Wholesale (Part G) (%)	0	3.1	2.3
Retail (Part G) (%)	2.6	6.9	8.9
Transport & storage (incl. postal) (H) (%)	1.1	5.6	4.2
Accommodation & food services (I) (%)	4.3	6.2	8.7
Information & communication (J) (%)	0.6	1.4	2.3
Financial & insurance (K) (%)	0	0.8	3
Property (L) (%)	0.5	0.7	1.5
Professional, scientific & technical (M) (%)	1.1	6.9	5.1
Business administration & support services (N) (%)	2.9	9.7	6.7
Public administration & defense (O) (%)	0	5.6	8.1
Education (P) (%)	57.1	6.2	9
Health (Q) (%)	7.1	6.9	15.2
Arts, entertainment, recreation & other services (R,S,T and U) %	2.9	3.1	4.7

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

## Occupations

19.4.9 In the Direct Impact Area, 15% of the population work in professional occupations (SOC code 2) and 13% in process, plant and machine operation occupations (SOC code 8). Comparatively, only 11% of Flintshire and 8% of Wales worked in process, plant and machine operation occupations; however, 17% of Flintshire and 18% of Wales worked in professional occupations. A full summary of the differences in occupations in the geographies can be found in **Table 19-8**.

**Table 19-8: Occupations**

SOC Group	Occupations	Direct Impact Area	Flintshire	Wales
SOC 1-3	1: Managers, directors and senior officials (%)	10	11	11
	2: Professional occupations (%)	15	17	18
	3: Associate professional and technical occupations (%)	12	12	12
SOC 4-6	4: Administrative and secretarial occupations (%)	9	9	9
	5: Skilled trades occupations	12	12	12
	6: Caring, leisure and other service occupations (%)	10	10	11
SOC 7-9	7: Sales and customer service occupations (%)	8	8	8
	8: Process, plant and machine operatives (%)	13	11	8
	9: Elementary occupations (%)	11	11	11

Source: Office for National Statistics (2022); Census 2021.

### Deprivation

19.4.10 Flintshire overall has three LSOAs in the most deprived 10% of areas, and eleven in the most deprived 20% across Wales. The Welsh Index of Multiple Deprivation scores range from 0 to 100, with 0 being the least deprived and 100 the most. The average score in Flintshire is 15.7; the LSOAs in the Direct Impact Area score 6, 10.1 and 23.5. Therefore, the Direct Impact Area as a whole falls in line with the average, with a slightly lower score of 13.2.

### Local Receptors

19.4.11 Assessment of receptors considers those in the vicinity of the Indicative Site Boundary, which includes the additional Abnormal Indivisible Load (AIL) routes and ports to be used for delivering abnormal loads to the site (referred to as the 'Temporary AIL Work Areas'). This includes road routes and also three marine ports (Port of Mostyn, Connah's Quay North and Ellesmere Port). It should be noted that these areas are included for the transportation of materials / equipment to site (e.g. via vessel, or roads)<sup>5</sup>.

### Open Space

19.4.12 There are multiple publicly accessible open spaces within 500 m of the Indicative Site Boundary, displayed in **Table 19-9**.

<sup>5</sup> This includes receptors relating to open space, visitor attractions, community facilities, residential areas, business premises, and PROWs.

**Table 19-9: Open Space**

Open Space	Approximate Size (ha)	Approximate Distance from Site (m)
<b>Indicative Site Boundary (Excluding the Temporary AIL Work Areas)</b>		
Unnamed park next to Ffordd Dewi Road in Oakenholt	2.07 ha	450 m
Unnamed park on Chester Road, next to Leadbrook Drive entrance	0.13 ha	220 m
Unnamed park on Chester Road, next to Bennetts Row junction	0.11 ha	480 m
Kelsterton Cemetery	3.11 ha	300 m
Deeside College Field	2.7 ha	50 m
Deeside College space/field	0.79 ha	230 m
Connah's Quay High School	0.18 ha	450 m
Blueskiving Park	0.19 ha	200 m
Golftyn Park	1.44 ha	60 m
St Mark's Church	0.27 ha	370 m
Area off Wales Coast Path	0.19 ha	370 m
Connahs Quay Cemetery	2.32 ha <sup>6</sup>	500 m
Playground off Church Street	0.03 ha	150 m
Playground off Leighton Court	0.015 ha	480m
<b>Temporary AIL Work Areas</b>		
Pentre Recreation Ground	-	50 m
Pen Goch Hill	-	500 m
Clwyd Avenue Play Area	-	20 m
Greenfield Dock	-	470 m
Westminster Park	-	200 m

### PRoW and Severance

19.4.13 A number of PRoWs have been identified within 500 m of the Proposed Development using FCC's Public Rights of Way map (Ref 19-41). The PRoWs identified crossing the Indicative Site Boundary are:

- 404/67/10 – a 416 m footpath beginning from Leadbrook drive and ending by connecting to PRoW 404/66/10, passing through the Proposed CO<sub>2</sub> Connection Corridor;
- 404/66/10 – a 326 m footpath intersecting the field parcel containing the Proposed CO<sub>2</sub> Connection Corridor, forming a link between Allt-Goch

<sup>6</sup> Part of the Connah's Quay Cemetery overlaps the 500 m boundary; approximately 0.92 Ha lies within the boundary.

Lane and the farm access road forming the northern boundary of the field parcel; and

- 404/66/20 – a 502 m footpath formed after 404/66/10 and 404/67/10 connect, crossing the Indicative Site Boundary of the Proposed CO<sub>2</sub> Connection Corridor, ending at Allt-Goch Lane.

19.4.14 PRoW which are within 500 m of the Indicative Site Boundary but do not cross it are as follows:

- 404/68/10, 404/58/20, 404/58/10, 404/51/10, 404/51/20, 404/69/10, 302/1/30, 302/43/10, 302/28/10, 302/42/10, 302/28/30, 302/27/10, 404/72/20, 404/56/10, 404/56/20, 302/28/20, 404/48/10, 404/80/10, 404/80/40, 404/47/10, 404/80/20, 404/43/10, 404/87/10, 404/86/10, 404/87/20, 404/87/30, 404/88/10, 404/89/10, 404/77/10, 404/36/10, 404/75/10, 407/39/10, 404/76/20, 407/2/10, 407/1/20, 407/38/20, 407/38/10, 407/6/80, 407/6/100, 407/6/40, 407/6/70, 407/34/30, 407/6/30, 407/6/50, 407/6/60, 407/42/10, 407/36/10, 407/37/20, 404/37/10, 407/37/30, 407/43/10, 407/70/10, 416/76/20, 416/76/10, 416/77A/10, 407/69/10, 407/70/10, 416/68/10, 416/68/20, 416/68A/10, 416/68B/10, 416/67B/10, 416/73/10, 416/72/10, 416/67/10, 416/67/30, 416/66/30, 416/67/20, 416/67A/10, 416/984, 416/69/10, 416/64/10, 416/63/10, 416/63/20, 416/62/10, 407/69/20, 407/69/30, 416/63/40, 416/63/30, 416/106A/10, 416/104A/10, 416/105A/10, 416/103/10, 416/103/20, 416/103A/20, 416/103B/10, 416/103A/10, 416/103/30, 416/107/30, 416/108/10, 416/107/10, 416/107A/10, 416/108/20, 416/102/10, 302/32/10 and 334/FP35/2.

19.4.15 Further information on each of these routes is provided in **Chapter 10: Traffic and Transport** and illustrated in **Figure 15-5: Public Rights of Way (PEIR Volume III)**.

19.4.16 **Chapter 10: Traffic and Transport** also provides overview of the local strategic road network in the area, considering potential severance effects.

#### Agriculture and Soil

19.4.17 There is a need to minimise the use of best and most versatile (BMV) agricultural land, which is classification grades 1, 2, and 3a, however development is not prohibited from being located on BMV agricultural land. Under the ALC system, Subgrade 3a land would form BMV whereas Subgrade 3b would not.

19.4.18 This section is informed by assessment within **Chapter 14: Geology and Ground Conditions (PEIR Volume II)**. **Figure 14-1: Study Area Boundaries** defines the areas within the Indicative Site Boundary considered for assessment of agriculture and soils. This includes:

- the Main Site;
- the Repurposed CO<sub>2</sub> Connection Corridor; and
- the Proposed Connection Corridor.

19.4.19 In Wales, predictive ALC is available via the Welsh Government's DataMap Wales (Ref 19-42). The map has been used to determine the classification of land within the Indicative Site Boundary. The division of ALC grades for

agricultural land, urban land and non-agricultural land (typically trees and hedgerows) is provided in **Table 19-10**.

**Table 19-10 Agricultural Land Classification (ALC) within Indicative Site Boundary**

ALC Grade	Main Site area (ha)	Repurposed CO <sub>2</sub> Corridor area (ha)	Proposed CO <sub>2</sub> Corridor area (ha)
2	28.4	0	1.5
3a	0	6.3	11.5
3b	0	0	0.7
5	0.9	0	0.4
Urban	26.4	0	0
Non-agricultural	0	0	1.0

19.4.20 Predictive Grade 2 land is solely within the Main Site and this area will be subject to field survey. However, desk study identifies the predictive Grade 2 area to lie within flood risk zone 3 and this may limit the ALC to Subgrade 3b. Further assessment is required and for this report the predictive Grade 2 data is presented as a worst case.

19.4.21 The Subgrade 3a land dominates the Repurposed and Proposed CO<sub>2</sub> Connection Corridors. Field survey is proposed for the soils overlying the Repurposed CO<sub>2</sub> Connection Corridor. Survey data for soils of the Proposed Connection Corridor are available (Ref 19-43) and confirm the soils to be Subgrade 3a. Temporary disturbance of soils within the Repurposed and Proposed CO<sub>2</sub> Connection Corridors will be restored to the original ALC Grade.

### Residential Properties

19.4.22 Within 500 m of the study area, there are individual and clusters of residential properties. The largest is in Connah's Quay centered around Church Street, approximately 100 m from the Indicative Site Boundary. The Village of Oakenholt is also within 500 m of the Indicative Site Boundary (approximately 180 m away), with residential clusters around Leadbrook Drive and Chester Road. There are a few sparsely distributed residential and agricultural properties throughout the 500 m radius on Kelsterton Road, Papermill Lane and around the Proposed CO<sub>2</sub> Connection Corridor. However, the majority of the residential properties are concentrated around Connah's Quay and Oakenholt.

19.4.23 The Temporary ALL Work Areas pass nearby villages of Flint, Bagilit, Greenfield, Mostyn, and Ellesmere Port. All of which have built-up residential settlements.

### Business Premises

19.4.24 Businesses are considered to be all legal entities with definable establishments and employing persons within the impact area (legal entities are considered to include sole traders; partnerships; limited companies; public limited companies; social enterprises; public services). For the purposes of assessing the impacts on home-based businesses, all such businesses are considered to be ancillary to the main use as a residence unless evidence of actual employment in situ is identified. **Appendix 19-B: List of Business**

**Premises – Baseline Assessment (PEIR Volume IV)** showcases the businesses within 500 m of the Indicative Site Boundary.

19.4.25 The majority of business premises are concentrated around Connah's Quay and Oakenholt when assessing those in 500 m radius of the Indicative Site Boundary. The Temporary AIL Work Areas pass nearby villages of Flint, Bagilit, Greenfield, Mostyn, and Ellesmere Port. All of which have clusters of business premises in towns and industrial estates.

#### Community Facilities

19.4.26 Community facilities are differentiated from businesses in that they provide services to individuals as well as employment, whereas businesses have been determined where the predominant potential impact is solely on employment (Ref 19-44). The Community Facilities also includes the educational facilities within 2 km from the Indicative Site Boundary. **Appendix 19-A List of Community Facilities – Baseline Assessment (PEIR Volume IV)** provides the full summary of facilities.

19.4.27 The majority of community facilities are concentrated around Connah's Quay and Oakenholt when assessing those in the vicinity of the Indicative Site Boundary. The Temporary AIL Work Areas pass nearby villages of Flint, Bagilit, Greenfield, Mostyn, and Ellesmere Port. All of which have clusters of community facilities in town centre locations.

#### Visitor Attractions

19.4.28 The Deeside Naturalists' Society (DNS) Field Studies Centre is located within the Indicative Site Boundary. As stated in **Chapter 4: The Proposed Development**, a secondary access to the wildlife hides for DNS members is currently provided and will be re-routed subject to design considering the need for safe access during construction and options for permanent access once construction is complete. Further information will be provided in the ES and secured via the draft DCO and accompanying Rights of Way and Access Plans.

19.4.29 Within 2 km of the Indicative Site Boundary, there are two substantial visitor attractions: Flintshire Bridge and the Kathleen and May Heritage Centre. Flintshire Bridge, the largest asymmetrical cable stayed bridge in the UK, lies approximately 0.2 km from the Indicative Site Boundary. The Kathleen and May Heritage Centre is a popular museum, approximately 0.5 km away. Within the 2 km area, there are also a variety of businesses and community facilities offering accommodation, food and beverages that serve the visitor economy.

19.4.30 In terms of the Temporary AIL Work Areas, there are various visitor attractions within the 2 km area. In Bagilit, this includes the Bagilit Estuary nature reserve, with facilities in Greenfield including the Greenfield Valley Heritage Park and historical landmark Basingwerk Abbey. In Mostyn, attractions include the Duke of Lancaster Ship, and Dry Bridge Lodge which are both historical landmarks in the area. In Ellesmere Port, attractions include the Lighthouse to the West of the Port, and the National Waterways Museum to the East of the Port.

#### Temporary Accommodation

19.4.31 Analysis of the hotel, bed and breakfast and inns accommodation sector has been undertaken to assess the likely capacity against the demand from the



potential peak construction workforce. This assessment considers the potential for adverse impacts due to demand for accommodation exceeding supply during the construction phase. Data on the number of rooms available within a 30 and 60-minute drive area in the hotel, bed and breakfast and inns accommodation sector has been sourced from CoStar, a property resource website (Ref 19-49). As of 2024, there are approximately 1,716 rooms in local hotel, bed and breakfast and inns accommodation within a 30-minute drive of the Indicative Site Boundary, as well as 28,287 rooms within a 60-minute drive of the Indicative Site Boundary as detailed in **Table 19-5** and demonstrated in **Figure 19-2** and **Figure 19-3**. This number has been adjusted in **Table 19-11** and **Table 19-12** below to reflect typical availability based on seasonal occupancy rates from 2023, as reported by Ref 19-47.

**Table 19-11: Accommodation Capacity within a 30-Minute Drive**

Month	Typical Room Occupancy (%)	Inventory Rooms	Rooms Available After Existing Demand
January	47	1,716	909
February	56	1,716	755
March	59	1,716	704
April	63	1,716	635
May	69	1,716	532
June	71	1,716	498
July	76	1,716	412
August	80	1,716	343
September	75	1,716	429
October	66	1,716	583
November	56	1,716	755
December	60	1,716	686

Source: CoStar (2024), VisitWales (2024)

**Table 19-12: Accommodation Capacity within a 60-Minute Drive**

Month	Typical Room Occupancy (%)	Inventory Rooms	Rooms Available After Existing Demand
January	47	28,287	14,992
February	56	28,287	12,446
March	59	28,287	11,598
April	63	28,287	10,466
May	69	28,287	8,769
June	71	28,287	8,203
July	76	28,287	6,789
August	80	28,287	5,657
September	75	28,287	7,072



Month	Typical Room Occupancy (%)	Inventory Rooms	Rooms Available After Existing Demand
October	66	28,287	9,618
November	56	28,287	12,446
December	60	28,287	11,315

Source: CoStar (2024), VisitWales (2024)

### Development Land

**19.4.32** A shortlist of developments in the vicinity of the Indicative Site Boundary has been established which may result in cumulative effects for the Proposed Development. These developments reflect those that are the most substantially committed in the local area where there may be an interface with the Proposed Development. The full shortlist can be found in **Chapter 24: Cumulative and Combined Effects** within Table 24-4. **Figure 24-1 (PEIR Volume III)** shows the location of the cumulative schemes in relation to the Proposed Development. An assessment of Cumulative effects is not available at this PEIR stage, however it will be undertaken for the ES.

### Sensitivity of Receptors

**19.4.33** **Table 19-13** identifies the sensitivity of effects on socio-economic receptors identified within the baseline and assigns a sensitivity value based on the criteria highlighted in **Table 19-4** and using professional judgement and best-practice.

**Table 19-13: Sensitive Receptors within the Existing Baseline**

Impact	Sensitivity of Receptor
Local economy (direct, indirect, and induced impacts)	Varies due to type of employment activity - Low to Medium
Skills and training	Low to Medium
Temporary worker accommodation	Medium
PRoW and Severance	Low
Agriculture and soils	Varies based on classification
Local amenities - residential properties	Medium to high
Local amenities - business premises	Varies based on type of amenity - Low to Medium
Local amenities - community facilities	Varies based on type of amenity - Low to Medium
Local amenities - visitor attractions	Varies based on type of amenity - Low to Medium
Development land	Medium

### Future Baseline

**19.4.34** The assessment has considered 2040 as the future baseline year, in that it presents a practical timeframe for planning and decision-making while

maintaining reasonable degree of accuracy and reliability. The future baseline is anticipated to be largely the same as the existing baseline for socio-economics and land use. However, it would be reasonable to expect that the population will increase. According to ONS population projections (Ref 19-52), the population of Flintshire is forecasted to increase from 154,962 in 2021 to 161,258 in 2040, representing a 4.1% increase. Similarly, North Wales' population is expected to increase by 4.2% in the 2021-2040 period, rising from 686,893 to 715,913. The overall population of Wales is forecast to grow at a higher rate of 5.9%, from 3,107,494 in 2021 to 3,290,312 in 2040.

19.4.35 In terms of the local economy, it would be reasonable to expect that employment and GVA would increase, associated with the expected increase in population. It is expected that PRowS will continue to be used. In terms of development land, cumulative schemes are expected to progress, and will be considered to ensure a comprehensive assessment of collective impacts on the local environment and infrastructure. Businesses and community facilities may open and close however it is not expected that there will be any perceptible changes to the local economic baseline assessment and the Proposed Development should be assessed against current baseline conditions and policies. These changes are not considered to constitute significant changes to the baseline.

## 19.5 Development Design and Embedded Mitigation

19.5.1 The Proposed Development has been designed, as far as possible, to avoid or minimise adverse impacts and effects on socio-economics, recreation and tourism through the process of design development.

19.5.2 Primary mitigation measures are embedded within the Proposed Development, as set out in the respective chapters, to reduce other construction and operational effects (such as noise, air quality, transport, and landscape and visual) which in turn will mitigate the effects on the local community and existing facilities from a socio-economics, recreation and tourism perspective.

19.5.3 The following embedded mitigation measures have been incorporated into the Proposed Development design, with detailed proposals and locations to be submitted with the DCO Application:

19.5.4 The following standard construction practices are relevant to this assessment:

- a Framework Construction Environment Management Plan (CEMP) is to be produced which will describe the specific mitigation measures to be followed to control and reduce impacts on the environment during the construction phase. The Framework CEMP will be developed considering the environmental assessments, including mitigation measures presented in the ES. A final CEMP will be secured as a requirement of any DCO that is granted and will identify the relevant procedures to be adhered to by the throughout construction. This will include, but not be limited to, impacts from:
  - Construction Traffic Management Plan (CTMP) providing an overview of proposed construction (including AIL) traffic routes and associated

management measures, (including parking and access requirements, and proposals for management of any affected PRoW);

- earthworks;
  - noise and vibration;
  - dust generation; and
  - waste generation.
- all construction works will adhere to the Construction (Design and Management) Regulations 2015 (CDM Regulations 2015);
  - a Framework Soil Management Plan (SMP) will be produced alongside the Framework CEMP and a final CEMP/SMP will be live documents with detail developed by the appointed contractor once construction methods are known. The SMP will describe the mitigation measures that follow good practice when working with soils to minimize risk to soil structure and minimize the risk of contamination through poor sediment management from exposed soils; and

19.5.5 The following standard decommissioning practices are relevant to this assessment:

- the Proposed Development is expected to operate for 30 years. At the end of its operating life, the most likely scenario is that the Proposed Development would be shut down and all above ground structures removed. The Proposed Development would then be suitably remediated as required to facilitate re-use; and
- a Decommissioning Plan (including Decommissioning Environmental Management Plan (DEMP)) would be produced with Natural Resources Wales (NRW) as part of the Environmental Permitting and site surrender process. The DEMP would consider in detail all potential environmental risks on the Site and contain guidance on how risks can be removed, mitigated or managed.

## 19.6 Preliminary Assessment of Likely Impacts and Effects

19.6.1 Taking into account the embedded mitigation measures as detailed in Section 19.5 above, the potential impacts and effects of the Proposed Development have been assessed using the methodology as detailed in Section 19.3 of this chapter and **Chapter 2: Assessment Methodology and Consultation**.

### Construction Phase

#### *Local Economy (direct, indirect, and induced impacts)*

19.6.2 The estimated single-phase construction period for the **main works phase** (civil, mechanical, electrical and integration works), is expected to last up to 3.5 years. This timeframe of the **main works phase** has been adopted for socio-economic assessment of local employment generation as it reflects the worst-case scenario (i.e. Rochdale Envelope) (see **paragraph 19.3.21**). Therefore, the likely effects will be of a medium -term temporary nature. Although these jobs are temporary, they represent a positive economic

effect for a substantial period that can be estimated from the function of the scale of the type of construction.

- 19.6.3 The Applicant estimates that the Proposed Development will require an average of 608 gross direct full-time employment (FTE) construction jobs on-site per day during this single-phase construction period, with a peak workforce of 1600. This is based on activities required and will fluctuate during the period therefore being both higher and lower than average at times.

#### Leakage

- 19.6.4 Leakage effects are the benefits to those outside the study area, defined as a 60-minute travel area.
- 19.6.5 It is estimated that 45% of construction staff could be sourced from within a 60-minute travel area (study area). This will be subject to labour availability and take-up at the time of construction, however it is considered to be a reasonable assumption on which to base this assessment. As such, 55% of construction staff would be likely to reside outside of this study area. This indicates that although a reasonably high proportion of employment opportunities will be retained in the effect area, a noticeable amount of jobs will be taken up by people living outside of the study area. Whilst it is not a specific consideration of the assessment, it is noted that a larger proportion of the jobs taken up by people living outside the area will likely be in more specialised carbon capture professions owing to the scarcity of such resources within localised areas compared with less skilled professions.
- 19.6.6 An adjustment of 55% has therefore been applied to the estimated 608 gross direct construction jobs on-site on average during the construction period to estimate the jobs created within the study area. On this basis it is estimated that the Proposed Development will create 274 jobs for residents within the study area during construction.

#### Displacement

- 19.6.7 Displacement measures the extent to which the benefits of a development are offset by reductions in output or employment elsewhere. Any additional demand for labour cannot simply be treated as a net benefit since it has the potential to displace workers from other positions and the net benefit is reduced to the extent that this occurs.
- 19.6.8 Construction workers typically move between construction projects when delays occur or to help the workforce meet construction deadlines. Due to the flexibility of the labour market, construction labour force displacement has been assumed to be low.
- 19.6.9 The HCA Additionality Guide (Ref 19-33) provides standards (or 'ready reckoners') for displacement. Within the context of a construction project in the study area, a low displacement factor for 25% is considered appropriate according to the HCA Additionality Guide. This factor is a best practice approach in the absence of specific local information that might provide a defensible justification for a different level of displacement being used. Applying this level of displacement to the total 608 gross direct jobs results in a total net direct employment figure of 456 FTE jobs per annum in the study area during the construction period.

### Multiplier Effect

- 19.6.10 In addition to the direct employment generated by the construction of the Proposed Development, there will be an increase in local employment arising from indirect and induced effects of the construction activity. Employment growth will arise locally through manufacturing services and suppliers to the construction process (indirect or supply linkage multipliers). Additionally, it is assumed that part of the income of the construction workers and suppliers will be spent in the Deeside area, generating further employment (in terms of induced or income multipliers).
- 19.6.11 The effect of the multiplier depends on the size of the geographical area that is being considered, the local supply linkages and income leakage from the area. The HCA Additionality Guide (Ref 19-33) provides 'ready reckoner' composite multipliers (the combined effect of indirect and induced multipliers) to account for this. This is a best practice approach in the absence of specific information that might provide a defensible justification for another multiplier effect level being used, appropriate to the sectors concerned. For the study area, a medium multiplier effect of 1.5 has been considered appropriate which equates to 228 FTE indirect and induced jobs per annum in the study area (an additional 50% derived from the 456 FTE jobs).

### Net Construction Employment

- 19.6.12 **Table 19-14** presents the temporary annual employment generated by the Proposed Development accounting for leakage, displacement and multiplier effects. The Proposed Development will support, on average, 683 total net jobs per day during the construction period. Of these, 308 jobs will be expected to be taken-up by residents within the study area.

**Table 19-14: Net Additional Construction Employment per annum from the Proposed Development**

	Study Area (60-minute travel area)	Outside Study Area	Total
Gross Direct Employment	274	334	608
Displacement	-69	-84	153
Net Direct Employment	205	250	455
Indirect & Induced Employment	103	125	228
<b>Total Net Employment<sup>7</sup></b>	<b>308</b>	<b>375</b>	<b>683</b>

*Note: calculations may not sum up correctly due to rounding.*

- 19.6.13 The sensitivity of the local workforce to employment changes has been assessed as low, due to the low claimant count in the area (claimants are those who are unemployed and claiming job seekers allowance or other unemployment related benefits). In Flintshire, 3.4% of economically active residents aged 16+ in February 2024 were claimants, a lower proportion than the 4.2% in Wales in the same period (Ref 19-50). The direct, indirect and

<sup>7</sup> Sum of Net Direct Employment and Indirect & Induced Employment

induced employment, expenditure and upskilling created from the construction of the Proposed Development must be judged in the context of the labour pool of construction workers in the study area (approximately 3,500 workers) (Ref 19-38). Taking this into account, the impact of construction employment generation in the study area has been assessed as having a magnitude of medium, which results in a minor beneficial effect. This is considered **not significant**.

### Gross Value Added (GVA)

19.6.14 Applying the average gross direct value added per construction worker in the area to the total number of construction workers generated from the Proposed Development gives the total GVA arising from the construction labour force during the period. Note that this has been calculated based on the compound average GVA per worker in the construction sector in Flintshire and Wrexham as the appropriate benchmark as data is published at this level rather than the more granular, LSOA-derived, study area.

19.6.15 In Flintshire and Wrexham, the average GVA per worker in the construction sector was approximately £73,053 in 2021, calculated by dividing the GVA in the Flintshire and Wrexham construction industry (£347 million in 2021) by the number of construction workers stated in the Business Register and Employment Survey (4,750 in 2021) (Ref 19-38). By applying this figure to the net direct construction workers (excluding multiplier)<sup>8</sup> generated by the Proposed Development, it is estimated that the construction workforce will directly contribute approximately £33.24 (£m) to the national economy, of which approximately £14.98 (£m) would likely be within the study area, as shown in **Table 19-15**.

**Table 19-15: Gross Direct Value Added per annum from the Proposed Development during the Construction Phase**

	Study Area (60-minute travel area)	Outside Study Area	Total
GVA during the construction phase (£m)	14.98	18.26	33.24

Source: AECOM Calculations 2024

19.6.16 The impact of direct GVA generation from the construction phase on the study area economy has been assessed as medium-term temporary low beneficial, which results in a temporary minor beneficial effect. This is considered **not significant**.

19.6.17 The impact on the national economy as represented by the construction workforce direct GVA generation has been assessed as medium-term temporary low beneficial, which results in a temporary minor beneficial effect. This is not considered significant.

### Temporary Worker Accommodation

19.6.18 Analysis of the hotel, bed and breakfast and inns accommodation sector has been undertaken to assess the likely capacity against the demand from the

<sup>8</sup> Indirect and induced employment are not considered as these jobs are in non-construction industries with much lower GVAs e.g. retail. The total GVA of construction would therefore be larger than that included in the assessment.



potential peak construction workforce. A single-stage construction programme has been assumed at this PEIR stage to present a worst-case scenario, where the peak workforce is 1,600.

- 19.6.19 The analysis indicates, considering existing seasonal demand and typical occupancy levels, that capacity is sufficient and that the workforce can be accommodated within existing provision in a 60-minute drive time radius of the Proposed Development. This is shown in **Table 19-16**. Analysis indicates that during peak seasonal occupancy (August), there would be 4,057 rooms (14% of the total 28,287 rooms) available after accounting for the peak construction workforce of 1,600. This is a worst-case scenario, given that approximately 45% of the workforce would likely be living within a 60-minute drive time of the Indicative Site Boundary and therefore be home-based (i.e. would live sufficiently close-by to return home in the evenings rather than needing overnight accommodation).
- 19.6.20 Further analysis to identify accommodation within a 30-minute drive time radius indicates that at peak seasonal occupancy in August, there would need to be an extra 1,257 rooms to accommodate the full peak construction workforce (1,600). This is shown in **Table 19-17**. This is very much a worst-case scenario, as previously stated approximately 45% of the workforce would likely be living within the study area and would be home-based. Accounting for the assumed 45% of workers who are home-based, there would be 880 peak workers. This would still result in an extra 537 rooms being necessary to accommodate the full peak workforce during peak occupancy within a 30-minute drive time.
- 19.6.21 In summary, this analysis demonstrates that at peak workforce employment and typical seasonal occupancy levels, 100% of the Proposed Development's construction workers could be accommodated within a 60-minute drive time of the Indicative Site Boundary. The full peak workforce could not be accommodated in a 30-minute radius, however it can also be noted that this analysis only takes into consideration the hotel, bed and breakfast and inns accommodation sector. There are also alternative accommodations (such as Airbnb, serviced apartments, etc.) that could also cater for a portion of any demand generated and therefore mitigate further any impact on accommodation provision. Overall, given that there is sufficient capacity within a 60-minute drive time to accommodate the full peak workforce, effects on local accommodation facilities are assessed to have low sensitivity. Due to the scale of the peak workforce, magnitude is assessed to be medium, which results in a minor adverse effect. This is considered **not significant**.

**Table 19-16: Accommodation Capacity within 60-minute drive time radius**

Month	Room Occupancy (%)	Rooms Typically Available after Existing Demand	Construction Workers (Peak)	Remaining Rooms Available	Remaining Rooms Available (%)
January	47	14,992	1,600	13,392	47%
February	56	12,446	1,600	10,846	38%
March	59	11,598	1,600	9,998	35%
April	63	10,466	1,600	8,866	31%

Month	Room Occupancy (%)	Rooms Typically Available after Existing Demand	Construction Workers (Peak)	Remaining Rooms Available	Remaining Rooms Available (%)
May	69	8,769	1,600	7,169	25%
June	71	8,203	1,600	6,603	23%
July	76	6,789	1,600	5,189	18%
August	80	5,657	1,600	4,057	14%
September	75	7,072	1,600	5,472	19%
October	66	9,618	1,600	8,018	28%
November	56	12,446	1,600	10,846	38%
December	50	11,315	1,600	9,715	34%

**Table 19-17: Accommodation Capacity within 30-minute drive time radius**

Month	Room Occupancy	Rooms Typically Available after Existing Demand	Construction Workers (Peak)	Remaining Rooms Available	Remaining Rooms Available (%)
January	47	909	1,600	-691	-40%
February	56	755	1,600	-845	-49%
March	59	704	1,600	-896	-52%
April	63	635	1,600	-965	-56%
May	69	532	1,600	-1,068	-62%
June	71	498	1,600	-1,102	-64%
July	76	412	1,600	-1,188	-69%
August	80	343	1,600	-1,257	-73%
September	75	429	1,600	-1,171	-68%
October	66	583	1,600	-1,017	-59%
November	56	755	1,600	-845	-49%
December	60	686	1,600	-914	-53%

### Skills and training

19.6.22 At this PEIR stage, assessments are ongoing to inform the need for, and scope of, any skills and training initiatives during the construction phase of the Proposed Development. It is assumed that the Applicant will pursue an arrangement with a suitable training provider, for apprentices to work on the Proposed Development. The current proposal for this is two apprenticeships per year. The Applicant is in the early stages of working with Coleg Cambria, Bangor University, and Wrexham University to explore the courses at nearby education facilities with skills required for the Proposed Development. Further, discussions between the Applicant and the regional skills partnership are ongoing. It is assumed that suitable arrangements will be in place for



construction of the Proposed Development to suit both local socio-economic needs and those of the Proposed Development.

- 19.6.23 On this basis, the magnitude of impacts on skills and training in the construction phase is assessed to be low. As described in paragraph 19.4.8, the skills/qualifications of the population in the Direct Impact Area is intermediate, therefore opportunities associated with skills and training are assessed to be of medium sensitivity. Overall, this results in a minor beneficial effect, which is considered to be **not significant**.

### *PRoW and Severance*

- 19.6.24 Changes to journey times, local travel patterns, and certainty of routes for users would arise from the temporary closures and diversions of PRoWs. The majority of PRoWs within the Indicative Site Boundary will be retained during the construction phase and there will be no diversion; effects have only been assessed for PRoWs that will experience either temporary closures or diversions. As noted in Section 19.4, there is an extensive network of PRoW in the study area, including three PRoW that cross the Indicative Site Boundary and 96 PRoW within 500m of the Indicative Site Boundary.
- 19.6.25 It is not possible to confirm with certainty the length of time that any affected routes will be closed for at this PEIR stage, so as a worst-case scenario it is assumed any diversions are for the entire duration of the construction period. As stated in **Chapter 10: Traffic and Transport**, two PRoW (404/67/10 and 404/66/10 (including 404/66/20)) form part of the network around Little Leadbrook Farm linking Leadbrook Drive to Allt Goch Lane. Temporary disruption to users of both PRoWs will occur during construction, as it runs directly through the Proposed CO2 Connection Corridor. It is anticipated that one temporary closure (comprising both footpaths) would be required. It is assumed that a temporary diversion will be put in place; with alternative routes likely possible via existing roadways/tracks or within the same field, limited to the construction period for the Proposed CO2 Connection, and no permanent changes to the PRoW will be required.
- 19.6.26 Further information on PRoW impacts is provided in **Chapter 10: Traffic and Transport (PEIR Volume II)**. **Figure 15-5 Public Rights of Way (PEIR Volume III)** showcases the PRoW network around the Indicative Site Boundary. Given that there is a large network of PRoWs and roads within the study area that could be used as substitutes in the case of PRoW closure, effects on PRoW are assessed to have low sensitivity. While the scale of impact may not be extensive, factors such as potential disruptions to access, usage patterns, or environmental considerations are still considered, therefore magnitude is assessed to be medium, which results in a minor adverse effect. This is not considered significant.
- 19.6.27 As stated in **Chapter 10: Traffic and Transport**, in relation to severance, the majority of the strategic road network, local road network and links will experience a minor adverse effect during the construction phase of the Proposed Development, classified as medium sensitivity owing to the availability of alternative routes, and low magnitude classification due to slight impact on travel patterns for road users. This is considered not significant.

19.6.28 Kelsterton Road will provide access to the Site for all construction traffic. As part of the embedded mitigation during the construction phase, a final CEMP will be prepared by the contractor(s) which will set out precise details of construction traffic management measures, including management of the local highway in the vicinity of any temporary road closures, in order to minimise the impacts of construction on the study area. In particular, the final CEMP will outline specific measures proposed for Kelsterton Road, in order to ensure the impacts of increased traffic, associated with the temporary construction phase, are mitigated. Therefore, the sensitivity of severance effects on Kelsterton Road is assessed to be medium owing to the importance of the route, and of low magnitude as a result of mitigations managing the increased traffic for users. This is considered a minor adverse effect which is **not significant**.

### *Agriculture and soils*

19.6.29 The Proposed Development has been designed to take into account the quality of agricultural land, such as positioning the permanent infrastructure, to avoid BMV land as far as possible

19.6.30 As described in Section 14.6 of **Chapter 14: Geology and Ground Conditions**, the withdrawal of land from agricultural use will begin with construction activities at the Main Site and Proposed CO<sub>2</sub> Connection Corridor. The effects on the Proposed and Repurposed CO<sub>2</sub> Connection Corridor would be during the construction phase only, and therefore would be temporary. In contrast, at the Main Site the effects would be permanent as they would continue throughout the operational phase.

19.6.31 Temporary effects at the Main Site would be use of agricultural land for construction laydown areas. A worst-case assumption is that the soils are of ALC Grade 2, however an initial ALC desk study indicates a downgrading to Subgrade 3b as a result of flood zoning. On this basis, the sensitivity of agricultural land loss is assessed to be low, and the short-term nature of the works represents a low magnitude effect. This results in a negligible effect to users of the land, which is considered to be **not significant**.

19.6.32 The effects of construction on the Proposed and Repurposed CO<sub>2</sub> Connection Corridors involves the temporary removal of ALC Subgrade 3a soils from agricultural use. However, the depth of the pipelines below the surface would allow continuation of agricultural operations after restoration. On this basis, this represents a low magnitude and medium sensitivity effect. The temporary withdrawal from agriculture would represent a minor adverse impact to users of the land which is considered **not significant**.

19.6.33 A Framework SMP will be produced alongside the Framework CEMP which will accompany the ES. A final CEMP/SMP will be secured as a requirement of any DCO that is granted and will identify the relevant procedures to be adhered to throughout construction. The Framework SMP will describe the mitigation measures that follow good practice when working with soils to minimise risk to soil structure and minimise the risk of contamination through poor sediment management from exposed soils.

### *Local amenities (Residential properties, Business premises, Community facilities and Visitor attractions)*

- 19.6.34 There are no residential properties, business premises, visitor attractions or community facilities within the Indicative Site Boundary which would need to be demolished or which would be displaced in whole or in part by the Proposed Development.
- 19.6.35 There is potential for noise, air quality, visual and traffic effects arising from the construction of the Proposed Development to impact on the amenity of residents, businesses, users of community facilities and visitor attractions.
- 19.6.36 The sensitivity of these receptors is assessed to be medium, due to their importance and moderate potential for substitution.
- 19.6.37 Taking into account the residual effect assessment results of the air quality, noise/vibration, traffic and transport and visual assessments relating to the operational activities, there are no receptors that would experience more than one significant adverse effect at the same time. Therefore, the magnitude of impact on the amenity of receptors during construction is considered to be very low. This represents a negligible impact on the amenity of receptors, which is **not significant**.

### *Development land*

- 19.6.38 There are multiple planning applications or permissions within the vicinity of the Proposed Development Site that are part of other development proposals, as stated in Section 19.4, which refers to the shortlist of cumulative schemes set out in Table 24–4 in **Chapter 24: Cumulative and Combined Effects**. Specifically, these proposed developments range from 0.1km to 14.1km in distance from the Proposed Development Site. These shortlisted development sites could lead to combined effects on development land due to the land and infrastructure needs. However, at this PEIR stage these are not expected to be sufficiently negatively impacted by the Proposed Development given the results of the respective assessments.
- 19.6.39 The sensitivity of the receptor is medium, and the magnitude of the impact is low. Therefore, the effect of the Proposed Development Site has the potential to be minor adverse (**not significant**).

### *Operation Phase*

- 19.6.40 Impacts on Socio-Economics, Recreation and Tourism features during operation of the Proposed Development are outlined in this section. The assessments consider the embedded mitigation measures described in Section 19.5.
- 19.6.41 The earliest year of operation for the Proposed Development is anticipated to be 2030, under a phased construction approach beginning in 2026 for a period of five years. If construction was to be undertaken in a single phased approach, the earliest year of operation is anticipated to be 2035. If a single phased construction approach was undertaken at the latest possible time, five years after DCO Consent, operation would be anticipated to occur in late 2036.

### Local Economy (direct, indirect, and induced impacts)

19.6.42 The Proposed Development will generate long-term jobs once it is complete and operational. In estimating operational employment generation, it is important to consider not just the gross effects of the Proposed Development, but also net effects considering leakage, displacement, and multiplier effects, applying the assumptions as set out in **Table 19-18**. Employment loss due to the existing Connah's Quay Power Station is not considered in this assessment as the impact would be minimal and not likely to impact conclusions regarding significance.

19.6.43 It is estimated that to operate the Proposed Development there will be a gross number of 66 permanent FTE jobs generated by the Proposed Development. It is noted that there could be an additional four FTE jobs for scaffolding/lagging, as well as various contractor jobs for maintenance activities, however these are excluded from the assessment to present a worst-case scenario; only the 66 permanent workers are considered.

**Table 19-18: Total Net Employment during Operation of the Proposed Development**

	Study Area (60-minute travel area)	Outside Study Area	Total
Gross Direct Employment	30	36	66
Displacement	-8	-9	-17
Net Direct Employment	23	27	50
Indirect & Induced Employment	15	18	33
<b>Total Net Employment<sup>9</sup></b>	<b>37</b>	<b>45</b>	<b>82</b>

Source: AECOM calculations (2024). Note calculations may not sum up correctly due to rounding.

19.6.44 The sensitivity of the local workforce to employment changes has been assessed as low, due to the low claimant count in the area (claimants are those who are unemployed and claiming job seekers allowance or other unemployment related benefits). The direct, indirect and induced employment, expenditure and upskilling created from the operation of the Proposed Development must be judged in the context of the labour pool of workers in the study area. Within Flintshire, there are approximately 127,578 people, of which approximately 77,353 are economically active (Ref 19-37). Taking this into account, the magnitude of operational employment generation in the study area has been assessed as low, which results in a permanent minor beneficial effect. This is considered **not significant**.

### Skills and training

19.6.45 At this PEIR stage there is no formal commitment regarding skills and training opportunities during the operational phase of the Proposed Development. It is assumed that the Applicant will pursue an arrangement with TTE, or any other suitable training provider, for apprentices to work on the Proposed Development. The current proposal for this is two apprenticeships per year.

<sup>9</sup> Sum of Net Direct Employment and Indirect & Induced Employment

The Applicant is in the early stages of working with Coleg Cambria, Bangor University, and Wrexham University to align courses at nearby education facilities with skills required for the Proposed Development. Further, discussions between the Applicant and the regional skills partnership are ongoing. It is assumed that suitable arrangements will be in place for operation of the Proposed Development to suit both local socio-economic needs and those of the Proposed Development.

- 19.6.46 On this basis, the magnitude of impacts on skills and training is assessed to be low. As described in paragraph 19.4.8, the skills/qualifications of the population of the Direct Impact Area is intermediate, therefore opportunities associated with skills and training are assessed to be of medium sensitivity. Overall, this results in a minor beneficial effect on skills and training during the operational phase, which is considered to be **not significant**.

#### *PRoW and Severance*

- 19.6.47 All of the PRoWs that are temporarily closed and diverted during the construction phase will be re-opened during the operation phase. It is assumed that any diversions during construction will be closed after the reopening of the corresponding PRoW. Given this, any potential effects (such as diversion or closures) on PRoW are assessed to have low sensitivity. Due to the limited scale of impacts, the magnitude is assessed to be very low, which results in a negligible effect. This is considered **not significant**.

#### *Agriculture and soils*

- 19.6.48 As described in Section 14.6 of **Chapter 14: Geology and Ground Conditions**, impacts on agriculture and soil would occur during operation of the Proposed Development at the Main Site. Soil function would be lost under the footprint of the Main Site (including areas of hard standing), which is approximately 50 % of the agricultural land. Under a worst-case scenario it is anticipated that less than 20 ha of Grade 2 land would be permanently withdrawn from farming. However, the desk study of ALC (**Appendix 14-D: Agricultural Land Classification Report (PEIR Volume IV)**) has indicated the area is reclassified as Subgrade 3b due to flood risk. On this basis, the land is of low sensitivity due its classification, and of medium magnitude owing to the area of land required. This results in the withdrawal of land from agriculture being a minor adverse impact to land users, which is considered **not significant**.

#### *Local amenities (Residential properties, Business premises, Community facilities and Visitor attractions)*

##### *Residential properties, Business premises, Community facilities and Visitor attractions*

- 19.6.49 There is potential for noise, air quality, visual and traffic effects arising from the operation of the Proposed Development to impact on the amenity of residents, businesses, users of community facilities and visitor attractions.
- 19.6.50 The sensitivity of these receptors is assessed to be medium, due to their importance and moderate potential for substitution.
- 19.6.51 Taking into account the residual effect assessment results of the air quality, noise/vibration, traffic and transport and visual assessments relating to the



operational activities, there are no receptors that would experience more than one significant adverse effect at the same time. Therefore, the magnitude of impact on the amenity of receptors during operation is considered to be very low. This represents a **negligible** impact on the amenity of receptors, which is **not significant**.

#### Development land

- 19.6.52 There are multiple planning applications or permissions within the vicinity of the Proposed Development Site that are part of other development proposals, as stated in Section 19.4, which refers to the shortlist of cumulative schemes set out in Table 24-4 in **Chapter 24: Cumulative and Combined Effects**. Specifically, these proposed developments range from 0.1km to 14.1km in distance from the Proposed Development Site. These shortlisted development sites could lead to combined effects on development land due to the land and infrastructure needs. However, at this PEIR stage these are not expected to be sufficiently negatively impacted by the Proposed Development given the results of the respective assessments.
- 19.6.53 The sensitivity of the receptor is medium, and the magnitude of the impact is low. Therefore, the effect of the Proposed Development Site has the potential to be minor adverse (**not significant**).

#### Decommissioning Phase

- 19.6.54 Impacts on socio-economics, recreation and tourism features during decommissioning of the Proposed Development are outlined in this section. At PEIR stage it is assumed that the scenario will be largely comparable to the construction phase, with impacts similar to that assessed throughout paragraphs 19.6.2 to 19.6.52. The assessments consider the embedded mitigation measures described in Section 19.5.

#### Local Economy (direct, indirect, and induced impacts)

- 19.6.55 The estimated duration of the decommissioning period is expected to be less than or similar to that of the **main works phase** of the construction period, being up to 3.5 years, and could be undertaken in phases. Therefore, the likely effects will be of a medium-term temporary nature (for the duration of decommissioning operations only). Although these jobs are temporary, they represent a positive economic effect that can be estimated as the function of the scale and type of activities required to decommission the Proposed Development. It is assumed that the same number of jobs needed for construction will be necessary for decommissioning, averaging 608 gross FTE jobs on-site per day, with a peak workforce of 1600, fluctuating throughout the period.
- 19.6.56 As such, the assessment presented through paragraphs 19.6.2 to 19.6.13 (including **Table 19-14**) should be read to inform the employment generation impacts for the decommissioning phase. This accounts for leakage, displacement and multiplier effects, as identified in the assessment for the construction period.
- 19.6.57 The sensitivity of the local workforce to employment changes in the decommissioning phase has been assessed as low, due to the low claimant count in the area (claimants are those who are unemployed and claiming job

seekers allowance or other unemployment related benefits). In Flintshire, 3.4% of economically active residents aged 16+ in February 2024 were claimants, a lower proportion than the 4.2% in Wales in the same period (Ref 19-50). The direct, indirect and induced employment, expenditure and upskilling created from the construction of the Proposed Development must be judged in the context of the labour pool of construction workers in the study area (approximately 3,500 workers) (Ref 19-38). Taking this into account, the impact of decommissioning employment generation in the study area has been assessed as having a magnitude of medium, which results in a minor beneficial effect. This is considered **not significant**.

### Skills and training

19.6.58 At PEIR stage, assessments are ongoing to inform the need for, and scope of, any skills and training initiatives during the decommissioning phase of the Proposed Development. The Applicant has stated they are seeking to formalize and continue engagement with educational facilities (that is being progressed for operational phase) through to decommissioning stage. On this basis, opportunities associated with skills and training are assessed to be of low sensitivity, and the magnitude is assessed to also be low. Overall, this results in a negligible effect, which is considered to be **not significant**.

### Temporary Worker Accommodation

19.6.59 Analysis of the hotel, bed and breakfast and inns accommodation sector has been undertaken to assess the likely capacity against the demand from the potential peak decommissioning workforce. At this PEIR stage, it has been assumed that the decommissioning workforce and programme will be the same as during construction, therefore consisting of a peak workforce of 1,600.

19.6.60 As such, the assessment presented through paragraphs 19.6.18 to 19.6.23 (including **Table 19-16**<sup>10</sup> and **Table 19-16**<sup>11</sup>) should be read to inform the local accommodation services assessment for the decommissioning phase.

19.6.61 In summary, this analysis demonstrates that at peak workforce employment and typical seasonal occupancy levels, 100% of the Proposed Development's decommissioning workers could be accommodated within a 60-minute drive time of the Indicative Site Boundary. The full peak workforce could not be accommodated in a 30-minute radius, however it can also be noted that this analysis only takes into consideration the hotel, bed and breakfast and inns accommodation sector. There are also alternative accommodations (such as Airbnb, serviced apartments, etc.) that could also cater for a portion of any demand generated and therefore mitigate further any impact on accommodation provision. Overall, given that there is sufficient capacity within a 60-minute drive time to accommodate the full peak workforce, effects on local accommodation facilities in the decommissioning phase are assessed to have low sensitivity. Due to the scale of the peak workforce, magnitude is assessed to be medium, which results in a minor adverse effect. This is considered **not significant**.

<sup>10</sup> Table 19-16 showcases the accommodation capacity for the construction workforce. As the decommissioning workforce is assumed to be the same as construction, Table 19-16 also shows accommodation capacity for the decommissioning workforce.

<sup>11</sup> Table 19-16 showcases the accommodation capacity for the construction workforce. As the decommissioning workforce is assumed to be the same as construction, Table 19-16 also shows accommodation capacity for the decommissioning workforce.

### *PRoW and Severance*

19.6.62 Effects during decommissioning on relevant routes is assumed to reflect the scenario during the construction phase at this PEIR stage.

19.6.63 As such, the assessment presented through paragraphs 19.6.24 to 19.6.26 should be read to inform the PRoW assessment for the decommissioning phase. Given that there is a large network of PRoWs within the study area shown in **Figure 15-5: Public Rights of Way (PEIR Volume III)** that could be used as substitutes in the case of PRoW closure, effects on PRoW are assessed to have low sensitivity. While the scale of impact may not be extensive, factors such as potential disruptions to access, usage patterns, or environmental considerations are still considered, therefore magnitude is assessed to be medium, which results in a minor adverse effect. This is not considered significant.

In terms of severance impacts on the local strategic road network which could arise during the decommissioning phase of the Proposed Development, effects are likely to be similar or less than impacts during the construction phase. The assessment presented for the construction phase (19.6.27 to 19.6.28) will therefore be considered representative (or an overestimate) of the decommissioning phase. In summary, this represents a minor adverse effect which is classified as **not significant**.

### *Agriculture and soils*

19.6.64 As described in Section 14.6 of **Chapter 14: Geology and Ground Conditions**, agricultural use of land within the Repurposed and Proposed CO<sub>2</sub> Connection Corridors would be possible throughout decommissioning of the Proposed Development, as it is currently proposed that the pipeline infrastructure would remain in place, decommissioned and made safe following the end of the Proposed Development's operational life. Decommissioning to remove infrastructure would have impacts equivalent of the construction phase and, similarly, would be managed in accordance with measures included within the SMP. As set out in 19.6.32, this represents a low magnitude and medium sensitivity effect owing to the temporary loss, and the land classification of Subgrade 3a. This represents a minor adverse impact to land users which is considered **not significant**.

19.6.65 It is not foreseen that decommissioning of the Main Site would result in a return to agriculture and the impacts should be considered permanent. However, soil function within green infrastructure of the Main Site would persist through operation and decommissioning. On this basis, the land is of low sensitivity due its classification (Subgrade 3b), and of medium magnitude owing to the area of land required (<20 Ha). This results in the withdrawal of land from agriculture being a minor adverse impact to land users, which is considered **not significant**.

### *Local amenities (Residential properties, Business premises, Community facilities and Visitor attractions)*

Residential properties, Business premises, Community facilities and Visitor attractions



- 19.6.66 There is potential for noise, air quality, visual and traffic effects arising from the decommissioning of the Proposed Development to impact on the amenity of residents, businesses, users of community facilities and visitor attractions.
- 19.6.67 The sensitivity of these receptors is assessed to be medium, due to their importance and moderate potential for substitution.
- 19.6.68 Taking into account the residual effect assessment results of the air quality, noise/vibration, traffic and transport and visual assessments relating to the operational activities, there are no receptors that would experience more than one significant adverse effect at the same time. Therefore, the magnitude of impact on the amenity of receptors during decommissioning is considered to be very low. This represents a negligible impact on the amenity of receptors, which is **not significant**.

#### Development land

- 19.6.69 Effects during decommissioning on development land is assumed to reflect the scenario during the construction phase at this PEIR stage.

### Post-decommissioning

#### Employment loss following Decommissioning (permanent long-term)

- 19.6.70 It can be expected when the Proposed Development is decommissioned, the employment required to operate the Proposed Development (66 jobs) will no longer be generated. In the worst-case scenario where the land is not utilised after decommissioning, there would be a loss of 66 jobs. The sensitivity of the local workforce to employment changes has been assessed as low, due to the low claimant count in the area (claimants are those who are unemployed and claiming job seekers allowance or other unemployment related benefits). The employment lost after the decommissioning of the Proposed Development must be judged in the context of the labour pool in the study area. Within Flintshire, there are approximately 127,578 people, of which approximately 77,353 are economically active (Ref 19-37). Taking this into account, the impact magnitude has been assessed as low, which results in a minor adverse effect. This is considered **not significant**.

## 19.7 Additional Mitigation and Enhancement Measures

- 19.7.1 No additional mitigation or enhancement measures are required, due to no significant adverse effects associated with socio-economics, recreation and tourism being identified.

## 19.8 Summary of Likely Significant Residual Effects

- 19.8.1 No likely significant residual effects of the Proposed development on socio-economics, recreation and tourism receptors are found.
- 19.8.2 An assessment of cumulative effects with other proposed developments that could interact with the effects of this Proposed Development will be carried out in the final ES, when the short-list of other developments has been finalised, as detailed in **Chapter 24: Cumulative and Combined Effects. Chapter 24:**

**Cumulative and Combined Effects** will also assess the in-combination effects of multiple aspects on one receptor.

## References

- Ref 19-1 The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (SI 2017/572). London: HMSO (Accessed 26/02/24)
- Ref 19-2 Welsh Government, 2023; Infrastructure (Wales) Bill 2023 [online]. Available at: <https://www.gov.wales/infrastructure-wales-bill-2023> (Accessed 13/03/24)
- Ref 19-3 Environment (Wales) Act, 2016 [online]. Available at: <https://www.legislation.gov.uk/anaw/2016/3/notes/contents> (Accessed 13/03/24)
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