
CHAPTER 8.0 SOCIO ECONOMIC EFFECTS

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8.0 SOCIO ECONOMIC EFFECTS

8.1 Introduction

8.1.1 This Chapter of the EIAR Main Report considers the likely effects of the LSEP scheme with the Proposal with regards to socio-economic matters. Socio-economic effects most commonly relate to the impact upon the human population living in the area surrounding a development site.

8.1.2 The assessment includes the following:

- Identification of the socio-economic baseline in respect of key issues identified, focussing on the characteristics of the local labour force. These characteristics can then be used as a measure for assessing future change; and
- Identification of the socio-economic effects, both direct and indirect, that would arise from the construction and operation of the LSEP with the Proposal.

8.1.3 It should be recognised that construction of the consented LSEP facility (the 'Consented Development') is underway, and as such, the socio-economic benefits of construction are already being experienced. As set out in the Scoping Report submitted in March 2021 (refer to Appendix 2-1 of the EIAR), the socio-economic baseline has changed materially from that assessed in the May 2011 ES, which was based upon 2001 census data (now superseded by the 2011 census) and was heavily influenced by the post-2008 recessionary period. Accordingly, an updated assessment of construction stage effects has been included in order to reassess the social and economic benefits of the Consented Development with the Proposal.

Competence

8.1.4 The Socio-Economic Assessment was prepared by AXIS, a registered practice of the Royal Town Planning Institute (RTPI), with more than twenty years' experience of working in the planning and environmental sectors, with a particular focus on the environmental assessment of major infrastructure development. AXIS has previously undertaken similar assessments for various large-scale developments, including energy recovery facilities.

8.2 Methodology and Scope of Assessment

Planning Policy Context

8.2.1 For a detailed appraisal of planning policy, refer to the Supporting Statement that forms part of the Section 36 Variation Application. Those policy documents of most relevance to this Chapter are listed below:

- *National Planning Policy Framework (the NPPF)*¹; and
- *Cheshire West and Chester Local Plan*.^{2 3}

National Policy

8.2.2 The NPPF (as amended in July 2021) contains a range of policies related to land-use planning in England. It confirms that the purpose of the planning system is to achieve sustainable development. The NPPF identifies the three objectives of the planning system as follows:

- An economic objective: to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;
- A social objective: to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering a well-designed, beautiful and safe built environment, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and
- An environmental objective: to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.

¹ Ministry of Housing, Communities and Local Government, 2021. *National Planning Policy Framework*

² Cheshire West and Chester Council, adopted 2015. *Local Plan (Part One) Strategic Policies*

³ Cheshire West and Chester Council, adopted 2019. *Local Plan (Part Two) Land Allocations and Detailed Policies*.

Local Policy

- 8.2.3 The Cheshire West and Chester Local Plan (Parts One and Two) set out strategic objectives for the Cheshire West and Chester, including:
- SO2: Support a vibrant, diverse and competitive local economy that provides a range of job opportunities to support sustainable communities; and
 - SO7: Support education and skills and ensure that deprived communities have access to services and employment.
- 8.2.4 Individual policies support the delivery of infrastructure (Policy STRAT 1), sustainable economic growth (Policy ECON 1), and renewable and low carbon energy development (Policy ENV 7 and policy DM53), and set out CWACC's approach to waste management development (Policy ENV 8 and Policy DM 54).

Other Policies

- 8.2.5 The LSEP site falls within the boundary of the Cheshire and Warrington Local Enterprise Partnership (LEP). The *Strategic Economic Plan*⁴ (SEP) for the LEP identifies ambitions to be achieved by 2040, including:
- To grow the economy to at least £50 billion Gross Value Added (GVA); and
 - To create 120,000 additional jobs (net).
- 8.2.6 The SEP is supported by an *Energy and Clean Growth Strategy*⁵ which highlights the need to understand and respond to the key skill needs for the energy sector, and which also sets out support for district heat networks.

Assessment Methodology

Introduction

- 8.2.7 The assessment is based upon an approach typical in Environmental Impact Assessment, which considers the sensitivity of receptors to change and the magnitude of the change that each receptor would experience. Based upon this, a conclusion can be drawn as to whether the resultant effect is significant or not.

⁴ Cheshire and Warrington Local Enterprise Partnership, 2017. *Strategic Economic Plan*

⁵ Cheshire and Warrington Local Enterprise Partnership, 2018. *Energy and Clean Growth Strategy*

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- 8.2.8 The assessment considers the potential for the LSEP with the Proposal to affect local socio-economic conditions both during the construction phase and once it becomes operational. These two elements are largely separate and, as such, are addressed under separate headings below. However, the methodology for determining effects is the same for both elements of the assessment.
- 8.2.9 The assessment has been carried out by undertaking a desk-based study, including a review of key statistical information.
- 8.2.10 The LSEP with the Proposal has the potential to affect local socio-economic conditions via three types of effect, as follows:
- Direct economic effects: jobs and wealth that are wholly or largely related to either the construction or operation of the LSEP;
 - Indirect economic effects: jobs and wealth generated in the economy via the supply chain of goods and services that support the direct activities; and
 - Induced economic effects: jobs and wealth created by direct and indirect employees' spending.

Current Guidance

- 8.2.11 There is no overarching guidance for the assessment of socio-economic effects. However, information published by government bodies has been used to derive estimates of the economic benefit that will accrue from the LSEP scheme with the Proposal. The net positive economic effect of the LSEP scheme with the Proposal has been estimated using information set out in the *Additionality Guide*⁶.

The Study Area

- 8.2.12 The Study Area for the Assessment has been determined through the use of 2011 Census data to identify travel-to-work patterns. Data is available for Middle-layer Super Output Areas (MSOAs) that form part of the Census.
- 8.2.13 The LSEP site is located within MSOA Cheshire West and Chester 018. It is considered that travel-to-work patterns for this MSOA (discussed further in Section

⁶ Homes and Communities Agency, 4th edition 2014. *Additionality Guide*

13.3) are likely to give a reasonable indication as to where those employed at the LSEP would originate.

8.2.14 The online mapping resource, *Data Shine Commute*⁷, can be used to display travel-to-work patterns for each MSOA, and identifies all other MSOA from where six or more people commuted to MSOA Cheshire West and Chester 018 for work in 2011.

8.2.15 Review of this online mapping indicates that the large majority of people employed locally to the LSEP Site also live relatively locally. As such, the Cheshire West and Chester Council (CWACC) local authority area has been adopted as the Study Area for the Assessment. The Study Area is outlined in blue on Figure 8.1.

Assessment of Significance / Assessment Criteria

8.2.16 In socio-economic assessment, both receptors and the effects of development upon them may be abstract and diffuse when contrasted with the receptors set out in the other chapters of the EIAR Main Report. The specific receptors that this assessment is concerned with are:

- Construction sector employment; and
- Rates of employment and gross value added, once the LSEP becomes operational.

8.2.17 Understanding the effects of the LSEP with the Proposal on these receptors enables a conclusion to be made as to the effects on the socio-economics of the Study Area.

8.2.18 The sensitivity of the receptors is determined based upon the importance attached to each receptor in policy, and the use of professional judgement relating to the scale of socio-economic challenges faced by each receptor (following analysis of the baseline). The criteria followed in determining receptor sensitivity are set out in Table 8.1. The criteria are indicative and the assessment includes a reasoned justification explaining the criterion allocated to each specific receptor.

⁷ *Data Shine Commute*

<<https://commute.datashine.org.uk/#mode=allflows&direction=both&msoa=undefined&zoom=12.0&lon=-0.1500&lat=51.5200> [accessed 22 Jun 2021]

Table 8.1: Sensitivity Criteria

Sensitivity	Description
High	<ul style="list-style-type: none">o Evidence of direct and significant socio-economic challenges relating to the receptor; and/ oro Identification in policy as a key thematic or spatial priority
Medium	<ul style="list-style-type: none">o Some evidence of socio-economic challenges linked to the receptor, which may be direct or indirect; and/ oro The receptor is identified in policy, but not as a key policy priority.
Low	<ul style="list-style-type: none">o Little evidence of socio-economic challenges relating to the receptor; and/ oro No identification in policy.
Negligible	<ul style="list-style-type: none">o No socio-economic issues relating to the receptor; and/ oro No particular economic weaknesses or challenges

Assessment of Construction Employment

8.2.19 Details of likely typical construction employment levels have been provided by the Applicant.

Additionality

8.2.20 The concept of additionality refers to the extent to which something would happen as a result of a particular intervention. With regards to this assessment, this means how the economy of the Study Area is likely to change because of the LSEP scheme with the Proposal. The *Additionality Guide*⁸ includes a formula for estimating the change in employment that would occur from development, which takes into account the influence of ‘leakage’ (jobs taken up by people living outside the Study Area), ‘displacement’ (where a development would take employment/ market share from other businesses or organisations), and ‘economic multipliers’ (knock-on effects in the Study Area economy).

Gross Value Added

8.2.21 Gross Value Added (GVA) is a measure of the contribution to the economy of a specific business or industry. It can be used as a headline indicator to monitor economic performance at regional and national level. It can also be estimated at a project-specific level to give some indication of the likely financial contribution of employment associated with a particular development.

8.2.22 GVA per person at the Study Area level is set out in Section 8.3.

⁸ Homes and Communities Agency, 4th edition 2014. *Additionality Guide*

8.2.23 The increase in GVA per person relating to the LSEP with the Proposal has been estimated based upon details of employment and income provided by the Applicant, and is reported in Section 8.4.

Magnitude of Change

8.2.24 The magnitude of change undergone by each receptor is determined by considering the likely deviation from baseline conditions. Magnitude criteria are set out indicatively in the table below. Again, the assessment includes a reasoned justification explaining the criterion allocated to each specific receptor.

Table 8.2: Magnitude Criteria

Magnitude	Description
Large	A large change to existing conditions, in terms of either absolute or percentage change
Medium	A moderate change to existing conditions, in terms of either absolute or percentage change
Small	A limited change to existing conditions, in terms of either absolute or percentage change
Negligible	No tangible change from baseline conditions.

Significance of Effect

8.2.25 As described above, once the sensitivity of the receptor and the magnitude of change have been identified, these are considered together to determine whether the resultant effect is significant or not. The level of effect that would occur is determined guided by the matrix below.

Table 8.3: Criteria for Assessment of the Level of Socio-Economic Effects

Magnitude		Sensitivity			
		High	Medium	Low	Negligible
	Large	<i>Substantial</i>	<i>Major</i>	<i>Moderate</i>	<i>Negligible</i>
	Medium	<i>Major</i>	<i>Moderate</i>	<i>Minor</i>	<i>Negligible</i>
	Small	<i>Moderate</i>	<i>Minor</i>	<i>Slight</i>	<i>Negligible</i>
	Negligible	<i>Negligible</i>	<i>Negligible</i>	<i>Negligible</i>	<i>Negligible</i>

8.2.26 For the purposes of this assessment, a major or substantial effect is considered to be significant. Where an effect is moderate, this may also be deemed significant following further consideration. A reasoned justification is provided as part of the assessment in relation to all judgements as to whether an effect is significant or not.

8.2.27 Wider and more intangible socio-economic effects may also derive from the LSEP scheme with the Proposal, occurring upon receptors that cannot easily be identified, or where the change occurring is difficult to quantify with any degree of certainty. In these cases, the likely effect is described textually and a statement made as to whether that effect would be significant or not, based upon the professional judgement of the assessor.

Scope of Assessment

8.2.28 The proposed scope of the socio-economic assessment was set out in the Scoping Report submitted in March 2021 (refer to Appendix B of the Supporting Statement to the Variation Application). The Scoping Opinion received in May 2021 made no comment on this (refer to Appendix C of the Supporting Statement to the Variation Application). As such, the scope of the assessment remains as set out in the Scoping Report.

Limitations

8.2.29 The assessment and its conclusions are both dependent upon the accuracy of third-party data. Economic data used to project the changes resulting from the LSEP scheme with the Proposal is inevitably historic, and actual outcomes may vary from those stated due to wider economic fluctuations, or to changes in technology.

8.2.30 The data gathered reflects different points in time, with 2011 Census data typically being less current than NOMIS labour market statistics. Like-for-like comparisons between data from different sources, or which covers different geographical areas is not always possible. See Section 8.3 for details of data sources.

8.2.31 Some of the data will reflect the effects of the Covid-19 pandemic upon employment levels and travel-to-work patterns, whereas other data will not, depending upon the dates of the data shown.

8.3 Baseline

Data Collection

8.3.1 The Assessment utilises data gathered from various sources, including:

- 2011 Census Data⁹;
- Office for National Statistics^{10 11}
- NOMIS data¹²; and
- Information provided by the Applicant.

Baseline Environment

Population

8.3.2 Mid-year population estimates for 2019 available from the Office of National Statistics indicate that the Study Area had a resident population of 343,071. The proportion of the population that was of working age was below the averages for the North West region and for Great Britain. The number of under-18s was also below average, and the number of people aged 65 or over was above average.

Table 8.4: Age Structure (mid-2019)

Population	Study Area	North West	England and Wales
<i>Total</i>	343,071 (100%)	7,341,196 (100%)	59,439,840 (100%)
<i>0-18</i>	72,271 (21.1%)	1,644,412 (22.4%)	13,307,239 (22.4%)
<i>19-64</i>	193,207 (56.3%)	4,236,679 (57.7%)	34,438,901 (57.9%)
<i>65+</i>	74,192 (21.6%)	1,375,111 (18.7%)	11,016,092 (18.5%)

Employment

8.3.3 NOMIS travel to work data¹³ (based upon the 2011 Census data) gives a picture of employment levels for MSOA Cheshire West and Chester 018. In 2011 a total of 6,523 people had a place of work within the MSOA (including those commuting from outside) and 2,692 people that lived within the MSOA commuted to places of work outside. Table 8.5 provides a breakdown of travel-to-work patterns in the Study Area (which are also illustrated on Figure 8.1)

⁹ UK Data Service Census Support. [online] <https://borders.ukdataservice.ac.uk/easy_download.html> [accessed 17 March 2017]

¹⁰ Office for National Statistics. *Estimates of the population for the UK, England and Wales, Scotland and Northern Ireland* [online]

<<https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/populationestimatesforukenglandandwalesscotlandandnorthernireland>> [accessed 22 Jun 2021]

¹¹ Office for National Statistics. *Regional Gross Value Added (Income approach)* [online]

<<https://www.ons.gov.uk/economy/grossvalueaddedgva/datasets/regionalgrossvalueaddedincomeapproach>> [accessed 22 Jun 2021]

¹² NOMIS Official Labour Market Statistics. *Area profiles* [online] <<https://www.nomisweb.co.uk/>> [accessed 22 Jun 2021]

¹³ NOMIS Official Labour Market Statistics. *Location of usual residence and place of work* [online] <<https://www.nomisweb.co.uk/census/2011/wf01bew>> [accessed 07/05/19]

Table 8.5: People working within MSOA Cheshire West and Chester 018 (2011)

Location of employees	Number of jobs (with % of total in parentheses)
<i>Total</i>	
People with a place of work in MSOA Cheshire West and Chester 018	6,523 (100%)
<i>People living in Cheshire West and Chester</i>	
People with a place of work in MSOA Cheshire West and Chester 018, that also live within MSOA Cheshire West and Chester 018	550 (8.4%)
People with a place of work in MSOA Cheshire West and Chester 018, that live in the remainder of Cheshire West and Chester	4,312 (66.1%)
<i>People living further afield</i>	
People with a place of work in MSOA Cheshire West and Chester 018, commuting from further afield	1,661 (25.5%)

8.3.4 NOMIS labour market profile data indicates that unemployment within the Study Area was below regional and national averages in 2020, and that weekly earnings were above average. Qualification levels were also above average.

8.3.5 With regards to employment breakdown by industry, the largest number of jobs in the Study Area in 2019 were in the Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles sector. Employment in this sector was significantly above the regional and national averages.

8.3.6 Employment within electricity, gas, steam, and air conditioning was below the regional and national averages. Employment within water supply, sewerage, waste management and remediation activities was slightly above average. Construction employment was below average. The proportion of higher skilled jobs (managerial, professional and technical) was above the regional average and was similar to the national average. The proportion of lower skilled jobs was similar to the regional average and was above the national average.

8.3.7 The NOMIS data referred to above are set out in Tables 8.6-8.11 (percentage numbers are rounded, and do not necessarily add up to 100%).

Table 8.6: NOMIS total employee jobs (2019)

Area	Total number of employee jobs
Study Area	167,000

NOTE: Figures exclude the self-employed, those employed in farm-based agriculture, government-supported trainees, and HM forces.

Table 8.7: NOMIS employment and pay data

Area	Unemployment	Average Weekly Earnings
Study Area	3.1%	£601.20
North West	4.2%	£560.30
Great Britain	4.6%	£587.10

NOTE 1: Unemployment figures are based on NOMIS data covering the period Jan 2020-Dec 2020.

NOTE 2: Average weekly earnings figures are for place of residence. Figures are based on NOMIS data for 2020.

Table 8.8: NOMIS qualification level data (2020)

Area	Qualification Level					
	NVQ4	NVQ3	NVQ2	NVQ1	Other	None
Study Area	44.9%	64.8%	82.3%	91.6%	-	6.6%
North West	38.7%	58.2%	76.9%	87.6%	4.9%	7.5%
Great Britain	43.1%	61.4%	78.2%	87.9%	5.7%	6.4%

NOTE 1: Percentage figures for NVQ levels are for that level and above, i.e. the NVQ1 figure includes the totals for NVQ2, 3 and 4.

Table 8.9: NOMIS employment level by industry (2019)

Industry	Study Area	North West	Great Britain
Mining and Quarrying	0.1%	0.1%	0.2%
Manufacturing	8.4%	9.3%	8%
Electricity, Gas, Steam and Air Conditioning Supply	0.1%	0.5%	0.4%
Water Supply; Sewerage, Waste Management and Remediation Activities	0.9%	0.7%	0.7%
Construction	3.6%	4.6%	4.9%
Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles	19.2%	16.3%	15%
Transportation and Storage	4.8%	5.6%	4.9%
Accommodation and Food Service Activities	8.4%	6.9%	7.7%
Information and Communication	2.4%	2.8%	4.3%
Financial and Insurance Activities	6%	2.8%	3.5%
Real Estate Activities	1.5%	1.5%	1.7%
Professional, Scientific and Technical Activities	9.6%	8.8%	8.8%
Administrative and Support Services	7.8%	8.6%	8.9%
Public Administration and Defence; Compulsory Social Security	3.6%	4.6%	4.4%
Education	7.8%	8%	8.7%
Human Health and Social Work Activities	10.8%	14.2%	13.1%

Industry	Study Area	North West	Great Britain
Arts, Entertainment and Recreation	3%	2.6%	2.5%
Other Service Activities	1.8%	1.9%	2%

NOTE: Figures exclude the self-employed, those employed in farm-based agriculture, government-supported trainees, and HM forces.

Table 8.10: ONS Gross Value Added

Area	Gross Value Added	Gross Value Added per head
Cheshire West and Chester	£9,882 million	£29,238.00

NOTE: GVA figures quoted are provisional for 2017. The ONS figures are not broken down by local authority area, but reflect larger statistical units.

Table 8.11: NOMIS Employment Data (2020)

Data	Study Area	Yorkshire and the Humber	Great Britain
Managers and Senior Officials	12.4%	10.4%	11.5%
Professional	22.8%	21.1%	22.8%
Associate Professional & Technical	14.4%	14.8%	15.8%
Administrative & Secretarial	9.7%	11%	10%
Skilled Trades	9.7%	9.3%	9.2%
Caring, Leisure and Other Service Occupations	5.8%	8.8%	8.8%
Sales and Customer Services	8.9%	7.9%	6.9%
Process Plant and Machine Operatives	7.6%	6.1%	5.5%
Elementary Occupations	8.8%	10.3%	9.2%

NOTE: Figures shown are a percentage of those in employment and are independent of unemployment rates.

Future Baseline

- 8.3.8 In the absence of the Proposal, it is assumed that the LSEP will be built and operated based on the consented tonnages.

8.4 Assessment of Effects

Construction Phase

Sensitivity of Receptor

- 8.4.1 The NOMIS data displayed in Section 8.3 shows that employment in the construction sector was below average in the Study Area in 2019, and that unemployment was

below average in 2020. Employment in the skilled trades was above average in 2020.

- 8.4.2 Construction employment on a particular project is inherently temporary, lasting for only as long as that particular project (or specific aspect of that project) is under construction. Construction employment is therefore dependent upon ongoing development opportunities being available. The policy support for sustainable economic growth, the delivery of new infrastructure, renewable and low carbon energy development, economic growth, and job creation all imply some degree of ongoing development, and hence increased levels of construction activity. Given this, there is clear potential for the maintenance and future growth of construction employment in the Study Area. As such, sensitivity is medium.

Direct Effects

- 8.4.3 The Applicant has confirmed that construction of the Consented Development will require an investment of approximately £480 million and that construction is anticipated to last for approximately three years. The number of people on-site is likely to fluctuate depending upon the programming of particular work elements, and will be likely to comprise a mix of full-time and part-time contractors. The Applicant has confirmed that up to 600 people are likely to be on site at any one time. Over the entire construction phase there will be an average of 300 staff employed on the site each day.
- 8.4.4 It is likely that elements of construction will be tendered in a series of sub-contractor packages, including for example ground works, steel works etc. Local contractors may be able to fulfil the requirements of some of these packages, and given the breakdown of the local labour market, there is scope for the employment of local people during the construction process (for example those employed in skilled trades), and the provision of employment opportunities for those that are currently out of work. However, some of the contractors and some of the workforce for more specialised elements of construction are more likely to be drawn from outside the Study Area.
- 8.4.5 There will be an increase in construction employment within the Study Area during the construction phase, either via the creation of new jobs, or via the maintenance of existing employment. In absolute terms, with, on average, approximately 300

workers on-site and a peak employment level approximately 600 people, this will represent a small to medium magnitude of change when considered against baseline construction employment levels. These figures are relatively small in percentage terms when considered against the whole of the Study Area, but nevertheless are large in absolute terms.

- 8.4.6 The effects of this on the Study Area overall will be moderately beneficial. The effects, which would be temporary, could be significant for individual businesses and workers, particularly for those based locally. Additionally, the generation of construction activity and employment associated with the LSEP scheme with the Proposal has potential to lead to further opportunities for both businesses and individual workers, should further development in the Study Area be implemented subsequently.

Indirect and Induced Effects

- 8.4.7 Indirect effects associated with the construction process will derive from supply chain employment. Construction materials and services would be bought-in by contractors. Some of these materials and services would be specialised, whilst others would be more generic. The various supply chains can only be determined by the relevant appointed contractors and therefore effects cannot be quantified at the time of writing. It should be recognised however, that supply chain businesses would benefit from construction, and demand for their goods or services is likely to support continued or additional employment.
- 8.4.8 Induced effects will derive chiefly from the expenditure by those employed in construction. Some of this expenditure is likely to occur locally to the LSEP site, or elsewhere in the Study Area. Expenditure by construction workers on food and drink is likely to have benefits for local shops. Additionally, any non-local workers whose home base is remote from the LSEP site are likely to require accommodation during the week, and there will therefore be potential benefits to local hotels and guest houses.
- 8.4.9 The *Additionality Guide* suggests a composite multiplier of 2.7 (covering income and supply) is appropriate for construction employment. As such, it is estimated that

approximately 510¹⁴ further jobs could be supported via the indirect or induced effects of the LSEP scheme with the Proposal.

8.4.10 The magnitude of change deriving from indirect and induced construction employment cannot be stated with any certainty. The level of effect will range from being minor (across the entire Study Area) to major (and therefore significant) for some local businesses and some supply chain businesses, given the size and scale of the LSEP scheme. As set out above, effects will be temporary, however construction activity at the LSEP site has the potential to lead to further opportunities for both businesses and individual workers. It should be noted that many supply chain businesses may be located outside the Study Area and that expenditure by construction workers may also take place outside the Study Area (including for example, online purchases, holiday expenditure, etc.). There is nevertheless clear potential for some businesses within the Study Area to derive economic benefits from the LSEP scheme during the construction stage (albeit, the Proposal, which doesn't seek to change the Consented Development, will not materially affect the construction phase or its economic impacts).

Operational Phase

Sensitivity of Receptor

8.4.11 Within the Study Area, unemployment was below average in 2020, as set out in Section 8.3. Employment within the waste management sector was slightly above average in 2019. In 2020, employment skewed towards higher skilled. Employment is therefore relatively buoyant. There is, however, policy support for sustainable economic growth and job creation, implying that further employment opportunities are desirable. As such, sensitivity is considered to be medium.

Employment

8.4.12 The Applicant has confirmed that the LSEP scheme will result in the creation of approximately 48 FTE jobs. The occupational mix would be broadly as follows:

- Managers: 7;

¹⁴ I.e. 300 direct construction jobs multiplied by 2.7 gives 810, with the difference (i.e. 510 being the additional indirect or induced employment supported).

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- Engineers, Supervisors and Technicians: 11
 - Plant and Process Operatives: 25;
 - Administrative and Secretarial Occupations: 2;
 - Apprentices: c.3 (not included in subsequent calculations regarding salaries).

8.4.13 The Applicant has confirmed that the average annual salary of those employed at the Consented Development will be approximately £40,000.00. As such, average weekly earnings will be approximately £769.25, and the overall gross income of employees will be approximately £1.8 million per year.

8.4.14 When compared with the average earnings set out in Table 8.7, it can be seen that the estimated average salary of those employed at the LSEP facility will be appreciably greater than the average for the Study Area, and the regional and national averages.

Leakage

8.4.15 Approximately 74.5% of those working within the Study Area also live there, based upon commuting patterns identified in the 2011 census (as referenced in Section 13.3), and approximately 25.5% of existing (in 2011) jobs are taken up by those living further afield. Based on this, the likely leakage of employment outside the Study Area is estimated at 25.5%.

Displacement

8.4.16 It is possible that the LSEP will take trade from other businesses located within the Study Area. Some waste / RDF could potentially be diverted from other waste management facilities and hence could displace activity at these sites. However, any diversion from UK landfills will, given overall UK landfill inputs, result in minimal displacement. Any displacement of exported RDF from European facilities would not impact upon the UK economy. Further, it may well be replaced by residual waste presently going to landfill within Europe. As a consequence, displacement resulting from the LSEP scheme with the Proposal is likely to be very low and has been estimated at no more than 5%.

Indirect and Induced Effects

8.4.17 There will inevitably be a range of bought-in goods and services required, once the LSEP becomes operational. These will result in continued or additional indirect employment by the suppliers of these goods and services. Further induced effects would derive from spending by those employed directly and indirectly at the LSEP, which will inevitably support employment (continued or additional) in relation to a further range of goods and services. The scale of this additional indirect and induced employment can be estimated via use of a multiplier. The *Additionality Guide* suggests a composite multiplier (covering income and supply) of 2.8 is appropriate for electricity production. As such, approximately 86-87¹⁵ ¹⁶new or existing FTE jobs will be supported via the indirect or induced effects of the LSEP scheme with the Proposal.

Additionality

8.4.18 Based on the above, the additionality deriving from the LSEP scheme with the Proposal (i.e. how it would be likely to affect the economy of the Study Area once operational) can be estimated. Gross Value Added (GVA) has been estimated based on the income levels estimated above, and in relation to direct employment is therefore approximately £40,000.00 per job (excluding income tax and other deductions)¹⁷. This is a significantly higher figure than the current GVA per head for the Study Area, (which is set out in Table 13.10).

8.4.19 Table 13.12 sets out the additionality calculation for the LSEP scheme with the Proposal.

Table 13.12: Additionality

	FTE Employment	Gross Value Added
A. Direct Employment	48	£1,800,000
B. Leakage (outside Study Area)	25.5%	n/a
C. Gross Direct Effect (A - B)	35.76 (35-36 FTE jobs)	£1,341,000
D. Displacement ¹⁸	5%	n/a
E. Net Direct Effect (C - D)	33.972 (33.34 FTE jobs)	£1,273,950
F. Multiplier	2.8	n/a

¹⁵ I.e., 48 direct FTE jobs multiplied by 2.8 gives 134.4, with the difference (i.e. 86.4) being the additional indirect or induced employment supported

¹⁶ The figure of 72 additional FTE jobs is absolute and excludes the effects of leakage or displacement.

¹⁷ £1,400,000.00 estimated gross income of employees, divided by 45 FTE jobs.

¹⁸ Displacement is estimated at 5%, as discussed above.

	FTE Employment	Gross Value Added
G. Total Net Effect (E x F)	95.1216 (95-96 FTE jobs)	£3,567,060

- 8.4.20 The LSEP scheme with the Proposal will result in the direct creation of approximately 48 FTE jobs. When leakage and displacement is taken into account, the LSEP scheme with the Proposal is likely to support approximately 95-96 jobs within the Study Area. The net GVA to the economy of CWACC¹⁹ by the Proposal will be in the region of £3.567 million annually.
- 8.4.21 These figures are relatively small in percentage terms when considered against the whole of the Study Area, but nevertheless are relatively large in absolute terms. Additionally, the provision of new employment opportunities needs to be considered in light of the anticipated increase in unemployment as a result of the Covid-19 pandemic. The LSEP scheme with the Proposal would result in growth in employment, in accordance with local planning and economic policies.
- 8.4.22 There would be a small magnitude of change from the baseline for both employment and GVA reported in Section 8.3. This would result in a minor beneficial effect to the economy of the Study Area, which would not be significant across the whole of the Study Area. Effects are however likely to be significant for some businesses that supply bought-in goods and services, and for individuals (including those employed at the LSEP).
- 8.4.23 Additionally, the Applicant (through its parent companies) encourages career progression for all employees. Annual training plans are produced for each individual, and training is provided at all levels of employment internally or externally (as required). As an example, the Applicant funds Higher National Certificate in engineering disciplines for candidates seeking to progress to senior management levels. At several sites operated by the parent organisations of the Applicant, individuals working in less skilled roles have progressed to become Shift Team Managers in less than three years, representing a salary increase of approximately 100%. This represents a clear benefit to people employed at the Consented Development to improve their skill set and earning capacity, with knock-on beneficial effects for the wider economy.

¹⁹ As noted in Section 13.3, the ONS figures for GVA are not broken down by local authority area, but reflect larger statistical units

Wider Socio Economic Effects

Renewable Energy Generation

8.4.24 The net export capacity of the LSEP with the Proposal would be 69.9MW. As such, up to 559,200MW²⁰ hours of electricity would be exported per annum. This is sufficient to meet the needs of approximately 148,250 homes²¹. Approximately 50% of the energy generated would be from the biogenic fraction of the residual waste treated at the Site and as such would be classified as renewable energy. This would clearly have a beneficial social effect in terms of the transition to a low carbon economy, and the development of renewable energy sources.

Non-Domestic Business Rate Retention

8.4.25 The Consented Development will be liable for non-domestic (business) rates which will be paid to Cheshire West and Chester Council. This will not be different through the Proposal. Government policy allows for business rate retention for local authorities who support the development of renewable energy projects.

8.4.26 Where waste managed at the facility comprises biomass, or is otherwise biodegradable, this is recognised as a source of renewable energy. As noted above, approximately 50% of the residual waste treated at the Consented Development will be biomass, and as such, this proportion of the energy generated at the Consented Development is likely to be subject to business rate relief. This applies equally to the LSEP scheme with the Proposal.

8.4.27 Significant additional funding will be delivered directly to Cheshire West and Chester, estimated by the Applicant to be between approximately £2.3 million and £2.6 million per year. The actual figures will be determined via a detailed assessment carried out by the Valuation Office Agency.

²⁰ Based on the EfW operating 8,000 hours per year.

²¹ Based on an average electricity consumption per household in 2018 of 3,772KWh, as set out in Department for Business, Energy and Industrial Strategy, 2020 *Energy Consumption in the UK* Table C9

District Heating and Heat Off-Take

- 8.4.28 In addition to the production of electricity, the Consented Development will be CHP-ready (Combined Heat and Power). A 'Heat Demand Investigation' has been undertaken and can be viewed in full at Appendix E to the Supporting Statement for the Variation Application. The purpose of the study is to identify potential options for heat off-take from the LSEP. The study concluded that the LSEP is located in an area that has good potential for future heat off-take and district heat network development, but at present, this is not economically viable. Options for heat off-take and heat networks will be subject to onward consideration.
- 8.4.29 Accordingly, there is considerable potential for future beneficial effects to derive via the supply of heat to local businesses, public buildings and residential development, which will again represent a contribution to the transition to a low-carbon economy.

Assessment of Effects against Future Baseline

- 8.4.30 The socio-economic effect of the Consented Development was assessed in the May 2011 ES. This identified that approximately 48 full time jobs will be created once operational, i.e. a similar level to that calculated in this latest assessment, and the effects of this were assessed as minor beneficial. Employment levels during construction were estimated at 500, but it is not clear whether this is a maximum or average figure. The indirect and induced effects of the Consented Development upon employment were not stated in the May 2011 ES.
- 8.4.31 As the currently consented LSEP scheme and the scheme as now proposed are similar, it is unsurprising that they would result in similar levels of employment. As such the effects of the schemes would inevitably be similar.

8.5 Mitigation

- 8.5.1 The Proposal will be beneficial to the permanent operational employment within the Study Area and no specific mitigation measures are deemed necessary. Additionally, the Proposal will help maintain the existing construction employment
- 8.5.2 The Applicant has a pre-existing obligation to provide for local employment under the Unilateral Undertaking (UU) for the Consented Development, dated 30th November

2011 (see Document 5 of the Variation Application). Along with other requirements under clause 5.1 of the UU, the Applicant is required to 'use reasonable endeavours to obtain 20% of the development's workforce from the council's (CWACC) administrative area'.

- 8.5.3 This will enhance the benefits of the Consented Development, by increasing the skill base of the local labour force.

8.6 Residual Effects and Conclusions

- 8.6.1 The Consented Development will have a beneficial effect on construction employment within the Study Area. The Proposal will not effect the construction of the LSEP and so these benefits will not change through the proposed increase in waste tonnage throughput.

- 8.6.2 The LSEP scheme will have a clear positive influence upon the continued viability of a range of contractor companies and their employees, as well of other businesses forming part of the supply chain. There may therefore be significant effects for specific businesses, and indeed for individuals employed in construction. This will be of general benefit to the wider economy in terms of retention and possible upgrading of skilled workers and in terms of the viability of construction sector businesses. Construction is a sector that is dependent upon the availability of continued opportunities to undertake built development, and the Consented Development with the Proposal will provide such an opportunity.

- 8.6.3 Once fully operational, the LSEP scheme with the Proposal will directly create approximately 48 jobs, representing a range of jobs levels and skill types. A further 86-87 jobs are likely to be created or supported by indirect or induced expenditure (e.g. services bought-in to the LSEP site, or spending outside the LSEP site by employees). Once the effects of displacement and leakage are considered, it is estimated that within the Study Area, approximately 96 jobs would be supported directly or indirectly. This would add an estimated £3.567 million to the economy of the Study Area each year.

- 8.6.4 In the context of the Study Area as a whole, these are relatively small figures. Nevertheless, the effects of the LSEP scheme with the Proposal will clearly be beneficial in providing new employment opportunities, at a time of economic

uncertainty due to the effects of the Covid-19 pandemic. The LSEP scheme with the Proposal will have potential benefits in reducing the above average unemployment levels locally, particularly as a range of different job types, at different skill levels, would be provided. When considered in the context of the wider Study Area economy, it is concluded that there would be major beneficial and significant effects.

- 8.6.5 The job creation, contribution to economic growth, contribution to the development of the low carbon economy, and contribution to skills improvement that would result from the LSEP scheme with the Proposal, together with the training providing by the Applicant (as a requirement of the UU), will contribute to the achievement of both planning and economic policies.