Tween Bridge Solar Farm

A Nationally Significant Infrastructure Project in the Energy Sector

Preliminary Environmental Information Report

Chapter 11 – Socio Economics

March 2025

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Socio Economics

11.1. Introduction

11.1.1. This chapter of the PEIR assesses the likely significant effects of the Scheme on socio economics.

11.1.2. This assessment reports on the baseline and Scheme design information available at the time of writing this PEIR. Consultation responses received to date as part of the Scoping Opinion adopted by the Planning Inspectorate (on behalf of the Secretary of State) on 13 March 2023 have been taken into account during the preparation of this chapter and this is discussed in detail below. The assessment has been carried out by Pegasus Group.

11.1.3. This chapter is supported by the following figures (figures are embedded within the chapter):

- **Figure 11.1** - Site Location in context of surrounding administrative boundaries.
- **Figure 11.2** - Population Change, 2011 – 2021 (2011=100).
- **Figure 11.3** – Gross Value Added, 2011-2021 (2011=100).
- **Figure 11.4** – Proportion of GVA contributed by Construction & Agriculture Sectors.
- **Figure 11.5** – Skill profile of resident working age (16-64) population, 2021.
- **Figure 11.6** – IMD map of LSOAs covered by Scheme.
- **Figure 11.7** – Employment change, 2015-21.
- **Figure 11.8** – Claimant count as a proportion of working age (16-64) population, February 2020-June 2023.

11.1.4. There are no appendices supporting this chapter.

11.1.5. Baseline and assessment work is ongoing, it is currently expected that the following information will be made available for the Socio Economic chapter of the Environmental Statement (ES).

- Consideration of Cumulative Impacts.
- Further assessment against the detailed design parameters of the scheme.
- Outline Supply Chain, Employment and Skills Plan.

11.2. Consultation

11.2.1. Consultation undertaken to date relating to socio-economics is outlined in **Table 11.1**.

Table 11.1 Summary of Consultation

CONSULTEE	QUERIES RAISED / INFORMATION SOUGHT	STATUS
City of Doncaster Council	Pegasus has made a request for the latest available STEAM data related to serviced and non-serviced accommodation within City of Doncaster administrative area	Engagement ongoing
North Lincolnshire Council	Pegasus has made a request for the latest available STEAM data related to serviced and non-serviced accommodation within North Lincolnshire administrative area	Engagement ongoing
East Riding of Yorkshire Council	Pegasus has made a request for the latest available STEAM data related to serviced and non-serviced accommodation within East Riding of Yorkshire administrative area	Engagement ongoing

11.3. Assessment Approach

Methodology

11.3.1. There is no specific guidance available which establishes a methodology for undertaking an Environmental Impact Assessment (EIA) of the socio-economic effects of a Scheme. The approach that has been adopted for this assessment is based on professional experience and best practice, and in consideration of relevant policy requirements at the national, regional and local scale.

11.3.2. The assessment specifically includes the following:

- Identification of receptors relevant to the potential for socio-economic effects that may arise as a result of the Scheme.
- Identification of the socio-economic baseline in respect of each of the key socio-economic issues identified, focusing on the characteristics of the economy and labour force. These characteristics have been used as a measure for assessing future changes associated with or resulting from the scheme.
- Analysis of the full range of socio-economic effects, both direct and indirect, arising from the scheme, during the construction (short term effects), operation (long term effects), and decommissioning (short term effects).

11.3.3. The baseline information has been collated with reference to the following:

- Overarching National Policy Statement for Energy (EN-1) (November 2023)[1].
- National Policy Statement for Renewable Energy (EN-3) (November 2023)[2].
- The National Planning Policy Framework (NPPF) (2024)[3].Office for National Statistics (ONS) data (various outputs as individually referenced within this chapter)[4].
- Ministry of Housing, Communities & Local Government (for deprivation data)[5].
- Doncaster Local Plan (2015-2035)[6].
- Doncaster Environment & Sustainability Strategy (2020-2030)[7].
- North Lincolnshire Local Development Framework Core Strategy (adopted 2011)[8].
- East Riding of Yorkshire Local Plan (adopted 2016)[9].
- Humber 2030 Vision[10].
- Information obtained from the Applicant.

11.3.4. For the Socio Economics assessment, there are a number of differences between the assessment presented in the informal PEIR and the assessment now presented within the formal PEIR. These changes are summarised as follows:

- Expansion of baseline to include coverage of East Riding of Yorkshire for each relevant baseline topic.
- Revision to the assessment of the potential effect on the visitor economy to ensure consideration of the potential effect on the wider local tourism sector, as well as potential effect on local visitors.

Assessment of Significance

[1] Department for Energy Security & Net Zero, November 2023, Overarching National Policy Statement for Energy (EN-1).

[2] Department for Energy Security & Net Zero, November 2023; National Policy Statement for Renewable Energy Infrastructure (EN-3)..

[3] National Planning Policy Framework (Revised),December 2024 . Ministry of Housing, Communities and Local Government.

[4] Office for National Statistics (ONS). Available at: Home - Office for National Statistics (ons.gov.uk).

[5] National statistics: English indices of deprivation 2019, Ministry of Housing, Communities and Local Government, September, 2019.

[6] Doncaster Local Plan, adopted September 2021. Doncaster Council.

[7] Doncaster Environment & Sustainability Strategy (2020-2030). Doncaster Climate Commission, available at: Climate and Environment - Team Doncaster

[8] North Lincolnshire Local Development Framework Core Strategy (adopted June 2011). Available at: Core Strategy 2010.indb (northlincs.gov.uk).

[9] East Riding of Yorkshire Local Plan (Adopted April 2016). Available at: https://downloads.eastriding.org.uk/corporate/pages/east-riding-local-plan/Strategy%20Document%20-%20Adopted%20April%202016%20lo.pdf.

[10] Humber 2030 Vision, Humber Energy Board, Greater Lincolnshire Local Enterprise Partnership. Available at: Humber_2030_Vision.pdf (greaterlincolnshirelep.co.uk).

11.3.5. The first step in the assessment is to identify the sensitivity of the receptors. In socio-economic assessments, receptors (for example, the labour market) are not sensitive to changing environmental conditions in the same way as many environmental receptors are. To address this, the assessment draws on a combination of measurable indicators and a consideration of the importance of the receptor in policy terms to gauge the receptor's sensitivity. For example, the number of jobs in the area may increase as new developments are completed and occupied by businesses. This is considered alongside the weight attached to these issues in local policy. **Table 11.2** shows the sensitivity criteria followed in this assessment.

Table 11.2: Criteria for Sensitivity of Receptor

Sensitivity	Criteria
High	Evidence of direct and significant socio-economic challenges relating to receptor. Accorded a high priority in local, regional or national economic regeneration policy. Evidence of direct and significant socio-economic challenges including: • Areas with levels of unemployment well in excess of regional / national averages, and/or trend of considerable job reduction identified. • Significantly high rise in population according to projections up to 2038. • Areas with high levels of deprivation, i.e. deprivation levels within 20% most deprived decile according to IMD 2019. • Areas with levels of gross value add (GVA[11]) that are lower than the regional and/or national averages overall. • Construction-related GVA lower than regional and/or national averages. • • Areas with especially underutilised accommodation services. • Areas with no spare capacity for additional guests.
Medium	Some evidence of socio-economic challenges linked to receptor, which may be indirect. Change relating to receptor has medium priority in local, regional and national economic and regeneration policy. Some evidence of socio-economic challenges, including: • Areas with levels of unemployment above regional / national averages, and/or trend of job reduction/no job growth identified. • Average rise in population according to projections up to 2038.

[11] GVA is the value of goods and services produced less the cost of inputs and materials used in the production process.

	• Areas with moderate levels of relative deprivation, i.e. deprivation levels within 50% most deprived deciles according to IMD 2019. • Areas with levels of GVA that are similar to the regional and/or national averages overall. • Construction-related GVA that are similar to regional and/or national averages. • • Areas with moderately underutilised accommodation services. • Areas with low spare capacity for additional guests.
Low	Little evidence of socio-economic challenges relating to receptor. Receptor is accorded a low priority in local, regional and national economic and regeneration policy. Little evidence of socio-economic challenges, including: • Areas with levels of unemployment in line with regional / national averages, and/or trend of particular growth in job numbers identified. • Lower than average rise in population according to projections up to 2038. • Areas with low levels of relative deprivation, i.e. i.e. deprivation levels within 50% least deprived deciles according to IMD 2019). • Areas with levels of GVA that are in excess of the regional and/or national averages overall. • Construction-related GVA in excess of regional and/or national averages. • • Areas with accommodation services which are sufficiently utilised. • Areas with spare capacity for additional guests.
Negligible	No socio-economic issues relating to receptor. Receptor is not considered a priority in local, regional and national economic development and regeneration policy. No socio-economic issues relating to a receptor, including: • Areas with levels of unemployment less than regional / national averages. • Projected decrease / population projections estimated to remain same in period up to 2038. • Areas with low levels of relative deprivation, i.e. i.e. deprivation levels within 20% least deprived decile according to IMD 2019. • Areas with levels of GVA that are well in excess of the regional and/or national averages overall. • Construction-related GVA well in excess of regional and/or national averages. •

	• Areas with accommodation services which are consistently utilised. • Areas with high levels of spare capacity for additional guests.

11.3.6. The magnitude of change upon each receptor has been determined by considering the predicted deviation from baseline conditions, both before and, if required, after mitigation. The criteria used for the assessment of magnitude of change, which can be either positive (beneficial) or negative (adverse) are shown in **Table 11.3**.

Table 11.3 Criteria for Magnitude of Change

Sensitivity	Criteria
High	Scheme would cause a large change to existing socio-economic conditions in terms of absolute and/or percentage change. • Considerable increase / decrease on existing baseline levels of employment. • Greater than 5% increase / decrease in GVA generated. • Considerable increase in local employment and training opportunities. • Considerable increase in business rates generated. • Considerable increase in accommodation demand.
Medium	Scheme would cause a moderate change to existing socio-economic conditions in terms of absolute or percentage change. • Moderate increase / decrease on existing baseline levels of employment. • 1% - 5% increase / decrease in GVA generated. • Moderate increase in local employment and training opportunities. • Moderate increase in business rates generated. • Moderate increase in accommodation demand.
Low	Scheme would cause a minor change to existing socio-economic conditions in terms of absolute and or percentage change. • Limited increase / decrease on existing baseline levels of employment. • 0.1% - 0.99% increase / decrease in GVA generated. • Limited, but some increase in local employment and training opportunities. • Limited increase in business rates generated. • Limited increase in accommodation demand.
Negligible	No discernible change in baseline socio-economic conditions.

11.3.7. In reporting the effects of significance resulting from the scheme, at construction, operational and decommissioning stages, the assessment contextualises both the sensitivity of the receptor and the magnitude of change. The method uses the matrix shown in **Table 11.4**.

Table 11.4 Significance Matrix

		Sensitivity of Receptor			
		High	**Medium**	**Low**	**Negligible**
Magnitude of Change	**High**	Major	Major	Moderate	Negligible
	Medium	Major	Moderate	Minor to Moderate	Negligible
	Low	Moderate	Minor to Moderate	Minor	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible

Legislative and Policy Framework

National Planning Policy

Overarching National Policy Statement for Energy (EN-1) (November 2023)

11.3.8. The Overarching National Policy Statement (NPS) for Energy (EN-1), latest revision dated November 2023, which came into force 17 January 2024, includes a section dedicated to 'Socio-Economic Impacts' (Section 5.13). It notes that, where a project is likely to have socio-economic impacts at local or regional levels, an assessment of such impacts should be undertaken as part of the application.

11.3.9. The existing socio-economic conditions in the areas surrounding the Scheme should be described as well as how the Scheme's socio-economic impacts correlate with relevant local planning policies.

11.3.10. The range of relevant potential socio-economic impacts referred to in EN-1 includes:

- Creation of jobs and training opportunities.
- Contribution to the development of low-carbon industries.
- Provision of additional local services and improvements to local infrastructure.
- Indirect beneficial impacts, in particular use of local support services and supply chains.
- Effects on tourism and users of the area.
- Impact of a changing influx of workers during the different work phases.

- Cumulative effects.

11.3.11. In making their decision, EN-1 notes that the Secretary of State (SoS) should expect to see evidence-based socio-economic assessments (paragraph 5.13.2).

11.3.12. EN-1 also indicates that the SoS should expect positive provisions to be made in terms of enhancements or otherwise to serve as mitigation for any potential negative effects, and legacy benefits to be highlighted where possible (paragraph 5.13.11).

11.3.13. EN-1 suggests the requirement for an employment and skills plan (paragraph 5.13.12), which would specify approval by the local authority, detailing arrangements to promote local employment and skills development opportunities, including apprenticeships, education, engagement with local schools and colleges and training programmes to be enacted.

11.3.14. Additionally, EN-1 suggests that applicants consider developing an accommodation strategy, where appropriate, especially relevant to the construction and decommissioning phases of a scheme (paragraph 5.13.7).

National Policy Statement for Renewable Energy (EN-3) (November 2023)

11.3.15. Socio-economic impacts were referenced only in respect of onshore wind and biomass power in the National Policy Statement (NPS) for Renewable Energy (EN-3) published in July 2011. An update to the EN-3 was published in September 2021 a further revision was published in March 2023 for consultation, with the latest revision having come into force on 17 January 2024. In this latest revision (November 2023), consideration of solar and potential for associated socio-economic effects is referenced in respect of the potential for socio-economic benefits of the site infrastructure being retained after the operational life of solar photovoltaic generation (paragraph 2.10.69).

National Planning Policy Framework

11.3.16. The most recent NPPF was published in December 2024. A key focus of the framework is to achieve sustainable development which requires three interdependent objectives that need to be pursued in a mutually supportive way:

- Economic Objective: Ensure that the economy is strong, responsive and competitive to support growth.
- Social Objective: Ensure there is a sufficient supply and range of homes available to meet present and future demand.
- Environmental Objective: Ensure the natural, built and historic environment is protected including mitigating and adapting to climate.

11.3.17. Other relevant points to note from the revised NPPF include:

- The NPPF places significant weight on the need to support economic growth and productivity with chapter 6 setting out the objective of building a strong and competitive economy. Paragraph 82 states that the planning policies should:

- Set out a clear economic vision and strategy which positively and proactively encourages sustainable economic growth, having regard to Local Industrial Strategies and other local policies for economic development and regeneration.
- Set criteria, or identify strategic sites, for local and inward investment to match the strategy and to meet anticipated needs over the plan period.
- Seek to address potential barriers to investment, such as inadequate infrastructure, services or housing, or a poor environment.
- Be flexible enough to accommodate needs not anticipated in the plan, allow for new and flexible working practices (such as live-work accommodation), and to enable a rapid response to changes in economic circumstances.

- Paragraph 87 states that alongside this, planning policies and decisions should recognise and address the specific locational requirements of different sectors.
- Section 14 of the NPPF outlines the role of the planning system in meeting the challenge of climate change. The Framework states that the planning system should support the transition to a low carbon future in a changing climate and that local planning authorities should support planning applications for all forms of renewable and low carbon development.

Doncaster Local Plan

11.3.18. The Doncaster Local Plan 2015-2030 (adopted September 2021) outlines the vision of Doncaster, as well as the aims and objectives that enable development in Doncaster up to 2030. The plan aims to deliver positive sustainable economic, social and environmental development.

11.3.19. The vision for Doncaster is for it to be 'a thriving place to learn, work, live and care'. The strategy has four themes to help to achieve this vision:

- Learning – that prepares all children and young people for a life that is fulfilling.
- Working – in ways that create purpose and meaning and allow more people to pursue their ambitions.
- Living – in a place that is vibrant and full of opportunity, where people enjoy spending time.
- Caring – together for the most vulnerable in communities.

11.3.20. Policy 58 of the local plan outlines Doncaster's strategic policy on low carbon and renewable energy. The council aims to increase the supply of low carbon and renewable energy generated.

11.3.21. The policy states that:

- 'Proposals will be supported which give priority to heat or power generation from light, water, waste, and other low carbon heat sources'.

Doncaster Environment & Sustainability Strategy

11.3.22. An Environment & Sustainability Strategy 2020 - 2030 has been developed in response to the climate change and biodiversity emergency declaration made by Doncaster Council in 2019.

11.3.23. The vision of this strategy is that 'Doncaster businesses, organisations and residents will deliver their contribution to the regional, national and international effort to tackle the climate change emergency; and in doing so will improve and maintain a pleasant and sustainable natural and built environment for everyone to enjoy'.

11.3.24. The ambition of the strategy is to become carbon neutral by 2040. This involves increasing the energy production from sustainable sources and capitalizing on opportunities in green technology industry sectors.

North Lincolnshire Local Development Framework

11.3.25. North Lincolnshire Local Development Framework Core Strategy was adopted in June 2011 and covers the twenty-year period up to 2026. The Strategy indicates that the ambition is to grow North Lincolnshire into an attractive and thriving place to live and work, while ensuring that all developments are sustainable and complement and enhance the area's high quality natural and built environment without any detrimental impact.

11.3.26. The Strategy acknowledges that the area is at the heart of the growing low carbon and green economy and there is significant interest in the area to develop various forms of green energy generation facilities.

East Riding of Yorkshire Local Plan

11.3.27. The current Local Plan was adopted in April 2016. The council has started to update the Local Plan and consult on proposed changes. In the meantime, the adopted plan remains material consideration.

11.3.28. Objective no. 11 of the Local Plan encourages growth, modernisation and diversification of the local economy to support existing and emerging economic sectors and clusters (associated with Policies S1, S2, S6, S7, EC1, EC2, EC3, EC5, A1-6). Linked to this is objective no. 14 which requires support to be given to a wide portfolio of energy infrastructure and businesses, and maximization of the potential for renewable energy and low carbon energy generation, whilst also minimising adverse impacts, including any cumulative landscape and visual effects (associated with Policies S1, S2, S6, EC1, EC5, A1, A3).

11.3.29. Objective no. 13 encourages a thriving and sustainable tourism and visitor economy, and enhancement of the tourism accommodation offer (associated with Policies S1, S3, S4, S7, EC2, EC3, ENV1, ENV2, ENV3, ENV4, A1-6).

Humber 2030 Vision

11.3.30. Greater Lincolnshire Local Enterprise Partnership (LEP) published the Humber 2030 Vision in which the three key objectives are to generate high-skilled, green jobs, encourage private investment to drive economic growth, and support a decarbonised future.

Scoping Criteria

11.3.31. The comments raised within the Planning Inspectorate Scoping Opinion dated 13 March 2023 relating to socio-economics are presented in **Table 11.5**.

Table 11.5 Extract of aspect-based scoping table from Scoping Opinion for Tween Bridge Solar Farm

ID	REF	MATTER	PLANNING INSPECTORATE COMMENTS	APPLICANT'S RESPONSE
3.10.2	Table 3.4	Impacts on Population	Table 3.4 of the Scoping Report proposes that impacts on population are assessed within the Socio Economics ES chapter. The Inspectorate is content with this approach.	Potential effects on the population within the host authorities of the Scheme are assessed within this chapter, namely potential for employment, economic contribution and accommodation demand effects during construction and decommissioning, and potential for employment, economic contribution and business rates once the Scheme is operational.
3.10.3	Para 9.14	Baseline	Paragraph 9.14 of the Scoping Report only references data for Doncaster, although the Scheme is located across the boundary of two local authorities (City of Doncaster Council and North Lincolnshire Council). The description of baseline conditions and assessment in the ES should be sufficient to address impacts on all areas likely to be affected by the Scheme.	Baseline analysis and assessment consider both Doncaster and North Lincolnshire LPAs as the host authorities of the Scheme.

11.4. Limitations to the Assessment

11.4.1. Baseline information is derived from the latest available statistics, however there is often a time-lag associated with the publication of this data.

11.4.2. Information relating to construction cost estimates and duration of construction activities has been provided by the Applicant. Jobs generated by the construction and decommissioning period have been estimated based on Pegasus Group's previous experience of similar scale solar energy projects, as well as benchmarking of similar scale projects for which applications have been made and information is in the public domain. In order to ensure a worst-case

scenario, 800MWp of AC capacity has been used as the basis of these assumptions[12]. An estimate of 0.8 FTE job per MW is subsequently used in the course of this assessment in respect of the construction and decommissioning phase assessments. This is based on previous experience and wider research of DCO projects which have been submitted.

11.4.3. Use of transport movements to identify estimated job numbers generated by the construction and decommissioning phases has been considered. However, due to the Works Order Limits layout, assumed management of and proposed activities associated with the construction and decommissioning phases and subsequent translation into traffic movements, a worst-case position that is considered to be most robust and transparent in respect of likely jobs generated by the Scheme is more suitably based on energy generation output and benchmarking.

11.4.4. The Applicant is intending to accommodate any construction or decommissioning workers who are from outside of the local area in Serviced and/or Non-Services Accommodation as opposed to residential dwellings (rental or otherwise). As such, consideration of potential effects on housing supply, be it affordable or otherwise, is scoped out of the assessment.

11.4.5. The baseline and associated assessment relating to Accommodation Demand has included existing Serviced and Non-Serviced Accommodation bedspaces only, i.e. only those bedspaces which are included in latest published data. It is acknowledged that new Serviced and/or Non-Serviced Accommodation is likely to be available by the time the Scheme and Cumulative Schemes are in construction. It is considered that excluding this information from the baseline and assessment at this time provides as a reasonable worst-case assumption for the basis of the assessment.

11.4.6. It is acknowledged that consideration is given within the PEIR to the illustrative underground export cable corridor and the strategic assessment for the overall National Grid Substation and RWE Underground Export Cable Route Assessment Area. There is not considered to be any potential significant socio economic effect, be it adverse or beneficial, of these elements. As such, not detailed assessment of these elements is included within the scope of PEIR Chapter 11 Socio Economics.

11.4.7. Full information regarding the expected effects of the Cumulative Sites is not publicly available at the time of writing this assessment. As such, a list of the Sites to be included in the analysis at a future date is provided at the end of this chapter. This will be amended to reflect feedback received on the PEIR and a full assessment undertaken for submission with the final ES chapter.

11.5. Baseline Conditions

Summary of Scheme Description

11.5.1. The full description of development is presented in draft PEIR Chapter 2: Scheme Description. The information presented here are items of relevance to the socio-economics assessment specifically, and inform the parameters of the assessment.

11.5.2. The main element of the proposal is the construction, operation, maintenance and decommissioning of a ground mounted solar park with an intended design capacity of over

[12] The MW figure is based on a wattage output of 610Wp (watt power) panel, the potential maximum range for energy generation is around 1250 MWp of direct current (DC) capacity.

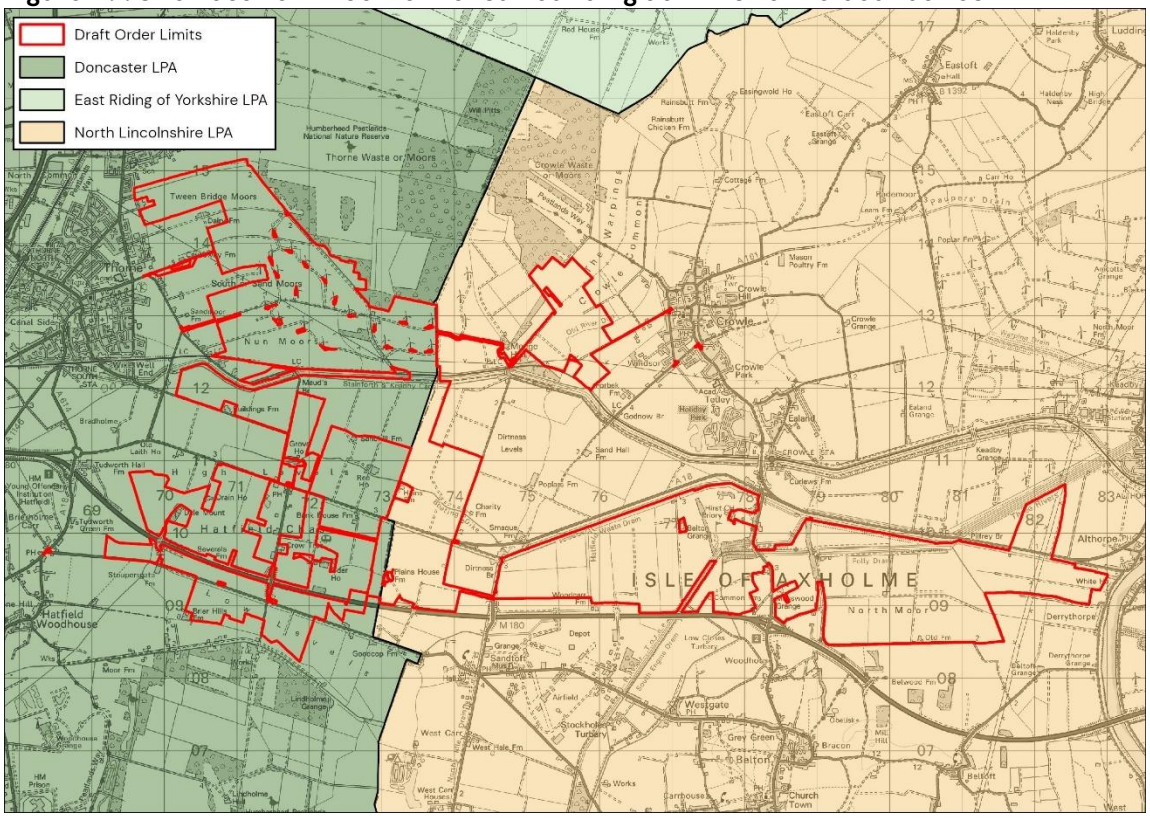
50MWp (megawatts peak), an energy storage facility and an export/import connection to the National Grid.

11.5.3. Based on a wattage output of 610Wp panel, the potential maximum range for energy generation is around 1250 MWp of DC capacity. This would equate to around 800 MWp of AC capacity. An operational lifespan of 40 years would be sought linked to the first export date from the Scheme.

Study area

11.5.4. **Figure 11.1** shows the Site location in the context of surrounding administrative boundaries. As shown, the Site is situated in both Doncaster and North Lincolnshire, and is close to East Riding of Yorkshire administrative area (2.1km north of the Draft Order Limits at nearest point as the crow flies).

Figure 11.1: Site Location in context of surrounding administrative boundaries



11.5.5. Based on review of other DCO renewable energy schemes of a similar nature and scale, it is reasonable for a 60-minute travel area to be assumed in respect of travel to work for construction and/or decommissioning workers. A 60-minute travel area from the Draft Order Limits of this Scheme is estimated to include 34 authorities. Therefore, this assessment has made consideration of potential effects for Doncaster, North Lincolnshire and East Riding of Yorkshire authorities only.

11.5.6. Where appropriate, benchmark data for Great Britain / England are also provided.

Identification of Receptors

11.5.7. There is no guidance or policy relevant to socio-economics that would dictate the study area and relevant receptors chosen. Instead, the choice of study area and relevant receptors associated with the scope of the socio-economic assessment are borne out of a detailed review of publicly available baseline data which informs the assessment. The spatial scale for which each dataset is available dictates the study area and the receptors to be used. Further detail is provided in **Table 11.6**.

11.5.8. The baseline presented in this report represents the current baseline at the time of submission and is based on the most recent publicly available socio-economic data. It is not possible to consider a future baseline position (i.e. to align with the build phase and operational phase) because the socio-economic data required to do this are not available.

Table 11.6: Summary of Assessment Scope and Relevant Receptors

Potential effect	Relevant Study Area	Potential Receptor	Justification for Study Area / Relevant Receptor
CONSTRUCTION			
Employment	District scale (administrative areas of Doncaster Council, North Lincolnshire Council and East Riding of Yorkshire Council)	Workforce in host local authorities including Doncaster, North Lincolnshire and East Riding of Yorkshire	Relevant baseline data available at District scale which enables sensitivity of receptor to be identified, and subsequently the magnitude of change to be measured.
Economic contribution	District scale (Doncaster, North Lincolnshire and East Riding of Yorkshire)	Economies of host local authorities including Doncaster, North Lincolnshire and East Riding of Yorkshire	Relevant baseline data available at District scale which enables sensitivity of receptor to be identified, and subsequently the magnitude of change to be measured.
Accommodation demand – Local Tourism Sector	District scale (Doncaster, North Lincolnshire, and East Riding of Yorkshire)	Tourism economy, specifically both Serviced and Non-Serviced Accommodation provision services, of host local authorities including Doncaster, North Lincolnshire and East Riding of Yorkshire.	Relevant baseline data available at District scale which enables sensitivity of receptor to be identified, and subsequently the magnitude of change to be measured.
Accommodation demand - Visitors	District scale (Doncaster, North Lincolnshire, and East Riding of Yorkshire)	Potential guests who may wish to stay within local accommodation and may be affected by the housing of construction workers in host local authorities including Doncaster, North Lincolnshire and East Riding of Yorkshire.	Relevant baseline data available at District scale which enables sensitivity of receptor to be identified, and subsequently the magnitude of change to be measured.

OPERATION			
Employment	District scale (Doncaster, North Lincolnshire, and East Riding of Yorkshire)	Workforce in host local authorities including Doncaster, North Lincolnshire and East Riding of Yorkshire	Relevant baseline data available at District scale which enables sensitivity of receptor to be identified, and subsequently the magnitude of change to be measured.
Economic contribution	District scale (Doncaster, North Lincolnshire and East Riding of Yorkshire)	Economies of host local authorities including Doncaster, North Lincolnshire and East Riding of Yorkshire	Relevant baseline data available at District scale which enables sensitivity of receptor to be identified, and subsequently the magnitude of change to be measured.
Business rates	District scale (Doncaster, North Lincolnshire, and East Riding of Yorkshire)	Economies of host local authorities including Doncaster, North Lincolnshire and East Riding of Yorkshire	Relevant baseline data available at District scale which enables sensitivity of receptor to be identified, and subsequently the magnitude of change to be measured.
DECOMMISSIONING			
Employment	District scale (Doncaster, North Lincolnshire, and East Riding of Yorkshire)	Workforce in host local authorities including Doncaster, North Lincolnshire and East Riding of Yorkshire	Relevant baseline data available at District scale which enables sensitivity of receptor to be identified, and subsequently the magnitude of change to be measured.
Economic contribution	District scale (Doncaster, North Lincolnshire and East Riding of Yorkshire)	Economies of host local authorities including Doncaster, North Lincolnshire and East Riding of Yorkshire	Relevant baseline data available at District scale which enables sensitivity of receptor to be identified, and subsequently the magnitude of change to be measured.
Accommodation demand – Local Tourism Sector	District scale (Doncaster, North Lincolnshire and East Riding of Yorkshire)	Tourism economy, specifically both Serviced and Non-Serviced Accommodation provision services, of host local authorities including Doncaster, North Lincolnshire and East Riding of Yorkshire.	Relevant baseline data available at District scale which enables sensitivity of receptor to be identified, and subsequently the magnitude of change to be measured.
Accommodation demand - Visitors	District scale (Doncaster, North	Potential guests who may wish to stay within local accommodation and may be	Relevant baseline data available at District scale which enables sensitivity of

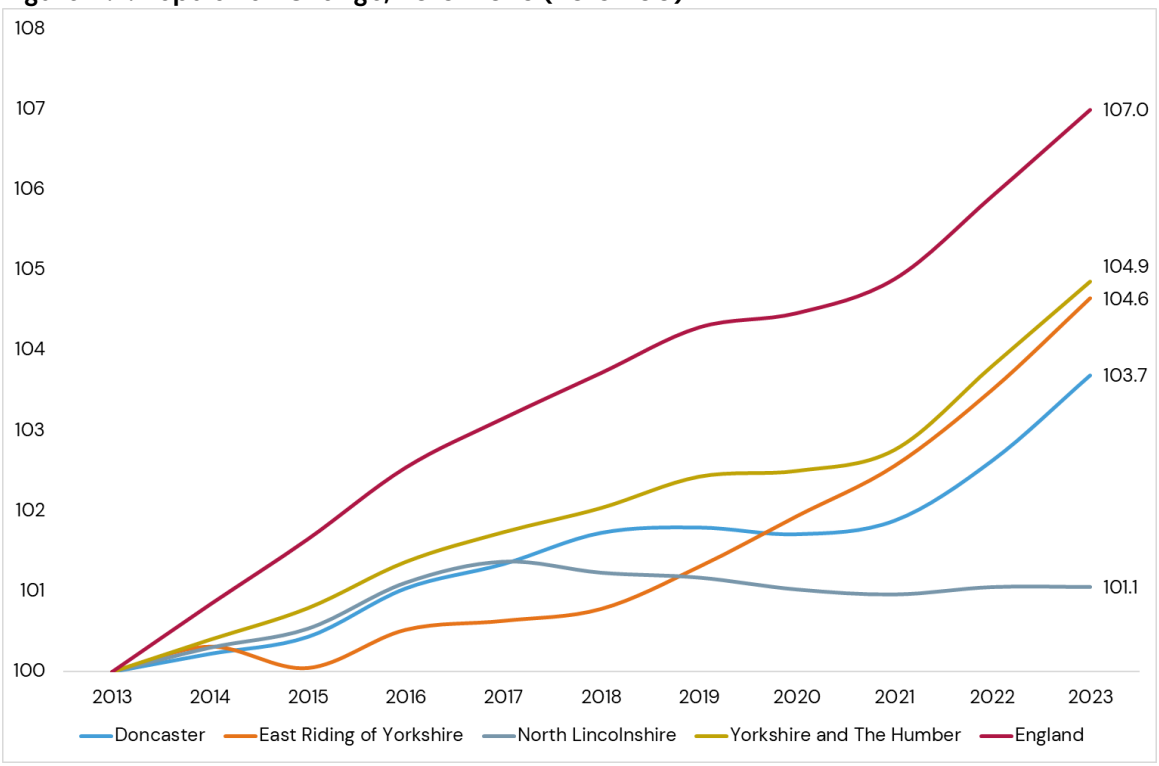
	Lincolnshire, and East Riding of Yorkshire)	affected by the housing of construction workers in host local authorities including Doncaster, North Lincolnshire and East Riding of Yorkshire.	receptor to be identified, and subsequently the magnitude of change to be measured.

Baseline Survey Information

Population

11.5.9. Based on ONS data, the population in Doncaster grew from around 302,991 to 314,176 between 2013 and 2023, a rise of 3.7%. Over the same timeframe, North Lincolnshire saw an increase of 1.1% (from 168,309 to 170,087) and East Riding of Yorkshire saw population growth of 4.6% (increase from 334,572 to 350,119). **Figure 11.2** shows the population growth in this timeframe for the districts and comparator areas. The population growth within those three districts was lower than the growth seen in Yorkshire & the Humber (4.9%) and England (7%).

Figure 11.2: Population Change, 2013-2023 (2013=100)



Source: ONS, Population Estimates

11.5.10. Data on population change by age in Doncaster shows that from 2013 to 2023, the fastest growing population group was those aged 65 and over with a growth rate of 13.8% (increase of 7,453 – see **Table 11.7**). This was below the rate of growth seen in the over 65's in Yorkshire & The Humber (15.2%) and in England (16.1%). The working age population (16-64) increased by 0.9% (1,799) between 2013 and 2023 in Doncaster. This is comparable with an increase of 2.6% (88,488 people) for this age group in Yorkshire & The Humber and a 5.2% (1.8million) increase in England. The young dependent population (0-15) also increased in Doncaster across this period, by 3.4%. Yorkshire & The Humber and England, saw increases of 2.8% and 4.6% respectively, in the same time frame.

Table 11.7: Population Change by Age in Doncaster, 2013-2023

	2013	2023	Absolute Change	% Change
0-15	57,151	59,084	1,933	3.4%
16-64	191,642	193,441	1,799	0.9%
65+	54,198	61,651	7,453	13.8%
Total	**302,991**	**314,176**	**11,185**	**3.7%**

Source: ONS, Population Estimates

11.5.11. In North Lincolnshire only age group which saw growth was those aged 65 and over with a growth rate of 18.6% (increase of 6,036 – see **Table 11.8**). The working age population (16-64) decreased by 3.3% (3,429) between 2013 and 2023 and the young dependent population (0-15) decreased by 2.7%.

Table 11.8: Population Change by Age in North Lincolnshire, 2013-2023

	2013	2023	Absolute Change	% Change
0-15	31,148	30,319	-829	-2.7%
16-64	104,623	101,194	-3,429	-3.3%
65+	32,538	38,574	6,036	18.6%
Total	**168,309**	**170,087**	**1,778**	**1.1%**

Source: ONS, Population Estimates

11.5.12. In East Riding of Yorkshire, similarly, the only age group which saw growth was those aged 65 and over with an increase of 20.3% (increase of 6,036 – see **Table 11.9**). The working age population (16-64) decreased by 74 people (0.04%) between 2013 and 2023 and the young dependent population (0-15) decreased by 0.5%.

Table 11.9: Population Change by Age in East Riding of Yorkshire, 2013-2023

	2013	2023	Absolute Change	% Change
0-15	55,061	54,808	-253	-0.5%
16-64	201,369	201,295	-74	0.0%
65+	78,142	94,016	15,874	20.3%
Total	**334,572**	**350,119**	**15,547**	**4.6%**

Source: ONS, Population Estimates

11.5.13. The latest ONS population projections were published in March 2020. They show that the population of Doncaster is expected to increase by 7.1% between 2018 and 2038 (22,050 additional people) whilst North Lincolnshire is projected to grow by 3.1% (5,326 additional people) and East Riding of Yorkshire is predicted to rise by 5.2% (17,542 additional people) (see **Table 11.10**). These growth rates compare to 6.2% at the regional scale and 8.6% at the national scale.

Table 11.10: Future Population Change, 2018-2038

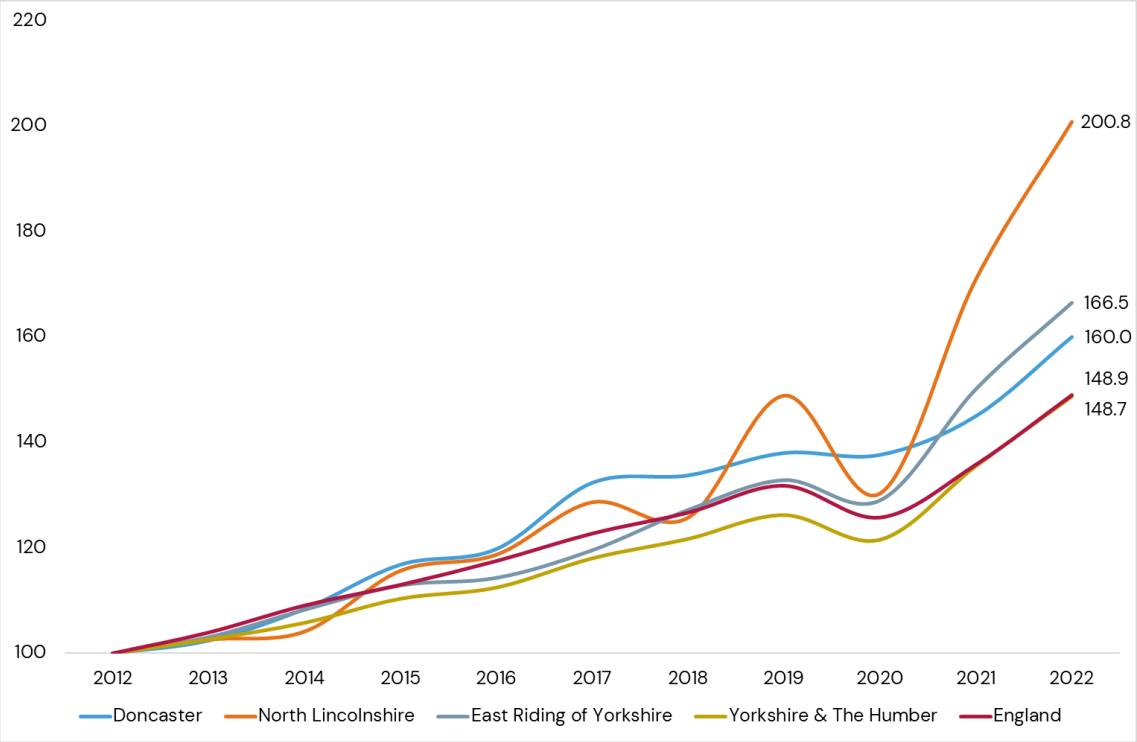
	2018	2038	Absolute Change	% Change
Doncaster	310,542	332,592	22,050	7.1%
North Lincolnshire	172,005	177,331	5,326	3.1%
East Riding of Yorkshire	339,614	357,156	17,542	5.2%
Yorkshire & The Humber	5,479,615	5,819,573	339,958	6.2%
England	55,977,178	60,766,251	4,789,073	8.6%

Source: ONS, Population Projections

Economic Output

11.5.14. Economic output can be measured by looking at gross value added (GVA), which for Doncaster, in 2022, totaled £6.6billion across all industries while this figure was £6.8billion in North Lincolnshire and £8.9billion in East Riding of Yorkshire. Over the period between 2012 and 2022 this figure has increased by 60% in Doncaster, which is above the regional and national changes (48.7% and 48.9% respectively), but below 100.8% in North Lincolnshire and 66.5% in East Riding of Yorkshire. **Figure 11.3** shows this data in more detail.

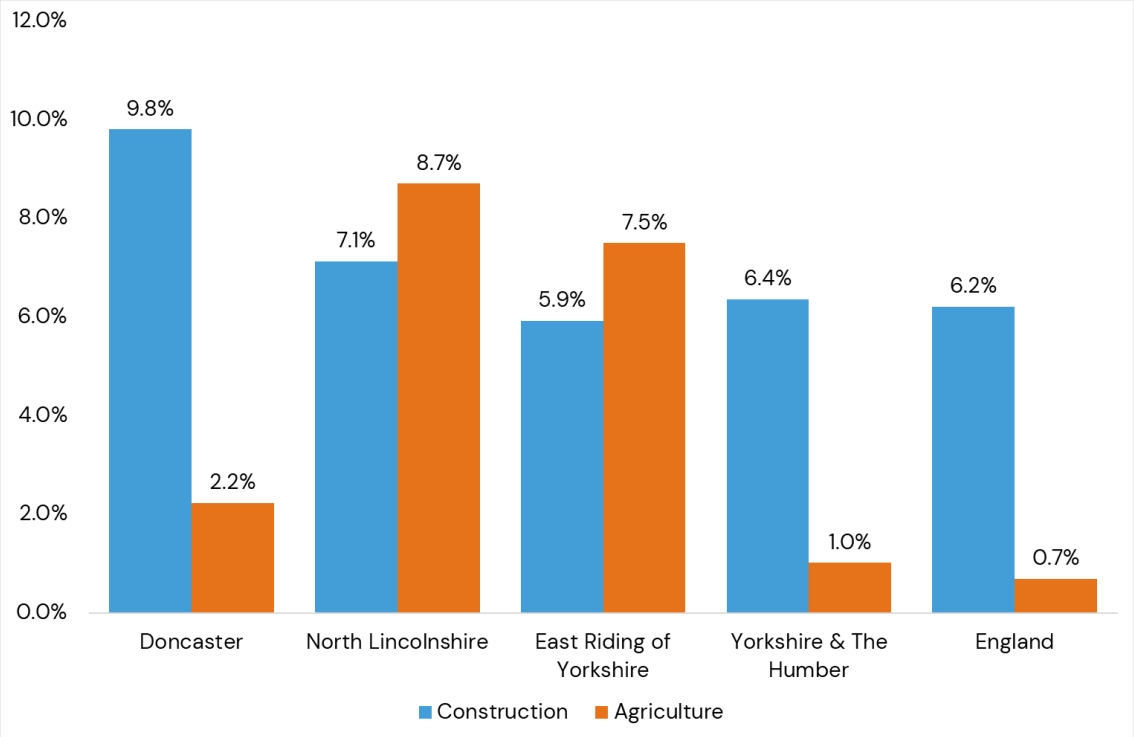
Figure 11.3: Gross Value Added, 2012-2022 (2012 = 100)



Source: ONS

11.5.15. Looking more specifically at GVA per sector in Doncaster, construction contributed £650million in 2022, whilst agriculture contributed £148million, equating to 9.8% and 2.2% of total GVA respectively. In North Lincolnshire construction GVA for 2022 totalled around £485million (7.1% of total GVA), whilst agriculture contributed £592million (8.7% of total GVA). In East Riding of Yorkshire, construction supported around £530 million (5.9% of GVA) and agriculture supported £671 million (7.5%). Figure 11.4 shows how these proportions compare to regional and national comparators.

Figure 11.4: Proportion of GVA contributed by Construction & Agriculture Sectors



Source: ONS

Skills

11.5.16. **Table 11.11** outlines the highest qualification level held by people aged 16+ in Doncaster, North Lincolnshire, and East Riding of Yorkshire, alongside figures for Yorkshire & the Humber and England. All three local authorities have a higher proportion of residents with no qualifications compared to England, and have a lower proportion of residents with level 4 qualifications. In Doncaster, 24.6% of residents have no qualifications whilst 22.7% have level 4 qualifications whilst in North Lincolnshire these proportions are 21.8% and 23.9% respectively. Further detail is set out below.

Table 11.11: Qualifications for residents 16+, 2021

	Doncaster	North Lincolnshire	East Riding of Yorkshire	Yorkshire & the Humber	England
No qualifications	24.6%	21.8%	18.2%	20.6%	18.1%
Level 1/entry level	11.4%	11.7%	10.0%	10.1%	9.7%
Level 2	15.1%	15.1%	14.1%	13.6%	13.3%
Apprenticeship	6.7%	7.1%	7.2%	6.1%	5.3%
Level 3	16.6%	17.2%	17.2%	17.4%	16.9%
Level 4+	22.7%	23.9%	30.5%	29.5%	33.9%
Other	2.9%	3.1%	2.8%	2.6%	2.8%

Source: 2021 Census

Deprivation

11.5.17. The 2019 Index of Multiple Deprivation provides an indication of the average levels of deprivation for Lower Layer Super Output Areas (LSOAs) across England. The index provides an overall assessment of the average levels of deprivation as well as an assessment against domains of deprivation. In total, England has 32,844 LSOAs. The Scheme falls across several LSOAs as listed in **Table 11.12**, which experience varying levels of deprivation. The lowest overall rank was for Doncaster 001C which ranked 2,887, placing the LSOA in the 10% most deprived LSOAs across the country. Whilst the highest overall rank was for North Lincolnshire 006D which ranked 25,679 which put it in the 30% least deprived LSOAs in the country. Detail on individual domains is shown in **Table 11.12**.

11.5.18. The order limits of the Scheme do not sit within the boundaries of the East Riding of Yorkshire Authority, and therefore do not sit within any East Riding of Yorkshire LSOAs. However, due to the proximity to the local authority, it is important to consider deprivation at a high-level scale. The 2019 English Indices of Deprivation data presents information for 317 local authorities in England, of these authorities East Riding of Yorkshire is the 217th most deprived local authority in England. The highest rank for East Riding of Yorkshire was in the living environment domain with a ranking of 182 of 317, whilst the lowest rank was in the crime rank with a ranking of 233 of 317.

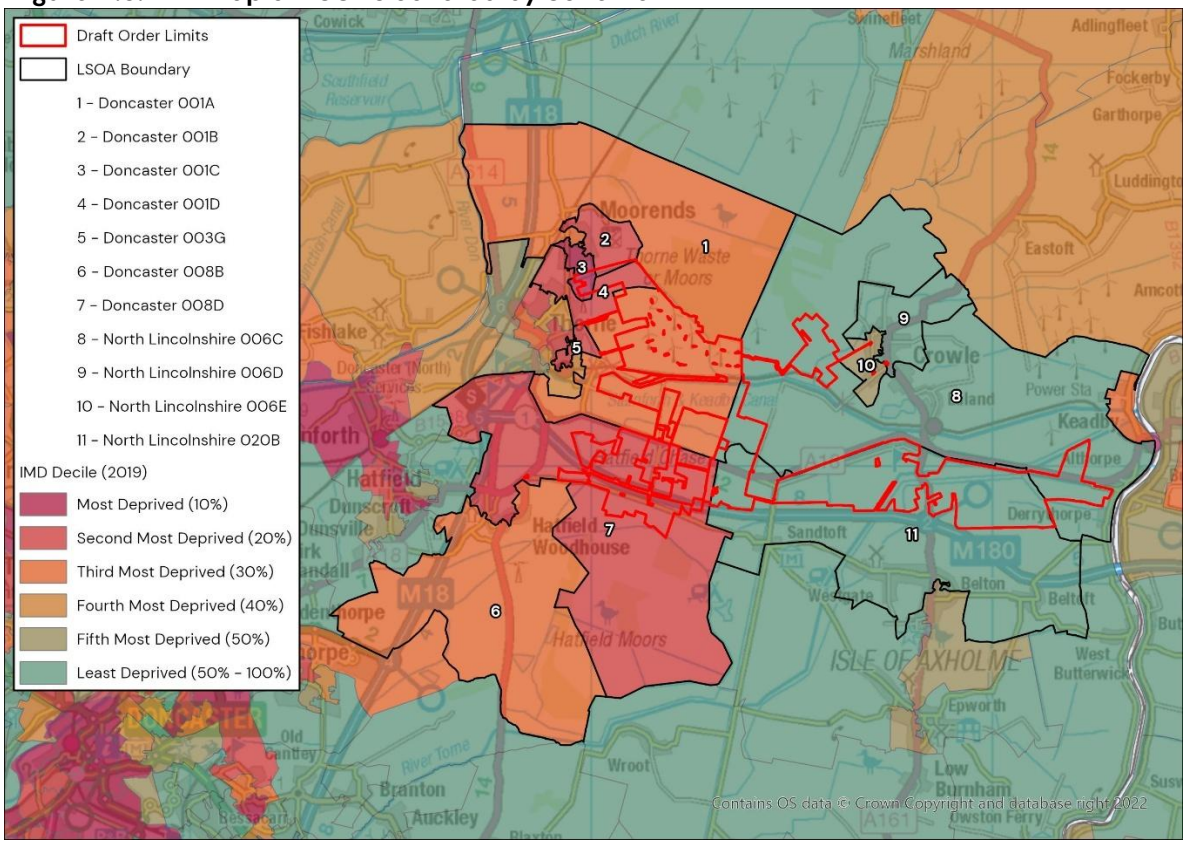
Table 11.12: Index of Multiple Deprivation

	Doncaster 001A	Doncaster 001B	Doncaster 001C	Doncaster 001D	Doncaster 003G	Doncaster 008D	North Lincolnshire 006C	North Lincolnshire 006D	North Lincolnshire 006E	North Lincolnshire 020B
Overall IMD	**7,396**	**4,292**	**2,887**	**3,990**	**5,208**	**6,334**	**20,122**	**25,679**	**15,964**	**23,051**
Income	8,863	5,070	2,506	4,142	6,156	10,901	18,945	20,626	12,936	27,801
Employment	6,854	4,801	2,991	2,346	5,138	7,132	20,384	21,340	9,967	24,383
Education & Training	3,119	564	656	4,398	1,391	9,376	19,099	19,258	10,967	21,730
Health	7,367	5,451	4,838	3,974	3,770	4,732	17,258	24,375	16,798	18,894
Crime	4,510	5,586	4,890	3,526	8,181	2,240	17,453	20,373	16,788	14,318
Barriers to Housing and Services	27,126	25,933	29,313	22,671	28,603	5,880	13,787	32,490	31,455	7,543
Living Environment	21,449	25,098	21,005	29,698	23,044	12,407	13,670	20,958	24,978	19,124

Source: Ministry for Housing Communities & Local Government

11.5.19. **Figure 11.5** shows the area surrounding the Scheme and the relevant LSOAs outlined above. As shown in the figure there are varying levels of deprivation with some LSOAs in the area being in the 10% most deprived across the country, whilst LSOAs to the East, North and South of the Scheme are some of the least deprived.

Figure 11.5: IMD map of LSOAs covered by Scheme

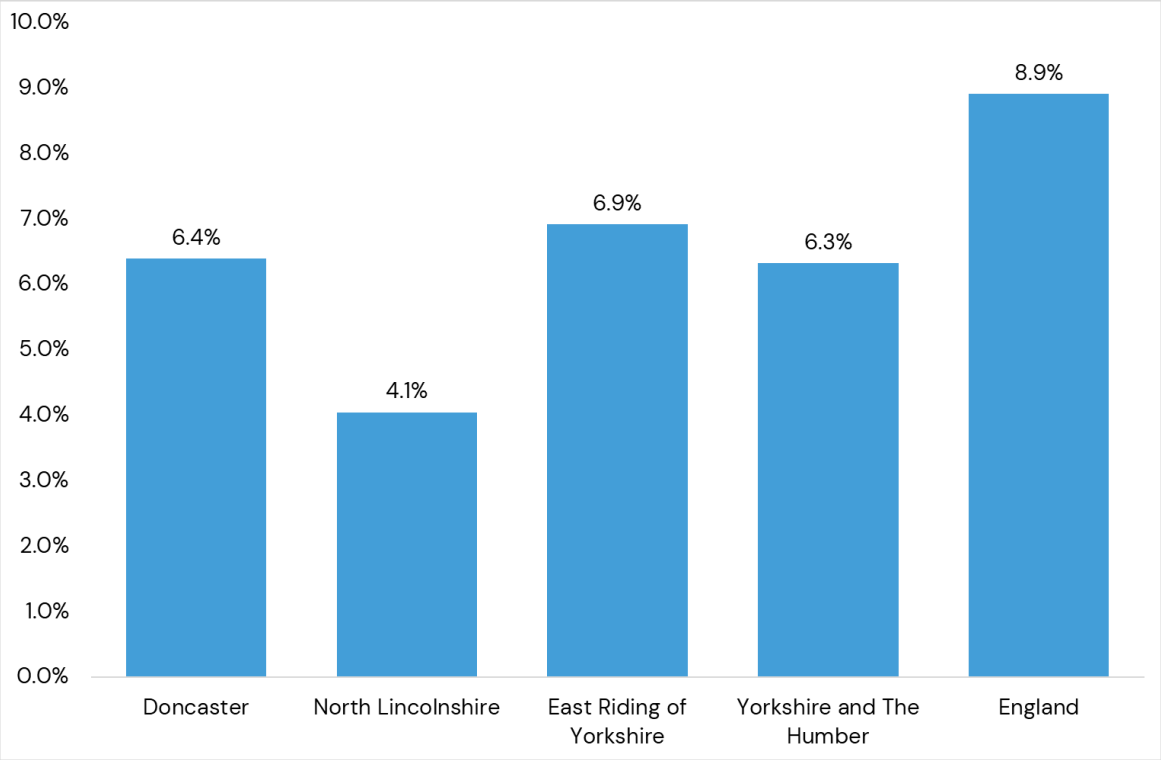


Source: Ministry for Housing Communities & Local Government

Employment

11.5.20. A review of the local labour market helps to provide some context as to how the Scheme will support growth of the area's economy. As of 2023, around 133,000people worked in Doncaster, around 77,00 people worked in North Lincolnshire, and 139,000 people worked in East Riding of Yorkshire. **Figure 11.6** shows that between 2015 and 2023 Doncaster saw 6.4% growth in jobs, an absolute increase of 8,000 jobs. This was above the growth seen in North Lincolnshire, where between 2015 and 2023 jobs grew by 4.1% (3,000), but below the growth seen in East Riding of Yorkshire (6.9% - 9,000 additional jobs).

Figure 11.6: Employment Change, 2015-23



Source: ONS, Business Register & Employment Survey

11.5.21. **Table 11.13** shows employment shares by broad sector in Doncaster, North Lincolnshire, East Riding of Yorkshire, Yorkshire & The Humber and England as of 2023. The largest sector in terms of employment in Doncaster was the public administration, education and health sector which accounted for 29.2% (39,000 jobs) of employment in 2023. This sector also accounted for the highest proportion of jobs in East Riding of Yorkshire (26.6% - 37,000 jobs), Yorkshire & The Humber (28%) and England (25.9%).

11.5.22. The largest sector in terms of employment in North Lincolnshire was the manufacturing sector which accounted for 23.4% of employment and supported 18,000 jobs as of 2023. All three local authorities saw a higher proportion of employment supported by construction than regional and national figures. For Doncaster construction supported 6.7% of employment, in North Lincolnshire 6.5% and in East Riding of Yorkshire 5.0%, compared to 4.9% regionally and 4.8% nationally.

Table 11.13: Employment by Sector, 2023

Sector	Doncaster	North Lincolnshire	East Riding of Yorkshire	Yorkshire & The Humber	England
Agriculture, mining, utilities etc.	1.7%	3.6%	6.1%	2.5%	2.3%
Manufacturing	8.2%	23.4%	13.6%	10.6%	7.3%
Construction	6.7%	6.5%	5.0%	4.9%	4.8%
Wholesale & retail	15.7%	14.0%	14.7%	14.6%	13.7%
Transport & storage	12.7%	9.1%	5.7%	5.8%	5.1%
Accommodation & food services	6.0%	5.8%	9.3%	7.6%	7.8%
Information & communication	1.5%	0.6%	2.2%	2.6%	4.7%
Business, financial & professional services	14.8%	11.0%	13.1%	19.7%	23.9%
Public admin, education & health	29.2%	22.1%	26.6%	28.0%	25.9%
Arts, entertainment, recreation & other services	3.4%	3.9%	3.6%	3.7%	4.6%

Source: ONS, Business Register & Employment Survey

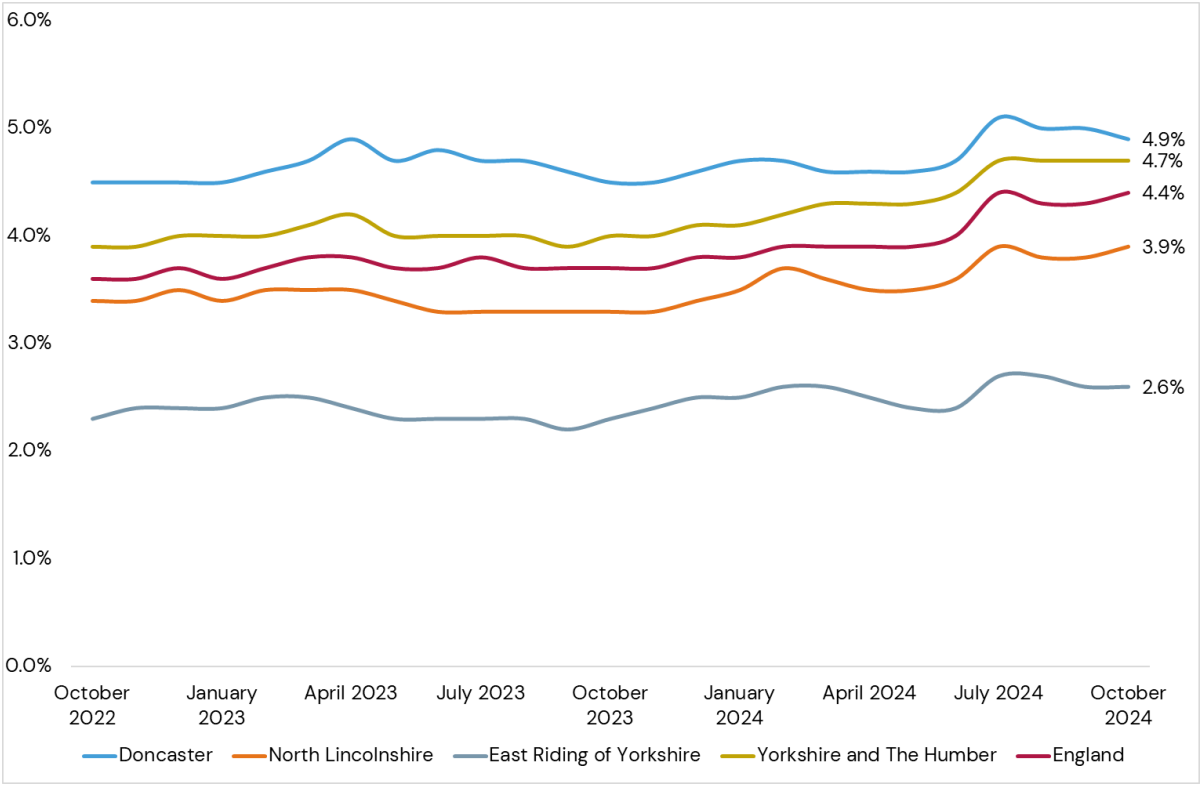
Unemployment

11.5.23. The claimant count records the number of people claiming Jobseeker's Allowance plus those who claim Universal Credit and are required to seek work and be available for work.

11.5.24. **Figure 11.7** shows the claimant count as a proportion of people aged 16-64 in Doncaster, North Lincolnshire, Yorkshire & The Humber and England for the period October 2022-October 2024 for all residents aged 16+.

11.5.25. In all three local authorities and comparator areas the claimant count has increased between October 2022 and October 2024. In Doncaster it has increased from 4.5% in 2022 to 4.9% in 2024, in North Lincolnshire it has increased from 3.4% to 3.9% and in East Riding of Yorkshire it has increased from 2.3% to 2.6%. The claimant count in Doncaster is above the regional figure (4.7%) and the national figure (4.4%), whilst the count is lower in both North Lincolnshire and East Riding of Yorkshire.

Figure 11.7: Claimant Count as a Proportion of Working Age (16-64) Population, October 2022-October 2024



Source: ONS, Claimant Count

Business Numbers

11.5.26. **Table 11.14** shows the change in the number of businesses in Doncaster, North Lincolnshire, and East Riding of Yorkshire between 2014 and 2024. It also presents the change for comparator areas of Yorkshire & The Humber and England. The number of businesses in Doncaster grew by 36.8% from 2014-24, equating to 3,190new companies. This was higher than the growth seen in North Lincolnshire (9.9%), East Riding of Yorkshire (12.6%), Yorkshire & The Humber (17.2%) and England (17.8%).

Table 11.14: Change in Business Numbers, 2014-24

	2014	2024	Absolute Change	% Change
Doncaster	8,670	11,860	3,190	36.8%
North Lincolnshire	14,355	15,780	1,425	9.9%
East Riding of Yorkshire	6,060	6,825	765	12.6%
Yorkshire & The Humber	192,605	225,715	33,110	17.2%
England	2,322,375	2,735,615	413,240	17.8%

Source: ONS, UK Business Count

Commuting

11.5.27. Based on data from the 2021 Census, there were 111,421 people that lived and worked within Doncaster. There were a further 23,067 people that worked in Doncaster but lived elsewhere. The top origin destinations for commuters were Rotherham (5,881), Bassetlaw (3,091), and Barnsley (2,607). There were also 26,436 people that lived in Doncaster but traveled elsewhere for work, the top destinations commuters traveled to from Doncaster were Rotherham (6,233),

Wakefield (3,199) and Sheffield (3,080). With 23,067 in-commuters and 23,067 out-commuters, Doncaster had a net outflow of 3,369commuters.

11.5.28. In North Lincolnshire there were 63,435people that lived and worked within the district (Census 2021). There were a further 14,529 people that worked in North Lincolnshire but lived elsewhere. The top origin destinations for commuters were North East Lincolnshire (4,123), Kingston Upon Hull (2,598), and West Lindsey (2,155). There were also 12,786 people that lived in North Lincolnshire but traveled elsewhere for work, the top destinations commuters traveled to were North East Lincolnshire (2,767), Doncaster (1,917), and Kingston upon Hull (1,857). With 14,529 in-commuters and 12,786 out-commuters, North Lincolnshire had a net inflow of 1,743 commuters.

11.5.29. In East Riding of Yorkshire there were 117,371 people that lived and worked within the District (Census 2021). There were 29,285 people who worked in East Riding of Yorkshire but lived elsewhere. The top origin destinations were Kingston upon Hull (18,706), York (1,607) and North Lincolnshire (1,524). There were also 38,748 people who lived in East Riding of Yorkshire and worked elsewhere. The top destinations workers travelled to were Kingston Upon Hull (21,836), York (4,308) and Selby (2,268). With 29,285 in-commuters and 38,748 out-commuters, there was a net outflow of 9,463 commuters.

Tourism and Visitor Economy

11.5.30. The Yorkshire and Humber Business Plan 2021/22[13] published by the Yorkshire Leaders Board identified six priority areas to focus on, including a priority area related to Tourism, hospitality and culture. The plan outlines the aim to restore and rebuild the hospitality leisure and tourism offer and use the area's assets to capitalise on a thriving visitor economy and ensuring this reflects the diverse needs of the region.

11.5.31. City of Doncaster Council published a visitor economy strategy for the years 2019-2022[14]. This strategy outlined that between 2015 and 2017 there were 330,000 trips to Doncaster which generated around 643,000 overnight stays, spending around £3.6million and supporting 14,000 jobs in the Doncaster economy. The vision for Doncaster was that by 2022 it would be recognised as a major visitor destination within Yorkshire.

11.5.32. The 2016 Accommodation Stock Audit published by Visit Britain[15] measures the volume, type and category of accommodation across England. The data is available at a local authority level, therefore enabling analysis of accommodation availability across Doncaster, North Lincolnshire and East Riding of Yorkshire.

11.5.33. To assess occupancy levels over the course of the year, national occupancy rates have been used. For serviced accommodation these have been sourced from 2023 Visit Britain data[16], and for non-serviced accommodation these have been sourced from a 2019 report for the UK Caravan & Camping Alliance[17]. Serviced accommodation occupancy is at its lowest in January,

[13] Yorkshire and Humber Business Plan 2021/22, December 2021. Available at: Business-Plan-21-22_PRINT.pdf

[14] Visitor Economy Strategy, City of Doncaster Council. 2019.

[15] Accommodation Stock Audit. Visit Britain, 2016. Available at: Accommodation Stock Audit | VisitBritain

[16] Accommodation Occupancy: Latest Results. Visit Britain, 2023. Available at: https://www.visitbritain.org/accommodation-occupancy-latest-results.

[17] Pitching the Value, 2019 Economic Benefit Report: Holiday Parks and Campsites UK. Report for the UK Caravan & Camping Alliance, February 2019. Available at: https://britishdestinations.files.wordpress.com/2019/04/2019-economic-benefits-report-holiday-parks-and-campsites-uk-final-report.pdf

with a figure of 60%, whilst it is at its highest in June and July, during which occupancy reaches 79%. For serviced accommodation occupancy is also lowest in January with a figure of 11%, but peaks in August with an occupancy rate of 70%.

11.5.34. The accommodation stock data show that there were 6,888 bedspaces in Doncaster, consisting of 5,514 serviced bedspaces and 1,374 non-serviced bedspaces. Applying the occupancy rates to these figures means it is possible to estimate how many bedspaces would be available each month in Doncaster. When occupancy is as its lowest in January, there would be 3,460 bedspaces occupied within Doncaster, with 3,428 bedspaces available across both serviced and non-serviced accommodation stock. Occupancy peaks in July when combining serviced and non-serviced bedspaces, with 5,277 bedspaces occupied in Doncaster, leaving 1,611 bedspaces available. Further detail is set out in **Table 11.15**.

11.5.35. In North Lincolnshire, there were 3,508 bedspaces, consisting of 1,361 serviced bedspaces and 2,147 non-serviced bedspaces. When occupancy is as its lowest in January, there would be 1,053 bedspaces occupied within North Lincolnshire, with 2,455 bedspaces available across both serviced and non-serviced accommodation stock. Occupancy peaks in July, with 2,514 bedspaces occupied, leaving 994 bedspaces available. Further detail is set out in **Table 11.16**.

11.5.36. In East Riding of Yorkshire, there were 23,215 bedspaces, consisting of 9,760 serviced bedspaces and 13,455 non-serviced bedspaces. When occupancy is as its lowest in January, there would be 7,336 bedspaces occupied within East Riding of Yorkshire, with 15,879 bedspaces available across both serviced and non-serviced accommodation stock. Occupancy peaks in July, with 16,725 bedspaces occupied, leaving 6,490 bedspaces available. Further detail is set out in **Table 11.17**.

11.5.37. **Table 11.18** sets out the data for all three authorities combined. When combining the number of bedspaces across all three authorities, there are a total of 33,611 bedspaces, with 16,635 serviced bedspaces and 16,976 non-serviced bedspaces. In January, the combined number of bedspaces occupied is around 11,848 with 21,763 bedspaces available. In July, there would be around 24,516 bedspaces occupied and 9,095 bedspaces available.

Table 11.15: Applied occupancy rates of paid accommodation in Doncaster

Accommodation type		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Serviced	Serviced Accommodation bedspaces (2016)	5,514	5,514	5,514	5,514	5,514	5,514	5,514	5,514	5,514	5,514	5,514	5,514
	Occupancy rate (2023)	60%	69%	73%	75%	76%	79%	79%	74%	77%	77%	75%	68%
	Actual number of bedspaces occupied	3,308	3,805	4,025	4,136	4,191	4,356	4,356	4,080	4,246	4,246	4,136	3,750
Non-Serviced	Non-Serviced Accommodation bedspaces (2016)	1,374	1,374	1,374	1,374	1,374	1,374	1,374	1,374	1,374	1,374	1,374	1,374
	Occupancy rate (2019)	11%	13%	30%	47%	52%	58%	67%	70%	54%	39%	22%	12%
	Actual number of bedspaces occupied	151	179	412	646	714	797	921	962	742	536	302	165
Total	Total number of bedspaces	6,888	6,888	6,888	6,888	6,888	6,888	6,888	6,888	6,888	6,888	6,888	6,888
	Actual number of bedspaces occupied	3,460	3,983	4,437	4,781	4,905	5,153	5,277	5,042	4,988	4,782	4,438	3,914
	Total available bedspaces	3,428	2,905	2,451	2,107	1,983	1,735	1,611	1,846	1,900	2,106	2,450	2,974

Source: Visit Britain, UK Caravan & Camping Alliance

Table 11.16: Applied occupancy rates of paid accommodation in North Lincolnshire

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Serviced	Serviced Accommodation bedspaces (2016)	1,361	1,361	1,361	1,361	1,361	1,361	1,361	1,361	1,361	1,361	1,361	1,361
	Occupancy rate (2023)	60%	69%	73%	75%	76%	79%	79%	74%	77%	77%	75%	68%
	Actual number of bedspaces occupied	817	939	994	1,021	1,034	1,075	1,075	1,007	1,048	1,048	1,021	925
Non-Serviced	Non-Serviced Accommodation bedspaces (2016)	2,147	2,147	2,147	2,147	2,147	2,147	2,147	2,147	2,147	2,147	2,147	2,147
	Occupancy rate (2019)	11%	13%	30%	47%	52%	58%	67%	70%	54%	39%	22%	12%
	Actual number of bedspaces occupied	236	279	644	1009	1116	1245	1438	1503	1159	837	472	258
Total	Total number of bedspaces	3,508	3,508	3,508	3,508	3,508	3,508	3,508	3,508	3,508	3,508	3,508	3,508
	Actual number of bedspaces occupied	1,053	1,218	1,638	2,030	2,151	2,320	2,514	2,510	2,207	1,885	1,493	1,183
	Total available bedspaces	2,455	2,290	1,870	1,478	1,357	1,188	994	998	1,301	1,623	2,015	2,325

Source: Visit Britain, UK Caravan & Camping Alliance

Table 11.17: Applied occupancy rates of paid accommodation in East Riding

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Serviced	Serviced Accommodation bedspaces (2016)	9,760	9,760	9,760	9,760	9,760	9,760	9,760	9,760	9,760	9,760	9,760	9,760
	Occupancy rate (2023)	60%	69%	73%	75%	76%	79%	79%	74%	77%	77%	75%	68%
	Actual number of bedspaces occupied	5,856	6,734	7,125	7,320	7,418	7,710	7,710	7,222	7,515	7,515	7,320	6,637
Non-Serviced	Non-Serviced Accommodation bedspaces (2016)	13,455	13,455	13,455	13,455	13,455	13,455	13,455	13,455	13,455	13,455	13,455	13,455
	Occupancy rate (2023)	11%	13%	30%	47%	52%	58%	67%	70%	54%	39%	22%	12%
	Actual number of bedspaces occupied	1,480	1,749	4,037	6,324	6,997	7,804	9,015	9,419	7,266	5,247	2,960	1,615
Total	Total number of bedspaces	23,215	23,215	23,215	23,215	23,215	23,215	23,215	23,215	23,215	23,215	23,215	23,215
	Actual number of bedspaces occupied	7,336	8,484	11,161	13,644	14,414	15,514	16,725	16,641	14,781	12,763	10,280	8,251
	Total available bedspaces	15,879	14,731	12,054	9,571	8,801	7,701	6,490	6,574	8,434	10,452	12,935	14,964

Source: Visit Britain, UK Caravan & Camping Alliance

Table 11.18: Applied occupancy rates of paid accommodation in Doncaster, North Lincolnshire and East Riding of Yorkshire Combined

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Serviced	Serviced Accommodation bedspaces (2016)	16,635	16,635	16,635	16,635	16,635	16,635	16,635	16,635	16,635	16,635	16,635	16,635
	Occupancy rate (2023)	60%	69%	73%	75%	76%	79%	79%	74%	77%	77%	75%	68%
	Actual number of bedspaces occupied	9,981	11,478	12,144	12,476	12,643	13,142	13,142	12,310	12,809	12,809	12,476	11,312
Non-Serviced	Non-Serviced Accommodation bedspaces (2016)	16,976	16,976	16,976	16,976	16,976	16,976	16,976	16,976	16,976	16,976	16,976	16,976
	Occupancy rate (2019)	11%	13%	30%	47%	52%	58%	67%	70%	54%	39%	22%	12%
	Actual number of bedspaces occupied	1,867	2,207	5,093	7,979	8,828	9,846	11,374	11,883	9,167	6,621	3,735	2,037
Total	Total number of bedspaces	33,611	33,611	33,611	33,611	33,611	33,611	33,611	33,611	33,611	33,611	33,611	33,611
	Actual number of bedspaces occupied	11,848	13,685	17,236	20,455	21,470	22,988	24,516	24,193	21,976	19,430	16,211	13,349
	Total available bedspaces	21,763	19,926	16,375	13,156	12,141	10,623	9,095	9,418	11,635	14,181	17,400	20,262

Source: Visit Britain, UK Caravan & Camping Alliance

11.6. Assessment of Likely Significant Effects

Construction

Employment

11.6.1. Economic benefits will arise through the provision of temporary jobs during the construction phase at the Site. Based on previous experience of similar projects, it is estimated that the total cost of the Scheme is in the region of £500million[18].

11.6.2. Investment in the Scheme is likely to create opportunities for local businesses through the supply chain, during the construction process. It is estimated that there will be around 640 on-site jobs[19] generated across the Scheme during the construction period, which is estimated to be up to 30-months[20]. In terms of solar powered growth in the UK report[21], Cebr give an employment multiplier for large-scale solar PV investments of 2.33 – i.e. for every job supported on-site, 1.33 indirect/induced jobs are supported in the wider economy. Applying this multiplier to the 640 on-site jobs, the Scheme could support 851 temporary jobs in the wider economy during the 30-month build phase.

11.6.3. In total, the Scheme could support 1,491 temporary jobs, both direct jobs on-site and indirect/induced roles in the wider economy, during the 30-month construction period.

11.6.4. The significance of construction phase effect in respect of employment is assessed as follows:

- The sensitivity of the receptor (employment in construction and other sectors of the economy in Doncaster, North Lincolnshire, and East Riding of Yorkshire) is assessed as being **medium**, in line with the criteria set out in **Table 11.2.** Construction employment represents around6.7% of employment in Doncaster, 6.5% in North Lincolnshire, and 5% in East Riding of Yorkshire. However, this is set in the context that employment growth between 2015 and 2023 in all three authorities was below national levels

- The magnitude of the impact is assessed as **medium**, in line with the criteria in **Table 11.3**. The 1,4911 jobs per annum supported by the construction phase (direct and indirect) represents a considerable increase in the number of new employment opportunities for local residents but is considered medium in magnitude due to the temporary nature of the change. Nevertheless, overall, the Scheme would result in a boost to the availability of jobs for workers in these authorities, even accounting for the fact that employment opportunities will also be taken by people from outside Doncaster, North Lincolnshire, and East Riding of Yorkshire.

[18] Estimated cost of Scheme provided by Applicant.

[19] Estimated number of jobs associated with the construction phase (0.8 jobs per MW) of the Scheme is based on a review of the number of construction workers generated as a result of a solar farms previously assessed by Pegasus, as well as benchmarking of publicly available information in other similar scale projects.

[20] Duration provided by Applicant.

[21] Solar powered growth in the UK – the macroeconomic benefits for the UK of investment in solar PV: Cebr (report for the Solar Trade Association), September 2014.

- The significance of the temporary effect is therefore considered to be **moderate beneficial** in Doncaster, North Lincolnshire, and East Riding of Yorkshire which is **significant** in EIA terms.

Economic Contribution

11.6.5. Another way of looking at the economic impact of the construction phase is to calculate the contribution a development makes to wealth creation, as measured by the increase in the value of goods and services generated within an area. This can be done by looking at the increase in gross value added (GVA), a common proxy for economic output. Using ONS data, it is possible to calculate GVA per employee by sector at a regional level. The Cebr report (Cebr, September 2014) gives a GVA multiplier of 2.39. Factoring this into the analysis, the overall GVA impact associated with the construction phase is estimated at £118million per annum, which equates to £294.9million over the 30-month build timeframe[22].

11.6.6. The significance of construction phase effect in respect of economic contribution is assessed as follows:

- The sensitivity of the receptor (economic contribution in construction and other sectors of the economy in Doncaster, North Lincolnshire, and East Riding of Yorkshire) is assessed as being **medium**, in line with the criteria set out in **Table 11.2**. In Doncaster, construction supported around 9.8% of GVA, in North Lincolnshire this figure was 7.1%, and in East Riding of Yorkshire 5.9% of GVA was supported by the construction sector. The total combined value of construction across the three authorities is around £1.7billion per annum.

- The magnitude of the impact is assessed as **high**, in line with the criteria in **Table 11.3**. The £118million per annum in GVA generated by the construction phase would cause an uplift of 7.1% in the total construction GVA of the three authorities, although it should be noted that a proportion of the GVA will be in other sectors when taking into account the multiplier effect.

- The significance of the temporary effect is therefore considered to be **major beneficial** in Doncaster, North Lincolnshire, and East Riding of Yorkshire, which is **significant** in EIA terms.

Accommodation Demand

11.6.7. A total of up to 640 (direct) construction workers are forecast to be on Site during the construction period. To ensure that there will be sufficient capacity throughout the construction phase in respect of local accommodation, the total number of direct on-site construction workers is used as the basis of the assessment and it is assumed that all workers would require accommodation. This is unlikely to be the case in reality as many workers may live locally and travel to the site each day. It is also unlikely that there would be 640 workers on site every month, this is more likely to be a peak number of workers which would only occur for a limited number of months, however this assessment assumes that there are 640 workers every month. This ensures any worst-case potential adverse impacts are assessed before assessing the benefits of boosting local hotel occupancy rates.

[22] GVA is calculated by multiplying the GVA per job per annum in construction in Yorkshire and Humber region in 2022 (£77,120) by the total number of direct jobs generated by the scheme (estimated to be 640). The multiplier is applied (Cebr, September 2014) to identify the multiplier GVA. The two amounts are combined to identify the total annual GVA associated with the construction phase.

11.6.8. Given that the Site sits within both Doncaster and North Lincolnshire administrative boundaries, and is extremely close to East Riding of Yorkshire administrative boundary, an assessment on accommodation demand is presented in relation to all three Districts, as well as in relation to a total assessment for all three authorities combined. Again, to avoid potential adverse effects, accommodation of all construction workers is presented for the authorities, rather than assuming proportion to be accommodated across the three.

Doncaster

11.6.9. **Table 11.19** sets out the impact of accommodating the 640 construction workers within Doncaster. Across all twelve months there would be spare capacity following the housing of construction workers. Occupancy levels would peak in July when 86% of bedspaces would be occupied, leaving 971 bedspaces available. Occupancy would be lowest in January with 60% of bedspaces occupied and 2,788 available. Therefore, in the unlikely event that all construction workers require accommodation within Doncaster, there would be sufficient capacity.

North Lincolnshire

11.6.10. **Table 11.20** sets out the impact of accommodating the 640 construction workers within North Lincolnshire. Across all twelve months there would be spare capacity following the housing of construction workers. Occupancy levels would peak in July when 90% of bedspaces would be occupied, leaving 354 bedspaces available. Occupancy would be lowest in January with 48% of bedspaces occupied and 1,815 available. Therefore, if all construction workers require accommodation within North Lincolnshire, there would be sufficient capacity.

East Riding

11.6.11. **Table 11.21** sets out the impact of accommodating the 640 construction workers within East Riding of Yorkshire. Across all twelve months there would be spare capacity following the housing of construction workers. Occupancy levels would peak in July when 75% of bedspaces would be occupied, leaving 5,850 bedspaces available. Occupancy would be lowest in January with 34% of bedspaces occupied and 15,239 available. Therefore, if all construction workers require accommodation within East Riding of Yorkshire, there would be sufficient capacity.

Combined Capacity

11.6.12. **Table 11.22** sets out the impact on combined bedspace capacity across the three districts of accommodating the 640 construction workers. It is more likely that workers are accommodated across all three districts, rather than only in one, therefore the combined capacity is an important consideration. Across all twelve months there would be spare capacity following the housing of construction workers. Occupancy levels would peak in July when 75% of bedspaces would be occupied, leaving 8,445 bedspaces available. Occupancy would be lowest in January with 37% of bedspaces occupied and 21,123 available. Therefore, if workers were accommodated within all three districts there would be sufficient capacity throughout the year. As demonstrated in the text above and tables below, there would be spare capacity of bedspaces throughout the year following the accommodation of workers, both for each District in isolation and for all three Districts combined. This means that there would still be capacity for additional tourist visits throughout the year, ensuring that local hospitality businesses are not adversely affected by housing the construction workers and the local tourism industry can continue to grow.

11.6.13. As the construction workers can be accommodated with no adverse effects, this means that local accommodation facilities would benefit from the bedspaces being filled throughout the year by the construction workers. This enables local businesses to be boosted through increased occupancy rates and revenue during the construction phase of the Scheme.

11.6.14. Increasing the occupancy rates of accommodation services within Doncaster, North Lincolnshire and East Riding of Yorkshire will help with the local and regional aims of growing local tourism. The filled bedspaces which would otherwise be empty and the economic benefits, such as local spend, generated by the construction phase of the Scheme would help to realise the key aims set out in relevant local policy such as the Yorkshire and Humber Business Plan and the Visitor Economy Strategy for the City of Doncaster.

11.6.15. The significance of construction phase accommodation effect is assessed against two receptors. Firstly, the impact on the local tourism sector is assessed, the increased occupancy rates could benefit local accommodation providers. Secondly, the impact on visitors is assessed, given that the same increased occupancy rates could reduce the ability of other guests to stay in the area.

11.6.16. The significance of the construction phase accommodation effect on the local tourism sector is as follows:

- The sensitivity of the receptor in Doncaster, North Lincolnshire and East Riding is assessed as being **medium**, in line with the criteria set out in **Table 11.2**. Tourism is a priority area for growth in the region, however there is a good level of bedspace capacity within each district in isolation and combined, and occupancy rates are low during some months.

- The magnitude of the impact is assessed as **medium**, in line with the criteria in **Table 11.3**. The construction workers would represent a moderate increase in the number of guests who would stay in local accommodation, raising occupancy rates and generating benefits for the local economy.

11.6.17. The significance of the temporary effect is therefore considered to be **moderate beneficial,** which is **significant** in EIA terms.The significance of the construction phase accommodation effect on visitors is as follows:

- The sensitivity of the receptor in Doncaster, North Lincolnshire and East Riding is assessed as being **low**, in line with the criteria set out in **Table 11.2**. Occupancy rates are low in some months throughout the year and there is spare capacity across all districts throughout the year, ensuring additional guests are able to stay in local accommodation.

- The magnitude of the impact is assessed as **medium**, in line with the criteria in **Table 11.3**. The construction workers would represent a moderate increase in the number of guests who would stay in local accommodation.

- The significance of the temporary effect is therefore considered to be **minor to moderate adverse,** which is not significant in EIA terms.

Table 11.19: Assumed Occupancy of Accommodation including housing of construction workers in Doncaster

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Total number of bedspaces	6,888	6,888	6,888	6,888	6,888	6,888	6,888	6,888	6,888	6,888	6,888	6,888
Actual number of bedspaces occupied	3,460	3,983	4,437	4,781	4,905	5,153	5,277	5,042	4,988	4,782	4,438	3,914
Total available bedspaces	3,428	2,905	2,451	2,107	1,983	1,735	1,611	1,846	1,900	2,106	2,450	2,974
Estimated no. construction workers	640	640	640	640	640	640	640	640	640	640	640	640
Construction workers + occupied bedspaces	4,100	4,623	5,077	5,421	5,545	5,793	5,917	5,682	5,628	5,422	5,078	4,554
Room occupancy incl. construction workers	60%	67%	74%	79%	81%	84%	86%	82%	82%	79%	74%	66%
Actual remaining bedspaces	2,788	2,265	1,811	1,467	1,343	1,095	971	1,206	1,260	1,466	1,810	2,334

Source: Visit Britain, UK Caravan & Camping Alliance

Table 11.20: Assumed Occupancy of Accommodation including housing of construction workers in North Lincolnshire

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Total number of bedspaces	3,508	3,508	3,508	3,508	3,508	3,508	3,508	3,508	3,508	3,508	3,508	3,508
Actual number of bedspaces occupied	1,053	1,218	1,638	2,030	2,151	2,320	2,514	2,510	2,207	1,885	1,493	1,183
Total available bedspaces	2,455	2,290	1,870	1,478	1,357	1,188	994	998	1,301	1,623	2,015	2,325
Estimated no. construction workers	640	640	640	640	640	640	640	640	640	640	640	640
Construction workers + occupied bedspaces	1,693	1,858	2,278	2,670	2,791	2,960	3,154	3,150	2,847	2,525	2,133	1,823
Room occupancy incl. construction workers	48%	53%	65%	76%	80%	84%	90%	90%	81%	72%	61%	52%
Actual remaining bedspaces	1,815	1,650	1,230	838	717	548	354	358	661	983	1,375	1,685

Source: Visit Britain, UK Caravan & Camping Alliance

Table 11.21: Assumed Occupancy of Accommodation including housing of construction workers in East Riding of Yorkshire

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Total number of bedspaces	23,215	23,215	23,215	23,215	23,215	23,215	23,215	23,215	23,215	23,215	23,215	23,215
Actual number of bedspaces occupied	7,336	8,484	11,161	13,644	14,414	15,514	16,725	16,641	14,781	12,763	10,280	8,251
Total available bedspaces	15,879	14,731	12,054	9,571	8,801	7,701	6,490	6,574	8,434	10,452	12,935	14,964
Estimated no. construction workers	640	640	640	640	640	640	640	640	640	640	640	640
Construction workers + occupied bedspaces	7,976	9,124	11,801	14,284	15,054	16,154	17,365	17,281	15,421	13,403	10,920	8,891
Room occupancy incl. construction workers	34%	39%	51%	62%	65%	70%	75%	74%	66%	58%	47%	38%
Actual remaining bedspaces	15,239	14,091	11,414	8,931	8,161	7,061	5,850	5,934	7,794	9,812	12,295	14,324

Source: Visit Britain, UK Caravan & Camping Alliance

Table 11.22: Assumed Occupancy of Accommodation including housing of construction workers across all three districts

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Total number of bedspaces	33,611	33,611	33,611	33,611	33,611	33,611	33,611	33,611	33,611	33,611	33,611	33,611
Actual number of bedspaces occupied	11,848	13,685	17,236	20,455	21,470	22,988	24,516	24,193	21,976	19,430	16,211	13,349
Total available bedspaces	21,763	19,926	16,375	13,156	12,141	10,623	9,095	9,418	11,635	14,181	17,400	20,262
Estimated no. construction workers	640	640	640	640	640	640	640	640	640	640	640	640
Construction workers + occupied bedspaces	12,488	14,325	17,876	21,095	22,110	23,628	25,156	24,833	22,616	20,070	16,851	13,989
Room occupancy incl. construction workers	37%	43%	53%	63%	66%	70%	75%	74%	67%	60%	50%	42%
Actual remaining bedspaces	21,123	19,286	15,735	12,516	11,501	9,983	8,455	8,778	10,995	13,541	16,760	19,622

Source: Visit Britain, UK Caravan & Camping Alliance

Operation

Employment

11.6.18. Based on information provided by the Applicant, current staffing levels of existing on-site operations are not available, however, it is understood that there will not be any redundancies as a result of the operational phase of the scheme.

11.6.19. Based on information provided by the Applicant, it is estimated that once operational there will be up to 10 FTE jobs supported on-site[23]. This includes the creation of 2 no. sheep farming roles. Applying the multiplier, as well as the jobs on-site, there will be an estimated 13 jobs supported in the wider economy.

11.6.20. In total, once operational the scheme will support an estimated 23 jobs.

11.6.21. The significance of the operational phase effect in respect of employment has been assessed as follows:

- The sensitivity of the receptor (labour market of Doncaster, North Lincolnshire, and East Riding of Yorkshire) is considered to be **medium**, in line with the criteria set out in **Table 11.2**. Between 2015 and 2023 Doncaster saw 6.4% growth in jobs, North Lincolnshire saw jobs growth of 4.1% and East Riding of Yorkshire saw growth of 6.9%, all of which were below national growth.

- The magnitude of the impact is identified as being **low**, in line with the criteria in **Table 11.3**. The number of on-site jobs created in the operational phase would represent only a small increase in current employment levels, but the employment supported by the operational phase will be long-term.

- The significance of the operational effect is therefore considered to be **minor to moderate beneficial** in Doncaster and North Lincolnshire, which is **not significant** in EIA terms.

Economic Contribution

11.6.22. Continued agricultural use will be secured by sheep grazing on the land. There will also be the provision of a secure income to the various farming enterprises through the rent of land.

11.6.23. The contribution of the operational phase of the scheme to economic output has been calculated by taking the job creation associated with the scheme and multiplying this by an estimate of average levels of GVA per employee for all jobs in Yorkshire & The Humber.

11.6.24. It is estimated that once operational and fully occupied, the additional GVA supported by the scheme is estimated to be around £1.4million per annum, allowing for multiplier effects. Over the 40-year operational lifespan of the solar farm the GVA generated is estimated to be around £31.3million (present value).

[23] Estimated based on Pegasus Group previous experience as well as information from the Applicant.

11.6.25. The significance of the operational phase effect in respect of contribution to economic output has been assessed as follows:

- The sensitivity of the receptor in Doncaster, North Lincolnshire and East Riding of Yorkshire, is considered to be **low**, in line with the criteria set out in **Table 11.2**. Between 2012 and 2022 all three local authorities saw GVA increase by a greater proportion than regional and national figures. The magnitude of the impact is identified as being **low**, in line with the criteria in **Table 11.3**. There will be a limited uplift in GVA for Doncaster, North Lincolnshire, and East Riding of Yorkshire in comparison to the total GVA generated per annum in each district.

- The significance of the operational effect is therefore considered to be **minor beneficial** in Doncaster and North Lincolnshire, which is **not significant** in EIA terms.

Business Rates

11.6.26. Business rates are an important economic contributor to an area. It is estimated that the solar project element of the proposed scheme could generate around £0.9million per annum in business rates. Over the intended 40-year lifespan of the scheme, business rates generated could total around £19.8million (present value).

11.6.27. Business rates are collated into a central government pot and shared out, as such, it is not possible to ascertain the exact split between districts and therefore the amount of business rates generated is considered as a single amount in this report.

11.6.28. The significance of the operational phase effect in respect of business rates has been assessed as follows:

- The sensitivity of the receptor in Doncaster and North Lincolnshire is considered to be **medium**, in line with the criteria set out in **Table 11.2**. Between 2015 and 2023 all three authorities saw jobs growth below the national figure and have seen claimant count rise between October 2022 and October 2024.

- The magnitude of the impact is identified as being **high**, in line with the criteria in **Table 11.3**. Given agricultural land and buildings are exempt from business rates, the business rates revenue generated from the scheme would represent a considerable uplift on current activities.

- The significance of the operational effect is therefore considered to be **major beneficial** in Doncaster, North Lincolnshire, and East Riding of Yorkshire which is **significant** in EIA terms.

Decommissioning

Employment

11.6.29. Economic benefits will arise through the provision of temporary jobs during the decommissioning phase at the Site. It is estimated that there will be around 320 on-site jobs[24] generated across the scheme during the decommissioning phase which is expected to last for around 2-years[25]. Applying the same multiplier as previously used to the 320 on-site jobs the scheme could support 426 temporary jobs in the wider economy during the 2-year decommissioning phase.

11.6.30. In total, the scheme could support 746 temporary jobs, both direct jobs on-site and indirect/induced roles in the wider economy, during the 2-year decommissioning period.

11.6.31. The significance of decommissioning phase effect in respect of employment is assessed as follows:

- The sensitivity of the receptor (employment in construction and other sectors of the economy in Doncaster, North Lincolnshire, and East Riding of Yorkshire) is assessed as being **medium**, in line with the criteria set out in **Table 11.2.** Construction employment represents around6.7% of employment in Doncaster, 6.5% in North Lincolnshire, and 5% in East Riding of Yorkshire. However, this is set in the context that employment growth between 2015 and 2023 in all three authorities was below national levels.

- The magnitude of the impact is assessed as **medium**, in line with the criteria in **Table 11.3**. The 320 jobs per annum supported by the decommissioning phase (direct) represents a considerable increase in the number of new employment opportunities for local residents, but is considered medium in magnitude due to the temporary nature of the change. Nevertheless, overall, the scheme would result in a boost to the availability of jobs for workers in these authorities.

- The significance of the temporary effect is therefore considered to be **moderate beneficial** in Doncaster, North Lincolnshire, and East Riding of Yorkshire, which is **significant** in EIA terms.

Economic Contribution

11.6.32. Using the same method as before to calculate GVA, it is estimated that over the approximate 2-year decommissioning phase the overall GVA impact associated with the decommissioning phase is estimated at £59million per annum over the 2-year decommissioning timeframe.

11.6.33. The significance of decommissioning phase effect in respect of employment is assessed as follows:

[24] Estimated number of jobs associated with the decommissioning phase of the Scheme is based on a review of the number of workers generated as a result of a solar farms previously assessed by Pegasus, as well as information provided by prospective contractors in respect of previous schemes.

[25] Assumed to mirror the construction period duration.

- The sensitivity of the receptor (economic contribution in construction and other sectors of the economy in Doncaster, North Lincolnshire, and East Riding of Yorkshire) is assessed as being **medium**, in line with the criteria set out in **Table 11.2**. In Doncaster, construction supported around 9.8% of GVA, in North Lincolnshire this figure was 7.1%, and in East Riding of Yorkshire 5.9% of GVA was supported by the construction sector. The total combined value of construction across the three authorities is around £1.7billion per annum.

- The magnitude of the impact is assessed as **medium**, in line with the criteria in **Table 11.3**. The £59million in annual GVA generated by the decommissioning phase would cause an uplift of 3.5% in the total construction GVA of the three authorities, although it should be noted that a proportion of the GVA will be in other sectors when taking into account the multiplier effect.

- The significance of the temporary effect is therefore considered to be **moderate beneficial** in Doncaster and North Lincolnshire, which is **significant** in EIA terms.

Accommodation Demand

11.6.34. A total of up to 320 (direct) construction workers are forecast to be on Site during the decommissioning period. The same assumptions for assessment are used for the decommissioning phase as were used for the construction phase.

Doncaster

11.6.35. **Table 11.23** sets out the impact of accommodating the 320 decommissioning workers within Doncaster. Across all twelve months there would be spare capacity following the housing of construction workers. Occupancy levels would peak in July when 81% of bedspaces would be occupied, leaving 1,291 bedspaces available. Occupancy would be lowest in January with 54% of bedspaces occupied and 3,108 available. Therefore, in the unlikely event that all decommissioning workers require accommodation within Doncaster, there would be sufficient capacity.

North Lincolnshire

11.6.36. **Table 11.24** sets out the impact of accommodating the 320 decommissioning workers within North Lincolnshire. Across all twelve months there would be spare capacity following the housing of construction workers. Occupancy levels would peak in July when 81% of bedspaces would be occupied, leaving 674 bedspaces available. Occupancy would be lowest in January with 39% of bedspaces occupied and 2,135 available. Therefore, in the unlikely event that all decommissioning workers require accommodation within North Lincolnshire, there would be sufficient capacity.

East Riding

11.6.37. **Table 11.25** sets out the impact of accommodating the 320 decommissioning workers within East Riding of Yorkshire. Across all twelve months there would be spare capacity following the housing of construction workers. Occupancy levels would peak in July when 73% of bedspaces would be occupied, leaving 6,170 bedspaces available. Occupancy would be lowest in January with 33% of bedspaces occupied and 15,559 available. Therefore, in the unlikely event that all decommissioning workers require accommodation within East Riding of Yorkshire, there would be sufficient capacity.

Combined Capacity

11.6.38. **Table 11.26** sets out the impact on combined bedspace capacity across the three districts of accommodating the 320 decommissioning workers. It is more likely that workers are accommodated across all three districts, rather than only in one, therefore the combined capacity is an important consideration. Across all twelve months there would be spare capacity following the housing of construction workers. Occupancy levels would peak in July when 74% of bedspaces would be occupied, leaving 8,775 bedspaces available. Occupancy would be lowest in January with 36% of bedspaces occupied and 21,443 available. Therefore, if workers were accommodated within all three districts there would be sufficient capacity throughout the year.

11.6.39. Similarly to the construction phase of the Scheme, the decommissioning phase will raise occupancy rates of local accommodation services and generate economic benefits which will provide a boost to the local tourism industry.

11.6.40. The significance of decommissioning phase accommodation effect is assessed against two receptors. Firstly, the effect on the local tourism sector is assessed, the increased occupancy rates could benefit local accommodation providers. Secondly, the effect on visitors is assessed, given that the same increased occupancy rates could reduce the ability of other guests to stay in the area.

11.6.41. The significance of the decommissioning phase accommodation effect on the tourism sector is as follows:

- The sensitivity of the receptor in Doncaster, North Lincolnshire and East Riding is assessed as being **medium**, in line with the criteria set out in **Table 11.2**. Tourism is a priority area for growth in the region, however there is a good level of bedspace capacity within each district in isolation and combined and occupancy rates are low during some months.

- The magnitude of the impact is assessed as **medium**, in line with the criteria in **Table 11.3**. The workers would represent a moderate increase in the number of guests who would stay in local accommodation, raising occupancy rates and generating benefits for the local economy.

- The significance of the temporary effect is therefore considered to be **moderate beneficial,** which is **significant** in EIA terms.

11.6.42. The significance of the decommissioning phase accommodation effect on visitors is as follows:

- The sensitivity of the receptor in Doncaster, North Lincolnshire and East Riding is assessed as being **low**, in line with the criteria set out in **Table 11.2**. Occupancy rates are low in many months throughout the year and there is spare capacity across all districts throughout the year, ensuring additional guests are able to stay in local accommodation.

- The magnitude of the impact is assessed as **medium**, in line with the criteria in **Table 11.3**. The workers would represent a moderate increase in the number of guests who would stay in local accommodation.

- The significance of the temporary effect is therefore considered to be **minor to moderate adverse,** which is not significant in EIA terms.

Table 11.23: Assumed Occupancy of Accommodation including housing of decommissioning workers in Doncaster

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Total number of bedspaces	6,888	6,888	6,888	6,888	6,888	6,888	6,888	6,888	6,888	6,888	6,888	6,888
Actual number of bedspaces occupied	3,460	3,983	4,437	4,781	4,905	5,153	5,277	5,042	4,988	4,782	4,438	3,914
Total available bedspaces	3,428	2,905	2,451	2,107	1,983	1,735	1,611	1,846	1,900	2,106	2,450	2,974
Estimated no. construction workers	320	320	320	320	320	320	320	320	320	320	320	320
Construction workers + occupied bedspaces	3,780	4,303	4,757	5,101	5,225	5,473	5,597	5,362	5,308	5,102	4,758	4,234
Room occupancy incl. construction workers	55%	62%	69%	74%	76%	79%	81%	78%	77%	74%	69%	61%
Actual remaining bedspaces	3,108	2,585	2,131	1,787	1,663	1,415	1,291	1,526	1,580	1,786	2,130	2,654

Source: Visit Britain, UK Caravan & Camping Alliance

Table 11.24: Assumed Occupancy of Accommodation including housing of decommissioning workers in North Lincolnshire

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Total number of bedspaces	3,508	3,508	3,508	3,508	3,508	3,508	3,508	3,508	3,508	3,508	3,508	3,508
Actual number of bedspaces occupied	1,053	1,218	1,638	2,030	2,151	2,320	2,514	2,510	2,207	1,885	1,493	1,183
Total available bedspaces	2,455	2,290	1,870	1,478	1,357	1,188	994	998	1,301	1,623	2,015	2,325
Estimated no. construction workers	320	320	320	320	320	320	320	320	320	320	320	320
Construction workers + occupied bedspaces	1,373	1,538	1,958	2,350	2,471	2,640	2,834	2,830	2,527	2,205	1,813	1,503
Room occupancy incl. construction workers	39%	44%	56%	67%	70%	75%	81%	81%	72%	63%	52%	43%
Actual remaining bedspaces	2,135	1,970	1,550	1,158	1,037	868	674	678	981	1,303	1,695	2,005

Source: Visit Britain, UK Caravan & Camping Alliance

Table 11.25: Assumed Occupancy of Accommodation including housing of decommissioning workers in East Riding of Yorkshire

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Total number of bedspaces	23,215	23,215	23,215	23,215	23,215	23,215	23,215	23,215	23,215	23,215	23,215	23,215
Actual number of bedspaces occupied	7,336	8,484	11,161	13,644	14,414	15,514	16,725	16,641	14,781	12,763	10,280	8,251
Total available bedspaces	15,879	14,731	12,054	9,571	8,801	7,701	6,490	6,574	8,434	10,452	12,935	14,964
Estimated no. construction workers	320	320	320	320	320	320	320	320	320	320	320	320
Construction workers + occupied bedspaces	7,656	8,804	11,481	13,964	14,734	15,834	17,045	16,961	15,101	13,083	10,600	8,571
Room occupancy incl. construction workers	33%	38%	49%	60%	63%	68%	73%	73%	65%	56%	46%	37%
Actual remaining bedspaces	15,559	14,411	11,734	9,251	8,481	7,381	6,170	6,254	8,114	10,132	12,615	14,644

Source: Visit Britain, UK Caravan & Camping Alliance

Table 11.26: Assumed Occupancy of Accommodation including housing of decommissioning workers across all three districts

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Total number of bedspaces	33,611	33,611	33,611	33,611	33,611	33,611	33,611	33,611	33,611	33,611	33,611	33,611
Actual number of bedspaces occupied	11,848	13,685	17,236	20,455	21,470	22,988	24,516	24,193	21,976	19,430	16,211	13,349
Total available bedspaces	21,763	19,926	16,375	13,156	12,141	10,623	9,095	9,418	11,635	14,181	17,400	20,262
Estimated no. construction workers	320	320	320	320	320	320	320	320	320	320	320	320
Construction workers + occupied bedspaces	12,168	14,005	17,556	20,775	21,790	23,308	24,836	24,513	22,296	19,750	16,531	13,669
Room occupancy incl. construction workers	36%	42%	52%	62%	65%	69%	74%	73%	66%	59%	49%	41%
Actual remaining bedspaces	21,443	19,606	16,055	12,836	11,821	10,303	8,775	9,098	11,315	13,861	17,080	19,942

Source: Visit Britain, UK Caravan & Camping Alliance

11.7. Mitigation, Enhancement and Residual Effects

Mitigation by Design

11.7.1. The specific operational requirements of the Scheme have been carefully considered to ensure the proposed design provides the best and most efficient layout required, resulting in the socio-economic benefits that have been identified.

Additional Mitigation.

11.7.2. There are no significant adverse effects, and therefore no mitigation is proposed.

Enhancements.

11.7.3. During construction and decommissioning phases, there are expected to be significant beneficial effects in respect of employment. The Applicant is committed to the enhancement of these effects as far as is practicably possible. As such, it is proposed that opportunities for employment and skills are supported through the preparation of an Outline Supply Chain, Employment and Skills Plan ("OSCESP") (the preparation and author of which is to be the Applicant). The OSCESP will be submitted with the application and the delivery of a final OSCESP secured by a DCO requirement.

11.7.4. The use of an OSCESP is intended to enhance the beneficial employment effects during the construction and decommissioning phases to result in a major beneficial residual effect. It is acknowledged that the major beneficial residual effect relates to development phases that are temporal in nature, however, the legacy effect of upskilling the local workforce, where possible, are expected to result in a long-term significant benefit at the District scale.

11.7.5. Measures could include, but will not be limited to:

- Targets for employment of minimum proportion of workers from within an agreed spatial area, where possible.
- Local employment opportunities in landscaping, fencing, security, plant hire and operators, and materials including aggregate and concrete.
- Opportunities for apprenticeships, traineeships and back to work opportunities.
- Partnering with local schools, sixth form colleges, other further education colleges, universities, Jobcentre Plus and PeoplePlus (and/or organisations specific to the local study area) to develop local skills and raise awareness of renewable technologies, in particular solar and energy storage.

11.7.6. The Applicant commits to an estimated £400 per MW per year of operation of the Scheme, which could equate to a total Community Benefit Fund of around £12.8million to support local community groups and initiatives.

11.7.7. A summary of proposed enhancement and how it Is proposed to be secured to the DCO is presented in **Table 11.27**.

Table 11.27: Enhancement

Ref	Measure to avoid, reduce or manage any adverse effects and/or to deliver beneficial effects	How measure would be secured		
		By Design	By S.106	By Requirements
1	Outline Supply Chain, Employment and Skills Plan	N/A	N/A	X

Residual Effects

11.7.8. Residual effects relating to socio-economics are as follows:

- Construction phase:
    - Employment – **major beneficial** effect in Doncaster, North Lincolnshire, and East Riding of Yorkshire, which is **significant** in EIA terms.
    - Economic contribution - **major beneficial** in Doncaster, North Lincolnshire, and East Riding of Yorkshire, which is **significant** in EIA terms.
    - Accommodation demand effect on local tourism sector – **moderate beneficial** in Doncaster, North Lincolnshire, and East Riding of Yorkshire which is **significant** in EIA terms.
    - Accommodation demand effect on visitors – **minor to moderate adverse** in Doncaster, North Lincolnshire, and East Riding of Yorkshire which is **not significant** in EIA terms.
- Operational phase:
    - Employment – **minor to moderate beneficial** in Doncaster, North Lincolnshire, and East Riding of Yorkshire which is **not significant** in EIA terms.
    - Economic contribution - **minor beneficial** in Doncaster, North Lincolnshire, and East Riding of Yorkshire, which is **not significant** in EIA terms.
    - Business rates - **major beneficial** in Doncaster, North Lincolnshire, and East Riding of Yorkshire, which is **significant** in EIA terms.
- Decommissioning phase:
    - Employment – **major beneficial** effect in Doncaster, North Lincolnshire, and East Riding of Yorkshire which is **significant** in EIA terms.
    - Economic contribution - **major beneficial** in Doncaster, North Lincolnshire, and East Riding of Yorkshire, which is **significant** in EIA terms.
    - Accommodation demand effect on local tourism sector – **moderate beneficial** in Doncaster, North Lincolnshire, and East Riding of Yorkshire which is **significant** in EIA terms.

- Accommodation demand effect on visitors – **minor to moderate adverse** in Doncaster, North Lincolnshire, and East Riding of Yorkshire which is **not significant** in EIA terms.

11.8. Cumulative and In-Combination Effects

11.8.1. The cumulative assessment approach aims to enable a robust assessment whilst also presenting a realistic consideration of the cumulative effects at the local scale (Doncaster and North Lincolnshire). An assessment of cumulative impact will be presented in the next iteration of the PEIR.

11.8.2. In the meantime, the proposed approach to assessment of cumulative socio-economic effects for those schemes to be scoped into the assessment is summarised as follows:

- Assumptions on which to base the cumulative effects assessment will be identified, specific to each potential socio-economic effect, with the intention of presenting a worse case assessment for each effect.
- Where possible, definitive information regarding estimated jobs will be used, obtained through a review of publicly available documentation held for public viewing on National Infrastructure Planning website or local authority planning portals, whichever is applicable to each cumulative scheme.
- Scope of assessment will align with the scope of assessment for the Scheme in isolation. In summary, the effects to be assessed will be as follows:
    - Construction phase – employment, economic contribution and accommodation demand.
    - Operational phase – employment, economic contribution and business rates.
    - Decommissioning phase - employment, economic contribution and accommodation demand.

11.9. Summary

Introduction

11.9.1. This chapter has analysed the baseline socio-economic conditions and then gone on to assess the likely socio-economic effects of the Scheme.

Baseline Conditions

11.9.2. Doncaster experienced population growth of 3.7% between 2013 and 2023, in North Lincolnshire there was a lower population growth of 1.1% and in East Riding of Yorkshire there was growth of 4.6%. Relative to the benchmark areas of Yorkshire & the Humber and England , Doncaster's, North Lincolnshire's, and East Riding of Yorkshire's population grew at a slower rate over this timeframe. Employment growth in Doncaster over the last seven years has been fairly strong with 6.4% increase in job numbers, this was higher than the regional figure (6.3%) but lower than the national figure (8.9%), in North Lincolnshire jobs increased by 4.1%, whilst the highest jobs growth was seen in East Riding of Yorkshire (6.9%). The construction sector, which is likely to

see increased employment opportunities during the Scheme build phase represents 6.7% of total employment in Doncaster, 6.5% in North Lincolnshire, and 5% in East Riding of Yorkshire which is above the proportion of total jobs at the regional scale (4.9%) and England (4.8%).

Likely Significant Effects

11.9.3. With the exception of accommodation demand. likely significant effects are expected to be beneficial in respect of socio-economics. Significant beneficial effects are expected in relation to employment and economic contribution during both the construction and decommissioning phases, and business rates during the operational phases. Additionally, during the construction and decommissioning phases there will be no adverse impacts on local tourism as there is sufficient capacity to accommodate workers, therefore the additional workforce will provide a boost to local accommodation and tourism businesses.

Mitigation and Enhancement

11.9.4. There are no significant adverse effects relating to socio-economics, and therefore no mitigation measures proposed.

11.9.5. Significant beneficial effects (moderate significance) are predicted in respect of employment in the construction and decommissioning phases. Enhancement of employment is proposed in the form of an Outline Supply Chain, Employment and Skills Plan (OSCESP) which will be agreed with the relevant authorities and secured by a DCO Requirement. It will aim to optimise the number of local people who will have access to employment and training opportunities arising from the Scheme. The legacy effect of upskilling the local workforce where possible will result in a long-term significant benefit (major significance) at the District scale. The Applicant is looking to prepare this document available for the final submission of the application. Related to this, the Application is seeking to hold a supplier engagement event.

Conclusion

11.9.6. The Scheme will result in beneficial effects in terms of employment, economic contribution, accommodation demand, and business rates in all relevant phases of development.

11.9.7. The Applicant is preparing an Outline Supply Chain, Employment and Skills Plan (OSCESP) to optimise the number of local people who will have access to employment and training opportunities arising from the Scheme. It is expected that this Plan will be included within the final submission of the application. The legacy effect of upskilling the local workforce where possible will result in a long-term significant benefit for Doncaster, North Lincolnshire and East Riding of Yorkshire.

11.9.8. There is not considered to be any potential significant socio economic effect, be it adverse or beneficial, respect of the illustrative underground export cable corridor and the strategic assessment for the overall National Grid Substation and RWE Underground Export Cable Route Assessment Area.

11.9.9. **Table 11.28** provides a summary of effects, mitigation/enhancement and residual effects.

Table 11.28: Summary of Effects, Mitigation and Residual Effects

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
Construction								
Employment	Potential generation of direct and indirect jobs as a result of construction activities.	Temporary	Medium	Medium	District (Doncaster, North Lincolnshire & East Riding of Yorkshire)	Moderate beneficial, which is significant	OSCESP	Major beneficial, which is significant
Economic contribution	Gross value added (GVA) generated as a result of construction activities	Temporary	Medium	High	District (Doncaster, North Lincolnshire & East Riding of Yorkshire)	Major beneficial, which is significant	None required	Major beneficial, which is significant
Accommodation demand	Potential effect on the local	Temporary	Medium	Medium	District (Doncaster & North Lincolnshire &	Moderate beneficial	None required	Moderate beneficial

	tourist sector				East Riding of Yorkshire).	which is significant.		which is significant.
	Potential effect on visitors	Temporary	Low	Medium	District (Doncaster & North Lincolnshire & East Riding of Yorkshire).	Minor to moderate adverse which is not significant in EIA terms.	None required	Minor to moderate adverse which is not significant in EIA terms.
Operation								
Employment	Potential generation of direct and indirect jobs once operational	Permanent	Medium	Low	District (Doncaster, North Lincolnshire & East Riding of Yorkshire)	Minor to moderate beneficial, which is not significant	None required	Minor to moderate beneficial, which is not significant
Economic contribution	Gross value added (GVA) generated once operational	Permanent	Low	Low	District (Doncaster, North Lincolnshire & East Riding of Yorkshire)	Minor beneficial, which is not significant	None required	Minor beneficial, which is not significant
Business rates	Generation of business	Permanent	Medium	High	District (Doncaster,	Major beneficial,	None required	Major beneficial,

	rates once operational				North Lincolnshire & East Riding of Yorkshire)	which is significant		which is significant
Decommissioning								
Employment	Potential generation of direct and indirect jobs as a result of decommissioning activities.	Temporary	Medium	Medium	District (Doncaster, North Lincolnshire & East Riding of Yorkshire)	Moderate beneficial, which is significant	OSCESP	Major beneficial, which is significant
Economic contribution	Gross value added (GVA) generated as a result of decommissioning activities	Temporary	Medium	High	District (Doncaster, North Lincolnshire, & East Riding of Yorkshire)	Major beneficial, which is significant	None required	Major beneficial, which is significant
Accommodation demand	Potential effect on the	Temporary	Medium	Medium	District (Doncaster & North Lincolnshire &	Moderate beneficial	None required	Moderate beneficial

	local tourist sector				East Riding of Yorkshire).	which is significant.		which is significant.
	Potential effect on visitors	Temporary	Low	Medium	District (Doncaster & North Lincolnshire & East Riding of Yorkshire).	Minor to moderate adverse which is not significant in EIA terms.	None required	Minor to moderate adverse which is not significant in EIA terms.