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Projects

# Hatton Solar Farm

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# Socio-Economic Impact Assessment

Applicant: Hatton Solar Farm Ltd.

Date: 12/08/2025

# Executive Summary

This report identifies and assesses the likely significant effects on socioeconomic and tourism receptors of the proposed development of at Hatton, Great Sturton, Horncastle, Lincolnshire, LN9 5NX on the study area, as identified within the Socio-Economic Baseline Assessment.

The socioeconomic receptors assessed within this report include economic output, employment, agricultural employment, agricultural economic output, education and skills, the visitor economy and travel patterns. Where appropriate, the impact upon each receptor is assessed during the construction, operational and decommissioning phases.

The approach to determining the significance of effects is a two-stage process that involves defining the magnitude of the impact and the sensitivity of the receptor. This section describes the criteria applied in this report to assign values to the magnitude of potential impacts and the sensitivity of the receptors.

### *Reduced Unemployment Levels*

Significant effects are anticipated in relation to reduced unemployment are anticipated during the construction and decommissioning phases of the development, given the high sensitivity of the receptor and the magnitude of impact.

### *Economic Output*

There is anticipated to be significant positive effects in relation to economic output during all phases of the development, given high capital investment and modest employment-related GVA.

### *Reduced Agricultural Employment*

Given the increase in employment associated with the development outweighs the losses associated with agriculture during all phases of development, the impact on agricultural employment is assessed as being negligible.

### *Reduced Agricultural Output*

Given that the increase in economic output associated with the project outweighs agricultural output losses, and the losses at each phase account for less than 1% of the sector's total, the impact is assessed as negligible.

### *Education and Skills*

Given there is no commitment to provide education and skills programs (apprenticeships, bursaries, training) during each phase of the development, the impact on education and skills is assessed as being negligible. However, if an Employment and Skills Plan is implemented, there is the potential for significant impacts during construction.

### *Change in Visitor Economy*

Taking in to account the assessments of impact within other supporting documents ('Landscape and Visual Impact Assessment Update' (CD2.12), and 'Transport and Access Statement' (CD2.1)), a review of the existing tourism landscape within the study area and consideration of the impact on local short-term rental accommodation, there is anticipated to be negligible effects in relation to the visitor economy, which is not significant.

### *Disruption to Travel Patterns*

Whilst there is the potential for additional vehicular movements on transport networks during each phase of the development, the Transport and Access Statement assesses the impact on the transport network as negligible over the lifetime of the project. Therefore, this assessment concludes that there will be a negligible impact on travel patterns.

### *Conclusion*

In conclusion, the assessment finds there to be no significant adverse effects on socioeconomics and tourism during the construction, operation or decommissioning phases of the Development. It is anticipated that there will be significant beneficial effects upon economic output during all phases of development. Significant positive effects on unemployment are also anticipated during construction and decommissioning. Should an Employment and Skills Plan be implemented effectively, there will also be significant residual effects on education and skills during construction.

A full breakdown of the sensitivity, magnitude and significance associated with each receptor/effect arising from the various phases is provided in Table 7: Summary of Potential Environmental Effects and Monitoring.

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Version – 2

Prepared by: Third Revolution Projects Ltd.

Third Revolution Reference: 1152_Socioec

Applicant: Hatton Solar Farm Ltd.

# 1.0 Introduction

## 1.1 Overview

This report identifies and assesses the likely significant effects of the proposed development of a 49.9MW solar farm on socioeconomic and tourism receptors at Hatton, Great Sturton, Horncastle, Lincolnshire, LN9 5NX, within the District of East Lindsey.

The report is supported by a baseline assessment (Appendix 1). This baseline assessment helps identify the sensitivity of receptors by analysing the socio-economic characteristics of a suitably defined study area for the proposed development.

This report was commissioned to support the Hatton Solar Farm Public Inquiry (APP/D2510/W/25/3363157) and provides data driven insight to assess the quantifiable impacts of the proposed interventions on the study area population.

## 1.2 Site description

The proposed development site is located on around 73.45ha of agricultural land spread across 5 parcels (shown on CD1.21).

Parcel 1 is located furthest west. It is bounded to the north by Sotby Woods and to the east by a line of young trees. Open agricultural land lies to the south and west boundaries.

Parcel 2 is adjacent east of parcel 1 and is bounded to the north by Sotby Woods. It is bounded to the east and south by open agricultural land (parcel 3). To the west lies a line of young trees.

Parcel 3 is located adjacent southeast of parcel 2 and the furthest south of all the parcels. It is bounded to the north and west by open agricultural land (parcel 2), and its southern boundary is screened from Sturton Lane looking onto the site. There are 2 proposed access points along the southern boundary of parcel 3.

Parcel 4 is the parcel closest to the east and is surrounded by agricultural land. There is one proposed access point on the southwestern corner of parcel 4.

Parcel 5 is the most northward parcel. Sotby Woods borders the parcel to the west, with agricultural land to the north, east, and south. There is also a permissive footpath located along the southern boundary of parcel 4, which is proposed to be retained for public use following the public consultation feedback.

All parcels of land are under Stourton Estates ownership and have been farmed by the same family for the past 99 years.

# 2.0 Social and Economic Policy Context

## 2.1 Local planning context

### *East Lindsey Economic Baseline Study (2021 Update)*

This study provides a data-driven snapshot of the district's economy. It highlights low job density, a decline in manufacturing jobs, limited higher-value employment opportunities, and below-average educational attainment. It also emphasises the uneven spatial distribution of economic opportunity across urban, rural, and coastal areas.

### *East Lindsey Local Plan Core Strategy (2018)*

The Core Strategy sets out an ambition for East Lindsey to be a district with a network of thriving, safer and healthy sustainable communities, where people can enjoy a high quality of life and an increased sense of well-being and where new development simultaneously addresses the needs of the economy, communities and the environment.

It also seeks to become a growing and diversified economy that not only builds on and extends the important agriculture and tourism base but supports the creation of all types of employment. It also includes a commitment to address the issues of deprivation and rural isolation to make an inclusive, equal and diverse district.

As part of 'SP13 – Inland Employment' the council also commits to supporting growth and diversification of the local economy by supporting farm diversification schemes where they are subordinate to the farm use and do not jeopardise the farm business.

### *East Lindsey Economic Action Plan (2018)*

East Lindsey District Council has been clear in its commitment to regeneration and growth on both the coast and inland. The Council strives to achieve a healthy economy across the district with a skilled workforce that has access to a range of sustainable job opportunities. The Council also wants to ensure that inland and coastal communities thrive, are attractive and remain popular as visitor destinations.

## 2.2 Regional planning context

### *Central Lincolnshire Local Plan, Adopted 2023*

The Central Lincolnshire Local Plan emphasises the importance of considering *'economic, social and community benefits'* as part of the planning balance and suggests that *'significant additional weight in favour of the proposal will arise for any proposal which is community-led for the benefit of that community'*.

### *Midlands Engine: East Lindsey Economic Profile & Impact Assessment (2025)*

This report, commissioned as part of the Midlands Engine programme, reaffirms East Lindsey's economic fragility but points to infrastructure-led growth as a high-impact opportunity. It cites renewable energy as a growth sector with potential to lift local GVA and create stable, year-round employment in rural and coastal communities.

### *Greater Lincolnshire LEP (GLLEP) Strategic Economic Plan 2014-2030 – Refresh Spring 2016*

The Greater Lincolnshire Strategic Economic Plan (2016 Refresh) emphasises the area's strength in the low carbon economy, identifying it as one of four priority growth sectors. Renewable energy is seen as a major opportunity for private investment, supporting local employment, innovation, and skills development.

There is also an ambition to increase manufacturing employment, output and investment, grow existing businesses, attract inward investment and focus on where the impacts will be greatest. The low-carbon economy is recognised to be creating new opportunities for manufacturing and engineering businesses, initially focused on the offshore wind sector but embracing a much wider range of low carbon goods and services.

### *Sub-regional Strategy 2024/25 – 2028/29*

The Sub-Regional Strategy 2024/25–2028/29, developed by the South & East Lincolnshire Councils Partnership, provides a clear policy context that supports solar farm development as part of its ambitions for clean growth, resilient communities, and a greener, more sustainable economy.

This strategy highlights growth and prosperity as a sub-regional priority with unemployment, productivity, pay, education, skills and training all key areas to be addressed. There is a strong commitment to skills and training pathways to support green industry, with the aim to "equip our workforce for the future". The strategy also emphasises "inclusive growth," "unlocking opportunity," and "raising prosperity".

## 2.3 National planning context

### *The National Planning Policy Framework*

The National Planning Policy Framework (NPPF) was published in 2012 and updated in 2025 The NPPF sets out the Government's planning policies for England. Table 1 sets out a summary of the NPPF policies relevant to this report.

*Table 1: Summary of NPPF requirements relevant to this report*

| Policy | Key provisions |
|---|---|
| Paragraph 8 | To achieve sustainable development the planning system sets social, economic and environmental objectives to secure net gains across each. |
| Paragraph 9 | States that in guiding developments towards sustainable development, local circumstances should be considered, to reflect the character, needs and opportunities of each area. |

### *National Policy Statements*

***EN-1***

EN-1 recognises that the construction, operation and decommissioning of energy infrastructure may have socio-economic impacts at local and regional levels and mandates that applicants consider all relevant socio-economic impacts, which may include:

"*The creation of jobs and training opportunities… the contribution to the development of low-carbon industries at the local and regional level as well as nationally; the provision of additional local services and improvements to local infrastructure, including the provision of educational and visitor facilities; any indirect beneficial impacts for the region hosting the infrastructure, in particular in relation to use of local support services and supply chains; effects (positive or negative) on tourism; and the impact of a changing influx of workers during the different construction, operation and decommissioning phases of the energy infrastructure*".

Paragraph 5.13.5 also states applicants must:

"*describe the existing socio-economic conditions in the areas surrounding the proposed development and … refer to how the development's socio-economic impacts correlate with local planning policies*."

It further recognises that:

"*socio-economic impacts may be linked to other impacts, for example visual impacts*" which can affect tourism and local businesses.

*National planning Policy Guidance*

Table 2 sets out a summary of the NPPG policies relevant to this report.

*Table 2: Summary of NPPG policies relevant to this report*

| Document | Key provisions |
|---|---|
| Natural Environment | Green infrastructure can improve the wellbeing of a neighbourhood with opportunities for recreation, exercise, social interaction, experiencing and caring for nature, community food-growing and gardening, all of which can bring mental and physical health benefits (para 006). |

*Equality Act 2010: The Socio-economic Inequalities*

Relevant authorities must, when making decisions of a strategic nature about how to exercise its functions, have due regard to the desirability of exercising them in a way that is designed to reduce the inequalities of outcome which result from socio-economic disadvantage. In deciding how to fulfil a duty, an authority must take into account any guidance issued.

# 3.0 Methodology

## 3.1 Relevant guidance

There is no specific guidance available which establishes a methodology for undertaking a socio-economic impact assessment. Accordingly, the approach adopted for this assessment is based on professional experience and best practice, and in consideration of the policy requirements/tests set out within the National Planning Policy Framework (NPPF), National Planning Statements (NPS), Draft NPS and local planning policy. The methodology used within the assessment has been tested extensively at examination and has been found to be robust.

## 3.2 Scope of the Assessment

This socioeconomic impact assessment identifies the potential effect of the Development on the socioeconomic and tourism profile of the area. This assessment is also informed by the 'Agricultural Considerations' (CD2.24), 'Landscape and Visual Impact Assessment Update' (CD2.12), 'Representation by Stourton Estates' (CD2.25) and 'Transport and Access Statement' (CD2.1) supporting documents.

Table 3 summarises the issues considered as part of this assessment at each of the phases of development.

*Table 3: Issues Considered Within this Assessment*

| Activity | Potential effects scoped into the assessment |
|---|---|
| ***Construction & Decommissioning phases*** | |
| Creation of Jobs | The Development will create direct and indirect jobs associated with the construction and decommissioning of the development. |
| Spending in local economy | Greater construction worker spending in the local economy and the direct investment in the local supply chain could have an impact on economic output. |
| Temporary road closures/disruption | Temporary road diversions and disruption as a result of increased traffic during construction could impact commuting times/patterns and have potential economic impacts on local economy. |
| Education and skills | The creation of jobs will present opportunities to increase local skills by providing training to workers. |
| Construction works | The visual impact of construction equipment and the associated noise and traffic impacts has the potential to impact nearby tourism receptors. |
| Cessation of agricultural activities | The construction and decommissioning phases will require the agricultural use of the site to stop which has the potential to have an impact on economic output and jobs. |
| Employing non-resident workforce | Potential increase in demand for temporary worker accommodation during the construction phase if large, non-resident workforce is required. |
| ***Operation and maintenance*** | |
| Creation of Jobs | The maintenance of the Development will require and support the creation of a dedicated work force on a regular basis. Indirect employment may also arise once the Development is operational. |
| Spending in local economy | Potential Gross Value Added (GVA) associated with the direct, indirect, and induced jobs over the lifetime of Development |
| Change of use of agricultural land | Economic and employment impact of the displacement of agricultural land uses for the duration of the Development. |
| Erection of solar panels in landscape | There is a potential impact associated with the visual impact of the solar panels on the amenity enjoyment of certain tourist destinations which could impact the visitor economy. |

## 3.3 Defining the Study Area

The study area has been defined as the East Lindsey local authority, based on travel to work patterns, the site's location within the Lincoln and the Skegness and Louth TTWA's, and the strong self-containment of employment within the district.

## 3.4 Methodology for Baseline Studies

### 3.4.1 Desk Study

Information on socioeconomics and tourism within the study area was collected through a detailed review of existing studies and datasets. These are summarised at Table 4 and the full baseline assessment is available at Appendix 1.

*Table 4: Summary of Desk Study Sources Used*

| Indicator | Elements | Source |
|---|---|---|
| Population and Deprivation | Age structure, qualifications, deprivation, motor car availability, health, electric vehicle (EV) car infrastructure access, renewable energy access, population projections | ONS, Census 2011 & 2021, English Indices of Deprivation, Department for Transport, Department for Business Energy & Industrial Strategy, The House of Commons Library |
| Economy | Economic activity, business activity | ONS 2011 & 2021, UK Business Count |
| Employment & Skills | Unemployment, commuting patterns, occupation, industry, earnings, qualifications | ONS, Census 2011 & 2021, BRES, NOMIS Labour Market Profiles, UK Business Count, Annual Population Survey, Labour Force Survey |
| Tourism | Public rights of way, land use, tourist economy, accommodation | Property Market Intel, West Lindsey District Council, Satellite Imagery, Google Maps, Open Government License |

## 3.5 Impact Assessment Methodology

### 3.5.1 Overview

The significance of an effect is determined based on the sensitivity of a receptor and the magnitude of an impact. This section describes the criteria applied in this report to characterise the sensitivity of receptors and magnitude of potential impacts.

The approach to determining the significance of effects is a two-stage process that involves defining the magnitude of the impact and the sensitivity of the receptor. This section describes the criteria applied in this report to assign values to the magnitude of potential impacts and the sensitivity of the receptors.

### 3.5.2 Receptor Sensitivity/Value

The criteria for defining sensitivity in this report are outlined in Table 5.

*Table 5: Sensitivity Criteria*

| Sensitivity | Definition |
|---|---|
| High | Receptor is identified as a policy priority<br><br>Evidence of major socio-economic challenge or underperformance |
| Medium | Receptor is important in policy<br><br>Evidence of under-performance or vulnerability |
| Low | Receptor is not a policy priority<br><br>Evidence that the receptor is resilient and no particular challenges |
| Negligible | Receptor is not a policy priority<br><br>Good overall performance in impact area |

### 3.5.3 Magnitude of impact

The criteria for defining magnitude in this report are outlined in Table 6.

*Table 6: Impact Magnitude Criteria*

| Magnitude of impact | | Definition |
|---|---|---|
| High | Adverse | Severe detrimental impact to key social and/or economic characteristics. Where the impact is able to be quantified this would equate to a percentage change of above 20%. |
| | Beneficial | Major enhancement to key social and/or economic characteristics. Where the impact is able to be quantified this would equate to a percentage change of above 20%. |
| Medium | Adverse | Discernible detrimental impact upon key social and/or economic characteristics. Where the impact is able to be quantified this would equate to a percentage change of 11-20%. |
| | Beneficial | Discernible improvement to key social and/or economic characteristics. Where the impact is able to be quantified this would equate to a percentage change of 11-20%. |
| Low | Adverse | Minor detrimental alteration to, one or more key social and/or economic baseline characteristic(s). Where the impact is able to be quantified this would equate to a percentage change of 6-10%. |
| | Beneficial | Minor benefit to one or more key social and/or economic baseline characteristic(s), or a reduced risk of negative impact occurring. Where the impact is able to be quantified this would equate to a percentage change of 6-10%. |

| Magnitude of impact | | Definition |
|---|---|---|
| Negligible | Adverse | Very minor detrimental alteration to one or more social and/or economic baseline characteristics. Where the impact is able to be quantified this would equate to a percentage change of under 5%. |
| | Beneficial | Very minor benefit to one or more social and/or economic baseline characteristics. Where the impact is able to be quantified this would equate to a percentage change of under 5%. |

Time periods within the socioeconomic assessment are defined as follows:

- Short term: a period of months, up to one year;
- Medium term: a period of more than one year, up to five years; or
- Long term: a period of greater than five years.

### 3.5.4 Significance of effect

The significance of effects upon socioeconomic receptors has been determined by taking into account the sensitivity of the receptor and the magnitude of the impact. The method employed for this assessment is presented in Table 7. Where a range of significance levels is presented, the final assessment for each effect is based upon expert judgement.

In all cases, the evaluation of receptor sensitivity, impact magnitude and significance of effect has been informed by professional judgement and is underpinned by narrative to explain the conclusions reached.

For the purpose of this assessment, any effects with a significance level of minor or less are not considered to be significant.

*Table 7: Assessment Matrix*

| Sensitivity of Receptor | Magnitude of Impact | | | |
|---|---|---|---|---|
| | High | Medium | Low | Negligible |
| **High** | Major | Moderate / Major | Moderate | Negligible |
| **Medium** | Moderate / Major | Moderate | Minor | Negligible |
| **Low** | Moderate | Minor | Negligible | Negligible |
| **Negligible** | Minor | Minor | Negligible | Negligible |

The definitions for significance of socioeconomic effect levels are described as follows:

- Major: These beneficial or adverse effects are considered to be very important considerations and are likely to be material in the decision-making process. These effects are generally, but not exclusively, associated with sites or features of international, national or regional importance that are likely to suffer a most damaging impact and loss of resource integrity. However, a major change in a site or feature of local importance may also enter this category. Effects upon human receptors may also be attributed this level of significance;
- Moderate: These beneficial or adverse effects have the potential to be important and may influence the key decision-making process. The cumulative effects of such factors may influence decision-making if they lead to an increase in the overall adverse or beneficial effect on a particular resource or receptor;
- Minor: These beneficial or adverse effects are generally, but not exclusively, raised as local factors. They are unlikely to be critical in the decision-making process but are important in enhancing the subsequent design of the Development; and
- Negligible: No effects or those that are beneath typical levels of perception, within normal bounds of variation or within the margin of forecasting error.

The definitions are well tested, considered robust and have withstood public inquiry/DCO examination.

### 3.5.5 Key Receptors

There are a number of key receptors being taken forward into the assessment. Firstly, employment is assessed, which includes indicators such as unemployment levels. Education and skills are assessed, which considers elements such as the level of qualifications of workers. Economic output is assessed, which considers spending in the local economy and the gross value added. The assessment of land use considers the effects on agricultural output. The tourism assessment looks at effects on the visitor economy and, finally, the assessment of commuting patterns assesses any effects of disruption.

Table 8 identifies the receptors taken forward into the assessment.

*Table 8: Key Receptors Taken Forward to Assessment*

| Receptor | Description | Sensitivity/value |
|---|---|---|
| Employment | Unemployment levels, occupations, industry, and earnings, labour supply | **High** – In terms of the vulnerability of the receptor; unemployment levels in the study area have typically sat above regional and national averages. The latest Annual Population Survey data indicates that the unemployment rate in the study area in Q2 2022 was 7.9%. approximately 4.2% higher than the national average. Employment is a policy priority in the study area.<br><br>The East Midlands has the second highest proportion of 'NEET' Young People (14.7%) compared to all other regions of England. |
| | | |

| Receptor | Description | Sensitivity/value |
|---|---|---|
| Economic Output | Economic activity and Gross Value Added | **High –** The vulnerability of the receptor is considered high given that the study area has a much lower average level of economic activity (70.4%) compared to the wider region (78.8%) and nationally (78.2%). The recoverability is also considered high, given the number of businesses that are active in the study area.. Economic output is a policy priority within local policy. |
| Education & Skills | Level of qualifications/number of highly skilled workers, educational deprivation | **High –** Education and skills development form part of a number of local plan policies across the study area. The study area generally has a high proportion of individuals with no qualifications (35.2%) compared to regional (25.1%) and national (22.8%) averages. The Index of Multiple Deprivation data indicates that the Lower Super Output Areas (LSOAs) in the study area are predominantly towards the most deprived in terms of educational deprivation in the country: 22.2% of LSOAs in the study area fall within the 10% most educationally deprived nationally, 75.3% of the LSOAs are within the 50% most deprived LSOAs in England. Education is considered as important in policy locally. |
| Land Use | Agricultural land value and agricultural output | **High – '**Crop and animal production, hunting and related service activities' accounted for 6.0% of all employment in study area, higher than regional (1.6%) and national (1.1%) averages. The site is estimated to be Grade 2/3 best, including some best and most versatile land and the GVA associated with agriculturally based labour is higher than the area average. Land Use is a policy priority locally. |

| Receptor | Description | Sensitivity/value |
|---|---|---|
| Tourism | Tourist spending in local economy, tourism employment, specific tourist attractions | **High** – The visitor economy is a policy priority locally. The tourism economy is identified as a key industry within the local authority, alongside agriculture. Although data with regards to footpath usage is not available, given the lack of surrounding tourist attractions, it is expected that PRoW with visibility of the site are used infrequently by tourists. Employment in East Lindsey in the 'Accommodation and food services' sector accounts for 19.9% of the total. Short term rental receptors likely to be impacted include 'Old Barn Cottages', 'The Old Barn' and the proposed Corner Farm holiday lets, as identified by The Hatton Action Group. At full capacity, these businesses account for just 0.1% of GVA within the 'Accommodation and food services' sector in the study area. There is a good active supply of short-term rental accommodation (604 properties) within the study area to cater for anticipated number of non-resident workers. This indicates good recoverability. Room occupancy data for the local authority (47% occupied) indicates that there are likely to be vacant rooms year-round, but especially during winter months, suggesting the vulnerability of the receptor is high. |
| Commuting Patterns | Motor car availability, travel to work method and time | **Low** – Average public transport links, good access to private car (83.3%), low level of working from home (19.8%) relative to national average (31.5%). Commuting patterns are not considered to be a policy priority locally. |

# 4.0 Assumptions and Limitations of the Assessment

One limitation with this assessment is the age of some of the data that has been used to inform the baseline position. In some instances, this has been taken from the 2011 Census, which is now over 10 years old. This is because, for some indicators, comparable 2021 Census data has not been recorded. Where possible, data from the 2021 Census has been used, however, caution needs to be applied when using this data due to the fact it was undertaken during the COVID-19 pandemic.

Therefore, in these instances (for example, with regards to commuting patterns), although the 2011 Census data is now somewhat out-of-date, it is accepted that this is the standard and most accurate method for gathering population and demographic data. Where available and appropriate, more up to date projections have been used and thus it is concluded that this limitation does not affect the robustness of the assessment.

In addition, there are no generally accepted criteria for assessing the significance of socio-economic effects and, in some cases, it can be difficult to quantify or measure such effects. Where the effect has been difficult to quantify, qualitative professional judgment has been applied, based on experience, best practice and in consideration of relevant planning policy.

Furthermore, limitations with regards to data on the use of footpaths within / around the development site makes assessing the impact on footpath users challenging. Subsequently, the assessment has considered local footpath characteristics alongside a review of nearby tourism attractions to make an informed assumption with regards to usage, which is discussed in greater detail in section 5.7.

# 5.0 Assessment of Effects

## 5.1 Reduced Unemployment

### 5.1.1 Construction Phase

Construction of the 49.9MW solar farm is estimated to last for 20 weeks. In order to assess the number of jobs the construction phase will create, this assessment has had reference to the 2017 study 'Regional electricity generation and employment in UK regions' which estimates that 20.8 constriction phase jobs are created per year per MW of installed capacity. On this basis the proposed development would create up to 1,040 person-years of direct and indirect employment connected to the construction phase.

The estimates underpinning this calculation are based on structured research reviews of the employment and economic effect of different electricity technologies carried out by Cardiff University and Regeneris.

The research also included a series of consultations with developers/operators to gain information on spending patterns and employment.

In order to determine the split of direct and indirect jobs; the majority of socio-economic assessments of solar developments refer to the report on the growth of solar power in the UK (2014). In this report, the Centre for Economics and Business Research (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.

This is, however, now somewhat outdated. Low Carbon and Renewable Energy Economy estimates of direct and indirect FTE employment for 2022 (most recent data available that is not provisional) indicate that solar PV developments have a multiplier of 1.77. This is the figure used for this assessment.

Applying this multiplier in reverse to the identified total direct and indirect jobs calculation results in an equivalent 588 person-years of direct employment and 452 person-years of indirect and induced employment.

Based on the 2017 study into regional electricity generation and employment in UK regions; 70% of the direct jobs (412) are estimated to be direct construction and manufacturing employment, with 11% of jobs related to associated professional services 10% of jobs related to wholesale/retail trade, 4% transport and communication related, 3% financial services and 2% others.

The 'Regional electricity generation and employment in UK regions' study states that more established technologies (e.g. Solar PV) can have a high level of employment impact, driven by the high proportion of development cost that is physical installation (often reliant on local labour), and the local sourcing of some device and ancillary elements.

Therefore, in order to estimate the direct construction employment (separate to any manufacturing employment that may not be resourced locally) generated by the Development, IRENA's detailed breakdown of utility-scale solar PV total installed cost has been utilised. This states that direct installation employment in the United Kingdom accounted for 19.4% of the total installed cost in 2023 (most recent data available). It also states that the total installed cost per kW equated to $933, or circa. £750 (using the average 2023 USD to GBP exchange rate of 0.8042). Consequently, the total installed cost of the Development is estimated to equate to circa £37.5m. 19.4% of the total installed cost equates to £7.27m. This is the identified cost associated with the direct installation.

In order to assess the number of jobs the direct installation could support, this cost (£7.27m), is divided by the average 'specialised construction activities' worker wage in the region (£34,576) to arrive at an estimate of the person years of employment that could be required. This equates to 210 direct construction person years or 45.3% of the total direct construction and manufacturing jobs identified above. Subsequently, it is assumed, there will be 202 direct manufacturing jobs.

The impacts of displacement and leakage on the construction and manufacturing workforce also need to be considered.

Displacement measures the extent to which the job creation of a project is offset by reductions of employment elsewhere. Any additional demand for labour cannot be treated as a net benefit, as it removes workers from other posts, such as other construction projects, and the net benefit is reduced to the extent that this occurs.

In terms of construction, workers typically move between projects when delays occur or to help the workforce meet construction deadlines. It is, therefore, assumed that due to the flexibility of the construction labour market, displacement effects are low. The HCA Additionality Guide suggests 25% for low levels of displacements.

Applying this level of displacement to the total direct construction jobs created, it is estimated that the Development will result in a net direct construction employment equivalent to 158 person years.

Leakage measures the extent to which jobs will be taken from people living outside of the study area.

In order to assess the appropriate level of leakage that should be applied, it is necessary to understand the current pool of labour within the study area that work within the 'Construction of utility projects' and 'Electrical, plumbing and other construction installation activities' sub-sectors (810 workers).

As this pool of labour is higher than the estimated net direct construction job creation figure, a low level of leakage is expected. The HCA Additionality Guide suggests a leakage percentage of 10% is applied in these instances where the majority of benefits will go to people living within the target area.

Applying this 10% leakage to the net 158 direct person years of construction employment results in an overall net direct local construction employment figure of 142 person years.

Manufacturing workers have less flexibility to move between roles due to the continuous nature of manufacturing processes. It is, therefore, assumed that, with greater rigidity in the manufacturing labour market, displacement effects are medium. The HCA Additionality Guide (Now Homes England) suggests 50% for medium levels of displacement.

Applying this level of displacement to the total direct manufacturing jobs created as a result of the Development results in a net direct manufacturing employment equivalent to 101 person years.

In order to assess the appropriate level of leakage that should be applied, it is necessary to understand the current pool of labour within the study area that work within the 'Manufacture of electrical equipment' sub-sector (175 workers). As this pool of labour is lower than the estimated net direct construction job creation figure, a high level of leakage is expected. The HCA Additionality Guide states that a high level of leakage is when many of the benefits will go to people living outside of the study area and suggests a leakage percentage of 50%.

Applying 50% leakage to the 101 net direct person years of manufacturing employment identified results in an overall net direct local manufacturing employment figure of 51 person years.

Although a 50% leakage has been applied to account for manufacturing taking place outside of the study area, anecdotal evidence suggests that often the manufacturing of solar panels is entirely carried out overseas and, therefore, employment in manufacturing could be less than the estimate presented within the assessment. Subsequently, a local supply chain plan would be required in order to ensure positive local impact in relation to manufacturing jobs.

As is standard within socio-economic assessments, it is considered that one permanent Full Time Equivalent (FTE) job is equivalent to ten person-years of temporary employment. Therefore, on this basis, the construction phase is estimated to create up to around 14 local net direct construction FTE jobs and 5 local net direct manufacturing FTE jobs.

It is then necessary to also consider the jobs lost as a result of the change of use from agriculture. Based on an approximately 73.45ha area of agricultural loss during construction, this would support approximately 0.40 FTE jobs (see section 5.4). This demonstrates that employment generated by the development of the proposal significantly outweighs the loss of employment associated with the existing agricultural use.

***Sensitivity of the Receptor***

As per Table 5, the sensitivity of the receptor is **High**.

***Magnitude of Impact***

The impact of reduced unemployment levels is both direct through construction jobs created as part of the Development and also indirect through jobs created in supply chain or local economy.

The 142 person years of construction employment will increase employment in relevant specialised construction sub-sectors ('Construction of utility projects' and 'Electrical, plumbing and other construction installation activities') by 17.5% (when compared to the existing pool of labour). This would be a medium magnitude of benefit

The 51 person years of manufacturing employment will increase employment in the 'Manufacture of electrical equipment' sub-sector (175 workers) by 29.1%. This would be a high magnitude of benefit.

The impact is predicted to be of local spatial extent and short-term continuous duration, given a 20-week construction period.

Given that the construction period is only 20 weeks, and there is no supply chain plan in place to require manufacturing jobs to be local, given the temporary nature of the benefits, the magnitude is, therefore, **Low Beneficial**.

***Significance of the Effect***

Based on the sensitivity of the receptor and the magnitude of the impact, the overall significance of the effect is considered to be **Moderate Beneficial**, which is significant.

### 5.1.2 Operational Phase

The operational phase is expected to last for 40 years. During the operational phase, a project of 49.9 MW of installed solar capacity is estimated to support 20 full time equivalent (FTE) direct and indirect jobs. This is based on the Cardiff University study into regional electricity generation and employment in UK regions (2017) which states the FTE jobs per MW installed is equivalent to 0.4.

This is the number of jobs supported on site, in supply chains and via wage effects but does not include employment related to the sale of electricity itself. Low Carbon and Renewable Energy Economy employment multipliers for 2022 estimate that solar PV developments have a multiplier of 1.77. This means that for every one job provided directly another 0.77 indirect/induced jobs are supported. This would indicate that the operational and maintenance phase would create circa 11 direct FTE jobs with the remaining circa 9 being indirect FTE jobs associated with the supply chain and wage effects.

The required jobs are likely to be highly skilled and niche in nature. It is, therefore, considered likely that the jobs may remove workers from other posts and, therefore, a high level of displacement has been applied at 75% with the remaining 25% of roles envisaged to be filled by local employees. In addition, due to the nature of the highly skilled role and likely requirement for existing experience, it is also considered likely that some of these jobs will be taken by people living outside of the study area. A high level of leakage (50%) has, therefore, also been applied.

On this basis the operational and maintenance phase would result in the creation of approximately 1 direct local FTE jobs in the local economy over the full operational phase of 40 years.

The jobs created will be in the renewable energy sector, assisting in the UK's transition to net zero.

It is, however, important to consider the jobs lost as a result of the change of use from agriculture. Based on an approximately 73.45 ha area of agricultural loss during operation, it is estimated that this would support approximately 0.40 direct local FTE employees.

Therefore, there would be a net positive employment impact during the operational phase of the development.

***Sensitivity of the Receptor***

As per Table 5, the sensitivity of the receptor is **High**.

***Magnitude of Impact***

The impact of reduced unemployment levels is both direct through operation/maintenance jobs created as part of the Development and also indirect through jobs created in supply chain or local economy.

Employment generated is not expected to have more than a negligible impact upon existing employment within relevant sectors.

The impact is predicted to be of regional spatial extent and medium-term continuous duration.

On this basis the magnitude is, therefore, **Negligible**.

***Significance of the Effect***

Based on the sensitivity of the receptor and the magnitude of the impact, the overall significance of the effect is considered to be **Negligible**, which is not significant.

### 5.1.3 Decommissioning

The number of jobs created by the decommissioning phase is considered to be commensurate with the construction phase, however, it is likely the number of manufacturing jobs will be reduced as there will be no requirement for manufacturing the solar panels. There will, however, be some jobs created in the supply chain through the recycling of the panels, which may offset this, although this assessment is unable to estimate the exact number and no commitments are in place to secure this.

***Sensitivity of the Receptor***

As per Table 5, the sensitivity of the receptor is **High**.

***Magnitude of Impact***

The impact of reduced unemployment levels is both direct through decommissioning jobs created as part of the Development and also indirect through jobs created in supply chain or local economy. However, manufacturing jobs are likely to reduce due to the lack of need to manufacture solar panels. There will be some jobs created in the supply chain through the recycling of the panels, however, this is unlikely to be of a similar magnitude to manufacturing.

The impact is predicted to be of local spatial extent and short-term continuous duration.

On this basis the magnitude is, therefore, **Low Beneficial**.

***Significance of the Effect***

Based on the sensitivity of the receptor and the magnitude of the impact, the overall significance of the effect is considered to be **Moderate Beneficial**, which is significant.

## 5.2 Economic Output

The effects of the Development on the economic output of the study area are direct through capital investment and indirect from increased spending from employment provision.

### 5.2.1 Construction Phase

According to the IRENA Renewable Cost Database (2023) the average cost of installing a solar PV farm in the UK was approximately £750 ($933) per kW installed. Therefore, applied to the subject scheme this would result in a direct capital investment of circa £37.5 million

ONS report 'Low carbon and renewable energy economy, UK: 2022' estimates, based on 2022 values (2023 still provisional), that for every £1 of direct turnover in the UK's Solar PV energy sector, a further £0.45 of indirect turnover is generated. On that basis a further indirect capital investment of £16.9 million is likely to be generated as a result of this proposal. Overall, that equates to a direct and indirect investment into the economy of around £54.4 million.

This investment will be felt throughout the supply chain providing positive impacts not only to solar panel manufacturing businesses but also to businesses such as aggregate suppliers, security and monitoring operatives, landscaping contractors and other construction industries and suppliers.

In addition to the direct capital investment in the economy, there will be an indirect effect on economic output through the additional construction employment generated by the Development. The Development is estimated to create 11 direct local FTE construction and 9 direct local FTE manufacturing jobs in the study area over the construction programme.

According to the ONS, the current price Gross Value Added (GVA) in the study area generated by the construction industry equated to £145m in 2023.

In order to assess the GVA for the development this figure has been divided by the Business Register and Employment Survey's estimate of construction industry employment in the study area (2,250). This results in an estimate of GVA per construction worker of £64,444.

Over the construction programme, construction employment would, therefore, result in a total contribution to GVA of approximately £708,884.

According to the ONS, the current price Gross Value Added (GVA) in the study area generated by the manufacturing industry equated to £321m in 2023.

In order to assess the GVA for the development this figure has been divided by the Business Register and Employment Survey's estimate of manufacturing industry employment in the study area (5,000). This results in an estimate of GVA per manufacturing worker of £64,200.

Over the construction programme, manufacturing employment would, therefore, result in a total contribution to GVA of approximately £577,800.

Taking into account the GVA related to the additional 45 indirect and induced FTE jobs created by the construction phase and multiplying this by the output per job in the UK in 2023 (£62,341), this indicates an additional GVA figure of approximately £2.8m. Overall, therefore, the total GVA associated with the direct and indirect solar PV jobs would equate to approximately £4.1m. This is in addition to the direct and indirect capital investment into the local economy of around £54.4m.

There is also estimated to be a loss of agricultural GVA during the construction phase equivalent to £37,036 (assessed in section 5.4.1 below). This still equates to a net GVA increase of circa. 4.1m

***Sensitivity of the Receptor***

As per Table 5, the sensitivity of the receptor is **High**.

***Magnitude of Impact***

The impact on economic output is both direct through capital investment in the Development and also indirect through the GVA of jobs created by the construction works.

The impact is predicted to be of regional spatial extent and medium-term continuous duration. The effect on GVA would be considered low accounting for less than 5% of the GVA for the study area. The impact of the direct capital investment would be considered high.

On this basis the magnitude is, therefore, **Medium Beneficial**.

***Significance of the Effect***

Based on the sensitivity of the receptor and the magnitude of the impact, the overall significance of the effect is considered to be **Moderate / Major Beneficial**, which is significant.

### 5.2.2 Operational Phase

The contribution of the operational phase of the development to economic output has been calculated by taking the job creation associated with the Development, 1 direct FTE jobs and multiplying this by the average GVA per employee in the Study Area (approx. £57,365 per annum).

Therefore, over the full anticipated operational phase of the Development (40 years) economic output associated with direct employment would equate to an additional GVA associated with the operation and maintenance of the Development of approximately £2.3m. It is good practice, however, to apply a discount rate to future benefits and costs to present a current present value. The HM Treasury Green Book recommends applying a discount rate of 3.5% per annum and on that basis the revised GVA figure would be circa £1.2m.

In addition to the GVA effect, the Development will also generate significant business rate revenue on an annual basis, a proportion of which will be retained by the local authorities in the study area. Having regard to the Photovoltaic Memorandum of Agreement Revaluation 2023 report from the Valuation Office Agency and on the assumption that the installation is unsubsidised, the Development would be liable for business rates of £2,040 per MW per annum.

This would equate to business rates liability over the Development lifetime of approximately £4.1m. Applying the same discount rate as discussed above, this would result in a present-day value of circa £2.2m.

Finally, the potential economic output associated with the sale of electricity generated by the Development has been estimated. The Department for Energy Security and Net Zero's 'Contracts for Difference – Allocation Round 6 results' (latest) shows that successful Solar PV applicants have been guaranteed a 'strike price' of £50.07/MWh. On average, a solar power plant with a capacity of 1MW can generate approximately 894 MWh (megawatt-hours) per year in the UK (8,760 hours in a year), considering an average Solar PV load factor of around 10.2%, as per Digest of UK Energy Statistics (DUKES) produced by the Department for Energy Security & Net Zero (2024).

Using this average, a 49.9MW solar scheme would generate approximately:

$$49.9\text{MW} \times 894\text{MWh/year} = 44{,}611\text{MWh/year}$$

Subsequently, the sale of the electricity would equate to approximately circa £2.2m per annum, or £89.3m for the full operational phase. After accounting for a discount rate of 3.5%, as discussed above, this equates to an economic output of £47.7m over the operational phase.

The assessment does, however, need to consider the GVA lost as a result of the cessation of agricultural output. Based on an approximately 73.45 ha area associated with the loss of agricultural land; it is estimated that this would support approximately 0.40 direct local FTE employees. The average GVA per agriculture, fishing and forestry; mining and quarrying employee in the study area equates to approximately £92,591. Therefore, over the full operational phase this would result in a loss in GVA (factoring in a discount rate of 3.5%) of £0.79m.

On that basis the GVA lost by the cessation of agricultural employment is more than offset by the GVA gained by the Development during operation/maintenance. The overall net gain in operational GVA associated with the proposed development is £0.41m

Furthermore, the agricultural output associated with crop production equates to approximately £112,048 per annum. Therefore, for the full operational phase, there is expected to be a loss of agricultural output equivalent to £4.5m. After applying the relevant discount rate (3.5%), this equates to an agricultural output loss of £2.4m but an overall net gain of circa 45.6m.

***Sensitivity of the Receptor***

As per Table 5, the sensitivity of the receptor is **High**.

***Magnitude of Impact***

The impact on economic output is both direct through business rate spending and also indirect through the GVA of jobs created by the operational requirements. The effect on GVA would be considered low accounting for less than 5% of the GVA for the study area. The impact of the economic output associated with the sale of electricity would be considered high.

The impact is predicted to be of local spatial extent and long-term continuous duration.

On this basis the magnitude is, therefore, **Medium Beneficial**.

***Significance of the Effect***

Based on the sensitivity of the receptor and the magnitude of the impact, the overall significance of the effect is considered to be **Moderate / Major Beneficial**, which is significant.

*Decommissioning*

The Gross Value Added created by employment associated with the decommissioning phase is considered to be similar to the construction phase. However, due to discounting effect, GVA will be slightly reduced.

***Sensitivity of Receptor***

As per Table 13.13, the sensitivity of the receptor is **High**.

***Magnitude of Impact***

The impact on economic output is indirect through the GVA of jobs created by the decommissioning works.

The impact is predicted to be of regional spatial extent and medium-term continuous duration. The effect on GVA would be considered low accounting for less than 5% of the GVA for the study area. The magnitude is, therefore, **Low Beneficial**.

***Significance of Effect***

Based on the sensitivity of the receptor and the magnitude of the impact, the significance of the effect is considered to be **Moderate Beneficial** which is significant.

## 5.3 Agricultural Employment

The change of use from agriculture to the stationing of solar panels and a substation will have the effect of reducing agricultural employment on site. However, all parcels of land are under Stourton Estates ownership and have been farmed by the same family for the past 99 years. The total land holding within the Stourton Estate much exceeds the 73.45 acres to be temporarily lost to support the proposed development.

The land affected by the Development comprises predominantly arable land. The construction, operational and decommissioning phases will have an effect on the prevailing land use and farming operations will be changed.

However, the diversification of land within the order limits for the implementation of the solar array will provide alternative forms of employment, as discussed above.

### 5.3.1 Construction Phase

Firstly, the assessment needs to take into account the agricultural employment lost as a result of the cessation of agricultural production during the construction phase. Given the site consists of Grade 2/3 land, the assessment assumes that the crop likely to be grown during all phases of development would be cereals.

The Nix Farm Management Pocketbook (2024) provides estimates for the required Standard Work Days (SWDs) per hectare for various crop types (shown in Table 9). A SWD is a general estimate of the farm labour requirement for a farm enterprise. A standard work year is defined as 2,200 hours and these total hours are converted into 275 notional 8 hour standard work days.

The average of ‘winter cereals – straw bailed’ and spring cereals – straw bailed’ has been used to reflect the seasonality of farming. This value, 1.485, has been used to estimate the likely SWDs lost during the construction period.

*Table 9: Nix Farmbook Pocketbook – Standard Work Days (SWDs) per Hectare*

| Crops | SWDs per hectare | | | |
|---|---|---|---|---|
| | Straw Incorporated | | Straw Bailed | |
| | Average | Premium | Average | Premium |
| Winter Cereals - Conventional Cults | 1.15 | 0.87 | 1.56 | |
| Winter Cereals - Minimum Tillage | 0.97 | 0.73 | 1.38 | |
| Winter Cereals - Direct Drill | 0.86 | 0.64 | 1.27 | |
| Spring Cereals | 1 | 0.75 | 1.41 | |
| Winter Oilseed Rape - Desiccated | 1.11 | 0.84 | | |
| Winter Beans | 0.93 | 0.7 | | |
| Spring Beans | 0.96 | 0.72 | | |
| Dried Peas | 1.33 | 1 | | |
| Vining Peas | 1.04 | 0.65 | Inc. in store | |
| Maincrop Potatoes 3 | 3.65 | 2.74 | 9.25 | 6.94 |
| Early Potatoes 3 | 5.41 | 4.06 | | |
| Sugarbeet | 1.88 | 1.41 | | |
| Herbage Seed (1st year) | 0.68 | 0.51 | | |
| Grass Production | 0.93 | 0.7 | | |
| Hay (7.5 t/ha) 4 | 1.39 | 1.04 | | |
| Silage (23 t/ha) 4 | 1.19 | 0.89 | | |

Based on an approximately 73.45 ha area of agricultural loss (solar and substation site areas), this would, therefore, require approximately 109 SWDs or 873 work-hours which is the equivalent of circa 0.40 direct FTE jobs.

***Sensitivity of the Receptor***

As per Table 5, the sensitivity of the receptor is **High**.

***Magnitude of Impact***

The impact on agricultural employment is direct through the change of use of land as a result of the Development. The loss in agricultural employment is outweighed by the jobs created by the Development. Even if the assessment were not to consider the offsetting employment generated by the development, the loss of agricultural employment represents a decrease of less than 5% relative to existing employment in the industry in the study area.

The impact is predicted to be of local spatial extent and short-term continuous duration.

On this basis the magnitude is, therefore, **Negligible**.

***Significance of the Effect***

Based on the sensitivity of the receptor and the magnitude of the impact, the overall significance of the effect is considered to be **Negligible**, which is not significant.

### 5.3.2 Operational Phase

The assessment must also to consider the agricultural employment lost as a result of the cessation of agricultural production during the operational phase. Based on an approximately 73.45ha area associated with the loss of agricultural land; it is estimated that this would support approximately 0.40 direct local FTE employees per annum.

***Sensitivity of the Receptor***

As per Table 5, the sensitivity of the receptor is **High**.

***Magnitude of Impact***

The impact on agricultural employment is direct through the physical change of use of land as a result of the Development. However, this is outweighed by the employment generated by the development. Furthermore, the loss of agricultural employment represents a decrease by less than 5% relative to existing employment in the industry in the study area.

The impact is predicted to be of local spatial extent and long-term continuous duration.

On this basis the magnitude is, therefore, **Negligible**.

***Significance of the Effect***

Based on the sensitivity of the receptor and the magnitude of the impact, the overall significance of the effect is considered to be **Negligible**, which is not significant.

### 5.3.3 Decommissioning

The reduction in agricultural output associated with the decommissioning phase is considered to be commensurate with the construction phase.

***Sensitivity of the Receptor***

As per Table 5, the sensitivity of the receptor is **High**.

***Magnitude of Impact***

The impact on agricultural employment is direct through the physical change of use of land as a result of the Development. However, this is outweighed by the employment generated by the development. Furthermore, the loss of agricultural employment represents a decrease by less than 5% relative to existing employment in the industry in the study area. The impact is predicted to be of local spatial extent and short-term continuous duration.

On this basis the magnitude is, therefore, **Negligible**.

***Significance of the Effect***

Based on the sensitivity of the receptor and the magnitude of the impact, the overall significance of the effect is considered to be **Negligible**, which is not significant.

## 5.4 Agricultural Output

The change of use from agriculture to the stationing of solar panels will have the effect of reducing agricultural output associated with the development site.

As discussed in the assessment of agricultural employment, the land affected by the Development comprises predominantly arable land. The construction, operational and decommissioning phases will have an effect on the prevailing land use and farming operations will be changed.

However, the diversification of land within the order limits for the implementation of the solar array will provide alternative forms of economic output, as discussed in section 5.2. This is described by the landowner in the Landowner Representation as providing "essential support in an increasingly challenging industry."

### 5.4.1 Construction Phase

The assessment calculates the value of the expected output associated with winter and spring cereals to estimate the loss of agricultural output associated with the construction phase of the development. This involved utilising the Nix Farm Management Pocketbook's estimates of arable crop output per hectare.

Table 10 shows the estimated output per annum produced by each crop should construction not take place. The assessment uses the average output per ha associated with 'spring malting barley' and winter feed wheat' to ensure the assessment captures the maximum potential output and, subsequently, the worst-case scenario. This equates to £1,525.50/ha. The total output per annum is, therefore, estimated to be approximately £112,048. Given the construction period is estimated to be 20 weeks, the loss of output would therefore equate to circa. £43,095.

*Table 10 – Agricultural Output per ha*

| Crop | Output, £/ha |
|---|---|
| First Feed Wheat | 1,799 |
| Grain maize | 1,538 |
| Maincrop potatoes | 12,000 |
| Spring Linseed | 840 |
| Spring malting barley | 1,286 |
| Spring oats | 1,134 |
| Sugar Beet | 2,541 |
| Vining Peas | 1,613 |
| Winter Beans | 1,011 |
| Winter feed wheat | 1,765 |
| Winter malting barley | 1,456 |
| Winter oats | 1,241 |

Furthermore, based on an approximately 73.45 ha area of agricultural loss, circa 0.40 direct FTE jobs are expected to be lost during the construction phase.

It is noted that the GVA per worker in the agriculture, forestry and fishing; mining and quarrying sector in the study area is estimated to be approximately £92,591.

As employment is quantified as an FTE, the GVA is quantified over an annual period. On this basis, over the construction programme, the loss of agriculture employment is expected to result in a loss to GVA of £37,036. This compares to the £3.65m of GVA gained in relation to employment generated by the development during construction.

***Sensitivity of the Receptor***

As per Table 5, the sensitivity of the receptor is **High**.

***Magnitude of Impact***

The impact on agricultural output is direct through the change of use of land and also indirect in terms of the GVA associated with any agricultural jobs lost as a result of the Development. The loss in agricultural output is outweighed by the economic output and employment GVA created by the development. Even before netting off, the loss in agricultural GVA equates to less than 1% of the sector's total.

The impact is predicted to be of local spatial extent and short-term continuous duration.

On this basis the magnitude is, therefore, **Negligible**.

***Significance of the Effect***

Based on the sensitivity of the receptor and the magnitude of the impact, the overall significance of the effect is considered to be **Negligible**, which is not significant.

### 5.4.2 Operational Phase

The assessment must also to consider the GVA lost as a result of the cessation of agricultural output during the operational phase. Based on an approximate area of 73.45ha associated with the loss of agricultural land; it is estimated that this would support approximately 0.40 direct local FTE employees per annum. The average GVA per agriculture, fishing and forestry; mining and quarrying employee in the study area equates to approximately £92,591. Therefore, over the full operational phase this would result in a loss in GVA (factoring in a discount rate of 3.5%) of £0.79m.

Furthermore, as per the construction period, per annum, agricultural output associated with crop production equates to £112,048. Therefore, for the full operational phase, there is expected to be a loss of agricultural output equivalent to £4.5m. After applying the relevant discount rate (3.5%), this equates to an agricultural output loss of £2.4m. This compared to an output of £47.8m associated with the sale of electricity and thus the economic output of the site would see a net increase of £45.4m.

***Sensitivity of the Receptor***

As per Table 5, the sensitivity of the receptor is **High**.

***Magnitude of Impact***

The impact on agricultural output is direct through the physical change of use of land and loss of employment and also indirect in terms of the GVA associated with any agricultural jobs lost as a result of the Development. However, this is outweighed by the GVA generated by the development. Even before netting off, the loss in agricultural GVA equates to just over 1% of the total generated in the sector.

The impact is predicted to be of local spatial extent and long-term continuous duration.

On this basis the magnitude is, therefore, **Negligible**.

***Significance of the Effect***

Based on the sensitivity of the receptor and the magnitude of the impact, the overall significance of the effect is considered to be **Negligible**, which is not significant.

### 5.4.3 Decommissioning

The reduction in agricultural output associated with the decommissioning phase is considered to be commensurate with the construction phase.

***Sensitivity of the Receptor***

As per Table 5, the sensitivity of the receptor is **High**.

***Magnitude of Impact***

The impact on agricultural output is direct through the change of use of land and loss of employment and also indirect in terms of the GVA associated with any agricultural jobs lost as a result of the Development. The loss in agricultural output is outweighed by the economic output and jobs created by the Development. Even before netting off, the loss in agricultural GVA equates to less than 1% of the sector's total.

The impact is predicted to be of local spatial extent and short-term continuous duration.

On this basis the magnitude is, therefore, **Negligible**.

***Significance of the Effect***

Based on the sensitivity of the receptor and the magnitude of the impact, the overall significance of the effect is considered to be **Negligible**, which is not significant.

## 5.5 Education and Skills

The creation of jobs at each phase of the development provides an opportunity for the applicant to offer related education and skills training programs to support employee / prospective employee development. This could be offered in the form of on-the-job training, professional development courses, onsite educational visits, bursaries and more.

### 5.5.1 Construction

During construction, employment related directly to the development is at its most prevalent. Subsequently, there is opportunity to provide onsite training and apprenticeships, as well as offsite training to give local people the skills required to work on similar developments. Whilst there is likely to be some natural skills development, without a dedicated employment and skills plan being adopted it is not possible to quantify this impact.

***Sensitivity of the Receptor***

As per Table 5, the sensitivity of the receptor is **High**.

***Magnitude of Impact***

The impact is predicted to be of local spatial extent and short-term continuous duration. Given the data presented within the socio-economic baseline, with regards to educational deprivation and unemployment, there are individuals within the study area who would benefit from skills and training opportunities. However, at present, methods to target these individuals have not been established. Furthermore, there is no existing commitment to provide education and skills programs.

On this basis, the magnitude is **Negligible**.

However, implementing an Employment and Skills Plan (ESP) would identify opportunities the project can offer, and target them towards areas where there are high rates of unemployment and/or educational deprivation.

As well as identifying opportunities, the ESP would outline a strategy for marketing opportunities within local educational institutions and with local job agencies. This would ensure maximum awareness within the district.

Therefore, an ESP has the potential to increase the magnitude of impact to **Medium Beneficial**.

***Significance of the Effect***

Based on the sensitivity of the receptor and the magnitude of the impact, the overall significance of the effect is considered to be **Negligible**, which is not significant.

However, if an ESP is implemented as discussed within the assessment of magnitude, the significance of impact would increase to **Moderate / Major Beneficial**, which is significant.

### 5.5.2 Operational Phase

During operation, there will be employment generated, albeit, to a lesser degree than observed during construction. This will create opportunities to provide onsite training, apprenticeships and offsite training programs.

***Sensitivity of the Receptor***

As per Table 5, the sensitivity of the receptor is **High**.

***Magnitude of Impact***

The impact is predicted to be of local spatial extent and short-term continuous duration. Given the data presented within the socio-economic baseline, with regards to educational deprivation and unemployment, there are individuals within the study area who would benefit from skills and training opportunities. However, education and skills programs are likely to be less prevalent during operation than during construction, due to fewer employment opportunities and, therefore, less opportunity for onsite training / apprenticeship programs.

Furthermore, at present methods to target educationally deprived / NEET individuals have not been established and there is no existing commitment to provide education and skills programs.

On this basis, the magnitude is **Negligible**.

However, as discussed above, the implementation of an ESP would target education and skills opportunities towards educationally deprived / NEET individuals within the study area, increasing the magnitude of impact. Subsequently, should an ESP be implemented effectively, the magnitude of impact could increase to Low Beneficial.

***Significance of the Effect***

Based on the sensitivity of the receptor and the magnitude of the impact, the overall significance of the effect is considered to be **Negligible**, which is not significant.

If an ESP is implemented effectively, the significance of the impact could increase to Minor Beneficial. However, this would still not be significant.

### 5.5.3 Decommissioning Phase

During the decommissioning phase, educational/skills opportunities are likely to be less prevalent than during the construction and operational phases. With the operational phase coming to an end, there is likely to be less emphasis on providing technical training and the offering of industry specific education/skills courses will likely reduce.

***Sensitivity of Receptor***

As per Table 5, the sensitivity of the receptor is **High**.

***Magnitude of Impact***

The impact is predicted to be of local spatial extent and short-term continuous duration. During this phase of the Development, the education/skills offering is likely to be reduced, reflecting less opportunity for on-the-job training and less need to train staff for operational employment opportunities.

Consequently, the magnitude is considered to be **Negligible**.

***Significance of Effect***

Based on the sensitivity of the receptor and the magnitude of the impact, the significance of the effect is considered to be **Negligible,** which is not significant.

## 5.6 Change in Visitor Economy

### 5.6.1 Construction Phase

During the construction phase of the development there is the potential for the tourism industry to be impacted as a result of perceived negative landscape and visual impacts associated with construction works. This could potentially deter tourists from using PRoW or detract from the enjoyment of tourists using PRoW. It could also potentially result in less people visiting tourism receptors and, subsequently, not using the local holiday let provision.

*PRoW*

The Transport Statement identifies the Public Rights of Way (PRoW) in close proximity to the development site within *'Figure 3: Existing Public Rights of Way'* alongside markers identifying site locations. It also states that vehicular access to the transformer on Panton Road is in the approximate location of the existing public footpath connection and, therefore, a temporary closure/diversion of this public footpath may be required during the construction period. However, the current position is that no PRoW will require closures during construction or operation.

The appellant is maintaining the permissive footpath along the northern boundary of the site. This path does not form part of the public rights of way network and is therefore only available to the public if the landowner allows it. The scheme therefore secures the future use of the permissive path for the duration of the solar farm.

*Visual Impact*

According to the LVIA; effects on landscape character would be confined to a small part of the host LCA E1 Wragby to Horsington Vale Woodland and Farmland. Mitigation planting would reduce the effects beyond the Site once mature. The LVIA states that effects would be Moderate/minor adverse during all stages of the Proposed Development.

During construction and early operation, the following visual effects would arise:

- Major/moderate, Adverse effects on users of the bridleways to the east of the Site;
- Moderate, Adverse effects on users of the footpath north of Amberholme Farm;
- Moderate/minor and Adverse effects on people living in and visiting Hatton (as a result of changes to views from the footpath and a short stretch of Sturton Road), and
- Moderate/minor and Adverse effects on local road users (Panton Road, Sturton Road, Sturton Lane and Wass Lane/Roman Road/Moor Lane).

After planting matures to design heights, which would require 7-10 years for new hedges and 2-4 years for existing hedges, the following visual effects would arise:

- Moderate, Adverse effects on users of the bridleways to the east of the Site;
- Minor/minimal and Adverse effects on people living in and visiting Hatton, and

- Minor and Adverse effects on local road users (Sturton Lane and Wass Lane/Roman Road/Moor Lane).

*Accommodation Providers*

***Temporary Worker Accommodation Demand***

During the construction phase, it is anticipated that there will be a gain in construction employment equivalent to 210 direct local person-years. When factoring in the anticipated leakage equivalent to 10%, only 21 workers would be expected to be living outside of the study area and thus potentially require accommodation

Based on the assessment of quantity of short-term rental accommodation in the study area and occupancy rates regionally (see Socio-Economic Baseline Assessment), any non-resident workforce would have an adequate number of short-term rental options to choose from and thus any demand would not impact upon demand from tourists.

In conclusion, there is sufficient supply of short-term rental accommodation to cater for demand. Any requirement is likely to be a net benefit to the visitor economy given the observed low occupancy rates for visitor accommodation in the study area.

***Reduced Visitor Numbers***

Despite the conclusions from the LVIA and Transport Assessment, it is still possible that some tourists may decide not to stay within the visitor accommodation adjacent the site during construction as a result of perceived visual, noise or traffic impacts.

Within the study area, an average occupancy rate within short-term rental accommodation is observed to be 47%. In the last year (July 2024 – June 2025), the period of October 2024 – May 2025 saw the lowest monthly revenue per available room in the study area. Therefore, to mitigate against potential negative impacts, construction should aim to be carried out during this period, if possible.

*Table 11 – Short-Term Rental Accommodation RevPAR, East Lindsey*

| Month | RevPAR (£) |
|---|---|
| Jul-24 | 2704 |
| Aug-24 | 2566 |
| Sep-24 | 2625 |
| Oct-24 | 1845 |
| Nov-24 | 2008 |
| Dec-24 | 1927 |
| Jan-25 | 1763 |
| Feb-25 | 1726 |
| Mar-25 | 1905 |
| Apr-25 | 1866 |
| May-25 | 1667 |
| Jun-25 | 2294 |

A discussed above, it is anticipated that there could be up to 21 non-resident workers that may require short-term rental accommodation. The identified local visitor accommodation has a total of 15 bedrooms. On that basis, if all 21 non-resident workers occupied the local short-term rental

accommodation, the occupancy rate of these providers would likely be 100%, as opposed to the 47% year-round average observed in East Lindsey.

In order to assess the economic output associated with the visitor numbers the highest observed rate per night for each of the holiday lets has been identified. This is shown in Table 12 below.

*Table 12 – Potentially Impacted Holiday Let Income*

| Holiday Let | Rate per night | No. of bedrooms |
|---|---|---|
| Old Barn Cottages | - | |
| *The Chaffhouse* | £68 | 2 |
| *The Granary* | £71.50 | 2 |
| *The Stable* | £75 | 3 |
| The Old Barn | £170 | 2 |
| Corner Farm (planning consent for 3x holiday lets) | £96 | 6 |
| **Maximum income per night** | £672.50 | - |
| **Total loss of income per night (assuming 47% occupancy)** | **£316.08** | **-** |
| **Total loss of income during construction (20wks)** | **£44,250** | **-** |

Subsequently, the output associated with providing temporary worker accommodation at the potentially impacted holiday let accommodation is estimated to be approximately £94,150, compared to £44,250 should construction of the proposed development not take place. This would be a net benefit of £49,900.

Even in a worst-case scenario whereby all income from tourist visitors is lost during the construction phase, only seven temporary workers (33% of the total outside of study area workforce) would be required to stay within the local accommodation to almost completely offset the loss (difference of £314). In order for any impact to be more than negligible (>5% loss of income) on the local short-term accommodation providers, less than six non-resident workers (28.6% of the total) would be required to stay in the local short term rental accommodation assuming no tourist visitors also stayed during this period.

Therefore, if possible, local accommodation providers should be provided with the first opportunity to accommodate non-resident workers to minimise any potential negative impact.

Looking at the wider visitor economy, the income generated by the identified local accommodation providers (£44,250) represents just 0.024% of the total output / GVA observed within the 'Accommodation and food services' sector in East Lindsey in 2023. Therefore, any potential impact on the study area visitor economy as a result of reduced income associated with visitor stays at the locally identified providers will be negligible.

***Sensitivity of Receptor***

As per Table 5, the sensitivity of the receptor is **High.**

***Magnitude of Impact***

The impact is predicted to be of local spatial extent and short-term duration. Although data with regards to footpath usage is not available, given the lack of surrounding tourist attractions, it is expected that PRoW with visibility of the site are used infrequently by tourists.

It is anticipated that the non-resident workforce will be minimal-modest. Subsequently, it is unlikely that a non-resident workforce will negatively impact upon the availability of short-term rental accommodation. Instead, the non-resident workforce will benefit short-term rental providers with ongoing vacancies, as identified by the Property Market Intel data provided in the baseline assessment (Appendix 1). On this basis any impact on the local identified accommodation providers will be negligible.

The impact on the 'Accommodation and food services' sector more widely in East Lindsay is also anticipated insignificant, given the output generated by the identified local accommodation providers equates to 0.024% of the sector total.

Therefore, the magnitude of the impact is considered to be **Negligible**.

***Significance of Effect***

Based on the sensitivity of the receptor and the magnitude of the impact, the significance of the effect is considered to be **Negligible,** which is not significant.

### 5.6.2 Operational Phase

During the operational phase of the development there is the potential for the tourism industry to be impacted as a result of perceived negative landscape and visual impacts associated with the completed solar farm. This could potentially deter tourists from using PRoW or detract from the enjoyment of tourists using PRoW. This could have possible implications on local tourism businesses, such as holiday let providers.

#### *Visual Impact*

The Landscape and Visual Impact Assessment (LVIA) states that land use of the site, and hence character, will alter as a direct result of development of the Site. However, the Site itself is well contained by mature hedgerow vegetation along boundaries and localised changes in topography. Therefore, the majority of the residual landscape effects are considered to be Negligible and None.

The LVIA states that the greatest level of visual effects will be experienced by those receptors within the near distance. Such effects are stated to be mitigated by the design of the Proposed Development in terms of the retained existing mature hedgerows, in conjunction with new hedgerow planting, although it will take time for new planting to become established. Long-term adverse effects are considered to be Negligible in the majority.

Subsequently, the LVIA concludes that there are no overriding landscape or visual effects that should prevent the development of the Site as proposed.

In addition, whilst the evidence base is not conclusive, the available research suggests that wider perceptions held by tourists in relation to climate change and renewable energy play a role in how tourists weigh up the positive and negative effects of renewable energy infrastructure and may influence their reactions. This means that, even in cases where a solar farm development may have an effect on characteristics of a tourism area that visitors value, the way that this effect is assessed by visitors (and reflected in future behaviour) is influenced by wider views and perceptions.

The most recent Department for Energy Security & Net Zero (DESNZ) Public Attitudes Tracker (PAT) carried out in Spring 2025 found that 80% of people supported renewable energy as a general concept. Solar energy was the most supported form of renewable energy in the survey. Opposition to solar energy represented 4% of those surveyed, compared to 86% who were supportive.

Although there has been little research into the tourism impact of large-scale solar projects, a Welsh Government report produced in 2014 found that there is little evidence that wind farms have had or are having a negative effect on tourism across Wales and the UK as a whole.

Therefore, given that research also conducted in 2014 which reviewed the dynamic properties of the preferences for renewable energy sources found that, in terms of the visual effects of onshore renewable energy infrastructure, there is an increased preference for biomass and solar energy solutions relative to wind power; this suggests that the negative effects on tourism may be slightly lower for solar than for wind farms. This is supported by the latest DESNZ Public Attitudes Tracker.

### *PRoW*

As part of the proposal, the appellant has committed to keeping all PRoW open during all phases of development. A permissive footpath near the Sotby Woods is also being retained. Other mitigation measures related to bridleways include:

- Buffer zones, additional hedging and wide corridors, where necessary.
- No construction traffic on the bridleway
- Inverters set back to reduce noise concerns.

The Proposed Development would also provide additional maintenance to the PRoW by maintaining the grassland surrounding the bridleway, allowing for better access by the public. The additional screening proposed at the site will also reduce visual impact of the solar farm.

### *Accommodation providers*

***Reduced Visitor Numbers***

It is possible that tourists decide not to stay within the visitor accommodation adjacent the site during the operational phase due to perceived visual impacts associated with the completed solar development.

On the basis that opposition to solar energy represented 4% of those surveyed (Department for Energy Security & Net Zero (DESNZ) Public Attitudes Tracker (PAT) Spring 2025), it is reasonable to assume that the accommodation providers could expect to see a drop in visitor numbers of an equivalent number.

Utilising the same occupancy rate assumptions as presented within the analysis at the construction phase, and assuming there would be a 4% reduction in visitors, the total annual loss of income associated with the loss of visitors would equate to £4,602.

Even in the absolute worst-case scenario, whereby the accommodation providers experienced a 100% reduction in visitor numbers, the total annual loss of output associated with the loss of visitors would equate to £115,051 per annum. This equates to 0.06% of the total output / GVA generated within the 'Accommodation and food services' sector in the study area each year.

***Temporary Accommodation Demand***

Given the minimal employment generated during the operational phase of the development, there is likely to be no implications for the availability of short-term accommodation, especially given the occupancy rates within the study area presented by Property Market Intel.

***Sensitivity of Receptor***

As per Table 5, the sensitivity of the receptor is **High.**

***Magnitude of Impact***

The impact is predicted to be of local spatial extent and medium-term duration. Although data with regards to footpath usage is not available, given the lack of surrounding tourist attractions, it is expected that PRoW with visibility of the site are used infrequently by tourists.

The magnitude of impact on local accommodation providers is anticipated to be negligible, given that public attitudes towards solar development indicate only approximately 4% of potential visitors are expected to be deterred by the visual impact of solar arrays.

The magnitude of impact in relation to the visitor economy is also considered to be negligible, given that the total output of the local accommodation providers equates to just 0.06% of 'Accommodation and food services' sector total.

Subsequently, the magnitude of the impact is considered to be **Negligible**.

***Significance of Effect***

Based on the sensitivity of the receptor and the magnitude of the impact, the significance of the effect is considered to be **Negligible,** which is not significant.

### 5.6.3 Decommissioning

The impact on the visitor economy associated with the decommissioning phase is considered to be commensurate with the construction phase.

***Sensitivity of Receptor***

As per Table 5, the sensitivity of the receptor is **High.**

***Magnitude of Impact***

The impact is predicted to be of local spatial extent and short-term duration. The LVIA assesses major to minor/minimal in relation to the construction phase of development. However, planting will have matured by decommissioning, reducing the anticipated effects.. Although data with regards to footpath usage is not available, given the lack of surrounding tourist attractions, it is expected that PRoW with visibility of the site are used infrequently by tourists.

It is anticipated that the non-resident workforce will be minimal-modest. Subsequently, it is unlikely that a non-resident workforce will negatively impact upon the availability of short-term rental accommodation. Instead, the non-resident workforce will benefit short-term rental providers with ongoing vacancies, as identified by the Property Market Intel data.

Therefore, it is envisaged that the benefit to short-term rental providers will offset the negative impact on the visitor economy associated with noise and visual impacts on PRoW surrounding the site.

Therefore, the magnitude of the impact is considered to be **Negligible**.

***Significance of Effect***

Based on the sensitivity of the receptor and the magnitude of the impact, the significance of the effect is considered to be **Negligible, which is not significant**.

## 5.7 Disruption to Travel Patterns

### 5.7.1 Construction Phase

There is potential for additional construction-related vehicles on the local road network to impact travel patterns. Within the Transport Statement, 'Table 2: Estimated HCV Construction Traffic Generation' suggests that, during the 20-week construction period, there is estimated to be 1,068 two-way vehicle trips (530 total HCVs).

It is expected that the maximum number of construction staff on-site will vary subject to the construction schedule. Staff trips will be made by cars, minibuses or vans/small LCVs. Staff vehicle movements would typically occur at the start and end of the working day and generally not coincide with the movement of large vehicles, which are expected to occur during the weekday daytime.

The following mitigation measures have been proposed within the Transport Statement to reduce effects:

- Temporary Vehicle Signing Strategy - Implement a temporary signing strategy to ensure that all large delivery vehicles use only designated routes. For example, signs could be placed at appropriate routeing decision points;
- Vehicle Arrival/Departure Scheduling - All deliveries associated with the project could be pre-arranged with site management to avoid potential for vehicles meeting along the construction access routes. Furthermore, a banksman will be available on site, if necessary, to coordinate the movement of vehicles, including the dispatch of vehicles from the site; and
- Timing Restrictions and Enforcement - In the interests of road safety and to reduce possible nuisance, construction delivery traffic could be subject to a timing restriction outside of which delivery vehicles will not be able to gain access into the site or depart from the site

The Transport Statement concludes that there will be a low number of daily/peak hour movements associated with construction. The proposed development should therefore only have a negligible impact on the operation of the local highway network. Therefore, it is that the proposed development would not be expected to have a detrimental impact in terms of road safety and traffic impact.

***Sensitivity of Receptor***

As per Table 5, the sensitivity of the receptor is **Low**.

***Magnitude of Impact***

The impact is predicted to be of local spatial extent and short-term duration. Given the Transport Statement concludes that there will be a negligible impact on the operation of the local highway network and no detrimental impact in terms of road safety and traffic impact, the magnitude of impact is considered to be **Negligible**.

***Significance of Effect***

Based on the sensitivity of the receptor and the magnitude of the impact, the significance of the effect is considered to be **Negligible**.

### 5.7.2 Operational Phase

During the operational phase, the transport network will need to support the additional workers present onsite. This has the potential to impact upon commuting patterns within the study area.

However, the Transport Statement states that the projected operational vehicle trip generation associated with the solar farm does not represent a significant amount of movement, with between 10 and 20 vehicle trips per annum (less than 2 per month) expected to be generated by the solar farm associated with site operations and maintenance activities. The proposed development should therefore only have a negligible impact on the operation of the local highway network.

Therefore, it is concluded within the Transport Assessment that the proposed development would not be expected to have a detrimental impact in terms of road safety and traffic impact.

***Sensitivity of Receptor***

As per Table 5, the sensitivity of the receptor is **Low**.

***Magnitude of Impact***

The impact is predicted to be of local spatial extent and medium-term duration.

Given the Transport and Access Statement concludes that the traffic generated by both the solar and substation site during their operation would be negligible, the magnitude of impact is considered to be **Negligible**.

***Significance of Effect***

Based on the sensitivity of the receptor and the magnitude of the impact, the significance of the effect is considered to be **Negligible**.

### 5.7.3 Decommissioning

The impact on travel patterns associated with the decommissioning phase is considered to be commensurate with the construction phase.

***Sensitivity of Receptor***

As per Table 5, the sensitivity of the receptor is **Low**.

***Magnitude of Impact***

The impact is predicted to be of local spatial extent and short-term duration. Given the Transport and Access Statement concludes that there will be a negligible impact on the operation of the local highway network and / or at key junctions during construction, the magnitude of impact is considered to be **Negligible**.

***Significance of Effect***

Based on the sensitivity of the receptor and the magnitude of the impact, the significance of the effect is considered to be **Negligible**.

# 6.0 Summary of Impacts and Monitoring

Information on socioeconomics and tourism within the study area was collected and informed by a review of relevant evidence sources, including scientific literature, baseline data, policy and legislation.

Table 13 presents a summary of the potential impacts and residual effects in respect to socioeconomics and tourism. The impacts assessed include:

- Unemployment;
- Economic Output;
- Agricultural Employment
- Agricultural Output;
- Skills & Qualifications;
- Changes to Visitor Economy; and
- Disruption to Travel Patterns.

It is concluded that there will be no significant adverse effects on socioeconomics and tourism during the construction, operation or decommissioning phases of the Development. There will be significant beneficial effects upon economic output and unemployment. Should an ESP be implemented effectively, there will also be significant residual effects on education and skills.

*Table 13: Summary of Potential Environmental Effects and Monitoring*

| Description of impact | Phase[a] | | | Magnitude of impact | Sensitivity of the receptor | Significance of effect | Further mitigation | Residual effect |
|---|---|---|---|---|---|---|---|---|
| | C | O | D | | | | | |
| The impact of employment generation on unemployment rates in the study area. | ✓ | ✓ | ✓ | C: Low Beneficial<br>O: Negligible<br>D: Low Beneficial | C: High<br>O: High<br>D: High | C: Moderate Beneficial<br>O: Negligible<br>D: Moderate Beneficial | N/a | C: Moderate Beneficial<br>O: Negligible<br>D: Moderate Beneficial |
| The impact of direct investment, supply chain investment, employment generation and sale of electricity. | ✓ | ✓ | ✓ | C: Medium Beneficial<br>O: Medium Beneficial<br>D: Medium Beneficial | C: High<br>O: High<br>D: High | C: Moderate / Major Beneficial<br>O: Moderate / Major Beneficial<br>D: Moderate Beneficial | N/a | C: Moderate / Major Beneficial<br>O: Moderate / Major Beneficial<br>D: Moderate Beneficial |
| The impact of the change of use on agricultural employment. | ✓ | ✓ | ✓ | C: Negligible<br>O: Negligible<br>D: Negligible | C: High<br>O: High<br>D: High | C: Negligible<br>O: Negligible<br>D: Negligible | N/a | C: Negligible<br>O: Negligible<br>D: Negligible |
| The impact of the change of use on agricultural output. | ✓ | ✓ | ✓ | C: Negligible<br>O: Negligible<br>D: Negligible | C: High<br>O: High<br>D: High | C: Negligible<br>O: Negligible<br>D: Negligible | N/a | C: Negligible<br>O: Negligible<br>D: Negligible |
| The impact of directed skills and training as part of a | ✓ | ✓ | ✓ | C: Negligible<br>O: Negligible | C: High<br>O: High | C: Negligible<br>O: Negligible | Implementation of ESP | C: Moderate / Major Beneficial |

| Description of impact | Phase[a] | | | Magnitude of impact | Sensitivity of the receptor | Significance of effect | Further mitigation | Residual effect |
|---|---|---|---|---|---|---|---|---|
| | C | O | D | | | | | |
| skills and employment plan on existing skills and qualifications. | | | | D: Negligible | D: High | D: Negligible | | O: Minor Beneficial<br>D: Negligible |
| The impact changes to visual amenity, noise impacts and restrictions to access on the visitor economy. | ✓ | ✓ | ✓ | C: Negligible<br>O: Negligible<br>D: Negligible | C: High<br>O: High<br>D: High | C: Negligible<br>O: Negligible<br>D: Negligible | N/a | C: Negligible<br>O: Negligible<br>D: Negligible |
| The impact on commuting patterns as a result of additional vehicular movements on the road network | ✓ | ✓ | ✓ | C: Negligible<br>O: Negligible<br>D: Negligible | C: Low<br>O: Low<br>D: Low | C: Negligible<br>O: Negligible<br>D: Negligible | N/a | C: Negligible<br>O: Negligible<br>D: Negligible |

C=construction, O=operational and maintenance, D=decommissioning

# 7.0 References


Annual Population Survey (2024). Economic Activity. Available at: https://www.nomisweb.co.uk/query/construct/summary.asp?mode=construct&version=0&dataset=17 [Accessed on 27/07/2025].

Annual Population Survey (2024). Highest Level of Qualification. Available at: https://www.nomisweb.co.uk/query/construct/summary.asp?mode=construct&version=0&dataset=17 [Accessed on 27/07/2025].

BRE (2014) Agricultural Good Practice Guidance for Solar Farms. Ed J Scurlock. Available at: https://files.bregroup.com/solar/NSC_-Guid_Agricultural-good-practice-for-SFs_0914.pdf [Accessed on: 27/07/2025].

Cardiff University (2017). Regional electricity generation and employment in UK regions. Available at: https://orca.cardiff.ac.uk/id/eprint/77013/3/Energy%20Paper%20Sept%2023rd%20%202015%20Main%20Orca.pdf [Accessed on: 27/07/2025].

CEBR (2014) Solar powered growth in the UK. Available at: https://cebr.com/reports/solar-powered-growth-in-the-uk/ [Accessed on: 27/07/2025].

Census (2011). Location of usual residence and place of work by sex. Nomisweb.co.uk. Available at: https://www.nomisweb.co.uk/census/2011/wu01uk#:~:text=Location%20of%20usual%20residence%20and%20place%20of [Accessed on 27/07/2025].

Central Lincolnshire Joint Strategic Planning Committee (adopted 2023). Central Lincolnshire Local Plan – Adopted April 2023. Available at: https://www.n-kesteven.gov.uk/sites/default/files/2023-04/Local%20Plan%20for%20adoption%20Approved%20by%20Committee.pdf [Accessed on 24/07/2025].

Department for Energy Security & Net Zero (2025). Public Attitudes Tracker – Spring 2025. Available at: https://www.gov.uk/government/statistics/desnz-public-attitudes-tracker-winter-2024 [Accessed on 27/07/2025].

Department for Energy Security & Net Zero (2024). Renewable electricity by local authority 2014 – 2023. Available at https://www.gov.uk/government/statistics/regional-renewable-statistics [Accessed on: 27/07/2025].

Department for Energy Security and Net Zero (2024). Contracts for Difference Allocation Round 6 results. Available at: https://assets.publishing.service.gov.uk/media/66d6ad7c6eb664e57141db4b/Contracts_for_Difference_Allocation_Round_6_results.pdf [Accessed on: 27/07/2025].

East Lindsey District Council (2021) - East Lindsey Economic Baseline 2021. Available at: https://democracy.e-lindsey.gov.uk/documents/s63156/APPENDIX%20A%20-%20East_Lindsey_Economic_Baseline_2021%20210610.pdf#:~:text=The%20East%20Lindsey%20Economic%20Baseline%202021%20forms%20part,to%20the%20previous%20Economic%20Baseline%2C%20produced%20in%202016. Accessed on [24/07/2025].

East Lindsey District Council (2018). East Lindsey Local Plan – Core Strategy. Available at: https://www.e-lindsey.gov.uk/media/9791/Core-Strategy/pdf/Final_Version_of_Core_Strategy_2018.pdf?m=1546595473230 [Accessed on 25/07/2025].

HM Treasury (2022). The Green Book, para 5.35. Available at: https://assets.publishing.service.gov.uk/media/6645c709bd01f5ed32793cbc/Green_Book_2022__updated_links_.pdf [Accessed on: 27/07/2025].

Homes & Communities Agency (2014). Additionality Guide. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/378177/additionality_guide_2014_full.pdf [Accessed on: 27/07/2025].

IRENA (2024). Renewable Power Generation Costs in 2023. Available at: https://www.irena.org/Publications/2024/Sep/Renewable-Power-Generation-Costs-in-2023 [Accessed on: 27/07/2025].

Labour Force Survey (2024). NEET age 16 to 24. Available at: https://explore-education-statistics.service.gov.uk/find-statistics/neet-statistics-annual-brief/2024 [Accessed on: 27/07/2025].

Ministry of Housing, Communities & Local Government (2024). National Planning Policy Framework. Available at https://www.gov.uk/government/publications/national-planning-policy-framework--2 [Accessed on 27/07/2025].

Ministry of Housing, Communities and Local Government, Ministry of Housing, Communities & Local Government (2018 to 2021) and Department for Levelling Up, Housing and Communities (2025). Planning Practice Guidance - Natural Environment. Available at: https://www.gov.uk/guidance/natural-environment [Accessed on 27/07/2025].

Office of National Statistics (2023). Business Register and Employment Survey. Available at: https://www.nomisweb.co.uk/query/construct/summary.asp?mode=construct&version=0&dataset=189 [Accessed on 27/07/2025]

Office of National Statistics (2021). Census – Method of Travel to Work. Available at: https://www.nomisweb.co.uk/query/construct/summary.asp?mode=construct&version=0&dataset=2078 [Accessed on: 27/07/2025].

Office of National Statistics (2021). Census – Car or van availability Available at: https://www.nomisweb.co.uk/query/construct/summary.asp?mode=construct&version=0&dataset=2063 [Accessed on: 27/07/2025].

Office of National Statistics (2024). Low carbon and renewable energy economy multipliers. Available at: https://www.ons.gov.uk/economy/environmentalaccounts/datasets/lowcarbonandrenewableenergyeconomymultipliersdataset? [Accessed on: 27/07/2025].

Office of National Statistics (2024). Regional gross value added (balanced) by industry: local authorities by ITL1 region – East Midlands. Available at: https://www.ons.gov.uk/economy/grossdomesticproductgdp/datasets/regionalgrossvalueaddedbalancedbyindustrylocalauthoritiesbyitl1region [Accessed on: 27/07/2025].

Office of National Statistics (2025). Output per job, UK. Available at: https://www.ons.gov.uk/economy/economicoutputandproductivity/productivitymeasures/datasets/outputperjobuk [Accessed on: 27/07/2025].

Property Market Intel (2025). Short-Term Rental Data Insights & Analytics. Available at: https://www.propertymarketintel.co.uk/for-serviced-accommodation [Accessed on 27/07/2025].

Valuation Office Agency (2023). Revaluation 2023 – Photovoltaics – Memorandum of Agreement. Available at: https://solarenergyuk.org/wp-content/uploads/2023/06/2023-Solar-PV-Memorandum-of-Agreement-signed-by-SEUK-GE-VOA.pdf [Accessed on: 27/07/2025].

Workforce Mobility and Skills in the UK Construction Sector 2022 – East Midland's. Available at: https://www.citb.co.uk/media/ozvnfg0w/2272_bmg_workforce_mobility_and_skills__east_midlands_v1.pdf [Accessed on 27/07/2025].