



Mallard Pass

Solar Farm

Mallard Pass Solar Farm

Environmental Statement Volume 2 Appendix 14.2: Socio-Economics - Assessment Methodology

November 2022

PINS Ref: EN010127

Document Ref: EN010127/APP/6.2

Revision P0

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations
2009 - Reg 5 (2) (a)

Appendix 14.2 - Socio-economics Assessment Methodology

1.1. Introduction

- 1.1.1. This appendix sets out the assessment methodology for Socio-economics.
- 1.1.2. The scope of the socio-economic assessment is in accordance with the EIA Scoping Report submitted by the applicant and takes into account the Scoping Opinion adopted by the Planning Inspectorate on behalf of the Secretary of State on 18 March 2022.
- 1.1.3. There is no specific guidance available which establishes a methodology for assessing the socio-economic effects of a Solar Farm. Therefore, the approach to the socio-economic assessment is based on professional experience and best practice. It is informed by the planning policy requirements set out within the adopted and emerging National Policy Statements (NPS) and local planning policy. The relevant national and local planning policies are presented in **Appendix 14.1** of the ES [EN010127/APP/6.2].

1.2. Study Area

- 1.2.1. The assessment of employment creation, and associated GVA, focusses on the effects in Rutland and South Kesteven local authority areas as they will be receiving the Proposed Development.
- 1.2.2. The assessment of effects on tourism are also considered across Rutland and South Kesteven as a whole. Specific reference is also made to effects on tourism receptors in the 2km radius of the Solar PV Site in order to align with the study area of **Chapter 6: Landscape and Visual** of the ES as intervisibility between tourism and recreation assets and the solar PV is likely to be the main influence on visitor experiences of the area.

- 1.2.3. The assessment of effects on the PRoW network is limited to the location where users are likely to experience any disruption in terms of travel time and/or routing, as well as any negative effects including noise, dust and visual impacts. The study area is therefore confined to the Order limits and the 500m radius of the Order limits.

1.3. Sources of Information

- 1.3.1. Socio-economic data is derived from the following datasets:

- Office for National Statistics (ONS) (2020) Business Register and Employment Survey [Ref 1];
- ONS (2021) Annual Population Survey [Ref 2];
- ONS (2020) Annual Survey of Hours and Earnings [Ref 3];
ONS (2021) Business Accounts [Ref 4];
- Global Tourism Solutions (UK) Ltd (2021) STEAM Report for 2010-2021 – Rutland [Ref 5]; and
- Global Tourism Solutions (UK) Ltd STEAM Report for 2010-2021 - South Kesteven [Ref 6].

1.4. Construction, Operation and Decommissioning Employment

- 1.4.1. The assessment focusses on the employment and linked Gross Value Added (GVA) effects associated with the construction, operation and decommissioning phases of the Proposed Development, as well as the potential effects on the local tourism economy and visitor receptors. These are discussed below.
- 1.4.2. The number of full-time construction, operation and decommissioning phase workers involved in the Proposed Development have been estimated by the Applicant, based on the experience gained from similar recent solar schemes that they have delivered.

1.4.3. Additionality¹ has been calculated by considering the overall jobs gains in the area, the level of leakage, number of displaced jobs and multiplier effects, such as supply chain and worker spending related jobs. These assumptions are informed by the Homes and Communities Agency (HCA) Additionality Guidance (2014) [Ref 7]. The assumptions are provided in **Table 1** below.

Table 1: HCA Additionality Factors and Values

Additionality factor	Value	Justification
Leakage (percentage of jobs that benefit residents living outside the study area of the Proposed Development)	50%	The Applicant will aim to employ as many local residents as possible and source from study area suppliers. However, given the proximity of large urban centres and the highly specialised equipment required in the construction of the Proposed Development it is assumed that a proportion of benefits will be leaked from the study area.
Displacement (percentage of jobs that result in a reduction in related jobs in the study area of the Proposed Development)	25%	It is considered that the levels of unemployment in the study area and the existing construction workforce mean that there is enough flexibility in the study area economy to minimise displacement levels.
Multiplier (jobs supported in the wider economy by further construction worker household spend and supplier purchases)	1.33	Centre of Economics and Business Research analysis (2014) [Ref 8] of the economic impact of large-scale solar developments concluded that every 1 direct full time equivalent (FTE) generates 1.33 additional indirect and induced jobs in the wider economy. This multiplier is broken down between 0.78 indirect FTEs generated through supply chain spend and a further 0.55 FTEs supported by the household spend of indirect FTEs on goods and services.

¹ Additionality is the difference between what would happen anyway and the change resulting from the delivery of the Proposed Development i.e. net change

1.4.4. The additionality calculations also consider ‘deadweight’ i.e. what would have happened in the absence of investment in the Proposed Development. In this case, it assesses how many direct, indirect and induced jobs associated with the farm operations within the Order limits, would be lost as a result of the Proposed Development, if any.

1.4.5. The principal socio-economic impacts on tourism receptors and Public Right of Way (PRoW) users have been considered in **Chapter 6: Landscape and Visual** of the ES [EN010127/APP/6.1] and **Appendix 6.5: Amenity and Recreation Assessment** of the ES.

1.5. Gross Value Added

1.5.1. GVA is calculated by multiplying the number of jobs created by the Proposed Development by the current GVA per head of construction workers in the study area.

1.6. Tourism

1.6.1. The perceived effect of a solar farm on tourism receptor is closely linked to whether or not the panels can be clearly seen from it. Therefore, the assessment of effects on tourism receptors is closely linked with the findings of the **Chapter 6: Landscape and Visual** and **Appendix 6.5: Amenity and Recreation Assessment** of the ES

1.7. Receptor Sensitivity

1.7.1. The assessment draws upon a combination of measurable indicators and considers the importance of the receptor in policy terms in order to understand its sensitivity. This is considered alongside the weight attached to these issues in local policy. Relevant local planning policy considered in the socio-economics assessment is presented in **Appendix 14.1** of the ES. The sensitivity criteria for employment, GVA and tourism receptors are set out in **Table 2**. The sensitivity criteria for PRoW set out in **Table 3**.

Table 2: Sensitivity Criteria (employment, GVA and tourism)

Sensitivity	Evidence for sensitivity assessment
High	Evidence of direct and significant socio-economic challenges (e.g. high unemployment) relating to the receptor. Change relating to the receptor is a high priority in local and/or national economic policy
Medium	Some evidence of socio-economic challenges relating to the receptor is a medium priority in local and/or national economic policy
Low	Little evidence of socio-economic challenges relating to the receptor. Change relating to the receptor is a low priority in local and/or national economic policy
Negligible	No socio-economic challenges relating to the receptor. Change relating to the receptor is not a priority in local and/or national economic policy

Table 3: Sensitivity Criteria (PRoW)

Sensitivity	Evidence for sensitivity assessment
High	PRoW is of high importance with limited potential to substitute with other route options to access the wider PRoW network
Medium	PRoW is of medium importance with potential to substitute with other route options to access the wider PRoW network
Low	PRoW is of minor importance with alternative route options available to access the wider PRoW network
Negligible	PRoW is of negligible importance with alternative routes easily available

1.8. Magnitude of Impact

- 1.8.1. With regard to employment, GVA and tourism effects, the magnitude of impact will then be determined with reference to the baseline conditions, using the criteria provided in **Table 4**. The magnitude of impact for PRoW will be determined against the criteria set out in **Table 5**.

Table 4: Magnitude of Impact (employment, GVA and tourism)

Magnitude of Impact	Description
High	Proposals would cause a large change – judged beneficial or adverse – to baseline socio-economic conditions in terms of absolute and/or percentage change
Medium	Proposals would cause moderate change – judged as beneficial or adverse – to existing socio-economic conditions in terms of absolute and/or percentage change
Low	Proposals would cause a slight change – judged as beneficial or adverse – to existing socio-economic conditions in terms of absolute and/or percentage change
Negligible	An impact that has very little change from baseline conditions where the change is barely distinguishable

Table 5: Magnitude of Impact (PRoW)

Magnitude of effect	Description
High	Significant increase or decrease in journey length and time, increased/decreased opportunities for users to access wider PRoW network
Medium	Some increase or decrease in journey length and time and increased/decreased opportunities for users to access wider PRoW network
Low	Minor increase or decrease in journey length and time and increased/decreased opportunities for users to access wider PRoW network
Negligible	Negligible increase, no change, or decrease in journey length and time and no increased/decreased

Magnitude of effect	Description
	opportunities for users to access wider PRow network

1.9. Significance of Effects

1.9.1. Socio-economic effects are a reflection of the relationship between the sensitivity of the affected receptor and the magnitude of the impact.

Table 6 shows how the assessment of the significance of effects has been determined.

Table 6: Significance Matrix

Magnitude of Impact	Sensitivity of receptor			
	High	Medium	Low	Negligible
High	Major	Major	Moderate	Minor
Medium	Major	Moderate	Minor	Negligible
Low	Moderate	Minor	Negligible	Negligible
Negligible	Minor	Negligible	Negligible	Negligible

1.9.2. The following criteria are applied:

- Moderate or Major impacts are classed as ‘significant’;
- Minor impacts are classed as not ‘significant’, although they may be a matter of local concern;
- Negligible effects are classed as ‘not significant’.

1.10. References

Ref 1 Office for National Statistics (ONS) (2020) Business Register and Employment Survey.

Ref 2 Office for National Statistics (ONS) (2021) Annual Population Survey.

Ref 3 Office for National Statistics (ONS) Annual Survey of Hours and Earnings.

Ref 4 Office for National Statistics (ONS) (2021) Business Accounts;

Ref 5 Global Tourism Solutions (UK) Ltd (2021) STEAM Report for 2010-2021 – Rutland.

Ref 6 Global Tourism Solutions (UK) Ltd STEAM Report for 2010-2021 - South Kesteven.

Ref 7 Homes and Communities Agency (HCA) Additionality Guidance, Fourth Edition.

Ref 8 Centre of Economics and Business Research (2014) Solar Powered Growth In the UK.

