



Mallard Pass

Solar Farm

Mallard Pass Solar Farm

Environmental Statement Volume 2 Appendix 13.2: Climate Change - 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 13.2 Climate Change Assessment Methodology

Introduction

- 1.1.1. This appendix sets out the methodology for the assessment relating to climate change.

Study Area

- 1.1.1. The Climate Change assessment comprises three elements of assessment which have different receptors. In the first part, the Proposed Development is the receptor, meaning the Order limits are the study area for this section of the assessment. The second, the global climate is the receptor. In the third, the receptors will be assessed within the individual environmental topic chapters of the ES [EN010127/APP/6.1].

Sources of Information

- 1.1.2. The sources of information used to inform the baseline and assessment methodology include:
- a. UK Climate Projections (UKCP) (2018), in accordance with NPS-EN1 (2011) [Ref 1];
 - b. Digest of UK Energy Statistics (2021) [Ref 2]; and
 - c. Intergovernmental Panel on Climate Change (IPCC) (2014) [Ref 3].

Assessment Criteria and Assessment of Significance

Effects of the Proposed Development on Climate (GHG Emissions)

- 1.1.3. There are currently only provisional guidelines for the assessment of climate change effects for EIA in the UK [Ref 4 and Ref 5]. The IEMA guidance on the assessment of GHG emissions in EIA states that the combined environmental effect of GHG is environmental degradation, and that this degradation is reaching a defined limit. Therefore, “GHG emissions or reductions from a project might be considered to be significant”. The level of significance associated with the GHG

impact of a project within the CCIA is to be contextualised and assigned through the professional judgement of the appropriate practitioner in accordance with the IEMA guidance.

Effects of Climate Change on Environmental Receptors

- 1.1.4. The sensitivity of the environmental receptors potentially affected by the Proposed Development is based on the discipline specific assessment and matrix within the ES.
- 1.1.5. The categories of significance associated with climate change effects are based upon practitioner conclusions and judgement by combining sensitivity (determined by each relevant technical disciplines) with the following magnitudes of effect:
- a. Negligible – no detectable or material change to a sensitive receptor;
 - b. Minor – a detectable but non-material change to a sensitive receptor;
 - c. Moderate – a material, but non-fundamental change to a sensitive receptor; or
 - d. Major – a fundamental change to a sensitive receptor.

References

- Ref 1 Met Office (2018). UK Climate Projection (UKCP) [Online].
- Ref 2 Department for Business, Energy and Industrial Strategy (2021). Digest of UK Energy Statistics (DUKES): Electricity, Fuels Used in Generation (DUKES 5) [Online].
- Ref 3 Intergovernmental Panel on climate change (IPCC)) (2014): Annex III: Technology-specific cost and performance parameters. In: Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Table A.III.2 [Online].
- Ref 4 Institute of Environmental Management and Assessment (IEMA) (2017). Environmental Impact Assessment Guide to: Assessing Greenhouse Gas Emissions and Evaluating their Significance [Online].
- Ref 5 Institute of Environmental Management and Assessment (IEMA) (2020). IEMA EIA Guide to: Climate Change Resilience and Adaptation [Online].

