

Tillbridge Solar Project
EN010142

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Environmental Statement
Appendix 7-1: Climate Change Legislation, Policy and Guidance
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Regulation 5(2)(a)
Infrastructure Planning (Applications: Prescribed Forms and
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1. Introduction

1.1 Purpose of this Appendix

- 1.1.1 This Environmental Statement (ES) appendix identifies and describes the legislation, policy and supporting guidance considered relevant to the assessment of the likely significant effects of the Tillbridge Solar scheme (hereafter referred to as 'the Scheme') on Climate.
- 1.1.2 Legislation and policy are considered at both national and local levels.
- 1.1.3 This appendix does not assess the Scheme against legislation and policy, instead the purpose of considering legislation and policy in the EIA is twofold;
- To identify legislation and policy that could influence the sensitivity of receptors (and therefore the significance of effects) and any requirements for mitigation; and
 - To identify legislation and policy that could influence the methodology of the EIA and signposting where this is dealt with in the Environmental Statement. For example, a policy may require the assessment of an impact or the use of a specific methodology.
- 1.1.4 Instead, the relevant legislation and policy are assessed within the **Planning Statement [EN/010142/APP/7.2]**. The following sections identify and describe the legislation, policy and supporting guidance considered specifically relevant to the climate assessment, which has been taken into account in preparing the ES.

2. National Legislation, Policy and Guidance

2.1 National Legislation

The Infrastructure Planning (Environmental Impact Assessment (EIA)) Regulations (2017)

- 2.1.1 Regulation 5 of The Infrastructure Planning (Environmental Impact Assessment (EIA)) Regulations 2017 (Ref 1) sets out that an EIA describe and assess, in an appropriate manner, the direct and indirect significant effects of the Scheme on climate.

The Paris Agreement (2015) and UK Nationally Determined Contribution (2020)

- 2.1.2 The Paris Agreement (2015) (Ref 2) is a legally binding international treaty on climate change. Its overarching goal is to hold "*the increase in global temperature to well below 2°C above pre-industrial levels*" and pursue efforts to "*limit the temperature increase to 1.5°C above pre-industrial levels*". Since

2020, countries have been submitting their national climate action plans known as Nationally Determined Contributions (NDCs), each NDC is supposed to reflect an increasing degree of ambition than its predecessor.

- 2.1.3 In December 2020, the United Kingdom (UK) communicated its NDC to the United Nations Framework Convention on Climate Change (UNFCCC) (Ref 3) in line with Article 4 of the Paris Agreement. In this NDC, the UK commits to reducing economy-wide greenhouse gas emissions by at least 68% by 2030, compared to 1990 levels.
- 2.1.4 The UK Nationally Determined Contribution (Ref 4) was updated in 2022 and provided the UK's updated formal submission of the updated NDC to the UNFCCC under the Paris Agreement, in response to the Glasgow Climate Pact.

The Climate Change Act 2008 and Climate Change Act 2008 (2050 Target Amendment) Order 2019

- 2.1.5 The Climate Change Act 2008 (Ref 5) set a legally binding target for the UK to ensure that the net UK carbon amount for the year 2050 is at least 80% lower than the 1990 baseline. This target is supported by legally binding 'carbon budgets' that place restriction on the total amount of greenhouse gases the UK can emit over a 5-year period, along with support from the Climate Change Committee (CCC), an independent body to monitor progress.
- 2.1.6 Section 1 of the Climate Change Act 2008 was amended in 2019 through the Climate Change Act 2008 (2050 Target Amendment) Order 2019 (Ref 6) to revise the target of 80% lower emissions than 1990 baseline, to 100%.

Carbon Budgets

- 2.1.7 Under the carbon budgets system, every tonne of greenhouse gases emitted up to 2050 will count. Where emissions rise in one sector, the UK will have to achieve corresponding falls in another. The following carbon budgets have been published to date:
- a. The Carbon Budgets Order 2009 (Ref 7) sets the carbon budget totals for the First (2008-2012), Second (2013-2017) and Third (2018-2022) Carbon Budget periods.
 - b. The Carbon Budget Order 2011 (Ref 8) sets the carbon budget total for the Fourth (2023-2027) Carbon Budget period.
 - c. The Carbon Budget Order 2016 (Ref 9) sets the carbon budget total for the Fifth (2028-2032) Carbon Budget period.
 - d. The Carbon Budget Order 2021 (Ref 10) sets the carbon budget total for the Sixth (2033-2037) Carbon Budget period.

2.2 National Policy Statements

- 2.2.1 The type of energy generating technology incorporated by the Scheme (solar photovoltaic generation), is specifically referenced within the following

National Policy Statements (NPS), therefore the EIA takes these NPSs into account:

- a. Overarching National Policy Statement for Energy (EN-1) (Ref 11);
- b. National Policy Statement for Renewable Energy Infrastructure (EN-3) (Ref 12Ref 12); and
- c. National Policy Statement for Electricity Networks Infrastructure (EN-5) (Ref 13Ref 13).

2.2.2 The NPSs set out the Government's energy policy infrastructure for delivery of major energy infrastructure, along with the need for new infrastructure and guidance for determining applications for Development Consent Orders (DCOs). The NPSs provide specific guidance and criteria that applicants should cover when assessing the effects of their Scheme, and how the Secretary of State should consider these impacts and any mitigation measures applied.

2.2.3 The relevant NPS requirements for Climate Change are provided in **Table 1**, along with an indication of where in the ES this information can be sourced. NPS EN-3 contains a specific section on solar photovoltaic generation and is therefore of direct relevance to the Scheme. Requirements from NPS EN-1 and NPS EN-5 are also considered of relevance in the context of climate change.

Table 1. Relevant NPS Policy for Climate Change

Relevant NPS Paragraph Reference	Requirement of the NPS	Location of information provided to address this
National Policy Statement for Energy EN-1		
Paragraph 4.10.5	In certain circumstances, measures implemented to ensure a scheme can adapt to climate change may give rise to additional impacts, for example as a result of protecting against flood risk, there may be consequential impacts on coastal change. In preparing measures to support climate change adaptation applicants should take reasonable steps to maximise the use of nature-based solutions alongside other conventional techniques.	The Assessment of Effects (Section 7.8) within Chapter 7: Climate Change of the ES [EN010142/APP/6.1] contains a climate change risk assessment, considering the impact of changing climate conditions on the Scheme. It also identifies the mitigation relevant to each climate change risk. A Flood Risk Assessment provided within Appendix 10-3 of the ES [EN010142/APP/6.2].
Paragraph 4.10.6	Integrated approaches, such as looking across the water cycle, considering coordinated management of water storage, supply, demand, wastewater, and flood risk can provide further benefits to address multiple infrastructure needs, as well as carbon sequestration benefits.	This is noted but not considered relevant to the Scheme.
Paragraph 4.10.7	In addition to avoiding further GHG emissions when compared with more traditional adaptation approaches, nature-based solutions can also result in biodiversity benefits and net gain, as well as increasing absorption of carbon dioxide from the atmosphere.	This is noted. As detailed in Paragraph 7.3.21 of Chapter 7: Climate Change of the ES [EN010142/APP/6.1] An assessment of GHG impacts from land use change associated with the conversion of arable land to grassland has been omitted to present a worst

Relevant NPS Paragraph Reference	Requirement of the NPS	Location of information provided to address this
Paragraph 4.10.8	New energy infrastructure will typically need to remain operational over many decades, in the face of a changing climate. Consequently, applicants must consider the direct (e.g. site flooding, limited water availability, storms, heatwave and wildfire threats to infrastructure and operations) and indirect (e.g. access roads or other critical dependencies impacted by flooding, storms, heatwaves or	<p>case assessment. Though land use change due to the Scheme is anticipated to have an overall net positive GHG impact, due to the higher carbon sequestration value of grassland in comparison to cropland, it is expected that the land will return to its original use upon decommissioning of the Scheme, with any carbon stored in soil or vegetation re-released to the atmosphere. The beneficial GHG impact from land use change is therefore considered to only be temporary (approximately 60 years) and has therefore been excluded from the lifecycle GHG impact assessment.</p> <p>Details with regards to biodiversity net gain are presented within the Biodiversity Net Gain Report [EN010142/APP/7.14] submitted with the DCO application.</p>
		The Assessment of Effects (Section 7.8) within Chapter 7: Climate Change of the ES [EN010142/APP/6.1] contains a climate change risk assessment, considering the impact of changing climate conditions on the Scheme.

Relevant NPS Paragraph Reference	Requirement of the NPS	Location of information provided to address this
	wildfires) impacts of climate change when planning the location, design, build, operation and, where appropriate, decommissioning of new energy infrastructure.	
Paragraph 4.10.9	The ES should set out how the proposal will take account of the projected impacts of climate change, using government guidance and industry standard benchmarks such as the Climate Change Allowances for Flood Risk Assessments, Climate Impacts Tool, and British Standards for climate change adaptation, in accordance with the EIA Regulations.	<p>The Assessment of Effects (Section 7.8) within Chapter 7: Climate Change of the ES [EN010142/APP/6.1] contains a climate change risk assessment, considering the impact of changing climate conditions on the Scheme.</p> <p>The assessment and mitigation measures for flood risk are presented in Chapter 10: Water Environment of the ES [EN010142/APP/6.1] and Appendix 10-3: Flood Risk Assessment of the ES [EN010142/APP/6.2].</p>
Paragraph 4.10.10	Applicants should assess the impacts on and from their proposed energy project across a range of climate change scenarios, in line with appropriate expert advice and guidance available at the time.	The climate change risk assessment presented in the Assessment of Effects (Section 7.8) within Chapter 7: Climate Change of the ES [EN010142/APP/6.1] considers the worst-case-scenario for climate change (RCP8.5) up to the end of the century.
Paragraph 4.10.11	Applicants should demonstrate that proposals have a high level of climate resilience built-in from the outset and should also demonstrate how proposals can be adapted over their	Sections 7.7 Embedded Mitigation Measures and 7.9 Additional Mitigation and Enhancements within Chapter 7:

Relevant NPS Paragraph Reference	Requirement of the NPS	Location of information provided to address this
	<p>predicted lifetimes to remain resilient to a credible maximum climate change scenario. These results should be considered alongside relevant research which is based on the climate change projections.</p>	<p>Climate Change of the ES [EN010142/APP/6.1] present built in climate resilience measures and any further recommended adaptations.</p>
Paragraph 4.10.12	<p>Where energy infrastructure has safety critical elements, the applicant should apply a credible maximum climate change scenario. It is appropriate to take a risk-averse approach with elements of infrastructure which are critical to the safety of its operation.</p>	<p>The Assessment of Effects (Section 7.8) within Chapter 7: Climate Change of the ES [EN010142/APP/6.1] contains a climate change risk assessment, considering the impact of changing climate conditions on the Scheme.</p> <p>The assessment and mitigation measures for flood risk are presented in Chapter 10: Water Environment of the ES [EN010142/APP/6.1] and Appendix 10-3: Flood Risk Assessment of the ES [EN010142/APP/6.2].</p>
Paragraph 4.10.13	<p>The Secretary of State should be satisfied that applicants for new energy infrastructure have taken into account the potential impacts of climate change using the latest UK Climate Projections and associated research and expert guidance (such as the EA's Climate Change Allowances for Flood Risk Assessments or the Welsh Government's Climate change allowances and flood consequence assessments) available at the time the ES was prepared to ensure they have identified appropriate mitigation or adaptation measures. This should cover the estimated</p>	<p>Section 7.4 Assessment Methodology of Chapter 7: Climate Change of the ES [EN010142/APP/6.1] details the information and datasets used to undertake the climate risk assessment.</p> <p>The Assessment of Effects (Section 7.8) within Chapter 7: Climate Change of the ES [EN010142/APP/6.1] contains a climate change risk assessment,</p>

Relevant NPS Paragraph Reference	Requirement of the NPS	Location of information provided to address this
	lifetime of the new infrastructure, including any decommissioning period.	<p>considering the impact of changing climate conditions on the Scheme up to the end of the century, well beyond its expected design life.</p> <p>The assessment and mitigation measures for flood risk are presented in Chapter 10: Water Environment of the ES [EN010142/APP/6.1] and Appendix 10-3: Flood Risk Assessment of the ES [EN010142/APP/6.2].</p>
Paragraph 4.10.15	<p>The Secretary of State should be satisfied that there are not features of the design of new energy infrastructure critical to its operation which may be seriously affected by more radical changes to the climate beyond that projected in the latest set of UK climate projections, taking account of the latest credible scientific evidence on, for example, sea level rise (for example by referring to additional maximum credible scenarios – i.e. from the Intergovernmental Panel on Climate Change or EA) and that necessary action can be taken to ensure the operation of the infrastructure over its estimated lifetime.</p>	<p>The Assessment of Effects (Section 7.8) within Chapter 7: Climate Change of the ES [EN010142/APP/6.1] contains a climate change risk assessment, considering the impact of changing climate conditions on the Scheme.</p>
Paragraph 4.10.16	<p>If any adaptation measures give rise to consequential impacts (for example on flooding, water resources or coastal change) the Secretary of State should consider the impact of the latter in relation to the application as a whole and the impacts guidance set out in Part 5 of this NPS.</p>	<p>Sections 7.7 Embedded Mitigation Measures and 7.9 Additional Mitigation and Enhancements of Chapter 7: Climate Change of the ES [EN010142/APP/6.1] present built in</p>

Relevant NPS Paragraph Reference	Requirement of the NPS	Location of information provided to address this
Paragraph 4.10.17	<p>Any adaptation measures should be based on the latest set of UK Climate Projections, the government’s latest UK Climate Change Risk Assessment, when available, and in consultation with the EA’s Climate Change Allowances for Flood Risk Assessments or the Welsh Government’s Climate change allowances and flood consequence assessments.</p>	<p>climate resilience measures and any further recommended adaptations.</p> <hr/> <p>Section 7.4 Assessment Methodology of Chapter 7: Climate Change of the ES [EN010142/APP/6.1] details the information and datasets used to undertake the climate risk assessment.</p> <p>The assessment and mitigation measures for flood risk are presented in Chapter 10: Water Environment [EN010142/APP/6.1] of the ES and Appendix 10-3: Flood Risk Assessment of the ES [EN010142/APP/6.2].</p>
Paragraph 5.3.4	<p>All proposals for energy infrastructure projects should include a GHG assessment as part of their ES (See Section 4.3). This should include:</p> <ul style="list-style-type: none"> • A whole life GHG assessment showing construction, operational and decommissioning GHG impacts, including impacts from change of use of land. • An explanation of the steps that have been taken to drive down the climate change impacts at each of those stages. • Measurement of embodied GHG impact from the construction stage. 	<p>The Assessment of Effects (Section 7.8) within Chapter 7: Climate Change of the ES [EN010142/APP/6.1] presents a whole-life carbon assessment.</p> <p>Assessment of Effects (Section 7.8) within Chapter 7: Climate Change of the ES [EN010142/APP/6.1] summarises the climate change risk assessment and outlines the assessment outputs</p> <p>Embodied carbon during the construction stage is measured in the</p>

Relevant NPS Paragraph Reference	Requirement of the NPS	Location of information provided to address this
	<ul style="list-style-type: none"> • How reduction in energy demand and consumption during operation has been prioritised in comparison with other measures. • How operational emissions have been reduced as much as possible through the application of best available techniques for that type of technology. • Calculation of operational energy consumption and associated carbon emissions. • Whether and how any residual GHG emissions will be (voluntarily) offset or removed using a recognised framework. • Where there are residual emissions, the level of emissions and the impact of those on national and international efforts to limit climate change, both alone and where relevant in combination with other developments at a regional or national level, or sector level, if sectoral targets are developed. 	<p>Assessment of Effects (Section 7.8) within Chapter 7: Climate Change of the ES [EN010142/APP/6.1].</p> <p>The Assessment of Effects (Section 7.8) within Chapter 7: Climate Change of the ES [EN010142/APP/6.1] discusses energy consumption.</p> <p>Embedded Mitigation Measures (Section 7.7) of Chapter 7: Climate Change of the ES [EN010142/APP/6.1] discusses operational emissions mitigation measures.</p> <p>The Assessment of Effects (Section 7.8) within Chapter 7: Climate Change of the ES [EN010142/APP/6.1] discusses operational emissions.</p> <p>Residual emissions are discussed in The Assessment of Effects (Section 7.8) within Chapter 7: Climate Change of the ES [EN010142/APP/6.1].</p>
Paragraph 5.3.5	<p>A GHG assessment should be used to drive down GHG emissions at every stage of the proposed development and ensure that emissions are minimised as far as possible for the type of technology, taking into account the overall objectives of ensuring our supply of energy always remains secure, reliable and affordable, as we transition to net zero.</p>	<p>GHG mitigation measures are outlined in the Embedded Mitigation (Section 7.7) of Chapter 7: Climate Change of the ES [EN010142/APP/6.1].</p>

Relevant NPS Paragraph Reference	Requirement of the NPS	Location of information provided to address this
Paragraph 5.3.6	Applicants should look for opportunities within the proposed development to embed nature-based or technological solutions to mitigate or offset the emissions of construction and decommissioning.	GHG mitigation measures are outlined in the Embedded Mitigation (Section 7.7) of Chapter 7: Climate Change of the ES [EN010142/APP/6.1].
Paragraph 5.3.7	Steps taken to minimise and offset emissions should be set out in a GHG Reduction Strategy, secured under the Development Consent Order. The GHG Reduction Strategy should consider the creation and preservation of carbon stores and sinks including through woodland creation, hedgerow creation and restoration peatland restoration and through other natural habitats.	GHG mitigation measures are outlined in the Embedded Mitigation (Section 7.7) of Chapter 7: Climate Change of the ES [EN010142/APP/6.1].
Paragraph 5.3.8	The Secretary of State must be satisfied that the applicant has as far as possible assessed the GHG emissions of all stages of development	The Assessment of Effects (Section 7.8) within Chapter 7: Climate Change of the ES [EN010142/APP/6.1] presents a whole-life carbon assessment.
Paragraph 5.3.9	The Secretary of State should be content that the applicant has taken all reasonable steps to reduce the GHG emissions of the construction and decommissioning stage of the development.	GHG mitigation measures are outlined in the Embedded Mitigation (Section 7.7) of Chapter 7: Climate Change of the ES [EN010142/APP/6.1].

Relevant NPS Paragraph Reference	Requirement of the NPS	Location of information provided to address this
Paragraph 5.3.10	<p>The Secretary of State should give appropriate weight to projects that embed nature based or technological processes to mitigate or offset the emissions of construction and decommissioning within the proposed development. However, in light of the vital role energy infrastructure plays in the process of economy wide decarbonisation, the Secretary of State must accept that there are likely to be some residual emissions from construction and decommissioning of energy infrastructure.</p>	<p>The Assessment of Effects (Section 7.8) of ES Chapter 7: Climate Change of the ES [EN010142/APP/6.1] presents a whole-life carbon assessment.</p>
Paragraph 5.8.12	<p>Development should be designed to ensure there is no increase in flood risk elsewhere, accounting for the predicted impacts of climate change throughout the lifetime of the development. There should be no net loss of floodplain storage and any deflection or constriction of flood flow routes should be safely managed within the site. Mitigation measures should make as much use as possible of natural flood management techniques.</p>	<p>The assessment and mitigation measures for flood risk are presented in Chapter 10: Water Environment of the ES [EN010142/APP/6.1] and Appendix 10-3: Flood Risk Assessment of the ES [EN010142/APP/6.2]. The assessment accounts for 40% increase in peak rainfall intensity due to climate change. No significant effects have been identified.</p>
Paragraph 5.8.14	<p>This assessment should identify and assess the risks of all forms of flooding to and from the project and demonstrate how these flood risks will be managed, taking climate change into account.</p>	<p>The assessment and mitigation measures for flood risk are presented in Chapter 10: Water Environment of the ES [EN010142/APP/6.1] and Appendix 10-3: Flood Risk Assessment of the ES [EN010142/APP/6.2]. This accounts</p>

Relevant NPS Paragraph Reference	Requirement of the NPS	Location of information provided to address this
Paragraph 5.8.15	The minimum requirements for Flood Risk Assessments (FRA) are that they should... take the impacts of climate change into account, across a range of climate scenarios, clearly stating the development lifetime over which the assessment has been made.	for the change in flood risk with climate change. Appendix 10-3: Flood Risk Assessment of the ES [EN010142/APP/6.2] considers flood risk over the lifetime of the Scheme.
Paragraph 5.8.27	Surface water drainage arrangements for any project should, accounting for the predicted impacts of climate change throughout the development's lifetime, be such that the volumes and peak flow rates of surface water leaving the site are no greater than the rates prior to the proposed project, unless specific off-site arrangements are made and result in the same net effect.	Surface water drainage strategy for the Scheme is presented within Appendix 10-4: Outline Drainage Strategy of the ES [EN010142/APP/6.2]. Existing greenfield runoff rates are proposed to be maintained.
Paragraph 5.8.30	Where a development may result in an increase in flood risk elsewhere through the loss of flood storage, on-site level-for-level compensatory storage, accounting for the predicted impacts of climate change over the lifetime of the development, should be provided.	The Scheme does not result in the loss of flood storage areas.

Relevant NPS Paragraph Reference	Requirement of the NPS	Location of information provided to address this
Paragraph 5.16.3	Where the project is likely to have effects on the water environment, the applicant should undertake an assessment of the existing status of, and impacts of the proposed project on, water quality, water resources and physical characteristics of the water environment, and how this might change due to the impact of climate change on rainfall patterns and consequently water availability across the water environment, as part of the ES or equivalent (see Section 4.3 and 4.10).	The assessment is presented in Chapter 10: Water Environment of the ES [EN010142/APP/6.1].
Paragraph 5.16.7	The ES should in particular describe: <ul style="list-style-type: none">• The existing quality of waters affected by the proposed project and the impacts of the proposed project on water quality, noting any relevant existing discharges, proposed new discharges and proposed changes to discharges• Existing water resources affected by the proposed project and the impacts of the proposed project on water resources, noting any relevant existing abstraction rates, proposed new abstraction rates and proposed changes to abstraction rates (including any impact on or use of mains supplies and reference to Abstraction Licensing Strategies) and also demonstrate how proposals minimise the use of water resources and water consumption in the first instance• Existing physical characteristics of the water environment (including quantity and dynamics of flow) affected by the	Any effects of the Scheme on the surrounding water environment, including a consideration of climate change can be found in ES Chapter 10: Water Environment of the ES [EN010142/APP/6.1].

Relevant NPS Paragraph Reference	Requirement of the NPS	Location of information provided to address this
	<p>proposed project and any impact of physical modifications to these characteristics.</p> <ul style="list-style-type: none"> • Any impacts of the proposed project on water bodies or protected areas (including shellfish protected areas) under the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 and source protection zones (SPZs) around potable groundwater abstractions# • How climate change could impact any of the above in the future • Any cumulative effects 	
National Policy Statement for Renewable Energy EN-3		
Paragraph 2.4.11	<p>Solar photovoltaic (PV) sites may also be proposed in low lying exposed sites. For these proposals, applicants should consider, in particular, how plant will be resilient to:</p> <ul style="list-style-type: none"> • Increased risk of flooding; and • Impact of higher temperature 	<p>The Assessment of Effects (Section 7.8) within Chapter 7: Climate Change of the ES [EN010142/APP/6.1] summarises the climate change risk assessment, including with regards to the increased risk of flooding and higher temperatures. No significant effects have been identified.</p>
Paragraph 2.10.9	<p>The government has committed to sustained growth in solar capacity to ensure that we are on a pathway that allows us to meet net zero emissions by 2050. As such solar is a key part of the government’s strategy for low-cost decarbonisation of the energy sector.</p>	<p>This is acknowledged within Chapter 7: Climate Change of the ES [EN010142/APP/6.1].</p>

Relevant NPS Paragraph Reference	Requirement of the NPS	Location of information provided to address this
National Policy Statement for Electricity Networks Infrastructure EN-5		
Paragraph 2.3.2	<p>As climate change is likely to increase risks to the resilience of some of this infrastructure, from flooding for example, or in situations where it is located near the coast or an estuary or is underground, applicants should in particular set out to what extent the proposed development is expected to be vulnerable, and, as appropriate, how it has been designed to be resilient to:</p> <ul style="list-style-type: none"> • Flooding, particularly for substations that are vital to the network; and especially in light of changes to groundwater levels resulting from climate change; • The effects of wind and storms on overhead lines; • Higher than average temperatures leading to increased transmission losses; • Earth movement or subsidence caused by flooding or drought (for underground cables); and • Coastal erosion – for the landfall of offshore transmission cables and their associated substations in the inshore coastal locations respectively. 	<p>The UKCP18 projections were used in the climate change risk assessment as detailed in the Assessment Method (Section 7.5) of Chapter 7: Climate Change of the ES [EN010142/APP/6.1].</p> <p>The Assessment of Effects (Section 7.8) within Chapter 7: Climate Change of the ES [EN010142/APP/6.1] summarises the climate change risk assessment and outlines the outputs.</p>
Paragraph 2.3.3	<p>Section 4.10 of EN-1 advises that the resilience of the project to the effects of climate change must be assessed in the Environmental Statement (ES) accompanying an application. For example, future increased risk of flooding would be covered in any flood risk assessment (see</p>	<p>The Assessment of Effects (Section 7.8) within Chapter 7: Climate Change [EN010142/APP/6.1] of the ES summarises the climate change risk assessment and outlines the outputs.</p>

Relevant NPS Paragraph Reference

Requirement of the NPS

Location of information provided to address this

Sections 5.8 in EN-1). Consideration should also be given to coastal change (see section 5.6 in EN-1).

This is supported by the **Flood Risk Assessment** provided within **Appendix 10-3** of the ES [EN010142/APP/6.2].

2.3 National Planning Policy Framework

2.3.1 The National Planning Policy Framework (NPPF) (Ref 14) sets out the Government's planning policies for England and how these are expected to be applied. Paragraph 5 outlines that while the NPPF does not contain specific policies for NSIPs, the NPPF is still relevant when considering the determination of DCOs. Therefore, the EIA for the Scheme has taken the NPPF into account.

2.3.2 Paragraph 8 defines three overarching objectives within the NPPF, which are interdependent and need to be pursued in mutually supportive ways:

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

2.3.3 Section 14 of the NPPF explains how local planning authorities should determine planning applications with regard to climate change, and the national planning policy associated with meeting the challenge of climate change, flooding and coastal change. Relevant NPPF requirements relating to Climate Change, along with an indication of where this information is located within the ES to address these requirements, are provided in **Table 2**.

Table 2. Relevant NPPF Policy for Climate Change

Relevant NPPF Paragraph Reference	Requirement of the NPPF	Location of information provided to address this
Paragraph 157	<p>The planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change. It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure.</p>	<p>The Assessment of Effects (Section 7.8) within Chapter 7: Climate Change of the ES [EN010142/APP/6.1] summarises the Scheme's impact on the net-zero trajectory. The Assessment of Effects (Section 7.8) within Chapter 7: Climate Change of the ES [EN010142/APP/6.1] summarises the climate change risk assessment and outlines the assessment outputs</p>
Paragraph 159	<p>New development should be planned for in ways that:</p> <ul style="list-style-type: none"> • Avoid increased vulnerability to the range of impacts arising from climate change. When new development is brought forward in areas which are vulnerable, care should be taken to ensure that risks can be managed through suitable adaptation measures, including through the planning of green infrastructure; and • Can help to reduce greenhouse gas emissions, such as through its location, orientation and design. Any local requirements for the sustainability of buildings should reflect the Government's policy for national technical standards. 	<p>The Assessment of Effects (Section 7.8) within Chapter 7: Climate Change of the ES [EN010142/APP/6.1] assesses the Scheme's vulnerability to climate change.</p> <p>The Assessment of Effects (Section 7.8) within Chapter 7: Climate Change of the ES [EN010142/APP/6.1] assess the Scheme's impact on the National Carbon Budgets and existing policy.</p>

2.4 Other National Policy and Guidance

UK Climate Change Risk Assessment (2022)

- 2.4.1 The UK Climate Change Risk Assessment (Ref 15) outlines the UK Government and devolved administrations' position on the key climate change risks and opportunities that the UK faces today.
- 2.4.2 As required by the Climate Change Act 2008, the UK Government undertook this Risk Assessment to outline the position on key risks posed by climate change, and the opportunities that the UK faces today.

Net Zero Strategy: Build Back Greener (2021)

- 2.4.3 The Net Zero Strategy: Build Back Greener (Ref 16) sets out policies and proposals for decarbonizing all sectors of the UK economy to meet our net zero target by 2050.

Energy White Paper: Powering our Net Zero Future (2020)

- 2.4.4 The Energy White Paper (Ref 17) sets out how the UK will clean up its energy system and reach net zero emissions by 2050. The white paper emphasises that achieving net zero and combatting climate change is of the highest priority in order to successfully meet the challenge of becoming the first net zero major economy.

Powering up Britain (2023)

- 2.4.5 Powering up Britain (Ref 18) was published in 2023 and sets out how the UK Government will enhance our country's energy security, seize the economic opportunities of the transition, and deliver on net zero commitments. To meet this ambition, the Department for Energy Security and Net Zero will deliver energy security, consumer security, climate security and economic security.

National Infrastructure Strategy (2020)

- 2.4.6 The National Infrastructure Strategy (Ref 19) was published in 2020 and sets out plans to transform UK infrastructure in order to level up the country, strengthen the Union and achieve net zero emissions by 2050. Within this it states *"The government wants to deliver an infrastructure revolution: a radical improvement in the quality of the UK's infrastructure to help level up the country, strengthen the Union, and put the UK on the path to net zero emissions by 2050"*.

3. Local Policy and Guidance

3.1 Local Planning Policy

- 3.1.1 Local planning policy documents concerning climate that are relevant to the Scheme, have been outlined below and policy relevant to these documents further considered within **Table 3**.

Central Lincolnshire Local Plan (2023)

- 3.1.2 The Central Lincolnshire Local Plan (Ref 20) was adopted in April 2023 and is a revision of the previous Central Lincolnshire Plan that was adopted in 2017. Following approval by the Central Lincolnshire Joint Strategic Planning Committee at the end of February 2022, consultation on the plan ran between March and May 2022.
- 3.1.3 The Local Plan contains planning policies and allocations for the growth and regeneration of Central Lincolnshire over the next 20 years. The Local Plan was revised to ensure it remains current and consistent with latest national guidelines and local circumstances.

Adopted Bassetlaw District Core Strategy and Development Management Policies Development Plan Documents (DPD) (2011)

- 3.1.4 The Bassetlaw Core Strategy (Ref 21) is the key Local Development Framework (LDF) document and provides the overarching framework for all other documents that may be produced. It sets out a vision for change in Bassetlaw to 2028, along with place-specific policy approaches taken in order to achieve this vision.
- 3.1.5 The Core Strategy was adopted on 22 December 2011 and sets out a vision of change in Bassetlaw to 2028.

Draft Bassetlaw Local Plan Main Modifications (2023)

- 3.1.6 The Draft Bassetlaw Local Plan is being produced to help guide development in Bassetlaw over the plan period from 2020 to 2038. It sets out the Council's development strategy, planning policies and proposal, including site allocations, to guide land use and planning decisions in the District up to 2038. As part of the Local Plan examination process, the independent Local Plan Inspectors have identified Main Modifications they consider necessary to ensure the Plan is legally compliant and sound. The Main Modifications document (Ref 22) was published in August 2023.
- 3.1.7 Once adopted, the Local Plan will replace the Bassetlaw Core Strategy and Development Management Policies DPD 2011.

Neighbourhood Plans

- 3.1.8 The following Neighbourhood Plans provide relevant policy and guidance on climate change and are considered further **Table 3**.

- a. **The Sturton by Stow and Stow Neighbourhood Plan (Ref 23),**
formally adopted on the 4 July 2022.

Table 3. Relevant Local Policy and Guidance with respect to Climate Change

Relevant Document	Relevant Policies	Location of information provided to address this
Lincolnshire Local Plan (2023)	<p>Policy S11: Embodied Carbon states that from the 1st of January 2025, there will be a requirement for all major development proposals to demonstrate how the design and building materials to be used have been informed by a consideration of the embodied carbon, and any reasonable opportunities to minimize this.</p> <p>Policy S14: Renewable Energy states that <i>“The Central Lincolnshire Joint Strategic Planning Committee is committed to supporting the transition to a net zero carbon future and will seek to maximise appropriately located renewable energy generated in Central Lincolnshire”</i>, with solar explicitly earmarked as likely development.</p> <p>Policy S16: Wider Energy Infrastructure outlines that the Joint Committee are committed to supporting the transition to net zero and supports, in principle, the need for investment in new energy infrastructure. This policy states <i>“support will be given to proposals which are necessary for, or form part of, the transition to a net zero carbon sub-region, which could: energy storage facilities; upgraded or new electricity facilities; or other electricity infrastructure.”</i></p> <p>Policy S21: Flood Risk and Water Resources states that development proposals should demonstrate:</p> <ul style="list-style-type: none"> c. That the development will be safe during its lifetimes taking into account the impacts of climate change. 	<p>Embodied carbon during the construction stage is measured in the Assessment of Effects (Section 7.8) within Chapter 7: Climate Change of the ES [EN010142/APP/6.1].</p> <p>The Assessment of Effects (Section 7.8) within Chapter 7: Climate Change of the ES [EN010142/APP/6.1] provides an assessment of the Scheme’s impact on the UK’s net zero pathway and its potential impact on fossil fuels.</p> <p>The Assessment of Effects (Section 7.8) within Chapter 7: Climate Change of the ES [EN010142/APP/6.1] also assesses the Scheme’s vulnerability to climate change, including with regards to flood risk.</p>

Relevant Document	Relevant Policies	Location of information provided to address this
	<p>Policy S59: Green and Blue Infrastructure states that the design and layout of green infrastructure should take opportunities to support climate change adaptation and resilience including through use of appropriate habitats and species</p>	
<p>Bassetlaw District Council Core Strategy (2011)</p>	<p>Policy DM4: Carbon Reduction states that <i>“New development will need to demonstrate that careful consideration has been given to minimising CO2 emissions and measures that will allow all new buildings in Bassetlaw to adapt to climate change”</i>.</p> <p>Policy DM10: Renewable and Low Carbon Energy states <i>“The Council will be supportive of proposals that seek to utilize renewable and low carbon energy to minimize CO2 emissions. Major development proposals will be expected to deliver specific low-carbon and renewable energy infrastructure in line with assessments of feasibility and overall viability.</i></p>	<p>The Assessment of Effects (Section 7.8) within Chapter 7: Climate Change of the ES [EN010142/APP/6.1] provides an assessment of the Scheme’s impact on the UK’s net zero pathway and its potential impact on fossil fuels.</p>
<p>Draft Bassetlaw Local Plan Main Modifications (2023)</p>	<p>Policy ST44: Promoting Healthy, Active Lifestyles states that <i>“Healthy, active and safe lifestyles will be enabled by... ..minimising and mitigating against potential harm from risks such as pollution and other environmental hazards and climate change”</i>.</p> <p>Policy ST50: Reducing Carbon Emissions, Climate Change Mitigation and Adaptation states that <i>“all new development should be designed to improve resilience to the anticipated effects of climate change”</i>. This policy also requires all major development proposals to make provision for at least 5 trees per</p>	<p>The Assessment of Effects (Section 7.8) within Chapter 7: Climate Change of the ES [EN010142/APP/6.1] provides an assessment of the Scheme’s impact on the UK’s net zero pathway and its potential impact on fossil fuels.</p> <p>The Assessment of Effects (Section 7.8) within Chapter 7: Climate Change of the ES [EN010142/APP/6.1] also</p>

Relevant Document	Relevant Policies	Location of information provided to address this
	dwelling or per 1,000 sqm of non-residential floorspace on site, or if on site provision is not practicable then an equivalent financial contribution will be sought to enable provision of new native trees and/or the protection and enhancement of ancient and veteran woodland within the District.	assesses the Scheme’s vulnerability to climate change.
Sturton by Stow and Stow Neighbourhood Plan (2022)	Policy 1: Sustainable Development states <i>“To support and enhance the sustainability of the Parishes of Sturton by Stow and Stow, development will be supported where it is consistent with the following principles as appropriate to the proposal’s scale, nature and location within the neighbourhood area... ...development is located and designed so that any potential negative impact on climate change such as increased carbon emissions or flood risk is mitigated”</i> .	The Assessment of Effects (Section 7.8) within Chapter 7: Climate Change of the ES [EN010142/APP/6.1] provides an assessment of the Scheme’s impact on the UK’s net zero pathway and its potential impact on fossil fuels. The Assessment of Effects (Section 7.8) within Chapter 7: Climate Change of the ES [EN010142/APP/6.1] also assesses the Scheme’s vulnerability to climate change.

3.2 Local Guidance

Lincolnshire County Council Green Masterplan 2020-2025

- 3.2.1 Lincolnshire County Council's Green Masterplan (Ref 24) sets out the guiding principles of how the County will achieve 'net zero carbon' by 2050, in response to climate change. The three guiding principles are "don't waste anything, consider wider opportunities and take responsibility and pride", and these help to bring focus to the Council's work and planning for reducing carbon emissions and adapting to the changing climate.
- 3.2.2 The Green Masterplan is supported by the Initial Action Plan 2020-2025 (Ref 25) which led to the development of initial projects to support in achieving national carbon reduction targets.

Nottinghamshire County Council Carbon Reduction Plan 2022-2032

- 3.2.3 The Nottinghamshire County Council Carbon Reduction Plan 2022-2032 (Ref 26) sets out a framework for action and scope for the activities for which greenhouse gas emissions will be measured and reported in pursuit of the 2030 goal.

4. References

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