

Green Hill Solar Farm

EN010170

Environmental Statement

Chapter 1: Introduction

Prepared by: Lanpro

Date: May 2025

Document Reference: APP/GH6.2.1

APFP Regulation 5(2)(a)



Contents

<u>1</u>	<u>Introduction</u>	<u>3</u>
1.1	Background	3
1.2	The EIA Regulations	4
1.3	Purpose and Structure of the Environmental Statement	5
1.4	The Applicant	10
1.5	Consultation	10
<u>References</u>		<u>13</u>



Issue Sheet

Report Prepared for: Green Hill Solar Farm

DCO Submission

Chapter 1: Introduction

Prepared by

Name: Charlotte Astrella

Job title: Senior EIA Consultant

Approved by

Name: Harry Parker

Job title: Technical Director

Revision	Date	Prepared by	Approved by
Original	23/05/2025	CA	HP



1 Introduction

1.1 Background

- 1.1.1 This Environmental Statement (ES) has been prepared on behalf of Green Hill Solar Farm Limited (the Applicant) in relation to an application (the Application) for a Development Consent Order (DCO) for the construction, operation and maintenance and decommissioning of Green Hill Solar Farm (hereafter referred to as the Scheme) with a total capacity exceeding 50 megawatts (MW).
- 1.1.2 As the Scheme comprises the construction of a generating station with a capacity of over 50MW it is defined as a Nationally Significant Infrastructure Project (NSIP) under sections 14(1)(a) and 15(2) of the Planning Act 2008 (Ref 1.1) and therefore must be consented by way of a DCO. The Application is submitted to the Planning Inspectorate, with the decision whether to grant the DCO being made by the Secretary of State for the Department of Energy Security and Net Zero (hereafter referred to as the Secretary of State).
- 1.1.3 The Scheme is considered to be EIA development under the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) (Ref 1.2), requiring an environmental impact assessment (EIA) to be prepared as part of the Application. The Environmental Statement (ES) presents the findings of the EIA undertaken for the Scheme in accordance with the EIA Regulations and the Planning Act 2008 (Ref 1.1).
- 1.1.4 A glossary and list of abbreviations for the ES is provided in Chapter 0: Table of Contents, Glossary and Abbreviations **[EN010170/APP/GH6.1]**.

The Scheme

- 1.1.5 The Scheme will be located within the Order Limits as shown in Figure 1.1 Location Plan **[EN010170/APP/GH6.4.1.1]** with the Scheme's boundary referred to as the Order Limits. The Order Limits outline the maximum extent of the land that will be required to facilitate the construction, operation, maintenance, and decommissioning of the Scheme as depicted on the Works Plans **[EN010170/APP/GHGH2.4]**.
- 1.1.6 The Scheme comprises in total 1,441.4 hectares (ha) of land located within the administrative areas of North Northamptonshire Council, West Northamptonshire Council and Milton Keynes City Council.
- 1.1.7 The Scheme consists of an electricity generating station with a capacity of approximately 500 MW comprising of ground mounted Solar Arrays and associated development, the latter encompassing: energy storage, grid connection infrastructure and any other infrastructure as well as works integral to the construction, operation, maintenance and decommissioning of the Scheme.
- 1.1.8 The national grid connection Point of Connection (PoC) will be at the Grendon 400kV National Grid Substation (Grendon Substation).
- 1.1.9 The Scheme comprises the two main parts:
- The nine sites (referred to collectively as the Sites where the Solar Arrays, Battery Energy Storage, and other associated development (other than



those parts of the grid connection cable to be located in the Cable Route Corridor) would be located; and

- The Cable Route Corridor within which the underground cables connecting the Sites and PoC will be located.

1.1.10 The operational phase of the Scheme is anticipated to be 60 years in total. Once the Scheme ceases to operate, the Scheme will be decommissioned and land restored to existing use. A full description of the Scheme is outlined in Chapter 4: Scheme Description **[EN010170/APP/GH6.2.4]**.

The Sites

1.1.11 The Sites are located between settlements to the west and south of Wellingborough and north and south-east of Northampton, near to the villages of Old, Walgrave, Mears Ashby, Earls Barton, Bozeat, Grendon and Lavendon, on fields located within a 20 kilometre (km) radius from Grendon Substation.

1.1.12 The Sites are referred to individually as Green Hill A, Green Hill A.2, Green Hill B, Green Hill C, Green Hill D, Green Hill E, Green Hill F, Green Hill G and Green Hill BESS and are described in detail in Chapter 3: Development Site **[EN010170/APP/GH6.2.3]**.

1.1.13 The Sites will accommodate ground mounted Solar Photovoltaic (PV) modules, battery energy storage systems, energy storage infrastructure, grid connection infrastructure and (collectively referred to as the Solar Arrays).

1.1.14 The location of the Sites is shown in Figure 1.1 **[EN010170/APP/GH6.4.1.1]** and Figure 3.1 **[EN010170/APP/GH6.4.3.1]**.

The Cable Route Corridor

1.1.15 The Cable Route Corridor is shown in Figure 1.1 **[EN010170/APP/GH6.4.1.1]**. The Cable Route Corridor will comprise buried and underground electrical cables that will connect the Sites to the PoC at Grendon Substation.

1.1.16 The Cable Route Corridor width is approximately 50m wide, with some variation along its length. It is wider than the final working area to allow flexibility in the final location (micro-siting) at the detailed design stage carried out following determination of the DCO Application. This approach provides flexibility to the Applicant at this stage whilst providing certainty to affected landowners that effects will be no greater than those assessed in the ES.

1.1.17 In addition to land required for the buried cable trenches, temporary land will be required in the for accessing the Cable Route Corridor, storage of soil and temporary cable lay down areas.

1.1.18 Temporary construction compounds associated with the cable route will be required along the route as indicated on the Works Plans (Work No.5) **[EN010170/APP/GH2.4]**.

1.2 The EIA Regulations

1.2.1 As the Scheme comprises the construction of a generating station with a capacity of over 50MW it is defined as a Nationally Significant Infrastructure Project (NSIP)



under sections 14(1)(a) and 15(2) of the Planning Act 2008 (Ref 1.1) and therefore must be consented by way of a DCO.

- 1.2.2 The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) (Ref 1.2) stipulate that developments listed under Schedule 1 must be subject to EIA, while Schedule 2 lists development which will be subject to EIA if considered “*likely to have significant effects on the environment by virtue of factors such as its nature, size or location*”. The criteria on which this judgement should be made are set out in Schedule 3 of the EIA Regulations.
- 1.2.3 The Scheme is a Schedule 2 development under paragraph 3(a) as it constitutes “*Industrial installations for the production of electricity, steam, water and hot water*”.
- 1.2.4 The Scheme is considered to be EIA development as defined by the EIA Regulations and confirmed in the Scoping Report pursuant Regulation 8(1)(b) of the EIA Regulations. Owing to the size, nature, and location of the Scheme, it is likely to have significant effects on the environment and is therefore considered to be EIA development.
- 1.2.5 Further detail about the approach to the EIA can be found within Chapter 2: EIA Process and Methodology [EN010170/APP/GH6.2.2].

1.3 Purpose and Structure of the Environmental Statement

- 1.3.1 Environmental impacts arising from the Scheme have been assessed as part of the EIA process, and the results are presented within this ES.
- 1.3.2 The baseline for the assessment has been derived from desktop and field-based surveys and studies within and around the Order Limits. The general assessment methodology is explained in Chapter 2: EIA Process and Methodology [EN010170/APP/GH.2.2], including the approach to the cumulative assessment.
- 1.3.3 The EIA process has considered impacts resulting from the construction, operation (including maintenance and replacement) and decommissioning phases of the Scheme, and considers mitigation measures to avoid, reduce or offset any likely significant adverse effects on the environment and where possible, enhance the environment.
- 1.3.4 Where applicable, the ES also identifies residual effects, defined as effects remaining following the inclusion or adoption of mitigation measures.
- 1.3.5 The structure of this ES is outlined in **Table 1.1** below. The Applicant is advised by a team of experienced and qualified environmental consultants. A Statement of Competence [EN010170/APP/GH6.3.1.1] of the relevant assessors and chapter authors, as required under Regulation 14.4 of the EIA Regulations (Ref 1.2), is provided at **Appendix 1.1** of the ES.

Table 1.1: Structure of the Environmental Statement

Document	Consultant
Volume 1 – Main Statement	Coordinated by Lanpro
Chapter 1: Introduction	Lanpro



Document	Consultant
Volume 1 – Main Statement	Coordinated by Lanpro
Chapter 1: Introduction	Lanpro
Chapter 2: EIA Process and Methodology	Lanpro
Chapter 3: The Development Site	Lanpro
Chapter 4: Scheme Description	Lanpro
Chapter 5: Alternatives and Design Evolution	Lanpro
Chapter 6: Energy Need, Legislative Context, and Energy Policy	Lanpro
Chapter 7: Climate Change	Bureau Veritas
Chapter 8: Landscape and Visual	Lanpro
Chapter 9: Ecology and Biodiversity	Clarkson and Woods
Chapter 10: Hydrology, Flood Risk and Drainage	Arthian
Chapter 11: Minerals	Clover Planning
Chapter 12: Cultural Heritage	Lanpro
Chapter 13: Transport and Access	KMC Transport Planning
Chapter 14: Noise and Vibration	Tetra Tech
Chapter 15: Glint and Glare	Arthian and Aviatica
Chapter 16: Air Quality	Arcadis
Chapter 17: Socio-Economics, Tourism and Recreation	Lanpro
Chapter 18: Human Health	Lanpro
Chapter 19: Arboriculture	Lanpro
Chapter 20: Agricultural Circumstances	Arcadis and Tony Kernon
Chapter 21: Electro-magnetic Fields (EMF)	Pager Power
Chapter 22: Ground Conditions and Contamination	Lucion Delta-Simons Limited
Chapter 23: Major Accidents and Disasters	Lanpro
Chapter 24: Other Environmental Matters	Lanpro
Chapter 25: Cumulative Effects and Effects Interaction	All consultant team
Chapter 26: Summary of Significant Effects	Lanpro
Chapter 26: Commitments Register	Lanpro
Volume 2 – Figures	Coordinated by Lanpro
Volume 3 – Technical Appendices	Coordinated by Lanpro
Volume 4 – Non-Technical Summary	Coordinated by Lanpro



Information Required by the EIA Regulations

1.3.6

Table 1.2 presents the information required by Regulation 14(2) of and Schedule 4 to the EIA Regulations (Ref 1.2) and where this information is located within the ES.

Table 1.2: Requirements of Regulation 14(2) of and Schedule 4 to the EIA Regulations

Requirement	Location in this ES
1. a) a description of the location of the development.	Chapter 3: The Development Site [EN010170/APP/GH6.2.3]
1. b) a description of the physical characteristics of the whole development, including, where relevant, requisite demolition works, and the land-use requirements during the construction and operational phases.	Chapter 4: Scheme Description [EN010170/APP/GH6.2.4]
1. c) a description of the main characteristics of the operational phase of the development (in particular any production process), for instance, energy demand and energy used, nature and quantity of the materials and natural resources (including water, land, soil and biodiversity) used.	Chapter 4: Scheme Description [EN010170/APP/GH6.2.4]
1. d) an estimate, by type and quantity, of expected residues and emissions (such as water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation and quantities and types of waste produced during the construction and operation phases.	Chapter 4: Scheme Description [EN010170/APP/GH6.2.4] Chapter 7: Climate Change [EN010170/APP/GH6.2.7] Chapter 10: Hydrology Flood Risk and Drainage [EN010170/APP/GH6.2.10] Chapter 13: Transport and Access [EN010170/APP/GH6.2.13] Chapter 14: Noise and Vibration [EN010170/APP/GH6.2.14] Chapter 16: Air Quality [EN010170/APP/GH6.2.16] Chapter 22: Ground Conditions and Contamination [EN010170/APP/GH6.2.22] Chapter 24: Other Environmental Matters [EN010170/APP/GH6.2.24]
2. A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project	Chapter 5: Alternatives and Design Evolution [EN010170/APP/GH6.2.5]



Requirement	Location in this ES
and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.	
3. A description of the relevant aspects of the current state of the environment (baseline scenario) and an outline of the likely evolution thereof without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge.	Section 6: Baseline Conditions of Chapters 7 to 24 (technical assessments) [EN010170/APP/GH6.2.7] to [EN010170/APP/GH6.2.24]
4. A description of the factors specified in Regulation 5(2) likely to be significantly affected by the development: population, human health, biodiversity (for example fauna and flora), land (for example land take), soil (for example organic matter, erosion, compaction, sealing), water (for example hydromorphological changes, quantity and quality), air, climate (for example greenhouse gas emissions, impacts relevant to adaptation), material assets, cultural heritage, including architectural and archaeological aspects, and landscape.	Chapters 7 to 24 (technical assessments) [EN010170/APP/GH6.2.7] to [EN010170/APP/GH6.2.24]
5. A description of the likely significant effects of the development on the environment resulting from, inter alia: a) the construction and existence of the development, including, where relevant, demolition works. b) the use of natural resources, in particular land, soil, water and biodiversity, considering as far as possible the sustainable availability of these resources. c) the emission of pollutants, noise, vibration, light, heat and radiation, the creation of nuisances, and the disposal and recovery of waste. d) the risks to human health, cultural heritage or the environment (for example due to accidents or disasters). e) the cumulation of effects with other existing and/or approved projects, taking	Chapters 7 to 24 (technical assessments) [EN010170/APP/GH6.2.7] to [EN010170/APP/GH6.2.24] ES Chapter 25: Cumulative Effects and Effect Interactions [EN010170/APP/GH6GH6.2.25]



Requirement	Location in this ES
<p>into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources.</p> <p>f) the impact of the project on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change.</p> <p>g) the technologies and the substances used. The description of the likely significant effects on the factors specified in Regulation 5(2) should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long term, permanent and temporary, positive and negative effects of the development.</p>	
<p>6. A description of the forecasting methods or evidence, used to identify and assess the significant effects on the environment, including details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved.</p>	<p>Chapters 7 to 24 (technical assessments) [EN010170/APP/GH6.2.7] to [EN010170/APP/GH6.2.24]</p>
<p>7. A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment and, where appropriate, of any proposed monitoring arrangements (for example the preparation of a post project analysis). That description should explain the extent, to which significant adverse effects on the environment are avoided, prevented, reduced or offset, and should cover both the construction and operational phases.</p>	<p>Chapters 7 to 24 (technical assessments) [EN010170/APP/GH6.2.7] to [EN010170/APP/GH6.2.24]</p>
<p>8. A description of the expected significant adverse effects of the development on the environment deriving from the vulnerability of the development to risks of major accidents and/or disasters which are relevant to the project concerned.</p>	<p>ES Chapter 23_Major Accidents and Disasters [EN010170/APP/GH6.2.23]</p>



Requirement	Location in this ES
9. A non-technical summary of the information provided under paragraphs 1 to 8.	Non-Technical Summary [EN010170/APP/GH6.5]
10. A reference list detailing the sources used for the descriptions and assessments included in the ES.	Chapters 7 to 24 (technical assessments) [EN010170/APP/GH6.2.7] to [EN010170/APP/GH6.2.24]

1.4 The Applicant

- 1.4.1 The Applicant is part of Island Green Power Limited (IGP), which is a leading developer of utility-scale solar projects and battery storage systems, established in 2013.
- 1.4.2 IGP has successfully delivered 36 projects worldwide with a total of more than 2.5GW of energy capacity. This includes 20 projects in the UK. These range in size from below 5MW to Nationally Significant Infrastructure Projects (NSIPs) such as Cottam Solar Project, currently the UK's largest consented solar farm, which will generate 600MW of clean, renewable, and secure electricity including 600MW of battery storage.
- 1.4.3 Their mission is to deliver renewable energy solutions that create lasting value for the communities they serve, protecting the environment while fostering economic growth and energy independence.
- 1.4.4 Recently, IGP's Cottam and West Burton projects have received DCOs. The Cottam Solar Project was granted development consent by the Secretary of State on 5 September 2024. The West Burton Solar Project was granted development consent by Secretary of State on 24 January 2025.

1.5 Consultation

- 1.5.1 The DCO process sets out several statutory requirements regarding consultation. The Planning Act 2008 (Ref 1.1) requires applicants to carry out statutory consultation on their proposals ahead of submission of a DCO Application. The requirements are:
- Section 42 of the Planning Act 2008 requires the Applicant to consult with the prescribed persons which includes consultation bodies such as Natural England, Environment Agency, Historic England, host authorities, neighbouring authorities and persons with interest in the land and those who may be affected by the Scheme.
 - Section 47 of the Planning Act 2008 requires the Applicant to consult with the local community. As part of this, a Statement of Community Consultation (SoCC) must be prepared which sets out how the applicant proposes to consult on the Scheme. The Applicant must consult with the host authorities on this document and have regard to their comments.
 - Section 48 of the Planning Act 2008 requires the Applicant to publicise the Scheme in the prescribed manner in a national newspaper, The London



Gazette, and local newspapers. The Section 48 notice also needs to be sent to prescribed consultees.

- Section 49 of the Planning Act 2008 requires the Applicant to have regard to any relevant responses received to the consultation and publicity that is required by Sections 42, 47 and 48 of the Planning Act 2008.

Consultation to Date

Initial Engagement and Non-Statutory Consultation

- 1.5.2 Throughout the period January 2024 to September 2024, informal consultation took place with relevant stakeholders. Regular meetings were held with host authorities and other bodies, as necessary. Statutory and non-statutory consultees were also consulted.
- 1.5.3 A number of meetings have taken place with statutory consultees to introduce the Scheme and commence discussions on detailed matters relating to the Scheme which include:
- North Northamptonshire Council, West Northamptonshire Council, Milton Keynes City Council (Officers and Members) and Bedford Borough Council;
 - Parish Councils;
 - Local Member of Parliament – Ms Gen Kitchen – MP for Wellingborough; Sarah Bool – MP for South Northamptonshire; Mike Reader – MP for Northampton South;
 - Historic England;
 - Environment Agency; and
 - Natural England.
- 1.5.4 Non-statutory consultation is described in the Consultation Report [EN010170/APP/GH GH5.1] supporting the DCO Application. Within each technical chapter of the ES there is further detail on any topic specific consultations that have taken place with statutory consultees to date.
- 1.5.5 Five consultation workshops were held in March and May 2024. During this initial stage of engagement, we engaged collaboratively with stakeholders to help understand key issues and potential constraints in the local area.
- 1.5.6 An EIA Scoping Opinion issued on 30 August 2024. In the preparation of the Scoping Report consultation was undertaken with key stakeholders where possible. The Planning Inspectorate consulted on the Scoping Opinion, with the prescribed consultation bodies, as listed in Schedule 1 of The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (as amended). Those responses were included with the Scoping Opinion issued by the Planning Inspectorate. Any key matters raised in those responses are covered in the individual aspect ES chapters.

Statutory Consultation

- 1.5.7 A Preliminary Environmental Information Report (PEIR) was prepared and published on 7 November 2024 to satisfy the requirement of the EIA Regulations



(Ref 1.2). Preliminary environmental information is defined in Regulation 12(2) of the EIA Regulations as information “*which (a) has been compiled by the applicant; and (b) is reasonably required for the consultation bodies to develop an informed view of the likely significant environmental effects of the development (and of any associated development)*”.

- 1.5.8 Planning Inspectorate Advice Note 7 (EIA: Process, Preliminary Environmental Information, and Environmental Statements) (Ref 1.3) notes: “*A good PEI document is one that enables consultees (both specialist and non-specialist) to understand the likely environmental effects of the Proposed Development and helps to inform their consultation responses on the Proposed Development during the pre-application stage.*”
- 1.5.9 The PEIR enabled consultees to understand the likely environmental effects of the Scheme. It presented the preliminary findings of the environmental assessments undertaken up to that point. This allowed consultees the opportunity to provide informed comments on the Scheme, the assessment process, and preliminary findings prior to the finalisation of the Application and this ES.
- 1.5.10 Statutory consultation was undertaken between 7 November 2024 and 19 December 2024, during which time the Applicant hosted a series of in-person and online events. Targeted consultation was undertaken between 13 March 2025 and 10 April 2025, during which feedback was encouraged to comment on changes relating to traffic management and vehicle access.
- 1.5.11 The issues that were raised by statutory consultees through consultation and how these have been considered and addressed within the design evolution of the Scheme and the EIA are set out in each of technical chapters (Chapters 7 to 24) of this ES and Chapter 5: Alternatives and Design Evolution [**EN010170/APP/GH GH6.2.5**].
- 1.5.12 The statutory consultation and targeted consultation undertaken by the Applicant is also documented within the Consultation Report that is provided as a separate document as part of the Application [**EN010170/APP/GH GH5.1**].



References

- Ref 1.1 Planning Act 2008, 2008.
- Ref 1.2 The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017.
- Ref 1.3 Planning Inspectorate (2020) Advice Note 7: EIA: Process, Preliminary Environmental Information and Environmental Statements. Available at: <https://www.gov.uk/government/publications/nationally-significant-infrastructure-projects-advice-note-seven-environmental-impact-assessment-process-preliminary-environmental-information-an>