

1 INTRODUCTION

1.1 Preamble

This Environmental Statement (ES) on behalf of Green Energy International Ltd. (hereafter referred to as 'GEI/the Applicant') and forms part of a suite of documents supporting a planning application to South Holland District Council in respect of the Applicants' proposal for a new solar farm located at Caudwell Farms, Holbeach St. Matthew in Lincolnshire.

The ES reports on the findings of the Environmental Impact Assessment process for the construction, operation and de-commissioning of a proposed ground mounted solar photovoltaic energy generation, battery energy storage and cable connection to the grid together with all associated ancillary development as set out in this ES, Chapter 2, Project Description.

This chapter outlines the purpose and structure of the ES, and provides an overview of the Applicant, the background and approach taken to the EIA process for the purposes The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended) - hereafter referred to as the EIA Regulations.

1.2 The Applicant

This ES and planning application has been prepared by Green Energy International Limited alongside specialist reports provided by third-party consultants.

Green Energy International (GEI) was first incorporated in 2009, rebranding to 'International' in 2016. The core management team have over 40 years of combined industry experience with projects ranging from small domestic rooftops to large scale ground-mounted solar farms.

To date, GEI has added more than 200MW of renewable energy into the grid with a carbon save in excess of 160,000 tonnes per annum and plans to develop a further 3GW over the next two years, aiding the security of energy supply to the UK during the transition from fossil fuels to a cleaner, more sustainable source.

1.3 Site Location

The Proposed Development is located at Caudwell Farm, east of the A17 and west of The Wash, approximately 3km off the coast, within the South Holland district of Lincolnshire. The application site ('the Site') extends to circa 110 hectares of agricultural land located in the countryside at Caudwell Farm between Holbeach St Matthew, approximately 1.7kms to the north and Holbeach St Marks, around 3.5kms west. As shown on Figure 2.1, the site is approximately 15kms northeast of the market town of Holbeach.

A detailed description of the Site and its surrounding context is provided in Chapter 2, Project Description.

1.4 Overview of the Proposed Development

It is proposed to install a solar photovoltaic (pv) farm with a maximum export capacity of 49.9MW on an area of agricultural land covering approximately 282.3 acres. It is estimated that the solar panels would generate up to 49.9 MW peak, enough to power approximately 16,581 homes. The Proposed Development benefits from an agreed point of connection ('POC') to a proposed Distribution Network Operator ('DNO') electricity substation located approximately 1.3kms to the south of the site.

A detailed description of the Proposed Development and all related ancillary development and equipment is set out in Chapter 2, Project Description. A summary of the component parts of the Proposed Development is set out below:

- Installation of PV Panels, divided into two separate formats with those to the west of the site consisting of tracking solar arrays and those to the east of the site being fixed, south facing solar arrays.
- A containerised Battery Storage Facility.
- Inverter/Transformer (SPS) Stations to be located across the site.
- One point of connection (POS) mast up to 35m in height.

- Distribution Network Operator (DNO) Substation, access and cable route to connect into the 132kV power line.
- Buried underground cable between the site and the DNO Substation.
- On-site substation/ Switchgear and Meter Kiosk.
- Strategically placed CCTV cameras for security purposes.
- Perimeter security fencing.
- Internal service tracks constructed of permeable stone material.
- Temporary construction access & compounds of permeable stone material providing for plant/material storage and Staff Welfare Facilities.
- Embedded/integrated habitat enhancement measures proposed offsetting any impact on habitat and producing a biodiversity net gain.

1.5 Legislative Context & Need for EIA

The Applicants sought a formal screening opinion from South Holland District Council ('the Council') under regulation 6 of The Town and Country Planning (Environmental Impact Assessment) Regulations 2017, (EIA Regulations) on 11th January 2021 (Appendix 1.1).

The Council undertook an EIA screening exercise on 30th April 2021 (Appendix 1.2) which confirmed the following:

From the information submitted it is not considered that a significant effect is likely on natural resources, residential amenity/human health, waste, water resources, transport routes, historic assets and, with mitigation measures, could have limited visual impact on the countryside landscape (no landscape designations present). This development is considered to be fully reversible and could return to agricultural use in the future.

However, the proposal is in an area that is likely to be sensitive by virtue of the avian species located on or around the location and which could be affected by the project. Given that both the RSPB and Natural England have indicated that further surveys are required to determine the likely impacts of the proposal it must be assumed that a significant effect is possible.

Accordingly, the Local Planning Authority, in line with Regulation 5 of the Regulations, has determined that the development proposed is Environmental Impact Assessment development and will require an Environmental Statement to be submitted.

1.6 Purpose of the Environmental Statement

An Environmental Statement (ES) is a document that sets out the findings of an Environmental Impact Assessment (EIA) in compliance with the requirements of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (the "EIA Regulations").

An EIA is a process for identifying the likely significance of environmental effects (beneficial or adverse) arising from a Proposed Development, by comparing the existing environmental conditions prior to development (the baseline) with the environmental conditions during/after the construction, operational and decommissioning phases of a development should it proceed.

The baseline for the assessment has been derived from surveys and studies within and around proposed application site (hereafter referred to as 'the Site'). The ES has also considered measures to avoid, reduce, or mitigate any significant adverse effects on the environment and, where possible, enhance the environment. It has then identified residual effects, which are defined as the effects that remain on receptors following the implementation of mitigation measures. The EIA is carried out prior to the submission of a planning application.

1.7 Consultations & Scoping of the EIA Process

The Applicants undertook pre-application consultations with South Holland District Council which informed the scope of this ES.

The Council EIA screening matrix (Appendix 1.2) confirmed the following key points:

- **Agricultural Land:** Higher grade agricultural land involved but there is the potential for grazing sheep, thereby allowing some agricultural activity to continue. Reversible after decommissioning and arguably

- more fertile. In that context the Applicant have commissioned an assessment of Agricultural Considerations which is included as an appendix to Chapter 10, Other Environmental Considerations.
- **Waste:** Waste production during construction phase would be limited as most components arrive at site ready-made/pre-assembled. The matter is addressed under Other Environmental Considerations in Chapter 10 of this ES.
 - **Population & Human Health:** The Council has confirmed that there is no likely significant impact on population and human health. In that context this matter has been scoped out of the EIA process.
 - **Water Resources:** The Council has confirmed that the Proposed Development is not likely to have a significant impact due to the nature of the development proposed and limited output/run-off. The assessment in that context is therefore focused on flood risk and drainage issues (Chapter 6).
 - **Landscape & Visual:** The Council has confirmed that there are no areas or features on or around the location which are protected for their landscape and scenic value, and/or any non-designated / non-classified areas or features of high landscape or scenic value on or around the location that could be affected by the Proposed Development. There are very small number of properties with 1kms of the site and a Public Right of Way runs through the site, half of which is already screened by hedgerow which could be continued along the remainder of its length within the site. In that context the ES contains a chapter on the Landscape & Visual impact Assessment including the assessment and mitigation proposed.
 - **Cultural Heritage:** The Council confirmed that, although it is unlikely that there is any below ground archaeology in or around the site, Hartley House Farm is a historic farmstead and can be considered a non-designated heritage asset. In that context an assessment of the potential impact on the cultural heritage resource, including Hartley House has been included as an appendix to Chapter 10, Other Environmental Considerations.
 - **Traffic & Transport:** The Council has confirmed that there are no transport routes on or around the location which are susceptible to congestion, or which cause environmental problems, which could be affected by the project. In this case the Applicants have instructed an assessment of traffic & transport impacts (Chapter 4) primarily focused on the construction phase of the development and a Construction Traffic Management Plan is provided as an appendix to Chapter 2, Project Description.
 - **Land Use:** The Council confirmed that any disturbance during construction and decommissioning phases could be mitigated by a Construction Management Plan which could be secured via condition. Disturbance during operation phase is considered likely to be minimal. In terms of visual impact, the majority of properties are either screened by on-plot planting or there is intervening screening that would minimise views of the proposed development. A Construction Environmental Management Plan (CEMP) is provided as an appendix to Chapter 2, Project Description.
 - **Ecology & Ornithology:** Detailed comments have been provided by RSPB and Natural England and these have informed the preparation of Chapter 8 and associated technical reports.
 - **Cumulative Impacts:** While the Council had confirmed that there are no existing or planned developments in the locality that, together with the proposed development, would result in a significant adverse cumulative impact during the construction/operation phase when taking into account the nature of the development proposed, the Applicants have identified a number of projects in the locality, either approved or in the planning system and have included assessment of potential cumulative impacts in each relevant chapter of this ES. The other developments considered are:
 - Decoy Park solar farm, Crowland, Spalding.
 - Proposed solar farm at Gunthorpe Road Solar Farm Land South of Gunthorpe Road Walpole Marsh
 - Proposed photovoltaic solar array, grid connection, access improvement works, and ancillary development on land west of Cowbridge Road, Bicker Fen, Boston, and South Holland
 - Proposed solar farm is at Land North of Roman Bank and East of Middle Marsh Road at Red House Farm, Holbeach Bank, Spalding

1.8 Structure of the Environmental Statement

This ES comprises technical studies on each of the aspects of the environment identified as likely to be significantly affected by the Proposed Development, which are supported with figures and technical appendices where appropriate.

The exception to this structure is Chapter 10: Other Environmental Considerations which presents assessments relating to topics where no individual chapter was warranted, either due to the brevity of the

assessment or the small impact associated with the Proposed Development as confirmed in the ES screening exercise undertaken with the Council.

Each chapter also presents the potential cumulative effects resulting from other present, or reasonably foreseeable projects together (i.e. cumulatively) with the Proposed Development.

The aim of Environmental Impact Assessment is to ensure that the decision making authority and the relevant consultation bodies, when deciding whether to grant planning permission for the Proposed Development, does so in the full knowledge of the likely significant effects on the environment and takes this environmental information into account in the determination of the application.

The Environmental Statement follows the broad structure set out below:

- Volume 1: Environmental Statement Main Text
- Volume 2: Appendices containing Technical Reports relevant to each chapter
- Volume 3: Figures and Drawings which form part of the ES and the planning application
- Non-Technical Summary which provides a summary in non-technical terms, of the outcome of the environmental assessment process and the measures proposed to mitigate or to avoid adverse effects of the Proposed Development.

Each of the chapters (4-9) that provide structured assessments of specific environmental effects follows the following broad approach:

- **Introduction:** setting out the scope of assessment and the competency of the author to undertake EIA.
- **Methodology:** providing a summary in non-technical terms of the methodology of assessment, making reference to relevant legislative context and guidance followed, identifying the study area.
- **Baseline:** provides a list of baseline studies and surveys undertaken and a summary of the existing environmental for the purpose of the assessment.
- **Assessment Criteria and Assignment of Significance:** each chapter provides an explanation of the approach taken to identifying the magnitude of an impact and the sensitivity/value of receptor in respect of classification of low, medium and high to describe sensitivity and magnitude (except where topic methodologies dictate otherwise).
- **Significance of the Effects:** the significance of potential effects are presented in respect of the consideration of the magnitude of the effect against the sensitivity of the consideration.
- **Impact Assessment:** each chapter considers the potential impact of the construction, operation, cumulative effects prior to mitigation and then in respect of any residual effects following mitigation.
- **Summary of Likely Environmental Effects:** key points emerging from the assessment.

Each chapter also identifies where relevant if there were any difficulties in completing the assessment, including technical deficiencies or limitations in available data.

1.9 Statement of Authority

In line with Regulation 18(5) of the EIA Regulations, the ES and all technical assessments have been undertaken by suitably qualified 'competent experts'. The consultants who have contributed to the preparation of this ES are set out in Table 1.1 below.

Each relevant chapter of the ES includes a statement on the competence of the author to carry out and report on that assessment.

Role	Name (Company)
Applicant	Green Energy International (GEI)
Project Manager	GEI
EIA Review	RPS
Introduction	GEI/RPS
Project Description	GEI/RPS
Assessment of Alternatives	GEI/RPS
Traffic and Transport	ADL Traffic & Highways

Noise Impact	ITP Energised
Flood Risk and Drainage	Weetwood
Glint and Glare	Pager Power
Biodiversity (Including Ecology and Ornithology)	Atmos Consulting
Landscape and Visual Impact Assessment	HELPA
Other Environmental Effects	GEI/RPS
- Heritage and Archaeology Assessment	Richard Conolly (RPS)
- Soils and Land Quality	Kernon Consultants
- Socio-Economic	
Interactions	GEI/RPS
Non-Technical Summary	GEI/RPS

Table 1.1: EIA Team & Responsibilities

1.10 Planning Drawings

The planning application will be supported a drawing pack comprising the following maps & plans:

- GEI-IH-2023-D4: Site Location Plan
- GEI-IH-CDW-LP: Redline Boundary Plan
- GEI-IH-CDW-LP: Layout Plan
- GEI-IH-CDW-LP: Landscape Plan
- Panel Array Details
- CCTY Details
- Security Fence & Gateway Details
- Access Tracks - Hard Standing
- Storage Container
- Battery Storage Compound
- Customer Substation Switch Room
- Customer Control Room
- DNO Substation Details
- Grid Connection Cable Route
- Inverter Transformer Details
- Development Zones