NORTH LINCOLNSHIRE GREEN ENERGY PARK

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North Lincolnshire Green Energy Park

Volume 5

5.1 Planning Statement

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Glossary

Abbreviation	Description
AA	Appropriate Assessment
AAP	Area Action Plan
AGI	Above Ground Installation
ALARP	As Low As Reasonably Possible
AQIA	Air Quality Impact Assessment
BEIS	Department for Business, Energy and Industrial Strategy
CBMF	Concrete Block Manufacturing Facility
CCUS	Carbon Capture, Utilisation and Storage
CEMP	Construction Environmental Management Plan
CHP	Combined Heat and Power
CLP	Construction Logistics Plan
CO_2	Carbon Dioxide
CoCP	Code of Construction Practice
COP26	Conference of the Parties 26
CTMP	Construction Traffic Management Plan
CWTP	Construction Workers Travel Plan
DEFRA	Department for Environment, Food and Rural Affairs
DCO	Development Consent Order
DHPWN	District Heat and Private Wire Network
DPD	Development Plan Document
EA	Environment Agency
EfW	Energy from Waste
EMFs	Electric and Magnetic Fields
ERF	Energy Recovery Facility
EIA	Environmental Impact Assessment
ES	Environmental Statement
EU	European Union
EV	Electric Vehicle

GHG	Greenhouse Gases
H_2	Hydrogen
HRA	Habitats Regulations Assessment
IDB	Internal Drainage Board
IED	Industrial Emissions Directive
IPC	Infrastructure Planning Commission (now ended)
LDF	Local Development Framework
MCAA	Marine and Coastal Access Act
MRF	Materials Recovery Facility
NE	Natural England
NLC	North Lincolnshire Council
NLGEP	North Lincolnshire Green Energy Park
NPPF	National Planning Policy Framework
NPS	National Policy Statement
NPSs	National Policy Statements
NSIP	Nationally Significant Infrastructure Project
PPG	Planning Practice Guidance
PRF	Plastic Recycling Facility
PV	Photovoltaic
RDF	Refuse Derived Fuel
RHTF	Residue Handling Treatment Facility
S21	Solar 21
SAC	Special Area of Conservation
SFRA	Strategic Flood Risk Assessment
SoS	Secretary of State
SPA	Special Protection Area
SPD	Supplementary Planning Document
SPV	Special Purpose Vehicle
SSSI	Site of Special Scientific Interest
SuDS	Sustainable Drainage Systems

UK	United Kingdom
WFD	Waste Framework Directive
WFD	Water Framework Directive
WID	Waste Incineration Directive
WMP	Waste Management Plan

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Executive Summary

This Planning Statement has been prepared on behalf of North Lincolnshire Green Energy Park Limited (the Applicant). It forms part of the application (the Application) for a Development Consent Order (DCO), that has been submitted to the Secretary of State (SoS) under Section 37 of the Planning Act (the 2008 Act).

The North Lincolnshire Green Energy Park (NLGEP) (the Project), located at Flixborough, North Lincolnshire, is a Nationally Significant Infrastructure Project (NSIP) with an Energy Recovery Facility (ERF) capable of converting up to 760,000 tonnes of non-recyclable waste into 95 MW of electricity at its heart and a carbon capture, utilisation and storage (CCUS) facility which will treat a proportion of the excess gasses released from the ERF to remove and store carbon dioxide (CO_2) prior to emission into the atmosphere. The design of the ERF and CCUS will also enable future connection to the Zero Carbon Humber pipeline, when this is consented and operational, to enable the possibility of full carbon capture in the future.

The NSIP incorporates a switchyard, to ensure that the power created can be exported to the national grid or to local businesses, and a water treatment facility, to take water from the mains supply or recycled process water to remove impurities and make it suitable for use in the boilers, the CCUS facility, concrete block manufacture, hydrogen production and the maintenance of the water levels in the wetland area.

The Project will include the following Associated Development to support the operation of the NSIP:

- a bottom ash and flue gas residue handling and treatment facility (RHTF);
- a concrete block manufacturing facility (CBMF);
- a plastic recycling facility (PRF);
- a hydrogen production and storage facility;
- an electric vehicle (EV) and hydrogen (H_2) refuelling station;
- battery storage;
- a hydrogen and natural gas above ground installations (AGI);
- a new access road and parking;
- a gatehouse and visitor centre with elevated walkway;
- railway reinstatement works including, sidings at Dragonby, reinstatement and safety improvements to the 6km private railway

spur, and the construction of a new railhead with sidings south of Flixborough Wharf;

- a northern and southern district heating and private wire network (DHPWN);
- habitat creation, landscaping and ecological mitigation, including green infrastructure and 65 acre wetland area;
- new public rights of way and cycle ways including footbridges;
- Sustainable Drainage Systems (SuDS) and flood defence; and
- utility constructions and diversions.

The Project will also include development in connection with the above works such as security gates, fencing, boundary treatment, lighting, hard and soft landscaping, surface and foul water treatment and drainage systems and CCTV.

The Project also includes temporary facilities required during the course of construction, including site establishment and preparation works, temporary construction laydown areas, contractor facilities, materials and plant storage, generators, concrete batching facilities, vehicle and cycle parking facilities, offices, staff welfare facilities, security fencing and gates, external lighting, roadways and haul routes, wheel wash facilities, and signage.

The overarching aim of the Project is to support the UK's transition to a low carbon economy as outlined in the Sixth Carbon Budget (December 2020), the national Ten Point Plan for a Green Industrial Revolution (November 2020) and the North Lincolnshire prospectus for a Green Future. It will do this by enabling circular resource strategies and low-carbon infrastructure to be deployed as an integral part of the design (for example by reprocessing ash, wastewater and carbon dioxide to manufacture concrete blocks and capturing and utilising waste-heat to supply local homes and businesses with heat via a district heating network).

The Project falls within the administrative boundary of North Lincolnshire Council in the Yorkshire and Humber area of England.

This Planning Statement considers the compliance of the Project as a whole with the requirements of relevant planning policy. An assessment has been made against National Policy Statements (NPSs) EN-1 (Overarching Policy Statement for Energy), EN-3 (Renewable Energy Infrastructure) and EN-5 (Electricity Networks Infrastructure), which form the primary policy context against which the Project should be assessed.

This Planning Statement demonstrates that the Project is supported both in principle and within the detail of the Project, when considered against the relevant 'assessment principles' and 'generic impacts' required by NPSs EN-1, EN-3 and EN-5.

This Planning Statement has assessed the Project against the National Planning Policy Framework policies which are considered to be of relevance to the Project. The Planning Statement has also considered the Project against other national and local policies; recognising that such matters may be material considerations in the context of an application for development consent.

Although there are no explicit policies which reference the Project by name, it is broadly consistent with the objectives of relevant plans and policies with regard to minimising adverse effects arising from construction and operational activities.

The 2008 Act requires that an application for development consent should be decided in accordance with NPSs EN-1, EN-3 and EN-5. It is the conclusion of this Planning Statement that the Project is in accordance with the NPSs providing significant benefits in supporting decarbonisation and diversification of the UK's energy supply.

Where negative effects are anticipated these have been mitigated or managed so as to reduce impacts overall. Whilst this is the case, it is not considered that there are any adverse effects which would outweigh the clear benefits of the Project overall. In conclusion therefore and overall, the planning balance lies strongly in favour of development consent being granted for the Project.

1. Introduction

1.1 Overview

1.1.1 This Planning Statement has been prepared on behalf of the Applicant. It forms part of the Application for a Development Consent Order (DCO), that has been submitted to the Secretary of State (SoS) under Section 37 of the 2008 Act.

1.2 The Applicant

1.2.1 The Applicant is a Special Purpose Vehicle (SPV) set up by Solar 21 Renewable Energy Limited (S21). S21 is part of a renewable energy investment company headquartered in Dublin, Ireland with locations in the United Kingdom (UK) and Italy.

1.2.2 Established in 2010, S21 specialises in the acquisition and management of solar photovoltaic (PV) installations and the development of renewable power assets including biomass, biogas and energy recovery projects in the UK and Europe. S21 has been delivering steady returns to investors since 2011 from its PV assets. To date, S21 has acquired or developed in excess of €240 million in renewable energy assets. Its current pipeline of projects is expected to bring this to €2 billion over the next five years, which includes this Project as part of a series of new energy recovery plants in the UK.

1.3 The Project

1.3.1 The DCO will provide the necessary authorisations and consents for the construction and operation (including maintenance) of the Project.

1.3.2 The Project comprises the following works, as set out in Schedule 1 of the draft DCO (**Document Reference 2.1**).

Energy Park: ERF infrastructure

Work No. 1: an electricity generating station located on land at Flixborough Port, Lincolnshire, fuelled by refuse derived fuels with a gross generation capacity of up to 95 megawatts at ISO conditions comprising the following works:

- fuel reception and storage facilities, consisting of vehicle ramps, a tipping hall, shredder, bunker hall and cranes;
- a combustion system housed within a boiler hall, consisting of three combustion lines and associated boilers;
- a steam turbine and generator housed within a turbine hall with a cooling system comprising fin fan coolers;

- a bottom ash handling system, including an ash conveyor housed within a bottom ash hall connecting to Work No. 2;
- a flue gas treatment system, including residue and reagent silos housed within a gas treatment hall;
- a silo or tank for the storage of ammonia reagents;
- district heating equipment;
- a tank for the storage of fuel oil;
- an air-cooled condenser;
- a compressed air system;
- a process effluent storage tank;
- a switchyard including a sub-station and battery storage;
- a transformer compound containing the generator transformer;
- utility connections within the works limits;
- pipe racks, pipe runs and cabling;
- fire water pump house and fire water tank;
- internal vehicle access roads, crossings and pedestrian and cycle facilities and routes;
- administration offices and control room, security gatehouse, barriers and enclosures;
- elevated walkway connected to Work Nos. 1C and 2;
- weighbridges;
- car parking;
- a demineralised water treatment plant and demineralised water storage tanks;
- indoor storage tanks for boiler water treatment chemicals, and;
- a back up generator

Work No. 1A: three stacks, consisting of ERF stack windshield, back up boilers stack windshield and back up generator stack and associated emissions monitoring system.

Work No. 1B: carbon capture utilisation and storage facility capable of capturing at least 54,387 tonnes of CO_2 per annum including carbon dioxide storage tanks.

Work No. 1C: associated development being a visitors centre containing offices, exhibition space and visitor accommodation with elevated walkway connected to Work Nos. 1 and 2.

Work No. 1D: a cooling system consisting of air-cooled condensers or air-blast chillers.

Work No. 2 comprising associated development:

- a bottom ash and flue gas residue handling and treatment facility;
- a concrete block manufacturing facility; and
- offices.

Rail infrastructure

Work No. 3: associated development being reinstatement of the railway line between Flixborough Wharf and the Dragonby sidings including new sidings.

Work No. 4: associated development being a railhead, sidings and associated equipment to allow loading and unloading.

Energy Park: supporting infrastructure

Work No. 5: associated development being a new access road linking the B1216 and Stather Road, stopping up of the section of Stather Road between Neap House and Bellwin Drive and improvements to footpaths and the junction between the B1216 and A1077**.**

Work No. 6: associated development being a plastic recycling facility and associated infrastructure including gatehouses, weighbridges, electrical equipment, heat exchange equipment, office and welfare facilities, pre-processed material storage and post processed material storage.

Work No. 7: associated development being a hydrogen electrolyser, associated infrastructure and equipment required to inject hydrogen into the national gas grid.

Work No. 8: associated development being an electric and hydrogen vehicle refuelling station, with hydrogen production and a gas grid injection above ground installation and offices.

Work No. 9: associated development being a battery storage facility capable of peak discharge of 30MWe, with associated infrastructure including site roads, offices, control equipment, transformers and rectifiers.

DHPWN

Work No. 10: associated development being private wire networks linking Work No 1 with Work No 2, Work No 6, Work No 7, Work No 8, Work No 9 to end users outside of the order limits.

Work No. 11: associated development being a district heating network providing heating and cooling and pipes carrying hydrogen gas, linking Work No 1 with Work No 6, and to end users outside of the order limits.

Landscaping, mitigation and utility works

Work No. 12: associated development being hard and soft landscaping and the construction of landscape features including a wetland area and ecological mitigation works.

Work No. 12A: associated development being habitat creation measures incorporating biodiversity enhancements.

Work No. 13: associated development comprising flood defences and sustainable drainage systems, including swales, attenuation ponds and below ground tanks and the diversion of ditches.

Work No. 14: associated development comprising diversions of existing utilities which conflict with the construction of Work No 1, Work No 2, Work No 5, Work No 6, Work No 10 and Work No 11.

Work No. 15: associated development being laydown areas to allow for storage of materials and construction activities in connection with Works 1-14.

1.3.3 A more detailed description of the Project is provided in Environmental Statement (ES) Chapter 3 (**Document Reference 6.2.3**).

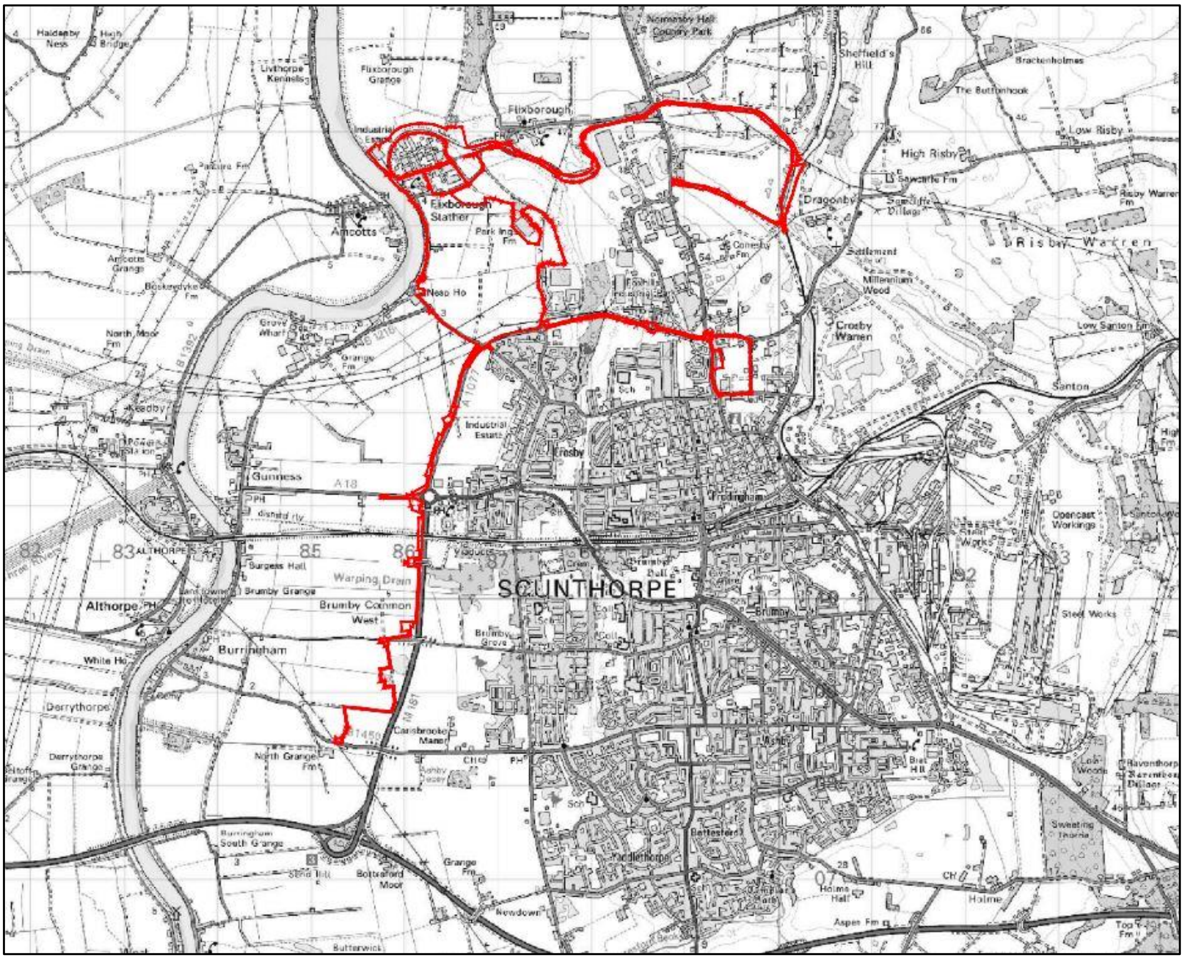
1.3.4 The Project meets the criteria to be considered an NSIP under the THE 2008 ACTas Work Nos. 1, 1A, 1B and 1D are a ‘generating station’ under section 15(2). Section 15(2) defines an NSIP as a proposed generating station which would be located within England, would not be offshore, and would have a total generating capacity of more than 50MW.

1.4 The Application Land

1.4.1 The location of the Project is wholly within the administrative area of North Lincolnshire Council (NLC) within the Yorkshire and Humber region of England. The Project sits to the north and west of Scunthorpe and is focussed on land at the Flixborough Wharf and Industrial Estate, including land to the south.

1.4.2 The location of the Project and the Order Limits are illustrated in Figure 1.1 overleaf.

Figure 1.1: Site Location



1.4.3 Plans provided alongside the Application for development consent confirm detail for the Project location, Order Limits and works. These plans include:

- Location Plan (**Document Reference: 4.1**);
- Land Plans (**Document Reference: 4.2**);
- Rights of Way and Access Plans (**Document Reference 4.3)**, and;
- Works Plans (**Document Reference: 4.4**)

1.4.4 The Application is also informed by a number of indicative plans which include (but are not limited to):

- Indicative Site Layout for the ERF and Associated Development (**Document Reference 4.11**);
- Indicative Elevations and Sectional Drawings for the ERF and built Associated Development (**Document Reference 4.12**);

- Indicative Floorplans and Roof plans for the ERF and built Associated Development (**Document Reference 4.13)**;
- Indicative Highways Drawings (**Document Reference 4.14**), and;
- Indicative Railway Drawings (**Document Reference 4.15**);

1.4.5 In-line with Chapter 3 of the ES (**Document Reference 6.2.3**), the Application Land is divided into four distinct geographical areas relating to the specific elements of the Project, namely:

- The Energy Park Land
- The Northern District Heat and Private Wire Network (DHPWN) Land
- The Southern District Heat and Private Wire Network (DHPWN) Land, and;
- The Railway Reinstatement Land

1.4.6 Figure 1.2 (page 11) illustrates these four geographical areas, with more detail on each of these geographical areas provided below:

The Energy Park Land

1.4.7 The Energy Park Land is located on land within and to the south of Flixborough Industrial Estate, to the west of Scunthorpe, North Lincolnshire. The Energy Park Land encompasses an area within and adjacent to Flixborough Wharf (RMS Trent Ports) on the east bank of the River Trent. The Flixborough Wharf and Flixborough Industrial Estate together form an industrial complex that has supported a range of businesses and industrial activities since the early 1900s. Existing infrastructure at the site includes roads, a rail spur, a 155m long Wharf, weigh bridge, cranes, warehousing and stock sheds, workshops and portable offices.

1.4.8 Large industrial facilities within the wider Flixborough Industrial Estate and on adjacent land include a cement works, wind turbines, grain processing facilities, and a small power station that has a feedstock of chicken litter and bone meal.

1.4.9 The Project will have transport connectivity by road, rail, and river to sea via the River Trent and River Humber, with the latter two used for freight transport only. Land adjacent to the Flixborough Industrial Estate included within the Order Limits is currently a mix of both brownfield land and areas used for arable agriculture, comprising a number of fields separated by hedgerows and well-established drainage ditches which are maintained by the Internal Drainage Board (IDB).

The Northern District Heat and Private Wire Network (DHPWN) Land

1.4.10 The route of the Northern DHPWN runs from the ERF down the new access road to the southern end of the Energy Park Land where the B1216 (Ferry Road West) meets the A1077 (Phoenix Parkway). The route follows the A1077 towards the east, passing the Skippingdale Retail Park on its south side and crossing the common land at Atkinsons' Warren / Foxhills Plantation.

1.4.11 East of the common land, the route passes south of the Foxhills Industrial Park where the Northern DHPWN Land incorporates rough grassland with hedges to the north of the A1077 and agricultural land and use of highways land.

1.4.12 At the roundabout junction with the A1430 (Normanby Road), two alternative route options for the Northern DHPWN are included in the Order Limits. Under Option A, the route passes south towards the built-up urban centre of Scunthorpe via Normanby Road, where the route remains lined on both sides by residential and industrial areas.

1.4.13 Under Option B, the route continues on the A1077 until the junction with Bessemer Way to the south. The route will follow Bessemer Way until the junction with Warren Road turning due west to meet the Normanby Road.

1.4.14 Both Option A and Option B have been incorporated within the Application for development consent, but the Applicant is restricted in its use of compulsory purchase powers to use either Option A or Option B, but not both. This optionality has been included within the Application due to concerns in relation to noise and traffic impacts on local residents during construction in relation to Option A, the route preferred by the local highway authority, NLC. The noise impacts of Option B are lesser, albeit this option may cause more disruption to the local highway network.

The Southern District Heat and Private Wire Network (DHPWN) Land

1.4.15 The route of the Southern DHPWN runs from the southern end of the Energy Park Land where the B1216 (Ferry Road West) joins the A1077, and then heads south through the agricultural land on the west side of the A1077. It will pass under the IDB drain north of the roundabout.

1.4.16 At Doncaster Road, the Southern DHPWN will pass under the carriageway and continue south across the agricultural land, where it will pass under the Crowle to Scunthorpe railway line and terminate in the field adjacent to Nuddock Wood Lakes and north of the B1450 (Burringham Road).

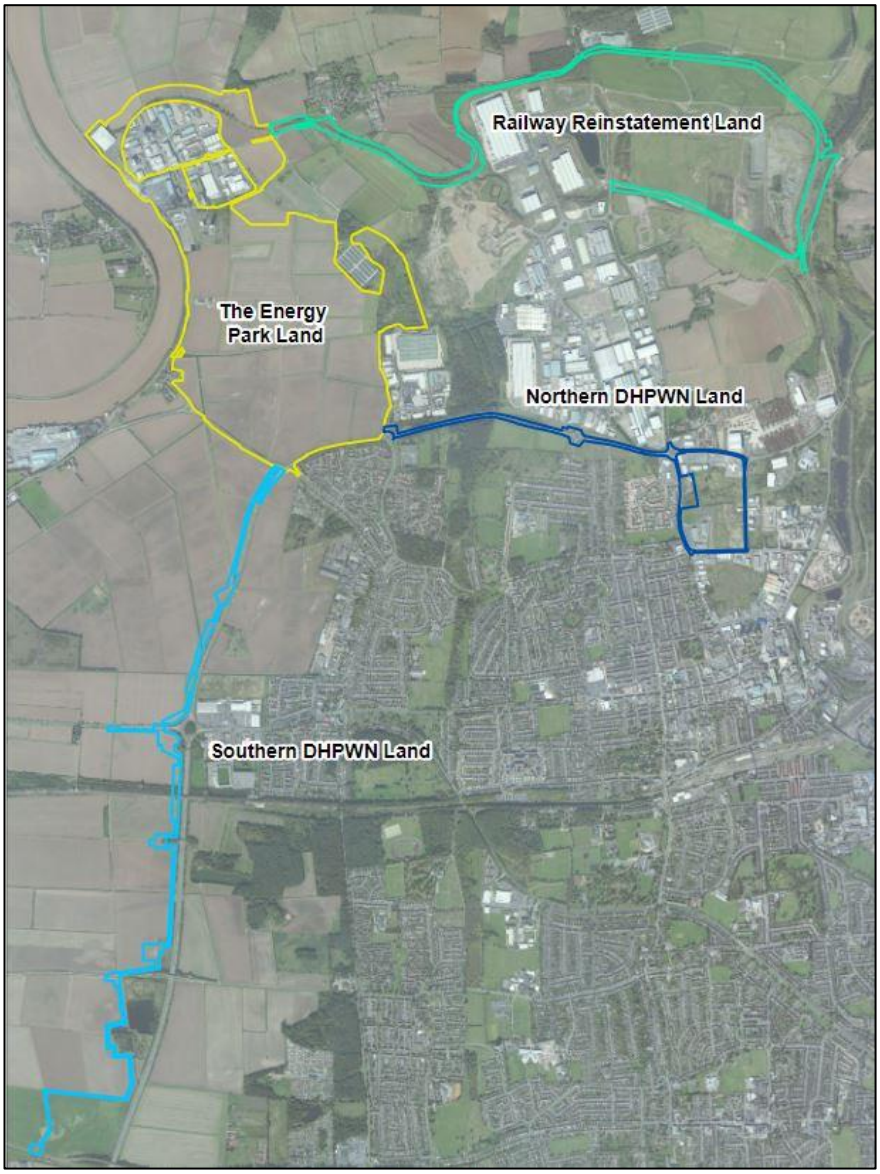
The Railway Reinstatement Land

1.4.17 The disused railway line between the main Network Rail line at Dragonby and the Wharf at Flixborough previously served the port operations through the delivery of steel and other materials to and from British Steel at

Scunthorpe up until its closure in 2012. The line runs in a roughly east-west direction, weaving between the industrial settings of Normanby Industrial Estate, the mineral workings, industrial developments at Dragonby sidings, slag dumping zones, quarries, and arable agricultural land, on a mix of embankments and cuttings that are lined with trees along much of the line.

1.4.18 The line passes immediately to the north of the Normanby Enterprise Park before winding around a long 's' bend to the south of Flixborough village and looping around the northern edge of Flixborough Industrial Estate, where the line terminates at the wharf edge.

Figure 1.2 Application Land: four geographical areas



1.5 The DCO Process

1.5.1 The Project meets the criteria to be considered as an NSIP under the 2008 Act as a 'generating station' under section 15(2). Section 15(2) defines an

NSIP as a proposed generating station which would be located within England, would not be offshore, and would have a total generating capacity of more than 50MW. As the Project is an NSIP, development consent must be obtained from the SoS for the Department for Business, Energy & Industrial Strategy (BEIS) to authorise it, and an application for a DCO must be made to the Planning Inspectorate who administer the DCO process on behalf of the SoS under section 37 of the 2008 Act.

1.5.2 As an NSIP consent for the Project is provided through the DCO process. The DCO process is split into the following main stages:

- **Pre-Application**
  Before making an application for development consent, potential applicants are required to consult on proposals in-line with the 2008 Act. All documents required in support of an application for development consent are also prepared during the Pre-Application stage

- **Acceptance**
  The Acceptance stage begins once an application for development consent has been made. There follows a period of 28 days for the Planning Inspectorate to decide whether to accept the application into the examination process. During the Acceptance stage the Planning Inspectorate will check whether all pre-application duties have been correctly discharged by the applicant.

- **Pre-Examination**
  The Pre-Examination stage requires the applicant to advertise that the application has been accepted into the examination process. This also opens the registration stage for Interested Parties participating in the examination. There is no set timescale for the Pre-Examination stage, but this normally lasts for three months following Acceptance.

- **Examination**
  The Examination stage is where the application for development consent is formally examined, the exact structure of each examination is unique but the timescale is set to run for six months. Registered Interested Parties will be invited to take part in the examination.

- **Recommendation and Decision**
  Within three months of the close of the Examination stage the appointed Inspector(s) will report to the Secretary of State with a recommendation for a decision. The Secretary of State will then have a further three months to make a decision on whether or not to grant development consent.

- **Post Decision**
  Following the decision made by the Secretary of State there is a

further six week period within which the decision may be challenged by Judicial Review in the High Court.

1.5.3 Now that an Application for development consent has been made, the Project is currently at the Acceptance stage of the above DCO Process.

1.6 The Structure and Purpose of the Planning Statement

1.6.1 The purpose of this document is to consider the compliance of the Project with the requirements of relevant national planning policies, most notably the National Policy Statements for Energy, and other relevant national and local planning policy. In doing so, the Planning Statement seeks to assist the Examining Authority and the SoS in applying the provisions of the 2008 Act when determining whether development consent should ultimately be granted.

1.6.2 This document also seeks to demonstrate the need for the Project, providing a summary of the assessment that has been carried out for the Project and which evidences the costs and benefits associated with its implementation and operation.

1.6.3 This Planning Statement draws upon the conclusions of documents submitted in support of the Application for a DCO. As such, this document should be read in conjunction with the Environmental Statement (ES), draft DCO, plans and other Application documents as appropriate.

1.6.4 This document has been prepared in accordance with Planning Inspectorate Advice Note 6 ‘Preparation and Submission of Application Documents’.

1.6.5 This document is structured as follows:

- **Section 2:** Planning History and Local Designations – sets out the planning history of the Application Land and any local designations which are relevant.
- **Section 3:** Legislative and Policy Framework – provides an overview of the legislative and policy framework within which the Application for development consent is being made, including notable policies and policy context for the Project.
- **Section 4:** Need for the Project – considers the policy case for the development and the need for the Project.
- **Section 5:** Impacts and Assessment of the Project Against National Policy – sets out assessment of impacts of the Project and how it complies with relevant national planning policies.
- **Section 6:** Impacts and Assessment of the Project Against Local Policy – sets out assessment of impacts of the Project and how it complies with relevant key local planning policies.

- **Section 7:** Assessment of the Planning Balance – sets out an assessment of any benefits and impacts of the Project in planning terms.

- **Section 8:** Conclusion - outlines the suitability of Project as a whole and whether development consent should be granted.

2. Planning History and Local Designations

2.1 Introduction

2.1.1 This Section covers those planning history records identified and which are relevant the Project (Section 2.2). These history records when viewed alongside the local planning designations (Section 2.3) form the planning context of the Project.

2.2 Planning History

2.2.1 The Order Limits sit within the administrative area of North Lincolnshire Council. North Lincolnshire Council are a unitary authority and therefore responsible for minerals and waste matters locally, alongside traditional planning applications. **Table 2.1** below reflects those planning history records[1] which are relevant to the Project site and their relationship to the development now proposed.

Table 2.1: Relevant Planning History		
Energy Park Land		
In general the planning history records relating to the Energy Park Land mainly relate to the Flixborough Industrial Estate and associated uses, less records cover the agricultural land to the south. Other concentrations of planning history records relate to areas where the Order Limits adjoin other land uses to the east (such as at Skippingdale Retail Park), to the west (the River Trent) and to North (renewable energy scheme and other uses associated with Flixborough Industrial Estate). Less significant secondary records also exist relating to variations of conditions associated with original permissions for the above locations. None of the records identified would prejudice the Project.		
Reference	Proposal	Relevance
Various 1975 and 1976 records following the Flixborough disaster of 1974	Various 1975 and 1976 records following the Flixborough disaster of 1974 for the redevelopment of land at Flixborough Industrial Estate.	A number of historic planning records concerning the redevelopment of land following the Flixborough disaster of 1974. Given the number of planning records from this date these are not individually referenced here but concern the redevelopment of the Flixborough Industrial Estate for a range of general and mixed industrial uses.
7/1980/1048	Planning permission to extract sand and reinstate to agricultural use	1981 planning record covering the eastern area of the Energy Park Land and adjacent to Skippingdale Retail Park. Proposal was for the extension of quarry land for the extraction of sand and reinstatement to agriculture.
7/1981/0079	Construct pumping station	1981 planning record relates to consent for the construction of a pumping station to the

[1] NB. This has been a desk-based exercise and no on-ground exercise has been undertaken to ascertain the implementation of the planning records listed (whether implemented in full, partially, or not at all).

Table 2.1: Relevant Planning History		
		west of the Energy Park Land and adjacent to the River Trent.
GBC5/1983/0013	Change the use of existing buildings and erect new buildings for general industrial, warehousing and office use and to use land for open storage.	Record from 1983 reflecting the development of the Flixborough Industrial Estate for general industrial and warehouse uses. This record extends across part of the Energy Park Land at its northern boundary.
GBC5/1985/0016	Construct a wharf	1985 record to construct a wharf to the west of the Energy Park Land and adjacent to the River Trent.
YH5264/219/19	Glanford Park	Glanford Park (business park) approved by Secretary of State on 2nd May, 1991. This site was located on and south of the Energy Park Land.
PA/2003/1820	Planning permission for the construction of a facility to compost green waste (works comprising of paving, drainage, office and storage buildings, fencing, lagoon and weighbridge).	2003 record covers an area within the north of the Energy Park Land and for a facility to compost green waste at Flixborough Industrial Estate. Permission for this facility was granted in March 2004.
PA/2010/1450	Planning permission for change of use from a composting plant to storage and distribution	2011 consent granted for the change of use from a composting plant to storage and distribution uses. This planning record covers an area within the north of the Energy Park Land at Flixborough Industrial Estate.
PA/2015/0942	Installation of circa 5.96MW solar arrays with transformer stations, access, and ancillary works	Planning record for a refused consent seeking a solar farm to the centre and east of the Energy Park Land, south and west of Park Ings Farm with access onto Stather Road. The proposal was appealed and was subsequently unsuccessful at appeal (APP/Y2003/W/16/3146209). Consent was refused based on the loss of best and most versatile agricultural land outweighing the benefits of the proposal.
PA/2015/0434	Planning permission for installation of ground-mounted solar arrays with transformer stations, internal access track, and other works	Record applies to land to the north and northeast of the Energy Park Land. Although planning consent was initially refused the proposal was successful at appeal (APP/Y2003/W/16/3142032) in 2016. The main matter considered in the

Table 2.1: Relevant Planning History		
		determination was impact on best and most versatile agricultural land.
PA/2019/574	Planning permission to retain change of Use from B2 to B2 & B8	Consent granted in June 2019 to retain a change of use from B2 (general industrial) to B2 (general industrial) & B8 (storage and distribution). This permission relates to an area of the Flixborough Industrial Estate within the Energy Park Land.
PA/2019/576	Planning permission to retain a 2.4 metre high galvanised steel palisade security fence to northern and part eastern boundaries	Consent granted in July 2019 to retain a security fence and relates to land at the Flixborough Industrial Estate. The site lies within the Energy Park Land.
PA/2019/2053	Planning permission to install flood lights	Application withdrawn on 10th February 2022 and relates to land south of Flixborough Industrial Estate. The site lies within the Energy Park Land.
PA/2020/290	Application for determination of the requirement for prior approval for demolition of office block and associated buildings	Application determined in April 2020 and confirmed that Prior Approval was not required. The site lies within the Energy Park Land.
PA/2020/855	Planning permission for change of use of site from offices to storage, with associated works	Approval for the development was granted in November 2020. This permission relates to land within Flixborough Industrial Estate, but outside the Application Land.
PA/2020/1168	Planning permission for installation of 1 overhead crane gantry with 2 single girder cranes	Approval for the development was granted in October 2020 and relates to land at the Flixborough Industrial Estate. The site lies within the Energy Park Land.
The Northern District Heat and Private Wire Network (DHPWN) Land		
For the Northern DHPWN Land, planning history records relate primarily to surrounding uses, with Skippingdale Shopping Centre adjacent and to the north and Foxhills Industrial Estate beyond. There are also residential permissions which abut the land to the south and which are associated with the settlement of Scunthorpe. Given the nature of the Northern DHPWN proposal, most historical and adjacent consents (commercial, industrial and residential) identified through searches are not relevant and are not reported here. None of the records identified would prejudice or conflict with the DHPWN proposal.		
6/1985/0143	Construction of stage 2B of the Scunthorpe North-West Orbital Road comprising a	Consent granted in October 1985 for the North-West Orbital Road which runs to the north of Scunthorpe. The Northern DHPWN follows this orbital road in an easterly direction from the Energy Park Land.

Table 2.1: Relevant Planning History		
	single carriageway link road	
PA/2022/706	Outline planning permission to erect 21 business storage units with all matters reserved for subsequent consideration	This application is currently 'live' and being considered by North Lincolnshire Council for determination. The application is adjacent to the Northern DHPWN Land at its eastern extremity.
PA/2022/16	Application for a non-material amendment to PA2021/864 namely to accommodate the appropriate specification of attenuation tanks (lowering the site by 0.5m)	Application Approved on 1st February 2022. The site lies to the east of the Northern DHPWN Land by Bessemer Way.
PA/2022/26	Application for a non-material amendment to PA2021/936 namely to accommodate the appropriate specification of attenuation tanks (lowering the site by 0.5m)	Application Approved on 1st February 2022. The site lies to the east of the Northern DHPWN Land by Bessemer Way.
The Southern District Heat and Private Wire Network (DHPWN) Land		
The majority of historic planning records for the Southern DHPWN Land relate to uses adjacent to the orbital road and primarily highways works, more recent records for mixed-use and commercial uses have also been identified. None of the records identified would prejudice or conflict with the Southern DHPWN proposal.		
HCC4/1979/0008	Single carriageway road from M181/ A18 roundabout to Ferry Road West (Scunthorpe North West Orbital Route)	1979 record relating to the first stage of the Scunthorpe North West Orbital Road. The Southern DHPWN proposals follow this orbital road in a southerly direction from the Energy Park Land.
PA/2015/0025	Hybrid planning application (full and outline elements) for: football stadium, outdoor pitches; cafe/bar; offices; hotel; gymnasium; access; car parking, and; associated infrastructure.	This planning consent sits adjacent and to the west of the M181 road (and therein adjacent to the proposed route of the Southern DHPWN). Decision made to grant consent for full and outline elements in March 2016.

Table 2.1: Relevant Planning History		
PA/2013/1003	Outline application for a commercial park comprising Use Classes A1 (food) A2, A3, A4, A5, B1, C1 and D2	This consent record sits adjacent and to the west of the A1077 road which is the route of the Southern DHPWN. Permission granted in July 2016.
PA/2016/1736	Planning for engineering and excavation to form a lake (part of wider Lincolnshire Lakes proposal)	Consent granted in November 2017, covers land to the east of the Southern DHPWN.
PA/2017/1386	New terminating junction to M181 motorway with roundabout to B1450 (+ side roads alignments and associated works)	Full planning consent was granted in January 2019. The highways works include and adjoin land for the Southern DHPWN in this location, which follows the road alignment.
PA/2015/0627	New terminating junction to the M181 motorway including development of eastern and western sections of east-west link road connecting to B1450.	Permission granted in August 2021. The highways works include and adjoin land for the Southern DHPWN in this location, which follows the road alignment.
PA/2015/0628	Hybrid application for full permission for road and footpaths, areas of open space, parklands, new wildlife habitats, recreational lakes and outline permission for a non-residential institution.	Permission granted in August 2021. The hybrid works include and adjoin land for the Southern DHPWN in this location, which follows the road alignment.
PA/2015/0396	Outline planning for up to 2500 new homes, village centre, health care and community facilities, school, and roads/paths, open space, play spaces and new habitats (all matters reserved).	Approval of outline proposal granted in August 2021. The outline proposal includes land which is also included in the Order Limits for the Southern DHPWN. The intention is to connect the DHPWN to the residential development if and when it is implemented.
PA/SCR/2022/1	EIA screening request relating to the erection of 599 dwellings including public open space, drainage	Not yet determined. Site lies outside the Application Land – to the east of the Southern DHPWN.

Table 2.1: Relevant Planning History		
	attenuation, a lake with recreational routes and landscaping	
PA/SCR/2022/2	EIA screening request relating to the reduction of the permitted red line boundary in relation to PA/2015/0396	Not yet determined. Site lies at the southern extent of the Southern DHPWN.
The Railway Reinstatement Land		
Most planning history records identified relate to land uses adjoining the railway (such as old mineral extraction or landfill operations). More recent records for renewable energy schemes (wind turbines) also exist to the east and north. None of the records identified would prejudice or conflict with the railway reinstatement.		
7/1979/0728	Planning permission to erect building for storage of rolled steel products awaiting export	Consent granted in 1979. The location is adjacent to the Order Limits and to the east of the railway reinstatement proposals.
7/1992/0649	Erect a warehouse with associated external works for the storage of steel products for export.	Consent from December 1992 for warehouse with associated works adjacent to but outside of the Project's Order Limits.
WF/2005/0067	Erect eight wind turbines with associated works	Decision granted in June 2006. The planning record extends either side of the railway reinstatement element of the Order Limits.
PA/2012/0820	Planning permission for the erection of a rail loading and assembly facility including rail siding, fencing, lighting, staff buildings and associated works	At the eastern end of the railway reinstatement element of the DCO works toward Dragonby sidings. Consent granted in November 2012.
WF/2010/1242	Six wind turbines with associated works	Consent approved at planning appeal in November 2013 following initial refusal by the local authority. WF/2010/1242 relates to land extending to the north of Flixborough Industrial Estate.

2.3 Local Planning Designations

2.3.1 This Section covers planning designations identified and which are relevant to the Project. Searches incorporate local designations made through

planning policy documents alongside local nature reserve, listed building, conservation areas and Tree Preservation Order records. Identified designations, when read alongside the local planning history records (section 2.2), form the planning context of the Application Land.

Table 2.2: Local Designations	
Designation	Description
Local Nature Reserve (LNR)	The Local Nature Reserve of Phoenix sits within and to the south of the Railway Reinstatement Land. The designation also adjoins the Energy Park Land to the east, nearby Park Ings Farm. Phoenix Parkway LNR sits immediately south of Phoenix LNR and extends toward Scunthorpe to the south to the A1077 alignment. At this point it sits in the Application Land along the northern side of the A1077 alignment (for the Northern DHPWN). A second Nature Reserve (Atkinson's Warren) also sits within the Application Land. Atkinson's Warren extends to the southern side of the A1077 alignment (for the Northern DHPWN). A third Nature Reserve (Conesby) is designated adjacent to the Railway Reinstatement Land further to the east than Phoenix Parkway. The nature reserves do not extend over the Energy Park Land.
North Lincolnshire Local Plan 2003	
Designation	Description
LC4 Site of Local Importance for Nature Conservation	Site of Local Nature Conservation Importance designated on the western bank of the River Trent opposite Flixborough Industrial Estate. Further site of Local Nature Conservation Importance located to the east of the A1077 and to the south of the railway mainline. Both designations are not within the Application Land but within 200m.
LC15 Landscape Enhancement Area	An extensive area is identified for landscape enhancement within the North Lincolnshire Local Plan 2003 surrounding an area to the northeast of Scunthorpe and adjacent to the Railway Reinstatement land toward Dragonby. A smaller landscape enhancement area is identified to the west of Scunthorpe and adjacent to the A1077 road, therefore also adjacent to the order limits for the Southern DHPWN as it follows this alignment.
Lincolnshire Lakes Area Action Plan 2016	
Lincolnshire Lakes Boundary	Area from the south of the Flixborough Industrial Estate forms the northern part of the Lincolnshire Lakes Boundary within the Lincolnshire Lakes Area Action Plan 2016.
Housing & Employment Land Allocations Development Plan Document Proposals Map Adopted 2016	
LC4	Site of Local Nature Conservation Importance located on the western bank of the River Trent opposite Flixborough Industrial Estate. A further site of Local Nature Conservation Importance is located to the east of the A1077 and to the south of the railway mainline. Both designations are not within the Application Land but within 200m.

Table 2.2: Local Designations	
T7 Cycle Route	Cycle route allocated through the Flixborough Industrial Estate.
LC15 Landscape Enhancement Area	An area identified for landscape enhancement surrounding an area to the northeast of Scunthorpe and adjacent to the Railway Reinstatement Land toward Dragonby. A smaller landscape enhancement area is identified to the west of Scunthorpe and adjacent to the A1077 road, therefore also adjacent Southern DHPWN Land as it follows this alignment.
SCUH-1	Land along the southern side of the Northern DHWPN Land (A1077 alignment, east of Atkinson's Warren. Allocated for 246 dwellings.
SCUH-8	Land north of Doncaster Road is allocated for housing (1,264 dwellings). The site is situated to the east and adjacent to the A1077 and as such is also adjacent to the Southern DHPWN Land as it follows this alignment.
SCUH-10	Land south of Ferry Road West is allocated for housing (721 dwellings). The site is situated immediately to the north of SCUH-8 and to the south and east of the A1077 in this location, as such the site is also adjacent to the Southern DHPWN Land as it follows this alignment.

2.4 Summary

2.4.1 A planning history search has been undertaken and planning records of relevance have been identified. These historical records primarily relate to the mixed industrial uses at Flixborough Industrial Estate, recent renewable energy projects on adjacent and nearby land, with historic and recent highways developments along local transport arteries. Other nearby records reflect the nature of the wider area; with the main settlement of Scunthorpe (and associated land uses) nearby, historic quarrying records in places and agriculture. None of the planning history records identified would, either in isolation or combined, fetter the delivery of the Project.

2.4.2 Local designations identified of relevance mainly relate to nature conservation sites. It is notable that there are no local heritage designations within the Application Land. In practical terms the local nature conservation designations which have been identified in the table above have been assessed as part of the EIA and the relevant mitigation secured in the Application. The designations will continue to require due consideration during detailed design stages and through sensitive working in the vicinity of conservation assets. None of the designations would, either individually or combined, constrain the Project such that it should not be granted development consent. Both local and national designations of relevance are considered within the topic specific chapters of the ES, as summarised at Section 5 of this report.

3. Legislative and Policy Framework

3.1 Overview

3.1.1 This Section provides an assessment of the Project against the relevant national and local policy, focusing in particular on the National Policy Statements (NPSs) as the main policy consideration for the Project.

3.2 Legislative and Policy Context

3.2.1 The ERF element of the Project meets the criteria to be considered as an NSIP under the 2008 Act. The NSIP element of the Project is within Work Nos. 1, 1A, 1B, 1D which are described in detail in Section 1 of this Statement and within the draft DCO (**Document Reference 2.1**). The Project is a 'generating station' NSIP under section 15(2) of the 2008 Act (as amended) as it is a proposed generating station which would be located within England, would not be offshore, and would have a total generating capacity of more than 50MW.

3.2.2 The 2008 Act sets out the framework for the preparation, submission, examination and determination of development consent for an NSIP. The 2008 Act makes provision for a number of additional consents and licences to be included alongside the NSIP in an application for development consent rather than seeking those separate consents and licences individually. The 2008 Act also enables an Applicant to include the permanent compulsory acquisition of land and rights over any special category land required for the construction, operation and mitigation of a Project as part of the application for development consent, the provisions sought are included within the draft DCO which forms part of the Application for development consent (**Document Reference. 2.1**) and associated Explanatory Memorandum (**Document Reference 2.2**).

3.2.3 As the Project is an NSIP, development consent must be obtained from the Secretary of State for the Department for Business, Energy & Industrial Strategy (BEIS) to authorise it, and an application for a DCO must be made to the Planning Inspectorate who administer the DCO process on behalf of the Secretary of State under section 37 of the 2008 Act.

3.2.4 Section 115 of the 2008 Act provides that, in addition to the development for which development consent is required (the principal development), consent may also be granted for 'associated development', that is, development that is associated with the principal development but is not part of it. This may be development that supports the construction or operation of the NSIP, or which helps to address the impacts of the NSIP. Associated development should be proportionate to the nature and scale of the principal development. Chapter 3 of the ES (**Document Reference 6.2.3**) provides a full list of the elements of the Project considered to be associated development for the purposes of Section 115 of the 2008 Act. The Explanatory Memorandum

(**Document Reference 2.2**) provides a detailed description of each element of the associated development.

3.2.5 A policy hierarchy exists in determining whether development consent for an NSIP should be granted, where a designated National Policy Statement (NPS) is in place. Section 104 of the 2008 Act states that the SoS must decide an application "in accordance with" any relevant, designated NPS and must have regard to any matters they regard as important and relevant. The documents in this hierarchy can be summarised as follows:

- The NPS for Energy (EN NPS) infrastructure set out the Government's policy for delivery of major energy infrastructure, within which the following components are relevant to the Project:
  - Overarching National Policy Statement for Energy (NPS EN-1) - sets out overarching national policy for development of major energy infrastructure.
  - National Policy Statement for Renewable Energy Infrastructure (NPS EN-3) – sets out policy specific to the provision of relevant renewable energy infrastructure.
  - National Policy Statement for Electricity Network Infrastructure (EN-5) – sets out policy specific to the provision of electricity network infrastructure.
- The National Planning Policy Framework (NPPF) (July 2021) sets out the Government's planning policy framework for the whole of England, including the Government's expectation for content and quality of planning applications and local plan policy. The overall strategic aims of the EN NPS and NPPF are consistent. The NPPF may be an important and relevant matter but does not form the primary basis for a decision on an NSIP.
- Local planning policies may be a relevant consideration but are not the primary basis for a decision on an NSIP which must be the relevant NPSs identified above. Adopted local policy documents identified which may be of relevance include:
  - The North Lincolnshire Council Local Plan (2003) Saved Policies (2007)
  - The North Lincolnshire Local Development Framework (LDF) Core Strategy (2011)
  - North Lincolnshire LDF Housing and Employment Land Allocations Development Plan Document (2016)
  - North Lincolnshire LDF Lincolnshire Lakes Area Action Plan (2016)

- North Lincolnshire Planning for Renewable Energy Development Supplementary Planning Document (2011)
- Sustainable Drainage Systems (SuDS) and Flood Risk Guidance (2017)
- North Lincolnshire Transport Plan 2011 - 2026
- North Lincolnshire Council's Municipal Waste Management Strategy (2012)
- North Lincolnshire Waste Strategy 2012 – 30

3.2.6 In terms of the relationships between documents in the above policy hierarchy, the following general principles apply for NSIPs:

- A designated NPS provides the principal planning policy to be applied in determining a DCO application. A designated NPS does not form part of the development plan for an area but has primacy over it, reflecting the national interest.
- Under section 104 of the 2008 Act, the SoS must have regard to any other matters which they think are both important and relevant to their decision, in addition to certain other specified matters.
- The NPPF requires local authorities to take account of the development principles set out in relevant NPSs when preparing their local plans.
- In general terms, there should be no conflict between policies in a designated NPS and the NPPF; however, if this does arise the designated NPS has primacy.
- The "development plan" for an area includes documents defined by section 38 of the Planning and Compulsory Purchase Act 2004; these are development plan documents prepared under the provisions of that Act and adopted by the relevant local authority. Supplementary Planning Documents are capable of being important and relevant but are not part of the development plan for an area.

3.2.7 On 6 September 2021, BEIS published for consultation a suite of five draft NPSs to guide energy development proposals. The new NPSs were subject to consultation until the end of November 2021. The House of Commons BEIS Committee reported on the Revised (Draft) National Policy Statement for Energy on 22nd February 2022, providing recommendations in relation to the suite of revised draft NPSs.

3.2.8 The expectation is that the suite of revised NPSs will be designated by Summer 2022. Further detail on proposed updates to the EN NPS is provided at Section 3.3.

3.2.9 North Lincolnshire Council is also preparing a new single Local Plan for North Lincolnshire. Once agreed (formally adopted), it will replace the current North Lincolnshire Local Plan, the Core Strategy and the Housing and Employment Land Allocations Development Plan Documents (DPDs). This replacement Local Plan is currently at Regulation 19 consultation stage (with consultation running from 15th October 2021 until 26th November 2021). Further detail on proposed updates to the North Lincolnshire Local Plan is provided at Section 3.38.

3.2.10 Much of the UK's environmental legislation, and Environmental Impact Assessment (EIA) Regulations that underpin the DCO process itself, are derived from EU Directives. The European Union (Withdrawal) Act 2020 ensured that all EU legislation which had not already been transposed into UK law at the point at which the UK left the EU was transferred to the UK statute. The European Union (Withdrawal) Act 2020 guarantees that those laws remain unchanged until amended or rescinded by Parliament.

3.3 National Policy Statements

3.3.1 The primary policy framework for examining and determining DCO applications in England and Wales is provided by National Policy Statements. Section 104 of the 2008 Act (as amended) states that in deciding an application for development consent, the Secretary of State must have regard to any relevant NPS, except in cases where:

- It would lead to the United Kingdom being in breach of any of its international obligations;
- It would lead to the Secretary of State being in breach of any duty imposed on the Secretary of State by or under any enactment;
- It would be unlawful;
- The adverse impact of the proposed development would outweigh its benefits; or
- It would be contrary to regulations about how decisions are to be taken

NPS EN-1 Overarching National Policy Statement for Energy

3.3.2 NPS EN-1 was designated in July 2011. NPS EN-1 sets out policy for nationally significant energy infrastructure and is relevant to the Project. The purpose of NPS EN-1 is confirmed in Paragraph 1.1.1 of that document, which confirms that NPS EN-1 has effect, in combination with the relevant technology-specific NPS, in being the primary basis for the decision of the Secretary of State on energy NSIP applications. In this role, NPS EN-1 includes overarching policy and guidance on generic impacts for all energy related NSIPs.

3.3.3 On meeting binding targets to cut greenhouse gas emissions, NPS EN-1 Paragraph 2.2.1 confirms UK Government commitments to reduce such gas emissions by "at least 80% by 2050, compared to 1990 levels". NPS EN-1 confirms that meeting this target is challenging and requires major investment in new technologies for (inter alia) cleaner power generation.

3.3.4 On support toward a low carbon economy, NPS EN-1 Paragraph 2.2.11 confirms the "need for low carbon energy infrastructure to contribute to climate change mitigation". Paragraph 2.2.20 states that it is critical that the UK continues to have secure and reliable supplies of electricity during this transition toward a low carbon economy, and that to manage risks this means ensuring that:

- there is sufficient capacity (including a greater proportion of low carbon generation) to meet demand at all times, including a safety margin of spare capacity to accommodate unforeseen fluctuations in supply or demand;
- there are reliable associated supply chains to meet demand as it arises;
- there is a diverse mix of technologies and fuels (including primary fuels imported from a wide range of countries), and;
- there are effective price signals, so that market participants have sufficient incentives to react in a timely way to minimise imbalances between supply and demand.

3.3.5 Part 3 of NPS EN-1 concerns the need for new nationally significant energy infrastructure Projects. Paragraph 3.1.1 confirms that the UK needs all types of energy infrastructure covered by NPS EN-1 in order to achieve energy security at the same time as dramatically reducing greenhouse gas emissions. Paragraph 3.1.3 goes further stating that the Secretary of State must:

> "assess all applications for development consent for the types of infrastructure covered by the energy NPSs on the basis that the Government has demonstrated that there is a need for those types of infrastructure and that the scale and urgency of that need is as described for each of them in this Part".

3.3.6 And at Paragraph 3.1.4 that the Secretary of State

> "should give substantial weight to the contribution which Projects would make towards satisfying this need when considering applications for development consent under the Planning Act 2008"

3.3.7 NPS EN-1 recognises that there will undoubtably be instances where significant adverse impacts are apparent in meeting the above need.

Confirming how the decision maker should consider such impacts when determining applications, Paragraph 3.2.3, states that

> "it will not be possible to develop the necessary amounts of such infrastructure without some significant residual adverse impacts. This Part also shows why the Government considers that the need for such infrastructure will often be urgent. The IPC [Secretary of State] should therefore give substantial weight to considerations of need. The weight which is attributed to considerations of need in any given case should be proportionate to the anticipated extent of a Project's actual contribution to satisfying the need for a particular type of infrastructure"

3.3.8 In terms of meeting UK energy security and carbon reduction objectives, NPS EN-1 Paragraph 3.3.5 confirms that the UK will decarbonise its power sector by adopting low carbon sources quickly. In doing so NPS EN-1 confirms that there are likely to be advantages to the UK of maintaining a diverse range of energy sources so there is not an overreliance on any one fuel or technology type.

3.3.9 On the need for more electricity capacity to support an increased supply from renewables, NPS EN-1 states at Paragraph 3.3.10 that the Government is committed to increasing dramatically the amount of renewable generation capacity, and that, in the short to medium term much of this new capacity is "likely to be onshore and offshore wind", but increasingly "may include plant powered by the combustion of biomass and waste".

3.3.10 Against this background of a need for renewable energy in the context of meeting greenhouse gas reduction targets, NPS EN-1 Paragraph 3.1.14 confirms that demand for electricity is also likely to increase and that "a substantial amount of new generation" will therefore be needed. This all leads to a position where "there is an urgent need for new (and particularly low carbon) energy NSIPs to be brought forward as soon as possible" (NPS EN-1 Paragraph 3.3.15). Paragraph 3.4.5 of NPS EN-1 states that:

> *"*it is necessary to bring forward new renewable electricity generating Projects as soon as possible. The need for new renewable electricity generation Projects is therefore urgent*."*

3.3.11 Need matters are also discussed further at Section 4 of this Planning Statement.

3.3.12 Paragraph 3.4.2 of NPS EN-1 makes the case for large scale renewables deployment to "help the UK to tackle climate change, reducing the UK's emissions of carbon dioxide/ and also improve security of supply by reducing reliance on the use of coal, oil and gas supplies". Of these, NPS EN-1 Paragraph 3.4.3 confirms energy from waste (EfW) as being one such type of large-scale renewable generation to come forward. EfW is identified as potential 'dispatchable power generation' within NPS EN-1, providing peak load and base load electricity on demand. As more intermittent renewable electricity comes onto the UK grid, the ability of biomass and EfW to deliver

"predictable, controllable electricity" is identified as being increasingly important for security of UK supplies (NPS EN-1 Paragraph 3.4.4).

3.3.13 Part 4 of NPS EN-1 sets out the general principles that should be applied in the assessment of development consent applications across the range of energy technologies, these include:

- habitats and species regulations;
- alternatives;
- criteria for 'good design' for energy infrastructure;
- consideration of combined heat and power;
- carbon capture and storage and carbon capture readiness;
- climate change adaptation;
- grid connection;
- pollution control and other environmental regulatory regimes;
- safety;
- hazardous substances;
- health;
- common law, nuisance and statutory nuisance, and;
- security considerations.

3.3.14 As a guiding principle, Paragraph 4.1.2 of EN1 confirms that, given the level and urgency of need for energy infrastructure, decisions should include a "presumption in favour of granting consent to applications for energy NSIPs". That presumption applies unless any more specific and relevant policies set out in the relevant NPSs clearly indicate that consent should be refused. Furthermore, NPS EN-1 requires that when making a decision on NSIP applications, decision makers look at potential benefits on meeting the need for energy infrastructure, job creation and any long-term or wider benefits; alongside potential adverse impacts, including any long-term and cumulative adverse impacts, as well as any measures to avoid, reduce or compensate for adverse impacts.

3.3.15 In terms of good design in particular, NPS EN-1 (paragraph 4.5.1) recognises that the functionality of buildings and infrastructure, including fitness for purpose and sustainability, are equally as important as visual appearance and aesthetic considerations. It goes on to state that applying 'good design' to energy, proposed developments should produce

sustainable infrastructure sensitive to place, efficient in the use of natural resources and energy used in their construction and operation, matched by an appearance that demonstrates 'good aesthetic' as far as possible. However, it is acknowledged that "…the nature of much energy infrastructure development will often limit the extent to which it can contribute to the enhancement of the quality of an area."

3.3.16 Paragraph 4.5.3 confirms that in assessing applications, the SoS will need to be satisfied that energy infrastructure developments are sustainable and, having regard to regulatory and other constraints, are as attractive, durable and adaptable (including taking account of natural hazards such as flooding) as they can be. In doing so, it goes on to state that the SoS should be satisfied that: "the applicant has taken into account both functionality (including fitness for purpose and sustainability) and aesthetics (including its contribution to the quality of the area in which it would be located) as far as possible. Whilst the applicant may not have any or very limited choice in the physical appearance of some energy infrastructure, there may be opportunities for the applicant to demonstrate good design in terms of siting relative to existing landscape character, landform and vegetation. Furthermore, the design and sensitive use of materials in any associated development such as electricity substations will assist in ensuring that such development contributes to the quality of the area."

3.3.17 Paragraph 4.5.4 stresses the importance of applicants being able to demonstrate in their application documents how the design process was conducted and how the proposed design evolved. However, it also makes clear that in considering applications, the SoS should take into account the ultimate purpose of the infrastructure and bear in mind the operational, safety and security requirements, which the design has to satisfy.

3.3.18 Each of the Part 4 assessment principles are considered in more detail within Section 5 of this Statement, where the accordance of the Project with NPS EN-1 is considered.

3.3.19 Part 5 of NPS EN-1 sets out policy on the assessment of impacts which are common across a range of energy infrastructure technologies (generic impacts). The following generic impacts are identified:

- air quality and emissions;
- biodiversity and geological conservation;
- civil and military aviation and defence interests;
- Coastal change
- Dust odour artificial light, smoke, steam and insect infestation
- Flood Risk

- historic environment;
- landscape and visual;
- land use including open space, green infrastructure & Green Belt;
- noise and vibration;
- socio-economic;
- traffic and transport;
- waste management; and
- water quality and resources.

3.3.20 Section 5 of this Statement sets out how the Application has considered 'generic impacts', where the accordance of the Project with NPS EN-1 is considered.

NPS EN-3 National Policy Statement for Renewable Energy Infrastructure

3.3.21 Part 1 of the NPS EN-3 sets out the role of this NPS in the planning system including relationship with NPS EN-1. This confirms that NPS EN-3 taken together with the Overarching National Policy Statement for Energy (NPS EN-1), provides the primary basis for decisions on applications for nationally significant renewable energy infrastructure. NPS EN-3 is essentially concerned with impacts and matters which are specific to renewable energy infrastructure, such as energy from waste (EfW) or where, although the impact or issue is generic and covered in NPS EN-1, there are further specific considerations for the specific technologies in question.

3.3.22 From the outset NPS EN-3 (Paragraph 1.1.1) also confirms the objective to further the provision of renewable energy generation in the UK stating that:

> "Electricity generation from renewable sources of energy is an important element in the Government's development of a low-carbon economy. There are ambitious renewable energy targets in place and a significant increase in generation from large-scale renewable energy infrastructure is necessary".

3.3.23 NPS EN-3 covers renewable energy infrastructure of relevance to the Project, including energy from biomass and/or waste (>50 megawatts (MW)).

3.3.24 Part 2 of NPS EN-3 sets out the assessment and technology specific information relevant to the different forms of renewable energy infrastructure, this includes the relationship with wider renewables policy (NPS EN-3 Section 2.2), climate change adaptation (NPS EN-3 Section 2.3), the criteria

for “good design” for energy infrastructure (2.4) and specific content on Biomass and Waste combustion at NPS EN-3 Section 2.5.

3.3.25 On climate change adaptation, Paragraph 2.3.3 of NPS EN-3 confirms that energy from waste generation may require significant water resources but will be less likely to proposed for coastal sites. NPS EN-3 notes that applicants for energy from waste developments should consider how plant will be resilient to:

- Increased risk of flooding; and
- Increased risk of drought affecting river flows.

3.3.26 On design, NPS EN-3 (Paragraph 2.4.2) requires that proposals for renewable energy infrastructure “demonstrate good design in respect of landscape and visual amenity, and in the design of the Project to mitigate impacts such as noise and effects on ecology”.

3.3.27 Support for Energy from Waste is provided within Section 2.5 (Paragraph 2.5.2) of NPS EN-3 which confirms that the recovery of energy from the combustion of waste, where in accordance with the waste hierarchy, will play an increasingly important role in meeting the UK’s energy needs. NPS EN-3 also confirms that where the waste burned is deemed renewable, this can also contribute to meeting the UK’s renewable energy targets and energy from waste forms an important element of waste management strategies in both England and Wales.

3.3.28 NPS EN-3 confirms that energy from waste generation stations can be configured to produce CHP, with CHP criteria set out within NPS EN-1 Section (NPS EN-3 Paragraph 2.5.4). Paragraph 2.5.27 of NPS EN-3 also states that decision makers should:

> “not give development consent unless it is satisfied that the applicant has provided appropriate evidence that CHP is included or that the opportunities for CHP have been fully explored”

3.3.29 On combustion types and scale, NPS EN-3 Paragraph 2.5.11 confirms that waste combustion plant covered by this NPS may include a range of different combustion technologies, including grate combustion, fluidised bed combustion, gasification and pyrolysis but that the decision maker should not be concerned with the technology type, rather that the technology accords with the policies set out in NPS EN-3. On this, and waste fuel throughput capacity and volumes, Paragraph 2.5.13 of NPS EN-3 confirms that the decision maker should be concerned with

> “increase in traffic volumes, any change in air quality, and any other adverse impacts as a result of the increase in throughput … balanced against the net benefits of the combustion of waste and biomass as described in paragraph 2.5.2”

3.3.30 NPS EN-3 notes at Paragraph 2.5.18 that energy from waste is "unlike other electricity generating power stations in that they have two roles: treatment of waste and recovery of energy".

3.3.31 On locational criteria NPS EN-3 notes at Paragraph 2.5.22 that energy from waste generation will need to connect into the wider transmission network, the technical feasibility of which will be dependent on grid networks and capacity to accept generation output. Such connections are noted as being a matter for the applicant (Paragraph 2.5.23) but that any application must include information in how the proposed generation is to be connected, including environmental issues likely to arise from that connection.

3.3.32 On transport infrastructure, Paragraph 2.5.24 of NPS EN-3 notes that energy from waste generating stations are likely to generate a large number of heavy goods vehicle (HGV) movements per day to import the fuel. As such NPS EN-3 Paragraph 2.5.25 encourages "multi-modal transport" and that decision takers should expect materials to be transported by "water or rail routes where possible". NPS EN-3 also requires that applicants should locate new biomass or waste combustion generating stations in the vicinity of existing transport routes wherever possible.

3.3.33 As a technical consideration, NPS EN-3 notes that there should be flexibility provided for energy from waste applications where "waste combustion plant operators may not know the precise details of all elements of the proposed development until some time after any consent has been granted" (Paragraph 2.5.30). When this is the case, the applicant should explain those elements of the Project yet to be finalised alongside reasons for this.

3.3.34 NPS EN-3 also places tighter controls on renewable generation proposals within designated areas, such as national parks or areas of outstanding natural beauty, or in locations that impact on designated heritage assets (NPS EN-3 Paragraph 2.5.33). The decision taker is suggested as taking into account the public benefit of the generation proposed, and whether this would outweigh any loss or harm to the designated asset (NPS EN-3 Paragraph 2.5.34). A similar approach applies for Greenbelt proposals (NPS EN-3 Paragraph 2.5.35).

3.3.35 On other locational considerations, NPS EN-3 Paragraph 2.5.36 confirms that "as most renewable energy resources can only be developed where the resource exists and where economically feasible, the IPC [Secretary of State] should not use a sequential approach in the consideration of renewable energy Projects (for example, by giving priority to the re-use of previously developed land for renewable technology developments)".

3.3.36 A series of topic specific policy considerations are set out within the remainder of Section 2.5 of NPS EN-3, these include:

- Biomass/Waste Impacts – Air quality and emissions
- Biomass/Waste Impacts – Landscape and visual

- Biomass/Waste Impacts – Noise and vibration
- Odour, insect and vermin infestation
- Waste management
- Residue management
- Water quality and resources

3.3.37 Each of the above topic specific policy considerations are discussed in more detail at Section 5 of this Statement where the accordance of the Project with national policy is assessed.

NPS EN-5 National Policy Statement for Electricity Infrastructure Networks

3.3.38 NPS EN-5 describes the position of electricity generating infrastructure within the Government's vision of a low-carbon economy and desire to maintain security of supply.

3.3.39 With regards to the infrastructure covered by NPS EN-5, paragraph 1.8.2 states "Any other kind of electricity infrastructure (including lower voltage overhead lines, underground or sub-sea cables at any voltage, and associated infrastructure as referred to above) will only be subject to the Planning Act 2008 – and so be covered by this NPS – if it is in England, and it constitutes associated development for which consent is sought along with an NSIP such as a generating station or relevant overhead line." NPS EN-5 is considered relevant to the Project in relation to the associated development.

3.3.40 In addition to providing supplementary policies relating to generic impacts outlined NPS EN-1, paragraph 2.6.1 of NPS EN-5 outlines the additional technology-specific considerations against which DCO applications relating to electricity networks infrastructure will be considered. The policy in NPS EN-5 regarding Electric and Magnetic Fields (EMF) is considered relevant to the Project and is discussed in more detail at Section 5 of this Statement where the accordance of the Project with national policy is assessed.

Emerging National Policy Statements

3.3.41 The 2020 UK Government Energy White Paper (EWP) confirms that the government has 'decided that it is appropriate to review the NPS, to ensure that they reflect the policies set out in this white paper and that we continue to have a planning policy framework which can deliver the investment required to build the infrastructure needed for the transition to net zero'.

3.3.42 Subsequently, on 6th September 2021, BEIS published for consultation a suite of five draft National Policy Statements. This consultation sought views on whether the revised NPS represent a suitable decision making framework

alongside appraisal on sustainability and habitat regulations grounds. Consultation on the draft National Policy Statements closed on 29th November 2021.

3.3.43 The draft NPSs confirm the UK Government's expectation that electricity demand will double by 2050. To meet this increase in demand the NPS confirm a fourfold increase in low carbon electricity generation is needed, with most of this likely to come from renewables.

3.3.44 Revised NPS EN-1 continues to give strong support to energy from waste, where it reduces the amount of waste going to landfill in line with the waste hierarchy (paragraph 3.3.33). Energy from waste continues to be recognised as a renewable technology and paragraph 3.3.44 continues to state that the need for such infrastructure is established by the NPS and is urgent.

3.3.45 Paragraph 2.4.4 recognises the benefits of introducing carbon capture into EfW facilities and states that the Government will incentivise the deployment of carbon capture technology through the Industrial Carbon Capture Business Model for industrial users who often have no viable alternatives available to achieve deep decarbonisation, which could include EfW facilities.

3.3.46 Draft NPS EN-3 contains similar policy criteria to the adopted versions in relation to specific impacts for biomass and waste combustion. In addition, it states at paragraph 2.10.4 that applicants must demonstrate that proposed EfW plants are in line with DEFRA's policy position on the role of energy from waste in treating municipal waste and (paragraph 2.10.5) that the proposed plant must not result in over-capacity of EfW waste treatment at a national or local level.

3.3.47 As mentioned at paragraph 3.2.7 above, the House of Commons BEIS Committee reported on the Revised (Draft) National Policy Statement for Energy on 22nd February 2022, providing recommendations in relation to the suite of revised draft NPSs. The report contains a number of recommendations on the revised draft energy NPSs. A strong and clear recommendation is that the draft NPSs need to go further given the urgency of the need. Recommendation 2 states:

"As currently drafted, revised (draft) EN-1 does not provide the "step change" needed to deliver the required scale of new NSIPs at a sufficiently rapid pace to deliver the Government's net zero aims. This is largely due to ambiguity in the drafting about the relative weight of 'climate change' relative to local impacts to be taken into account in making planning decisions. We recommend that revised (draft) EN-1 be further amended to make the Government's commitment to net zero more explicit and to provide a clear and unambiguous direction to the Secretary of State to prioritise the importance of climate change in decision-making. (Paragraph 24)"

3.3.48 The report concludes at paragraph 74:

'Overall, we recommend that the revised (draft) NPS needs to place greater emphasis on the impact of climate change and the speed at which new infrastructure will need to be built to meet the Government's net zero target. It must clearly articulate how the decision-making process will weigh the urgent need for developments which contribute to climate change mitigation, against other relevant considerations. It must unambiguously express that the prime consideration for planning consent for NSIPs for renewable energy is the overall contribution to mitigating climate change and reducing emissions."

3.3.49 In terms of transitional arrangements, the 2021 Planning for New Energy Infrastructure consultation documents confirm that 'for any application accepted for examination before designation of the 2021 amendments, the 2011 suite of NPSs should have effect in accordance with the terms of those NPS. The updated NPSs will therefore have effect only in relation to those applications for development consent accepted for examination after the designation of those updated NPS.

3.3.50 However, emerging NPS EN-1 states that any emerging draft NPSs (or those designated but not having effect) are potentially capable of being important and relevant considerations in the decision making process. The extent to which they are relevant is a matter for the relevant Secretary of State to consider within the framework of the 2008 Act and with regard to the specific circumstances of each DCO application.

3.3.51 The expectation is that the updated suite of Energy NPSs will be designated in Summer 2022.

3.4 National Planning Policy Framework

3.4.1 The NPPF sets out the Government's planning policies for England and sets out how they should be applied through the preparation of local development plans and in decision-making.

3.4.2 The revised NPPF (2021) does not contain any specific policies relating to NSIPs, Paragraph 5 states that:

> "The Framework does not contain specific policies for nationally significant infrastructure Projects. These are determined in accordance with the decision-making framework in the Planning Act 2008 (as amended) and relevant national policy statements for major infrastructure, as well as any other matters that are relevant (which may include the National Planning Policy Framework). National policy statements form part of the overall framework of national planning policy, and may be a material consideration in preparing plans and making decisions on planning applications."

3.4.3 As a result, this report briefly considers the extent of any such relevance and compliance with NPPF policies.

Section 2 – Achieving sustainable development

3.4.4 Paragraph 7 of the NPPF explains that the role of the planning system is to contribute to the achievement of sustainable development, which is summarised as meeting the needs of the present without compromising the ability of future generations to meet their own needs.

3.4.5 Paragraph 8 of the NPPF states that there are three overarching objectives to achieving sustainable development, which are interdependent and should be pursued in mutually supportive ways. These are:

- **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

- **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

- **an environmental objective** – to protect and enhance our 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.

3.4.6 Paragraph 10 explains that there is a 'presumption in favour of sustainable development' 'at the heart of the Framework', 'so that sustainable development is pursued in a positive way'.

Section 6 – Building a strong, competitive economy

3.4.7 This section of the NPPF is clear about the need for economic growth and the role of planning in facilitating this. Paragraph 81 states that significant weight should be placed on the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development.

Section 8 – Promoting healthy and safe communities

3.4.8 Paragraph 100 states that decisions should protect and enhance public rights of way and access, including taking opportunities to provide better facilities for users, for example by adding links to existing rights of way networks including National Trails.

Section 9 – Promoting sustainable transport

3.4.9 This section of the NPPF states that transport issues should be considered from the earliest stages of plan-making and development proposals (Paragraph 104) so that:

(a) the potential impacts of development on transport networks can be addressed;

(b) opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;

(c) opportunities to promote walking, cycling and public transport use are identified and pursued;

(d) the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and

(e) patterns of movement, streets, parking and other transport considerations are integral to the design of Projects, and contribute to making high quality places

3.4.10 NPPF Paragraph 110 states that appropriate opportunities to promote sustainable transport modes should be – or have been – taken up within development proposals, relevant to the type of development and its location.

Section 12 - Achieving well-designed places

3.4.11 Paragraph 126 confirms that good design is a key aspect of sustainable development, creates better places in which to live and work and helps make development acceptable to communities.

Section 14 – Meeting the challenge of climate change, flooding and coastal change

3.4.12 NPPF Paragraph 152 states that 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. The NPPF confirms that planning decisions 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.

3.4.13 Paragraph 154 states that new development should be planned for in ways that can help to reduce greenhouse gas emissions, such as through its

location, orientation and design. Paragraph 155 continues that development should help to increase the use and supply of renewable and low carbon energy and heat.

Section 15 - Conserving and enhancing the natural environment

3.4.14 This section of the NPPF seeks to ensure development proposals enhance the natural and local environment, through approaches such as: protecting and enhancing valued landscapes; sites of biodiversity or geological value and soils, minimising impacts on biodiversity and providing net gains in biodiversity; and preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability (paragraph 174).

3.4.15 Paragraph 180 states that development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest.

Section 16 - Conserving and enhancing the historic environment

3.4.16 Matters relating to the conservation of the historic environment are dealt with at section 16 of the NPPF (paragraphs 189-208). Paragraph 194 states that where development is proposed on a site that includes or has the potential to include heritage assets or archaeological interests, applicants should be required to submit an appropriate desk-based assessment and, where necessary, a field evaluation.

3.4.17 Paragraph 201 states that where a proposed development will lead to substantial harm to (or total loss of significance of) a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or total loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply:

> ‘a) the nature of the heritage asset prevents all reasonable uses of the site; and
>
> b) no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and
>
> c) conservation by grant-funding or some form of not for profit, charitable or public ownership is demonstrably not possible; and

d) the harm or loss is outweighed by the benefit of bringing the site back into use'

Summary

3.4.18 The accordance of the Project with the NPPF is considered within Section 5 of this Planning Statement.

3.5 Environmental Permit

3.5.1 The Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016/1154) ('the Environmental Permitting Regulations') consolidate earlier amendments to the Environmental Permitting (England and Wales) Regulations 2010 (S.I. 2010/675). They set out an environmental permitting and compliance regime that applies to various activities and industries, including the management of waste.

3.5.2 An Environmental Permit is required by The Environmental Permitting (England and Wales) Regulations 2016 (as amended), for the operation of the ERF. The Permit will relate to matters such as: air quality, water, drainage and groundwater activities.

3.5.3 An application for an Environmental Permit is being made to the Environment Agency separate to the Application submission.

3.6 National Waste Planning Policy & Legislation

Overview

3.6.1 At a national level, waste planning policy is driven by the 25-year Environment Plan which sets out government's long-term policy for improving the environment. The Environment Plan includes commitments to double resource productivity by 2050, reuse materials and to minimise and manage waste to reduce their impact on the environment.

3.6.2 The Resources and Waste Strategy (*Our Waste Our Resources, A Strategy for England, 2018*) builds on the waste objectives of the Environment Plan and sets out how the UK Government intend to preserve resources by minimising waste, promoting resource efficiency and moving towards a circular economy. The Resources and Waste Strategy informs both the Waste Prevention Programme for England and the Waste Management Plan for England. The Waste Prevention Programme for England articulates the actions for government and for others which will result in reduced waste arisings and increased resource efficiency. The Waste Management Plan for England provides an overview of waste management in order to fulfil the requirements of the Waste (England and Wales) Regulations 2011.

Waste Framework Directive 2008/98/EC

3.6.3 English and Welsh law was updated on 1 October 2020 to include changes to the Waste Framework Directive (WFD) made in 2018. The Waste and Environmental Permitting etc. (Legislative Functions and Amendments etc.) (EU Exit) Regulations 2020 and The Waste (Wales) (Miscellaneous Amendments) (EU Exit) Regulations set out how articles 5 and 6 of the WFD should be read now that the transition period has ended.

3.6.4 The revised Waste Framework Directive clarifies the definition of 'waste' and other concepts such as 'recycling' and 'recovery'. It implements a revised 'Waste Hierarchy', expands the 'polluter pays' principle by emphasising producer responsibility and applies more stringent waste reduction and waste management targets for EU Member States. It also requires Member States to take measures to promote high quality recycling and to set up separate collections of paper, plastic, metal and glass.

The Waste (England and Wales) Regulations 2011:

3.6.5 These regulations transpose Directive 2008/98/EC on waste into national law in England and Wales. The regulations require the establishment of waste prevention programmes, make related provisions in relation to waste prevention programmes and waste management plans, and impose duties in relation to the improved use of waste as a resource. The regulations require the Waste Hierarchy in Article 4 of the Waste Framework Directive to be applied in a priority order (regulation 12) and require the separate collection of wastepaper, metal, plastic and glass, and prohibit mixing of those wastes once separately collected (regulation 13). It also makes provisions in relation to carriers of waste and brokers and dealers in waste.

Hazardous Waste (England and Wales) Regulations 2005 (as amended)

3.6.6 Sets out the regime for the control and tracking of the movement of hazardous waste; waste that possesses hazardous properties that poses a threat to human health, or the environment is classified as hazardous waste. Wastes classified as hazardous are those listed in the List of Wastes included in the Hazardous Waste Directive 91/689/EC. Waste producers have a duty of care to investigate if they produce hazardous waste, segregate and store it appropriately, ensure that waste is managed correctly, and hazardous waste movement is done with the correct documentation and necessary records maintained.

Waste Management Duty of Care Regulations

3.6.7 Section 34 of the Environmental Protection Act 1990 imposes a duty of care as a legal requirement for those dealing with certain kinds of waste to take all reasonable steps to keep it safe.

"Our Waste Our Resources", A Strategy for England, 2018

3.6.8 The strategy provides a long-term approach on waste management for England, setting guiding principles for wider waste policy. The document

does not intend to provide detailed policy guidance on plan making or decision taking, the strategy however forms a guide to future government policy and commitments to safeguarding natural resources and the environment. The Strategy identifies five ambitions:

- To work towards all plastic packaging placed on the market being recyclable, reusable or compostable by 2025;
- To work towards eliminating food waste to landfill by 2030;
- To eliminate avoidable plastic waste over the lifetime of the 25 Year Environment Plan;
- To double resource productivity21 by 2050; and
- To eliminate avoidable waste of all kinds by 2050.

3.6.9 The strategy also supports growth in efficient Energy from Waste developments (section 3.2.1).

Waste Management Plan for England (2021)

3.6.10 The Department for Environment Food & Rural Affairs (DEFRA) published a National Waste Management Plan for England in January 2021. The plan focuses on waste arisings and their management. It is a high-level, non-site-specific document and provides an analysis of the current waste management situation in England and evaluates how the Plan will support implementation of the objectives and provisions of the Waste (England and Wales) Regulations 2011.

3.6.11 The Waste Management Plan for England will be supplemented by a Waste Prevention Programme for England: *Towards a Resource Efficient Economy* which has yet to be published. This will set out plans for preventing products and materials from becoming waste, including by greater reuse, repair and remanufacture supported by action to ensure better design to enable this to be done more easily.

3.6.12 The Waste Management Plan for England supports the provision of energy from waste proposals which operate with CHP (page 12). The plan also states that “energy from waste is generally the best management option for waste that cannot be reused or recycled in terms of environmental impact and getting value from the waste as a resource” (page 17 & 45).

National Planning Policy for Waste (2014)

3.6.13 The National Planning Policy for Waste document sets out detailed waste planning policies. It should be read in conjunction with the National Planning Policy Framework, the National Waste Management Plan for England and national policy statements for waste water and hazardous waste.

3.6.14 The policy contains the core principles of the 'plan led' approach, with a continued focus of moving waste up the Waste Hierarchy. The policy document details waste planning policies to enable a "more sustainable and efficient approach to resource use and management", for instance, the design and layout of new infrastructure should supplement sustainable waste management. The document provides guidance to local planning authorities in how they should account for waste matters when preparing local plans and determining planning applications.

3.6.15 The National Planning Policy for Waste (Appendix A) illustrates the waste management hierarchy for England (extracted from the WFD), as below:

- the most effective environmental solution is often to reduce the generation of waste, including the re-use of products - **prevention**
- products that have become waste can be checked, cleaned or repaired so that they can be re-used – **preparing for re-use**
- waste materials can be reprocessed into products, materials, or substances – **recycling**
- waste can serve a useful purpose by replacing other materials that would otherwise have been used – **other recovery**
- the least desirable solution where none of the above options is appropriate – **disposal**

National Planning Policy Framework (NPPF) (July, 2021) and (Planning Practice Guidance (PPG) 2015 Onwards)

3.6.16 The NPPF does not have waste specific policies, but includes an environmental objective to use natural resources sensibly, and to minimise waste and pollution. It states that strategic policies should make provision for waste management and where practical, take account of substitute or secondary and recycled materials and minerals waste when supplying materials. The PPG for waste provides further information in support of the implementation of waste planning policy, such as the role of waste planning in meeting objectives, implementing the waste hierarchy and what types of waste planning authorities plan for e.g. municipal and household waste.

Government Review of Waste Policy in England (2011)

3.6.17 This document contains actions and commitments, which together set a clear direction towards a zero-waste economy. Notable commitments in the context of Project include support for *"energy from waste where appropriate and for waste which cannot be recycled"* (page 4) and recognition that *"energy recovery is an excellent use of many wastes that cannot be recycled and could otherwise go to landfill"* (Paragraph 214).

Waste Prevention Programme for England (2013)

3.6.18 Sets out key roles and actions that should be taken to move towards a more resource efficient economy. In addition, actions are described for the government to support this move, it also highlights actions businesses, the wider public sector, the civil society and consumers can take to benefit from preventing waste. The efficient use of resources, designing and manufacturing products for optimum life and repairing and reusing more products could be cost beneficial, as well as provide opportunities for economic growth, and enhancing the environment at the same time. The Environmental Agency are consulting on a new Waste Prevention Programme for England: Towards a Resource Efficient Economy.

Department for Environment, Food and Rural Affairs (DEFRA) Guidance on applying the Waste Hierarchy (June, 2011)

3.6.19 The Waste Hierarchy is set out at Article 4 of the revised Waste Framework (Directive 2008/98/EC). It ranks waste management options according to what is most favourable for the environment. The top priority is to prevent waste from being produced in the first instance. Where waste is produced, the lower level gives priority to preparing it for reuse, recycling, recovery, and disposal as a last resort. The waste hierarchy is transferred into the waste policy documents above.

3.7 Local Waste Management Strategy (May, 2012)

3.7.1 North Lincolnshire Council published a Waste Management Strategy in May 2012. The document sets out a description of the systems that are in place, how they are performing, and the initiatives needed to adapt to the future. The Plan states that waste needs to be managed in a more sustainable way and that a sustainable approach is required to meet new legislation, which gives a much higher priority to waste prevention, recycling and treating waste to recover value from it. The waste strategy adheres to the Waste Hierarchy aims and ensures delivery of the strategy has limited risks.

3.7.2 The implementation of the Waste Management Strategy intends to enable the Council to meet statutory targets related to waste, reduce the amount of biodegradable waste landfilled and prepare for zero waste.

3.7.3 The Council promotes sustainable waste management by:

- Requiring Site Waste Management Plans for future major developments to minimise waste;
- Requiring the integration of facilities for waste minimisation, re-use, recycling and composting, in association with the planning, construction and occupation of new development;
- Providing guidance on minimising potential social, environmental and economic impacts that are likely to arise in the development of waste infrastructure; and

- Establishing a planning policy framework that identifies suitable locations for waste management.

3.7.4 The document also discusses landfill allowances and states that North Lincolnshire Council will not be able to meet longer-term landfill allowance targets until a suitable treatment facility has been installed to treat the remaining waste generated above the allowance.

3.7.5 Section 5.5.3 of the North Lincolnshire Council Waste Management Strategy discusses landfill capacity and states that the availability of current landfills cannot be guaranteed, input needs to reduce and additional landfill capacity may still be required over the longer term.

3.7.6 The Marine and Coastal Access Act (MCAA 2009) introduced a spatial planning system for environmental management in the UK marine area. Section 42(3)(b) defines the UK marine area as including 'the waters of every estuary, river or channel, so far as the tide flows at mean high water spring tide'. Given that the River Trent is tidal where it passes the Application Land, the requirements of the MCAA 2009 are a relevant consideration.

3.7.7 The 2008 Act allows for the inclusion within an application for development consent a Deemed Marine Licence for those works which would otherwise be licensable under the MCAA. However, as the Project does not include physical works with the tidal River Trent, which is excluded from the Order Limits, a Deemed Marine Licence is not required.

Summary

3.7.8 The accordance of the Project with relevant waste policy is considered within Sections 5 and 6 of this Planning Statement.

3.8 Local Development Plan

Overview

3.8.1 The Project is situated entirely within the administrative area of North Lincolnshire Council who are responsible for local planning matters, both policies and determining planning applications. As confirmed within 3.2, local planning policies are not the primary policy basis against which NSIPs are considered but may be material considerations in decision making. As a result, this report briefly considers the extent of relevant local plans and any policies of relevance. Local allocations or designations made through local policy are covered at Section 2.3.

3.8.2 North Lincolnshire Council is also preparing a new single Local Plan for North Lincolnshire. Once agreed (formally adopted), it will replace the current North Lincolnshire Local Plan, the Core Strategy and the Housing and Employment Land Allocations Development Plan Documents (DPDs). This replacement Local Plan recently progressed through Regulation 19 consultation stage, which closed on 26 November 2021 with North

Lincolnshire Council currently reviewing feedback received. Of particular relevance to the Project is emerging Local Plan Policy WAS2 (Waste Facilities), which details that proposals for Energy from Waste facilities will be supported provided they meet the criteria set out within the policy, as well as emerging policy DQE8 (Renewable Energy Proposals).

The North Lincolnshire Local Development Framework (LDF) Core Strategy (2011)

3.8.3 The North Lincolnshire Core Strategy was adopted in June 2011 and sets out the long-term vision for North Lincolnshire and provides a blueprint for managing growth and development in the area up to 2026. The Core Strategy provides strategic policies and guidance to deliver the spatial vision for the area including the scale and distribution of development, the provision of infrastructure to support it, and the protection of the natural and built environment.

3.8.4 The Core Strategy sets a 'spatial vision' for the future of North Lincolnshire as below:

> "By 2026, North Lincolnshire will be the north of England's Global Gateway. It will have a strong economy, thriving towns and villages, a protected world class environment and will be a place where people are proud to live"

3.8.5 The Core Strategy spatial vision is underpinned by a series of 10 spatial objectives, summarised below:

- **Spatial Objective 1: An Area Wide Renaissance:** high quality of life for residents, Scunthorpe providing future development focus.
- **Spatial Objective 2: Delivering the Global Gateway:** secure regional growth potential.
- **Spatial Objective 3: Delivering Better Homes:** provide quantity and quality homes that meet the needs of North Lincolnshire.
- **Spatial Objective 4: Creating Greater Economic Success:** strong, competitive and diverse economy by encouraging business and strategic employment sites.
- **Spatial Objective 5: Creating Thriving Towns and Villages:** Scunthorpe town centre as a shopping, leisure and cultural focus for North Lincolnshire.
- **Spatial Objective 6: Protecting and Enhancing The World Class Environment:** conserve and enhance environments and improve natural, historic and built landscapes.

- **Spatial Objective 7: Efficient Use and Management of Resources:** ensure efficient use of resources, recycling, minimising pollution and improving environmental quality.

- **Spatial Objective 8: Promoting Community Health and Well Being:** promote health and wellbeing by providing open spaces, play and sports facilities, access to countryside and health facilities.

- **Spatial Objective 9: Connecting North Lincolnshire:** improve transport network for economic development and local residents.

- **Spatial Objective 10: Creating A Quality Environment:** Ensuring that all new development exhibits a high standard of design.

3.8.6 Each chapter of the Core Strategy aligns with the above spatial vision and associated spatial objectives, and in-turn with the NPPF. The Core Strategy has 27 Core Policies, those of most relevance to the Project are discussed below.

3.8.7 Chapter 7 of the Core Strategy covers design and policy CS5 concerns requires that all new development in North Lincolnshire should be well designed and appropriate for their context. This policy makes it clear that proposals should contribute to creating a sense of place locally. Furthermore, CS5 encourages contemporary design, provided that it is appropriate for its location and is informed by surrounding context.

3.8.8 Core Strategy Chapter 9 concerns the delivery of economic success across North Lincolnshire over the plan period with policy CS11 identifying future employment sites across the area. Beyond these future sites, development elsewhere is supported by policy CS11, where this will meet local employment needs and maximise other special locations.

3.8.9 Chapter 11 of the Core Strategy relates to the environment and resources, Policy CS16 concerns the protection and enhancement of green spaces, landscapes and waterscapes. Seeking to protect important features such as trees and hedgerows whilst requiring developments to provide enhancement where appropriate.

3.8.10 Policy CS17 relates to biodiversity and supporting wildlife enhancements through developments, alongside protection of important biodiversity resources.

3.8.11 Policy CS18 covers sustainable use of resources and climate change. The policy seeks to reduce carbon emissions in-line with UK Government commitments. CS18 also supports development that seeks to minimise waste and facilitates recycling and using waste for energy where appropriate. The policy also supports renewable sources of energy in appropriate locations, where possible, and ensuring that development maximises the use of combined heat and power and technologies for carbon capture.

3.8.12 On flood risk, Core Strategy Policy CS19 states that the council will support development proposals that avoid areas of current or future flood risk, and which do not increase the risk of flooding elsewhere. This will involve a risk-based sequential approach to determine the suitability of land for development that uses the principle of locating development, where possible, on land that has a lower flood risk, and relates land use to its vulnerability to flood. Development in areas of high flood risk will only be permitted where it meets the following prerequisites:

- *"It can be demonstrated that the development provides wider sustainability benefits to the community and the area that outweigh flood risk.*
- *The development should be on previously used land. If not, there must be no reasonable alternative developable sites on previously developed land.*
- *A flood risk assessment has demonstrated that the development will be safe, without increasing flood risk elsewhere by integrating water management methods into development."*

3.8.13 Core Strategy Chapter 12 considers sustainable waste management, noting that "*all activities generate waste, which needs to be collected, managed and disposed of in a suitable way*" (Paragraph 12.1). Policy CS20 states that the Council will consider new and enhanced facilities for the treatment and management of waste in locations across the area, including at Flixborough Industrial Estate. CS20 seeks a sequential approach to siting the location of waste management facilities, in order of preference as below:

- On-site management of waste where it arises at retail, industrial and commercial locations, particularly in the main urban areas (The Proximity Principle)
- Pursuit of neighbourhood self-sufficiency, at the lowest practicable level for the waste stream concerned (The Self-Sufficiency Principle)
- Encouraging co-location of waste facilities - at Materials or Resource Recovery Parks for example
- Locations at existing mineral extraction and waste landfill sites
- Locations at established and proposed industrial and business sites
- Locations in redundant farm buildings and associated land
- Use of other previously-developed land.

3.8.14 Core Strategy Chapter 15 on Transport and Communications notes that "rail is becoming increasingly important in the movement of freight due to the need to use more sustainable modes for freight transport". Policy CS25

states that "The council will support and promote a sustainable transport system in North Lincolnshire that offers a choice of transport modes and reduces the need to travel through spatial planning and design and by utilising a range of demand and network management tools [including] the development of a freight strategy… to include… provision of facilities for (and promote the benefits of) transferring freight delivery from road to rail and/or water transport, wherever practical, particularly in relation to the movement of freight to and from the South Humber Ports and Trent Wharves."

The North Lincolnshire Local Development Framework (LDF) Housing and Employment Land Allocations DPD (March, 2016)

3.8.15 The Housing and Employment Land Allocations DPD sets out which sites the council has allocated for future housing development and where new employment opportunities will be located. The DPD includes a proposals map for the North Lincolnshire area, any designations and allocations of relevance are discussed within Section 2.3 of this Planning Statement.

Lincolnshire Lakes Area Action Plan (May, 2016)

3.8.16 The Lincolnshire Lakes Area Action Plan (AAP) sets out the planning policy framework to deliver the Lincolnshire Lakes development in a consistent and properly planned way. The Lincolnshire Lakes Project is planned to create *"a number of high quality, sustainable village communities on land between the western edge of Scunthorpe and the River Trent, set within an attractive waterside environment with major opportunities for leisure, sport and recreation"*. The AAP was adopted on 10 May 2016.

3.8.17 The Lincolnshire Lakes AAP describes the development as a transformational, sustainable new development of a significant number of new homes across 6 waterside villages and associated mixed use commercial and leisure opportunities. To achieve the development, the AAP sets out nine 'development objectives', summarised below:

- ensure sound place-making principles and a high quality of design
- create approximately 6,000 sustainable new homes supported by social and community infrastructure
- expand North Lincolnshire's strong infrastructure through the provision of green infrastructure to maximise opportunities for habitat/biodiversity creation a high standard of sustainable design and to explore innovative approaches to delivering energy & waste solutions
- a new centrally located mixed use destination, providing a strategic gateway to the AAP site and Scunthorpe town

- maximise opportunities for the introduction of new strategic road network arrangements through the partial de-trunking of the M181 and the creation of two new junctions
- develop sustainable areas that are flood resilient and adaptable for the future with exemplar flood risk defence and drainage infrastructure
- create a series of new lakes that are integral to the development, creating a unique gateway setting for Scunthorpe
- provide a District Centre and Local Centres that are focal points for the provision of retail and commercial services and community facilities

3.8.18 The Lincolnshire Lakes boundary extends across part of the Application Land to the south of Flixborough Industrial Estate and over much of the land across which the Southern DHPWN follows as this tracks the alignment of the A1077 to the south. The development proposals of the Lincolnshire Lakes AAP are further to the south of the Lincolnshire Lakes area and beyond the mainline railway into Scunthorpe.

North Lincolnshire Planning for Renewable Energy Development Supplementary Planning Document (November, 2011)

3.8.19 The Council's Planning for Renewable Energy Development Supplementary Planning Document (SPD) (2011) strongly supports renewable energy and views this as being a key part of the transformation of North Lincolnshire's economy. In particular, the SPD recognises the importance of North Lincolnshire in the power generation industry, noting that the area supplies approximately 7% of UK electricity needs.

The North Lincolnshire Council Local Plan (May, 2003) Saved Policies (September, 2007)

3.8.20 Some of the policies of the North Lincolnshire Local Plan been replaced following the adoption of the Core Strategy and the Housing and Employment Land Allocations DPD. However, certain policies of the North Lincolnshire Local Plan Adopted 2003 remain as saved policies and until they are superseded by other emerging DPDs, these policies still form part of the development plan but are not the primary policy basis against which NSIPs are determined - which remains the relevant NPS.

3.9 Other Policy Considerations

3.9.1 There are a number of specific policy considerations which are discussed in detail within the specific chapters of the ES.

4. The Need for the Project

4.1 Overview

4.1.1 There is a growing body of UK energy policy and guidance which highlights an urgent need for new energy generation infrastructure, particularly from renewable sources such as energy from waste and carbon capture equipped power stations.

4.1.2 Alongside this drive for new energy generation, recent UK energy and climate change policy establishes clear objectives for decarbonising the power and industrial sectors and achieving the Government's legally binding commitment to achieve Net Zero in terms of greenhouse gas emissions by 2050 and decarbonisation of the energy sector by 2035.

4.1.3 The Applicant considers that these matters, within the context of Section 104 of the 2008 Act, are "relevant and important" to the SoS's decision making on the Project.

4.1.4 The first part of this Section therefore summarises the recent UK energy and climate change policy with the second part of this Section setting the context of the need for new electricity generating capacity in the UK and ensuring security of supply.

4.2 UK Energy and Climate Change Policy

Overview

4.2.1 The UK is legally bound through the Climate Change Act (2008) to reduce carbon emissions. Part 1 of the 2008 Act sets out a duty to reduce UK greenhouse gas emissions to at least 80% below 1990 levels by 2050.

4.2.2 The Climate Change Act is underpinned by further legislation and policy measures which have developed in the last 13 years. This has been based on an increased need and urgency for decarbonisation in order to meet the UK's obligations under the Paris Agreement (2015).

4.2.3 In October 2018, following the adoption by the UN Framework Convention on Climate Change of the Paris Agreement, the Intergovernmental Panel on Climate Change (IPCC) published a Special Report on the impacts of global warming of 1.5°C above pre-industrial levels. This report concluded that human-induced warming had already reached approximately 1ºC above pre-industrial levels, and that without a significant and rapid decline in emissions across all sectors, global warming would not be likely to be contained, and therefore more urgent international action is required.

The Clean Growth Strategy (HM Government, 2017)

4.2.4 The UK Clean Growth Strategy – Leading the Way to a Low Carbon Future sets out government proposals for decarbonising all sectors of the UK

economy through the 2020s. The Strategy recognises that the UK waste sector has become an important contributor to electricity generation, helping to generate 14 per cent of UK renewable electricity in 2015, enough to power 2.3 million homes

4.2.5 The Executive Summary of the Strategy states that in order to meet the fourth and fifth carbon budgets (covering the periods 2023-2027 and 2028-2032) the government will need to drive a significant acceleration in the pace of decarbonisation. The Executive Summary also sets out a number of key policies and proposals (pages 12 - 16) relating to 'Improving Business and Industry Efficiency', 'Low Carbon Homes, 'Accelerating the Shift to Low Carbon Transport' and 'Enhancing the Benefits and Value of Our Natural Resources'. These include to:

> "4. Publish joint industrial decarbonisation and energy efficiency action plans with seven of the most energy intensive industrial sectors;
>
> 5. Demonstrate international leadership in carbon capture usage and storage (CCUS), by collaborating with our global partners and investing up to £100 million in leading edge CCUS and industrial innovation to drive down costs.
>
> 6. Work in partnership with industry, through a new CCUS Council, to put us on a path to meet our ambition of having the option of deploying CCUS at scale in the UK, and to maximise its industrial opportunity.
>
> 7. Develop our strategic approach to greenhouse gas removal technologies, building on the Government's programme of research and development and addressing the barriers to their long-term deployment.
>
> 17. Build and extend heat networks across the country, underpinned with public funding (allocated in the Spending Review 2015) out to 2021.
>
> 24. Develop one of the best electric vehicle charging networks in the world by: Investing an additional £80 million, alongside £15 million from Highways England, to support charging infrastructure deployment and taking new powers under the Automated and Electric Vehicles Bill, allowing the Government to set requirements for the provision of charging points

4.2.6 Chapter 4 of the Strategy deals with different sectors of the UK economy, including at pages 61 - 71, a section on 'Improving Business and Industry Efficiency and Supporting Clean Growth'. Page 62 states (as at the time the CGS was prepared) that business and industry account for approximately 25% of the UK's emissions and 50% of its electricity use.

4.2.7 Page 68 of the Strategy relates to CCUS in detail. It states "There is a broad international consensus that carbon capture, usage and storage has a vital future role in reducing emissions. This could be across a wide range of activities such as producing lower-emission power, decarbonising industry

where fossil fuels are used and/or industrial processes as well as providing a decarbonised production method for hydrogen which can be used in heating and transport. This makes CCUS a potentially large global economic opportunity for the UK. The International Energy Agency estimates there will be a global CCUS market worth over £100 billion - with even a modest share of this global market, UK GVA could increase to between £5 billion and £9 billion per year by 2030".

4.2.8 In addition to a section on 'Improving Business and Industry Efficiency and Supporting Clean Growth' Chapter 4 of the Strategy also includes sections on 'Improving Our Homes and 'Accelerating the Shift to Low Carbon Transport'.

4.2.9 Page 82 of the Strategy in particular relates to the future of heat decarbonisation. It states "Heating our homes, businesses and industry accounts for nearly half of all energy use in the UK and a third of our carbon emissions. Nearly 70 per cent of our heat is produced from natural gas. Meeting our target of reducing emissions by at least 80 per cent by 2050 implies decarbonising nearly all heat in buildings and most industrial processes. Reducing the demand for heat through improved energy efficiency will have an important role to play but will not by itself suffice to meet our 2050 target." It goes on to recognise that heat networks is one possible technological solution to low carbon heating which will support the scale of change needed.

4.2.10 Pages 83 to 92 of the Strategy outline the ambition of the government to create a more modern transport system – one that is clean, affordable and easy to use. To achieve this, the Strategy outlines a number of broad policies including: accelerating the take up of ultra low emission vehicles, encouraging low carbon alternatives to car journeys and government innovation investment e.g. through electric vehicle and battery technology.

The Ten Point Plan for a Green Industrial Revolution (HM Government, November 2020)

4.2.11 The Ten Point Plan for a Green Industrial Revolution - Building back better, supporting green jobs, and accelerating out path to net zero', was published on 18 November 2020 and is aimed at delivering a 'Green Industrial Revolution' in the UK.

4.2.12 The 'Ten Points' of the Plan are summarised at page 7 of the document. Those of particular relevance to the Project are:

- Point 2 – Driving the Growth of Low Carbon Hydrogen.
- Point 4 – Accelerating the Shift to Zero Emission Vehicles
- Point 8 – Investing in Carbon Capture, Usage and Storage (CCUS).

4.2.13 Point 2 'Driving the Growth of Low Carbon Hydrogen' is covered at pages 10 - 11 of the Ten Point Plan. It highlights how hydrogen could provide a clean source of fuel and heat for our homes, transport and industry and recognises the potential role of CCUS in hydrogen production. It refers to an aspiration to create "hubs" where renewable energy, CCUS and hydrogen congregate that will put our industrial "SuperPlaces" at the forefront of technological development.

4.2.14 Point 4 'Accelerating the Shift to Zero Emission Vehicles' is covered at pages 14 -15 of the Ten Point Plan and recognises that Zero emission vehicles can be our most visible incarnation of our ability to simultaneously create jobs, strengthen British industry, cut emissions, and continue travelling. It states that the government will "invest £1.3 billion to accelerate the roll out of charging infrastructure, targeting support on rapid charge points on motorways and major roads to dash any anxiety around long journeys, and installing more on-street charge points near homes and workplaces to make charging as easy as refuelling a petrol or diesel car."

4.2.15 Point 8 'Investing in Carbon Capture, Usage and Storage (CCUS)' is dealt with at pages 22 - 23 of the Ten Point Plan. The Ten Point Plan states that CCUS will be an exciting new industry to capture the carbon we continue to emit and revitalise the birthplaces of the first Industrial Revolution. It states that the Government's ambition is to capture 10Mt of CO2 a year by 2030, the equivalent of four million cars' worth of annual emissions.

The Sixth Carbon Budget – The UK's Path to Net Zero (HMSO December 2020)

4.2.16 From the UK Committee on Climate Change, The Sixth Carbon Budget sets out the actions the UK will need to take to achieve net-zero emissions by 2050. The recommended pathway requires a 78% reduction in UK territorial emissions between 1990 and 2035. In effect, bringing forward the UK's previous 80% target by nearly 15 years.

4.2.17 The Sixth Carbon Budget emphasises the scale of the Net Zero challenge and details that meeting the recommended Budget (through The Balanced Net Zero Pathway) will require a major nationwide investment programme, led by Government, but largely funded and delivered by private companies and individuals.

4.2.18 Whilst the report recognises the ambition contained within the Governments Ten Point Plan for a Green Industrial Revolution, it explains that it remains urgent to align the policy framework with the raised ambition under Net Zero. Similarly, whilst emissions have fallen by 40% in the last three decades – Part 1, Chapter 2 of the Budget 'UK path to Net Zero' states that emissions must fall more quickly to meet the Sixth Carbon Budget.

4.2.19 Part 1, Chapter 3 of the Budget 'Sector pathways to Net Zero' states that achieving the 2050 Net Zero target requires all sectors of the economy to contribute, including the following sectors relevant to the Project:

- **Buildings**. The Balanced Net Zero Pathway reflects four priorities over the coming decade or so, including expanding the rollout of low-carbon heat networks in heat dense areas like cities, using anchor loads such as hospitals and schools.

- **Electricity generation.** This will require a significant expansion of low-carbon generation, in particular low-cost renewables and decarbonised back-up generation, in conjunction with more flexible demand and use of storage.

- **Waste.** The Balanced Net Zero Pathway details that sector emissions can be reduced by 75% by 2050. Although it is anticipated around 80% of the abatement to 2035 will be from waste prevention, increased recycling and banning biodegradable waste from landfill - by 2050, 30% of sector abatement is anticipated to come from retrofitting CCS to the UK's fleet of energy-from-waste facilities.

Net Zero Strategy: Build Back Greener (HM Government, October 2021)

4.2.20 The Government's Net Zero Strategy: Build Back Greener follows on from the UK's Committee on Climate Change The Sixth Carbon Budget. It explains the imperative for action to reduce greenhouse gases and combat climate change, through inter alia decarbonisation of the nation's power system, enhanced hydrogen production and uptake, expanded carbon capture and storage, innovation in durable energy storage, growing low carbon heat networks, decarbonising transport and encouraging the use of non-recyclable residual waste into valuable outputs, such as energy (with carbon capture and storage where possible).

4.2.21 In the Strategy the Government commits to:

- A target that by 2035, all our electricity will come from low carbon sources, subject to security of supply (expected residual emissions will be limited to CCUS plants, unabated gas, and energy from waste), all of which means increased investment in the grid network as well as electricity storage solutions;

- Ensuring the planning system can support the deployment of low carbon energy infrastructure;

- An ambition for 5 GW UK low carbon hydrogen production capacity by 2030;

- An ambition to deliver 6 MtCO2 per year of industrial CCUS by 2030, and 9 MtCO2 per year by 2035;

- Enacting legislation to give heat networks the statutory powers they need to build, and regulate the carbon emissions of projects from the early 2030s;

- Delivering new heat networks zones in England by 2025 where heat networks are the default solution for decarbonising heating;

- Developing and delivering large scale trials of hydrogen for heating, including a neighbourhood trial by 2023 and a village scale trial by 2025, and develop proposals for a possible 'hydrogen town' before the end of the decade;

- Ensuring the UK's charging infrastructure network is reliable, accessible, and meets the demands of all motorists;

- Maximising carbon savings from road vehicles through the uptake of low carbon fuels including low carbon hydrogen - the RTFO main obligation will increase from 9.6% in 2021 to 14.6% in 2032;

- An ambition of deploying at least 5 MtCO2/year of engineered removals of greenhouse gases by 2030;

The UK Climate Change Conference of the Parties 26 (COP26)

4.2.22 In November 2021 the UK hosted the 26th UN Climate Change Conference of the Parties in Glasgow. As the first five-year cycle of the emission reduction targets under the Paris Agreement came to an end, COP26 brought parties together to take stock on the progress achieved and to accelerate action towards the goals of the Paris Agreement and the UN Framework Convention on Climate Change.

4.2.23 One of the main four goals of COP26 included securing global net zero by mid-century in order to keep global temperature increase below the critical 1.5 degree threshold.

4.2.24 Although the conference was generally considered unsatisfactory in delivering the action and commitments needed to reach the targets from the Paris Agreement (e.g. a phase-down approach on the use of coal was agreed rather than a phase-out approach), COP26 has raised the global ambition on climate action and reinforces the urgent need to reach net-zero. The 'Glasgow Climate Pact', reaffirms the long-term global temperature goal and urges the parties to do more to achieve it - 'rapidly scaling up the deployment of clean power generation and clean efficiency measures' and 'emphasising the importance of protecting, conserving and restoring nature and ecosystems, including forests and other terrestrial and marine ecosystems … by acting as sinks and reservoirs of greenhouse gases'.

The British Energy Security Strategy (April, 2022)

4.2.25 The UK government published its 'British Energy Security Strategy' in April, 2022, which aims to secure long-term, clean and affordable energy for the country. The Strategy is intended to ensure a greater proportion of the country's needs are met by low carbon domestic sources.

4.2.26 The new Strategy builds on the government's pro-renewables policy, which has been developing over the last few years and makes clear that the emphasis on renewable energy generation growth is a matter of national security.

4.2.27 The Strategy confirms government support for low-carbon nuclear projects, offshore wind development, hydrogen production and storage technology, solar power capacity and all forms of long-duration electricity storage.

4.3 National and Local Need for New and Renewable Electricity Generation

Overview

4.3.1 Since the 1990s, electricity demand in England, Wales and Scotland has grown only slowly, and (since 2005) has fallen with this trend being a result of numerous factors including:

- A decline in economic growth rate (particularly with the recession of 2009);
- A reduction in the level of electricity intensity as the economy has shifted to less energy intensive activities; and
- The introduction of energy efficiency measures, especially more efficient lighting, but also technology development more generally.

4.3.2 However, as identified in the Energy White Paper, the Energy NPS and by National Grid Electricity System Operator in their Future Energy Scenarios 2020, demand for electricity is expected to grow significantly in the years ahead.

The National Need

4.3.3 As mentioned above, the UK Government has committed to achieving net zero in greenhouse gas emissions by 2050 and plans to close all coal-fired power stations by 2025. What this means is that emissions will be substantially reduced by 2050 and that any residual emissions would be balanced by schemes to offset an equivalent amount of greenhouse gases from the atmosphere, such as planting trees or using technology like carbon capture and storage.

4.3.4 To achieve the 2050 commitment an urgent need for renewable generation and energy from waste developments has been transposed into national policy documents, notably within NPS EN-1 which confirms at Paragraph 2.2.1 that meeting commitments is challenging and needs major investment in new technologies for (inter alia) cleaner power generation. NPS EN-1 Paragraph 2.2.11 confirms that there is a "need for low carbon energy infrastructure to contribute to climate change mitigation". Paragraph 2.2.20 states that it is critical that the UK continues to have secure and reliable supplies of electricity during this transition toward a low carbon economy, and that to manage risks this means ensuring that there is sufficient capacity (including a greater proportion of low carbon generation) to meet demand at all times, including a safety margin of spare capacity to accommodate unforeseen fluctuations in supply or demand.

4.3.5 NPS EN-1 Paragraph 2.1.2 recognises that energy is vital to economic prosperity and social well-being and thus establishes that it is important to ensure that the UK has 'secure and affordable energy'. Part 3 of NPS EN-1 concerns the need for new energy NSIPs, such as the Project. Paragraph 3.1.1 confirms that the UK needs all types of relevant energy infrastructure to achieve energy security at the same time as dramatically reducing greenhouse gas emissions. Paragraph 3.1.3 goes further stating that the need for energy NSIPs is already established, and that the Secretary of State should:

> "assess all applications for development consent for the types of infrastructure covered by the energy NPSs on the basis that the Government has demonstrated that there is a need for those types of infrastructure and that the scale and urgency of that need is as described for each of them in this Part."

4.3.6 And at Paragraph 3.1.4 that the Secretary of State:

> "should give substantial weight to the contribution which projects would make towards satisfying this need when considering applications for development consent under the Planning Act 2008"

4.3.7 NPS EN-1 recognises that there will undoubtably be instances where significant adverse impacts are apparent in meeting the above need. Confirming how the decision maker should consider such impacts when determining applications, Paragraph 3.2.3, states that

> "it will not be possible to develop the necessary amounts of such infrastructure without some significant residual adverse impacts. This Part also shows why the Government considers that the need for such infrastructure will often be urgent. The IPC [Secretary of State] should therefore give substantial weight to considerations of need. The weight which is attributed to considerations of need in any given case should be proportionate to the anticipated extent of a project's actual contribution to satisfying the need for a particular type of infrastructure".

4.3.8 On the need for more electricity capacity to support an increased supply from renewables, NPS EN-1 states at Paragraph 3.3.10 that the Government is committed to increasing dramatically the amount of renewable generation capacity, and that this increasingly "may include plant powered by the combustion of biomass and waste".

4.3.9 Against this background of a need for renewable energy in the context of meeting greenhouse gas reduction targets, NPS EN-1 Paragraph 3.1.14 confirms that demand for electricity is also likely to increase and that "a substantial amount of new generation" will therefore be needed. This all leads to a position where "there is an urgent need for new (and particularly low carbon) energy NSIPs to be brought forward as soon as possible" (NPS EN-1 Paragraph 3.3.15). Paragraph 3.4.5 of NPS EN-1 states that:

> "it is necessary to bring forward new renewable electricity generating projects as soon as possible. The need for new renewable electricity generation projects is therefore urgent."

4.3.10 Paragraph 3.4.2 of NPS EN-1 makes the case for large scale renewables deployment to "help the UK to tackle climate change, reducing the UK's emissions of carbon dioxide/ and also improve security of supply by reducing reliance on the use of coal, oil and gas supplies". Of these, NPS EN-1 Paragraph 3.4.3 confirms EfW as being one such type of large-scale renewable generation to come forward. EfW is identified as potential 'dispatchable power generation' within NPS EN-1, providing peak load and base load electricity on demand. As more intermittent renewable electricity comes onto the UK grid, the ability of biomass and EfW to deliver "predictable, controllable electricity" is identified as being increasingly important for security of UK supplies (NPS EN-1 Paragraph 3.4.4).

4.3.11 As a guiding principle, Paragraph 4.1.2 of NPS EN1 confirms that, given the level and urgency of need for energy infrastructure, decisions should include a "presumption in favour of granting consent to applications for energy NSIPs". That presumption applies unless any more specific and relevant policies set out in the relevant NPSs clearly indicate that consent should be refused. Furthermore, NPS EN-1 requires that when making a decision on NSIP applications, decision makers look at potential benefits on meeting the need for energy infrastructure, job creation and any long-term or wider benefits; alongside potential adverse impacts, including any long-term and cumulative adverse impacts, as well as any measures to avoid, reduce or compensate for adverse impacts.

4.3.12 From the outset NPS EN-3 (Paragraph 1.1) also confirms the objective to further the provision of renewable energy generation in the UK stating that:

> "Electricity generation from renewable sources of energy is an important element in the Government's development of a low-carbon economy. There are ambitious renewable energy targets in place and a significant increase in generation from large-scale renewable energy infrastructure is necessary".

4.3.13 Support for EfW is provided within Section 2.5 (Paragraph 2.5.2) of NPS EN-3 which confirms that the recovery of energy from the combustion of waste, where in accordance with the waste hierarchy, will play an increasingly important role in meeting the UK's energy needs. NPS EN-3 also confirms that where the waste burned is deemed renewable, this can also contribute to meeting the UK's renewable energy targets and energy from waste forms an important element of waste management strategies in both England and Wales.

Local Need

4.3.14 In local policy terms, North Lincolnshire Council's adopted and emerging Local Plan policies are generally consistent with the UK government's approach in seeking to reduce carbon emissions and divert waste away from landfill. Of particular relevance is Core Strategy Policy CS18 (Sustainable Resource and Climate Change), which promotes development that utilises natural resources as efficiently and sustainably as possible and reduces carbon emissions to meet the UK government commitments to reducing greenhouse gas emissions and climate change.

4.3.15 Also of relevance are emerging Local Plan Policies WAS1 (Waste Management Principles), stating that the Council will ensure sufficient capacity is located within the area to accommodate forecast waste arisings, and WAS2 (Waste Facilities), which states that proposals for Energy from Waste facilities will be supported provided they meet the criteria set out within the policy, as well as emerging policy DQE8 (Renewable Energy Proposals). Furthermore, the Local Plan recognises that there may be a need for additional capacity as waste moves up the waste hierarchy to have less reliance on disposal.

4.3.16 In addition to the adopted Core Strategy policy referred to above, the Council's Planning for Renewable Energy Development Supplementary Planning Document (SPD) (2011) strongly supports renewable energy and views it as being a key part of the transformation of North Lincolnshire's economy. In particular, the SPD recognises the importance of North Lincolnshire in the power generation industry, producing around 7% of the country's electricity requirement.

4.3.17 In September 2021 North Lincolnshire Council published for consultation, their prospectus for 'A Green Future: Our Plan For Positive Change'. A Green Future is the Council's vision to unite the county so everyone can take positive action to leave the environment in a better state for future generations.

4.3.18 The prospectus contains the following eight aims, which seek to boost productivity and economic growth while reducing carbon emissions:

- Achieve net zero carbon emissions by 2030, including through maximising opportunities for carbon capture and sequestration.

- Work with industry and commerce towards net zero emissions
- Make decarbonisation the foundation of North Lincolnshire's economic growth
- Deliver sustainable energy and sustainable living
- Minimise waste and use resources more effectively
- Enhance and protect the natural environment
- Ensure everyone feels the benefit of the environment and has a stake in it
- Build a network of residents, businesses, the public sector and non-profit organisations to deliver the aims.

4.4 The Role of Energy Recovery Facilities

4.4.1 The Project will help meet two urgent national and local needs: to reduce the amount of waste going to landfill (landfill capacity is set to decline over the next decade as the UK Government strives to meet its obligation to reduce general waste disposed of in landfill to 10% of the Municipal Solid Waste (MSW) produced), and to generate low carbon energy.

4.4.2 At the same time, the UK's energy requirements are changing. The Government plans to close all coal-fired power stations by 2025, and to reach net-zero carbon emissions by 2050. Consequently, there is an urgent national need for new, low carbon energy generation. The demand for energy is also becoming more complex. National Grid expects there to be up to 36 million more electric vehicles on UK roads by 2040. The Project will help address these changing patterns of demand by combining energy recovery with a range of energy storage technologies at the same site.

4.4.3 The ERF will process refuse derived fuel to heat water into steam, which will turn a turbine to generate electricity. Refuse derived fuel is made from unrecyclable elements of municipal waste and is a greener alternative to fossil fuels. Carbon dioxide, created as a result of this process, will be captured and cleaned from the exhaust gases and other emissions will be neutralised or mitigated prior to release. There are very strict rules and regulations which set out what emissions can be released from energy recovery facilities via the chimney/stack as a result of the recovery process. The ERF will work within these strict limits and along with the regulatory authorities may monitor what is released from the facility using an automatic system, operating 24 hours a day. The aim is for the Project to be able to capture, store and use as many of the by-products from the recovery process as possible, including carbon dioxide and ash.

4.4.4 Effective energy storage helps provide more energy for the nation to use as and when it is needed. Energy will be stored at the North Lincolnshire Green Energy Park using a variety of methods.

4.5 The Contribution to Waste Management Objectives

4.5.1 26 million tonnes of waste left over after recycling in the UK is turned into refuse derived fuel, exported or sent to landfill every year. Refuse derived fuel is a way of recovering energy from waste that would otherwise go to landfill. There are not enough facilities in the UK to process all the refuse derived fuel produced. 12 million tonnes a year, nearly half of the refuse derived fuel produced in the UK, is exported abroad or sent to landfill. Nearly one million tonnes of this currently travels by road to the Humber Ports and is exported.

4.5.2 The Project will process refuse derived fuel to heat water into steam, which will turn a turbine to generate electricity. Thus providing a sustainable and local solution to waste management combined with sustainable energy from waste generation.

4.6 Assessment of Fuel Availability and Waste Hierarchy

4.6.1 In terms of fuel availability, the RDF Supply Assessment (**Document Reference 5.2**) provides analysis of fuel availability on both a national and regional level. The Report concludes that in a scenario in which England meets it existing recycling targets, an additional 4.7 million tonnes of recovery capacity is required to ensure that residual waste that cannot be recycled can be processed for energy recovery in 2035.

4.6.2 The RDF Supply Assessment (**Document Reference 5.2**) further identifies that within Yorkshire & Humber and East Midlands, there could be 1.6 million tonnes of waste without access to recovery operations in 2035. On a regional level, ES Chapter 15 (**Document Reference 6.2.15**) identifies that there are a number of landfill and incineration facilities within the East Midlands region with limited remaining capacity.

4.6.3 Most recent reports date from 2019, capacity would have since reduced further. Incinerator capacity was at or reaching capacity as shown in Table 5 and Table 7 of ES Chapter 15 (**Document Reference 6.2.15**). Landfill facilities have limited capacity when comparing the input in 2019 versus the remaining available capacity. Waste Interrogator Data (2019) shows landfill trends from 1998/99 to 2019. In 1998/99, Lincolnshire had 20,237,000 cubic metres of landfill capacity, in 2019 this has reduced to 10,475,000 cubic metres. This includes inert, non-inert and restricted user (non-hazardous and hazardous restricted landfill) sites.

4.6.4 Section 5.5.3 of the North Lincolnshire Council Waste Management Strategy discusses landfill capacity and states that the availability of current landfills cannot be guaranteed, input needs to reduce and additional landfill capacity may still be required over the longer term.

4.6.5 The need for this facility is to intercept the volume of RDF currently being exported through the Humber ports and the volume of household waste currently being landfilled in the East Midlands region. Tariffs being placed on exported waste due to waste levies imposed by EU countries, such as Holland and Sweden, as well as growing national support for the phasing out of exports of waste by 2030 provides a positive effect on local capacity (as outlined in the Waste ES Chapter 15 (**Document Reference 6.2.15**)).

4.6.6 The Project meets the objectives of the North Lincolnshire Council's Waste Strategy, as the facility will take RDF feedstock made from residual waste previously subject to recycling at separate collection or Materials Recovery Facility (MRF), and so the production of feedstock to be recovered in the facility will not negatively influence recycling targets. Therefore, the production of feedstock to be recovered in the facility will not negatively influence recycling targets.

4.6.7 Energy from waste using RDF feedstock is consistent within the waste hierarchy principles as it diverts waste from landfill, the recyclable materials have been extracted from the feedstock and the operation has flexibility in terms of calorific value and waste composition of its feedstock. ERFs have a fundamental part to play in the waste hierarchy, particularly to reduce the amount of non-recyclable waste going to landfill. The diversion of waste away from landfill to ERFs in turn reduces the commercial viability of landfill operations alongside landfill tax and helps to decrease their role in the hierarchy further.

4.6.8 Although the RDF Supply Assessment (**Document Reference 5.2)** identifies that there is a significant amount of energy from waste capacity under development in England to realise the demand, there is also a high level of uncertainty about how much will be realised.

4.6.9 There is also a need for new-build energy from waste plants to be CCUS-ready in order to align with the UK's Net Zero commitments, which the Project provides for. The Project is also well placed to connect to the East Coast CCUS cluster (connecting to the proposed Zero Carbon Humber pipeline).

4.6.10 The need for the Project to meet current and forecast requirements on waste is therefore well established at a local, regional and national level.

4.7 Summary

4.7.1 Recent UK energy and climate change policy has established clear objectives for decarbonising the power and industrial sectors in order to achieve the Government's legally binding commitment to achieve net zero in terms of greenhouse gas emissions by 2050. This policy is both important and relevant to decision making in respect of the Project.

4.7.2 It is evident from the review of energy and climate change policy that the Project will contribute toward the delivery of key energy and climate change

policy objectives – most importantly net zero by 2050. The Project will achieve this through both the NSIP itself (an ERF, including a CCUS facility) and its Associated Developments (including DHPWN, PRF, an EV and H_2 refuelling station, battery storage and a hydrogen production and storage facility).

4.7.3 In terms of electricity generation capacity, the above review clearly highlights the need for new, diverse, electricity generation capacity to increase security of supply, support higher generation levels overall, and decarbonise the grid.

4.7.4 The Project responds to this urgent need for new electricity generation capacity, generating up to 95 MW of low carbon energy.

4.7.5 The Energy Park will process up to 760,000 tonnes of RDF and non-hazardous household and commercial waste per year providing sustainable and secure generation of energy. It is estimated that up to 5,000 tonnes of scrap metal will be recovered for recycling per annum and up to 25,000 tonnes of recyclable plastic will be processed to produce 20,000 tonnes of recycled plastic in an onsite PRF. Waste left after recycling will be combusted at high temperatures to produce steam, which will drive a turbine to create electricity. Electricity output will be 95MWe. Fly ash and bottom ash produced by the energy recovery process will be used on site to make concrete blocks, recycling around 130,000 tonnes of ash. The Energy Park includes CCU and will be CCUS-ready, with plans to accommodate carbon capture technology and ambitions to connect to the Zero Carbon Humber pipeline (should this project come forward) to enable the long-term storage of carbon dioxide.

4.7.6 This analysis indicated that in a scenario in which England meets it existing recycling targets, an additional 4.7 million tonnes of recovery capacity is required to ensure that residual waste that cannot be recycled can be processed for energy recovery in 2035.

4.7.7 While a considerable amount of energy from waste capacity is under development, there is a high level of uncertainty about how much of this capacity will be realised. If new build energy from waste is required to be CCUS-ready in order to align with the UK's Net Zero commitments, then the Project is among the small minority of pipeline projects which are well placed to connect to a CCUS cluster.

4.7.8 In local terms, the Project meets the objectives of the North Lincolnshire Council's Waste Strategy, as the facility will take RDF feedstock made from residual waste previously subject to recycling at separate collection or MRF facility, and so the production of feedstock to be recovered in the facility will not negatively influence recycling targets. Energy from waste using RDF feedstock is a recovery option consistent with the principles of the waste hierarchy as it diverts waste from landfill.

4.7.9 Furthermore, the Energy Park Land at Flixborough Industrial Estate is aligned with the local Council's strategy where the site is identified as

suitable for a waste management facility. There is an urgent national need for the Project in terms of renewable energy infrastructure, but also an identified regional need within the East Midlands and Yorkshire & Humber regions, which have the highest proportion of waste going to landfill in the UK.

5. Project Impact and Assessment of the Project Against National Planning Policy

5.1 Overview

5.1.1 This Section seeks to provide an assessment of the effects of the Project on a topic-by-topic basis against relevant planning policy provisions, notably those contained within NPS EN-1 and NPS EN-3. In terms of NPS EN-5, the relevant EMF policy is covered in Section 5.15 below.

5.2 Consideration of Alternatives

5.2.1 Paragraph 4.4.1 of NPS EN-1 confirms that as in any planning case, the relevance or otherwise to the decision-making process of the existence (or alleged existence) of alternatives to a proposed development is in the first instance a matter of law, which falls outside the scope of the NPS. It goes on, however, to state that from a policy perspective there is no general requirement to consider alternatives or to establish whether a development represents the best option, except that:

- Applicants are obliged to include in their ES, information about the reasonable alternatives they have studied. This should include an indication of the main reasons for the applicant's choice, taking into account the environmental, social and economic effects and including, where relevant, technical and commercial feasibility;

- In some circumstances, there are specific legislative requirements, notably under the Habitats Directive, as transposed into UK law by the Habitats and Species Regulations, for the SoS to consider alternatives. These should be identified in the ES by the Applicant.

- In some circumstances, the relevant energy NPSs may impose a policy requirement to consider alternatives; NPS EN-1 does so in sections 5.3, 5.7 and 5.9 in relation to avoiding significant harm to biodiversity and geological conservation interests, flood risk and development within nationally designated landscapes, respectively.

- Paragraph 4.4.3 of NPS EN-1 outlines a number of overarching tests as to the extent to which alternatives should be considered. E.g. alternatives should be considered in a proportionate manner, and the examining authority should be guided in considering alternative proposals by whether there is a realistic prospect of the alternative delivering the same infrastructure capacity (including energy security and climate change benefits) in the same timescale as the proposed development.

5.2.2 Section 9.4 of ES Chapter 3 (**Document Reference 6.2.3**) outlines the process undertaken by the Applicant to find a suitable location for an ERF within the UK. Paragraph 9.4.1.1 explains that there is an established and

urgent national (and regional) need for an ERF at Flixborough as the region has the highest proportion of waste going to landfill in the UK. A large proportion of the site falls within an existing industrial estate. It is therefore considered that this is an appropriate site for the Project.

5.2.3 With regard to the specific legislative requirements to consider alternatives, notably under the Habitats Regulations, the Applicant has prepared a Report to inform Habitats Regulations Assessment (**Document Reference 5.9**). The Report (which includes an Appropriate Assessment undertaken in relation to Humber Estuary SAC / Ramsar site and Humber Estuary SPA) concludes that there will be no adverse effects on the integrity of any European sites either alone or in combination with other plans and projects. As such there is no requirement to consider alternatives to the Project under the Habitats Regulations as it will not adversely impact upon the SPA/Ramsar/SAC.

5.2.4 In relation to avoiding significant harm to biodiversity and geological conservation interests, flood risk and development within nationally designated landscapes, the effects of the Project are outlined in ES Chapters 8, 9 10 and 11 (**Document References 6.2.8, 6.2.9, 6.2.10** and **6.2.11**). The weight that the decision-maker should place on such interests when considering alternatives varies according to the importance of the asset. For instance, paragraph 5.3.3 of NPS EN-1 makes it clear that whilst local and regional designations are important, these should not be used in themselves to refuse development consent.

5.2.5 ES Chapter 10 (**Document Reference 6.2.10**) presents a summary of findings of the effects of the Project on biodiversity from the desk-based study and a wide range of comprehensive field surveys completed up to and including April 2022. Whilst residual effects are considered not significant for the majority of ecological receptors, significant residual adverse effects (at site level) have been assessed at the designated site of Risby Warren SSSI as a result of very small increases in ammonia, nitrogen and acid deposition. Risby Warren SSSI is located approximately 1.2km to the east of the Order Limits with significant industrial development, including Foxhills Industrial Estate to the north of Scunthorpe located in between. Airborne pollution from the industrial complex at Scunthorpe already has an adverse effect on the heath communities of the site (see paragraph 4.3.2 of ES Chapter 10, Appendix A (**Document Reference 6.2.10**)). Ammonia is already exceeded in the majority of the SSSI and nitrogen deposition has already resulted in the SSSI being in an 'unfavourable and declining' condition (see paragraph 4.3.2 of ES Chapter 10, Appendix A (**Document Reference 6.2.10**)). There is also existing high background levels of sulphur and nitrogen. In the context of the assessment of alternatives, this effect could not be reduced or avoided by design. ES Chapter 3, Project Description and Alternatives (**Document Reference 6.2.3**), also explains the reasoning behind the location of the Project at Flixborough. Alternative sites which would have a lesser impact on the SSSI are not suitable, available or viable. In the context of paragraph 5.3.11 of NPS EN-1, the benefits and need of the Project (as outlined in

Section 4 and Section 7.2 of this Planning Statement) are considered to clearly outweigh the impacts on the features of the site that make it of special scientific interest, particularly given that the SSSI is already significantly affected by current levels of atmospheric pollution outside of the control of the Project and the significant adverse effects predicated are based on a worse-case scenario.

5.2.6 Paragraph 5.3.8 of NPS EN-1 states that 'As a general principle, and subject to the specific policies below, development should aim to avoid significant harm to biodiversity and geological conservation interests, including through mitigation and consideration of reasonable alternatives…where significant harm cannot be avoided, then appropriate compensation measures should be sought.'

5.2.7 Alongside embedded mitigation, other mitigation measures such as those outlined in the CoCP (**Document Reference 6.3.7**) have been proposed for the Project. The CEMP (secured by Requirement 4 of the draft DCO, **Document Reference 2.1**) will include all measures to avoid impacts on designated sites (as well as habitats of principal importance, other habitats of importance and protected/sensitive species) and the successful implementation of these measures will ensure impacts are minimised and effects are restricted to a site level only.

5.2.8 ES Chapter 8 (**Document Reference 6.2.8**) concludes that through remediation of existing conditions and mitigation controls in place, no significant geological, hydrogeological and land contamination effects are anticipated.

5.2.9 Paragraph 5.7.13 of NPS EN-1 states that the consideration of alternative sites is relevant to the application of the 'Sequential Test' in relation to flood risk, with the preference in the first instance to locate development within Flood Zone 1, the zone of least probability of tidal or fluvial flooding.

5.2.10 The Project Site falls predominantly within Flood Zone 3, benefiting from flood defences. There are also two small parts of the Application Land which fall within Flood Zone 1 - Zone J, the Northern District Heat and Private Wire Network and Zone K, Railway Reinstatement Land (please refer to Figures 4.2 and 5.1 in the Flood Risk Assessment (**Document Reference 6.3.3**).

5.2.11 As the Project involves land within both Flood Zones 2 and 3, it is necessary to apply the 'Sequential Test' in order to demonstrate that the Applicants have sought to locate it within the areas with the lowest probability of flooding (e.g. Flood Zone 1) when compared to alternative sites. The Applicants' approach to applying the Sequential Test is set out at paragraphs 5.7.15 to 5.7.30 of this Statement. Although the Project Site is located predominantly in Flood Zone 3, it benefits from flood defences and its riverside location was also a key feature in its selection, in enabling potential access from the river, through the existing Wharf.

5.2.12 In terms of the Exceptions Test, further details are provided at paragraphs 5.7.31 to 5.7.33 of this Statement and section 6 of the FRA (**Document Reference 6.3.3**). The Project provided wider sustainability benefits to the community and a large proportion of built elements are located on previously developed land. Elements of the Project that are not on previously developed land have been reduced as far as possible through an iterative approach to design, with flood risk being the predominant factor influencing the siting of key elements on the Site. An FRA has been provided (**Document Reference 6.3.3**) which demonstrates that the project is safe, without increasing flood risk elsewhere. The Project is also Essential Infrastructure, having regard to the definition in the NPPF in that it has be to be located in a flood risk area for operational reasons.

5.2.13 In respect of nationally designated landscapes ES Chapter 11 (**Document Reference 6.3.11**) confirms that there are no nationally designated landscapes within the landscape and visual study areas for the Project.

5.2.14 The Applicant's consideration of alternatives in relation to the Proposed Development, as set out in the ES, is therefore considered to be both appropriate and proportionate.

5.3 Air Quality

5.3.1 On air quality, NPS EN-1 recognises at Paragraph 5.2.1 that infrastructure development can have adverse effects on air quality. Noting that:

> "the construction operation and decommissioning phases can involve emissions to air which could lead to adverse impacts on health, on protected species and habitats, or on the wider countryside. "

5.3.2 NPS EN-1 Paragraphs 5.2.1 – 5.2.4 sets out the key pollutants of concern for the protection of human health and ecosystems. Paragraph 5.2.7 of NPS EN-1 states that in assessing air quality and key pollutants the ES should describe:

- any significant air emissions, their mitigation and any residual effects distinguishing between the project stages and taking account of any significant emissions from any road traffic generated by the project;
- the predicted absolute emission levels of the proposed project, after mitigation methods have been applied;
- existing air quality levels and the relative change in air quality from existing levels; and
- any potential eutrophication impacts.

5.3.3 NPS EN-1 Paragraph 5.2.9 also states that decision makers should give air quality considerations "substantial weight" where a project would lead to a deterioration in air quality in an area or leads to a new area where air quality

breaches any national air quality limits. Paragraph 5.2.10 continues that "*in the event that a project will lead to non-compliance with a statutory limit*" consent should be refused. NPS EN-3 also identifies key pollutants of concern and states:

- Where a proposed waste combustion generating station meets the requirements of Waste Incineration Directive (WID) [2] and will not exceed the local air quality standards, the IPC should not regard the proposed waste generating station as having adverse impacts on health.

5.3.4 The NPPF notes that planning decisions should sustain and contribute towards compliance with relevant limits values or national objectives for pollutants (Paragraph 53).

5.3.5 ES Chapter 5 (**Document Reference 6.2.5**) presents the Air Quality Impact Assessment (AQIA) and states that the construction phase will include the implementation of mitigation measures to minimise emissions of dust and PM_{10}. These measures will be implemented for the construction of the ERF (and associated facilities), the new road and the district heating scheme. Site boundary dust or PM_{10} monitoring will be undertaken during construction, as part of the Dust Management Plan, forming part of the CEMP as secured by Requirement 4 of the draft DCO (**Document Reference 2.1**). With mitigation in place emissions to air during the construction phase will have no significant effects.

5.3.6 ES Chapter 5 (**Document Reference 6.2.5**) concludes that operational impacts on air quality at sensitive human receptors will be negligible and there will be no significant effects on human health due to airborne concentrations of pollutants.

5.3.7 With regards to N-amines there is very limited information available on existing baseline concentrations. However, the Environmental Assessment Levels for N-Nitrosodimethylamine used in the EIA is based upon the carcinogenic risk of exposure to N-amines, and is based upon the 'acceptable' risk defined by the Environment Agency of 1 in 100,000 lifetime risk. As such, the Process Contribution as a percentage of the Environmental Assessment Level is the important metric, rather than the Predicted Environmental Concentration and on this basis the absence of baseline data is of lesser importance. Given that the assessment of N-amines is a relatively new area of environmental study, albeit based upon a long history of experimental science, the Project commits to undertaking monitoring of amines and N-amines when operational, both in flue gases and in the environment.

5.3.8 The AQIA also concludes that for most pollutants of concern and protected sites, the Project will not make a significant contribution. However, further

[2] It is noted that the WID has been superseded by the Industrial Emissions Directive and BREF, but is still referenced by NPS EN-3

assessment of potentially significant effects on habitats for some protected sites is presented at ES Chapter 10, Ecology and Nature Conservation, Appendix A (**Document Reference 6.3.10)**, with further consideration of the spatial aspects of the Project, and the specific sensitivity of receptor species.

5.3.9 In conclusion, the Project, with mitigation controls in place, is not anticipated to create significant negative effects. The Project is therefore in broad accordance with NPS policies on air quality, notably those on decision taking under NPS EN-1 Paragraphs 5.2.9 and 5.2.10, as well as compliant with the NPPF.

5.4 Climate

5.4.1 NPS EN-1 sets out the policies for UK energy infrastructure and advises that EIA's consider climate change including the impact of the Project on climate change and its resilience to future climate change risks. NPS EN-1 is clear on the role of energy from waste in future large-scale renewable energy generation, whilst the Government's Review of Waste Policy in England 2011 indicated an expected trebling of the contribution from energy from waste derived renewable electricity from thermal combustion, stating that:

> "Our horizon scanning work up to 2020, and beyond to 2030 and 2050 indicates that even with the expected improvements in prevention, re-use and recycling, sufficient residual waste feedstock will be available through diversion from landfill to support significant growth in this area, without conflicting with the drive to move waste further up the hierarchy."

5.4.2 Further to this, NPS EN-1 (part 4.6) outlines the clear preference for plants that provide CHP (combined heat and power):

> "Utilisation of useful heat that displaces conventional heat generation from fossil fuel sources is to be encouraged where, as will often be the case, it is more efficient than the alternative electricity/heat generation mix. To encourage proper consideration of CHP, substantial additional positive weight should therefore be given to applications incorporating CHP"

5.4.3 NPS EN-3 also supports the incorporation of appropriate carbon capture methods within energy from waste projects, stating that the Secretary of State should not give development consent unless it is satisfied that the proposed development meets all the criteria and is, therefore, carbon capture ready (Paragraph 2.5.28). Support for carbon capture is further provided within NPS EN-1 at Paragraph 3.6.5 which states that decision takers should take account of the importance the Government places on demonstrating carbon capture and storage.

5.4.4 NPS EN-3 Paragraph 2.5.2 highlights the role of energy from waste in meeting the urgent need for energy infrastructure.

> "The recovery of energy from the combustion of waste, where in accordance with the waste hierarchy, will play an increasingly important role in meeting the UK's energy needs. Where the waste burned is deemed renewable, this can also contribute to meeting the UK's renewable energy targets. Further, the recovery of energy from the combustion of waste forms an important element of waste management strategies in both England and Wales."

5.4.5 The NPPF includes policy on meeting the challenge of climate change, flooding and coastal change (NPPF, Chapter 14). It provides guidance on climate change allowances to be used in flood risk assessments as set out in the NPPF. This outlines how the planning system should plan for a changing climate and support a low carbon future transition. It states that new development should be planned for in ways that:

> "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".

5.4.6 The NPPF principles relevant to climate change are set within Paragraph 152 which states:

> 'the planning system should support the transitions to a low carbon future in a changing climate… 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".

5.4.7 ES Chapter 6 (**Document Reference 6.2.6**) has assessed the quantity of greenhouse gas (GHG) emissions for the Project and the baseline scenarios have been modelled and indicate that there is a net carbon benefit of 6,066 tCO2e per annum for the Project compared to the alternative baseline landfill scenario. Therefore, over the lifetime of the Project (assumed to be 25 years), the total carbon benefit is approximately 152,000 tCO_2e.

5.4.8 The combined GHG emissions from waste transport, materials production and transport and direct emissions of CO_2 (from ERF) and methane (from landfill) are similar in each scenario at approximately 400,000 tCO_2e per annum.

5.4.9 Avoided GHG emissions from the recovery of energy and materials at the Project are substantially larger than those realised for the baseline landfill scenario.

5.4.10 Storage of biogenic carbon in the landfill (approx. 270,000 tCO_2e per annum) represents the majority of the total avoided GHG emissions in the landfill scenario. However, this storage is temporary, and this carbon will be released at some point in the future, however distant. Therefore, including these avoided GHG emissions provides a very conservative assessment of the total GHG emissions from landfill of the waste. If the biogenic carbon storage in landfill is excluded, the net GHG emissions from the Project compared to the alternative baseline would be approximately 276,000 tCO_2e per annum.

5.4.11 The results show the benefit of carbon capture technology and subsequent storage in concrete blocks or utilisation in horticulture. Further to this there is the potential for the captured CO_2 to be removed from the atmosphere through long term storage e.g. geological storage, although this does not form part of the Application. If the captured CO_2 emissions from the site were sent to long term storage, this could increase the net carbon benefit for the Project compared to landfill to approximately 12,000 tCO_2e per annum.

5.4.12 In summary, the design of the ERF meets government planning policy requirements to consider and implement uses of combined heat and power. Also, with the inclusion of CCUS, the Project is aligned with NPS EN-3 policy and government proposals for all new energy recovery facilities to have CCUS or be CCUS ready from the end of the 2020s.

5.4.13 With the implementation of the mitigation as set out in ES Chapter 6 (**Document Reference 6.2.6**), the assessment has concluded that there will be a net reduction in GHG from the Project compared to the alternative baseline landfill scenario and therefore there will be no significant residual effects from the Project and there should be a positive impact.

5.4.14 However, as noted in the sensitivity analysis, with a lower biogenic content in the RDF, this net benefit could potentially be lost. Should insufficient processing facilities exist to manage the organic fines present in MSW, these will by default remain mixed with the RDF. Therefore, monitoring of the biogenic carbon content of the RDF used at the site will be undertaken to give confidence that the net benefit in GHG emissions is being maintained or improved upon.

5.4.15 In summary of the above and overall, the Project sits in accordance with the objectives of NPS EN-1 and NPS EN-3 in their support of combined heat and power and energy from waste projects, and the potential for reductions in GHG sought through NPS EN-1, NPS EN-3 and the NPPF overall.

5.5 Noise

5.5.1 Section 5.11 of NPS EN-1 refers to the Government's policy on noise within the Noise Policy Statement for England (discussed further below) and sets out requirements for noise and vibration assessment for Nationally Significant Infrastructure Projects, such as the Project.

5.5.2 NPS EN-1 provides advice on decision-making guidance and states:

> "The project should demonstrate good design through selection of the quietest cost effective plant available; containment of noise within buildings wherever possible; optimisation of plant layout to minimise noise emissions; and, where possible, the use of landscaping, bunds or noise barriers to reduce noise transmission." (NPS EN-1 Paragraph 5.11.8)

5.5.3 NPS EN-1 also states at Paragraph 5.11.9 that the decision maker shoulder not grant development consent unless it is satisfied that proposals will meet the following aims:

- avoid significant adverse impacts on health and quality of life from noise;
- mitigate and minimise other adverse impacts on health and quality of life from noise; and
- where possible, contribute to improvements to health and quality of life through the effective management and control of noise.

5.5.4 NPS EN-3 Paragraph 2.5.55 also confirms, in an energy from waste specific context, that decision takers should also "be satisfied that noise and vibration will be adequately mitigated through requirements attached to the consent".

5.5.5 Paragraph 174 of the NPPF confirms that planning decisions should prevent new development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of noise pollution.

5.5.6 ES Chapter 7 (**Document Reference 6.2.7**) considers noise effects in the context of the Project and concludes that in order to manage construction noise, construction works will be undertaken in accordance with a Construction Environmental Management Plan (CEMP) secured by Requirement 4 of the draft DCO (**Document Reference 2.1**). The CEMP will set out the key management measures that contractors will be required to adopt and implement. These measures will be developed based on those identified during the EIA process. They will include strategies and control measures for managing the potential environmental effects of construction and limiting disturbance from construction activities as far as reasonably practicable. A Code of Construction Practice (CoCP) that provides the basis for the CEMP is provided at Annex 7 of the ES (**Document Reference 6.3.7**).

5.5.7 Lead contractors will develop and submit the CEMP for agreement with the local planning authority. The approved measures will be set out in detail by the Contractor in the CEMP. The consent application will set out detailed 'best practicable means' measures to minimise construction noise and vibration, including control of working hours, and provide a further assessment of construction noise and vibration if necessary. The approved measures will be set out in detail by the Contractor in the CEMP.

5.5.8 The predicted residual effects of construction noise impacts are predicted to be of moderate significance at most. In general, most impacts are on a small number of receptors, or over very short periods of time such as is likely for the night works to connect the reopened railway with the existing mainline railway or the transitory works associated with the DHPWN.

5.5.9 The effect of noise during demolition and construction has been considered on the neighbouring industrial buildings at Flixborough Industrial estate on a worst-case basis. Taking into account the potential for disturbance, but bearing in mind that the noise levels will not be at their highest every day, the impact has been assessed as being moderate, and will be investigated further during the production of the CEMP with the agreement of North Lincolnshire Council once more information is available.

5.5.10 At Normanby Road and at Concord House and commercial buildings containing offices on Bessemer Way, noise and vibration from the installation of Northern DHPWN pipework and cables has the potential to lead to impacts of large magnitude. However, these works will be undertaken over a relatively short period. Therefore, moderate residual noise effects are predicted.

5.5.11 The closest receptors in Normanby Road are also likely to be subject to vibration impacts during breaking out of the road surface and vibratory compaction, but these are expected to be of minor significance.

5.5.12 A moderate impact significance is predicted during night works associated with the DHPWN at Betony Close during works associated with crossing the Skippingdale Roundabout if directional drilling cannot be used to cross the roundabout which would allow the work to be carried out during the day.

5.5.13 Significant effects are also likely if the work on the main construction areas needs to be undertaken during the evening at the same intensity as during the day. However, work outside of core daytime hours would be discussed with NLC to establish which works could be performed with a low likelihood of significant effects.

5.5.14 During operation ES Chapter 7 (**Document Reference 6.2.7**) concludes that the residual effects from the operation of the Project at a small number of noise sensitive receptors are predicted to be of no greater than moderate significance when the context of the noise impact is considered (taking into account the integral mitigation outlined). The Chapter goes on to explain that the assumed mitigation in terms of enclosures for the fixed plant and noise

levels for equipment have been based on the experience of the design team in terms of the lowest realistic noise levels that are likely to be achieved. External plant at the Wharf and the Railhead have been based on measurements at Flixborough and Immingham of plant which was operated, where appropriate, with at-source mitigation such as exhaust silencers and enclosed engine compartments. Therefore, the assessment takes into account a high level of mitigation which is currently commercially available and practicable to implement.

5.5.15 Opportunities for further mitigation will be explored during detailed design to reduce predicted significant noise effects which have been reported in the ES. However, it should be noted that the mitigation options, including the use of building facades with higher acoustic insertion losses, have been considered with the Project engineering team, and lower noise methods of unloading aggregate from the train which avoid the need for a grab crane have been explored, and these have been included in the assessment. As a result, options for further mitigation are not expected to significantly change the predicted noise levels. The use of noise barriers along the railhead and on-site roads has also been considered, however, these have not been included due to concerns regarding the potential obstruction of flood water flows on the site, and would only mitigate noise from unloading trains (a train service frequency of one train every four hours has been assumed for the daytime period).

5.5.16 A Noise Management Plan will be developed as part of the Operational Environmental Management Plan (OEMP) and agreed with North Lincolnshire Council. The Plan will be implemented before the development becomes operational (as secured by Requirement 4 of the draft DCO (**Document Reference 2.1**). The purpose of the Plan will be to demonstrate noise from the operation of the Project is no higher than reported in the ES and where practicable to reduce noise levels below those that have been predicted. This noise monitoring will include:

- measurements of candidate unloading equipment during procurement including during loading/unloading cycles to ensure it does not lead to higher noise levels than assumed in the ES;
- review of test data for fixed equipment and building elements;
- identification of equipment with potentially distinctive noise characteristics from equipment and consideration of alternatives/mitigation based on test data and commissioning measurements;
- regular noise monitoring in Amcotts to establish any activities which result in noise levels above those that are predicted in the ES, including attended noise measurements where it is necessary to identify the contribution of loading and unloading activity noise levels;

- investigation of noise complaints and monitoring as required to identify potential causes and solutions; and

- regular visual monitoring/audit of equipment to identify if noise control equipment (covers/louvres/silencers etc) are in good condition and are being used appropriately to minimise noise levels.

5.5.17 In summary, significant noise impacts are predicted through ES Chapter 7 (**Document Reference 6.2.7**) and suitable mitigation and management measures are incorporated into the Project design to reduce these. Whilst this is the case, opportunities have been explored and taken with regard to the Project design to reduce the noise effect of the Project so far as feasible, in line with Paragraph 5.11.8 of NPS EN-1. Suitable measures in place include the implementation of the CEMP and adherence to a Noise Management Plan which will be developed and agreed with North Lincolnshire Council. These measures accord with the emphasis placed on noise mitigation by NPS EN-1 Paragraph 5.11.9. Any further mitigation measures will be explored during detailed design to seek to reduce predicted significant noise effects which are reported in the ES.

5.6 Ground Conditions, Contamination and Hydrology

5.6.1 Paragraph 4.10.3 of NPS EN-1 states that when considering applications for development consent decisions takers should focus on whether the development is an acceptable use of the land, and on the impacts of that use, rather than the control of processes, emissions or discharges themselves. Paragraph 4.10.3 continues that such decisions should work on the assumption that "relevant pollution control regime and other environmental regulatory regimes, including those on land drainage, water abstraction and biodiversity, will be properly applied and enforced by the relevant regulator".

5.6.2 On use of land, Paragraph 5.10.8 of NPS EN-1 states that applicants should seek to minimise impacts on the best and most versatile agricultural land (defined as land in grades 1, 2 and 3a of the Agricultural Land Classification) and preferably use land in areas of poorer quality (grades 3b, 4 and 5) except where this would be inconsistent with other sustainability considerations. Applicants should also identify any effects and seek to minimise impacts on soil quality taking into account any mitigation measures proposed. In terms of contamination, NPS EN-1 states that for developments on previously developed land, applicants should ensure that risks posed by land contamination are properly considered.

5.6.3 Paragraph 184 of the NPPF states that where a site is affected by contamination or land stability issues, "responsibility for securing a safe development rests with the developer and/or landowner". Paragraph 183 states that planning policies and decisions should also ensure that:

- a site is suitable for its proposed use taking account of ground conditions and any risks arising from land instability and contamination. This includes risks arising from natural hazards or former activities such as mining, and any proposals for mitigation including land remediation (as well as potential impacts on the natural environment arising from that remediation);

- after remediation, as a minimum, land should not be capable of being determined as contaminated land under Part IIA of the Environmental Protection Act 1990; and

- adequate site investigation information, prepared by a competent person, is presented.

5.6.4 ES Chapter 8 (**Document Reference 6.2.8**) considers ground conditions, contamination and hydrology. This Chapter concludes that during construction and demolition, a literature review of the baseline conditions within the study area indicated that the bulk of the Application Land poses a low risk to human health or controlled waters either during construction or operation. There were a number of small areas of potential contaminant sources identified at the northern end of the Energy Park Land (Flixborough Industrial Estate, historical tank farm) and the potential for more widespread soil contamination due to the Flixborough disaster.

5.6.5 An intrusive site investigation was undertaken on the Energy Park Land and the Southern DHPWN Land, targeting areas where potentially contaminated sources were identified during the Phase 1 site assessment, as well as to obtain baseline soil and groundwater data. No concentrations were recorded that were likely to significantly impact human health or controlled waters or indicated widespread soil or groundwater impact. However, it should be noted that access to the northern end of the Energy Park Land was limited and there may be unidentified sources in this area.

5.6.6 Low concentrations of asbestos fibres were identified at two locations in the made ground in the Wharf area. An asbestos management plan will be prepared and implemented at the pre-construction/construction phase to ensure no risk to human health on or offsite. This is secured by Requirement 4 of the draft DCO (**Document Reference 2.1**).

5.6.7 If contamination is encountered and removed/remediated during or prior to the construction of the Project, there will be a beneficial residual effect.

5.6.8 Monitoring of groundwater and surface water quality may be required under the Environmental Permitting Regulations before construction, during construction, and post-construction.

5.6.9 There were a number of access issues that prevented locations on the Railway Reinstatement Land being advanced. In addition, ground conditions at the northern end of the Energy Park Land resulted in refusal at three locations out of nine resulting in less-than-optimal data from this area for soil

or groundwater. A further detailed geotechnical investigation is planned. If required, further environmental samples will be obtained during this investigation to provide cover for previously inaccessible areas which will in turn inform the detailed design and development of the detailed CEMP.

5.6.10 In conclusion implementation of measures contained in the CoCP (**Document Reference 6.3.7**) (and subsequent detailed CEMP) will reduce any adverse effects on soils and groundwater (and human health) arising from either accidental spills or due to mobilisation/disturbance of previously unidentified sources to negligible significance.

5.6.11 Ground gas monitoring is ongoing across the Application Land as part of the site investigation. Preliminary results indicate that there may need to be some mitigation measures due to methane and carbon dioxide levels. Any necessary mitigation will be included in the detailed design once the ground gas monitoring has been completed pursuant to Requirement 3 of the draft DCO (**Document Reference 2.1**).

5.6.12 The site will be operated in accordance with the requirements of its Environmental Permit, which will include conditions and measures for the protection of soils and groundwater.

5.6.13 Monitoring of groundwater quality will be undertaken throughout the operational life of the Project to determine whether there are any operational impacts.

5.6.14 As such, the Project accords with NPS EN-1 as an acceptable use of the land, and also with NPPF Paragraph 184 by taking responsibility for contamination of the site. In summary therefore, the Project is in broad accordance with relevant policies relating to ground conditions and hydrology and that, through remediation of existing conditions and mitigation controls in place, no significant negative effects are anticipated.

5.7 Water Resources and Flood Risk

5.7.1 NPS EN-1 states, in Section 5.15, that “Infrastructure development can have adverse effects on the water environment including groundwater, inland surface water, transitional waters, and coastal waters”. An assessment of the existing conditions regarding water quality, water resources, and physical characteristics of the water environment and the impacts of a Project are required by NPS EN-1 Paragraph 5.15.2.

5.7.2 NPS EN-1 notes that activities that discharge to the water environment are subject to additional pollution controls and recommends that the SoS gives increased weight to impacts on the water environment that will have an adverse effect on the achievement of the objectives of the WFD in its decision-making (NPS EN-1 Paragraphs 5.15.4 – 5.15.5).

5.7.3 Paragraph 5.15.7 of NPS EN-1 states that: “The [Secretary of State] should consider whether appropriate requirements should be attached to any

development consent ... to mitigate adverse effects on the water environment."

5.7.4 In determining an application for development consent, Paragraph 5.7.9 of NPS EN-1 states that decision takers should be satisfied that where relevant:

- the application is supported by an appropriate FRA;
- the Sequential Test has been applied as part of site selection;
- a sequential approach has been applied at the site level to minimise risk by directing the most vulnerable uses to areas of lowest flood risk;
- the proposal is in line with any relevant national and local flood risk management strategy;
- priority has been given to the use of sustainable drainage systems (SuDs); and
- in flood risk areas the project is appropriately flood resilient and resistant, including safe access and escape routes where required, and that any residual risk can be safely managed over the lifetime of the development

5.7.5 NPS EN-3 Paragraph 2.3.3 states that:

"EfW generating stations may also require significant water resources, but are less likely to be proposed for coastal sites. For these proposals, applicants should consider, in particular, how the plant will be resilient to:

- increased risk of flooding; and
- increased risk of drought affecting river flows."

5.7.6 NPS EN-3 Paragraph 2.5.84 also states that the design of water cooling systems for EfW and biomass generating stations "will have additional impacts on water quality, abstraction and discharge".

5.7.7 Part 14 of the NPPF focuses upon adapting to and mitigating the effects of climate change and notes that the planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk. Paragraph 154 notes that new development should be planned for in ways that avoid increased vulnerability to impacts arising from climate change.

5.7.8 Paragraph 161 of the NPPF states that all development should apply a sequential, risk-based approach to the location of development – taking into account all sources of flood risk and the current and future impacts of climate change so as to avoid, where possible, flood risk to people and property. The NPPF also states that if it is not possible for development to be located

in areas with a lower risk of flooding (taking into account wider sustainable development objectives), the exception test may have to be applied.

5.7.9 Chapter 9 of the ES (**Document Reference 6.2.9**) considers water resources and flood risk. The baseline water environment of the Application Land has been described in detail as well as the principal receptors within hydraulic connection of the Project which have the potential to be affected by its construction, operation and decommissioning.

5.7.10 The construction and decommissioning activities of the Project have the potential to have adverse effects upon a number of agricultural drains and ditches within and downstream of the Application Land. No WFD water bodies will be affected.

5.7.11 With the implementation of the mitigation as set out in ES Chapter 9 (**Document Reference 6.2.9**), along with the measures set out in the CoCP (**Document reference 6.3.7**) (as developed into further detail in a CEMP and related plans at the pre-construction stage), the ES concludes that the effects of the construction and decommissioning of the Project will not result in any significant effects on flooding and the water environment other than one exception: moderate adverse effects on Lysaght's Drain are predicted temporarily during the construction works themselves. The ES also confirms that the CEMP will stipulate the necessary inspection and monitoring measures to demonstrate that mitigation measures are implemented properly, in a timely manner and work as anticipated.

5.7.12 In terms of the operational phase of the Project, and similarly with the implementation of the mitigation as set out in ES Chapter 9 (**Document Reference 6.2.9**), the ES concludes that the effects of Project operation will result in a significant effect at just one receptor and only during a breach scenario: the commercial building at Flixborough Wharf, located to the north of the Wharf. This building is currently used as a stockpile and storage warehouse. To manage the areas where the increase in flood risk has not been mitigated, it is proposed that a Flood Management Plan is developed for the Project. The plan would be used to primarily manage the increased depth and hazard identified in Zone B, port area, and to alert users of a potential flood event. Recommended measures include signing up to the EA flood warning alert system and Met Office weather forecasts and disseminating information from the visitor centre across the site using information boards, phone messaging and text messaging services. The proposed measures will be further developed as part of the wider Flood Management Plan in consultation with the local authority's emergency planners.

5.7.13 The details of this Flood Management Plan will be agreed with the Environment Agency and is secured by Requirement 12 in the draft DCO (**Document Reference 2.1**).

5.7.14 The Operational Environmental Management Plan (OEMP) (**Document Reference 6.3.8**) contains the necessary inspection and monitoring

measures to demonstrate that mitigation measures are implemented properly, in a timely manner and work as anticipated. As such the Project is within accordance with the policy objectives set by Section 5.15 of NPS EN-1 and Paragraphs 2.3.3 and 2.5.84 of NPS EN-3 specifically, as well as the NPPF, whereby appropriate mitigation is proposed to manage any anticipated negative effect on water resources and flood risk.

Sequential Test

5.7.15 The Applicant has undertaken a sequential approach to site selection in terms of flood risk, as required by paragraph 5.7.13 of NPS EN-1 which states:

5.7.16 "Preference should be given to locating projects in Flood Zone 1 in England or Zone A in Wales. If there is no reasonably available site in Flood Zone 1 or Zone A, then projects can be located in Flood Zone 2 or Zone B. If there is no reasonably available site in Flood Zones 1 or 2 or Zones A & B, then nationally significant energy infrastructure projects can be located in Flood Zone 3 or Zone C subject to the Exception Test." (our emphasis)

5.7.17 The Project Site falls predominantly within Flood Zone 3, benefiting from flood defences. There are also two small parts of the Application Land which fall within Flood Zone 1 - Zone J, the Northern District Heat and Private Wire Network and Zone K, Railway Reinstatement Land (please refer to Figures 4.2 and 5.1 in the Flood Risk Assessment (**Document Reference 6.3.3**).

5.7.18 The site for the ERF and CCUS facility, and a large part of the RHTF and CBMF, originally fell within a committed industrial site (CIN10) in the North Lincolnshire Local Plan 2003. This allocation was superseded by the Housing and Employment Allocations DPD (March 2016) on the basis that it was "part of an established employment area". The emerging Local Plan (Preferred Options, 2020), includes the same broad area within an "Existing Employment Area" (see purple outlined area at Figure 5.1 overleaf) which are safeguarded for employment uses. It is important therefore from a flood risk perspective that a large proportion of the principal development is located on an area that has been allocated for development.

Figure 5.1 Existing Employment Area boundary from Preferred Options Local Plan (2020)

5.7.19

5.7.20 A Strategic Flood Risk Assessment (SFRA) was carried out for the emerging Local Plan, although it notes that applications on the Flixborough Industrial Estate will need to be fully assessed on a site specific basis, given that the Environment Agency had expressed a lack of confidence in the outputs of the hydraulic model at this point, at the time that the SFRA was published (November 2021).

5.7.21 The part of the Site to the south of the Flixborough Industrial Estate falls within the Lincolnshire Lakes Area Action Plan (AAP) (2016) – see boundary on Figure 5.2 overleaf.

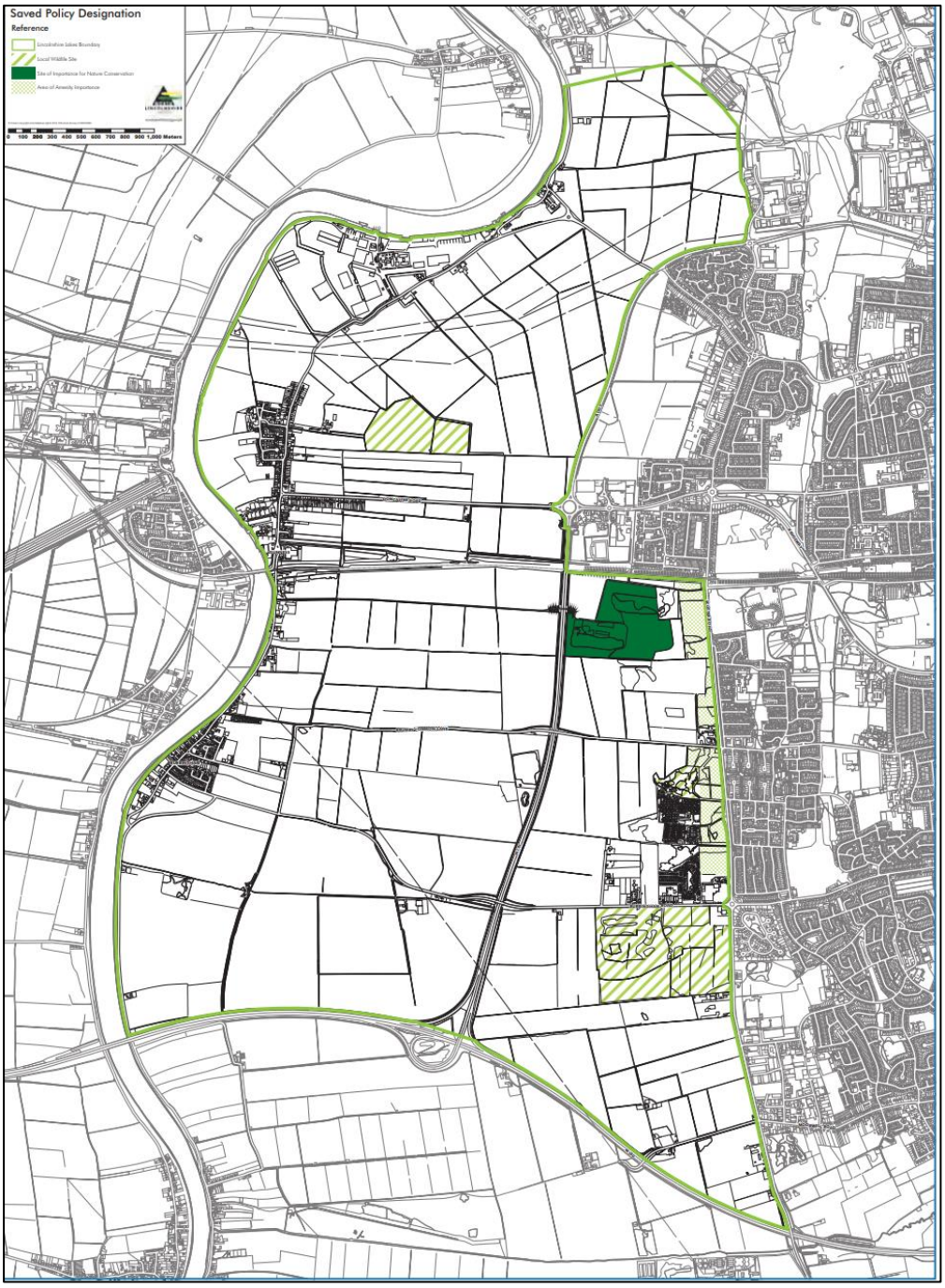
5.7.22 The AAP states with regard to flood risk (paragraph 3.10):

"In line with national policy, development of land at the highest risk of flooding should be avoided as far as possible, with a sequential approach taken to development. A strategic and sustainable solution to managing surface water run-off and drainage must form part of the AAP proposals."

5.7.23 It goes on to state (paragraph 4.75):

"The Council assessed their Core Strategy in line with the then required PPS25 Sequential Testing. The Council's 'Sequential Test of the Flood Risk of Potential Development Sites Final Report' (2010) concludes that only a limited supply of land is available for development in Flood Zone 1 and that in order to meet housing needs, there is a requirement for development in the Lincolnshire Lakes area."

Figure 5.2 Lincolnshire Lakes AAP Boundary



5.7.24 The AAP then proposes a flood risk mitigation strategy (Policy F1) which requires each applicant to provide a fully considered flood mitigation solution within a Flood Risk Assessment (FRA), following the principles established in the AAP.

5.7.25 The area to the south of the Flixborough Industrial Estate has therefore been seen as acceptable for development, through the Local Plan process, subject to detailed flood mitigation measures being applied.

5.7.26 Notwithstanding this, the application of the sequential test and exception test has been considered on a site-specific basis.

5.7.27 As stated in Chapter 3, section 9.4, of the Environmental Statement (**Document Reference 6.2.3**) the Applicant initially undertook a commercial site finding exercise for a suitable location for an ERF within the UK. Factors influencing commercial viability included the size of the site, the availability of refuse derived fuel sources, availability of a suitable grid connection, potential users of heat and power in the vicinity, proximity to existing ERFs, amount of waste within the region going to landfill, transport links, potential expansion area to include future best available techniques such as carbon capture and the willingness of landowners to enter into commercial negotiations. In this context, it should be noted that there are a limited number of sites that would be suitable for an ERF.

5.7.28 This exercise identified that there was a need for an ERF in the East Midlands and Yorkshire & Humber Region, which has the highest proportion of waste going to export or landfill in the UK.

5.7.29 The shortlisting exercise then identified only two potentially suitable and viable sites within this region, the British Steel Site and Scunthorpe and Flixborough Wharf. There are no other potentially suitable or viable sites within the region having regard to the factors identified above. In particular, accessibility/potential accessibility by sustainable modes was a key factor, with accessibility by river and rail being a key benefit of the Flixborough site.

5.7.30 The British Steel Site in Scunthorpe is located in Flood Zone 1, according to the Environment Agency Flood Zone mapping. It is therefore preferable from the perspective of the sequential test, however, as noted in Chapter 3 of the Environmental Statement, the landowners of the British Steel Site confirmed that the site was not available and therefore the Site is not considered to be reasonably available in the context of the policy test in NPS EN-1.

5.7.31 Although the Project Site is located predominantly in Flood Zone 3, it benefits from flood defences and its riverside location, as explained above, was also a key feature in its selection, in enabling potential access from the river, through the existing Wharf.

Exception Test

5.7.32 In terms of the Exception Test requirements in paragraph 5.7.16 of NPS EN-1:

- The Project provides wider sustainability benefits to the community through the removal of a significant volume of waste from landfill.

- A large proportion of the built elements of the Project Site is located on previously developed land and the part that is not benefits from a previously issued planning permission for development (Glanford Park) granted in May 1991 for an industrial business park, sewage

treatment plant and fire and ambulance station (determined under call-in procedure - reference YH5264/219/19 and LPA reference 7/1021/89). Whilst this permission had lapsed, there was some history of a very large-scale development proposal being viewed as acceptable on this part of the site.

- Those elements of the Project Site that are not on previously developed land have been reduced as far as possible through an iterative approach to design, with flood risk being the predominant factor influencing the siting of key elements on the Site.

- The layout has been sequentially adapted to ensure that it is entirely located in Flood Zone 1 and 3a (i.e. not within the functional floodplain).

- An FRA has been provided which demonstrates that the project is safe, without increasing flood risk elsewhere.

5.7.33 Further details on compliance with the Exception Test are provided in section 6 of the FRA (**Document Reference 6.3.3**).

5.7.34 The Project is also Essential Infrastructure, having regard to the definition in the NPPF, in that it has be to be located in a flood risk area for operational reasons, i.e. that it is providing power through the sustainable recovery of waste, reducing waste to landfill and is located in close proximity to an operational Wharf, offering the potential for more sustainable transport during construction and operation. As part of the Project, the Applicant is also proposing to reinstate the existing 6km Dragonby to Flixborough railway line serving the Wharf and construct a new railhead and sidings. The railway is essential infrastructure that can only be reinstated where it occurs and will facilitate the movement of materials at scale to and from the Project, reducing the need for movements by road.

5.8 Ecology and Nature Conservation

5.8.1 Section 5.3 of NPS EN-1 includes consideration of generic impacts for biodiversity and geological conservation, and which requires that applicants show how a Project has taken advantage of opportunities to 'conserve and enhance biodiversity and geological conservation interests' (NPS EN-1 Paragraph 5.3.4). NPS EN-1 Paragraph 5.3.6 requires that decision takers should take account of the context of the challenge of climate change and that failure to address this challenge will result in significant adverse impacts to biodiversity. Paragraph 5.3.6 recognises:

> "… the need to protect the most important biodiversity and geological conservation interests. The benefits of nationally significant low carbon energy infrastructure development may include benefits for biodiversity and geological conservation interests and these benefits may outweigh harm to these interests".

5.8.2 In this context Paragraph 5.3.7 of NPS EN-1 states that as a general principle development should aim to avoid 'significant harm to biodiversity and geological conservation interests, including through mitigation and consideration of reasonable alternatives; where significant harm cannot be avoided then NPS EN-1 requires that appropriate compensation measures should be sought. Paragraph 5.3.8 of NPS EN-1 requires that when making a decision on whether to grant development consent, that:

> *"…*appropriate weight is attached to designated sites of international, national and local importance; protected species; habitats and other species of principal importance for the conservation of biodiversity; and to biodiversity and geological interests within the wider environment*."*

5.8.3 On international sites, paragraph 4.3.1 confirms that prior to granting development consent, the SoS must, under the Habitats Regulations, consider whether the project may have a significant effect on a European site, or any site to which the same protection is applied as a matter of policy, either alone or in combination with other plans and projects. Furthermore, NPS EN-1 Paragraph 5.3.9 recognises that the most important sites for biodiversity are those identified through international conventions and European Directives.

5.8.4 Regarding Sites of Special Scientific Interest (SSSIs), Paragraph 5.3.11 states that:

> "Where a proposed development on land within or outside an SSSI is likely to have an adverse effect on an SSSI (either individually or in combination with other developments), development consent should not normally be granted. Where an adverse effect, after mitigation, on the site's notified special interest features is likely, an exception should only be made where the benefits (including need) of the development at this site, clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broader impacts on the national network of SSSIs"

5.8.5 On regional and local sites, NPS EN-1 Paragraph 5.3.13 states that:

> "Sites of regional and local biodiversity and geological interest, which include Regionally Important Geological Sites, Local Nature Reserves and Local Sites, have a fundamental role to play in meeting overall national biodiversity targets; contributing to the quality of life and the well-being of the community; and in supporting research and education. The IPC should give due consideration to such regional or local designations. However, given the need for new infrastructure, these designations should not be used in themselves to refuse development consent"*.*

5.8.6 On mitigation measures NPS EN-1 Paragraph 5.3.18 states that:

"The applicant should include appropriate mitigation measures as an integral part of the proposed development. In particular, the applicant should demonstrate that:

- during construction, they will seek to ensure that activities will be confined to the minimum areas required for the works;
- during construction and operation best practice will be followed to ensure that risk of disturbance or damage to species or habitats is minimised, including as a consequence of transport access arrangements;
- habitats will, where practicable, be restored after construction works have finished; and
- opportunities will be taken to enhance existing habitats and, where practicable, to create new habitats of value within the site landscaping proposals"

5.8.7 The NPPF accords with the direction of NPS EN-1 in relation to ecology and nature conservation matters. In particular, paragraph 180, part b reiterates that stated in paragraph 5.311 of NPS EN-1 development on land within or outside a SSSI, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest.

5.8.8 A Report to inform Habitats Regulations Assessment (HRA) has been prepared for the Project, the results of which are outlined in **Document Reference 5.9**. The report details that no European sites will be directly affected by the Project, but identifies the following five sites within 15km of the main emission source at the ERF: Humber Estuary Special Area of Conservation (SAC), Humber Estuary Special Protection Area (SPA), Humber Estuary Ramsar site, Thorne Moor SAC and Thorne and Hatfield Moors SPA.

5.8.9 With regards to Thorne Moor SAC and Thorne and Hatfield Moors SPA, the screening assessment determined that no likely significant effects are predicted on these sites. However, the screening assessment could not rule out the potential for significant effects at the Humber Estuary SAC / Ramsar site for the effects of NOx (24 hr), ammonia and nitrogen deposition (for Atlantic salt meadows and estuary habitat types). In addition, potential disturbance to mallard using functionally linked land associated with the Humber Estuary SPA could not be screened out. Further assessment was therefore required for the Humber Estuary SAC / Ramsar and the Humber Estuary SPA as part of the Appropriate Assessment (AA).

5.8.10 The AA is provided at section 5 of the Report to Inform Habitat Regulations Assessment (**Document Reference 5.9**) and concludes that there will be no adverse effects on site integrity at the Humber Estuary SAC, SPA or Ramsar site in terms of NOx (24 hour), ammonia and deposited nitrogen (for saltmarsh habitats).

5.8.11 In terms of in-combination effects, the HRA screening found that further assessment was required to assess the potential effects of operational emissions to air from the Project in-combination with operational emissions from the Keadby 2 Power Station Project and the Keadby 3 Low Carbon Gas Power Station Project. The assessment concluded that adverse effects on the integrity of the European sites are not predicted as a result of emissions to air and associated acid and nitrogen deposition in-combination with other developments.

5.8.12 ES Chapter 10 (**Document Reference 6.2.10**) presents a summary of findings from the desk-based study and a wide range of comprehensive field surveys completed up to and including April 2022.

5.8.13 Using this information, embedded mitigation has been incorporated into the construction and operational phases of the Project to minimise significant effects on important ecological features. Key ecological features identified by the assessment include the Humber Estuary Ramsar Site, SAC, SPA; nationally and locally designated sites; habitats of principal importance (including hedgerows and Lowland Calcareous Grassland); and legally protected and notable species (including water vole, GCN, badger, reptiles, bats, and birds).

5.8.14 Alongside embedded mitigation, other mitigation measures such as those outlined in the CoCP (**Document Reference 6.3.7**) and biodiversity enhancement measures have been taken into consideration when assessing residual effects on the designated sites in ES Chapter 10 (**Document Reference 6.2.10**). The CEMP (secured by Requirement 4 of the draft DCO, **Document Reference 2.1**) will include all measures to avoid impacts on designated sites, habitats of principal importance, other habitats of importance and protected/sensitive species.

5.8.15 Residual effects are considered not significant for the majority of ecological receptors. However significant residual adverse effects (at site level) have been assessed at Risby Warren SSSI and on Lowand Dry Acid Grassland HPI and Lowland Calceours Grassland HPI. Significant residual adverse effects on badger, breeding birds and migratory/wintering birds have also been assessed as adverse at a site level, due to the range of bird species present across the site and the presence of two main badger setts close to construction areas within the Energy Park Land and Railway Reinstatement Land. However, the design has incorporated the establishment of a range of habitats offering nesting, foraging and resting opportunities for a variety of bird species and the installation and monitoring of a badger tunnel beneath the new access road. The successful implementation of these measures will ensure impacts are minimised and effects are restricted to a site level only.

5.8.16 Residual effects for pond, wetland and watercourses are considered to be beneficial at a site level, due to the small amount of habitat to be lost in comparison to the extensive areas of proposed new wetland east of the River Trent.

5.8.17 The ES includes details of the target for a minimum of 10% net-gain of biodiversity. Whilst achieving biodiversity net-gain is not currently a policy requirement for NSIP projects, use of the Defra Metric 3.0 has demonstrated the Project can achieve this through minimising loss, habitat creation, reinstatement, and enhancement of habitats. Overall, there is potential for mitigation, compensation, enhancement to deliver an overall positive impact for wildlife, which would be secured through Requirement 7 of the draft DCO (**Document Reference 2.1**).

5.8.18 In summary, the Project sits in broad accordance with NPS EN-1 Section 5.3 by protecting the most important sites of biodiversity, geological and conservation interests, including designated sites of international, national and local importance and protected species in accordance with NPS EN-1 Paragraphs 5.3.4 and 5.3.8. Where negative impacts are anticipated, appropriate mitigation and compensation measures are proposed, including through the adoption of a CoCP and subsequent CEMP which will manage and reduce negative effects in line with NPS EN-1 Paragraph 5.3.18.

5.8.19 Whilst significant adverse effects are assessed at Risby Warren SSSI (air quality monitoring concluded that there will be slight exceedances of the critical level/load thresholds of insignificance of ammonia, nitrogen and acid deposition), this is at site level only. It is considered the benefits and need of the Project (as outlined in Section 4 and Section 7.2 of this Planning Statement) clearly outweigh the impacts on the features of the site that make it of special scientific interest, particularly given that the SSSI is already significantly affected by current levels of atmospheric pollution outside of the control of the Project and the significant adverse effects predicated are based on a worse-case scenario The Project is therefore considered to comply with paragraph 5.3.11 of NPS EN-1 and paragraph 180 of the NPPF.

5.9 Landscape and Visual Impact

5.9.1 NPS EN-1 Paragraph 5.9.16 requires that decision takers consider whether any adverse impact is temporary, such as during construction, and/or whether any adverse impact on the landscape will be capable of being reversed in a reasonable timescale. Paragraph 5.9.17 of NPS EN-1 also requires that decision takers consider whether the Project has been designed carefully, taking account of environmental effects on the landscape and siting, operational and other relevant constraints, to minimise harm to the landscape, including by reasonable mitigation.

5.9.2 In terms of visual impact, NPS EN-1 Paragraph 5.9.18 requires decision takers to judge whether the visual effects on sensitive receptors, such as local residents, and other receptors, such as visitors to the local area, outweigh the benefits of the Project overall.

5.9.3 Good design is supported by both NPS EN-1 (Section 4.5) and NPS EN-3 (Section 2.4), in essence both documents support good design in infrastructure Projects in respect of landscape and visual amenity, and in the design of the Project to mitigate impacts such as noise and effects on ecology (NPS EN-3 Paragraph 2.4.2).

5.9.4 Mitigation of landscape and visual effect is supported by Paragraphs 5.9.21 – 5.9.23 of NPS EN-1, including:

- Reducing the scale of a project to mitigate the visual and landscape effects of a proposed project. (Paragraph 5.9.21)
- Within a defined site, adverse landscape and visual effects may be minimised through appropriate siting of infrastructure within that site, design including colours and materials, and landscaping schemes, depending on the size and type of the proposed project. (Paragraph 5.9.22)
- Depending on the topography of the surrounding terrain and areas of population it may be appropriate to undertake landscaping off site. For example, filling in gaps in existing tree and hedge lines would mitigate the impact when viewed from a more distant vista. (Paragraph 5.9.23)

5.9.5 Amongst other matters, paragraph 174 of the NPPF seeks to ensure development proposals contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes.

5.9.6 The Design and Access Statement (DAS) (**Document Reference 5.3**) provides an explanation of how the design of the Project has evolved in the lead-up to submission of the Application. Furthermore, the individual chapters of the ES explain how the Project has been designed, including the mitigation embedded in its design, to minimise and mitigate impacts. The principles built into the illustrative design are set out in the Design Principles and Codes Document (**Document Reference 5.12**), compliance with which is secured by Requirement 3 in the draft DCO (**Document Reference 2.1**).

5.9.7 ES Chapter 11 (**Document Reference 6.2.11**) concludes that the Project would have a major adverse (significant) effect on the landscape character of the Application Land during construction, reducing to moderate adverse (significant) during the operational stage. During construction, adverse effects on landscape character would arise from the presence of construction activity having an incongruous influence. Unlike the operational stage, construction effects would be both reversible and of short duration. The Project would represent a change in landscape character and land use across the Energy Park Land, in a context of a partly industrialised location where the existing Flixborough Industrial Estate forms a key element of the landscape. Over time, landscape mitigation would mature and integrate the development into the landscape, reducing effects on the landscape of the Energy Park Land to minor adverse (not significant).

5.9.8 Effects on the landscape character of Flat Drained Farmland LCT and Industrial Landscape LCT (Trent Levels LCA) are judged to be moderate adverse (significant) in both the construction and operational (year 1) stages. Moderate adverse (significant) effects are also predicted for Steep Wooded Scarp LCT and Despoiled Landscape LCT (Lincolnshire Edge LCA) during construction and year 1 of operation. The landscape mitigation included as part of the Project would provide a degree of landscape integration by year 15, reducing effects on all LCTs to minor adverse (not significant).

5.9.9 In terms of effect on visual amenity, views of the Project have been considered within the Visual Study Area (7.5km radius) and evaluated at 11 representative locations. A ZTV based on assumed maximum parameters for the Project suggests that views would be obtainable from most of the Visual Study Area. Long range views would be largely available from the western portion of the Visual Study Area, and closer views from land lying close to the River Trent. Vegetation and buildings within Scunthorpe will screen views of the Project, restricting the availability of views to the east and southeast. Localised screening is also provided by the undulating topography associated with the ironstone and limestone scarps to the east.

5.9.10 The assessment identifies major adverse effects, albeit temporary and reversible, during construction for receptors with short viewing distances or characterised by a lack of mature intervening vegetation. Major adverse (significant) levels of effect are predicted at the construction phase for viewpoints 1 and 2, within Amcotts and Flixborough respectively, due to their short viewing distances. Moderate adverse (significant) effects at the construction phase are also identified at Viewpoints 3, 4, 5, 7, 8, and 11, none of which are more than 4km from the Order Limits.

5.9.11 At year 1 of the operational stage, effects are predicted to be major (significant) at Viewpoints 1 and 2, and moderate (significant) at Viewpoints 3, 4 and 11 (all within 2km). At more distant Viewpoints, year 1 effects are predicted to be minor (not significant). Operational stage effects are primarily attributable to the largest Project elements; the ERF its stack, and to a lesser extent the RHTF/CBMF and PRF buildings. Other elements of the Project would have lesser or more localised effects on views.

5.9.12 The incremental growth of intervening vegetation and landscape mitigation planting indicates that visual effects would reduce to minor adverse (not significant) at year 15 at all viewpoints with the exception of Viewpoint 1 (major at year 15) and Viewpoint 2 (moderate at year 15).

5.9.13 Overall significant visual impacts are identified for the Project from construction through to year 15 from some viewpoints. A series of mitigation measures are proposed to reduce negative effects identified in the ES, these are set out at in detail at ES Chapter 11 (**Document Reference 6.2.11**) and include landscape mitigation planting to reduce significant effects over the 15 year post-construction period. Such measures sit in accordance with Paragraphs 5.9.21 – 5.9.23 of NPS EN-1, including through detailed Project

design. Significant effects are only predicted to remain after year 15 at two Viewpoints (Viewpoints 1 and 2 at Amcotts and Flixborough respectively).

5.9.14 Paragraph 5.9.18 of NPS EN-1 recognises that all proposed energy infrastructure is likely to have visual effects for receptors around proposed sites. Whilst the applicant accepts the Project will result in a residual negative effect, in response to the need to consider landscape and visual harm versus benefits (outlined in paragraphs 5.9.15 and 5.9.18 of NPS EN-1), on balance it is considered that this does not outweigh the significant national and regional benefits of the Project overall.

5.9.15 The Applicant considers that the Project has been designed carefully, taking account of environmental effects on the landscape and siting, operational and other relevant constraints, to minimise harm to the landscape, including by reasonable mitigation in accordance with NPS EN-1 Paragraph 5.9.17. Opportunities have been taken to minimise the visual impact of the Project by locating the built elements primarily within the existing Flixborough Industrial Estate and providing landscaping where appropriate. Proposed mitigation reduces all significant adverse effects on landscape character and visual amenity by year 15, with the exception of just 2 Viewpoints.

5.10 Archaeology and Cultural Heritage

5.10.1 Paragraph 5.8.1 of NPS EN-1 recognises that the construction, operation and decommissioning of energy infrastructure has the potential to result in adverse impacts on the historic environment.

5.10.2 Paragraph 5.8.11 of NPS EN-1 confirms that decision makers should seek to identify and assess the particular significance of any heritage asset that may be affected by the proposed development, including by development affecting the setting of a heritage asset, taking account of:

- evidence provided with the application;
- any designation records;
- the Historic Environment Record, and similar sources of information
- the heritage assets themselves;
- the outcome of consultations with interested parties; and
- where appropriate and when the need to understand the significance of the heritage asset demands it, expert advice.

5.10.3 In considering the impact of a proposed development on any heritage assets, decisions should take into account the particular nature of the significance of the heritage assets and the value that they hold for this and future generations. This understanding should be used to avoid or minimise

conflict between conservation of that significance and proposals for development (NPS EN-1 Paragraph 5.8.12).

5.10.4 NPS EN-1 Paragraph 5.8.14 confirms that there should be a presumption in favour of the conservation of designated heritage assets and the more significant the designated heritage asset, the greater the presumption in favour of its conservation should be. It goes on to state that: "*Once lost heritage assets cannot be replaced and their loss has a cultural, environmental, economic and social impact. Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. Loss affecting any designated heritage asset resulting from its alteration or development in its setting should require clear and convincing justification*."

5.10.5 NPS EN-1 paragraph 5.8.15 states that "Where the application will lead to substantial harm to or total loss of significance of a designated heritage asset the IPC (now the Secretary of State) should refuse consent unless it can be demonstrated that the substantial harm to or loss of significance is necessary in order to deliver substantial public benefits that outweigh that loss or harm."

5.10.6 Paragraph 5.8.17 continues that where loss of significance of any heritage asset is justified on the merits of the new development, decisions should consider imposition of a condition on the consent or requiring the applicant to enter into an obligation that will prevent the loss occurring until it is reasonably certain that the relevant part of the development is to proceed.

5.10.7 The NPPF and its supporting guidance in the NPPG provide more up to date policy than NPS EN-1 with regard to the assessment of harm. Paragraphs 199 to 203 of the NPPF introduce the concept that heritage assets can be harmed or lost through alteration, destruction or development within their setting and identify that this harm ranges from less than substantial through to substantial. Paragraph 201 of the NPPF has the same direction to refuse consent where a proposed development will lead to substantial harm to (or total loss of significance of) a designated heritage asset as NPS EN-1 paragraph 5.8.15.

5.10.8 Chapter 12 of the ES (**Document Reference 6.2.12**) considers the archaeology and cultural heritage effects of the Project and notes that the results of desk-based analysis, geoarchaeological and geophysical surveys have revealed extensive evidence for archaeological remains in the vicinity of the Project, with a particular concentration on the eastern slopes of the Trent Valley.

5.10.9 Significant physical effects have been identified on the following heritage assets:

- deep sequences of organic deposits of probable prehistoric date (with potential to contain associated archaeology) on the site of the ERF

deep fuel bunker, as well as the footprints of the concrete block and plastic recycling facilities;

- the site of a World War 2 searchlight near Neap House, and;
- archaeological features identified by desk-based analysis and geophysical survey on the site of the proposed Gas AGI/substation site to the east of Flixborough Industrial Estate.

5.10.10 In addition, the construction of the ERF will have a significant effect on the setting of the 'Flixborough Nunnery' scheduled monument.

5.10.11 A significant effect is also assessed for the Axholme Fens HLCA.

5.10.12 In line with NPS EN-1 Paragraph 5.8.14 and Paragraph 202 of the NPPF, and as detailed in paragraph 9.3.1.4 of ES Chapter 12 (**Document Reference 6.2.12**), these effects are considered to constitute less than substantial harm.

5.10.13 Archaeological mitigation will include two areas of controlled archaeological excavations, including at the likely medieval and post medieval structures close at the ERF and the archaeologically sensitive sand deposits at the substation and Gas AGI to the east of Flixborough Industrial Estate. Substantial archaeological watching briefs will also be required in a number of areas. Close monitoring of the excavation of the ERF's deep bunker hall with special provision for environmental sampling is also proposed.

5.10.14 In addition, a programme of public engagement to communicate the results of archaeological field investigation will be undertaken to enhance public understanding and appreciation of the historic environment.

5.10.15 Significant Project impacts are identified in archaeological and cultural heritage terms and mitigation measures are proposed to manage these impacts during construction. Despite these measures being in place negative effects are still identified. As such it is important to weigh the harm against the public benefits of the development in accordance with Paragraph 5.8.15 of NPS EN-1 which states "*Any harmful impact on the significance of a designated heritage asset should be weighed against the public benefit of development, recognising that the greater the harm to the significance of the heritage asset the greater the justification will be needed for any loss*".

5.10.16 Section 4 and Section 7.2 of this Planning Statement summarise the significant public benefits and need for the Project in relation to urgently delivering low carbon renewable energy to meet the aim of decarbonising the UK's electricity supplies by 2050; providing security of supply as well as affordability for end consumers. In summary, the significant public benefits of the Project outweigh the significant effects identified to designated heritage assets during the stages of the Project's time limited lifetime.

5.11 Traffic and Transport

5.11.1 Section 5.13 of NPS EN-1 relates to traffic and transport matters and notes that the transport of materials, goods and personnel to and from a development during all Project phases can have a variety of impacts on the surrounding transport infrastructure and potentially on connecting transport networks, for example through increased congestion (Paragraph 5.13.1).

5.11.2 NPS EN-1 also states that where appropriate, the applicant should prepare a travel plan including demand management measures to mitigate transport impacts. The applicant should also provide details of proposed measures to improve access by public transport, walking and cycling, to reduce the need for parking associated with the proposal and to mitigate transport impacts (Paragraph 5.13.4).

5.11.3 Paragraph 5.13.6 of NPS EN-1 requires that decision takers consider how a new energy NSIP may give rise to substantial impacts on the surrounding transport infrastructure and how an applicant has sought to mitigate these impacts, including during the construction phase of the development. Where the proposed mitigation measures are insufficient to reduce the impact on the transport infrastructure to acceptable levels, the mitigation of adverse impacts on transport networks arising from the development should be considered. Paragraph 5.13.7 continues that "Provided that the applicant is willing to enter into planning obligations or requirements can be imposed to mitigate transport impacts… then development consent should not be withheld, and appropriately limited weight should be applied to residual effects on the surrounding transport infrastructure".

5.11.4 A series of potential traffic and transport mitigations are listed at NPS EN-1 Paragraphs 5.13.8 – 5.13.12 as below:

- Demand management measures (Paragraph 5.13.8) and their cost effectiveness (Paragraph 5.13.9)
- Water-borne or rail transport preference over road transport (Paragraph 5.13.10)
- DCO Requirements (Paragraph 5.13.11) on:
    - Control number of HGV movements to and from site during construction, and possibly routing of such movements
    - Sufficient provision for HGV parking onside or elsewhere
    - Satisfactory arrangements for reasonably foreseeable abnormal disruption

5.11.5 On transport infrastructure, Paragraph 2.5.24 of NPS EN-3 notes that energy from waste generating stations are likely to generate a large number of heavy goods vehicle (HGV) movements per day to import the fuel. As such

NPS EN-3 Paragraph 2.5.25 encourages “multi-modal transport” and that decision takers should expect materials to be transported by “water or rail routes where possible”. NPS EN-3 also requires that applicants should locate new biomass or waste combustion generating stations in the vicinity of existing transport routes wherever possible.

5.11.6 Part 9 of the NPPF is aimed at facilitating more sustainable transport choices within new developments, and encourages opportunities from existing infrastructure and changing transport technology and usage to be realised. Paragraph 113 states that all developments that will generate a significant amount of movement should be required to provide a travel plan and the application should be supported by a Transport Statement/ Assessment to the proposal can be assessed.

5.11.7 ES Chapter 13 (**Document Reference 6.2.13**) considers traffic and transport, within which it concludes that during demolition and Project construction, the assessment has demonstrated that there will be no significant effects on traffic and transport as a result of the Project, assuming that the outline Construction Logistics Plan (CLP) (Appendix D to ES Chapter 13 - **Document Reference: 6.2.13**) and the measures contained therein are implemented (including those to be developed such as the Construction Traffic Management Plan (CTMP) and Construction Workers Travel Plan (CWTP)).

5.11.8 The change in traffic flows during construction would result in a temporary adverse effect of minor significance to driver delay and negligible significance on severance, highway safety and pedestrian / cycle amenity and delay.

5.11.9 The outline CLP (Appendix D to ES Chapter 13 - **Document Reference: 6.2.13**) will provide the mechanism for delivery of mitigation relating to all types of freight vehicles to and from the Project during construction; with the aim of improving the safety and reliability of deliveries to the Project and minimising the environmental impact. The use of river /rail modes during construction will continue to be explored during detailed logistics planning as the Project develops, which would be favourable from an environmental perspective as it would replace a large amount of road traffic.

5.11.10 No further measures are required beyond implementation of the outline CLP from a transport perspective. The preparation and implementation of the detailed CTMP and CWTP (which will be in accordance with the outline CLP) is secured by Requirement 10 in the draft DCO (**Document Reference 2.1**).

5.11.11 Following construction and during Project operation, no significant adverse effects resulting from the Project have been identified.

5.11.12 In terms of non-motorised users (severance, pedestrian / cycle amenity and delay), a beneficial effect of moderate significance has been identified due to the increase in walking and cycle trips being mitigated through proposed

improvements to pedestrian/cycle accessibility at the Project and surrounding area as well as to the public realm areas within the Project.

5.11.13 In terms of motorised road users (driver delay) on the B1216 Ferry Road West (east of the New Access Rd) and Ferry West Road (east of A1077), an adverse effect is predicted of minor significance due to the increase in traffic movements. The significance of the effect on all other highway links is shown to be negligible.

5.11.14 While no quantitative analysis can be undertaken to determine the overall effect of a Travel Plan for a site such as this is likely to have a beneficial effect on influencing sustainable travel modes. By encouraging employees to travel by active and sustainable modes, this would subsequently lead to a potential reduction in vehicle trips and thus, potentially reduce the impact on the highway network. The potential use of rail and river modes to transport operational freight would also seek to reduce the number of road trips.

5.11.15 By encouraging employees to travel by active and sustainable modes, this would subsequently lead to a potential reduction of any impacts on the highway network.

5.11.16 Against the policy requirements of NPS EN-1 and NPS EN-3, the Project is in broad accordance with national policy with regards to traffic and transport. With suitable mitigation proposed through the outline CLP (Appendix D to ES Chapter 13, **Document Reference 6.2.13**) but importantly through Project design which, utilising multi-modal and non-road methods of transport, accords with the thrust of national policy (NPS EN-3 Paragraph 2.5.25 and NPS EN-1 Paragraphs 5.13.8 – 5.13.12).

5.11.17 The Project is in broad accordance with the NPPF through provision of a Travel Plan (Appendix C of ES Chapter 13, **Document Reference 6.2.13**), encouraging sustainable travel modes, and the potential use of rail and river modes to transport operational freight. There will be no significant effects to traffic/transport during demolition and construction through implementation of the outline CLP.

5.11.18 On balance, and considering the conclusions of ES Chapter 13 (**Document Reference 6.2.13**) on the magnitude of traffic and transport impact and mitigations through the CLP, the Project accords with the decision taking emphasis as set by Paragraph 5.13.6 and 5.13.7 of NPS EN-1, weighing positively on the balance of planning considerations overall and in support of development consent being granted.

5.12 Economic, Community and Land Use

5.12.1 NPS EN-1 Paragraph 2.1.2 recognises that energy is vital to economic prosperity and social well-being and thus establishes that it is important to ensure that the UK has ‘secure and affordable energy’.

5.12.2 Whilst there is no specific guidance related to socio-economic assessment in NPS EN-3, Section 5.12 of NPS EN-1 covers socio economic matters and notes at Paragraph 5.12.1 that the construction, operation and decommissioning of energy infrastructure may have socio-economic impacts at local and regional levels.

5.12.3 In terms of decision making NPS EN-1 Paragraph 2.12.6 requires that decision makers should have regard to the potential socio-economic impacts of new energy infrastructure and any other sources which may be both relevant and important to a decision. Paragraph 2.12.8 continues by stating that decision makers should consider any relevant positive provisions the developer has made or is proposing to make to mitigate impacts (for example through planning obligations) and any legacy benefits that may arise.

5.12.4 Part 2 of the updated 2021 draft of NPS EN-1 re-emphasises the importance of the security of supply of energy and that decarbonising the energy system will necessitate a significant amount of energy infrastructure, both large and small-scale contributing to the ambition to support jobs in the UK's clean energy industry and local supply chains.

5.12.5 Part 6 of the NPPF confirms that the significant weight should be placed on the need to support economic growth and productivity, recognising and addressing specific locational requirements of different sectors. The Government are committed to securing economic growth to addresses challenges of the future.

5.12.6 Chapter 14 (**Document Reference 6.2.14**) of the ES considers the impact of the Project in economic, community and land use terms, concluding that during construction and in terms of employment and economic activity, there are likely to be beneficial significant effects as a result of the Project. An estimated 2940 net FTE jobs over the whole of the construction phase of the Project will benefit the area, supported through the implementation of an Employment and Skills Policy. There will be a net economic impact of £140.1m spread across the six-year construction period.

5.12.7 There will however be a temporary significant effect on the businesses at Wharfside Court unless suitable alternative premises can be agreed. Discussions regarding re-location opportunities are on-going between the Applicant and the affected businesses on Wharfside Court.

5.12.8 In terms of communities and social infrastructure, there are no community resources considered likely to experience significant direct effects during the construction of the Project and demand for local services will not be significant. No significant in-combination effects have been identified.

5.12.9 No direct adverse effects on public rights of way or open space have been identified, alongside no significant adverse effects on agricultural land during construction. No significant in-combination effects have been identified regarding these matters either.

5.12.10 During operation and in terms of effect on employment and economic activity, there are likely to be beneficial significant effects as a result of the development. An estimated 175 net FTE jobs will be created as a result of the Project with a net economic impact of £8.34m per annum, supported through the implementation of an Employment and Skills Policy and training and education opportunities.

5.12.11 During operation there are no community resources considered likely to experience significant direct effects during the operation of the Project and demand for local services will not be significant.

5.12.12 There are no public rights of way considered likely to experience direct effects during the operation of the Project. The creation of new paths and public access represents a moderate positive benefit, which is significant. Similarly, there are no areas of open space considered likely to experience direct effects during the operation of the Project. Overall, there will be a moderate positive benefit associated with access to increased areas of open space, which is significant. No direct operational effects on recreational facilities are anticipated.

5.12.13 During operation, no significant adverse effects on agricultural land have been identified.

5.12.14 Overall the Project is anticipated to have a number of significant positive benefits, namely in relation to employment and economic activity during both the construction and operational phases. There are also positive impacts anticipated for public rights of way and open space during operation. The limited negative effects will be managed through mitigation and measures incorporated during detailed design of the works. The overall positive economic and social impacts of the Project sit in accordance with the broad emphasis of NPS EN-1 on job creation and energy generation, and the NPPF, which supports economic growth (in particular when it supports innovation). This weighs positively on the balance of planning considerations overall and in support of development consent being granted.

5.13 Waste

5.13.1 Waste policy is discussed in detail at Section 3.5 of this Planning Statement much of which is relevant to the consideration of waste generated by the Project as much as it is against the energy from waste proposal itself. Section 5.14 of NPS EN-1 covers waste from an NPS perspective and which supports the waste hierarchy (NPS EN-1 Paragraph 5.14.2) for sustainable waste management including:

> a) prevention; b) preparing for reuse; c) recycling; d) other recovery, including energy recovery; and e) disposal.

5.13.2 Paragraph 5.14.4 of NPS EN-1 recognises that all large infrastructure projects have the potential to generate waste, often hazardous in nature, but that this can be controlled through the Environmental Permitting (EP) regime

which incorporates operational waste management requirements for certain activities.

5.13.3 In terms of decision taking, NPS EN-1 Paragraph 5.14.7 requires that decision takers should consider the extent to which the applicant has proposed an effective system for managing waste arising from the construction, operation and decommissioning of the proposed development and should be satisfied that:

- any such waste will be properly managed, both on-site and off-site;
- the waste from the proposed facility can be dealt with appropriately by the waste infrastructure which is, or is likely to be, available. Such waste arisings should not have an adverse effect on the capacity of existing waste management facilities to deal with other waste arisings in the area; and
- adequate steps have been taken to minimise the volume of waste arisings, and of the volume of waste arisings sent to disposal, except where that is the best overall environmental outcome.

5.13.4 NPS EN-1 Paragraph 5.14.8 notes that where necessary decision takers should use requirements or obligations to ensure that appropriate measures for waste management are applied.

5.13.5 NPS EN-3 Paragraph 2.5.83 concerns decision taking relating to the management of combustion residues, stating that:

> The environmental burdens associated with the management of combustion residues can be mitigated through recovery of secondary products, for example aggregate or fertiliser, rather than disposal to landfill. The IPC should give substantial positive weight to development proposals that have a realistic prospect of recovering these materials. The primary management route for fly ash is hazardous waste landfill. However, there may be opportunities to reuse this material for example in the stabilisation of industrial waste. The management of hazardous waste will be considered by the EA through the Environmental Permitting regime.

5.13.6 ES Chapter 15 (**Document Reference 6.2.15**) contains the full assessment of waste matters related to the Project. This assessment concludes that the greatest potential impacts regarding waste management will be during the construction phases from site preparation, excavation and potential encounters with contaminated materials.

5.13.7 The implementation of measures contained in the construction Waste Management Plan (WMP) (secured by Requirement 4 of the draft DCO, **Document Reference 2.1**) and best practice measures related to waste management as outlined in Section 7 of ES Chapter 15 (**Document Reference 6.2.15**) will mitigate the majority of effects from the construction

phase. Addressing issues associated with encountering contaminate materials will be addressed through the CoCP and the outline Remediation Strategy (Appendix C of the CoCP**, Document Reference 6.3.7**).

5.13.8 There has been no allowance made at this stage of the assessment for re-use and recycling of materials from the demolition of the buildings and structures. Assessment at the time of construction will be required within the CoCP and Construction WMP to establish the amount of non-hazardous and inert waste, which will arise from demolitions and can be recovered and reused to further reduce the volumes of waste removed from site.

5.13.9 As construction methods are further developed, the aim will be to maximise the balancing of cut and fill so that possible inert and non-hazardous material from site clearance and excavations can be stockpiled and reused to reduce the use of imported material to backfill foundations and minimise the volumes removed from site.

5.13.10 Waste arising from Project construction activities that cannot be recovered will be managed by local waste management facilities. The waste arising will be minimal and spread across a long period to ease capacity issues on existing infrastructure.

5.13.11 As there is further potential to apply the waste hierarchy and likely to be no significant effects on existing waste management capacity, alongside mitigation proposed, there will be no significant effects associated with construction waste management.

5.13.12 Monitoring will be undertaken as a normal part of the construction WMP and is secured by Requirement 4 of the draft DCO (**Document Reference 2.1**).

5.13.13 During the operational phase of the Project, any likely negative effects that have been identified as potentially occurring are considered not significant. In short, with proposed mitigation in place and the requirement to operate within the conditions of an Environmental Permit, there will be no significant waste management effect during operation. Monitoring will also be undertaken during operation in accordance with an Environmental Permit.

5.13.14 In summary of the impacts of the Project on waste, there are no significant negative effect anticipated either during construction or operation. Furthermore the waste generated by the Project will be managed through a Construction WMP, in accordance with the CoCP, to reduce and reuse waste generated during construction, in line with the waste hierarchy set out at NPS EN-1 Paragraph 5.14.2 and the decision taking emphasis under NPS EN-1 Paragraph 5.14.7. During operation the Project will operate within the conditions of an Environmental Permit (NPS EN-1 Paragraph 5.14.4, NPS EN-3 Paragraph 2.5.83) and any negative effects are not significant.

5.13.15 The Project accords with Section 2.5 (Paragraph 2.5.2) of NPS EN-3 which confirms that the recovery of energy from the combustion of waste, where in

accordance with the waste hierarchy, will play an increasingly important role in meeting the UK's energy needs.

5.13.16 With the above policy accordance on waste hierarchy, construction and operational waste management, the effect of waste matters on the planning balance is strong and positive overall.

5.14 Major Accidents and Hazards

5.14.1 Section 4.11 of NPS EN-1 concerns safety and specifies that the Health and Safety Executive is responsible for enforcing a range of occupational health and safety legislation some of which is relevant to the construction, operation and decommissioning of energy infrastructure.

5.14.2 The NPPF provides considerations for Major Accidents and Disasters assessment. Paragraph 45 requires that:

> "Local planning authorities should consult the appropriate bodies when considering applications for the siting of, or changes to, major hazard sites, installations or pipelines, or for development around them".

5.14.3 Paragraph 97 notes that decisions:

> "should promote public safety and take into account wider security and defence requirements by … anticipating and addressing possible malicious threats and natural hazards, especially in locations where large numbers of people are expected to congregate…this includes appropriate and proportionate steps that can be taken to reduce vulnerability, increase resilience and ensure public safety and security."

5.14.4 The Hazard Identification study within ES Chapter 16 (**Document Reference 6.2.16**) demonstrate that with the mitigation measures committed to by the Project in place, there are no residual risks in the 'Extreme risk' category. Therefore, all Major Accident Hazards can be judged to be 'Tolerable if as low as reasonably possible (ALARP)' or 'Broadly Acceptable'.

5.14.5 This assessment is a review based on information available at this stage and has adopted a worst-case approach. As is normal practice, further hazard and risk analysis will be undertaken throughout the lifecycle of the Project in accordance with the requirements of applicable legislation and industry good practice guidance, to ensure risks continue to be managed to a level that is considered ALARP during the detailed design, construction planning and operation of the Project.

5.14.6 As such, the Project is in-line with major accident and hazard planning policy requirements.

5.15 Health

5.15.1 NPS EN-1 Paragraph 4.13.1 states that energy production has the potential to impact on the health and well-being of the population, whilst confirming that access to energy is beneficial to society and to health as a whole.

5.15.2 Paragraph 4.13.5 of NPS EN-1 confirms that generally those aspects of energy infrastructure which are most likely to have a significantly detrimental impact on health, are subject to separate regulation (for example for air pollution) which will constitute effective mitigation of them, so that it is unlikely that health concerns will either constitute a reason to refuse consent or require specific mitigation under the 2008 Act. However, decision makers will want to take account of health concerns when setting requirements relating to a range of impacts such as noise.

5.15.3 NPS EN-3 confirms, albeit on air quality specifically, that where a proposed waste combustion generating station meets the requirements of WID and will not exceed the local air quality standards, decision takers should not regard the proposed waste generating station as having adverse impacts on health.

5.15.4 Section 2.10 of the NPS EN-5 focuses on the potential health effects of Electric and Magnetic Fields (EMFs), with an emphasis on the effects of overhead higher voltage (400 and 275 kV) lines. NPS EN-5 goes on to state in paragraph 2.10.12: “Undergrounding of a line would reduce the level of EMFs experienced, but high magnetic field levels may still occur immediately above the cable. It is not the Government’s policy that power lines should be undergrounded solely for the purpose of reducing exposure to EMFs.

5.15.5 Part 8 of the NPPF, and in particular Paragraph 82, focuses on the promotion of health, inclusive and safe places. The NPPF specifies the requirement to “ensure that permitted and proposed operations do not have unacceptable adverse impacts on the natural and historic environment or human health, taking into account the cumulative effects of multiple impacts from individual sites and/or a number of sites in a locality” (Paragraph 210).

5.15.6 In terms of EMF’s, ES Chapter 17 (**Document Reference 6.2.17**) explains that the electric cables for the DHPWNs will be buried throughout their length and will operate at a voltage of 11 or 33 kV. The routes of the DHPWNs involve burial predominantly below roads and in open land. The pathway for public exposure to any health effects will therefore be minimal spatially and in duration. The potential for health effects from the buried and relatively low voltage DHPWN electric cables is therefore negligible and not considered further.

5.15.7 In terms of potential effects on human health and wellbeing arising from dust emissions and noise, effects have been identified as a result of construction activity. Mitigation such as dust suppression measures outlined in the CoCP (**Document Reference 6.3.7**) will be adopted to protect those living in closest proximity to the site and will be integrated into the CEMP (secured by Requirement 4 of the draft DCO, **Document Reference 2.1**) and construction management planning to reduce effects on health and

wellbeing. Mitigation will also be required to reduce the effect on health and wellbeing from noise arising from the installation of the DHPWN pipework and cables. A residual effect may nonetheless occur. Monitoring of noise levels and the provision of a contact point for local communities will be integrated into the CEMP.

5.15.8 There is a recognition that anxiety exists within sections of the community over the operation of the ERF with relation to perceived effects on human health arising from emissions to air. The quantitative assessment of the effects of emissions to air concluded that their magnitude in the wider population will be negligible. It is, however, likely that anxiety may persist if not actively mitigated. Anxiety in the local area is also recognised as emanating from the legacy of the Flixborough disaster, in particular amongst older generations for whom the disaster has been a defining influence in their sense of place.

5.15.9 These anxieties are assessed in the wider context of pre-existing mental health within the community. North Lincolnshire has a higher percentage of the population reporting high anxiety scores compared to the national figures, and a higher percentage of patients recorded with depression than those recorded on average for England.

5.15.10 In this context, and noting the sensitivity around the legacy of the 1974 Flixborough disaster, appropriate mitigation will be implemented to try and address and alleviate public anxiety and potential effects on human health and wellbeing through proactive engagement with the local community and wider stakeholders. This will include the deployment of a Community Liaison Officer, publication of the CEMP, the adoption of a hotline or alternative contact mechanisms for residents and advance notification of proposed construction works, amongst other measures.

5.15.11 The assessment concludes that the operation of the facility is not predicted to lead to significant negative health and wellbeing effects if the identified mitigation to address public anxiety is implemented successfully. The Project will be subject to strict regulatory controls and the requirement for ongoing monitoring of various activities at the site. To reduce potential anxiety, environmental monitoring data will be published for local communities, and wider stakeholders, to access via the Project website.

5.15.12 The socio-economics assessment identified the potential direct and indirect employment and economic development generated by the Project. This will have a positive effect on health and wellbeing. Opportunities will be taken to enhance such benefits through local procurement of people, goods and services, wherever appropriate. Positive effects are also predicted to arise through enhancement of the physical environment and leisure opportunities this may generate.

5.15.13 As such, the Project accords with health planning policy requirements included within NPS EN-1, NPS EN-3 and NPS EN-5 and embedded in the NPPF.

5.16 Mitigation

5.16.1 ES Chapter 19 (**Document Reference 6.2.19**) considers mitigation proposals for the Project in two separate overall design considerations, these being construction phase measures and those measures designed for operational phases.

5.16.2 In terms of overall design, many elements are integral to the design and are secured by the Design Principles and Codes Document (**Document Reference 5.12**) and the Vertical Parameter Plans (**Document Reference 4.18**). It is therefore important to note that, save for the permitted preliminary works, no part of the authorised Project will commence until details of the following have been submitted to and approved by North Lincolnshire Council (secured by Requirement 3 of the draft DCO, **Document Reference 2.1**):

- the siting design, external appearance and dimensions of all buildings and structures which make up the Project, and which are to be retained following commissioning;
- the colours, materials and surface finishes of all new permanent buildings and structures referred to above;
- the permanent circulation roads, vehicle parking and hardstanding; and
- ground levels and heights of all permanent buildings and structures.

5.16.3 The detailed design for the above matters will be in accordance with the principles set out in the submitted Design Principles and Codes (**Document Reference 5.12**) and the Vertical Parameters (**Document Reference 4.18**).

5.16.4 For the construction phase, a detailed CEMP will be prepared by the contractor for approval by North Lincolnshire Council and relevant statutory consultees in advance of construction (secured by Requirement 4 of the draft DCO, **Document Reference 2.1**). The main purpose of the CEMP will be:

- to provide a mechanism for ensuring that measures to mitigate potentially adverse environmental and socio-economic effects are implemented;
- to ensure that standards of good construction practice are adopted throughout the construction of the Project;
- to provide a framework for mitigating impacts that may be unforeseen or unidentified until construction is underway;
- to provide assurance to third parties that their requirements and the commitments made in the ES with respect to environmental and social performance will be met; and

- to provide a framework for compliance auditing and inspection to enable the Applicant to be assured that its aims with respect to environmental performance are being met.

5.16.5 The CEMP will be developed as the Project proceeds through the detailed design and pre-construction phases, in conjunction with the appointed construction contractor, and in consultation with relevant bodies including NLC, Environment Agency (EA) and Natural England (NE). The CEMP will reflect any conditions, requirements and obligations contained in the consent, including those set out in the draft DCO submitted as part of the Application (**Document Reference 2.1**).

5.16.6 A CoCP which provides the framework for the CEMP (secured by Requirement 4 of the draft DCO, **Document Reference 2.1**) is provided at Annex 7 of the ES (**Document Reference 6.3.7**) and includes the following outline activity-specific environmental management plans:

- Dust Management Plan;
- Remediation Strategy;
- Spill Response Plan;
- Asbestos Management Plan;
- Construction Flood Management Plan;
- Construction Waste Management Plan
- Protected Species Management Plan;
- Invasive Non-Native Species (INNS) Management Plan; and
- Soil Management Plan.

5.16.7 The CEMP will also address any specific mitigation requirements that result from obtaining other consents and licences (**Document Reference 5.8**) as required.

5.16.8 In terms of the phasing and review of the CEMP, the Project will be delivered in a number of phases and the proposed phasing must be submitted to NLC for approval before development commences. The permitted preliminary development works and each phase, (see also CoCP, **Document Reference 6.3.7**), will be covered by a bespoke CEMP developed to a common high standard and each one will be submitted to NLC for review and approval before development of any part of the relevant works commence.

5.16.9 The Applicant will undertake regular reviews of the Project and emerging standards, guidance, and legislation to ensure that good industry practice is

being applied at all times in the CEMP. The review process will be iterative and ongoing, so that new information is identified at an early stage and incorporated into any updated versions of the CEMP (and agreed with North Lincolnshire Council).

5.16.10 In addition to the CEMP, construction phase mitigation measures will also be secured through the following means.

- The Outline Construction Logistics Plan (CLP) will be developed in detail to include a Construction Traffic Management Plan and a Construction Workers Travel Plan, all to be produced in accordance with the principles set out in the Outline CLP (Appendix D to ES Chapter 13 - **Document Reference 6.2.13**).

- The Indicative Landscape and Biodiversity plans (**Document Reference 4.10**) provide an overview of the measures that will be implemented during the construction phase to provide landscaping mitigation, mitigation for habitat losses, implementing habitat enhancements and providing biodiversity net gain measures.

5.16.11 During operation, an Environmental Permit (the EP) will be required to operate the ERF and related aspects of the Project such as the carbon capture facility. The EP will have its own management and monitoring requirements set by the Environment Agency and will require an Environmental Management System (EMS) to be in place (most likely to ISO14001 equivalent, if not actually certified). The EP would require a 'Technically Competent' person to be appointed to oversee the permit. Most environmental mitigation relating to specific aspects of operation will therefore be secured through the EP.

5.16.12 Some aspects of the operating Project may not fall within the remit of the EP, and these will be secured through other mechanisms as follows.

- All environmental pollution activities not covered by the EP (e.g. noise, surface water discharges, solid waste management) will be addressed in an Operational Environmental Management Plan (OEMP). This plan will be developed in parallel with the Environment Management System. The scope and content of the OEMP is outlined in Annex 8 (**Document Reference 6.3.8**).

- A Landscape and Biodiversity Management and Monitoring Plan (LBMMP) will be developed in accordance with the principles set out in the Outline LBMMP (**Document Reference 5.7**). The LBMMP will secure delivery during operation, through monitoring, management and maintenance measures, of the landscaping provisions and biodiversity mitigation and enhancements (including those provided in the context of 'biodiversity net gain').

- A Flood Management Plan, which includes an Evacuation Route Plan and Flood Resilience Implementation Plan, to protect workforce,

neighbours and built Project assets, will be developed in accordance with the principles set out in the Flood Risk Assessment (FRA) (**Document Reference 6.3.3**).

- A Travel Plan will be developed, in accordance with principles set out in the Framework Travel Plan (Appendix C to ES Chapter 13 - **Document Reference 6.2.13**), to address sustainable travel issues and management measures to mitigate Project transport impacts. Sustainable travel issues addressed in the Travel Plan will include measures proposed to improve access by public transport, walking and cycling, and to reduce the need for parking.

- Permanent surface water drainage and foul water drainage systems will be designed in detail in accordance with the principles set out in the Indicative Surface Water Drainage Plan (**Document Reference 4.16**).

- A scheme for all permanent external lighting to be installed for the Energy Park and the railway works will be designed in detail and submitted to and approved by NLC. The design of the external lighting will be in accordance with the principles of the Indicative Lighting Strategy (**Document Reference 6.3.4**) and include measures to minimise and mitigate any artificial light emissions during the operation of the Project.

5.17 Summary

5.17.1 This Section has demonstrated the main effects of the Project and how it complies with the requirements of the 'assessment principles' and the 'generic impacts' of NPS EN-1, NPS EN-3 and NPS EN-5 alongside other relevant policy considerations.

6. Project Impact and Assessment of the Project Against Local Planning Policy

6.1 Overview

6.1.1 As confirmed within Section 3.1 of this Statement, local planning policies are not the primary policy basis against which NSIPs are considered but may be material considerations in decision making.

6.1.2 Appendix B of Chapter 2 of the ES (**Document Reference 6.2.2**) provides a summary of the adopted and emerging local plan policies of relevance to the Project. This Section of the Planning Statement assesses the compliance of the Project with the key policies of relevance.

Table 6.1: Local Planning Policy Assessment		
North Lincolnshire Local Plan 2003, Saved Policies (2007)		
Policy	Description/Summary	Assessment
RD1: Development Involving High Quality Agricultural Land	Proposals for the development or change of use of agricultural land will only be permitted where this would not result in the loss of the best and most versatile land (Grades 1, 2 and 3a) unless it can be demonstrated that the proposed development cannot be accommodated on: land within settlement boundaries, or land which is allocated for development, or previously developed land or land of a lower agricultural grade. Where development of agricultural land is unavoidable, areas of poorer quality land should be developed in preference to those of higher quality, except where other sustainability considerations suggest otherwise. For development to be permitted on higher grades of land there has to be an overriding need for the development.	Chapter 14 (**Document Reference 6.2.14**) of the ES considers the Project in economic, community and land use impact terms. The Application Land includes approximately 235ha of agricultural land, approximately 95 hectares of which will be disturbed during construction and 35hectares of which will be permanently required during operation. Whilst some agricultural land will be lost as a result of the development, this type of development is not suitable to take place within settlement boundaries and several elements of the Project are located on brownfield land in Flixborough Industrial Estate. Furthermore, Section 4 and Section 7.2 of this Planning Statement summarise the significant public benefits and need for the Project in relation to urgently delivering low carbon renewable energy to meet the aim of decarbonising the UK's electricity supplies by 2050; providing security of supply as well as affordability for end consumers. In summary, it is considered that the significant public

		benefits of the Project outweigh the loss of high-quality agricultural land.
T1: Location of Development	Provides guidance on the location of development which is likely to create a significant volume of traffic in relation to the settlement hierarchy of the existing highway network and public transport.	ES Chapter 13 (**Document Reference 6.2.13**) considers traffic and transport, within which it concludes that during demolition and Project construction, the assessment has demonstrated that there will be no significant effects on traffic and transport as a result of the Project. The Project is consistent with this policy as its location at Flixborough Industrial Estate provides access to rail and water transport. Opportunities for foot and cycle transport within the Project have also been explored/provided.
W1: Waste Management Facilities	Details that proposals for waste management facilities will only be permitted where a number of factors can be demonstrated.	The Project is generally consistent with this policy as the local road network can accommodate the anticipated traffic, the engineering design is technically feasible and the development includes measures to ensure there would be no significant risk of pollution, or danger to public health or safety, including the effects on water and air quality. Whilst some visual amenity, ecological and archaeological impacts are identified within the ES, it is considered that the benefits of the Project will very significantly outweigh any harm predicted.
DS1: General Requirements	Expects development proposals to achieve a high standard of design in both built-up areas and the countryside. Details a number of design criteria which all proposals will be considered against.	The Project is generally consistent with this policy. The DAS (**Document Reference 5.3**) provides an explanation of how the design of the Project has evolved in the lead-up to submission of the Application and details how the Project does/intends to deliver good design. Furthermore, the individual chapters of the ES explain how the Project has been designed, including the mitigation embedded in its design, to minimise and mitigate impacts. The principles built into the illustrative design are set out in the Design Principles and Codes Document (**Document Reference 5.12**), compliance with

		which is secured by Requirement 3 in the draft DCO (**Document Reference 2.1**). The Applicant considers that the Project has been designed carefully, taking account of environmental effects on the landscape and siting, operational and other relevant constraints, to minimise harm to the landscape. Opportunities have been taken to minimise the visual impact of the Project by locating the built elements primarily within the existing Flixborough Industrial Estate and providing landscaping where appropriate.
DS16: Flood Risk	States that development proposals will not be permitted in floodplains where, amongst other matters, it would increase the number of people or buildings at risk, impede the flow of floodwater, reduce the storage capacity of the floodplain, or increase the risk of flooding elsewhere.	The Environment Agency's Flood Map for Planning illustrates that the majority of the Application Land is located within Flood Zone 3. The EA flood maps also illustrate that the majority of that area that is at risk is classed as benefits from flood defences, meaning that the identified area is protected by the existing flood defences and will only become inundated in the event of a breach or overtopping of the defences in the future. Chapter 9 of the ES (**Document Reference 6.2.9**) considers water resources and flood risk. In terms of the operational phase of the Project, with the implementation of the mitigation set out, the chapter concludes that the effects of Project operation will result in a significant effect at just one receptor and only during a breach scenario. This building is currently used as a stockpile and storage warehouse. To manage the areas where the increase in flood risk has not been mitigated, it is proposed that a Flood Management Plan is developed for the Project. The Applicant has undertaken a sequential approach to site selection in terms of flood risk, details of which are outlined in paragraph 5.7.15 to 5.7.30 of this Planning Statement.

		A sequential approach to the layout of the Project has also been undertaken. Further details regarding the alternative locations of the Project within the Order Limits are outlined in sections 9.6 and 9.7 of ES Chapter 3 (**Document Reference 6.2.3**). Furthermore, the Project is 'Essential Infrastructure' and can be appropriate to these higher risk flood zones, subject to satisfying the Exception Test. As outlined at paragraphs 5.6.31 to 5.6.33 of this Planning Statement the Project will have very clear wider sustainability benefits to the community in relation to urgently delivering low carbon renewable energy to meet the aim of decarbonising the UK's electricity supplies by 2050; providing security of supply as well as affordability for end consumers. Furthermore, the FRA demonstrates that the Proposed Development will be safe from the risk of flooding and will not increase the risk of flooding off-site. It is therefore considered that the Exception Test is satisfied.
DS21: Renewable Energy	Supports proposals for the generation of energy from renewable resources where any detrimental impacts are outweighed by environmental benefits and proposals include details of associated developments.	The Project is consistent with this policy. Section 4 and Section 7.2 of this Planning Statement summarise the significant public benefits and need for the Project in relation to urgently delivering low carbon renewable energy to meet the aim of decarbonising the UK's electricity supplies by 2050; providing security of supply as well as affordability for end consumers. In summary, it is considered that the significant public benefits of the Project outweigh the limited detrimental impacts.
North Lincolnshire Core Strategy (2011)		
CS1: Spatial Strategy for North Lincolnshire	Sets out the broad framework around which the spatial development strategy for North Lincolnshire will be based. It provides clear priorities for the distribution and location of future	The Project is generally consistent with the spatial strategy for North Lincolnshire, facilitating economic development and contributing to sustainable development.

	development and a distinct direction for moving the area forward and achieving the spatial vision and objectives.	Whilst some significant adverse impacts have been identified within the ES, measures have been taken minimise these where feasible/appropriate. On balance the benefits of the Project will significantly outweigh any harm predicted.
CS2: Delivering more Sustainable Development	Details that the spatial strategy described in policy CS1 will be implemented using a sequential approach to the location of future development that is based on the settlement hierarchy and taking into account other sustainability criteria.	The Project is generally consistent with this policy, being located on previously developed land within Flixborough Industrial Estate and adjacent agricultural land. Flixborough Industrial Estate is an existing employment site as outlined in the Housing and Employment Allocations DPD (March 2016). The emerging Local Plan (Publication Draft, 2021), includes the same broad area within an "Existing Employment Area". Section 8 of the DAS (**Document Reference 5.3**) details how sustainable considerations have been incorporated into the Project. The Project has been designed to reduce waste wherever possible. Waste products from the ERF, such as bottom ash and FGTr are to be processed on site and used as inputs to produce concrete blocks. The Project has also been designed to ensure that sustainable transport is used wherever possible. The location of the Project provides an opportunity to convey material to and from the Energy Park by road, river and rail. The ERF will be equipped with a Carbon Capture, Utilisation and Storage facility from the outset. Beyond the ERF, the Project will also be a leader in sustainable transport and low carbon energy. The inclusion of the infrastructure to deliver sustainable fuel for electric and low carbon hydrogen powered vehicles will support the uptake of low carbon transport. It will contain hydrogen production, both to support a vehicle re-fuelling station and have the potential to provide low carbon hydrogen to decarbonise the gas

		grid. An EV charging area is also included, supplied with electricity by the ERF.
CS5: Delivering Quality Design in North Lincolnshire	Requires all new development in North Lincolnshire should be well designed and appropriate for their context. It should contribute to creating a sense of place.	The Project is entirely consistent with this policy. The DAS (**Document Reference 5.3**) provides an explanation of how the design of the Project has evolved in the lead-up to submission of the Application and details how the Project does/intends to deliver good design. Furthermore, the individual chapters of the ES explain how the Project has been designed, including the mitigation embedded in its design, to minimise and mitigate impacts. The principles built into the illustrative design are set out in the Design Principles and Codes Document (**Document Reference 5.12**), compliance with which is secured by Requirement 3 in the draft DCO (**Document Reference 2.1**). The Applicant considers that the Project has been designed carefully, taking account of environmental effects on the landscape and siting, operational and other relevant constraints, to minimise harm to the landscape. Opportunities have been taken to minimise the visual impact of the Project by locating the built elements primarily within the existing Flixborough Industrial Estate and providing landscaping where appropriate.
CS20: Sustainable Waste Management	Details that the Council will consider new and enhanced facilities for the treatment and management of waste at a number of broad strategic areas, including Flixborough Industrial Estate.	The Project is entirely consistent with this policy, being located largely within Flixborough Industrial Estate, on previously developed land.
Emerging North Lincolnshire Council Local Plan Publication Draft Policies (2021)		
EC2: Existing Employment Areas	States existing employment areas as identified on the Policies Map will be safeguarded for employment uses. Flixborough	The Project is consistent with this policy as the bulk of the Energy Park Land falls within an existing employment site (Flixborough Industrial Estate). The principle of development in this existing

	Industrial Estate is identified as an existing employment site.	employment site is therefore considered acceptable.
TC2: Placemaking and Good Urban Design	Details that Development proposals will be supported where they improve poor existing urban and natural environments, enhance special qualities of North Lincolnshire's settlements and better reveal the significances of the historic environment. Outlined a number of design points which development proposals should adhere to.	The DAS (**Document Reference 5.3**) details how the Project interacts with the natural environment and improves poor existing urban/natural environments. The Project is consistent with policy TC2 through its commitment to good design, which is outlined in the DAS (**Document Reference 5.3**) and also the Design Principles and Codes (**Document Reference 5.12**).
RD1: Supporting Sustainable Development in North Lincolnshire's Countryside	Outlines outside settlement development limits land will be regarded as the countryside and details the forms of development which will be supported, where proposals respect the intrinsic character of their surroundings. The forms of development include employment uses where it is an appropriate scale to its location and it respects the character of the surrounding landscape. Such employment uses should, amongst other criteria, be within or adjacent to an existing industrial estate.	The Project is generally consistent with this Policy, which supports employment uses where it is an appropriate scale to its location and respects the character of the surrounding landscape. The Energy Park Land is largely within (and if not adjacent to) the existing Flixborough Industrial Estate. The Project also provides new renewable energy infrastructure, which is consistent with the policy, and reuses existing but disused railway infrastructure.
DQE7: Climate Change and Low Carbon Living	Sets out how development proposals should contribute to mitigating the impacts of climate change and minimising carbon emissions to meet the climate change challenge.	The Project meets the urgent national need for renewable energy infrastructure, which is driven by the policy objective to reduce carbon emissions (meet Net Zero targets). With the implementation of mitigation (set out in ES Chapter 6 (**Document Reference 6.2.6**)) there will be a net reduction in GHG from the Project compared to the future baseline landfill scenario. The inclusion of CCUS is also aligned with this Policy.
DQE8: Renewable Energy Proposals	Supports proposals for renewable energy development where any significant adverse impacts are satisfactorily minimised and the	There is a national need for renewable energy infrastructure, which is demonstrable in, and

	residual harm is outweighed by the public benefits of the proposal.	supported by national policies (including NPS EN-1). Section 7 of this Planning Statement considers the planning balance between the Project's likely significant adverse effects and against the key benefits of the Project and concludes that the benefits will very significantly outweigh any harm predicted.
WAS1: Waste Management Principles	Sets out the council's strategic planning framework and principles for sustainable waste management, reflecting the requirements of national policy and guidance, as well as the Waste Framework Directive. Details that Development that encourages and supports the minimisation of waste production, and the re-use and recovery of waste materials will normally be supported. States the Proposals for waste management facilities will be encouraged based on a number of principles, including – managing waste through the waste hierarchy in a sequential order.	Energy from waste using RDF feedstock is consistent within the waste hierarchy principles as it diverts waste from landfill and the recyclable materials have been extracted from the feedstock. The RDF Supply Assessment (**Document Reference 5.2**) confirms that there is a regional need for the facility. There is future potential to apply to waste hierarchy and likely to be no significant effects on existing waste management capacity. The Project as such accords with WAS1.
WAS2: Waste Facilities	States that new waste management facilities should be located in sustainable locations that are appropriate to the proposed waste management use and its operational characteristics, and where impacts on the community and the environment can be avoided or addressed appropriately. Details that proposals for Energy from Waste Facilities will be supported provided that they meet the criteria set out in this policy and policy DQE8 Renewable Energy Proposals.	The Project is consistent with this policy, being an Energy from Waste (energy recovery) facility located on previously developed land within Flixborough Industrial Estate with good transport connections. The national and local need for this facility is outlined in Section 4 of this Statement. A comprehensive EIA of the Project has been undertaken, the results of which are detailed in the ES (**Document Reference 6.0**). Whilst some significant adverse impacts have been identified within the ES, measures have been taken to minimise these where feasible/appropriate. On balance the benefits of the Project will

		significantly outweigh any harm predicted.
WAS3: Waste Management Provision	States net self-sufficiency in waste management will be achieved through the provision of the waste-management capacity needs of North Lincolnshire. This capacity will be met through existing operation waste management facilities (and extensions, where appropriate) and new facilities.	The Project is entirely consistent with this policy, providing a new waste management facility for North Lincolnshire and beyond. The RDF Supply Assessment (**Document Reference 5.2**) provides analysis of fuel availability on both a national and regional level. The Report concludes that in a scenario in which England meets it existing recycling targets, an additional 4.7 million tonnes of recovery capacity is required to ensure that residual waste that cannot be recycled can be processed for energy recovery in 2035. The RDF Supply Assessment (**Document Reference 5.2**) further identifies that within Yorkshire & Humber and East Midlands, there could be 1.6 million tonnes of waste without access to recovery operations in 2035. On a regional level, ES Chapter 15 (**Document Reference 6.2.15**) identifies that there are a number of landfill and incineration facilities within the East Midlands region with limited remaining capacity.
DM1: General Requirement	Requires all new development proposals achieve high quality sustainable design that contributes positively to local character, landscape and townscape, and supports diversity, equality and access for all. Outlines a number of design principles and amenity considerations.	The Project is entirely consistent with this policy. The DAS (**Document Reference 5.3**) provides an explanation of how the design of the Project has evolved in the lead-up to submission of the Application and details how the Project does/intends to deliver good design. Furthermore, the individual chapters of the ES explain how the Project has been designed, including the mitigation embedded in its design, to minimise and mitigate impacts. The principles built into the illustrative design are set out in the Design Principles and Codes Document (**Document Reference 5.12**), compliance with which is secured by Requirement 3 in

		the draft DCO (**Document Reference 2.1**). The Applicant considers that the Project has been designed carefully, taking account of environmental effects on the landscape and siting, operational and other relevant constraints, to minimise harm to the landscape. Opportunities have been taken to minimise the visual impact of the Project by locating the built elements primarily within the existing Flixborough Industrial Estate and providing landscaping where appropriate.
DM3: Environmental Protection	Requires development proposals to demonstrate that environmental impacts on receptors have been evaluated and appropriate measures have been taken to minimise the risks of adverse impacts to air, land and water quality, whilst assessing vibration, heat, energy, light and noise pollution.	A comprehensive EIA of the Project has been undertaken, the results of which are detailed in the ES (**Document Reference 6.0**). Whilst some significant adverse impacts have been identified within the ES, measures have been taken to minimise these where feasible/appropriate. On balance the benefits of the Project will significantly outweigh any harm predicted.

6.2 Summary

6.2.1 Table 6.1 demonstrates that there is broad compliance with the development plan and emerging policies and overall, no material conflict between the Project and relevant key policies contained within the North Lincolnshire Local Plan (2003), Saved Policies (2007), the North Lincolnshire Local Development Framework Core Strategy or the North Lincolnshire emerging Local Plan (Publication Draft).

7. Planning Balance

7.1 Overview

7.1.1 Under section 104(3) of the 2008 Act, the SoS must decide the DCO Application in accordance with any relevant NPS. The relevant NPSs for the Project are NPS EN-1, NPS EN-3 and NPS EN-5.

7.1.2 Section 3 sets out the policy and legislative context for the Project. Section 4 makes the need case for the Project and the main objectives for sustainable waste management, energy production and economic benefits which the Project is seeking to achieve. Whilst Section 5 of this document sets out the main impacts of the Project and an assessment of the impacts against relevant national planning policy, primarily that of NPS EN-1 and NPS EN-3. Section 6 assesses the Project against the key local planning policies.

7.1.3 This Section seeks to draw together the above concerns of need, environmental impact and planning policy compliance into consideration of the key benefits of the Project, as well as its likely significant (permanent) adverse effects.

7.2 Benefits of the Project

7.2.1 NPS EN-1 confirms the urgency and scale of the need that exists for all energy NSIPs. In particular, the urgent need for low carbon and renewable forms of generation is corroborated by national energy and climate change policy and guidance, in support of the Government's legally binding commitment to achieve Net Zero emissions by 2050 and decarbonise the energy sector by 2035.

7.2.2 NPS EN-3 confirms that the recovery of energy from the combustion of waste, where in accordance with the waste hierarchy, will play an increasingly important role in meeting the UK's energy needs.

7.2.3 The Project would contribute to the scale of this need, as well as security of supply to meet increasing demand in the UK by providing up to 95W of low carbon energy.

7.2.4 The design of the ERF meets the requirements of NPS EN-1 and NPS EN-3 to consider and implement uses of combined heat and power. Also, with the inclusion of a proportion of carbon capture, utilisation and storage (CCUS), the Project is aligned with government proposals for all new energy recovery facilities to have CCUS or be CCUS ready from the end of the 2020s.

7.2.5 The Project is very well placed to connect to the East Coast CCUS cluster and the proposed Zero Carbon Humber pipeline (should this development come forward in the future). NPS EN-3 identifies that energy from the combustion of waste is a recovery option consistent with the waste

hierarchy. The Project aligns with local Council's strategy and capacity demands and Flixborough Industrial Estate (where a large part of the Energy Park is located) is identified in local strategy as suitable for a waste management facility.

7.2.6 With the implementation of the mitigation as set out in ES Chapter 6 (**Document Reference 6.2.6**), the climate change assessment has concluded that there will be a net reduction in GHG from the Project compared to the future baseline landfill scenario, therefore there will be no significant residual effects from the Project and there should be a positive impact.

7.2.7 The ES demonstrates how the Project can achieve a minimum 10% net-gain in biodiversity through use of the Defra Metric 3.0. This can be accomplished through minimising loss, habitat creation, reinstatement and enhancement of habitats. Overall, there is a commitment for the Project to have a positive impact for wildlife, which would be secured through submission of a Landscape and Biodiversity Management and Monitoring Plan through Requirement 7 of the draft DCO (**Document Reference 2.1**).

7.2.8 During construction there are likely to be beneficial significant socio-economic effects as a result of the Project. An estimated 2940 net FTE jobs over the whole of the construction phase of the Project will benefit the area, supported through the implementation of an Employment and Skills Policy. There will be a net economic impact of £140.1m spread across the six-year construction period, which represents a significant socio-economic benefit.

7.2.9 During operation an estimated 175 net FTE jobs will be created as a result of the Project with a net economic impact of £8.34m per annum, supported through the implementation of an Employment and Skills Policy and training and education opportunities.

7.2.10 The creation of new paths and public access represents a moderate positive benefit, which is significant. There will also be a moderate positive benefit associated with access to increased areas of open space, which is significant. Further significant beneficial effects will be provided in ecological terms to ponds wetland and watercourses at site level.

7.3 Likely Adverse effects of the Project

7.3.1 As outlined in Section 5 above, the Project will only result in a limited number of significant effects after mitigation. These limited effects relate to the following matters: noise, flood risk, ecology, landscape/visual impacts and archaeology/cultural heritage.

7.3.2 Most negative noise effects during construction relate to a small number of receptors, or over very short periods of time such as areas where night workings may be necessary. Effects of noise during demolition and construction is assessed as being moderate for neighbouring industrial buildings at Flixborough Industrial Estate on a worst-case basis.

7.3.3 Significant effects are also likely if the work on the main construction areas needs to be undertaken during the evening at the same intensity as during the day. However, the current information suggests that work outside of core daytime hours would be discussed with NLC to establish which works could be performed with a low likelihood of significant effects. A CEMP (secured by Requirement 4 of the draft DCO, **Document Reference 2.1**) will set out the key noise management measures that contractors will be required to adopt and implement. Further reductions will be sought during detailed design where this is practicable.

7.3.4 In terms of flooding and the water environment, the effects of the construction of the Project will result in temporary moderate adverse effects on Lysaght's Drain. The operation of the Project will result in a significant effect at just one receptor in terms of flooding and water environment, and only during a breach scenario. It is proposed that this effect will be mitigated through the implementation of a flood management plan. The details of this flood management plan will be agreed with the Environment Agency and is secured by Requirement 12 of the draft DCO, (**Document Reference 2.1)**.

7.3.5 In terms of ecology and nature conservation matters, significant adverse effects are assessed at Risby Warren SSSI and on Lowand Dry Acid Grassland HPI and Lowland Calcerous Grassland HPI. Residual effects on badger, breeding birds and migratory/wintering birds have been assessed as adverse at a site level, due to the range of bird species present across the site and the presence of two main badger setts close to construction areas within the Energy Park Land and Railway Reinstatement Land. However, the design has incorporated the establishment of a range of habitats offering nesting, foraging and resting opportunities for a variety of bird species and the installation and monitoring of a badger tunnel beneath the new access road. The successful implementation of these measures will ensure impacts are minimised and effects are restricted to a site level only.

7.3.6 In terms of landscape and visual amenity effects of the Project, these are summarised as follows:

- a major adverse (significant) effect on the landscape character of the Application Land during construction, although these would be both reversible and of short duration;

- a moderate adverse (significant) effect on the landscape character of the Application Land during the operational stage. Over time, landscape mitigation would mature and integrate the development into the landscape, reducing effects on the landscape of the Energy Park land to minor adverse (not significant).

- moderate adverse (significant) effects on the landscape character of Flat Drained Farmland LCT and Industrial Landscape LCT (Trent Levels LCA) during both the construction and operational (year 1) stages.

- moderate adverse (significant) effects for Steep Wooded Scarp LCT and Despoiled Landscape LCT (Lincolnshire Edge LCA) during construction and year 1 of operation. The landscape mitigation included as part of the Project would provide a degree of landscape integration by year 15, reducing effects on all LCTs to minor adverse (not significant).

- major adverse effects, albeit temporary and reversible, during construction for visual amenity receptors with short viewing distances or characterised by a lack of mature intervening vegetation.

- major adverse (significant) effects during the construction phase for viewpoints 1 and 2, within Amcotts and Flixborough respectively, due to their short viewing distances. Moderate adverse (significant) effects at the construction phase are also identified at Viewpoints 3, 4, 5, 7, 8, and 11, all of which are within 5km of the Site centre.

- At year 1 of the operational stage, effects are predicted to be major (significant) at Viewpoints 1 and 2, and moderate (significant) at Viewpoints 3, 4 and 11 (all within 2km). The incremental growth of intervening vegetation and landscape mitigation planting indicates that visual effects would reduce to minor adverse (not significant) at year 15 at all viewpoints with the exception of Viewpoint 1 (major at year 15) and Viewpoint 2 (moderate at year 15).

7.3.7 Paragraph 5.9.18 of NPS EN-1 recognises that all proposed energy infrastructure is likely to have visual effects for receptors around proposed sites. The Project has been designed carefully, taking account of environmental effects on the landscape and siting, operational and other relevant constraints to minimise harm to the landscape, including by reasonable mitigation. Significant effects are only predicted to remain after year 15 at two Viewpoints (Viewpoints 1 and 2 at Amcotts and Flixborough respectively).

7.3.8 With regards to archaeology and cultural heritage, likely significant effects have been identified on the following heritage assets: deep sequences of organic deposits of probable prehistoric date (with potential to contain associated archaeology), the site of a World War 2 searchlight near Neap House, archaeological features identified by desk-based analysis and geophysical survey on the site of the proposed Gas AGI/substation site to the east of Flixborough Industrial Estate, the setting of the 'Flixborough Nunnery' scheduled monument and the Axholme Fens HLCA. These effects are considered to constitute less than substantial harm.

7.4 Overall Planning Balance

7.4.1 Under section 104(3) of the 2008 Act, the Secretary of State must decide the Application in accordance with any relevant National Policy Statement, except where any of subsections (4) to (8) of that section apply. This

Planning Statement has demonstrated that the Project accords with the National Policy Statements EN-1, EN-3 and EN-5. These are the primary basis for the determination of development consent applications for energy infrastructure. Furthermore, Sections 5 and 6 of this statement have demonstrated that there are no major conflicts with NPPF policy or with relevant key policies contained within the North Lincolnshire Local Plan (2003), Saved Policies (2007), the North Lincolnshire Local Development Framework Core Strategy or the North Lincolnshire emerging Local Plan (Publication Draft, 2021).

7.4.2 In addition, for the purposes of section 104(7) of the 2008 Act, this statement has demonstrated it is not the case that "the adverse impact of the proposed development would outweigh its benefits".

7.4.3 Against the above position, the Applicant considers that the benefits of the Project will very significantly outweigh any harm predicted. Mitigation measures have been identified as set out in ES Chapter 19 (**Document Reference 6.2.19**) and summarised above to ensure that the harm is reduced as far as possible. The urgent need case also identifies the need for the Project in support of national and local waste and energy policy objectives.

7.4.4 Having weighed up each of the elements assessed in respect of the ES and their compliance with national and local planning policy, aligned to need case for the Project, it is considered that the tests in Section 104 have been met. Accordingly, the policy presumption in favour of the Project and the overall planning balance are in favour of development consent being granted.

8. Conclusion

8.1.1 This Planning Statement considers the compliance of the Project as a whole with the requirements of relevant planning policy. An assessment has been made against NPS EN-1 (Overarching Policy Statement for Energy), NPS EN-3 (Renewable Energy Infrastructure) and NPS EN-5 (Electricity Networks Infrastructure) which form the primary policy context against which the proposal should be assessed under Section 104 of the 2008 Act.

8.1.2 This Planning Statement demonstrates that the Project is supported both in principle and within the detail of the Project, when considered against the 'assessment principles' and 'generic impacts' required by NPSs EN-1 and EN-3.

8.1.3 The Planning Statement has assessed the Project against the NPPF policies which are considered to be of relevance to the Project. The Planning Statement has also considered the Project against other national and local policies; recognising that such matters may be material considerations in the context of an application for development consent.

8.1.4 Although there are no explicit policies which reference the Project by name, the Project is broadly consistent with the objectives of relevant plans and policies with regard to minimising adverse effects arising from construction and operational activities.

8.1.5 The 2008 Act requires that an application for development consent should be decided in accordance with NPSs EN-1, EN-3 and EN-5. It is the conclusion of this Planning Statement that the Project is in accordance with the NPSs, as well as recent UK energy and climate change policy, providing significant benefits in supporting decarbonisation and diversification of the UK's energy supply and support of local and national waste management objectives. In addition to contributing toward the need for new low carbon generating capacity and the delivery of important energy and climate change policy, the Proposed Development has a number of other very clear and substantial benefits, including employment and economic activity, amongst others.

8.1.6 Furthermore, Paragraph 4.1.2 of NPS EN-1 confirms that, given the level and urgency of need for energy infrastructure, decisions should include a "presumption in favour of granting consent to applications for energy NSIPs". That presumption applies unless any more specific and relevant policies set out in the relevant NPSs clearly indicate that consent should be refused. There are no such policies which would clearly indicate that consent should not be granted and as such the presumption in favour applies for the Project.

8.1.7 In conclusion therefore, given the urgency of the need for new electricity generation capacity (as set out in NPS EN-1) and the importance of decarbonising the power and industrial sectors in the UK to meet the legally binding target of Net Zero by 2050, the Applicant considers that the benefits

of the Proposed Development significantly outweigh the limited harm that would result from it proceeding. The planning balance therefore lies strongly in favour of development consent being granted for the Project.