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# North Lincolnshire Green Energy Park

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# Glossary

BESS	Battery Energy Storage System
BESS	British Energy Security Strategy
BNG	Biodiversity Net Gain
CCC	Climate Change Committee
CCS	Carbon Capture and Storage
CCUS	Carbon Capture Usage and Storage
СНР	Combined Heat and Power
DHPWN	District Heat and Private Wire Network
EfW	Energy from Waste
ERF	Energy Recovery Facility
ETS	Emissions Trading Scheme
NLGEP	North Lincolnshire Renewable Energy Park
NPS	National Policy Statement



# **CONTENTS**

EXE	CUTIVE SUMMARY	1
1.0	INTRODUCTION	4
Pι	urpose of this Document	4
	ummary of Proposed Development	
	Summary of Need for the Proposed Development	
U	pdate on Landowners with outstanding planning issues	7
2.0	POLICY - DIRECTION OF TRAVEL AND RELEVANCE TO POLICY POSITION	9
	troduction	
Po	owering Up Britain, 30 <sup>th</sup> March 2023	9
Revised Suite of Energy NPSs		10
	oring Budget, March 2023	
	imate Change Committee - Delivering a Reliable Decarbonised Power System, March 20	
	ydrogen Champion Report, March 2023	
	lission Zero, Independent Review of Net Zero, Rt Hon Chris Skidmore MP	
	nvironmental Improvement Plan, January 2023	
	K Emissions Trading Scheme (ETS)	
	irection of travel	
Re	elevance to waste capacity position	18
3.0	NEED FOR EACH COMPONENT OF THE PROJECT	19
Ρl	astics recycling facility (PRF)	19
Н	ydrogen production and storage	21
Battery Storage		22
Electric Vehicle charging		23
District Heat and Private Wire Network		23
Rail works		24
New Access Road		
Landscaping, wetland areas and Biodiversity Net Gain (BNG)		
Sι	ummary	26
4.0	ADVERSE EFFECTS OF PROPOSED DEVELOPMENT	27
N	oise	27
Noise Water Resources and Flood Risk		28
Ed	Water Resources and Flood Risk  Ecology and Nature Conservation	
La	andscape and Visual Impact	32
Αı	Archaeology and Cultural Heritage	
Αį	gricultural Land	35
5.0	BENEFITS OF THE PROPOSED DEVELOPMENT	37
6.0	OVERALL PLANNING BALANCE	39
Sı	ummary of Need	39
	dverse Impacts	
	enefits <sup>'</sup>	
1.	ocal Planning Policy	<b>/</b> 11



Planning Balance41	
Talling Balance	

# **FIGURES**

Figure 1 – National Grid Future Energy Scenarios, Total Electrical Energy Storage Capacity, July 2022 23



#### **EXECUTIVE SUMMARY**

- This document summarises the Applicant's position as set out in the Application Documents and
  other submissions from the Applicant during the Examination, including oral submissions and with
  reference to the most up to date Government policy and announcements. It then draws this
  information together and presents our closing submissions on the overall planning balance and
  case for the scheme.
- 2. In summary, it demonstrates why there is a compelling case in favour of the Project and why the Development Consent Order should be granted by the Secretary of State.
- 3. Government policy has never been clearer on the need for a fit-for-purpose, clean, renewable energy network that allows decarbonisation of the energy sector by 2035 and Net Zero by 2050. 'Green Day' of 30th March 2023 made the Government's priorities abundantly clear that the future UK energy needs will primarily be met through a mix of wind, solar, nuclear, hydrogen and CCUS-enabled EfW and biomass.
- 4. In a tight fiscal environment, the Spring budget committed significant spending (£20bn) towards the delivery of CCUS.
- 5. Adopted Government policy is that EfW will continue to be needed, where consistent with the waste hierarchy, to divert waste from landfill. There is no planned moratorium on EfW, and this is clear from the revised NPSs. Selection of CCUS-enabled EfW projects in the Track-1 projects for further due diligence (Protos ERF and Viridor, Runcorn) and the prospect of delivering negative emissions, shows a clear direction of travel.
- 6. The NLGEP is positively supported by Government policy on a number of important levels. It includes the following.
  - A CCUS-enabled ERF which delivers 6,066 tCO2e per annum of carbon savings compared with
    the baseline landfill position, with the potential for further CCS to be delivered in the future
    via connection to the Humber Low Carbon Pipeline.
  - Provision of up to 95MW of low carbon energy.
  - Concrete block manufacturing from the residual flue-gas treatment residue and bottom ash.
  - A plastics recycling facility to enable waste that would be otherwise destined for landfill to be recycled.
  - Hydrogen production and storage and a hydrogen re-fuelling facility.



- Electric vehicle charging.
- Battery storage.
- New habitat creation and nature recovery.
- All served by a reinstated railway line and port access which can be achieved with minimal to no additional infrastructure.
- 7. In 2019, 2.9 million tonnes of general waste were received by landfill sites within 100 miles of the Project, of which 866,000 tonnes were received by landfill sites in North Lincolnshire [REP3-040]. The Project would go a long way towards diverting this from landfill. Looking forward, even with recycling targets being met, at a North Lincolnshire local authority level alone there would still be residual capacity of 329,000 tonnes per annum in 2022, falling to 283,000 tonnes per annum in 2040.
- 8. There is no adopted policy which requires Applicants to demonstrate that there is no overcapacity of EfW at a national or local level; nevertheless, the Applicant has considered the position given the draft policy in NPS EN3, which has been carried through to the revised draft NPS EN3.
- 9. If all existing EfW facilities are assumed to continue operating, and current recycling targets (65% by 2035) and residual waste reduction targets (50% by 2042) are met, there would be a slight overcapacity at UK and regional level (see Tables 1-4 of Applicant's response to ExA's second written questions, [REP6-032]), but a slight under-capacity at local level.
- 10. However, the Applicant's position is that it is reasonable to assume that older facilities that do not have R1 status, and have low potential to incorporate CCUS, will increasingly be unable to compete and a number of these will therefore be forced to close, or require significant investment to refurbish or rebuild them, which in the majority of cases would require a new planning permission or DCO, in addition to new environmental permits, the process of which would be expensive and time consuming, with no certainty that they would be granted. This is entirely consistent with the required transition to a renewable and low carbon economy which is 'fit for the future' and strongly supported by recent Government policy announcements of 30th March 2023.
- 11. There is also considerable uncertainty over whether recycling targets will be met [RDF Supply Assessment, REP3-040]. The next target to achieve is 55% by 2025.
- 12. At national and regional (East Midlands and Yorkshire and Humber) level, the RDF Supply Assessment [REP3-040] projects a capacity gap based on existing and committed capacity of over



- 2 million tonnes nationally and around 1.1 million tonnes at the local level in 2035 if low-CCS potential projects are excluded (and assuming that very ambitious recycling targets are met).
- 13. In addition to the Net Zero and waste hierarchy benefits, the Project will generate up to 3,115 (net FTE) jobs during construction and operation and land for at least 10% of BNG and nature recovery, together with improved public access and recreation, meeting important objectives of the Environmental Improvement Plan.
- 14. The Project will also include a visitor's centre and elevated walkway, playing an important part in educating the next generation of the importance of Net Zero and the level of waste generated by households that cannot be recycled.
- 15. This is then balanced with the relatively limited adverse effects of the Project (in relation to noise, flood risk to a single property during a breach scenario, archaeology and cultural heritage, site-level ecology, landscape and visual (up to year 15) and a small loss of agricultural land) which are minimal and have been reduced and mitigated as far as possible.
- 16. Each element of the NLGEP Project is playing an important role in the overall sustainability of the Project and its role in meeting Net Zero. Whilst the ERF could feasibly function without all of the additional elements, alone it would not be maximising its ability to use and reduce carbon emissions and deliver good design in accordance with NPS EN1.
- 17. In summary, there is a compelling case in favour of the Project proceeding, and it should be approved without delay.



#### 1.0 INTRODUCTION

#### **Purpose of this Document**

- 1.1 This document summarises the Applicant's latest position as set out in the Application Documents and other submissions from the Applicant during the Examination, including oral submissions and with reference to the most up to date Government policy and announcements.
- 1.2 It then draws this information together and presents the overall planning balance and case for the scheme.
- 1.3 In summary, it demonstrates why there is a compelling case in favour of the Project and why the Development Consent Order should be supported.

## **Summary of Proposed Development**

- 1.4 The North Lincolnshire Green Energy Park (NLGEP), located at Flixborough, North Lincolnshire, comprises an Energy Recovery Facility (ERF) capable of converting up to 760,000 tonnes of residual non-recyclable waste into up to 95 MW of electricity and a CCUS facility which will treat a proportion of the excess gasses prior to emission from the ERF to remove and store CO<sub>2</sub>. The design of the ERF and CCUS will also enable future connection into the Zero Carbon Humber pipeline (still to be applied for), when this is consented and operational, to enable the possibility of full carbon capture in the future. The Applicant has included within the dDCO, consent for a section of the necessary pipeline along the new access road to transport the CO2. Alternatively, there is the prospect of transporting additional captured carbon, over and above that committed through the draft DCO, by rail and/or river, subject to this falling within the permitted/available number of movements through the port and by rail. Enfinium announced in March 2023 that it has signed an MOU to develop options to transport carbon dioxide captured at its Ferrybridge waste facilities in West Yorkshire to Navigator's storage facilities in Teesside using rail freight. The CO<sub>2</sub> would then be transported offshore from Navigator's facilities for permanent storage, which supports the prospect of this happening at the Project site.
- 1.5 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.
- 1.6 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 (H2) 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 by 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.
- 1.7 Additional information regarding the proposed development can be found in Chapter 1 and Chapter 3 of the submitted Environmental Statement [APP-049 and REP6-018].
- 1.8 In this document, the terms ERF and Energy from Waste (EfW) are used interchangeably to refer to the same treatment process producing energy from residual waste.

#### Summary of Need for the Proposed Development

1.9 NLGEP is not simply an Energy Recovery Facility (ERF). It includes a variety of complementary renewable and low carbon sources to deliver a project that achieves a net carbon benefit of 6,066 tCO2e per annum for the Project compared to the alternative baseline landfill scenario [Chapter 6 of the ES, APP-054]. This is not just a pipe dream – the infrastructure is either included or enabled



so that the Examining Authority can consider that there is a high prospect of these carbon benefits being delivered.

- 1.10 The ERF will process refuse derived fuel to heat water into steam, which will turn a turbine to generate electricity. Refuse derived fuel is derived from the processing of municipal and commercial 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. An Environmental Permit will set limits and control these emissions.
- 1.11 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 [Planning Statement, REP2-017].
- 1.12 In 2019, 2.9 million tonnes of general waste were received by landfill sites within 100 miles of the Project, of which 866,000 tonnes were received by landfill sites in North Lincolnshire [REP3-040]. The Project would go a long way towards diverting this from landfill. Looking forward, even with recycling targets being met, at a North Lincolnshire local authority level alone there would still be residual capacity of 329,000 tonnes per annum in 2022, falling to 283,000 tonnes per annum in 2040 [Applicant's response to ExA's second written questions, Table 4, REP6-032]. There is however considerable uncertainty over whether recycling targets will be met [RDF Supply Assessment, REP3-040].
- 1.13 There is an existing stockpile of waste currently stored at Killingholme Airfield, which was amassed by a now defunct operator and is estimated to be at least 50,000 tonnes. Whilst this is a small quantum of the capacity of the facility, this stockpile has been there since 2011 and North Lincolnshire Council, the Environment Agency and Natural England is seeking a solution for treatment of this waste, which the Project if consented would be able to resolve.
- 1.14 At national and regional (East Midlands and Yorkshire and Humber) level, the RDF Supply Assessment [REP3-040] projects a capacity gap based on existing and committed capacity of over 2 million tonnes nationally and around 1.1million tonnes at the local level in 2035 if low-CCS potential projects are excluded (and assuming that very ambitious recycling targets are met). The Applicant's position on waste need, having regard to the clear policy direction on CCS is summarised at Section 2 of this report.
- 1.15 The UK has targets to increase recycling (and indeed NLGEP has assumed in its calculations that all of these targets will be met) and a residual waste reduction target, but there remains a long way to go, and it requires massive investment and a step change in behaviour. The ERF at NLGEP will only



be able to take processed Refuse Derived Fuel (RDF) as secured by requirement 15 in the draft DCO [REP5-006]. As such, the Project will not impact on the UK's ability to meet recycling and residual waste reduction targets.

- 1.16 Government policy continues to support EFW facilities where they are compliant with the waste hierarchy. It is clear that there is no Government policy moratorium on EfW facilities and the Government response to the consultation on draft EN3 makes it clear that it is not considered necessary to impose one [see REP7-032].
- 1.17 In addition to the Project's role in treating residual waste, it has an important role in renewable and low carbon energy generation. Government has a legal obligation to ensure that Net Zero is met the decarbonisation required to achieve this is of global significance and cannot be allowed to fail.
- 1.18 The recent policy announcements on so-called Green Day (30<sup>th</sup> March 2023) make it clearer than ever what the UK needs to do in order to meet its legally binding Net Zero targets. The National Audit Office in their 2020 report entitled Meeting Net Zero described the challenge as "colossal" [see Applicant's Written Summary of Oral Submissions at ISH1, REP1-015].
- 1.19 The UK will continue to require a fleet of modern, clean, CCUS-enabled ERFs to contribute both to the legal requirement to meet Net Zero and treat the UK's waste without continuing to send vast quantities to landfill. The NLGEP not only provides this but puts forward a holistic solution to meeting the challenges of Net Zero.

#### Update on Landowners with outstanding planning issues

- 1.20 An updated Compulsory Acquisition Schedule was submitted at Deadline 8 [REP8-015].
- 1.21 The final SoCG with Rainham Steel submitted at Deadline 9 [Document 8.2.16] confirmed that the Applicant had entered into a commercial agreement to purchase the site freehold from Voric/Rainham Steel, with a preferred option for the Applicant to deliver a relocation site in proximity to Flixborough Wharf. In order to progress this preferred option, the Applicant is working with Rainham Steel to finalise a pre-application submission to NLC on a site within close proximity of Flixborough Wharf. The Applicant will continue to work with Rainham Steel to finalise the pre-application submission and subsequently a full application for planning permission for the proposed relocation site. It is understood that Rainham Steel has no outstanding objections to the Proposed Development as set out in the final SoCG.
- 1.22 AB Agri continue to maintain their objections to the scheme. The Applicant's response to their latest submission at Deadline 8 was provided at Deadline 9 [Document 9.36]. In terms of the land required



for temporary acquisition, the Applicant notes that it is a very small area outside of AB Agri's operational fence line and the Applicant maintains that there would be no impact on AB Agri's operations from the temporary acquisition. The Applicant has responded comprehensively to AB Agri's concerns relating to the risk of salmonella infection and considers all outstanding concerns have been addressed, noting that there is a fundamental difference of opinion from AB Agri that cannot be resolved.



#### 2.0 POLICY - DIRECTION OF TRAVEL AND RELEVANCE TO POLICY POSITION

#### Introduction

- 2.1 Recent Government policy has been increasingly clear that mitigating the effects of climate change and ensuring UK energy security, resilience and affordability is a top priority.
- 2.2 Since the start of the NLGEP examination in November 2022, policy has grown even stronger with regard to the steps necessary to reach Net Zero and improve energy security, resilience and self-sufficiency of the UK energy (and waste) market.

# Powering Up Britain, 30th March 2023

- 2.3 The Government made a number of further policy announcements in March 2023, with the publication of Powering Up Britain, building on earlier announcements in the budget and incorporating a Net Zero Growth Plan and Energy Security Plan.
- 2.4 This included further support for CCUS and hydrogen, including the announcement of Track 2 CCUS projects in HyNet and Teesside.
- 2.5 The document included an intention to consult in 2023 on the need and potential design options for market intervention to support hydrogen. The Government's view on the role of hydrogen is clear, with the document stating the following.

"Hydrogen – The UK's natural assets and technical expertise means we can be an early mover in both electrolytic 'green' hydrogen and CCUS-enabled 'blue' hydrogen production. There are over 200 companies working on hydrogen and fuel cell technologies in the UK, and we consistently feature in the top ten countries globally for hydrogen technology patent rates."

- 2.6 Overall, the policy statement gave further weight to the Government's commitment to Net Zero showing progress made and further support for:
  - Offshore wind, nuclear and solar;
  - CCUS and hydrogen, including announcing two CCUS-enabled energy recovery facility (Protos
    ERF and Viridor Runcorn in the HyNet Cluster) within the Track 1 negotiation list, showing
    clear Government intent on support for CCUS in EfW facilities;
  - Electric vehicle charging; and
  - Nature recovery.
- 2.7 The NLGEP Project is entirely consistent with these aims and policy direction.



#### **Revised Suite of Energy NPSs**

2.8 The Government also published the revised draft suite of Energy NPSs on 30<sup>th</sup> March 2023.

#### Revised draft National Policy Statement EN3

2.9 There are relatively little relevant changes from the draft NPS EN3 of 2021, which was already supportive of EfW where consistent with the waste hierarchy. One relevant change is to paragraph 3.7.29 which states:

"Applicants must ensure EfW plants <u>are fit for the future</u>, do not compete with greater waste prevention, re-use, or recycling and do not result in an over-capacity of EfW waste treatment provision at a local or national level." (our emphasis)

- 2.10 This revised draft policy can be looked at in three parts, in terms of its reflection of Government intent:
  - i. That EfW plants are fit for the future;
  - ii. That EfW plants do not compete with greater waste prevention, re-use and recycling; and
  - iii. That EfW plants do not result in an over-capacity at a local or national level.
- 2.11 On i) this supports the Applicant's position that older EfW will find it increasingly hard to compete and therefore that older plant which have low potential for CCUS should not be considered fit for the future and consequently should not be included in the definition of capacity. The relevance of this to the Applicant's position on capacity is explained later in this Section. We have also highlighted the fact that one of the Government requirements to bid to be a project connected to one of the clusters is that the EfW facility has R1 status.
- 2.12 This is further supported by existing EfWs recognising the direction of travel and making steps to integrate CCUS and hydrogen. For instance, the Cory Riverside Decarbonisation Project see further details later in this section.
- 2.13 On ii) the Applicant's submission to the ExA's third written questions at Deadline 8 [REP8-020, question 17.0.1] confirms the Applicant's position that the Project will not compete with waste prevention, reuse of recycling. It explains that Government policy requires further action to achieve the various targets. It will do so, amongst other things, through the measures set out in the Environmental Improvement Plan 2023 and through the Deposit Return System for plastics and metal containers; consenting the Project would not compromise the effectiveness of these measures and the current NPS EN3 acknowledges that this need not be the case.



- 2.14 On iii) the Applicant's position is that there will be no overcapacity, as stated in paragraph 1.13 above. The Applicant considers it entirely reasonable to exclude low-CCS potential projects for the reasons given above and this is only reinforced by the amendments to revised NPS EN3.
- 2.15 There is also helpful clarification on the role of CCS in biomass projects. Whilst not directly relevant to the Project, it provides useful recognition of the Government's view of the importance of CCS to deliver negative emissions and the priority to be given to such projects (paragraph 3.7.14).

The government recognises the need to prioritise biomass use to applications where it can deliver GHG emission reductions in hard-to-decarbonise sectors, without other viable alternatives, to comply with our net zero and wider environmental goals. One of these priority applications is the use of biomass to deliver negative emissions through Bioenergy with Carbon Capture & Storage (BECCS)."

2.16 Paragraph 3.7.2 continues to give strong support to EfW.

"In accordance with the waste hierarchy, Energy from Waste (EfW) also plays an important role in meeting the UK's energy needs. Furthermore, the recovery of energy from the combustion of waste forms an important element of waste management strategies in both England and Wales."

2.17 Regarding site selection, the revised draft NPS EN3 continues to include policy on the sequential approach, making clear that:

"As most renewable energy resources can only be developed where the resource exists and where economically feasible, and because there are no limits on the need established in Part 3 of EN-1, the 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)."

- 2.18 This is important with regard to the consideration of alternative sites.
- 2.19 There is also further clarity on the need for flexibility for EfW and biomass facilities. Paragraph 3.7.32 states:

"In some cases, not all aspects of the proposal may have been settled in precise detail at the point of application. Such aspects may include:

- The composition, calorific value and availability of fuel.
- The precise details of all elements of the proposed development." (our emphasis)
- 2.20 Revised draft NPS EN3 also continues to recognise the role of EfW in the waste hierarchy stating at paragraph 3.7.43:



- "EfW plants need not disadvantage reuse or recycling initiatives where the proposed development accords with the waste hierarchy."
- 2.21 This has been confirmed by the Environment Agency in their response to the ExA's Second Written questions [REP6-040, question Q12.17.0.2], where they state:
  - "5. The use of EWC codes is the method used in environmental permits to identify the types of waste that can be accepted to enter an ERF. The correct application and adherence to all relevant UK waste legislation and regulations should ensure that no recyclable or re-usable waste enter the ERF component of the proposed development, unless it is considered that incineration delivers the best environmental outcome in accordance with regulation 12 of the Waste Regulations 2011."

# Revised draft National Policy Statement EN1

- 2.22 There is also a change in emphasis in draft NPS EN1 for support for hydrogen and CCUS projects not captured by the Planning Act, but included within a project under a Section 35 determination by the Secretary of State:
- 2.23 Paragraph 3.2.11 provides clarity that the substantial weight to be given by the Secretary of State to the need for new infrastructure, given the urgency of that need, applies to hydrogen and CCS infrastructure:
  - "• where the application is for hydrogen infrastructure not covered by sections 15-21 of the Planning Act, the Secretary of State should give substantial weight to the need established at paragraphs 3.4.12 to 3.4.21 of this NPS.
  - where the application is for CCS infrastructure not covered by sections 15-21 of the Planning Act, the Secretary of State should give substantial weight to the need established at paragraphs 3.5.1 to 3.5.7 of this NPS."
- 2.24 This further demonstrates the Government's commitment to such projects.

#### Spring Budget, March 2023

- 2.25 The Spring Budget gave a strong direction that mitigating climate change and energy security and affordability was a clear priority, through the allocation of funds in a tight fiscal environment. Amongst other things, the Spring Budget included:
  - £20bn allocated for development of Carbon Capture Usage and Storage, which will create 50,000 jobs and facilitate the storage of 20 to 30 million tonnes of CO2 a year by 2030. This will begin with projects in HyNet and East Coast cluster, before being rolled out to further clusters.



- The Government will introduce legislation in a future Finance Bill which will determine how tax is applied to payments for the repurposing of existing oil and gas assets for use in CCUS projects.
- Climate Change Agreement scheme extended for two years to allow eligible businesses £60m of tax relief on energy efficiency.
- Subject to consultation, nuclear power to be classed as "environmentally sustainable" in green taxonomy.
- 'Great British Nuclear' will be established to help nuclear provide one quarter of electricity by 2050.
- The UK is launching the first competition for Small Modular Reactors which is expected to conclude this year.
- The Energy Price Guarantee will be extended, remaining at £2,500 for the next three months.

# Climate Change Committee - Delivering a Reliable Decarbonised Power System, March 2023

- 2.26 The Climate Change Committee published its report Delivering a Reliable Decarbonised Power System in March 2023.
- 2.27 In publishing the report, the CCC expressed strong sentiments about progress towards meeting Net Zero:

"We know how to do this, <u>but Government is asleep at the wheel</u>. Recent commitments for new nuclear and renewables are welcome, <u>but these alone are insufficient</u>. ."

"Alongside Government's Energy Security Strategy commitments to renewables and nuclear, we need:

- New low-carbon back-up generation, with hydrogen-based power stations and some continued use of fossil gas, <u>made low-carbon through use of carbon</u> <u>capture and storage</u>.
- Smart shifting of consumer demand, to help to smooth peaks in demand and absorb excess supply, especially through controlled timing of electric vehicle charging and use of heat pumps.
- New storage solutions, beyond simply the use of batteries. Most critical is the use
  of surplus generation to produce hydrogen through electrolysis ('green
  hydrogen'), providing long-term storage so it can later be used to generate
  electricity." (our emphasis)



2.28 CCUS, hydrogen and low carbon production of electricity are therefore key components of what is needed in the fight to combat climate change.

# **Hydrogen Champion Report, March 2023**

- 2.29 The Government published the *Hydrogen Champion Report* in March 2023, which was the outcome of a review by an expert independent advisor on the steps necessary to accelerate investment in the hydrogen economy.
- 2.30 The report is not Government policy, but there are clear recommendations included which together with Government support for hydrogen in the British Energy Security Strategy [see Applicant's Written Summary of Oral Submissions at CA Hearing 1, REP6-035] shows the strong direction towards hydrogen becoming more dominant in the future UK energy mix.
- 2.31 The Report included emphasis on the importance of hydrogen's role in integrated energy infrastructure, noting:

"Hydrogen transport and storage infrastructure will be a critical enabler to meet government's 10GW ambition. Alongside connecting producers and consumers, well-developed hydrogen transport and storage can deliver system savings. Excess renewable electricity can be used to produce hydrogen, which can then be stored over time.

As in so many other areas, hydrogen is an essential piece of a bigger puzzle. However, it requires an integrated, long-term approach to deliver benefits."

# Mission Zero, Independent Review of Net Zero, Rt Hon Chris Skidmore MP

- 2.32 Former Energy Minister, Chris Skidmore, published his Net Zero Review in January 2023. This included 129 recommendations to Government, including:
  - In 2023, government must act quickly to re-envisage and implement a clear CCUS roadmap, showing the plan beyond 2030. As part of the roadmap, government should take a pragmatic approach to cluster selection. This means allowing the most advanced clusters to progress more quickly.
  - By 2024, government must develop a strategy for the plan for non-pipeline transport and how dispersed sites and mini clusters can connect to the CCS network and what support should be offered for doing so.
  - As soon as legislation allows, government must finalise the business models and regulatory frameworks across the value chain, including for industrial CCS, Energy from Waste with CCS and CO<sub>2</sub> transport and storage.



- By the end of 2023, develop and implement an ambitious and pragmatic '10 year' delivery roadmap for the scaling up of hydrogen production. Government should deliver hydrogen business models as soon as legislation allows and confirm the long-term funding envelope available for hydrogen revenue support, to incentivise timely investment.
- As soon as legislation allows, government must finalise the business models and regulatory frameworks across the value chain, including for industrial CCS, Energy from Waste with CCS and CO<sub>2</sub> transport and storage.
- 2.33 The Government published their response to the Skidmore Review in March 2023, alongside the suite of other energy documents. The Government has accepted many of the recommendations and these are reflected through some of the policy announcements of the same date.
- 2.34 On the recommendations relating to the UK ETS, Government accepts the recommendation that they set out a long-term pathway for the UK Emissions Trading Scheme (ETS) and that they will work with the ETS Authority to publish one this year. Subject to agreement within the Authority, this pathway will set out their intention to legislate to continue the ETS beyond 2030 until at least 2050. The Government states that it will remain aligned with the net zero target, so giving businesses the certainty they need to invest in decarbonisation. The Government states that it will explore expanding the scheme to more sectors of the economy, including energy from waste/waste incineration and on incorporating greenhouse gas removals. Throughout, the Government confirms that it will ensure effective carbon leakage mitigations are in place to ensure the UK's efforts in decarbonisation lead to a true reduction in global emissions.

#### **Environmental Improvement Plan, January 2023**

- 2.35 The EIP included a pledge to eliminate avoidable plastic waste by 2042.
- 2.36 The EIP also had a renewed focus on nature recovery and included the following targets and commitments:
  - Restore or create more than 500,000 hectares of wildlife-rich habitat by 2042, alongside our international commitment to protect 30% of our land and ocean by 2030.
  - New interim target to restore or create 140,000 hectares of wildlife-rich habitats outside protected sites by 2028, compared to 2022 levels.
  - Establish a UK wetland inventory, in support of the Ramsar Convention on Wetlands, mapping our wetlands for the first time and underpinning future actions to protect these vital habitats.



- Support 65 to 80% of landowners and farmers to adopt nature friendly farming on at least 10-15% of their land by 2030.
- Pay farmers and land managers to take care of the natural countryside environment,
   alongside food and other production, so that collectively:
  - They will contribute at least 50% of the target of bringing protected sites into favourable condition by 2042.
  - Including peatland restoration and biodiverse woodland, they will contribute at least 80% of the target to restore or create more than 500,000 hectares of wildlife-rich habitat outside of protected areas by 2042.

# **UK Emissions Trading Scheme (ETS)**

2.37 The Government published a consultation document *Developing the UK ETS* in June 2022. This included a Call for Evidence to expand the UK ETS to waste and energy from waste by the mid to late 2020's.

#### 2.38 The document notes:

"In their recently published progress report, the CCC stressed that Government needs to "address with urgency the rising emissions from, and use of, Energy from Waste". The report recommended that Government consult in 2022 on the introduction of a carbon tax (either as part of the UK ETS or a separate instrument) aimed at curbing rising emissions from EfW. This call for evidence seeks to understand how the UK ETS could be expanded to cover waste incineration and EfW."

- 2.39 The Call for Evidence also states that including EfW in the UK ETS may:
  - Help raise efficiency of conventional EfW plants by incentivising more plants to supply heat (i.e. heat offtake) or by potentially encouraging residual waste to be recovered in a way which lowers overall carbon emissions.
  - Provide an incentive for the development and uptake of decarbonisation technologies or
    practices to reduce emissions from waste incineration and EfW, principally by strengthening
    long-term investment incentives. For example, by enhancing the pre-treatment of waste
    before it is incinerated to reduce fossil plastic in the waste stream (a costly and intensive
    process).
  - Incentivise investment into Carbon Capture and Storage (CCS) to reduce CO<sub>2</sub> emissions from EfW, depending on wider availability of the technology and infrastructure, and cost-benefit to the plant.



2.40 It should be noted that whilst the UK Government has yet to confirm that EfW will be included in the UK ETS, the European Parliament and Council confirmed in December 2022 that EfW will be included within the EU ETS by 2030 at the latest. It is widely expected that the UK ETS will also be amended to follow suit.

#### **Direction of travel**

- 2.41 There is a clear direction of travel in UK policy, which has strengthened even further in the last six months:
  - Increasing push towards decarbonisation and the criticality of meeting Net Zero.
  - Increasing focus on not just achieving Net Zero but also about ensuring security, resilience and affordability of the UK energy sector.
  - A realisation that a change in the pace of delivery of renewable and low carbon energy is needed if the UK is to meet its legal obligations.
  - Increasing policy support and funding for CCUS.
  - Increasing policy support and funding for hydrogen.
  - A high prospect that EfW will be included within the UK ETS, which will require existing plants to incorporate measures to make them more energy efficient, including CCUS and CHP.
  - Further emphasis on the importance of nature recovery in meeting Net Zero.
- 2.42 Further evidence of this is provided in the S35 Direction of the Secretary of State for the Decarbonisation of Cory Riverside EfW (6<sup>th</sup> October 2022). In reaching the decision to make the S35 Direction, the Secretary of State confirmed:

"Both the carbon capture and storage and hydrogen elements of the Proposed Project will play an important role in enabling an energy system that meets the UK's commitment to reduce carbon emissions and the Government's objectives to create a secure, reliable and affordable energy supply for consumers.

The carbon capture element of the Proposed Project would provide and support the decarbonisation of energy from waste derived CO2 emissions in the UK, delivering over a million tonnes of CO2 savings per annum, and supporting the achievement of a fully de-carbonised district heating network that crosses local authority areas.

The hydrogen element of the Proposed Project would provide and support the production of viable hydrogen facilities that would enable the provision of regular hydrogen supply to heavy goods vehicles and vessels as both forms of transport seek to decarbonise, and will make an important contribution to the overall 5GW target set out in the Hydrogen Strategy."



# Relevance to waste capacity position

- 2.43 There is no adopted policy requirement to show that new ERFs will not result in an overcapacity at UK or local level.
- 2.44 Nevertheless, the Applicant has considered whether there will be any overcapacity. If all existing facilities are assumed to continue operating, and current recycling and residual waste reduction targets are met, there would be a slight overcapacity at UK and regional level (see Tables 1-4 of Applicant's response to ExA's second written questions, [REP6-032]), but a slight under-capacity at local level.
- 2.45 However, the Applicant's position is that it is reasonable to assume that older facilities that do not have R1 status and have low potential to incorporate CCUS will not be fit for the future and increasingly they will be unable to compete and a number of them will therefore be forced to close. This is entirely consistent with the required transition to a renewable and low carbon economy and strongly supported by recent Government policy announcements of 30<sup>th</sup> March 2023.
- 2.46 The RDF Supply Assessment, Revision 2 [REP3-040] (as updated in REP3-022) shows that when non R1 plant (which are further down the waste hierarchy) and EfW with low potential to incorporate CCS are excluded, there is a significant capacity gap at a national and local level. When active consented pipeline projects are added and weighted by a probability of realisation based on historic success rates, the capacity gap just about closes at the national level, assuming recycling targets are met. However, as the RDF Supply Assessment notes, whilst a considerable amount of energy from waste capacity has been consented, 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 minority of pipeline projects which are well-placed to connect to a CCUS cluster. The Project secures the delivery of the CCUS through requirement 18 of the dDCO, which requires the CCUS to be constructed and commissioned within 6 months of commissioning of the ERF.
- 2.47 Furthermore, as noted in the RDF Supply Assessment, it is unrealistic to assume that all of the existing EfW fleet will be retrofitted with carbon capture. Assuming all capacity is required to have carbon capture by 2035, then there will be a capacity gap of over 2 million tonnes nationally and around 1.1 million tonnes at the local (East Midlands and Yorkshire and Humber) level in 2035 if low-CCS potential projects are excluded (even assuming that very ambitious recycling and residual waste reduction targets are being met). There is an increasingly high prospect of this given the recent Government policy announcements.



#### 3.0 NEED FOR EACH COMPONENT OF THE PROJECT

- 3.1 The need for the ERF has been dealt with comprehensively above and in the Application Documentation.
- 3.2 A summary is provided below on the need for the Associated Development, building on the written summary of oral submissions provided at CAH1 [REP6-035].
- 3.3 As explained at CAH1, the Applicant started with the central principle of delivering a truly sustainable scheme, which addressed Government policy on a number of important levels. The need for each component is explained below. The Explanatory Memorandum [REP5-007] explains why each component meets the tests of Associated Development.

## Plastics recycling facility (PRF)

- 3.4 Recycling is at the heart of Government waste policy. The waste hierarchy (referenced in EN1 at para 5.14.2) sets out clearly that the priorities for managing waste must be applied as follows:
  - Prevention
  - Preparing for re-use
  - Recycling
  - Other recovery including energy recovery
  - Disposal.
- 3.5 The Resources and Waste Strategy (2018) sets a target recycling rate of 75% for packaging by 2030 and 65% for municipal solid waste by 2035. It also includes a strategic ambition to eliminate avoidable<sup>1</sup> plastic waste over the lifetime of the 25 Year Environment Plan.
- 3.6 Plastics recycling is therefore a key part of Government policy.
- 3.7 RDF will be purchased in bulk and will include an element of plastic materials which are capable of being recycled but nevertheless usually end up being recovered through the ERF. By delivering the PRF as part of the Project, the Applicant will be able to facilitate and incentivise the RDF to be source segregated and enable the recycling of plastics that would otherwise not be recycled. The PRF will

<sup>&</sup>lt;sup>1</sup> When the plastic could have been reused or recycled; when a reusable or recyclable alternative could have been used instead; or when it could have been composted or biodegraded in the open environment.



be subordinate to the ERF as requirement 23 of the draft DCO [Document 2.1] commits the PRF to only treating plastic waste received from suppliers who are also supplying the RDF for the ERF.

3.8 The Environment Food and Rural Affairs committee have set out objectives to eliminate the export of plastics by 2027<sup>2</sup> which would require additional capacity to manage the 2.5m tonnes currently exported. The UK capacity to recycle this volume of plastic is not yet consented or operational. The Government response to the committee<sup>3</sup> (in January 2023) didn't take on board all of the committee's recommendations, but it was clear that plastics recycling (and reuse) is still an absolute priority, particularly given the move away from compostable plastics. For instance, the response notes:

"On the subject of compostable plastic, the Committee should note there has been a change in the government's position since the Resources and Waste Strategy was published in 2018. In this, we committed to work towards all plastic packaging placed on the market being reusable, recyclable or compostable by 2025. However, since then, we are now focusing on increasing reuse and recycling, not composting of plastic packaging. Compostable plastics are inherently single-use and are not in line with our vision for a circular economy for plastics." (our emphasis)

- 3.9 The current plastic separation and recycling technologies do not facilitate the recycling of all types of plastic. A co-location of a plastic recycling facility that can recover energy from the non-recyclable fraction will increase the volume of waste plastic that can be recycled. As technologies develop and the commercial viability increases, more plastics can be recycled.
- 3.10 The ability to utilise the process residues in the manufacture of concrete products on site improves the environmental benefits of the recycled plastic.
- 3.11 In order for the Government to meet their recycling and residual waste reduction targets (which as explained earlier will be challenging) it is vital that facilities such as that included as part of the Proposed Development are built. The PRF is another way in which the Project is seeking to deliver a modern, low carbon energy park, rather than a traditional ERF.

<sup>&</sup>lt;sup>2</sup> The price of plastic: ending the toll of plastic waste: Third Report of Session 2022-2023, November 2022

<sup>&</sup>lt;sup>3</sup> The price of plastic: ending the toll of plastic waste: Government Response to the Committee's Third Report, January 2023



#### Hydrogen production and storage

- 3.12 As noted in the Explanatory Memorandum [REP5-007], the Project will include up to two Hydrogen production facilities, which will produce around 6.7 MW (gross calorific value) of hydrogen:
  - (i) The first facility will be located at the south of the Energy Park Land, adjacent to the Electric Vehicle (EV) and H2 re-fuelling station. This facility will comprise a standalone building, housing Polymer Electrolyte Membranes (PEM) units, with additional ancillary equipment, including pumps, heat exchangers, fin-fan coolers, oxygen separators, buffer tanks, compressors, high pressure gas storage, gas AGI and pipework needed to feed H2 to the distribution hub outside of the electrolyser building.
  - (ii) The second H2 production facility will be located to the north of the Energy Park Land, adjacent to the Gas AGI and will be of a similar design to the first, incorporating a standalone building housing an electrolyser and the additional ancillary buildings to incorporate the necessary ancillary equipment. However, at this location, the pipes will feed H2 to the AGI for future distribution into the gas grid.
- 3.13 The Project will include the construction of up to two new gas above ground installations (AGI) which will facilitate the export of hydrogen to the gas grid at a point in the future when the concept has been validated.
- 3.14 The H2 refuelling station will have a refuelling bay for buses and lorries, enabling Scunthorpe buses to transition to a Net Zero future and offering the opportunity for HGVs associated with the NLGEP and Flixborough Industrial Estate as a whole to be more sustainable.
- 3.15 Policy announcements in March 2023, together with policy in the British Energy Security Strategy (BESS), 2022 and the Ten Point Plan (2020) have made the Government's position on hydrogen clear:
  - An ambition for 10GWe of hydrogen production by 2030.
  - An aspiration for hubs where renewable energy, CCUS and hydrogen congregate.
  - The commitment of £240m in the Net Zero hydrogen fund, with the successful applicants (15 projects) announced on 30<sup>th</sup> March 2023.
  - Announcement of the shortlist of projects for due diligence in the first electrolytic hydrogen round, supporting up to 250MW of capacity.



- Announcement of intention to launch a second electrolytic allocation round later this year, through which they intend to support up to 750MW capacity, and to publish a hydrogen production delivery roadmap by the end of the year.
- 3.16 The Applicant's response to Q6.0.10 [REP2-033] referred to The Energy Networks Association (ENA), which represent all electricity and gas networks in UK and Ireland, which published its Hydrogen Blending Delivery Plan in January 2022, which clearly stated the commitment of all energy networks to enable hydrogen blending by the end of 2023.
- 3.17 National Grid Future Energy Scenarios, July 2022, also considers the role of hydrogen under four possible scenarios falling short, leading the way, consumer transformation and system transformation. The document notes that the credible range of possible hydrogen use is very wide, and this impacts the development of hydrogen infrastructure. While hydrogen for power generation is needed in all our Net Zero scenarios to support electricity Security of Supply, the broader levels of demand, hydrogen production methods, and end uses vary greatly between the scenarios.
- 3.18 National Grid's Leading the Way scenario meets the 10GW of hydrogen production by 2030 set out in the BESS. Future Energy Scenarios also notes that:

"To fully realise the whole system benefits of hydrogen, and to provide energy security without unabated gas, high levels of hydrogen storage will be required. This is the case across all the Net Zero scenarios and, given the likely geological aspect of these projects, strategic investment is required now."

3.19 This scale of ambition will only be realised if projects like NLGEP are allowed to proceed.

## **Battery Storage**

- 3.20 The Project will include a battery storage facility which will have a storage capacity of 45MWh and a peak discharge of 30MW.
- 3.21 BESS recognises the need for battery storage as a fundamental part of meeting Net Zero and its importance for resilience and security of the energy network. The provision of battery storage also helps to manage the peaks and troughs, holding power and delivering it to the network when it is needed.
- 3.22 It is necessary to have battery storage at both power generators and local distribution networks, to enable electricity to be delivered to the system when it is most needed.
- 3.23 National Grid Future Energy Scenarios, July 2022, illustrates four future energy scenarios Falling Short, Consumer Transformation, System Transformation and Leading the Way. Falling Short



doesn't deliver the legally binding commitments of Net Zero. Consumer Transformation and Leading the Way require more than 115 GWh (volume) of electricity storage, compared to less than 30 GWh (volume) today. All scenarios see an increase in capacity of between 1.6GW (Falling Short) and 20GW (Leading the Way) by 2030, and up to 35GW by 2050. This transformational increase cannot be achieved without quickly building many more battery storage projects in the UK than we are currently.

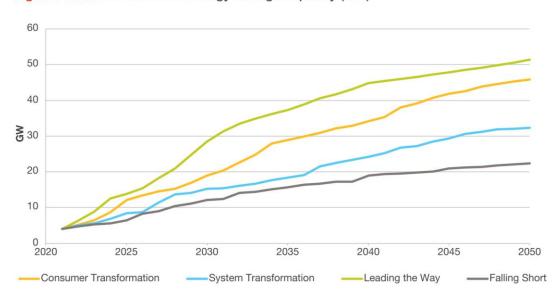


Figure FL.18: Total electrical energy storage capacity (GW)

Figure 1 – National Grid Future Energy Scenarios, Total Electrical Energy Storage Capacity, July 2022

3.24 The proposed battery storage at NLGEP would provide an important step towards meeting the scale of battery storage necessary by 2030.

## **Electric Vehicle charging**

- 3.25 The EV re-fuelling station will have 13 electrical re-fuelling points for both domestic cars and light commercial vehicles and 5 HGV sized vehicle recharging bays.
- 3.26 The provision of EV charging points is a critical part of the decarbonisation of the UK transport sector and fundamental to achieving Net Zero.

# **District Heat and Private Wire Network**

3.27 NPS EN1, paragraph 4.6.2, makes the benefits of district heating networks clear as a means of reducing the amount of fuel which would otherwise be needed to generate the same amount of



heat and power separately. Policy specifically requires the consideration of CHP in all types of thermal generating stations, including EfW.

- 3.28 The CHP Assessment [APP-038] makes it clear that the facility will be constructed as CHP enabled from the outset and configured as a CHP-Ready plant, thereby meeting another central aim of Government policy. Requirement 17 of the draft DCO requires a scheme for the provision of steam or hot water pass-outs to be submitted to and approved by the local planning authority and for the approved scheme to be implemented prior to the coming into operation of the development and maintained throughout the operation of the development.
- 3.29 The Project includes two DHNs:
  - (i) The Northern DHPWN
  - (ii) The Southern DHPWN
- 3.30 The Northern Network runs in same trench as the high voltage grid connection required to connect NLGEP to the national grid. It therefore achieves the benefits of a district heating network without additional works and impacts.
- 3.31 The Southern Network connects to planned future housing to the south of Scunthorpe. Planning permission was granted for 2500 homes granted in August 2021, along with junction works and new habitats (PA/2015/0396).
- 3.32 The provision of the DHPWN ensures that the benefits of, and the excess heat generated by, the ERF can be shared with the local community and businesses in the future.

#### Rail works

- 3.33 6km of the currently disused privately owned and operated railway line between the main Network Rail line at Dragonby and the Wharf at Flixborough will be upgraded and re-instated. The line runs 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 length.
- 3.34 Government policy requires us to make the most of existing infrastructure.
- 3.35 NPS EN3 encourages multi-modal transport (para 2.5.25) and that decision takers should expect materials to be transported by water or rail wherever possible.



- 3.36 NN NPS (2014) recognises that railways are a vital part of the country's infrastructure (para 2.28). It also recognises that the railway must, inter alia, provide for the transport of freight across the country, and to and from ports, in order to help meet environmental goals and improve quality of life (para 2.30).
- 3.37 The National Networks NPS recognises importance of rail freight in transporting goods and materials:

"Rail freight is therefore of strategic importance, is already playing an increasingly significant role in logistics and is an increasingly important driver of economic growth, particularly as it increases its market share of container traffic. The Government has therefore concluded that at a strategic level there is a compelling need for development of the national rail network to meet the need set out in paragraphs 2.28 and 2.29."

3.38 The reinstatement of the railway to connect into the national rail network therefore addresses important aims of Government policy with relatively little additional works, primarily to facilitate safe crossing of the railway and to deliver landscaping and environmental improvements. The reinstatement of the railway line is secured by requirement 20 of the draft DCO. This aims to ensure the railway line is completed to an extent as to facilitate its use by rail freight for importing/exporting waste and other materials during construction of the development (within 12 months of construction of the new access road) and in any event prior to commissioning of the ERF. The requirement also provides that once completed, the railway line must be retained, managed and kept as part of the development, available for use throughout construction and operation. There would also be the added benefit of the railway then being available for use by other businesses at the port, for example Rainham Steel and British Steel, once installed, subject to being within the permitted capacity.

#### **New Access Road**

- 3.39 The Project will involve closing the section of highway on Stather Road between Flixborough Industrial Estate and the existing surface water pumping station north of Neap House and replacing it with a new access road. The need for the new access road is addressed in the Applicant's response to FWQ Q.14.0.8. Article 14 of the draft DCO provides that this section of Stather Road shall not be stopped up unless the new access road has been completed and is open for use.
- 3.40 The closed section will be on the site of the proposed ERF for which there is a compelling case in the public interest, for the reasons stated elsewhere in this document. It's loss therefore cannot be avoided.



3.41 Further, the existing road is not fit for purpose to serve the existing industrial estate and port and is a single track in places. The provision of a new access road to serve the whole industrial estate and port therefore has additional benefits. NLC (the highway authority) are supportive of the proposed New Access Road saying that it will offer significant benefits to road users and residents at Neap House in particular. Requirement 14 ensures the new access road is to be delivered to base course level and connected to the public highway prior to commencement of the Energy Park works or railway reinstatement works, so that the new access road can be used during construction. Requirement 14 also secures the completion of the new access road prior to the ERF coming into operation.

# Landscaping, wetland areas and Biodiversity Net Gain (BNG)

- 3.42 Although the Applicant is not seeking compulsory acquisition rights over land to deliver BNG, the Project incorporates important mitigation and enhancement areas for wildlife. In some instances, these are mitigating impacts, for example for visual screening, for surface water drainage and flood risk mitigation and in other instances they are addressing important aspects of Government policy, either through delivering BNG or nature recovery. The delivery of the BNG is secured through requirement 6, which ensures that the Landscaping Scheme to be submitted to and approved by the local planning authority must be in accordance with the plans in the Biodiversity Net Gain Report (Appendix I of the Ecology and Nature Conservation chapter of the Environmental Statement (APP-058)). The approved scheme must be implemented within 12 months from the coming into operation of the development and maintained during its operation.
- 3.43 The new landscape and wetland area to the south of the ERF will address important aims of the Government's Environmental Improvement Plan (2023) and nature recovery programme through creating wildlife-rich habitats and improved access to nature and providing overall good design, as required by NPS EN1 (Design and Access Statement, Revision 2 [REP6-009]).

#### Summary

- 3.44 This section has demonstrated why each component of the NLGEP is necessary. Some elements are necessary as part of the ERF element of the Project to maximise the benefits and address important aspects of Government policy, for example the ERF itself, rail reinstatement works, new access road and Northern and Southern DHPWNs. Other elements address important aspects of Government policy, in their own right, for example the plastics recycling facility, hydrogen production and storage facility, BESS and EV charging.
- 3.45 Together they would provide an important and fundamental step towards achieving Net Zero.



#### 4.0 ADVERSE EFFECTS OF PROPOSED DEVELOPMENT

4.1 This section outlines any remaining significant adverse residual effects (following the implementation of mitigation measures) under the relevant topics. Those topics which will not result in significant adverse residual effects have not been listed.

#### **Noise**

- 4.2 As set out in paragraph 5.5.17 of the Planning Statement, significant noise impacts are predicted through ES Chapter 7 [REP8-006] and suitable mitigation and management measures are incorporated into the Project design to reduce them. During construction, residual noise effects are predicted to be of moderate significance at most. In general, most impacts are on a small number of receptors, or over short periods of time. Night works may be required for a relatively short period, to install the Northern DHPWN across the Skippingdale roundabout and close to Dragonby, during reinstatement of the railway link, at the tie-in to the existing railway. The closest receptors in Normanby Road are also likely to be subject to vibration impacts at times during installation of the Northern DHPWN, if option A is taken forward, but these are expected to be of minor significance and for a duration typically of just a few days outside individual receptors. During the operation of the Project, the residual daytime noise effects 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. During the night-time, residual noise effects are predicted to be of no greater than minor significance.
- 4.3 Suitable mitigation measures proposed include a Construction Noise and Vibration Management Plan to be incorporated as part of the CEMP which is to be complied with during construction of the development (requirement 4 of the draft DCO); setting of daytime and night time noise level limits in respect of the development measured from particular residential receptors (requirement 22); compliance with design details which will be agreed with North Lincolnshire Council (requirement 3); and compliance with a Noise Management Plan incorporated as part of a detailed Operational Environmental Management Plan for the Energy Park works which will be developed and agreed with North Lincolnshire Council (requirement 4). Additional mitigation measures will be explored during detailed design to seek to further reduce predicted significant noise effects.
- 4.4 NPS EN1 (paragraphs 5.11.8 and 5.11.9) state that 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. Further it



states that the [IPC] should not grant development consent unless it is satisfied that the 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.
- 4.5 As noted above, the predicted construction noise effects will be at most of moderate significance for a small number of properties, or over short periods of the night. During operation, moderate effects are also experienced to a small number of properties. The Applicant has sought to avoid these effects where possible, through siting the project as far as possible from sensitive residential receptors, within and adjoining an industrial area, which is allocated by the Local Plan for the type of use proposed.
- 4.6 ES Chapter 19 (Mitigation) [REP8-008] sets out the measures that the project has incorporated to mitigate and minimise adverse impacts from noise. This includes the approval and implementation of a Construction Noise and Vibration Plan and Operational Noise Management Plan, to demonstrate that noise including from loading and unloading will be minimised as far as reasonably practicable, as well as limits on noise to be emitted from fixed plant and a commitment to consider through the detail of these plans the use of quieter machinery, in addition to regular monitoring. The most recent amendment to Chapter 19 committed to the operational noise limits being secured through the DCO in requirement 22. It should be noted in the context of the third bullet above, that the proposals are located within and adjoining an active industrial area and port, which already has a degree of operational noise related to it. The use of the port is within permitted levels and the bringing back into use of the disused railway is supported across many levels of Government policy (see previous section). Accordingly, it is considered that the proposals accord with paragraphs 5.11.8 and 5.11.9 of NPS EN1.

# **Water Resources and Flood Risk**

- 4.7 As set out in paragraph 5.7.11 of the Planning Statement, ES Chapter 9 [REP6-020] concludes that the only residual adverse effect of the construction and decommissioning of the project, in relation to water resources and flood risk, are the moderate adverse effects on the Lysaght's Drain which are predicted temporarily during the construction works.
- 4.8 In terms of the operational phase of the project the residual adverse effects have been minimised, and ES Chapter 9 [REP6-020] concludes that the effects of Project operation will result in a



significant effect at one receptor and only during a breach scenario: the commercial building at Flixborough Wharf, located to the north of the Wharf. The increase in risk would be during a potential 50m wide breach of the existing Environment Agency defences during an extreme tidal event (1 in 200 year event, or an event with a 0.5% chance of happening in a given year). To manage these areas where the increase in flood risk has not been mitigated by other means (to be set out in a detailed Flood Mitigation Strategy, including the flood defences that form part of the development), it is proposed to develop a Flood Management Plan for the Project. The Flood Management Plan would be used to manage the increased depth and hazard identified in Zone B, port area and to alert users of a potential flood event. The proposed measures will be further developed as part of the wider Flood Management Plan in consultation with the local authority's emergency planners.

- 4.9 The details of the Flood Mitigation Strategy and the Flood Management Plan will be agreed with the local planning authority in consultation with the Environment Agency and these are secured by Requirement 12 in the draft DCO.
- 4.10 The above approach is consistent with paragraph 5.7.9 of NPS EN1 which requires that the [IPC] should be satisfied that 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.

#### **Ecology and Nature Conservation**

4.11 Paragraph 5.8.15 of the Planning Statement [REP2-017] sets out that there will be significant residual adverse effects (at site level) on Risby Warren SSSI, Lowland Dry Acid Grassland HPI and Lowland Calcareous Grassland HPI. The effect on Risby Warren SSSI is from the conclusion of the air quality monitoring that there will be slight exceedances of the critical level/load thresholds of insignificance of acid deposition from the Project alone and ammonia, nitrogen and acid deposition cumulatively with the effects of Keadby 2 and Keadby 3. The SSSI has been significantly affected already by current levels of atmospheric pollution outside of the control of the Project, the significant adverse effects at the Risby Warren SSSI are on a reasonable operating case scenario. The Applicant has agreed in principle to enter into a management agreement with a tenant farmer on land adjacent to the Risby Warren SSSI and has notified Natural England of this intent. A formal agreement of the proposed management approach would result in a reduction of the background ammonia levels and a change in the land management approach that would be of benefit to the Risby Warren SSSI. The tenant is committed to engaging "..positively and actively.." with the



Applicant towards a formal agreement and being guided in the management required by Natural England. Hence there is a real prospect of mitigation being developed in the coming weeks, for the currently predicted significant residual effects of the Project on the Risby Warren SSSI.

- 4.12 It is also assessed that there are significant residual adverse effects at a site level on badger, breeding birds and migratory/wintering birds (although no adverse effects were reported on the designated sites), 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, as set out in paragraph 5.8.15 of the Planning Statement [REP2-017]. The design incorporates 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. These measures will ensure impacts are minimised and effects are restricted to a site level only.
- 4.13 Paragraph 5.3.6 of NPS EN1 recognises that there will be cases where renewable energy infrastructure may include benefits for biodiversity stating: "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. The [IPC] may take account of any such net benefit in cases where it can be demonstrated."
- 4.14 In this case, there are clear and demonstrable benefits that outweigh the relatively limited residual adverse effects identified in relation to biodiversity.
- 4.15 Paragraph 5.3.17 of NPS EN1 relates to how the decision-maker should consider effects on biodiversity in the decision-making process and states that 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.
- 4.16 The key policy on SSSIs is at paragraph 5.3.11 of the NPS which states:

"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. The IPC should use requirements and/or planning obligations to mitigate the harmful aspects of the development and, where



# possible, to ensure the conservation and enhancement of the site's biodiversity or geological interest." (our emphasis)

- 4.17 The effect on Risby Warren SSSI is largely as a result of the SSSI having been significantly affected already by atmospheric pollution in the vicinity of the Project and only slight exceedances are anticipated due to the Project as described above. It is considered that the effect from the Project has been reduced as far as possible and should be balanced with the commitment to developing options to provide mitigation / compensation for the residual effects currently reported at the Risby Warren SSSI. These options are being explored with Natural England and there are ongoing discussions with both Natural England and an adjacent tenant farmer and there is a clear intent to secure mitigation for the residual effects (as described above). The wider benefits of the Project are explained in Chapter 5 of this Report. In terms of the policy test above, it is considered, and given the existing context, that the benefits, as set out in Chapter 5 of this Report clearly and demonstrably outweigh the impacts reported.
- 4.18 In relation to protected habitats and species, NPS EN1 states that the [IPC] should refuse consent where harm to the habitats or species and their habitats would result, unless the benefits (including need) of the development outweigh that harm. In this case, the design of the development has sought to minimise and mitigate effects as far as possible, although some residual effects remain at site level. For the reasons set out elsewhere in this Report, in particular Section 5.0, any harm is clearly and demonstrably outweighed by the benefits of the development, included its contribution to combating the effects of climate change.
- 4.19 Paragraph 4.3.1 of NPS EN1 requires that before granted a DCO for a project, the decision-maker must consider whether the Project would have a significant effect on a European protected site, either alone or in combination with other Projects, in accordance with the Habitats Regulations and provide such information as is necessary to inform whether Appropriate Assessment is required.
- 4.20 The Habitats Regulations require, in summary, that, following Appropriate Assessment, the competent authority may agree to the plan or project only after having ruled out adverse effects on the integrity of the habitats site. Where an adverse effect on the site's integrity cannot be ruled out, and where there are no alternative solutions, the plan or project can only proceed if there are imperative reasons of over-riding public interest (IROPI) and if the necessary compensatory measures can be secured.
- 4.21 The Report to Inform the Habitats Regulations Assessment submitted for the Project Rev 2 [REP6-014] concludes that the Project, alone and in combination with other projects, would not have an



adverse effect on the integrity of a European site (now referred to as The National Site Network).

On this basis, it is not necessary to consider alternatives or IROPI in this context.

#### **Landscape and Visual Impact**

- 4.22 ES Chapter 11 [APP-059] concluded that the Project would have a significant adverse effect on the landscape character of the Application Land during construction, reducing to moderate (still significant) adverse effect during the operational stage. Construction effects will be of short duration, however, once operational, the project would represent a change in landscape character and land use across the Energy Park in a partly industrialised location. Over time, the effect will minimise to a 'not significant' level, as the landscape mitigation would mature and integrate into the surroundings.
- 4.23 Effects on the landscape character of Flat Drained Farmland LCT and Industrial Landscape LCT (Trent level LCA) will be moderate adverse (significant) during both construction and once operational (year 1). 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. These effects would be limited in extent to the immediate surroundings of the Project land, and would reduce below the level of significance by year 15 once mitigation planting matures.
- 4.24 ES Chapter 11 sets out that there will overall be significant visual impacts on sensitive visual receptors within 4 km of the Energy Park, during construction through to year 15 when the mitigation landscaping will have matured. Significant effects are only predicted to remain after year 15 at two locations, representing residents at Amcotts (Viewpoint 1) and walkers at Stather Road near to Flixborough (Viewpoint 2.
- 4.25 Two visual barriers are to be provided one along the western edge of the development platform for the ERF to extend between First Avenue and stopped up Stather Road in order to provide screening of ground level storage and activity such as loading bays and vehicle movements when viewed from Amcotts and one along the eastern edge of the development platform for the ERF to extend along the retaining wall along Bellwin Drive/First Avenue to provide visual and safety amenity for pedestrians and vehicles. These form part of Work No. 1 and details are included in the Design Principles and Codes document [Rev 4, REP7-008]. Requirement 3 of the dDCO, which requires submission to and approval by NLC of the detailed design for the development, provides that the details to be submitted must be in accordance with the Design Principles and Codes.
- 4.26 Paragraph 5.9.8 of NPS EN1 recognises that effects on the landscape from major infrastructure projects will be inevitable. It states, "virtually all nationally significant energy infrastructure



projects will have effects on the landscape. Projects need to be designed carefully, taking account of the potential impact on the landscape. Having regard to siting, operational and other relevant constraints the aim should be to minimise harm to the landscape, providing reasonable mitigation where possible and appropriate."

4.27 The Project has sought to minimise potential impact on the landscape through siting of the principal components in an area which is partly brownfield land with few trees, hedgerows or other valued landscape features. The buildings have also been grouped so that they will primarily be viewed against the backdrop of the existing Flixborough Industrial Estate. As explained above, remaining effects have therefore been reduced as far as possible through the incorporation of landscaped screening and two visual barriers. Accordingly, it is considered that the proposed development accords with paragraph 5.9.8 of NPS EN1.

## **Archaeology and Cultural Heritage**

- 4.28 It is concluded in Section 5.10 of the Planning Statement [REP2-017] that there will be significant adverse residual effects 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;
  - buried structural remains at Flixborough Staithe associated with the medieval and postmedieval river port;
  - The 'Flixborough Nunnery' scheduled monument;
  - The Axholme Fens HLCA.
- 4.29 Trial trench evaluation [Document 9.38, Appendix D] has demonstrated that there will be no adverse effects on the following two heritage assets identified in Section 5.10 of the Planning Statement [REP2-017]:
  - 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.
- 4.30 Trial trench evaluation has demonstrated that there will be significant adverse residual effects on buried archaeological features located to the north-west of Skippingdale Industrial Park on the site of the proposed flood bund.



- 4.31 Trial trench evaluation [Document 9.38, Appendix D] has also identified potential significant adverse residual effects on the following four heritage assets, which require further investigation before the effects can be appropriately assessed:
  - buried archaeological features to the west of Skippingdale Roundabout on the site of the proposed DHPWN;
  - buried archaeological features to the north of the Ferry Road West and and the A1077
     junction on the site of the proposed DHPWN;
  - buried archaeological features to the north of the Frodingham Grange Roundabout on the site of the proposed DHPWN; and
  - buried archaeological features to the west of Nuddock Wood Lakes on the site of the proposed DHPWN.
- 4.32 As secured by Requirement 11 of the dDCO, a programme of further exploratory excavations within the Application Land, that have been discussed with the North Lincolnshire Historic Environment Officer and are outlined in the Overarching Archaeological Mitigation Strategy [Document 9.39], are to be carried out. Pursuant to requirement 11(1)(e), the Overarching Archaeological Mitigation Strategy is to be approved by NLC before commencement of the development.
- 4.33 A programme of mitigation excavations has also been discussed with the North Lincolnshire Historic Environment Officer and are outlined in the Overarching Archaeological Mitigation Strategy [Document 9.39]. The archaeological mitigation measures must be carried out in accordance with the approved Overarching Archaeological Mitigation Strategy.
- 4.34 Following mitigation measures, there will still be negative impacts which would need to be weighed against the need for and benefits of the project. It is confirmed in the ES Archaeology and Heritage Chapter [REP4-011] that these impacts are considered to constitute less than substantial harm (see paragraph 9.3.1.4 of REP4-011). NPS EN1 states that 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. In this context, the less than substantial harm to a limited number of designated and non-designated assets is outweighed by the benefits of the scheme in terms of its contribution towards low carbon and renewable energy and the other benefits set out in Chapter 5 of these Closing Submissions, including substantial job creation.



4.35 Paragraph 5.8.18 of NPS EN1 states that when considering applications for development affecting the setting of a designated heritage asset, the [IPC] should treat favourably applications that preserve those elements of the setting that make a positive contribution to, or better reveal the significance of, the asset. Section 9.4 of the Archaeology and Heritage Chapter provides proposals for enhancement through working with local communities and other interested stakeholders to provide a way of enhancing the knowledge, appreciation and access to cultural heritage in the area. This could include measures to enhance the understanding of North Conesby medieval settlement and the origins and history of Flixborough Staithe. This programme of enhancement is secured by requirement 11 of the dDCO.

# **Agricultural Land**

- 4.36 As set out in the ES Chapter 14, paragraph 8.3.6.5 and in Appendix B of ES Chapter 14 [REP6-022], overall, the impact on soils and land due to the permanent loss of Very High to High sensitivity agricultural land to built infrastructure is of Medium magnitude, and therefore the overall effect is Major and Significant. However, all soils that are to be removed for the construction of built infrastructure will be sustainably managed to preserve their functions and retained on site for use in the biodiversity and landscaping areas. This will be secured through the Soil Management Plan (SMP) included in the CoCP and secured by requirement 4 of the draft DCO, an outline of which is provided at Appendix J of the CoCP Rev 5 [REP7-018].
- 4.37 It should be emphasised that the vast majority of agricultural land that will be lost from agricultural use is as a result of the delivery of the wetland area and Biodiversity Net Gain (BNG). Only 12.2 ha of BMV land is permanently lost as a result of built development associated with the Project, with the remaining 47.2 ha for landscape mitigation and BNG, and 81.2 ha retained in agriculture with no impact on its soil and agricultural quality.
- 4.38 Paragraph 5.10.8 of NPS EN1 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. In this context, as explained in the Project Description and Alternatives Chapter of the ES [REP6-018], the location of the principal components of the scheme was led by the requirement to acceptably mitigate flood risk and therefore was consistent with other sustainability considerations. For decision-taking, 5.10.15 confirms that the [IPC] should ensure that applicants do not site their scheme on the best and most



versatile agricultural land without justification. In this context, the Proposed Development is located in an area of predominantly best and most versatile (BMV) land and therefore it is inevitable that a project located in this part of the country will take some BMV land. Care has been taken to site as much of the built development as possible on previously developed land and the majority of loss of BMV land is required to satisfy other important policy objectives, in relation to the provision of BNG, landscape mitigation and wider environmental improvements, consistent with the Government's Environmental Improvement Plan 2023. The Project Description and Alternatives Chapter of the ES [REP6-018] and subsequent written submissions from the Applicant also explains the site selection process undertaken by the Applicants which demonstrates why the site is particularly suitable for an ERF, and indeed a large part of it is allocated as such in the North Lincolnshire Core Strategy.

4.39 Accordingly, it is considered that the Proposed Development complies with paragraph 5.10.15 of NPS EN1.



#### 5.0 BENEFITS OF THE PROPOSED DEVELOPMENT

- 5.1 In addition to the climate change and waste capacity benefits of the scheme, the NLGEP will result in the following benefits:
  - 2280 net additional jobs during construction and 136 net direct additional jobs during operation (as set out in ES Chapter 14 [REP6-022]), the opportunities for which will be made accessible to local people and firms through an Employment and Skills Plan (in accordance with the Employment and Skills Policy) which is secured by requirement 21 of the draft DCO. The operational phase could also support a further 39 jobs as a result of the multiplier effect resulting in total operational net employment gain of 175.
  - The ES Chapter 14 [REP6-022] concludes that there will be a net economic impact of £140.1m spread across the six-year construction period, supported through the implementation of an Employment and Skills Policy and training and education opportunities.
  - The ES Chapter 10 [APP-058] demonstrates how the project can achieve a minimum 10% biodiversity net gain through use of the Defra Metric 3.0. This can be accomplished through minimising loss, habitat creation, reinstatement and enhancement of habitats. The delivery of the BNG is secured through requirement 6 (the landscaping scheme) as set out above. 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.
  - New 65-acre wetland area to the east of the River Trent and the west of the new access road (as set out in Paragraph 8.3.5.4 of the EA Chapter 14 [REP6-022]). This will contain a number of informal paths that allow access and facilitate physical activity, play and relaxation through improved quality and access to open space/nature for both local residents and people working at the Energy Park and Flixborough Industrial Estate.
  - Improvements to Public Rights of Way (PRoW) routes in the area with three routes across
    the Application Land (as set out in ES Chapter 13, Revision 1 [REP2-021]) which will be
    enhanced to act as ecological corridors:
    - a new public right of way will be created, orientated west east, continuing to the open land at Foxhills Plantation / Atkinson's Warren, providing a new circular walking route and connectivity between the River Trent and the northern edge of Scunthorpe;



- a new footbridge over the existing railway and a new public right of way will be provided along the southern edge of the railway, connecting footpaths FP/FLIX/177 and FP/FLIX/178, providing a new circular walking route to the south of Flixborough village. This will provide a formalized alternative route to the unconsented use along the existing railway; and
- a new public right of way will be provided to the east of Flixborough Industrial Estate, connecting footpath FP/FLIX/175 and FLIX/304, providing a new link that avoids the walking along Stather Road. This will include an informal crossing point with suitable drop kerbs and tactile paving is proposed where it crosses the new access road.
- A visitors' centre which will serve a number of community and education uses including
  education on the ERF process and demonstrating how RDF is being used to create low carbon
  heat and power (as set out in ES Chapter 14 [REP6-022]). It will contain offices, exhibition
  space and visitor accommodation with elevated walkway connected to Work Nos. 1, 2 and
  6.
- A new access road linking the B1216 and Stather Road, for the existing port and the Flixborough Industrial Estate, which is much more fit for purpose than the existing access road (Stather Road) which has width and capacity restrictions ([REP2-021]). This will also include improvements to footpaths and the junction between the B1216 and A1077.
- A northern and southern District Heat and Private Wire Network (as set out within Section 1.4 of the Planning Statement, Revision 1 [REP2-017]), fuelled by the ERF, which will provide low carbon heating, cooling and power to existing and planned homes and businesses in Scunthorpe.



#### 6.0 OVERALL PLANNING BALANCE

#### **Summary of Need**

- 6.1 NPS EN1 makes it clear that there is a need for new energy infrastructure and that this need is urgent. Revised draft NPS EN1 issued in March 2023 places even further emphasis on this urgency.
- 6.2 NPS EN1 is also clear that the ExA should assess applications covered by the energy NPSs on the basis that the Government has demonstrated that there is a need (para 3.1.3 of NPS EN1). It is not therefore for this examination to test this need [ISH1, REP1-015].
- 6.3 Substantial weight should be given to the contribution that the project would make towards satisfying this need (para 3.1.3) [ISH1, REP1-015].
- 6.4 NPS EN3 also establishes the need for EfW, provided that it accords with the waste hierarchy [ISH1, REP1-015].
- 6.5 Whilst there is no requirement in adopted policy, revised draft NPS EN3 (March 2023) also requires that Applicants must ensure EfW plants are fit for the future, do not compete with greater waste prevention, re-use, or recycling and do not result in an over-capacity of EfW waste treatment provision at a local or national level.
- 6.6 Whilst this is not adopted policy, the Applicant has therefore considered the position on whether the Project would lead to an over-capacity, having regard to the position that EfW plants must be fit for the future. When EfW plants that have low potential for CCUS and those with non-R1 status are removed from the equation, there will be a capacity gap of over 2 million tonnes nationally and around 1.1 million tonnes at the local (East Midlands and Yorkshire and Humber) level in 2035 (even if recycling targets are met).
- 6.7 The Project will also not impact on the ability of meeting targets for prevention, re-use and recycling, which are primarily going to be met by other measures including through the measures set out in the Environmental Improvement Plan 2023 and through the Deposit Return System for plastics and metal containers. Consenting the Project would not compromise the effectiveness of these measures and the current NPS EN3 acknowledges that this need not be the case.
- 6.8 The Project also provides further essential infrastructure to meeting Net Zero through the plastics recycling facility, hydrogen production and storage, battery storage and electric vehicle charging and hydrogen re-fuelling.
- 6.9 There should therefore be a strong presumption in favour of the proposals [NPS EN1 and revised draft EN1].



6.10 In accordance with Section 104 of the Planning Act 2008, projects that accord with the relevant NPS should be allowed, unless the adverse impact of doing so would outweigh the benefits.

#### **Adverse Impacts**

- 6.11 The Application has relatively limited significant adverse effects, which the Applicant has sought to avoid and minimise as far as possible. The landscape and visual effects would no longer be significant 15 years into operation and therefore the remaining significant adverse effects are in relation to flood risk to a single receptor, heritage assets, ecology and agricultural land, as a result of the proposed BNG.
- 6.12 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 [Planning Statement, REP2-017]. Operational residual daytime noise effects 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. During the night-time, residual noise effects are predicted to be of no greater than minor significance, with compliance with a Noise Management Plan to be agreed with NLC (requirement 4).
- 6.13 In relation to ecology, the successful implementation of secured mitigation measures will ensure impacts are minimised and effects are restricted to a site level only. Mitigation / compensation options for the significant residual effects at the Risby Warren SSSI are being explored with Natural England. There are ongoing discussions with both Natural England and an adjacent tenant farmer and there is a clear intent to secure mitigation for the residual effects (as described above). The Report to Inform the Habitats Regulations Assessment concluded that the Project, alone and in combination with other projects, would not have an adverse effect on the integrity of a European site (now referred to as The National Site Network).
- 6.14 In relation to heritage assets, the effects are considered to constitute less than substantial harm.

#### **Benefits**

6.15 The benefits by contrast are very significant. The Project will provide up to 95MW of much needed low carbon electricity, together with plastics recycling, hydrogen production and storage, battery storage and electric vehicle charging and hydrogen re-fuelling. The Government's support for such infrastructure is clearer than ever following the announcements of 30<sup>th</sup> March 2023.



- 6.16 In addition, the NLGEP will deliver significant BNG and the creation of new, publicly accessible habitats and areas for nature recovery, something which is strongly supported by the Environmental Improvement Plan 2023.
- 6.17 The NLGEP will also provide 2280 net additional jobs during construction and 136 net direct additional jobs during operation, the opportunities for which will be made accessible to local people and firms through the Local Labour Agreement and have an economic impact of £140.1m.

# **Local Planning Policy**

- The Applicant has also considered compliance with local planning policy, as potential important and relevant considerations to the decision on the DCO. Compliance with local policy is set out in chapter 6 of the Planning Statement [REP2-017]. Policy CS20 of the North Lincolnshire Core Strategy (2011) 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 also broadly consistent with other local policies relating to land use and environmental effects, albeit that they were not drafted to deal with projects of this scale. Table 6.1 in the Planning Statement 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).
- 6.19 There has been no material changes to local planning policy during the course of the examination.
- 6.20 North Lincolnshire Council confirm in their SoCG with the Applicant [REP7-025] their position that the local development plan is not discouraging of the principle of new energy generating or waste management infrastructure at this site, as confirmed [by NLC] by raising no objection to the principle of the proposed scheme in their Section 42 response dated 26 January 2021.

# **Planning Balance**

- 6.21 Taking the above into account, even with the identified adverse effects, the planning balance is clearly and demonstrably in favour of the proposals.
- 6.22 The UK will continue to require a fleet of modern, clean, CCUS-enabled ERFs to contribute both to the legal requirement to meet Net Zero and treat the UK's waste without continuing to send vast quantities to landfill. The NLGEP not only provides this but puts forward a holistic solution to meeting the challenges of Net Zero.