NORTH LINCOLNSHIRE GREEN ENERGY PARK

Planning Act 2008

Infrastructure Planning (Applications Prescribed Forms and Procedure) Regulations 2009

North Lincolnshire Green Energy Park

Volume 9

9.17 Comments on Written Representations

PINS reference: EN010116

January 2023

Revision number: 0

GLOSSARY

Acronym	Full term / Description
2008 Act	Planning Act 2008
AGI	Above Ground Installations
BNG	Biodiversity Net Gain
CCTV	Closed Circuit Television
CBMF	Concrete Block Manufacturing Facility
CEMP	Construction Environmental Management Plan
CCUS	Carbon Capture, Utilisation and Storage
CO2	Carbon Dioxide
CoCP	Code of Construction Practice
CoPA	Control of Pollution Act
DCO	Development Consent Order
DHPWN	District Heating and Private Wire Network
EA	Environment Agency
EN-1	Overarching National Policy Statement for Energy
EN-3	National Policy Statement for Renewable Energy Infrastructure
EN-5	National Policy Statement for Electricity Networks Infrastructure
EV	Electric Vehicle
ERF	Energy Recovery Facility
ES	Environmental Statement
FRA	Flood Risk Assessment
FGTr	Flue Gas Treatment Residue
H2	Hydrogen
IAQM	Institute of Air Quality Management
IDB	Internal Drainage Board
LVIA	Landscape and Visual Impact Assessment
LLFA	Lead Local Flood Authority
NPS	National Policy Statement
NSIP	Nationally Significant Infrastructure Project
NLC	North Lincolnshire Council
NLGEP	North Lincolnshire Green Energy Park
PRF	Plastic Recycling Facility
PEIR	Preliminary Environmental Information Report

PRoW	Public Rights of Way
RLB	Red Line Boundary
RHTF	Residue Handling and Treatment Facility
SoS	Secretary of State
SoCG	Statement of Common Ground
SoCC	Statement of Community Consultation
SuDS	Sustainable Drainage Systems
TCPA	Town and Country Planning Act
WSI	Written Scheme of Investigation

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APPENDICES

1.0 INTRODUCTION

Overview

1.1 This report sets out North Lincolnshire Green Energy Park Limited's (the Applicant's) comments on the written representations submitted at Deadline 2.

The Proposed Development

1.2 The North Lincolnshire Green Energy Park (NLGEP), located at Flixborough, North Lincolnshire, comprises an ERF capable of converting up to 760,000 tonnes of residual non-recyclable waste into 95 MW of electricity and a CCUS facility which will treat a proportion of the excess gasses released from the ERF to remove and store CO2. Prior to emission into the atmosphere. The design of the ERF and CCUS will also enable future connection to the Zero Carbon Humber pipeline to be applied for, when this is consented and operational, to enable the possibility of full carbon capture in the future.

1.3 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.

1.4 The Project includes 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) refueling station;
- battery storage;
- a hydrogen and natural gas above ground installation (AGI);
- a new access road and parking;
- a gatehouse and visitor centre with elevated walkway;

- railway reinstatement works including; sidings at Dragonby, reinstatement and safety improvements to the 6km private railway spur, and the construction of a new railhead with sidings south of Flixborough Wharf;
- a northern and southern district heating and private wire network (DHPWN);
- habitat creation, landscaping and ecological mitigation, including green infrastructure and 65 acre wetland area;
- new public rights of way and cycle ways including footbridges;
- Sustainable Drainage Systems (SuDS) and flood defence; and
- utility constructions and diversions.

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

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

The Purpose and Structure of this Document

1.7 This document sets out the Applicant's comments on Written Representations received by the Examining Authority at Deadline 2.

1.8 The document is structured as follows:

- Section 2: Network Rail Infrastructure Limited
- Section 3: Environment Agency
- Section 4: Burton upon Stather Parish Council
- Section 5: Flixborough Parish Council
- Section 6: Amcotts Parish Council
- Section 7: United Kingdom without Incineration Network
- Section 8: Rapleys LLP on behalf of AB Agri Ltd

- Section 9: Sisters Food Group
- Section 10: Amy Ogman
- Section 11: Tricia Murphy
- Section 12: Andrew Green, D, M & A Green, Church Farm, Flixborough
- Section 13: Gately Hamer on behalf of the Norris Family
- Section 14: Kevin John Bird
- Section 15: ADG Autotech on behalf of Mr Gravel

2.0 APPLICANTS' COMMENTS ON NETWORK RAIL INFRASTRUCTURE LIMITED WRITTEN REPRESENTATION

2.1 The Applicants Comments on Network Rail Infrastructure Limited's representation can be found below in Table 1.

Table 1: Applicants comments on Network Rail Infrastructure Limited's written representation

Written Representation Issue	Applicant's Response
As stated in document AS-001, NR objects to the making of the North Lincolnshire Green Energy Park Development Consent Order 202[X] (Order) on the ground that the proposed works may interfere with the safe and efficient operation of the railway.	NR's objection is noted. The Applicant first engaged with Network Rail (NR) in September 2020. Due to internal resource constraints, NR has to date been unable to provide a Scheme Sponsor with which to progress a Basic Services Agreement as requested by the Applicant. This has recently been addressed by NR and the Applicant looks forward to formalising the productive discussions to date with NR within the draft Statement of Common Ground and NR standard Protective Provisions.
NR has carried out a detailed assessment of the Land Plans and Book of Reference submitted with the Promoter's application for the DCO Scheme and notes that the following plots forming part of the DCO Scheme include or are adjacent to NR-owned land and which therefore may give rise to impacts on NR's railway infrastructure: • Plot 2-6, the Railway located west of M181, Scunthorpe (compulsory acquisition of rights)	The Applicant first engaged with Network Rail in September 2020. Due to internal resource constraints, NR has to date been unable to provide a Scheme Sponsor with which to progress a Basic Services Agreement as requested by the Applicant. This has recently been addressed by NR and the Applicant looks forward to formalising the productive discussions to date with NR within the draft Statement of Common Ground and NR standard Protective Provisions. There are two plots over which there are proposed compulsory acquisition of rights over land owned by Network Rail. With the exception of the

• Plot 8-2, the disused Flixborough Mineral Railway located west of High Street, Dragonby (compulsory acquisition of rights).	proposed under-track crossing (UTX) of Network Rail's main line between Althorpe and Scunthorpe as part of the district heating and private wire network (DHPWN) (Plot 2-6), no other physical works will be required on land owned by Network Rail. Plot 8-3 has been included to allow the Applicant access to the railway line in order to operate and maintain signalling infrastructure, for the ongoing operation and maintenance of the railway following the Railway Reinstatement Works (Work Nos. 3 and 4).
In order for NR to be in a position to withdraw its objection to the making of the Order, it will require the following matters to be concluded and secured to its satisfaction: 1. the inclusion in the draft Order of NR's standard protective provisions to address the potential impacts arising as a result of the DCO Scheme on the safe and efficient operation of the railway.	The Applicant is in discussions with NR in respect of the form of the protective provisions and a draft framework agreement. The Applicant received updated draft protective provisions from NR on 5 January and is reviewing these amendments with a view to providing a response as soon as possible after Deadline 3.
2. the completion of a framework agreement entered into between NR and the Promoter to make further provision for protection of their respective interests so far as the design, construction and operation of the DCO Scheme interfaces with NR's operational railway (including NR's review and prior approval of the design proposals for the parts of the DCO	See response above. In addition the Applicant received the first draft of a framework agreement on 5 January and is reviewing the contents of the same with a view to providing a response as soon as possible after Deadline 3.

scheme which interface with the railway at detailed design and construction stages). NR is progressing discussions with the Promoter and its legal representatives with regards to the agreement of these matters and setting these out in an agreed draft Statement of Common Ground which shall be submitted as soon as possible in due course.	

3.0 APPLICANTS' COMMENTS ON ENVIRONMENT AGENCY WRITTEN REPRESENTATION

3.1 The Applicants Comments on the Environment Agency's written representation can be found below in Table 2.

Table 2: The Applicants Comments on the Environment Agency's written representation

Written Representation Issue	Applicant's Response
Environmental Permit A permit to operate the plant(s) will be required from the Environment Agency under the Environmental Permitting (England and Wales) Regulations 2016. The Applicant met with representatives of our National Permitting Service on 17 October 2022 to commence pre-application discussions. Carbon Capture Usage and Storage (CCUS) was discussed during this meeting and it was agreed that a Carbon Capture Readiness assessment was not required for the Project. Accordingly, we withdraw the request for such an assessment, which was included in our Relevant Representations. It is our understanding that the Applicant will be submitting the permit application to us within the next 2-3 months. Our estimated determination period is 8-12 months and therefore	The Applicant acknowledges that a permit will be required and will continue working with the EA to progress this. The confirmation that a Carbon Capture Assessment is not required is acknowledged by the applicant.

it is unlikely that we will be able to provide any further information on this issue during the Examination period.	
<u>Ground conditions, contamination and hydrogeology</u> The Environment Agency is concerned that the Development Consent Order (the 'DCO') does not appear to include any requirement that secures investigation/details in respect of piling. Accordingly, we requested the inclusion of an additional requirement within Schedule 2 of the DCO to cover this issue. The Applicant is proposing to address our concerns through a revision of the Code of Construction Practice (CoCP), to include an additional Appendix (to be Appendix K) entitled Outline Piling and Ground Penetration Works Plan. This will set out the required content of a detailed method statement to be produced under the Construction Environmental Management Plan (CEMP); the Environment Agency will be a specific consultee for this plan when it is submitted to the relevant planning authority for approval. We will undertake a review of the revised CoCP when available (together with the additional DCO drafting on this matter) and update the Examining	An Outline Piling and Foundation Works Management Plan has been drafted to address the Environment Agency's requirements and is included in an update to the CoCP [AS-011] to be submitted at Deadline 3. This matter will continue to be discussed further as part of the SoCG with the Environment Agency. Requirement 3 of the dDCO [REP2-004] was updated at Deadline 2 to include reference to the fact that the CEMP to be submitted and approved must include a foundation and piling plan.

Authority on its acceptability to us through the Statement of Common Ground (SoCG).	
To ensure the Project's surface water drainage strategy aligns with any recommendations relating to contamination, remediation and ground conditions, we also request that the Environment Agency is included as a specific consultee to Requirement 8 (surface water drainage). For the avoidance of doubt, the Environment Agency's interest in the surface water drainage strategy relates only to the protection of controlled waters; it would not provide comments in respect of surface water flooding.	The draft SoCG [REP2-028] addresses that SuDS will be used to manage surface water runoff and will be discharged to Lysaght drain and pumped to the River Trent. This matter will continue to be discussed further as part of the SoCG. Requirement 8 of the dDCO [REP2-004] was updated at Deadline 2 to include the EA as a consultee on matters related to its function.
<u>Foul water disposal</u> The Application (Chapter 9, paragraph 8.2.4.9) outlined an intention to connect to the mains sewage system, which was acceptable to us on the basis that the sewerage undertaker confirmed its agreement, and that capacity was available to accommodate the development. The Applicant has been advised by the sewerage undertaker, Severn Trent Water, that there are already some capacity issues within its system, and it may not be able to	The Applicant is aware of the potential capacity issues that Severn Trent have informed them about, and potential solutions are being discussed further as part of the SoCG. The Applicant notes the EA's request to be included as a consultee in respect of requirement 9 of the dDCO [REP2-004] and will make this amendment when the dDCO is next updated at Deadline 4.

accommodate any additional flows from this Project. The Applicant has suggested that a separate system may be required to treat water via an on-site package treatment plant (PTP) followed by discharge to a large wetland for further polishing of the flow – a small sewage discharge permit would be required. The Environment Agency does not support the use of PTPs in locations where it may be reasonable (in deciding what is reasonable we will take into account cost, practicality and environmental considerations) to connect to mains sewer. This is because discharges from wastewater treatment plants owned and operated by sewerage undertakers are significantly less likely to cause pollution than discharges from private treatment plants treating domestic sewage or trade effluent: public sewerage systems are much more likely to meet the standards set in their environmental permit as a result of effluent receiving more comprehensive and reliable treatment. The presumption against relying on private sewerage systems in areas where it is reasonable to connect to the public sewer applies to temporary as well as permanent arrangements. Lack	

of capacity in the receiving public sewer is not a valid reason for not connecting to an otherwise available public sewer. We will continue to work with the Applicant to understand the reasons why capacity may not be available to serve the Project and what the potential is for Severn Trent Water to provide additional capacity within the development timeframe. Notwithstanding this, we are currently of the view that if the Environment Agency is added to Requirement 9 as a specific consultee, prior to approval by the relevant planning authority, this will enable us to provide further advice and comment on the detailed foul water drainage scheme to ensure the water environment is adequately protected. We will also continue to update the Examining Authority on this issue through the SoCG.	
<u>Flood risk mitigation scheme</u> In our Relevant Representation, we noted the matters that will be covered (but will not necessarily be limited to) in the Construction Flood Management Plan, as secured through Requirement 4(3)(e) (Schedule 2 Part 1) of the DCO. We are now of the view that further clarity is required on the remit of	The Applicant acknowledges the response and the points discussed are further noted/addressed within the draft SoCG. The built-in (physical) mitigation scheme will be considered as part of the Flood Management Plan. As part of Deadline 2, the wording in Requirement 3 Detailed Design was updated to make reference to the principles set out in the FRA before any part of the development may commence, with details

this Construction Flood Management Plan and the Flood Management Plan secured through Requirement 12, i.e. which Plan will include the built-in (physical) mitigation scheme? If it is the intention that the mitigation measures to be built into the development are included under the Flood Management Plan secured through Requirement 12, then the wording of this will need to be amended to secure its submission before the commencement of development; to leave it to the pre-commissioning stage will not provide an opportunity for consultation on the adequacy of the scheme before the development is constructed. We expect the Applicant will need to undertake further modelling once the culvert designs have been completed to ensure that they are of sufficient capacity to convey flood flows. It is therefore important that the Environment Agency is able to comment on this prior to that part of the development commencing, as well as any built-in mitigation for the project buildings etc.	submitted to and agreed with the relevant planning authority. The FRA [App-070] makes reference to the Flood Management Plan. We will continue to engage with the EA to agree the wording in the dDCO relating to delivery of the physical mitigation measures and consider if any further amends are required to secure this. In terms of the comment regarding culverts capacity, the SoCG [REP2-028] notes that further hydraulic flood modelling is being proposed to be undertaken during the next stage of design, post DCO consent and will confirm the culvert sizes required to provide sufficient capacity.
<u>Further Representations</u>	The Applicant acknowledges the EAs response and remains committed to continuing engagement with the EA for the duration of the Examination.

Once again, we would like to confirm that the Environment Agency has no objection to the principle of the development; the outstanding matters mentioned above are all capable of resolution through further negotiation and agreement. However, we reserve the right to add or amend these representations, including requests for DCO Requirements and protective provisions should further information be forthcoming during the examination on issues within our remit.	

4.0 APPLICANTS' COMMENTS ON BURTON UPON STATHER PARISH COUNCIL WRITTEN REPRESENTATION

4.1 The Applicants Comments on Burton Upon Stather Parish Council's representation can be found below in Table 3.

Table 3: The Applicants comments on Burton Upon Stather Parish Council's written representation

Written Representation Issue	Applicant's Response
1. There are concerns about future flooding at the proposed location. The North Lincolnshire Council Strategic Flood Risk Assessment 2022 12.29 notes that Flixborough Industrial Estate is in flood risk Zone 3, whilst some areas within or close to the proposed site are in flood Zone 3B. The North Lincolnshire Council Core Strategy 2011 Policy CS19 only allows development on a flood risk site if it demonstrates wider sustainability benefits to the community, whilst the National Planning Policy Framework 159 and National Policy Statements (NPS) for Energy EN-1 5.5.1 mention inappropriate development on a flood risk area should be avoided. How can the applicant guarantee that building an additional development on this flood zone will not have a detrimental effect on it and/or increase its size, which could affect other buildings already in the area. The flood risk assessment APP-070 appears to cover the area of the proposed application and	The Flood Risk Assessment [APP-070] has been undertaken to understand the existing flood risk to the site, how this risk changes over the lifetime of the development (by the impact of climate change) and determine how the proposed development may alter the impact observed at the site and in surrounding areas (upstream, downstream and the other side of the river). This assessment of the baseline flood risk and the impact of the new development allowed investigation of various mitigation options to be explored and tested using the most appropriate hydraulic flood model available for the site, developed in consultation with the Environment Agency. Through this process, a series of flood mitigation measures have been proposed and incorporated into the design of the development to minimise the impact to both users of the new development and to surrounding areas. The ERF has been located in defended Flood Zone 3 as it is necessary that the development is located near to the port for ease of materials delivery. However, the layout has been sequentially adapted to ensure that it is located

does not show the effects to the areas north. Burton upon Stather has properties that lie close to the River Trent, so the development could have a detrimental effect to these properties on Stather Road, Burton upon Stather, by increasing the flood zone further north. With the current flood defences these properties are in a Zone 3 flood risk (see appendix A) and suffered flooding in the tidal surge of December 2013.	entirely within Flood Zone 1, 2 and 3a and not Flood Zone 3b, and to minimise flood risk to the development and third-party land. The reason the FRA does not show areas further north at Burton Stather is because the modelling didn't show any changes in flood level in this location with the new development in place.
2. The website Coastal Climate Central predicts with its coastal risk screening tool that Flixborough Industrial Estate will potentially be below the annual flood level in 2030. With this information available, doesn't this make it an unsuitable site for further investment and development? (see Appendix B).	The Climate Central maps is a tool to provide indicative information regarding estimated sea level rise in relation to the topography of a site. It extrapolates the level in the sea into the land and does not take into account how this level may vary along the estuary. It also does not include local variations in topography for example due to flood defences. The Flood Risk Assessment [APP-070] was undertaken based on the latest hydraulic flood model approved by the Environment Agency, taking into account the impact of climate change on sea level rise and utilising site-specific information in accordance with the National Planning Policy Framework. The FRA identifies flood mitigation measures required to make the site safe from the future risk of flooding and ensure the risk is not increased to surrounding areas. As such, the site is assessed as being suitable for further investment and development with the mitigation measures in place.

3. The proposed entrance road will stop quality agricultural land being used and the roads nearby are already busy. Berkeley Circle on the junction of A18/Doncaster Road/Scotter Road is often busy and has queues. Further traffic will simply make this junction worse. APP-061 consultee type S47 states only an additional 2% of traffic is expected through Flixborough village, but people living on the north side of Scunthorpe who may work at site will more likely approach it via the village. This is something that cannot be monitored or discouraged and will affect the human receptors significantly. Vans already access the industrial estate this way and nothing is done to stop it. The 30 minute walking distance only reaches one end of Ferry Road West, so for the majority of people working at the site will be outside this limit. APP-061 transport assessment 3.4.8 states that Althorpe train station is a 20 minute cycle ride away from the proposed site but trains only stop there every two hours so will make it difficult for employees to coordinate this with their working hours. It would be easier to travel by car which will increase the road traffic, so this argument of using the train to travel to work is irrelevant.	Land to the west of the access road will be converted from agricultural use to various combinations of landscaping, biodiversity enhancements (including wetland) and flood management uses. Access to parts of this land will be available for public amenity uses. Additional employee trips on the local highway network have been distributed based on local Census travel to work patterns for people who are working in this area together with the observed vehicle turning movements at local junctions. This assessment methodology has been agreed in principle with the highway authority. HGV trips associated with the site will typically include articulated HGVs (up to 16.5m in length) and small vans would only be used for occasional / infrequent maintenance requirements. Given the existing 7.5T weight restriction through Flixborough village, all HGV movements would arrive/depart via the proposed New Access Road to/from the south, and via the B1216 and A1077. Beyond the A1077, around 30% HGVs are assumed to continue eastwards along the A1077 with the majority (65%) to/from the south via the M180/ M181 and a small number (5%) via the A18 through Scunthorpe. Details on how the vehicle trip distribution has been calculated are contained in the Transport Assessment [REP2-021].

	The table in Appendix H of the Transport Assessment shows the predicted increase in vehicle trips on the A18 Kingsway (approach to Berkeley Roundabout) to be 5 vehicles in the morning and evening peak hours. Comparing this to the baseline traffic flow on the A18 in 2033 (2,434 vehicles in the morning peak hour and 2,708 in the evening) the change in traffic flow on the A18 is less than 1%, which is not significant. In terms of train travel, it appears that there was an hourly service provided at Althorpe station before the COVID pandemic but this has since been reduced to every two hours. It nevertheless provides a possible option for train travel together with Scunthorpe Station, which is a similar distance from the site (15 to 20-minute bus journey or a 25-minute cycle approximately) which provides access to more frequent train services. Table 5 of the ES Chapter 13: Traffic and Transport [REP2-021] confirms that 2% of all employee trips have been assumed to arrive / depart by train (mode split based on local Census travel to work patterns for people who are working in this area - as agreed with the highway authority). Table 5 also shows that 76% of employee trips are assumed to arrive / depart by car, which adopts a worst case for the purpose of the transport impact assessment.
4. Burton upon Stather is situated above the industrial estate and will be affected by a reduction in air quality from the fumes	Public Health England and the Environment Agency jointly state "PHE's risk assessment remains that modern, well run and regulated municipal waste

from the chimney. APP053 table 12 states that there will be a negligible difference in the air quality, but the applicant has not confirmed that PM2.5 to PM1 particulates which can be emitted have no detrimental effect on receptor's health. Can evidence be provided to show this? APP-053 4.3.13.3 states that air pollution control residue contains potentially hazardous material but no detail report has been done since the risk of emission is negligible. What is in place should this risk occur? If the air quality is made worse this may also bring odours. Residents in Burton are affected by the odours submitted from the Roxby Landfill at certain times. Once again APP-053 states in 4.3.14.2 that no assessment has been done since the chance of odours being omitted is negligible. The air quality in parts of Scunthorpe is being managed due to the steel works affecting it. These negligible chances of increased air quality and odours being released could be enough to affect the air quality over the proposed site and affect human receptors health.	incinerators are not a significant risk to public health. While it is not possible to rule out adverse health effects from these incinerators completely, any potential effect for people living close by is likely to be very small." This statement captures all emissions from the North Lincs facility, including particulate matter. No industrial activity is 'zero harm' and the overall context is important. Waste materials used at North Lincs would be disposed of somewhere, and as such emission from the facility are not 'new'. In the local context, the overall plant design is driven by the need to achieve acceptable impacts to air quality. North Lincs will be one of the most stringently regulated industrial facilities in terms of the emissions to air. In addition to complying with these emission limits, the facility is designed to minimise impacts and meet all of the air quality standards and Environmental Assessment Levels for the wide range of emissions of interest. The Air Quality Impact Assessment has been undertaken in line with the requirements of the Environment Agency and Planning regulations to provide an informed assessment in the context of the existing air quality, local human and ecological receptors and any areas where air quality is already poor. North Lincs is sufficiently distant from Scunthorpe that the overlap of impacts is negligible. The Air Quality Impact Assessment also considers the effects of local meteorology and terrain and the plant has been designed with due consideration of these factors.

	North Lincs has also been designed to avoid emissions of odour from arising in the first place. Waste arriving at the facility will be pre-baled and sealed in containers on the trucks, ships and trains. These bales are only opened once inside the reception hall which is, itself, under negative pressure to avoid odours escaping. This is in contrast to the composting and waste transfer station that previously occupied the site where wastes were handled in the open and in an uncontained manner.
5. 13.11 of the proposed NLC Local Plan states 'National policy suggests that industrial or employment areas may be appropriate (for waste facilities), as they are often located distant from residential areas' and 'However, before any proposals are permitted, applicants should demonstrate that they have fully considered the likely impacts associated with the development and any measures which could satisfactorily mitigate those impacts'. Flixborough Industrial Estate is located near to villages that already suffer from noise and light pollution from the operations taking place. This proposed application will only make things worse.	It is acknowledged that paragraph 13.11 of the emerging North Lincolnshire Council Local Plan (submission version) makes these statements. The ES, submitted as part of the application [APP- 049 to APP-075], considers the impacts of the project, including in relation to noise [APP-055] and light pollution [APP-059]. This document includes details of assessments and surveys undertaken, the impacts the Project may have and, where necessary, sets out proposed mitigation against these impacts. It also includes several outline Plans/strategies that the Project would be required to carry out their works in accordance with, should consent be granted. This includes an Indicative Lighting Strategy [APP-071] which aims to limit the impact of obtrusive light and undue light spill on to surrounding areas, protected natural environments and sensitive receptors (secured by Requirement 5 of the draft DCO [REP2-004]).

	In terms of noise matters, it is recognised that adverse noise impacts are predicted through ES Chapter 7: Noise [APP-055] and suitable mitigation and management measures are incorporated into the Project design to reduce these. Suitable measures in place include the implementation of a CEMP and adherence to a Noise Management Plan which will be implemented before the development becomes operational (as secured by Requirement 4 of the draft DCO [REP2-004]). Further mitigation measures will be explored during detailed design to seek to reduce even further predicted significant noise effects which are reported in the ES.
6. The applicant mentioned in person at a consultation that no biomass will be burnt at the site and there would be no sorting of waste on site. Is this still the case?	The Applicant has defined the waste feedstock classification in Section 3.3 of the RDF Supply Assessment [REP1-006]. The assessment includes household waste and commercial and industrial (C&I) waste, and specifically focuses on residual waste, after the waste hierarchy has been applied and materials either source-separated or later removed for recycling and composting. No virgin biomass or recycled wood will be combusted at the facility. There are no processing facilities to undertake the sorting onsite for the ERF. All sorting or processing will be done before the RDF is transported to site.
7. If no sorting is done on site, then there is a risk that batteries in the waste could catch fire. The DCO states that any metals	RDF is the result of the residual waste from household waste and commercial and industrial (C&I) waste sources, after the waste hierarchy has been applied and materials either source-separated or later removed for recycling

will be extracted so when will the batteries be removed to reduce the risk of fire?	and composting. Ferrous and non-ferrous metals are removed in this process. ES Chapter 1: Non-Technical Summary, section 7-10-4 [REP2-020] refers to the recovery of residual metals from the treatment of the waste entering the PRF as a result of the cleaning process. The removal of contaminants such as batteries would be removed as part of any waste sorting process to produce the RDF.
8. The area north of the site between Burton Hills and the river has a topographical anomaly in that noise can be heard from numerous surrounding areas. The current noise levels from Flixborough Wharf can be heard as well as the racing at the Scunthorpe Raceway racetrack, Normanby Road which is over 3 miles away. The noise sensitive monitoring investigations mentioned in APP-55 Appendix A did not cover this area. Likewise, no noise sensitive investigations were done on the south edge of Burton upon Stather which is another area where human receptors are currently affected by the noise from Flixborough Wharf.	The noise sensitive receptor locations and the locations at which baseline noise levels were measured were established in consultation with North Lincolnshire Council. These were reported in the Preliminary Environmental Information Report (Chapter 7 Noise) released for statutory consultation in June/July 2021. ES Chapter 7: Noise [APP-055] considers these noise sensitive receptor locations, which are likely to be those worst affected by the Proposed Development. Flixborough Grange lies closer to the site than Burton Upon Stather and lies in between the two. Therefore, noise effects at noise sensitive receptors in Burton Upon Stather are expected to be no greater than are reported at Flixborough Grange. The assessment at Flixborough Grange concluded noise effects would not be significant.

	Predictions of noise from the Project have been carried out using a widely recognised 3D software modelling computer package SoundPLAN. To reflect the specific nature of the area ground topography as well as the main buildings close to the site of the Project have been included in the model. The area of hardstanding surrounding the site as well as the river are assumed to be acoustically hard, reflective surfaces. Elsewhere the ground is assumed to be partly absorbent. Noise predictions have been carried out following ISO 1996 methodology which incorporates these features, and which predicts noise under meteorological conditions favourable to propagation.
9. In the original environmental investigations, it was mentioned that wind turbines don't affect the air flow, so won't affect the emissions from the chimney. Table 17 in APP-53 shows the impact the turbines will have but it doesn't give an explanation to allow for the results of the modelling to be fully understood.	Wind turbines have the potential to affect the dispersion of the plume, if the plume is blown through the turbine and into the turbine wake. The turbine affects both wind speed and turbulence. The ADMS model used in the assessment includes a module that simulates the effect of the change in the wind flow field downwind of turbines. This module has been verified with data from measurements obtained at three existing wind farms. The potential effects of wind turbine wake effects were included in the model, given that there are turbines within the 15km study area. These were initially considered to be sufficiently distant to not affect the plume dispersion but were included in the modelling for completeness.

10. On 5/12/22 Biffa issued the report 'From Waste Hierarchy to Carbon Hierarchy: Biffa's Blueprint for Waste Net Zero' where it asks the government for a moratorium on future energy waste facilities. It mentions that there are more than enough consented facilities, so this should be investigated before this application is considered.	The RDF Supply Assessment (REP1-006) examines the need for energy from waste capacity to ensure that residual wastes are managed in accordance with the waste hierarchy, once recycling targets have been met, and in particular to avoid consigning residual waste to landfill. Landfill disposal has risen as exports of RDF have fallen, an outcome consistent with the finding of the assessment that a capacity gap remains, exacerbated by the prospect of lower efficiency plant and those unable to retro-fit CCUS becoming commercially and environmentally less attractive.

5.0 APPLICANTS' COMMENTS ON FLIXBOROUGH PARISH COUNCIL WRITTEN REPRESENTATION

5.1 The Applicants Comments on Flixborough Parish Council's representation can be found below in Table 4.

Table 4: The Applicants Comments on Flixborough Parish Council's representation

Written Representation Issue	Applicant's Response
APP-058 6.1.2.12 notes that Great Crested Newts have been located near to the reinstated railway line. Appendix F of APP-058 mentions that bats have been located commuting along this line. The reopening of this line will affect these receptors and effect the current ecological systems. Many human receptors use this railway line for exercise so the reopening of the line will have a negative effect on numerous receptors.	Great crested newts (GCN) have been confirmed present in ponds within 0.25km of the Railway Reinstatement Land (described in paragraph 7.2.3.5 of ES Chapter 10: Ecology and Nature Conservation [APP-058]). It is therefore recognised that works in these areas will require either conventional or District Level Licensing for GCN. It is also recognised that the decision maker will need to record evidence that the proposal meets the "3 tests" of licensing -particularly in relation to "no alternative" and "reasons of over-riding public interest". Bat surveys of the railway line confirmed use by low to moderate numbers of four common bat species, which may be impacted by habitat loss and disturbance during train operation. However, vegetation loss will be minimised to only that necessary to ensure safe running of the branch line. Furthermore, with only 3-4 trains running daily and no external lighting along the track, the reinstatement will not significantly affect bats using the railway corridor. Use of the railway line by the public for exercise has not been previously mentioned in consultation on the EIA Scoping Report or on the Preliminary

	Environmental Information Report. The railway line is not a public space, and has rails, hardcore and sleepers in place so is not especially suitable for public exercise (e.g. jogging, or cycling). Public rights of way cross the railway line and it is intended to have one level crossing and two footbridges. One of the footbridges will reinstate the public right of way FLIX 178 whereas the other footbridge will be private and will be used to maintain access between adjacent farmland.
2. If no barrier is to be fitted to cut back the noise from the railway, how will the applicant make sure that the additional noise does not affect the human receptors? APP-055 predicts the train noise will be 43 db. when the government acceptable level is 50db, but this is still a large increase from no noise.	Up to four trains are expected to use the line per day and no trains at night. This is a worst-case assumption as the Project is unlikely to use rail as the sole means of transport. Therefore, elevated noise levels during train pass-by events will be transient and infrequent. An average noise level of 43 dB L_{Aeq} is predicted for the nearest sensitive receptor location to the railway, which is below the criterion of 50 dB for a potentially significant effect (Lowest Observable Adverse Effect Level). Since predicted noise levels from the railway are clearly below the threshold of 50 dB, this indicates no need for specific mitigation measures. However, if noise levels had been predicted to be above this level it would be appropriate to consider the change in noise. For this comparison the existing baseline noise level measured at this location would be 48 dB $L_{Aeq,}$ using the same average noise level parameter. The

	existing baseline would be predicted to increase by 1 dB(A) which would be a negligible change in baseline noise. (It is noted that the assessment method of noise from on-site operational activity requires the use of the LA90 parameter, following BS 4142, which results in a lower background noise level (34 dB) for the same noise environment, but this would not be relevant to assessing changes in train noise.)
3. Can it be confirmed that the rail line from Dragonby to Flixborough industrial estate will only be used during daylight hours since APP-053 only states that it will be once every 4 hours. APP-055 8.1.2.3 states that during the construction there will be medium magnitude impacts in noise from the railway, but no significant effects are predicted. However, the difference between no noise from the railway to some noise is a disturbance to residents. There are no predicted decibels of noise on the line near Flixborough unlike at Dragonby? APP-055 4.2.1.6 says limited railway night time use from wharf to Dragonby in construction. How limited will this be? Likewise. APP-055 8.4.11 states no trains expected at night during	Operational noise levels are predicted at the Forge, Flixborough (see response above). Noise predictions from daytime construction work along the rail corridor are reported in the APP-055 in Section 8.1.2. A noise level of approximately 66 dB, LAeq, is predicted at the closest noise sensitive receptors to the railway, which exceeds the construction criterion by 1 dB, resulting in a medium magnitude impact. However, due to the limited duration adjacent to any individual receptor, this is not considered to be significant. ES Chapter 7: Noise [APP-055] 4.2.1.6 reports that limited night-time construction work may be required at the tie-in of the railway at Dragonby

operation. Can a stipulation be put in that NO trains are allowed at night, rather than expected.	Sidings to the existing mainline, close to Dragonby. No night-time use of the railway is envisaged during construction. During operation, the Applicant would anticipate movements of locomotives and rolling stock along the Flixborough Branch Line between the Proposed Development and Dragonby Sidings during daylight hours, but would reserve the right to operate outside of this period in exceptional circumstances, e.g. recovering from disruption to rail operations on site or on the wider rail network, to avoid creating a backlog of materials which might otherwise then need to be moved by other modes of transport. The movement of trains across the wider rail network is necessarily outside of the control of the Applicant, and it is therefore considered reasonable to allow some degree of flexibility to allow the Applicant to respond to these exceptional circumstances should they arise. This also aligns with the operation of rail services to and from other existing ERF facilities, where trains have run for many years through densely-populated areas between London and Bristol, and between Liverpool, Manchester and Teesside, during daytime and night-time periods.
4. APP-055 8.5.1.9 table 20 states that noise at Flixborough will be less than 45 db. which is acceptable at night with windows closed. This will increase the current levels of noise and in	A noise level of up to 38 dB, L_{Aeq} is predicted at the nearest noise sensitive receptor in Flixborough. Noise at this level is below the range of external noise levels (40 – 45 dB, L_{Aeq}) at night that provides a good standard for sleep within

summer, residents cannot be expected to have their windows closed at night.	the building with windows open. As described in Table 20 of ES Chapter 7: Noise [APP-055], this is based on typical reductions from outside to inside a building with partly open windows and design guidance for a bedroom at night for preserving a good standard for sleep, from British Standard 8233.
5. Air quality from the chimney stack. APP-053 table 12 states that there will be a negligible difference in the air quality, but recent fires from local waste disposal companies affected the air quality, and even a negligible difference when mixed with these temporary increases could affect the health of human receptors. APP-053 states that the air quality from the chimney is checked but that is the same case at the steel works in Scunthorpe but is currently being monitored since it is not at an acceptable level.	The operation of the Project is entirely different from open waste burning. An open fire is an uncontrolled burn with no optimisation of combustion conditions or monitoring of oxygen content and temperature. Also, an open fire has no abatement of the emissions. Conversely, the furnaces used in the Project are carefully controlled to optimise combustion conditions and minimise initial pollutant generation. The exhaust gases are then passed through a series of abatement stages designed to remove the large majority of residual pollutants. This abatement and the overall plant design is then optimised around residual impacts being negligible. The Project is also equipped with Continuous Emissions Monitoring System (CEMS) that continually monitors both pollutant concentrations in the residual gases and also key parameters such as oxygen content to refine the operation of the plant. The project is a modern design that is specifically designed around the requirement to meet Best Available Techniques and emission limits. The Project is very different from Scunthorpe Steelworks

	which is characterised by a much larger operation with multiple point and fugitive sources of emissions.
6. The lights from the wharf already seriously affect pollution especially when travelling from Neap House to the village of Flixborough. Any additional lighting will influence the environment even if it is negligible as stated in APP-071.	The effects of lighting are considered in ES Chapter 11: Landscape and Visual Impact [APP-059]. See also the Indicative Lighting Strategy [APP-071]. The draft DCO [REP2-004] includes Requirement 5, which requires that a scheme of external lighting must be submitted to and approved by North Lincolnshire Council prior to implementation. Appropriate mitigation measures and design strategy are detailed to ensure the impact and light spill from the wharf are limited.
7. 13.11 of the North Lincs Local Plan (submitted for examination) states that 'National policy suggests that industrial or employment areas may be appropriate, as they are often located distant from residential areas and close to where waste is generated.' Flixborough Industrial Estate is close to a village, so this is not an appropriate site for a waste incinerator.	It is acknowledged that paragraph 13.11 of the emerging North Lincolnshire Council Local Plan (submission version) makes this statement. North Lincolnshire Council's adopted Core Strategy Policy CS20 – (Sustainable Waste Management) states that the Council will consider new and enhanced facilities for the treatment and management of waste in locations across the area, including at Flixborough Industrial Estate. North Lincolnshire Council have recognised this policy as being relevant to the Project in the draft Statement of Common Ground [REP2-025].
8. The fly ash needs weathering for up to six months before it can be used for concrete blocks. Where will it be stored and	Fly ash is another term for flue gas treatment residue (FGTr) or air pollution control residue (APCr). This material is to be stored on site in sealed siloes and

where is the contamination to go while being weathered. Can the applicant confirm all contamination will be removed from the ash before being used in blocks without any risk to human receptors? How can the applicant be certain that these blocks are not a risk to receptors health when being used?	will be processed using carbonation. This process involves mixing the residue with cement, water, carbon dioxide and an aggregate material, and heating the mixture. The product formed is a lightweight aggregate, in which any hazardous material is encapsulated by the cementitious material added, rendering the material safe.
9. The Saxon nunnery, within two miles of the proposed application site, is the site of a medieval church and burial ground and its location is shown in APP021. APP-060 mentions the nunnery but again it does not seem to make it clear how it will be protected especially since the order limits go along side it. (see Appendix A for further information). The applicant does not appear to have shown how it will make sure that air quality or construction vibrations do not affect/damage it.	There will be no construction (or operational activities) at any location within the application land at sufficient distance to have a vibration impact on this cultural asset. Air quality impacts at the worst affected ground level location are within the levels designed for the protection of human health and will have no significant effect on receptors visiting the site.
10.Odour: APP-053 states that everything will be enclosed and will have no odours. As items are moved from one area there is a risk of an odour being released into the atmosphere although minimal. How can the applicant be 100% sure that there won't be any odours to affect the local human receptors?	The RDF will arrive at the ERF wrapped in bales (i.e. several layers of plastic wrapping). It will be transferred from the point of arrival (be it by lorry, ship or train) into the tipping hall. Once in the tipping hall it will be in a negative pressure environment (i.e. air will flow into the facility and not out of it). There is minimal risk of odour escaping to the environment and affecting human receptors.

6.0 APPLICANTS' COMMENTS ON AMCOTTS PARISH COUNCIL WRITTEN REPRESENTATION

6.1 The Applicants Comments on Amcotts Parish Council's representation can be found below in Table 5.

Table 5: The Applicant's Comments on Amcotts Parish Council's written representation

Written Representation Issue	Applicant's Response
Definition of Green Energy How can this be described as a Green Energy Park when there is no green energy being produced. By definition, in order to be deemed green energy a resource cannot produce pollution such as is found in fossil fuels.	The Climate Change Committees 6th Carbon Budget identifies the use of low-carbon heat networks, electricity production and hydrogen production as a means to displace the use of fossil fuels as a key element in the drive to meet the Net Zero 2050 Target. "Expand the rollout of low-carbon heat networks in heat dense areas like cities, using anchor loads such as hospitals and schools. Prepare to shift away from using fossil fuel Combined Heat and Power (CHP) as a supply-source towards low-carbon and waste heat by preference from the mid-2020s" **"Take-up of low-carbon solutions.** Over half the emissions saving is from people and businesses adopting low-carbon solutions as high-carbon options are phased out" The ERF targets the recovery of energy from waste that is currently exported or landfilled and cannot be recycled to deliver low-carbon fuels and power with the benefit of carbon capture.

	Energy from waste is recognised as a supply of renewable energy as a result of utilisation in its fuel of biomass, a source of renewable energy. The National Policy Statement for Renewable Energy Infrastructure (EN-3) states that electricity generation from renewable sources of energy is an important element in the Government's development of a low-carbon economy (see paragraph 1.1.1).
Consultation and the Developer Inadequacy of consultation documents were not at Crowle library as stated and the local ward councillor confirmed no documents were at listed sites. Within the 3km consultation zone some homes did not receive any material. Solar 21 have failed to keep consultees informed at each stage. Website was only updated in Nov 2022 since Sept 2021.	As outlined in the Consultation Report on 16 June 2021, the Applicant became aware that North Lincolnshire Council's library service had not been able to distribute consultation materials from the arranged point of delivery at Scunthorpe Central Library to Crowle Community Hub and Winterton Library. The Applicant therefore arranged for these materials to be distributed by hand to Crowle Community Hub and Winterton Library. The Applicant did not receive any enquiries checking arrangements for viewing materials at these locations prior to 16 June 2021 and copies of the materials were available at the other deposit points and the Project website throughout the consultation period. The Applicant therefore considers that no consultee was disadvantaged in accessing the consultation materials. The consultation materials were sent out by Royal Mail to all addresses within the 3km radius. The consultation materials were posted via Royal Mail to all addresses within Consultation Zone 1 as defined in the Statement of

	Community Consultation (SoCC). If the interested party is able to provide details for the addresses that they claim did not receive the materials the Applicant can check whether these addresses were within the mailing area. The Applicant kept consultees updated across a phased process of consultation. Specifically, with regards to September 2021 to November 2022, the Applicant was preparing its DCO application so there were no updates to provide ahead of the submission of the application – updates on that process were available on the PINS project page.
The EIS and PIER response states that if RMS Flixborough is taken under a compulsory acquisition order then all jobs will be transferred to RMS Gunness and Althorpe. RMS has sold both sites so this is clearly going to create numerous job losses above initially predicted.	The Applicant has a signed commercial agreement with Flixborough Wharf Limited so that no compulsory acquisition power will need to be exercised. Under that agreement, RMS Ports have the option to continue their existing operation at Flixborough Wharf. No job losses will occur for staff employed at Flixborough Wharf as a result of the Project. The Project will return the port activity to historic levels and will support additional jobs at the site for stevedores and railway workers.
The Humber Low Carbon Pipeline has chosen its preferred route corridor, and the corridor which would have been beneficial to the project has been rejected. SSE Keadby would	The Applicant also provided a response to Q6.0.8 on the Humber Low Carbon Pipeline connectivity. The Humber Low Carbon Pipelines (HLCP) project is currently at its statutory stage of consultation and its delivery is a

be able to utilise this pipeline more effectively in the future due to one of AGIs being located close by. British Steel was considered an alternative site for NLGEP but was rejected by the developer. Why was this rejected?	fundamental part of Government policy to decarbonise the Humber and facilitate the introduction of a dedicated hydrogen network. Its purpose is to decarbonise major generators of carbon in the Humber area and the proposed pipeline passes within 3km of the south of the southern DHPWN. The Applicant has made representations to National Grid Carbons Venture's consultation to seek an amendment to their proposals to facilitate this. However, even if an amendment is not made, given the very close proximity, it is reasonable to assume that the project could be connected to the HLCP in the future, given the strength of policy to support this.
<u>Overcapacity</u> Figures indicate that there are over 42 UK plants processing 11.5million tons of waste per annum. Enfinium state that they need the feedstock to meet capacity in the area. Feedstock will not be coming from local area therefore it could be sent to incinerators that are already close by.	The RDF Supply Assessment [REP1-006] addresses this point. It compares residual waste arising with available treatment capacity at the national level (England) and local level (East Midlands and Yorkshire and Humber). Whilst there is considerable uncertainty when projecting into the future, it presents a prudent base case showing that there is a need for the facility.
<u>Visual Impact</u> Night time views and effect of lighting were assessed and a range of adverse effects, from minor to major, were predicted from various viewpoints, the worst being in Flixborough and	These effects are as reported in ES Chapter 11: Landscape and Visual Impact [APP-059]. Mitigation measures that will assist in reducing some of the impacts are set out in Section 7 of ES Chapter 11: Landscape and Visual Impact. Design principles that will guide the development of the finalised proposals include measures aimed at reducing the landscape and visual

Amcotts. There will still be major and moderate adverse impacts on these viewpoints after 15 years.	impacts of the scheme, and these are set out in the Design Principles and Codes document [APP-046]. The Indicative Lighting Strategy [APP-071] addresses the existing issues identified and measures in place to improve on the existing lighting conditions, to limit the levels of undue light spill and glare to an insignificant level.
<u>Environmental</u> If you do not know what your waste is composed of, how do you know what pollutants will be produced? As wintering bird surveys were limited to the energy park facility and surrounding areas, the wintering and passage waterbirds associated with the Humber Estuary SPA and Ramsar Site were not considered. ES lighting strategy needs clarity as sensitive environmental receptors nearby, including potential badger sets in Amcotts, could be affected. Noise has been highlighted to be above the criterion 75db during the day during construction. Some properties in Amcotts have been identified as being receptors of 7db above the criterion at night time. It is suggested that the plant will run 24 hours. Will there be any quiet time? The ES says that the	1) The waste fuel arriving on site is obtained from processes that have initially separated out recyclable/reusable material. The processing and handling of waste is subject to a strict classification regime. As such, the sources of waste and its composition of waste is known and understood. The project is designed with the knowledge of the waste types that will be accepted by the plant and therefore the composition of the exhaust gases is known within a well defined set of parameters. The Project is designed in the knowledge of the waste type that will be accepted on site, and is designed specifically to meet Best Available techniques, and the associated emission limits set out in the IED and BREF. The assessment is therefore a worst case as the plant will be operated within the emission limits, in most cases, substantially below. 2) The wintering bird surveys included vantage point surveys of the River Trent, undertaken from the B1392 and adjacent riverbank to the north

impact would only be 3 years yet it is now likely to last up to 7 years.	and east of the village of Amcotts. Surveyors carrying out walked transect surveys for wintering, breeding and migratory birds also surveyed along the banks of the River Trent. Wintering and passage bird survey records relating to the European designated sites has been used in the Report to Inform Habitats Regulations Assessment (APP-043), which concludes no significant effects on birds using the Humber Estuary. Light spill onto the River Trent will be limited and as will any light spill onto the Amcotts and impact onto the Badger sets. The badger sets nearby and within the locality of the Lysaght's Drain are addressed within the lighting strategy to limit any light spill onto the Lysaght's Drain. 3) Most of the construction work is anticipated to be carried out during the day for the main buildings in the northern and southern parts of the Energy Park Land. Some evening works may be required, and therefore an assessment at noise sensitive receptors in Amcotts has been carried out against daytime and evening construction noise standards and is reported in the ES Chapter 7 - Noise [APP-055], in Section 8. The assessment concludes that noise levels affecting noise sensitive receptors in Amcotts are predicted to be below the criterion of 65 dB, L_{Aeq} during the day. However, should works be required at the same intensity during the evening, an exceedance of the evening criterion (55 dB) of up to

	7 dB is predicted, resulting in a large magnitude impact at times, should evening works be required close to these receptors. Whilst there is the potential for a large magnitude effect, the overall significance of the effect on sensitive receptors in Amcotts is considered to be up to moderate. This is because it is likely that noise levels will normally be lower as most of the works are expected to take place during the day and because the assessment followed a worst-case approach in terms of plant locations which are assumed to be at the closest point to receptors (i.e. at the site boundary). Works outside of core hours would be discussed with NLC to identify works unlikely to cause significant effects. In order to manage construction noise, construction works will be undertaken in accordance with a Construction Environmental Management Plan (CEMP). The CEMP will set out detailed measures to minimise construction noise as far as is reasonably practicable and will be agreed with North Lincolnshire Council (NLC) before construction work is undertaken. Regarding the construction period the Programme is set out in the outline Construction Logistics Plan Table 3.1 (e-page 395) Appendix D to ES Chapter 12 Traffic and Transport (REP2-021). Construction of the ERF facility and other structures in the Project area across the River Trent from Amcotts is expected to be completed after four to five years. This includes site establishment and access at the beginning of this period and mechanical and electrical works and

	commissioning in the latter period; i.e. a large part of the construction period is not made up of especially noisy construction activity. Construction of the District Heat Network, which extends south and east along the A1077 is programmed to continue until the end of 2028 (commencing towards the end of the ERF construction and commissioning). By virtue of the nature of the activities and separation distances, construction of the DHN is not expected to have any noise impacts on Amcotts.
Health Can clarification be given on the impacts on health due to air quality. It is clearly stated that mortality being premature is directly impacted by PM2.5 and NO2. These are only some of the toxins produced from incineration. How can this be mitigated?	The Health Effects Assessment has set out in considerable detail the quantifiable effects on premature mortality in the local population, through exposure to NO2 and PM2.5, using the same methodology that produces the national estimate of loss of life years equivalent to 29,000 premature deaths though exposure to PM2.5. Whilst being non-zero, these effects are extremely small, which is the consequence of the extensive mitigation in place to reduce the emissions to their lowest practical level. For example. the fabric filters to be used are highly efficient at removing the particles of all sizes, and only a tiny fraction of 1% of the total particles are ever emitted to the atmosphere. Similarly, the pollution control system will remove almost all of the metals and volatile organic compounds that are produced by the incineration process.

	Within the limits of current pollution control technology, the development will incorporate all the mitigation that can be feasibly installed, and this will eliminate almost all of the pollutants emitted to atmosphere. The residual stack emissions will be closely monitored, and results made publicly available to demonstrate compliance with emission standards.

7.0 APPLICANTS' COMMENTS ON UNITED KINGDOM WITHOUT INCINERATION NETWORK (UKWIN) WRITTEN REPRESENTATION

7.1 The Applicant's Comments on the summary of United Kingdom Without Incineration Network's (UKWIN) representation can be found below in Table 6.

Table 6: Applicants Comments on the summary of United Kingdom Without Incineration Network's (UKWIN) written representation

Written Representation Issue	Applicant's Response
UKWIN objects due to lack of need, overcapacity risk, and adverse climate impacts. <u>Lack of need, and risk of overcapacity</u> The Applicant has not demonstrated their proposed capacity would not result in overcapacity at a local or national level, in contravention of EN-3, nor that it would not undermine long-term recycling targets.	The Applicant has responded comprehensively on the need and capacity for Energy from Waste in its response to Q14.0.2 of the ExA's First Written Questions [REP2-033] and the RDF Supply Assessment [REP1-006] submitted at Deadline 1 and Footprint Services Reports [REP2-039] and [REP2-040], submitted at Deadline 2. These submissions together demonstrate that the proposal will not result in an overcapacity at local or national level. Notwithstanding this, the Applicant notes that the requirement to demonstrate that the proposed development would not result in overcapacity at a local or national level is only in draft form at present in draft NPS EN3 (September 2021). The Applicant confirmed its view on the weight that can be applied to the draft NPS in its response to Q14.0.6 [REP2-033], which at present is only

	limited, given that revised drafts have not yet been published for consultation, which is anticipated before the final NPS can be published in their adopted form. The proposed ERF would only be supplied by RDF which would otherwise be destined for landfill and so it would not undermine long-term recycling targets. As noted in its response to Q14.0.12 [REP2-033], the proposed development should in fact support recycling rates. The aim of the inclusion of the Plastics Recycling Facility within the Project is to encourage RDF suppliers to segregate out more plastic from the RDF to be delivered to the ERF. In turn this will also have the potential to reduce the impact of the ERF by reducing the proportion of plastic waste that is used as a fuel in the ERF. As a result of removing plastics from the fuel, its fossil carbon content will fall and the overall carbon balance of the facility will improve, raising still further this significant benefit.
The proposal is not 'necessary development' that would justify the proposed location, given the site's flooding issues	In its responses to Q.4.0.8 and Q17.1.3 [REP2-033] the Applicant explains how flood risk was considered as part of the site selection exercise. The Planning Statement [APP-035] and the Applicant's response to Q17.1.10 iii) [REP2-033]

	also explains why the proposed development is Essential Infrastructure in the context of the Exception Test.
Anticipate reductions in residual waste are expected to free up capacity at existing incinerators, undermining the Applicant's justification for their proposed new capacity.	The Applicant has considered the position in relation to existing and proposed Energy from Waste facilities in the updated RDF Supply Assessment [REP1-006].
Reducing plastic in incinerator feedstock can increase effective capacity of UK incinerators by 21-31%, thus freeing up existing capacity.	The Applicant has considered increases in recycling rates in the updated RDF Supply Assessment [REP-006]. The Applicant's written summary of its Oral Submissions [REP1-015] states that the Applicant has looked at the effect of increasing the rate of recycling to hit the 2035 target for England of 65% and also a sensitivity analysis with the 68% recommended by the committee on climate change alliance. Currently the rate sits around 45%, so an increase to 65% would be quite significant. Nonetheless that is what the Applicant has modelled. If recycling targets are not met there will be a shortfall of treatment capacity and those wastes will likely go to landfill. We expect a capacity gap by 2035 of approximately three million tonnes for England as a whole. The updated RDF Supply Assessment is based upon permitted capacity of existing facilities and does not speculate on what changes to these may be requested and approved.

The proposed incineration capacity would constitute a wholly unnecessary barrier to and leakage from the circular economy, harming recycling whilst destroying valuable materials and nutrients.	National and local policy currently supports Energy from Waste as an appropriate way of moving waste up the waste hierarchy and diverting material from landfill. Whilst we understand UKWIN's position that they do not support Energy from Waste as a matter of principle, this is, with respect, not the Government policy position.
The proposal would be likely to use feedstock that could otherwise have been recycled, composted, or sent to existing incinerators, thus undermining APP-051 because the Applicant's assessment has not adequately considered those alternative options.	This is not supported by the evidence submitted. The waste processed through the proposed ERF would be restricted to RDF. See requirement 15 on the draft DCO submitted at Deadline 2 [REP2-005] which further ensures that compliance with the waste hierarchy is secured. The Environmental Permit will restrict specific waste types that can be received at the ERF and not include recyclable waste streams. The inclusion of the PRF within the proposed development would also ensure that as much plastic as possible that would otherwise be packaged with the RDF by waste processors off site could potentially be segregated and recycled. The proposed Facility will be sourcing RDF after recyclables have been removed and will not be competing for feedstock for materials suitable for composting and anaerobic digestion.

With respect to the range of relevant policies of Local Development Plans, the overcapacity that would result from the proposal would go against ambitions set out in various Local Development Plan strategies across the affected areas, undermining ambitions in relation to recycling, self-sufficiency, and the proximity principle.	The Applicant has included an assessment of compliance with the Local Development Plan in the Planning Statement [APP-035]. Local policy is supportive of Energy from Waste in appropriate locations, which include the Flixborough Industrial Estate (see adopted policy CS20 and draft policy WAS2). The Applicant's written summary of its Oral Submissions [REP-015] and RDF Supply Assessment [REP1-006] also referred to the Local Waste Needs Assessment 2020 that was prepared as part of the evidence base for the draft Local Plan. It identified that there would be a residual capacity of Local Authority Collected Waste (LACW) of 24,715 tonnes in 2020 (after recycling and recovery is allowed for) falling to 10,827 in 2038. Note this assumes an increase in recycling to 65%. However, the LWNA 2020 also notes that two existing landfill sites are due to close in the mid-2020s (Roxby) and 2030 (Crosby) respectively. This will result in 925,000 tonnes of permitted LACW landfill capacity being lost. The LWNA also notes that North Lincolnshire currently receives substantial amounts of imported waste from other local authorities in Lincolnshire. Two million

	tonnes comes in, some of which is exported. If this continues, there will be a significant shortfall in landfill capacity over the plan period.
As per REP1-023, Regulation 12 of the Waste Regulations 2011 cannot be relied upon to prevent avoidable, reusable, recyclable or compostable material being used as incinerator feedstock. Feedstock can meet the definition of RDF with only minimal recycling, meaning the fact the proposal would process RDF does not obviate concerns over incinerating material that could have been treated higher up the waste hierarchy, e.g. recyclable or compostable paper and card. Similar concerns influenced the Kemsley North refusal, with the Secretary of State agreeing with the Examining Authority that "...the projects would divert a significant proportion of waste from recycling rather than landfill" despite the Kemsley applicant's claim the incinerator would only burn non-recyclable material.	The Applicant would again emphasise that Government policy supports Energy from Waste as part of the solution to divert waste from landfill. It is therefore not for the Examining Authority to test the need for such facilities, although it is a relevant consideration as to whether the capacity exists, which the Applicant has addressed in its various submissions, including its response to Q14.0.2 of the ExA's First Written Questions [REP2-033] and the RDF Supply Assessment [REP1-006] submitted at Deadline 1 and Footprint Services Reports [REP2-039] and [REP2-040], submitted at Deadline 2. The Applicant has also submitted an amended requirement 15 in the draft DCO submitted at Deadline 2 [REP2-005] which provides for the submission and approval of a waste hierarchy scheme which sets out arrangements for maintenance of the waste hierarchy in priority order and which aims to minimise recyclable and reusable waste received at the authorised development during the commissioning and operational period of the authorised development. The scheme will include: • the arrangements that must be put in place for ensuring that as much reusable and recyclable waste as is reasonably possible is removed from waste to be received at the authorised development,

	including contractual measures to encourage as much reusable and recyclable waste being removed as far as possible. • the arrangements that must be put in place for ensuring that commercial suppliers of residual waste operate a written environmental management system which includes establishing a baseline for recyclable and reusable waste removed from residual waste and specific targets for improving the percentage of such removed reusable and recyclable waste. • the arrangements that must be put in place for suspending and/or discontinuing supply arrangements from commercial suppliers who fail to retain or comply with any environmental management systems. • Monitoring arrangements and keeping of records on the composition of waste, which must be available for inspection by the Local Planning Authority. This type of requirement was accepted in the Cory Riverside case to address the waste hierarchy position. At Kemsley, the ExA report that recommended refusal of consent for Wheelabrator Kemsley North (WKN) also recommended granting of consent for an upgrade to the Wheelabrator Kemsley 3 (WK3) generating station, operated by enfinium. The Secretary of State's decision letter refusing consent to WKN also granted consent to WK3.

	The WK3 upgrade will increase its capacity to 75 MW and its throughput of waste fuel to 657,000 tpa. Kent Enviropower's Allington RDF plant near Maidstone, operating since 2008, has a throughput of 550,000 tpa. WK3, near Sittingbourne, is approximately 15 miles from Allington, with both facilities proximate to the Kent primary road network. In combination, the facilities have a throughput of c. 1.2Mtpa. Referring to the need case for WKN, in paragraphs 6.2.20 and 6.2.31, the ExA report makes the point echoed by the SoS at 4.9 that *"… there is no proven need for the plant to be located **in Kent**…"* (our emphasis) and that *"an alternative location outside of Kent would appear to better serve the strategic purposes of SEWPAG (South East Waste Planning Advisory Group) … in particular the KMWLP (Kent Minerals and Waste Local Plan). …."* (our emphasis). It is not that a need for Energy from Waste capacity is not demonstrated, indeed, there was, sufficient to support the WK3 decision, but that this capacity was not needed within Kent, served as it is both by WK3 and Allington. Instead, this need should be met through the plans of the other South East authorities, who made representations to this effect. Additional capacity in Kent at WKN, against a backdrop of a significant existing operational capacity in the County and plans by neighbouring authorities to

	meet remaining need within the region, was judged by the ExA and SoS to put at risk the targets of the KMWLP (paragraph 4.19). This is an entirely different context from that of the NLGEP, where there is no existing local capacity, a shortfall in capacity in the region and current imports of residual waste for the purposes of landfill or export.
REP1-006 does not consider the impact of achieving the Government's proposed Environmental Target to halve residual waste sent to either landfill or incineration by 2042.	The Applicant recognises the Government's proposed target to reduce residual waste, however the proposed development will target diverting RDF currently being exported overseas and to landfill, thus moving them up the waste hierarchy. As noted above, the RDF Supply Assessment has considered the impact of increased recycling rates from around 45% to 65% (with a sensitivity at 68%), significantly above current levels. The Applicant has considered this extensively in the RDF Supply Assessment [REP1-006] submitted at Deadline 1. This point is addressed further in the Appendix to this document., which extends projections out to 2042 and takes account of this target.
The importance of accounting for Government ambitions to reduce residual waste going to incineration is made explicit in the 17th November 2022 Ministerial Statement that: "…We	The Applicant accepts these ambitions, however the updated RDF Supply Assessment [REP1-006] has taken into account increased recycling rates. As noted above, the proposed development will only take RDF and will not

should be aware that generating energy from waste should not compete with greater waste prevention, reuse or recycling. Consideration must be given to the Government's strategic ambition to minimise waste and our soon-to-be-published residual waste reduction target…" (emphasis added).	compete with reuse or recycling. The point on the residual waste reduction target is addressed further in the Appendix to this document.
The Government states that their target to halve residual waste would represent a national municipal recycling rate of 70% - 75% by 2042.	The Applicant notes this and supports a reduction in residual waste but notes the level of ambition given that current recycling rates are around 45%. Nevertheless the base case presented in the RDF Supply Assessment is consistent with 70-75% municipal recycling rate by 2042.
Even if no new incineration capacity enters construction beyond that already operational or being built there would be EfW overcapacity in England.	The Applicant has considered capacity in the RDF Supply Assessment [REP1-006] which includes assumptions on planned EfW and potential closures as a result of the need to fit carbon capture in light of the Government target to decarbonise the electricity sector by 2035. This point is addressed further in the Appendix to this document. This demonstrates that there will be no overcapacity at a local or national level.
UKWIN's updated analysis, taking account of the 595,000 tonnes of Rivenhall capacity, shows the impact of English	Noted but not agreed. This point is addressed further in Appendix to this document, which includes Rivenhall in the analysis.

incinerator feedstock falling from the current level of around 25.4Mt to 13.4Mt by 2042 in line with Government targets.	
The current 15.6Mt of operational incineration capacity in England is set to increase to 18.9Mt once those incinerators currently under construction become operational.	Noted. The Applicant's view on the appropriate figures are included in the RDF Supply Assessment [REP1-006] and this point is addressed further in Appendix A to this document.
This combination of increased capacity and reduced feedstock would result in around 5.5 million tonnes of incineration overcapacity in England by 2042 (i.e. 18.9Mt capacity minus 13.4Mt feedstock). Government expects their 65% recycling target to be met, alongside the halving of residual waste.	This point is addressed further in Appendix A to this document.
The Applicant's assessment should run to at least 2042, and ideally to 2050, in line with REP1-024 and relevant CCC advice.	This point is addressed further in Appendix A to this document, which extends the assessment to 2042.
UKWIN provides a summary of concerns regarding Appendix A to REP1-006 which are explored in more detail in UKWIN's D2 comments on NLGEPL's D1 RDF Supply Assessment.	Noted. This point is addressed further in Appendix A to this document.
In REP1-015 the Applicant makes the unsubstantiated claim that: "Air Products development plasma arc technology is still used in thermal treatment and in recovery technology – the	Mention of Air Products' plant was made in a discussion of the prospect of planned and permitted capacity becoming operational, and of operational plant closing in the future.

facility was commissioned but Air Products chose to close it for commercial reasons". If the Applicant can supply examples of anywhere across the European continent where plasma arc technology is being used at commercial scale, then UKWIN would be happy to comment on their relevance to the North Lincolnshire proposal. UKWIN provides some examples of public statements that contradict the notion that Air Products chose to close their Tees Valley plasma arc facilities solely for commercial reasons. Air Products' failed plasma arc scheme differed from any and all of the EfW capacity currently operational, under construction, or being applied for, anywhere in the UK. The technology failures associated with Air Products' Tees Valley plasma arc project are not material to the consideration of the Flixborough proposal.	An alternative example of how consented capacity can be misleading in considering the extent of a capacity gap is Peel Environmental's Ince Marshes RDF project. Consented in 2009 at 600,000tpa throughput, it is only now under construction and due for completion in 2024, but at 400,000 tpa throughput.
<u>Adverse climate impacts</u> UKWIN is concerned about the proposal's adverse climate change impacts, both in terms of the direct and indirect emissions compared to other treatment options, including	The Applicant acknowledges that climate impacts will be a material consideration in the planning balance. ES Chapter 6: Climate [APP-054], presents the greenhouse gas (GHG) assessment of the Project. With the implementation of the mitigation as set out in ES Chapter 6: Climate [APP - 065], the assessment, carried out on a reasonable worst case basis, has

those further up the Waste Hierarchy, that the proposed capacity might be displacing. Relying only on the Applicant's figures, net GHG emissions from the proposed project would have to be only slightly higher, or the net GHG emissions of landfill be slightly lower, for the proposal to have an adverse impact when compared to landfill. For example, increasing the landfill gas recovery rate from 68% to 75% would result in the project having a net disbenefit of between 82,698 and 135,062 tCO2e per annum.	concluded that there will be a net reduction in GHG from the Project compared to the alternative baseline landfill scenario and therefore there will be no significant residual effects from the Project and there should be a positive impact. As such, the Applicant disagrees with UKWIN's assessment and considers that positive weight in the planning balance can be attached to climate impacts. Before considering UKWIN's points in further detail, it should be noted that the majority of points are objecting to the principle of Energy from Waste, rather than the detailed assessment of the proposed development. Current Government policy is clear that Energy from Waste is supported as a means of diverting waste from landfill and thus moving it up the waste hierarchy. Government policy in the Resources and Waste Strategy (2018) and NPS EN3 (2011) is clear that Energy from Waste is above landfill in the waste hierarchy. NPS EN3 recognises the role of EfW generating stations in taking fuel that would otherwise be sent to landfill (NPS EN3 para 2.5.9). NPS EN1 also confirms that energy recovery from residual waste has a lower GHG impact than landfill (para 3.3.33). Whilst it is noted that emerging policy in draft NPS EN3 requires applicants to demonstrate that there would be no overcapacity at local and national levels, this is not yet adopted policy. Nevertheless, the

	Applicant has demonstrated that it has also met this emerging policy requirement. In addition, notwithstanding the waste policy need, Government policy is also clear that the UK will need to generate much more electricity from renewable and low carbon sources to meet Net Zero and the decarbonisation of the electricity sector by 2035. NPS EN3 states that: "the recovery of energy from the combustion of waste, where in accordance with the waste hierarchy, will play an increasingly important role in meeting the UK's energy needs (paragraph 2.5.2)." The UK's electricity consumption is anticipated to double by 2050 (British Energy Security Strategy, April 2022) as a result of more homes being heated by electricity and the widespread introduction of electric vehicles. At the same time, we are losing major generators of power as nuclear power stations and coal fired power stations close. Although Government policy (in NPS EN6) is that we will continue to have large GW nuclear reactors, Hinkley Point C is not due to start generating electricity until mid-2027 and Sizewell C has not yet started construction, so is unlikely to be generating until 2035 at the earliest. Sites still need to be agreed for Small Modular Reactors (SMRs) and they are many years from any future SMR facility being able to generate energy. At the same time, existing nuclear is close to the end of its life with all

	of the existing UK AGR reactors scheduled to be switched off before 2028 and Sizewell B in the 2030's. In terms of timing, at the date of this note, three Advanced Gas-cooled Reactors (AGRs) Dungeness B (1GW), Hunterston B (1GW) and Hinkley Point B (1GW) stations have closed, and firm closure dates have been set for all but 1.2GW of nuclear capacity - Sizewell B, Heysham 1 and Hartlepool (2.2GW) will close during 2024 and 2.4GW (Heysham 2 and Torness) will close by 2028. It is therefore clear that the UK will need to do much more to generate power from low carbon sources and this needs to come from a diverse mix of generation – including Energy from Waste.
The Applicant separately looks at the sensitivity for 'Landfill gas recovery rate and electricity generation displacement factor' and for 'RDF Composition (Biogenic content and biodegradability of waste)'. These sensitivities could combine to create an even higher adverse impact than predicted in either sensitivity scenario. As such, even if the Applicant's sensitivity analysis were considered adequate, it indicates that the proposed development could perform worse than landfill and, in some cases, significantly worse than landfill.	The Applicant has undertaken a very conservative approach to the assessment of GHG emissions, consistent with Defra's guidance on assessing the carbon balance of energy from waste plant (*Energy recovery for residual waste. A carbon based modelling approach*, Defra, February 2014). Therefore, with respect, it is not helpful to consider progressively narrowing sensitivity analyses. Any combination of unlikely parameter values considered in sensitivity analysis multiplies their respective probabilities, resulting in a vanishingly small likelihood of their occurrence. The Applicant has sought to undertake a reasonable worst-case approach in relation to climate change in chapter 6 of the ES [APP-054], however this has

	resulted in an under-estimate of the climate change benefits for a number of reasons which are summarised below. For this reason, we have not sought to consider the various alternative scenarios suggested by UKWIN in detail. **The greenhouse warming potential of methane** The GHG assessment in the Climate Change chapter [APP-054] has used a very conservative assumption that the Global Warming Potential (GWP) of Methane is 28 times that of carbon dioxide over a 100-year time horizon (IPCC AR5, as referenced in Table 2 of the climate change chapter of the ES). However, methane has an atmospheric half-life of about 12 years, and contributes much more warming over the short-term than the longer-term. As an issue, climate change is unlikely to have been addressed over the 100-year period; however, the emergency is a current one, and demands action now. In part, this explains the great weight given to reduction in biodegradable waste sent to landfill by the Committee on Climate Change. A less conservative approach can use as an alternative GWP value either that derived by weighting heating contributions over the 100-year timeline (referred to as GWP-100*); or by considering GWP over the short-term, on a 20-year time horizon. The outcome of using these alternative GWP values is set out and summarised in a table below. *Using a GWP100* value of 34*

All other parameters being equal[1], the avoided emissions from landfill will increase to a total of 469,562 tCO2e per annum and the overall carbon balance of the development, as assessed, will increase to a net benefit of -88,930 tCO2e per annum assuming carbon storage and -359,224 tCO2e with carbon storage excluded (compared with the values in the original assessment of -6.066 and -276,360 tCO2e per annum respectively).

Using a GWP20 value of 84 (IPCC AR5)

All other parameters being equal, the avoided emissions from landfill will increase to 1,160,094 tCO2e per annum and the overall carbon balance of the development, as assessed, will increase to a net benefit of -779,462 tCO2e per annum assuming carbon storage and -1,049,756 with carbon storage excluded (compared with the values in the original assessment of -6.066 and -276,360 tCO2e per annum respectively).

GWP method	**Net benefit including biogenic carbon storage in landfill (tCO2e per annum)**	**Net benefit excluding biogenic carbon storage in landfill (t CO2e per annum)**

[1] In this revised assessment, GWP20 is used only for methane. The GWP20 value for nitrous oxide is lower than the GWP100 value, which would have the effect of further increasing the net benefit, albeit to only a small degree.

GWP100 -original assessment	-6,066	-276,360
GWP100*	-88,930	-359,224
GWP20	-779,462	-1,049,756

It can be seen that in both cases where a less conservative approach is used, the net benefit increases significantly. Where a GWP20 value is employed, the increase is very considerable indeed, and demonstrates how important is diverting waste from landfill to combat the climate emergency in the short-term. Over the 25-year design lifetime of the proposed development, its net benefit might be as high as -25MtCO2e.

Biogenic carbon storage in landfill

The original assessment of carbon balance in the ES [APP-054] took into account the possibility of a proportion of the biogenic carbon in landfill being stored for a sufficiently long period before it is decomposed and released that its impact could be excluded (see climate change chapter 5.3.3.17). This is because it is well understood that some materials are intransigent to degradation and may in some landfills persist for decades and potentially for

the 100-year time horizon over which GWP is considered (see above[2]). Thus, a delayed release of GHGs can be considered to offer some benefit.

Nonetheless, in practice, all carbon in wastes consigned to landfill can be expected to be released at some point as a result of landfill or geomorphological processes. In a context where all emissions of GHGs are considered significant, and where shifting an environmental burden to future generations is to be avoided, accounting for temporary storage in this way is an extremely conservative approach.

Were the assessment to consider all releases of GHGs on the same basis, the results would be as shown in the table below, dependent on the choice of GWP value.

GWP method	**Net benefit excluding biogenic carbon storage in landfill (tCO2e per annum)**
GWP100 -original assessment	-276,360
GWP100*	-359,224
GWP20	-1,049,756

Supply of Heat

[2] These are two different quantities: GWP100 being the period over which the heat-retaining property of a GHG released in year 1 is considered, rather than a time period over which GHG releases are considered relevant.

	The development is designed as CHP-ready and includes the proposed main distribution routes of the heat networks within the Order Limits, in that heat can be supplied to neighbouring residential, commercial and industrial users once it is constructed, contracts agreed and the necessary infrastructure implemented. Whilst the UK is making good progress in the supply of renewable electricity, much less progress has been made with renewable heat, with natural gas remaining the dominant supply. Enthusiasm for renewable heat has led to CHP uptake at some EfW facilities many years after their original commissioning. Exporting energy as heat, rather than generating electricity, delivers greater net carbon benefit: 1) because it is a more efficient supply, avoiding turbine and gen set; and 2) because it offsets combustion of natural gas and to some extent diesel. The benefits of renewable heat supply were excluded from the assessment presented in the climate change chapter [APP-054] because user uptake is as yet unconfirmed, whereas the export of electricity is certain. Nevertheless, this would be a potential additional climate change benefit of the scheme. ***Further capture of carbon dioxide in from flue gases*** The assessment in the climate change chapter considered the contribution of only a relatively small degree of carbon capture, consistent with what might be achieved in advance of connection to the East Coast Cluster's Zero Carbon Humber project, which would enable the long-term storage of carbon dioxide

	at greater scale. Again, this represents a worst-case scenario for carbon capture that can be delivered by the operator on its own from inception of operation of the ERF. Since the assessment was carried out, the East Coast Cluster has been named as one of the UK's first carbon capture usage and storage clusters, following a successful bid to the Department for Business, Energy & Industrial Strategy (BEIS). It's Track-1 status confirmed by the Energy Minister places it on course for deployment by the mid-2020s. Greater confidence can now be placed on the prospect of much higher degree of carbon capture at the development than considered in the original climate change assessment and the Applicant is in ongoing discussions with the applicant for that scheme about options to connect into the pipeline and will keep the ExA updated accordingly. As is the case with heat, the extent of carbon capture cannot be known with certainty at this point in time. However, this is another example of where the climate change chapter [APP-054] is robust and worst case. As an illustrative example, the facility may expand its capability to capture carbon dioxide to capture 25% of that emitted by the ERF (based on a throughput of 650,000 tpa and constant fuel composition/NCV). In this case, the ERF would generate less electrical power due to the increased heat and

power demands of the carbon capture facility. The new export and capture rate and the effect on net emissions is stated in the table below.

Parameter	Unit	Value
Carbon dioxide captured	Tpa	181,610
Net power	MW	75.71
Net emissions	Tpa	-175,109 tCO2e excluding biogenic carbon capture in landfill -445,403 tCO2e including biogenic carbon capture in landfill

Benefits of plastics recycling

The proposed development includes a plastics recycling facility (PRF) intended to facilitate the recycling of plastics separated locally by waste processors and by suppliers of residual waste. However, no carbon benefit was allocated to the plastics recycling facility in the climate change assessment presented in the ES [APP-054]. Instead, it was assumed as a worst case that the same quantity of plastics would be recycled in another location (see climate change chapter 5.3.2.7).

As noted in the Explanatory Memorandum [REP2-006], the PRF gives the real prospect of the separation of plastics as part of MSW processing that would otherwise be destined for landfill as a component of mixed residual waste.

	The associated carbon benefit can be calculated by multiplying the PRF throughput by an average figure for the benefit of recycling mixed plastics (1.17 tCO2e/t). The net benefit of a fully-utilised PRF (i.e. producing 20,000 tonnes per annum (tpa) from an input of 25,000 tpa) would therefore be – 23,400 CO2e per annum.
Uncertainties regarding feedstock composition and its alternative fate, the net GHG impact of the proposed development, and the net GHG performance of the baseline combine to reduce the weight to be given to the Applicant's claimed environmental benefits with respect to the Principal Issue on climate change, i.e. the overall change in greenhouse gas (GHG) emissions that may arise from the construction and operation of the proposed development. Such an approach would be in line with that taken by the Secretary of State in the Wheelabrator Kemsley North (WKN) incinerator infrastructure decision.	Please see Applicant's response above. The Applicant has undertaken a very robust approach to the assessment of GHG emissions which demonstrates that there will be a net reduction in GHG emissions from the Project compared to the alternative baseline landfill scenario. This is not unexpected given the Government's support of Energy from Waste over landfill in the waste hierarchy and the priority assigned by the Committee on Climate Change to the diversion of waste from landfill. Given this conservative approach, it is not considered helpful to consider further alternative scenarios. The effect on the forecast net benefit of the development of using a less conservative value for GWP and of accounting for the benefits of heat supply, higher rates of carbon capture and plastics recycling and the inevitable release of carbon temporarily stored in landfill are explained above. Whilst the precise net benefit is uncertain, the balance is not a marginal one, and a

	high level of confidence can be placed in the contribution of the development to the reduction of greenhouse gas emissions.
For North Lincolnshire, a similar range of key uncertainties and limitations are acknowledged within the Applicant's carbon assessment. This similarly casts considerable doubt on whether the Applicant's claimed 'net benefit' can be ascertained with any great certainty given that, as with WKN, the Applicant's claims are highly sensitive to the assumptions applied. The potential for adverse climate change impacts arising from the proposed Flixborough plant should weigh heavily against the proposal because the development consent could result in locking the UK into a development that comes with adverse GHG impacts for decades to come.	There are no adverse climate change impacts arising from the proposed development. The Climate Change chapter [APP-065] notes an overall reduction in GHG emissions of the proposed development when compared to landfill. Conversely, as noted above, there are significant climate change benefits of the proposals which should be taken into account in the planning balance. Whilst the precise net benefit is uncertain, the balance is not a marginal one, and a high level of confidence can be placed in the contribution of the development to the reduction of greenhouse gas emissions.
According to the Applicant, the facility would have a similar carbon performance to landfill. It is hard to see how that could be described as 'low carbon'. The plant could be considered to generate electricity with a fossil carbon intensity of 548gCO2e/kWh, which is higher than unabated CCGT and significantly higher than the BEIS marginal electricity mix.	Please see Applicant's response above. The Applicant has undertaken a very robust approach to the assessment of GHG emissions which demonstrates that there will be a net reduction in GHG emissions from the Project compared to the alternative baseline landfill scenario. This is not unexpected given the Government's support of Energy from Waste over landfill in the waste hierarchy.

	It would be misleading to consider only the direct emissions of the facility, without reference to its benefits in avoiding emissions from landfill, the reduction of which explains the priority of the waste hierarchy. Given this conservative approach, it is not considered helpful to consider further alternative scenarios, although a less conservative approach to landfill emissions is presented above. Whilst the precise net benefit is uncertain, the balance is not a marginal one, and a high level of confidence can be placed in the contribution of the development to the reduction of greenhouse gas emissions. Energy from Waste is specifically covered by NPS EN3 "Renewable Energy" and therefore the Government clearly considers that it is renewable as a matter of policy.
The NPPF Glossary is clear, "Low Carbon technologies are those that can help reduce emissions (compared to conventional use of fossil fuels)". The Applicant has failed to demonstrate that the electricity that would be exported from their proposed development would be genuinely low carbon energy. Nothing in EN-3 prevents adverse climate change impacts from being considered material in the planning balance.	Energy from Waste is specifically covered by NPS EN3 "Renewable Energy" and therefore the Government clearly considers that it is renewable as a matter of policy. NPS EN3 also specifically acknowledges the role of Energy from Waste in generating electricity and states that: "*the recovery of energy from the combustion of waste, where in accordance with the waste hierarchy, will play an increasingly important role in meeting the UK's energy needs*" (paragraph 2.5.2).

	This support for Energy from Waste is carried through into the draft NPS "*The combustion of biomass (fuels of recent biological origin as described in paragraph 2.6.1 below) for electricity generation plays an important role in meeting the UK's energy needs and supports the decarbonisation of the sector. It also has a potentially significant role in supporting delivery towards the UK's net zero target when combined with carbon capture and storage (our emphasis).* *In accordance with the waste hierarchy, the recovery of energy from the combustion of waste, 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*" (paragraphs 2.5.1 and 2.5.2). As noted above, the Applicant acknowledges that climate impacts will be a material consideration in the planning balance, however it considers that they are positive rather than adverse.
We note the Court of Appeal ruling in ClientEarth, R v Secretary of State for BEIS & Anor [2021] on the interpretation of the Overarching National Policy Statement for Energy ("EN-1"). According to the Court, when considering a proposed development, the adverse impacts of GHG emissions from that	Noted. The Applicant acknowledges that GHG emissions will be a material consideration in the planning balance, however it considers that they are a benefit of the proposed development. As noted above, the Applicant considers that it has undertaken a very robust assessment in the Climate Change chapter of the ES [APP-054] and this has

development can be given "significant, or even decisive" weight in the planning balance and are even capable of being "treated as a freestanding reason for refusal".	still shown an overall reduction in GHG emissions compared to landfill. With less conservative assumptions, the net benefit is shown to be very significant.
While construction and decommissioning emissions might be relatively small portions of the overall emissions within the context of the incinerator's lifetime, given the marginal nature of the claimed climate benefits in this case the impacts of construction and decommissioning emissions could be significant to the overall conclusions. The total impact of the North Lincolnshire incinerator's construction and decommissioning emissions could be around 340,952 tonnes of CO2e, and the Applicant has not ruled out potentially significant adverse GHG impacts arising from the project's construction and decommissioning phases.	See the Applicant's response in relation to the Climate Change chapter of the ES [APP-054] which it considers represents a very worst-case scenario. Emissions associated with construction and decommissioning were scoped out of the assessment presented in the climate change chapter of the ES. Amortised over the lifetime of the development, they are not significant. Avoided emissions associated with the reuse and recycling of materials at end of life will counterbalance direct emissions.
Production of consumable material inputs for Selective Catalytic Reduction, also known as 'SCR' (e.g. lime and ammonia), should be included in the scope of ERF's anticipated climate emissions. We are not aware of the Applicant making any statement to indicate that these emissions would be	Please see Applicant's response above. The Applicant has undertaken a very robust approach to the assessment of GHG emissions which demonstrates that there will be a net reduction in GHG emissions from the Project compared to the alternative baseline landfill scenario. This is not unexpected given the Government's support of Energy from Waste over landfill in the waste hierarchy.

insignificant within the context of how marginal the claimed benefits are for the Project.	Nonetheless, in point of fact, flue gas emission control reagents are accounted for in the carbon balance assessment (see Tables 6, 9 and 11) Given this conservative approach, it is not considered helpful to consider further alternative scenarios.
Full consideration should be given to quantifying the emissions anticipated to be released during the incinerator's hot commissioning phase, which could last for 6 months or more. During the commissioning phase waste and fuel would be processed, and electricity would need to be imported, while electricity generation could be expected to be lower or absent.	Please see Applicant's response above. The Applicant has undertaken a very robust approach to the assessment of GHG emissions which demonstrates that there will be a net reduction in GHG emissions from the Project compared to the alternative baseline landfill scenario. This is not unexpected given the Government's support of Energy from Waste over landfill in the waste hierarchy. Amortised over the lifetime of the development, emissions associated with hot commissioning will not make a significant contribution to the net greenhouse gas balance of the development. Given this conservative approach, it is not considered helpful to consider further alternative scenarios.
It is not certain that the RDF proposed to be used as feedstock for the North Lincolnshire incinerator would otherwise be sent to landfill. The feedstock might otherwise be incinerated at a more efficient incinerator (and/or at a cement kiln, etc.), and	In the unlikely event that, where there is a capacity gap as demonstrated in the RDF Supply Assessment [REP1-006], fuel is diverted from another EfW plant to NLGEP, then the other plant would have spare capacity to accept waste that would otherwise be consigned to landfill.

elements of the material used to produce the RDF could otherwise be reduced, reused or recycled.	No justification is made for the assertion that there might be a more efficient facility available although it is noteworthy that UKWIN accept that efficiency of plant (e.g. in terms of R1 efficiency) is a factor to consider. The proposed ERF exceeds the R1 efficiency requirement, at between 0.747-0.755 (reference APP-044). The facility will use as a fuel only residual waste where the waste hierarchy has already been applied.
Assuming, as the Applicant does, that 1.1% of the feedstock would be metal is unreasonable given that the feedstock is expected to be mostly RDF where a large proportion of the metals would have been removed. It is likely that the metal that is recovered would be largely or entirely ferrous metal rather than being an even split.	Residual waste composition has been modelled to represent the impact of processing for provision of fuel as RDF to the facility. This takes into account the further removal of metals. There is no specification that states the extent of removal of any material in producing RDF. The Applicant considers that the parameters values used are prudent and reflect waste composition and likely processing technology. Note that it is easier to remove ferrous metal in RDF processing than non-ferrous metal, through magnetic separation.
The Applicant's Planning Statement [APP-035] and RDF Supply Assessments [APP-036 and REP1-006] provide a maximum metal recovery figure which is closer to the enfinium figures, and lower than the Applicant's APP-054 assumptions.	Residual waste composition has been modelled to represent the impact of processing for provision of fuel as RDF to the facility. This takes into account the further removal of metals. There is no specification that states the extent of removal of any material in producing RDF . The Applicant considers that the parameters values used are prudent and reflect waste composition and

	likely processing technology. Note that it is easier to remove ferrous metal in RDF processing than non-ferrous metal, through magnetic separation.
The Applicant has not demonstrated that their CO2 would in fact displace 100% fossil CO2, as distinct from a level of CO2 that reflects the grid average.	The assessment is correct. Heat supplied to greenhouses will replace that raised using natural gas. As a result, the proportion of heat raised at the ERF using biogenic carbon-containing material will offer a net carbon benefit.
The Applicant's carbon content, biogenic carbon content, and DDOC assumptions appear optimistic and contrived. Instead of using unabated CCGT as the central case, the Assessment's central case should use the BEIS marginal figure. In discussions with UKWIN the incineration industry regarding potential sources of heat in the event of the decommissioning of the EfW element of an EfW powered CHP scheme, one common answer we have been provided with is that ground source heat pumps offer a reasonable alternative. As such, it would be reasonable to assess the proposal against ground source heat pumps as the comparator.	The Applicant has undertaken a very robust approach to the assessment of GHG emissions which demonstrates that there will be a net reduction in GHG emissions from the Project compared to the alternative baseline landfill scenario. This is not unexpected given the Government's support of Energy from Waste over landfill in the waste hierarchy. Assumptions made in estimating emissions of methane from landfill are robust. Defra guidance on modelling Energy from Waste recommends using CCGT as the 'marginal build' capacity that would be replaced by Energy from Waste developments. Regarding the second point, I'd suggest the answer is "Guidance is use of CCGT as the counterfactual" The Applicant is not aware of any proposed ground source heat pump schemes that offer an alternative heat supply.

With respect to the incinerator's anticipated net electricity generation, while the Applicant assumes 100% turbine and generator availability, real world data reveals that, on average, electricity generated by incinerators was 15% lower than implied by the headline MW generation figure. This should be assessed in the Applicant's sensitivity analysis.	'The greenhouse gas assessment has assumed availability of 91% (ie 8000 hours of the 8760 in one year). This is well within normal operations for modern energy from waste plant.
Concerns are raised regarding the poor efficiency of the proposed carbon capture element of the proposal. The proposal for carbon capture and storage would capture only 54,387 tonnes of CO2 per annum (only around 6.34% of the total CO2) and provide long-term store for only 5,723 tonnes of CO2 per annum (a mere 0.67% of the total CO2), whilst adding to the facility's energy demands, thereby increasing the parasitic load while reducing the amount of electricity or heat that would be available for export.	The carbon capture has been sized to provide a carbon benefit, supply on site users and remain economical. The size of the carbon capture stated is a demonstrator for the technology. An illustrative example of a higher rates of carbon capture is provided above. It is inevitable that increased rates of carbon capture result in less energy available for export as heat or electricity. Nonetheless, purely in carbon balance terms, the effect of increasing capture is an extremely positive one.
For post-combustion carbon dioxide capture (PCC) technologies the EA's BAT Guidance expects a design CO2 capture rate of at least 95%. It is obvious that the proposed 6.34% level of carbon capture falls well short of this 95% CO2 capture rate.	The current proposal is for a capture plant sized for the requirements of the other facilities within the energy park and to guarantee a net carbon benefit. The facility has the potential to be increased in size if a commercial case can be established, with connection to the Zero Carbon Humber pipeline feasible.

Potential adverse health impacts of amine degradation associated with the chosen carbon capture technology may prove to be a barrier to the Applicant's ability to secure an environmental permit. The EA might only permit the scheme in a form that excludes the proposed carbon capture element, thus raising questions about the deliverability of the associated claimed benefits of the scheme.	The air quality impact assessment considered the emissions and potential impacts of amines and nitrosamines/nitramines (N-amines) from the proposed carbon capture aspect of the project. The assessment concluded that the impacts of these emissions are insignificant. This assessment was undertaken in light of relevant EA guidance on the assessment of amine emissions and impacts and referred to the Environment Environmental Assessment Levels for amines and N-amines published by the Environment Agency (EA). Atmospheric amines chemistry was simulated using the amines module in the ADMS-5 dispersion model, which is widely recognised as an acceptable method for assessing amine impacts. This used published data for amines chemistry and based upon the capture plant design proposed by the project engineers.
The proposal conflicts with EN-3 in relation to compliance with local waste development plans and strategies. The Applicant has not demonstrated conformity with the waste hierarchy, nor that the proposal would not prejudice the achievement of waste management targets across all the areas that could be expected to be a source of feedstock. The Applicant is asking for planning permission to process waste from anywhere in the UK, yet they do not assess the	Paragraph 3.2.5 of the Planning Statement [REP2-017] outlines the policy hierarchy which exists in determining whether development consent for a NSIP should be granted and recognises that, whilst local planning policies are not the primary basis for a decision on an NSIP, may be a relevant consideration in terms of Section 104 of the Planning Act 2008. Given the physical location of the project entirely within North Lincolnshire and the nature and extent of impacts of the project described in the Environmental Statement [APP-053 to APP-067], the Applicant does not

proposal's impact on Local Development Plans across whole of the UK, and the more local assessment carried out by the Applicant fails to account for the adverse impacts of the project. As such, there is a realistic prospect that the proposed facility would conflict with the policies and ambitions set out within numerous Local Plans across the country.	consider it reasonable or necessary to assess the impact of the Project on Local Development Plans across the whole of the UK. An assessment of the Project against the key adopted and emerging North Lincolnshire Council Local Plan policies is provided in Table 6.1 of the Planning Statement [REP2-017].

8.0 APPLICANT'S COMMENTS ON RAPLEYS LLP ON BEHALF OF AB AGRI LTD WRITTEN REPRESENTATION

8.1 The Applicants Comments on Rapleys LLP on behalf of AB Agri Ltd's representation can be found below in Table 7.

Table 7: Applicants Comments on Rapleys LLP on behalf of AB Agri Ltd's written representation

Written Representation Issue	Applicant's Response
Risks to Biosecurity The measures proposed by the applicant do not provide adequate control measures to minimise biosecurity risks, the need for which cannot be overstated, as it has the potential to cause a major implication the food supply chain. We consider that the Applicant has not demonstrated that risks to the animal feed facility have been considered and addressed, as proportionate to the critical nature of the risks involved. The animal feed production facility has been operating from Flixborough for a number of years and has a very low risk of biosecurity. Biosecurity risks from the Glanford Power Station facility are mitigated by a range of measures, whereas the proposed NLGEP proposal increases biosecurity risks owing a range of identified factors.	Where the transport and handling of RDF is concerned, the Applicant will operate the Project in accordance with the *Refuse Derived Fuel - Code of Practice (RDF CoP) (Version 1, October 2017)* prepared and published by the RDF Industry Group. The purpose of the RDF CoP is to share good practice across the industry and provide confidence to regulators regarding the various aspects of producing, handling and transporting RDF. In the course of preparing the RDF CoP, inputs were provided by the Environment Agency (EA), Department for Environment, Food and Rural Affairs (Defra), Natural Resources Wales (NRW), Scottish Environment Protection Agency (SEPA), the Food Standards Agency (FSA) and the Advisory Committee on Animal Feedingstuffs (ACAF). The RDF CoP covers all aspects from the waste arriving at a waste transfer station through to it being received at an energy recovery facility, i.e. its scope covers the full range of activities involved in RDF being transported by river, rail, or road to the NLGEP and its unloading at the facility.

Notwithstanding this, a range of mitigation measures are sought to minimise biosecurity risks posed by the proposed development to an acceptable level. If these measures are not applied, then AB Agri's operations will be substantially prejudiced and a knock-on effect on the UK's food supply chain as described above will arise, unless wide ranging and costly measures are applied at the animal feed facility to mitigate the biosecurity risk that would rise otherwise. We note the Applicant's comments on our Relevant Representations that HGVs transporting RDF will not use First Avenue except for HGVs transporting RDF in sealed shipping containers from the port. We also note that waste transported to the ERF will be handled in a reception area of a building under negative pressure. However, these measures do not provide adequate control measures to minimise biosecurity risks to AB Agri by virtue of EFR's proximity to AB Agri's raw material intake for the following reasons: • An increase in vehicles carrying waste materials in the nearby road network (not limited to First Avenue) will increase the biosecurity risks if materials are	It is worth emphasising the role of 'Duty of Care' in the whole process. All operators in the waste supply chain must comply with Duty of Care (DoC) requirements. In England DoC is based on Section 34 of the Environmental Protection Act (EPA) 1990 and regulated by the Environment Agency and local authorities. Operators have a legal responsibility to ensure that waste is produced, stored, transported and treated/disposed of without harming human health or the environment. The Applicant will follow this Duty of Care responsibility. The transportation of RDF within England must therefore be undertaken in compliance with DoC, and this includes specific requirements for waste carriers. Waste carriers must be registered, and all movements of waste must be covered by a written description of the waste, e.g. waste transfer note, which can be a paper copy or an electronic DoC certificate. The main elements of DoC that relate to RDF transportation of RDF include: • preventing the escape of waste, especially regarding the careful transportation of wrapped bales of RDF to prevent damage to the wrapping; and, • describing the waste accurately to ensure it is handled in an appropriate manner.

transported without complete sealing and vehicles are not sanitised regularly. • A routing plan does not preclude HGVs passing AB Agri on First Avenue with RDF materials in unsealed containers or uncleaned vehicles. • Birds (particularly seagulls) are attracted by waste facilities handling food and organic waste materials, which in turn poses risks to the feed mill facility from their droppings. Notwithstanding the Applicant's comments on the Relevant Representations relative to the design and storage capacity of ERF and the transport route, we consider that the following mitigation measures are necessary to minimise biosecurity risks posed by the proposed development to an acceptable level, particularly on the basis of the Applicant's submissions to date indicating that it is not possible to separate RDF from materials of animal origin: • A condition requiring all RDF to be delivered in sealed containers and wrapped/sealed bales;	To reduce the potential for nuisance (litter and odour), operators are required to ensure that RDF is wrapped or containerised: • sufficiently to prevent the loss of waste materials and littering during storage and transport; • sufficiently to prevent the leaking of leachate; • sufficiently to prevent fly infestation and access by vermin; • in a way that meets any conditions and specifications set out in the contract with the off- taker; and, • in a way which makes it easy to handle and store. The number of layers of plastic wrapping required to meet these recommendations will vary depending on the quality of the wrapping process, the thickness of the plastic film and the amount of handling that the bales will be subjected to. A minimum of six layers is typically applied for non-containerised RDF that is being handled multiple times through the supply chain; however, the precise number of layers will be ultimately determined by the requirements of the hauliers and the off-takers involved. The Applicant is therefore able to specify such requirements to its suppliers.

• A condition requiring an Operational Environmental Management Plan to include wheel washing and disinfectant regime for RDF delivery vehicles and pest management plan, and • A routing agreement that HGVs do not drive past AB Agri, unless the first conditions are agreed and enforced. If these measures are not applied, then AB Agri's operations will be substantially prejudiced and a knock-on effect on the UK's food supply chain as described above will arise, unless wide ranging and costly measures are applied at the animal feed facility to mitigate the biosecurity risk that would rise otherwise.	It is the view of the Applicant that compliance with the RDF CoP and adherence to the DoC will significantly mitigate the risks raised by AB Agri relating to their operational business. The operation of the Project will be regulated by the terms of the Environmental Permit from the Environment Agency. It is anticipated that all aspects of the delivery and handling of RDF set out in the RDF CoP will be covered by the terms of the permit, thus becoming a legal compliance matter for the Applicant. Any operational environmental management requirements and/or aspects of the RDF CoP that fall outside the remit of the Environmental Permit will be addressed by an Operational Environmental Management Plan (OEMP) (which will be approved by North Lincolnshire Council, with input from the Environment Agency) as secured by DCO Requirement 4. It is worth noting that the Environment Agency will require strict controls to avoid odour nuisance from the ERF and the ERF is designed accordingly. The Applicant and AB Agri have agreed to assess the biohazard risks from its operations. Based on the results of the risk assessment the Applicant will adopt any necessary additional controls to avoid, minimise or reduce residual risks to a level acceptable to AB Agri. Management and control

	measures, in addition to the form in which RDF is received at the ERF, could include, but not necessarily be limited to the following: • routing of waste in the vicinity of AB Agri; • vehicle specifications in terms of biosecurity; • cleansing procedures for vehicles delivering or transferring waste on site; • pest control and management; and, • monitoring the effectiveness of the tipping hall negative pressure environment. Such measures would then be adopted into the terms of the Environmental Permit and/or the OEMP and be legally binding.
<u>Flood Risk</u> The flood model used to inform the Flood Risk Assessment is not suitable for detailed design of food defences or for informing a flood management and evacuation plan. AB Agri continues to engage with the Applicant on the detailed flood modelling to ensure that necessary flood defence measures are agreed. It is also concerned that the potential overtopping of the existing defences along the dock area may have been	The hydraulic model used in the FRA incorporates two sources of data to represent the topography: 2011 LiDAR (compared against 2020 LiDAR with no noticeable differences); and 2016 EA survey of defence crest level. This data was included in the NLC model that the NLGEP model was based upon, and alterations to this base data was not made. The purpose of the NLGEP flood model was to ascertain the key flood mechanisms across the site to establish the overall impact of the proposed

represented accurately in the applicant's model. As the upstream and downstream defences have higher crest elevations than the dock defence, it is not clear why the model is not showing overtopping at the docks also.	development with the model being developed and agreed in consultation with the EA. Information on the estimated design flood event level in the River Trent in the location of the dock area is 6.2mAOD. This was shared with AB Agri in January 2023. To confirm the level of the wharf and existing defences along the east bank along the site boundary, the Applicant will undertake a ground topographic survey as part of the next stage of design, committed to in the SoCG. This survey data, along with the final proposed finished levels of the railway line across the wharf, will then be input into the detailed hydraulic flood model used to carry out the detailed design. This will ensure that the flood mitigation measures being proposed around the AB Agri site are set at the appropriate level and modified where needed. The modelling results will also be used to inform the flood evacuation and management plan. The detailed flood modelling undertaken in the next stage of design will be undertaken in consultation with the EA and results and progress will be shared with AB Agri during the process.
Access to AB Agri's facility AB Agri operates 24 hours a day, 7 days a week, all year round (except for Christmas Day) and requires constant access as a	The Applicant acknowledges this comment, and it is being discussed as part of the Statement of Common Ground (SoCG). The SoCG at Deadline 2 stated that construction road traffic will primarily use the new access

result. As a result, AB Agri seeks a range of measures to be included in the construction traffic management plan to be secured by a condition. We request the Applicant to engage with AB Agri on traffic flow and construction planning as per their commitment to do so.	road, diverting construction traffic away from the Stather Road and the Neap House constraint. Once the construction requires the Stather Road closure to be implemented, traffic for Flixborough Industrial Estate will then use the new access road. It has been noted that the Construction of the Project will not disrupt the 24/7 all year round operation of the AB Agri Facility.
<u>Temporary Acquisition</u> Possession for three years of approximately one third of the perimeter of the AB Agri's site and one half of its road frontage will significantly compromise AB Agri's enjoyment of its land, not least due to AB Agri requiring full access around all buildings and temporary land, and the biosecurity and contamination risks that would arise. The Applicant has not demonstrated a compelling case to take temporary possession in light of the potential damage that it may cause AB Agri's business.	The Applicant is not intending to interfere with or disrupt the ongoing operations of AB Agri's access via First Avenue and Second Avenue. The Applicant's understanding is that Plot 5-54 is an area of non-operational grassland, part of which falls within the fence line of AB Agri's land, occupation of which should not cause interference to AB Agri's operations. The flood mitigation wall is currently proposed close to the AB Agri site to maintain clearance within the wharf area for movement of vehicles, minimising any potential impact on existing and future operations within the wharf and to minimise impact on First Avenue. As shown in APP-074 Indicative Utility Diversion Drawings, Drawing No. NLGEP-BHE-XX-XX-DR-C-9105 Sheet 5, within First Avenue and the area west of the AB Agri site, existing Open Reach telecommunication cables are located. It is intended that an appropriate set-back is allowed from the proposed flood wall

	sub-base footing to these cables. Temporary access within Plot 5-54 is sought to allow, if necessary, the appropriate access required to construct the wall. If construction of the flood defence can be secured without the temporary possession of AB Agri land, this option will be taken. Appropriate measures required to minimise biosecurity and contamination risks during construction will be discussed with AB Agri as part of ongoing discussions.

9.0 APPLICANT'S COMMENTS ON 2 SISTERS FOOD GROUPS WRITTEN REPRESENTATIONS

9.1 The Applicant's Comments on the 2 Sisters Food Group's representation can be found below in Table 8.

Table 8: The Applicant's comments on the 2 Sister Food Group's written representation

Written Representation Issue	Applicant's Response
By way of background, we are a food manufacturing company which operates 24/7 and include large deliveries to the site of live birds. As such, please can you explain to us how this development will impact us, including but not limited to, transport, contamination, vibration, etc. As you can appreciate, we have a duty to preserve and maintain the welfare of the birds and our deliveries and factory cannot be affected due to the development of the NLGEP.	The Environmental Statement (document references REP2-020, APP-049 to APP-075) has assessed likely significant effects of the Project on the existing environment, which includes homes and businesses within the vicinity of the Site, including the 2 Sisters Food Group, who are located at Rams Boulevard, Foxhills Industrial Estate, Scunthorpe. It should be noted that the Sisters Food Group are located some 600 m away from the Order Limits and the predominant effects would be likely to be as a result of an increase in traffic in the wider area during construction and operation, mitigation proposals for which are included as part of the Project. If the 2 Sister's Food Group has any specific additional concerns, the Applicant would be happy to arrange a meeting to discuss and address these.
We emailed previously to express our concern over these matters and were simply forwarded a great deal of documents. As we have no knowledge in this development, and the fact that there are so many documents to review, we are having issues understanding the main details of the proposal, where	We understand that the volume of DCO documents make them difficult to engage with. Various documents are provided with the application to ease understanding, including Non-Technical Summary to the Environmental Statement [REP2-020] and the Planning Statement [REP2-017]. The Applicant also consulted widely to help businesses and residents in the

its located (as the map attached to the letter covers a large area in red and is too small to locate our factory on it) and how that will impact our factory.	local area understand the proposals as they were developing. The 2 Sisters Food Group responded to a s44 consultation letter where they raised a query about traffic impacts. The Applicant responded to them confirming that traffic impacts had been assessed as part of the application. As noted above, the Applicant would be happy to arrange a meeting with the 2 Sister's Food Group to understand their outstanding specific concerns.
Please can you list out specifically the below details:- Where the NLGEP is to be located? There seems to be one large area surrounded by red on the map but also several offshoots, are these also part of the NLGEP being constructed? If approved, when is development due to take place? How long will development take? Will it impact Rams Boulevard, Foxhills Industrial Estate? And if so, how? Particularly, please can you highlight potential traffic issues that might affect this area?	The location of NLGEP in relation to highway access etc is described in detail in the Transport Assessment [REP2-021] and shown in the Indicative Site Layout (APP-025 but also submitted as an updated version at this deadline). The Programme for construction is set out in the outline Construction Logistics Plan Table 3.1 (e-page 395) Appendix D to ES Chapter 12 Traffic and Transport (REP2-021). Construction of the ERF facility etc is expected to be completed after four to five years. This includes site establishment and access at the beginning of this period and mechanical and electrical works and commissioning in the latter period. Construction of the District Heat Network, which extends south and east along the A1077 is programmed to continue until the end of 2028 (commencing towards the

	end of the ERF construction and commissioning). The assumed opening year for the proposed development is 2028. The table in Appendix H of the Transport Assessment shows the predicted increase in vehicle trips on the A1077 North at Skippingdale Roundabout (which will continue eastwards past Foxhills Industrial Estate) is 13 vehicles in the morning peak hour and 12 vehicles in the evening peak hour. Comparing this to the baseline traffic flow on the A1077 in 2028 (1,693 vehicles in the morning peak hour and 1,704 in the evening) the change in traffic is around 1%, which is not significant.
Once we are clear on the above details, we will be able to review further and advise again on anymore concerns we may have. It may also be advisable to set up a call between the parties to discuss any queries, once we are in receipt of the above information.	The Applicant will continue to engage with the 2 Sister's Food Group to set up any necessary meetings after submission of this Response at Deadline 3.
In the meantime, due to the majority of the registered office workforce now working from home, please can you forward any further correspondence direct by email to legal@2sfg.com, rather than posting to our Wakefield office.	The Applicant confirms that they will engage with the 2 Sisters Food Group via email as requested.

10.0 APPLICANT'S COMMENTS ON AMY OGMAN WRITTEN REPRESENTATIONS

10.1 The Applicant's Comments on Amy Ogman's written representation can be found below in Table 9.

Table 9: The Applicant's Comments on Amy Ogman's written representation

Written Representation Issue	Applicant's Response
Consultation and the Developer: Inadequacy of consultation documents were not at libraries as stated and the local ward councillor confirmed no documents were at listed sites. I have written evidence of this. Within the 3km consultation zone, some homes in that zone did not receive any material. Solar 21 have failed to keep the website up to date only updated Nov 2022 and prior to this the last update was Sept 2021. They have failed to keep consultees informed at each stage of the application/process.	As outlined in the Consultation Report on 16 June 2021, the Applicant became aware that North Lincolnshire Council's library service had not been able to distribute consultation materials from the arranged point of delivery at Scunthorpe Central Library to Crowle Community Hub and Winterton Library. The Applicant therefore arranged for these materials to be distributed by hand to Crowle Community Hub and Winterton Library. The Applicant did not receive any enquiries checking arrangements for viewing materials at these locations prior to 16 June 2021 and copies of the materials were available at the other deposit points and the Project website throughout the consultation period. The Applicant therefore considers that no consultee was disadvantaged in accessing the consultation materials. The consultation materials were sent out by Royal Mail to all addresses within the 3km radius. The consultation materials were posted via Royal Mail to all addresses within Consultation Zone 1 as defined in the Statement of Community Consultation (SoCC). If the interested party is

	able to provide details for the addresses that they claim did not receive the materials the Applicant can check whether these addresses were within the mailing area. The Applicant kept consultees updated across a phased process of consultation. Specifically with regards to September 2021 to November 2022, the Applicant was preparing its DCO application so there were no updates to provide ahead of the submission of the application – updates on that process were available on the PINS project page.
The EIS and PIER response (table 3.1.1.3) states that if RMS Flixborough is taken under a compulsory acquisition order then all the jobs will be transferred to RMS Gunness and Althorpe but now this is impossible as RMS has sold both sites. This is clearly going to create numerous job losses above what Solar 21 have initially predicted.	The Applicant has a signed commercial agreement with Flixborough Wharf Limited so that no compulsory acquisition power will need to be exercised. Under that agreement, RMS Ports have the option to continue their existing operation at Flixborough Wharf. No job losses will occur for staff employed at Flixborough Wharf as a result of the Project. The Project will return the port activity to historic levels and will support additional jobs at the site for stevedores and railway workers.
Scoping Report was very out of date as it was published on 30th Oct 2020 but information in this was initially recorded in 2019.	The Scoping Report was a 'snapshot' in time and its main purpose was to obtain a scoping opinion on the main areas of attention for the EIA. In reality, scoping as an activity continued through the EIA process to identify issues for the EIA (and their importance) through extensive baseline studies and consultation. This continued up to issue for the Preliminary

	Environmental Information Report and the formal consultation in June/July 2021.
Overcapacity RR Enfinium, who run Ferrybridge 1 and 2, state that they need the feedstock to meet capacity in the area. Feedstock will not be coming from local area therefore it could be sent to incinerators that are already built closer by.	The RDF Supply Assessment [REP1-006] addresses this point. It compares residual waste arising with available treatment capacity at the national level (England) and local level (East Midlands and Yorkshire and Humber). Whilst there is considerable uncertainty when projecting into the future, it presents a prudent base case showing that there is a need for the facility.
The Humber Low Carbon Pipeline has now chosen it preferred route corridor, and the corridor which would have been beneficial to the project, has been rejected. SSE have Keadby 3 approved, and 4 in the pipeline which can utilise this pipeline more effectively due to one of the AGIs being located close by. One AGI for the project will also be located at British Steel, which was considered as an alternative site for the North Lincolnshire Green Energy Park but was rejected by the developer with no clear reason. This is a clear spur the developer could utilise. What were the reasons for rejection?	The Applicant provided a response to Q4.0.5 at Deadline 2 with further information on the site selection process undertaken, including consideration of the British Steel Site. The response confirms that the site is not commercially available. The Applicant also provided a response to Q6.0.8 on the Humber Low Carbon Pipeline connectivity. The Humber Low Carbon Pipelines (HLCP) project is currently at its statutory stage of consultation and its delivery is a fundamental part of Government policy to decarbonise the Humber and facilitate the introduction of a dedicated hydrogen network. Its purpose is to decarbonise major generators of carbon in the Humber area and the proposed pipeline passes within 3km of the south of the southern DHPWN. The Applicant has made representations to National Grid Carbons Venture's consultation to seek an amendment to their proposals

	to facilitate this. However, even if an amendment is not made, given the very close proximity, it is reasonable to assume that the project could be connected to the HLCP in the future, given the strength of policy to support this.
Application for the project, and the infrastructure required in the surrounding area, is not in the North Lincolnshire Core Strategy. North Lincolnshire recycling rates in 2021 were 54.2% against a national average of 43% demonstrating North Lincolnshire is committed to Reduce, Reuse, Recycle. The 2035 target of a 65% recycling rate could be impacted if this project was allowed to go ahead.	The Project does not propose to take waste that would otherwise be recycled. The energy recover facility will treat non-recyclable residual waste that would otherwise be managed at a lower level of the waste hierarchy or exported for energy recovery outside of the UK.
The North Lincolnshire Local Plan, which has been submitted to the Planning Inspectorate for examination in Q4 2022, is not supportive of the loss of an 'operational port facility' as this is significant locally.	It is unclear which part of the emerging North Lincolnshire Council's Local Plan is being referred to here. The Applicant would be happy to provide a more detailed response if clarification can be made by Ms Ogman. Nevertheless, Table 6.1 in Section 6 of the Planning Statement [REP2-017] assesses the compliance of the Project with key adopted and emerging North Lincolnshire Council Local Plan Policies.

	It should also be noted that the Project does not result in the loss of an operational port facility – it in fact results in the optimisation of an existing port facility which is currently under-utilised.
Brexit and the war in the Ukraine makes us more reliant on resources from home. Acres of greenfield and arable land would have to be taken away to accommodate the energy park according to the Scoping Report part 3.2.5.6. Some of this land will not be able to reinstated due to it being inaccessible, severed and unviable' in the EIS part 8.2.5.3.	The Applicant has sought to minimise the amount of agricultural land being taken by the development and refers to its response to Q2.0.2 within document 9.18 submitted at this deadline. The Applicant's previous proposals had included vertical farm units to use the heat, power and CO2 from the Project, which would have helped to compensate for the loss or crop production. This was removed from the DCO proposals due to concerns raised in initial discussions with the Planning Inspectorate that it did not form Associated Development. However, the Applicant is still keen to pursue the concept and in the event that the DCO for the Proposed Development is approved, it will progress discussions with the local planning authority to deliver these elements through the local planning process.
The Scoping Report alludes to in part 5.3.1.5 the impacts of the project from start to decommissioning will have a 25- 40 year life span. NLC are wanting the Ilse of Axholme to be recognised as an ANOB and this could impact this submission.	The Scoping Report was a 'snapshot' in time and its main purpose was to obtain a scoping opinion on the main areas of attention for the EIA. In reality scoping as an activity continued through the EIA process to identify issues for the EIA (and their importance) through extensive baseline studies and consultation. This continued up to issue for the Preliminary

	Environmental Information Report and the formal consultation in June/July 2021.
Scoping report lists dust, waste gasses, odour and increased activity as likely significant effects' of the project. How will these impacts be mitigated?	The purpose of the Scoping Report is to set out those topics that cannot be definitively excluded from detailed study. The scoping report does not state that any impact will be significant only those impacts that cannot be excluded at an early stage. The comprehensive Air Quality Impact Assessment undertaken for the Project builds upon the Scoping Report. The Air Quality Impact Assessment assesses all of the potentially significant impacts and where needed provides Mitigation of these impacts. These are described in the relevant parts of the Environmental Statement and was also described in Preliminary Environmental Information Report released for the formal consultation in June/July 2021.
Numerous statutory designated sites are with 15km of the project. Visual impacts on the area will affected the surrounding area by at least 7.5km. Should this be the case when we have numerous SSSIs, SACs, SPAs and LNRs?	The visual impacts of the Proposed Development are reported in ES Chapter 11: Landscape and Visual Impact [APP-059]. This includes consideration of views experienced by people visiting publicly accessible locations within designated sites, for example viewpoint 11 within Phoenix LNR. There are no sites designated for visual or scenic quality within the area. Visual impacts are experienced by people, and are distinct from effects on biodiversity, therefore the presence of areas protected for their

	biodiversity interest alone is immaterial to the Landscape and Visual Impact assessment.
Part 12.7.1.4 says there will be impacts on nearby areas due to the lighting that is required for the project and will alter sense of place'.	The Scoping Report describes potential impacts. The effects of lighting are considered in ES Chapter 11: Landscape and Visual Impact [APP-059]. See also the Indicative Lighting Strategy [APP-071]. The draft DCO [REP2-004] includes Requirement 5, which requires that a scheme of external lighting must be submitted to and approved by North Lincolnshire Council prior to implementation.
13.1 Heritage Amcott's Ferry located next to the proposed site and could be disturbed due to works. Also, many heritage assets which have not been fully explored.	Please refer to the Applicant's Comments on Relevant Representations, Table 3-4, page 92: The Project will have no direct physical impact on the Amcotts ferry site as it is on the opposite side of the River Trent. A historical mapping exercise reported in ES Chapter 12: Archaeology and Cultural Heritage (APP-060) found that the former landing stage of the Amcotts-Flixborough ferry lies on the river foreshore outside of the Order Limits. In terms of other heritage assets within Amcotts, please refer to the Applicant's response to the Local Impact Report (comment 9.45): The historic core of Amcotts is set well back from the river and is screened from Flixborough Port by trees so, like the listed buildings within it, any impacts from the operational facilities of NLGEP will be minimal.

Scoping Report, part 11.3 identifies protected species, some of which are red, in May 2019 and Sept 2020 and potential for bat roost. Zone A was surveyed in 2018 which is a vast time lapse between the survey and publication. Part 3.6 of the Bowland Habitat Survey appendix noted 50 lapwings, which are 'red' listed, were seen in arable fields north of Amcotts during when the surveys were completed by Bowland Habitat Surveying. Bats, red listed species and wintering birds were recognised in Chapter 10 Ecology and Nature Conservation. These habitats have probably thrived since the March 2020 lockdown. Have further surveys been done that were alluded to in figure 11.7.1.11 of the Scoping report? Chapter 10 alludes to habitat loss being long term and significant and adverse effects will be notable in places such as Risby Warren SSSI.	Further ecological surveys have been undertaken since initial surveys included within the Scoping Report, full details of which are provided in the Appendices to ES Chapter 10: Ecology and Nature Conservation (APP-058). Regarding bats, Zone A was subject to static bat detector surveys in 2020, and aerial tree inspections were undertaken in 2021. Bird surveys comprise breeding bird surveys undertaken in 2021 and wintering and migratory bird surveys undertaken throughout 2021 leading up to April 2022. Furthermore, mitigation for potential impacts on protected species often specifies the need for pre-commencement surveys to account for the mobility of individuals. Mitigation will ensure habitat losses are restricted to only those areas required and will be carried out in line with method statements implemented via the CEMP. The Project proposals also include extensive habitat creation and enhancement, as demonstrated by the Biodiversity Net-Gain Assessment (Appendix I of ES Chapter 10 [APP-058]). Concern over the effects on Risby Warren SSSI is noted, and discussions are underway with Natural England to investigate opportunities to recover habitats which have already been lost (due to existing pollution and lack of management) at the SSSI.
Volume 6 of the ES states increased noise levels will impact properties in Amcotts during construction and	Construction noise is assessed in ES Chapter 7: Noise [APP-055]. Noise criteria used in the assessment are based on the 'ABC' method from British

decommissioning. A noise complaint is ongoing with NLC regarding noise from RMS Flixborough.	Standard 5228, which takes into account the existing baseline sound level at the noise sensitive receptor. In order to assess construction noise at noise sensitive properties in Amcotts, the most stringent (Category 'A') criteria have been adopted based on relatively low existing baseline sound level measurements.
Chapter 11 Landscape and visual impact states the project will have a 'large' effect on the area and its duration and reversibility impact will be 'large'. Table 19 indicates this impact will not be low until 15 years after the start of the project. The impacts of the project, as a whole, are irreversible.	These effects are as reported in ES Chapter 11: Landscape and Visual Impact [APP-059]. Mitigation measures that will assist in reducing some of the impacts are set out in Section 7 of ES Chapter 11: Landscape and Visual Impact. Design principles that will guide the development of the finalised proposals include measures aimed at reducing the landscape and visual impacts of the scheme, and these are set out in an updated Design Principles and Codes document submitted at this deadline.
ES lighting strategy needs clarity as sensitive environmental receptors nearby, including potential badger sets and Amcotts could be affected if no clear strategy is in place. Amcotts has had issues from lighting from Flixborough Wharf recently, raised by one of the parish councillors.	The effects of lighting, including effects on views from Amcotts, are considered in ES Chapter 11: Landscape and Visual Impact [APP-059]. See also the Indicative Lighting Strategy [APP-071]. The draft DCO [REP2-004] includes Requirement 5, which requires that a scheme of external lighting must be submitted to and approved by North Lincolnshire Council prior to implementation. The effect of lighting on nocturnal wildlife, including badgers, is addressed in ES Chapter 10: Ecology and Nature Conservation [APP-058]. Badger

	setts located close to construction areas will be surveyed and appropriate mitigation put into place depending on the impacts. Temporary construction lighting and permanent lighting will not illuminate badger setts, and light spillage onto sensitive badger habitats within and adjacent to the Project will be avoided. Lighting is not considered to significantly impact badgers residing on the western side of the River Trent.
ES Noise - this has been highlighted to be above the criterion of 75db during the day in the construction phase and will exceed this by 4-8db. Some properties on Trentside, Amcotts have been identified as being receptors of up to 7db above the criterion at night-time. Is this acceptable considering receptors of this noise live under 200 meters from the site? The ES project design does not highlight if the applicant will commit to any quite time as they suggest the plant will run 24 hours. Could there not be a 'quiet time' commitment after 11pm? Is this likely to now last for up to 7 years as alluded to at the preliminary meeting and ISH1 and ISH2? The ES says this impact would only affect receptors for 3 years.	Most of the construction work is anticipated to be carried out during the day for the main buildings in the northern and southern parts of the Energy Park Land. Some evening works may be required, and therefore an assessment at noise sensitive receptors in Amcotts has been carried out against daytime and evening construction noise standards and is reported in ES Chapter 7: Noise [APP-055], in Section 8. The assessment concludes that noise levels affecting noise sensitive receptors in Amcotts are predicted to be below the criterion of 65 dB, L_{Aeq} during the day, however, should works be required at the same intensity during the evening, an exceedance of the evening criterion (55 dB) of up to 7 dB is predicted, resulting in a large magnitude impact at times, should evening works be required close to these receptors. Whilst there is the potential for a large magnitude effect, the overall significance of the effect on sensitive receptors in Amcotts is considered to be up to moderate. This is because it is likely that noise levels will normally be lower as most of the

	works are expected to take place during the day and because the assessment followed a worst case approach in terms of plant locations which are assumed to be at the closest point to receptors (i.e. at the site boundary). Works outside of core hours would be discussed with NLC to identify works unlikely to cause significant effects. In order to manage construction noise, construction works will be undertaken in accordance with a Construction Environmental Management Plan (CEMP). The CEMP will set out detailed measures to minimise construction noise as far as is reasonably practicable and will be agreed with North Lincolnshire Council (NLC) before construction work is undertaken. Regarding the construction period, the Programme is set out in the outline Construction Logistics Plan Table 3.1 (e-page 395) Appendix D to ES Chapter 13 Traffic and Transport [REP2-021]. Construction of the ERF facility and other structures in the Project area across the River Trent from Amcotts is expected to be completed after four to five years. This includes site establishment and access at the beginning of this period and mechanical and electrical works and commissioning in the latter period; i.e. a large part of the construction period is not made up of especially noisy construction activity. Construction of the District Heat Network, which extends south and east along the A1077 is programmed to continue

	until the end of 2028 (commencing towards the end of the ERF construction and commissioning). By virtue of the nature of the activities and separation distances, construction of the DHN is not expected to have any noise impacts on Amcotts.
ES Health What will be the true impact on health when 585 to 800 vehicles move on and off the site in Year 4? How can local infrastructure support this number of extra vehicles daily? Those with long term respiratory illness, some of which due to Covid, could be exacerbated in the nearby area. I have concerns about pressure on already stretched health services in the area due to accidents, potentially serious, on site.	The Project has been located and designed to minimise road traffic wherever possible by using river and rail transport, to maximise the efficiency of delivery. For transport assessment purposes, it has been assumed that 100% of freight movements would arrive and depart via road, which adopts a worst-case scenario I.e. emissions have been overestimated. In reality, it is anticipated that freight transport will be split between road, rail and river modes in order to make use of the adjacent River Trent and railway line. All HGV movements to/from the PRoject would arrive/depart via the proposed New Access Road to/from the south, and via the B1216, A1077 and the surrounding strategic highway network (M181 etc), generally avoiding built up areas. The proposed stopping up of Stather Road and resultant re-distribution of traffic to the proposed New Access Road would also move traffic away from existing receptors to the south of the Project (including Neap House).

	The 585-800 vehicles quoted relates to the estimated construction workforce vehicles (car/LGV trips) per day during Year 4. The arrival and departure profile of these trips would be spread across the day / a number of hours. To help mitigate the temporary impact during the construction phase, it is required via the dDCO to implement a Construction Travel Plan for the Project (to be agreed with NLC prior to construction), which will seek to reduce this number by encouraging sustainable modes of travel, including the possible use of crew minibuses to limit the number of individual car journeys.
What programme are they going to put in place to help with anxieties over Flixborough, Nypro? They don't specify how they are going to acknowledge and actively manage' these. Also RDF is not a stable material' as we know all too well from the waste fires during summer 2022 in Scunthorpe. Two recycling plants (Northern Watse and Ellgia) had more than one waste fire which proved difficult to get under control on more than one occasion. The village of Amcotts was plagued by the smoke and pollutants that this created. Can the developer clarify the impacts on health due to the effects on air quality as they state:	The Applicant has considered Major Accidents and Hazards in Section 6.2.16 of the ES Chapter 16 [APP-064]. The design and operation of the facility will be subject to permitting requirements of the Environment Agency and the Health and Safety Executive. The safety track record for waste facilities are exemplary – the quoted reference to fires relates to the waste handling and waste aggregation facilities. Waste is processed to form RDF before it reaches the site. All RDF onsite will be stored in an enclosed bunker, equipped with fire suppression systems. The waste fuel arriving on site is obtained from processes that have initially separated out recyclable/reusable material. The processing and handling

'methods that allow quantification of cases' are not in place to fully assess the impact on health.	of waste is subject to a strict classification regime. As such, the sources of waste and its composition of waste is known and understood. The project is designed with the knowledge of the waste types that will be accepted by the plant and therefore the composition of the exhaust gases is known within a well-defined set of parameters. The Project is designed in the knowledge of the waste type that will be accepted on site, and is designed specifically to meet Best Available techniques, and the associated emission limits set out in the IED and BREF. The assessment is therefore a worst case as the plant will be operated within the emission limits, in most cases, substantially below. Public Health England and the Environment Agency jointly state "PHE's risk assessment remains that modern, well run and regulated municipal waste incinerators are not a significant risk to public health. While it is not possible to rule out adverse health effects from these incinerators completely, any potential effect for people living close by is likely to be very small." This statement captures all emissions from the North Lincs facility, including particulate matter. No industrial activity is 'zero harm' and the overall context is important. Waste materials used at North Lincs would be disposed of somewhere, and as such emission from the facility

	are not 'new'. In the local context, the overall plant design is driven by the need to achieve acceptable impacts to air quality.
Part 6.2.8.5 clearly states that morality being premature is directly impacted by PM2.5 and NO2. 29,000 premature deaths occur at a typical age per year. These are only some of the toxins that are produced from incineration. How can this be mitigated?	The Health Effects Assessment has set out in considerable detail the quantifiable effects on premature mortality in the local population, through exposure to NO2 and PM2.5, using the same methodology that produces the national estimate of loss of life years equivalent to 29,000 premature deaths though exposure to PM2.5. Whilst being non-zero, these effects are extremely small, which is the consequence of the extensive mitigation in place to reduce the emissions to their lowest practical level. For example. the fabric filters to be used are highly efficient at removing the particles of all sizes, and only a tiny fraction of 1% of the total particles are ever emitted to the atmosphere. Similarly, the pollution control system will remove almost all of the metals and volatile organic compounds that are produced by the incineration process. Within the limits of current pollution control technology, the development will incorporate all the mitigation that can be feasibly installed, and this will eliminate almost all of the pollutants emitted to atmosphere. The residual stack emissions will be closely monitored, and results made publicly available to demonstrate compliance with emission standards.

RDF creates unpleasant odours and attracts flies. The village of Amcotts has been blighted by flies previously from ships on Flixborough Wharf, so much so, they often had to be decontaminated with smoke bombs.	The Project has been designed to avoid emissions of odour from arising in the first place. Waste arriving at the facility is pre-baled and sealed in containers on the trucks, ships and trains. These bales are only opened once inside the reception hall which is, itself, under negative pressure to avoid odours escaping. This is in contrast to previous waste operations at Flixborough which were undertaken in the open air.
Amcotts is an award-winning village for it environmental and community projects. It has received numerous awards from the RHS, most notably being a national finalist this year. It also has been awarded numerous accolades from CPRE. Nature seems to really be at one in the village, the owl boxes installed this year already have owls which have settled in them; herons are regular visitors; buzzards, sparrow hawks, and even little egrets. I fear that this abundance of wildlife would be scared away with such a large development across the river and the amount of disruption it would cause during construction, operation and decommissioning. To conclude, I chose to live in this village due to it agricultural heritage and the opportunity to immerse myself in the wildlife	Ecological effects are reported in ES Chapter 10: Ecology and Nature Conservation [APP-058]. The Project is assessed as having a residual effect upon bird species (including wintering and breeding species). However, this is at a site level only. Potential effects at a local level (i.e. local populations of birds which may use habitats within and surrounding the village of Amcotts) are not considered to be significant.

that frequents the area daily. I feel it would be injurious to allow anything to take these well-established assets away.	

11.0 APPLICANT'S COMMENTS ON TRICIA MURPHY WRITTEN REPRESENTATIONS

11.1 The Applicant's Comments on Tricia Murphy's written representation can be found below in Table 10.

Table 10: The Applicant's Comments on Tricia Murphy's written representation

Written Representation Issue	Applicant's Response
Why does the applicant wish to incinerate plastic at all which does nothing to assist North Lincolnshire's re-cycling agenda?	The energy recovery facility will treat non-recyclable residual waste that would otherwise be managed at a lower level of the waste hierarchy or exported for energy recovery outside of the UK. Inevitably, there is a plastic component to the residual waste fuel that the plant will receive, as quantified in the RDF Supply Assessment [REP1-006]. This plastic remains in mixed waste when waste producers are not able to separate it for technical, economic or environmental reasons. The development includes a Plastic Recycling Facility [APP-051] which will add to the capacity of appropriate infrastructure within the local area, including North Lincolnshire and facilitate higher rates of plastic separation and recycling, including amongst fuel providers.
2. Why has the applicant chosen the same site that was the scene of a major trauma for the residents of Amcots in 1974. Many of those residents involved with that disaster to their homes and wellbeing still live here and can recall the Ist June	The Applicant is cognisant of the sad history relating to the loss of life as a result of the Nypro disaster. The site was chosen because of the industrial location of the Flixborough Wharf and the railway which has served the steel works since the 1930's.

Flixborough disaster and have perceived trauma about another industrial park being on that site?	The proximity to the proposed carbon pipeline due to connect to the Keadby Power Station has established an additional benefit to the site.
3. Why has the applicant given little recognition to the visual impact of this proposed development from the west side of the River Trent namely Amcots and Garthorpe? Amcots is on the west bank of the river Trent directly opposite Flixborough Wharf and is a nationally recognised award-winning village for its environmental and community projects. In 2022 alone it took RHS Gold for the Best Small Village category in The East Midlands Region and nationally took Silver Gilt in the RHS finals for being in the final six in the British Isles.	The effects on views from Amcotts and Garthorpe are reported in ES Chapter 11: Landscape and Visual Impact [APP-059]. Amcotts is represented by viewpoint 1 (see Table 25), and Garthorpe by viewpoint 8 (see Table 32). The landscape and visual impact assessment (LVIA) concludes that effects on views from Garthorpe will be limited, although effects on views from Amcotts will be significant. Mitigation measures that will assist in reducing some of the impacts are set out in Section 7 of ES Chapter 11: Landscape and Visual Impact [APP-059], with particular reference to views from Amcotts. Design principles that will guide the development of the finalised proposals include measures aimed at reducing the visual impacts of the scheme, and these are set out in the Design Principles and Codes document [APP-046].
4. Why has the applicant given little recognition of the environmental impact to our resident Lapwings on the riverbank? Amcots has been awarded numerous accolades from the Council for the Protection of Rural England. Many village children hold John Muir Awards for their work on the nationally	Ecological surveys, including bat and bird surveys, have been undertaken in 2019, 2020, 2021 and 2022, supplementing data presented within the initial scoping report. Collectively, surveys results have informed the assessment of likely significant effects contained within ES Chapter 10: Ecology and Nature Conservation [APP-058]. Lapwings are recognised as red-listed and are qualifying species of the Humber Estuary designated

recognised Tiddy Mun Trail which involved regular surveys of protected species along the Trentside Riverbank. The Scoping Reports of 2019 and 2020, part 11.3 identified protected species, some of which are in the 'red' category, in danger of extinction. Zone A was surveyed back in 2018 which is a vast time lapse between the survey and publication. Part 3.6 of the Bowland Habitat Survey appendix noted 50 lapwings, which are 'red' listed, seen in arable fields north of Amcotts and we can identify their "scrapes" all down the riverbank. Bats, red listed species, and wintering birds were recognised in Chapter 10 – Ecology and Nature Conservation. These habitats have greatly increased and thrived since the March 2020 lockdown.	sites They were recorded in moderately high numbers within arable fields west of the River Trent during the wintering bird surveys. Fewer numbers were recorded within and adjacent to the site, however appropriate mitigation is required and will be implemented via the CEMP, to limit the effects of disturbance during construction and operation.
5. Why has the applicant taken little notice of light pollution that will emanate from this new proposed construction? Action was taken by children from Amcots by writing to the Mayor of North Lincolnshire to realign the current lighting from the wharf. Chapter 10 alludes to habitat loss being long term and significant and adverse effects will be notable in places such as Risby Warren SSSI and we also believe Amcots. Our bat colony	The effects of lighting are considered in ES Chapter 11: Landscape and Visual Impact [APP-059]. See also Annex 4: Indicative Lighting Strategy [APP-071]. The draft DCO [REP2-004] includes Requirement 5, which requires that a scheme of external lighting must be submitted to and approved by North Lincolnshire Council prior to implementation. The proposed Indicative Lighting Strategy [APP-071] addresses existing issues with light spill and glare, with measures in place to reduce the level

now seen regularly on Church Street has already moved from the Riverbank to Church Street and into the Churchyard due to disturbance from current lighting on the wharf. The bat surveys undertaken at Halloween show that our bats are moving down the village due to excess lighting and our Star Count undertaken in February 2022 shows the variance in light pollution from Red at Trentside opposite the wharf to green at the other end of our village greatly affecting our CPRE Star Count results and obvious light pollution. Owl boxes installed this year by the children as part of our award-winning Owl Trail have owls already breeding and fear that this this abundance of wildlife would be scared away with such a large development across the river. Plus, the amount of disruption caused during construction, operation, and decommissioning. Please see North Lincolnshire Council Impact Document. Potential impacts on local and more distant views and landscape character types have been assessed. Night-time views and effect of lighting are also included in the assessment. A range of adverse effects, from minor to major adverse, has	of lighting spill and glare from the proposed development to improve on existing conditions. The effects of lighting on nocturnal wildlife are addressed in ES Chapter 10: Ecology and Nature Conservation [APP-058], which concluded no significant effects overall on bats and effects at a site level only on breeding and wintering birds. Both species groups may choose to move roost and nest sites in response to a wide range of environmental factors, including changing conditions inside the roosting space and availability of alternative opportunities. The scheme of external lighting will ensure no part of the river or banking is directly illuminated, and measures will be implemented to minimise light spillage, both onto the river and existing and created habitats that birds and bats may use.

been predicted from various viewpoints, with the worst affected viewpoints being from Amcotts and Stather Road, Flixborough. Of particular concern to NLC is the impact of the proposed development on visual amenity from receptors at Viewpoint 1 (Amcotts) and Viewpoint 2 (Stather Road, Flixborough). These impacts are outlined in tables 25 and 26. Despite the presence of existing industrial development associated within Flixborough Wharf and Industrial Estate, the proposed development would be larger in scale and form and have an appreciable impact on views from these locations. NLC agree with the assessment presented by the Applicant which demonstrates that there will still be major adverse and moderate adverse impacts on viewpoints 1 and 2 respectively even following the growth of landscape mitigation planting at year 15. This is concerning.	
6) Why does the applicant appear to have scant regard for the cultural heritage of Amcotts in terms of its Grade 2 listed buildings and the site of significance of the Amcotts Ferry as	In regard to the Ferry site, please refer to the Applicant's Comments on Relevant Representations [REP1-012], Table 3-4, page 92: The Project will have no direct physical impact on the Amcotts ferry site as it is on the opposite side of the River Trent. A historical mapping exercise reported in

identified by Natural England and North Lincs. Council's Historic Environment Record? 9.7 NLCs Historic Environment Record (HER) advised at the pre-application stage that desk-based assessment would not be sufficient for EIA and planning purposes and that undertaking a staged programme of archaeological field evaluation would be necessary to prepare a robust assessment of the heritage significance of the site and inform any appropriate mitigation for inclusion in the Environmental Statement. 9.24 The completion of the field evaluation prior to the determination of the DCO is necessary to ensure the identification of any previously unknown remains, and to date and characterise all the heritage assets, the results to update the assessment of heritage significance in the EIA and inform the preparation of an appropriate archaeological mitigation strategy, in line with national and local planning policy. 9.45 Section 8.2 Impacts on Setting have only considered the individual designated heritage assets. The very considerable impacts of the siting and scale of the proposed development on the character and settings of the historic villages of	ES Chapter 12: Archaeology and Cultural Heritage [APP-060] found that the former landing stage of the Amcotts-Flixborough ferry lies on the river foreshore outside of the Order Limits. In regards to listed buildings in Amcotts: the village is well set back from the river and is screened from Flixborough Port by trees so the impacts from the operational facilities of NLGEP will be minimal. (9.7 & 9.24) An iterative programme of archaeological survey was agreed in a call with Historic England and NLC's archaeological advisor on 15th September 2021. WSIs for the first phases of this were agreed and further surveys were carried out in October and November 2021. Following a further call with NLC's archaeological advisor on 26th November 2021, it was agreed that a WSI should be developed setting out additional geoarchaeological, geophysical and trial trenching surveys. The programme for these works is included in ES Chapter 12: Archaeology and Cultural Heritage [APP-060]. There were extensive and frequent communications and meetings between ERM, Solar 21 and NLC's advisor throughout 2022, which are ongoing in 2023. At submission, a comprehensive Desk Based Assessment (DBA) had been undertaken, alongside extensive geophysical surveys and a preliminary

Flixborough and Amcotts, with their collection of designated and non-designated historic buildings and monuments, and their respective relationships with the river do not appear to have been assessed from a cultural heritage perspective. 9.49 Section 9.4 Enhancement, these enhancement proposals are most welcome. Flixborough parish council have approached NLCs HER in a bid to improve the environs of the scheduled monument and site of burial ground within the woodland. Working with ourselves and Historic England could produce beneficial enhancements for the scheduled monument and other archaeological sites around the proposed development. Amcotts parish too, could benefit from heritage enhancements, potentially building on their work with North Lincolnshire Museum Service. 9.53 Whilst it is acknowledged that several of the listed buildings are identified due to their proximity to the northern DHPWN and the railway reinstatement land, the listed buildings within Amcotts are within proximity to the Energy Park Land and as such there is the potential for impact.	deposit model constructed based on the results of a geoarchaeological watching brief. The results of all three of these preliminary studies were included in the APP-060 as appendices. The ES submission also set out a strategy for a programme of further iterative archaeological survey, and outlined commitments to mitigation. The survey strategies were set out in two WSI's that were also appended to APP-060, the first describing a phase of geoarchaeological investigation and an ERT (Electrical Resistivity Tomography), and a second consisting of a trial trench evaluation. At the time of submission of [APP-060], these documents had been subject to review by NLC's archaeological advisor, but have subsequently undergone a number of revisions. The geoarchaeological WSI was approved by NLC's archaeological advisor following a number of reviews and was completed after two phases of survey in September 2022, a draft report of which was also reviewed by NLC. The trial trench evaluation scope has been approved by NLC and work on the vast majority of the project areas began in December 2022. Further stages of exploratory work will, however, be scheduled post consent but in advance of any preliminary works that may have the

	potential to impact buried archaeology. This has been discussed and agreed with NLC heritage advisor in recent meetings and correspondence. Please also refer to the Applicant's response to the Examiner's Questions: Q9.0.2 and Q9.0.3 for further details on the ongoing work and how the impact assessment and mitigation plan will be updated following this work. (9.45/9.53) As noted earlier in this response, and in the Applicant's response to the Local Impact Report: Amcotts is set well back from the river and is screened from Flixborough Port by trees so the impacts from the operational facilities of NLGEP will be minimal. (9.49) The Applicant will look at the possibility of supporting the community heritage work within Amcotts Parish as part of the proposed enhancement project.
7) Why does the applicant fail to appreciate the levels of noise currently being endured in the village by the wharf and wish to add to it? 10.19 Appendix C Section 4 provides details of vessel noise and unloading activities. The noise levels in the report have been derived based on measurements made at the nearest receptor when vessels were alongside Flixborough Wharf. It should be noted that NLC is currently investigating	The potential for operational noise effects from the site have been assessed in ES Chapter 7: Noise [APP-055]. The assessment, following national standards and guidance, considers increases in noise from the Project and also takes account of the local context.

complaints from residents of Amcotts village regarding excessive noise from unloading activities at Flixborough Wharf which are proving complex to resolve. If further development of this nature goes ahead, this may compound the situation, particularly if suitable mitigation measures are not found to reduce predicted noise levels. NLC are concerned that noise levels monitored at this location are being considered as the normal acoustic environment experienced by residents and that consideration of context has been given to these noise levels.	No loading or unloading activities will take place at the Wharf or the railhead during the night. The Project has the potential to result in moderate daytime noise impacts at the closest residential receptors close to Ingelnook in Amcotts, during a loading or unloading event at the railhead. At all other receptors, the predicted effects are considered minor or not significant when the context of the noise is taken into account. The method for deriving baseline noise for the noise assessment, following BS 4142, requires a representative baseline noise level. The existing activities are part of the existing noise environment. However, the method required for deriving baseline for BS 4142 tends to result in the lower noise levels (often due to relative continuous sources such as distant traffic or industrial buildings) being selected. This method tends to exclude noise during high peaks in noise levels such as might be experienced from the existing wharf operations, which is a cautious approach to noise assessment. Therefore, the monitoring is representative of the noise in the area (following BS 4142), and the assessment is not based on a comparison with the existing unloading events.

	The Project will continue to develop the design and operational procedures and where there is the opportunity to do so, examine practicable means of further reducing noise levels from operating plant and equipment. A noise management plan will be formulated in order to keep delivery noise (e.g. use of tonal reversing alarms, doors opening/closing etc.) to a minimum. There will also be a requirement to consider noise when procuring new equipment. Operational noise will be monitored and the results will be reported to NLC.
8) Why does the applicant wish to pursue the site at Flixborough now that the Humber Low Carbon Pipeline has confirmed its route that bypasses Flixborough and crosses the river beyond West Butterwick?	The Applicant also provided a response to Q6.0.8 on the Humber Low Carbon Pipeline connectivity. The Humber Low Carbon Pipelines (HLCP) project is currently at its statutory stage of consultation and its delivery is a fundamental part of Government policy to decarbonise the Humber and facilitate the introduction of a dedicated hydrogen network. Its purpose is to decarbonise major generators of carbon in the Humber area and the proposed pipeline passes within 3km of the south of the southern DHPWN. The Applicant has made representations to National Grid Carbons Venture's consultation to seek an amendment to their proposals to facilitate this. However, even if an amendment is not made, given the very close proximity, it is reasonable to assume that the project could be

	connected to the HLCP in the future, given the strength of policy to support this.

12.0 APPLICANT'S COMMENTS ON ANDREW GREEN, D, M & A GREEN, CHURCH FARM, FLIXBOROUGH WRITTEN REPRESENTATIONS

12.1 The Applicants' Comments on Andrew Green, D, M & A Green, Church Farm, Flixborough's written representation can be found below in Table X.

Written Representation Issue	**Applicant's Response**
I, Andrew Green, as a Partner, with Derek Green, in D, M & A Green, who own and farm Church Farm, Flixborough, (which is bisected by the former railway line that the project envisages reinstating and is thus a crucial element of the proposal), have already submitted submissions at each stage of the process with regard to our concerns.	The Applicant acknowledges Mr Greens previous submissions and notes that the railway line was in place and operational when Mr Green purchased the farm.
The project proposals contain measures that would dramatically effect our farm. These include compulsory purchase, along with other issues such as rights of way.	The Applicant is seeking the following land in the ownership of Andrew and Derek Green: • Permanent acquisition of land forming the following plots: 6-20, 6-30, 6-31, 6-35, 6-37, 6-42, 6-49; • Permanent acquisition of new rights in land forming the following plot: 6-34; and • Temporary possession of land forming the following plots: 6-26, 6-27, 6-29, 6-32, 6-36, 6-43, 6-44, 6-46, 6-52, 6-81

	The Applicant requires the above land in order to facilitate the reopening of the railway line, and to increase the screening of the railway line to reduce any visual impact and noise from its re-instatement. The Applicant is also seeking permanent acquisition of Plot 6-38 which includes a crossing over the existing railway line forming public right of way FLIX 175. The stretch of FLIX 175 between points E1 and E2 (shown on the Rights of Way and Access Plans [APP-015]) is proposed to be temporarily diverted or stopped up. Access to the south of the railway from Flixborough High Street/Stather Road is still available via the bridge carrying Stather Road across the existing railway line, following the road west and south to where it meets an alternative section of FLIX 175.
I attended the preliminary hearing on 15th of November. A point was raised at that hearing to which the applicant said that all owners of land effected by the proposal had been formally contacted. We have not been formally contacted by the applicants (I have spoken informally with them). I have only found out about plans for compulsory purchase by trawling through the masses of documentation. I do not think that this is an appropriate way to find out about this.	The Applicant has formally contacted all landowners through the non-statutory and statutory consultation process that is required as part of the DCO application process. The Applicant met with the Green's on 17 November 2022 and prior to that had met the Green's on during the four days of statutory consultation hosted at Mr Greens Finestra Conference Centre on Church Farm. Our discussions included a site to discuss the impact of the railway crossing and the requirement to increase the tree planting on both sides of the railway.

I spoke to the applicants after the meeting to raise this point. A face-to-face meeting was held with them two days later. Proposals and options were discussed but despite the promise of a written letter of proposals, along with numerous reminder requests from myself up until this deadline day, I have not received any thing from them. Obviously, verbal discussions carry no weight or commitment, so are worthless. I am, therefore, unable to make any informed decisions without the promised formal written response of proposals.	The Applicant sent a formal proposal to Mr Green on 12th January 2023 outlining the options tabled by both parties at the meeting that was held on 17 November 2022. The proposal includes options to establish a new access to Mr Greens land to the south of the railway, suggested by Mr Green to avoid the railway crossing. Other options have been proposed to acquire additional land from Mr Green.

13.0 APPLICANT'S COMMENTS ON GATELEY HAMER ON BEHALF OF THE NORRIS FAMILY WRITTEN REPRESENTATIONS

13.1 The Applicant's Comments on Gately Hamer on behalf of the Norris Family's written representation can be found below in Table 11.

Table 11: The Applicant's Comments on Gately Hamer on behalf of the Norris Family's written representation

Written Representation Issue	Applicant's Response
Additionally, The DCO Applicant has failed to adequately consult and engage with our clients in relation to the acquisition of their property interests in advance of the powers now being sought to compulsory purchase. This is contrary to s.42 of the Planning Act 2008 and paragraph 25 of the DCLG's published guidance related to procedures for the compulsory acquisition of land.	The Applicant's consultation report sets out how the Applicant undertook various consultation activities including various non-statutory consultations between May 2021 and June 2021, and formal statutory consultation under section 42 of the Planning Act 2008 between 14 June 2021 and 25 July 2021 [APP-076]. As landowners and persons with an interest in the land the Norris Family were contacted throughout this process. The Applicant is confident that it has followed the DCLG Guidance in respect of the procedures for the compulsory acquisition of land throughout.
Further, in October 2022, an acquiring authority' s failure to adequately engage and negotiate in advance of seeking confirmation to compulsory purchase land was one of the principal grounds for the Inspector's decision not to confirm The London Borough of Barking and Dagenham Council (Vicarage Field and surrounding land) Compulsory Purchase Order 2021.	The Applicant is aware of the recent decision of the Vicarage Fields CPO and the Inspector's decision to not confirm the same CPO. Whilst the decision of the Inspector did reference that they felt the Acquiring Authority's negotiations with landowners was not adequate, this was not the main reason for the CPO not being made. The Inspector's main concerns went to the financial viability of the Scheme and ultimately its prospects of delivery, which the Applicant is confident is not at issue in

	respect of this Application. The Applicant has been engaging with affected landowners throughout the process including the Norris Family and those discussions are set out in the Compulsory Acquisition Schedule (Document 9.3 [REP2-030] - the latest position being that set out in the version submitted at Deadline 3).
We therefore request the powers being sought by the DCO Applicant to acquire the Norris Family's property interests be refused.	The Applicant notes these comments. The Applicant is looking to acquire land by agreement wherever possible including from the Norris Family, but in the event that voluntary agreement is not possible, refers the Examining Authority to its justification for the use of compulsory acquisition powers as set out in section 7 of the Statement of Reasons [REP2-010].

14.0 APPLICANT'S COMMENTS ON KEVIN JOHN BIRD WRITTEN REPRESENTATIONS

14.1 The Applicant's Comments on Kevin John Bird's written representation can be found below in Table 12.

Table 12: The Applicant's Comments on Kevin John Bird's written representation

Written Representation Issue	Applicant's Response
Definition of Green Energy Could you please explain how you can call this project a "Green Energy Park" when there is no green energy being produced. By definition, In order to be deemed green energy, a resource cannot produce pollution, such as is found with fossil fuels. This is not what you are intending.	The Climate Change Committees 6th Carbon Budget identifies the use of low-carbon heat networks, electricity production and hydrogen production as a means to displace the use of fossil fuels as a key element in the drive to meet the Net Zero 2050 Target. "Expand the rollout of low-carbon heat networks in heat dense areas like cities, using anchor loads such as hospitals and schools. Prepare to shift away from using fossil fuel Combined Heat and Power (CHP) as a supply-source towards low-carbon and waste heat by preference from the mid-2020s" **"Take-up of low-carbon solutions.** Over half the emissions saving is from people and businesses adopting low-carbon solutions as high-carbon options are phased out" The ERF targets the recovery of energy from waste that is currently exported or landfilled and cannot be recycled to deliver low-carbon fuels and power with the benefit of carbon capture.

	Energy from waste is recognised as a supply of renewable energy as a result of utilisation in its fuel of biomass, a source of renewable energy. The National Policy Statement for Renewable Energy Infrastructure (EN-3) states that electricity generation from renewable sources of energy is an important element in the Government's development of a low-carbon economy (see paragraph 1.1.1).
Alternative Sites You say that you have considered all alternative sites within the UK & Flixborough came out on top. Did you ever consider utilising land presently being occupied by defunct power stations, i.e. Eggborough, Ferrybridge or Keadby or areas due for regeneration such as the old pit complex at Knottingley. All these sites have infrastructure readily available, easy access to motorways, adjacent to rivers and canals and would still serve the Yorkshire & Humberside region. Can you tell us why they were not even considered.	The Applicant provided a response to Q4.0.5 at Deadline 2 with further information on the site selection process undertaken [REP2-033]. The Applicants initial search sought to identify sites with a history of, or allocation for, Energy from Waste, which is considered a reasonable place to start. They did not carry out an exhaustive search of the UK, or the East Midlands and Yorkshire & Humber Region for all possible brownfield sites, which is not required by policy. It is also relevant that the majority of existing power stations are in the ownership of current power generators who have plans for their future redevelopment, e.g. a DCO has just been granted for a carbon capture power station at Keadby (Keadby 3) and a DCO was consented for a CCGT at Eggborough in 2018. Ferrybridge also has DCO consent for a Multifuel Power Station (October 2015) and a registered future DCO application for a CCGT plant. It should be noted that NPS EN1 contains policy on alternatives as follows:

	Paragraph 4.4.1 states: "*From a policy perspective this NPS does not contain any general requirement to consider alternatives or to establish whether the proposed project represents the best option*." Paragraph 4.4.2 states: "*Applicants are obliged to include in their ES, as a matter of fact, information about the main alternatives they have studied*". Note that this does not require the Applicant to consider all alternatives, simply that they must describe the main alternatives they have studied. Paragraph 4.4.3 also emphasises: • The consideration of alternatives is to be carried out in a proportionate manner. • When considering alternative proposals, consideration should be given to whether there is a reasonable prospect of the alternative delivering the same infrastructure capacity, in the same timescale as the proposed development. • Alternatives which are not commercially viable or on sites which are not physically suitable can be excluded. • Alternative proposals which are vague or inchoate can be excluded • Where an alternative is put forward by a third party after an application has been made, the [IPC] may place the onus on the person proposing the alternative to provide the evidence for its

	suitability as such and the [IPC] should not necessarily expect the applicant to have assessed it.
Overcapacity Latest figures indicate that there are over 42 UK plants processing 11.5 million tonnes of waste per annum. Only France, of all European countries, has a higher number 121 plants with 14 million tonnes per annum capacity. So each UK plant handles on average 273,810 tonnes of waste per annum, which would appear a small amount per plant, you are suggesting a further 750,000 tonnes per annum surely this could be re distributed to the existing facilities.	The Applicant has responded comprehensively on the need and capacity for Energy from Waste in its response to Q14.0.2 of the ExA's First Written Questions [REP2-033] and the RDF Supply Assessment [REP1-006] submitted at Deadline 1 and Footprint Services Reports [REP2-039] and [REP2-040], submitted at Deadline 2. These submissions together demonstrate that the proposal will not result in an overcapacity at local or national level. In considering the capacity position, the Applicant has reviewed existing and proposed Energy from Waste facilities in the updated RDF Supply Assessment [REP1-006]. 1.10
Latest technologies Is there any reason why you have not considered Pyrolysis, its benefits include minimum oxidisation of the waste, no production of pollutants, high levels of synthetic gas production, high level of calorific values, clean gas production. It has been described as the most ecologically clean, simple and modular	The proposed technology is established and well understood. As such, the project design and operation is based upon experience of numerous operating plants with a long history of successful operation. Conversely, pyrolysis has never taken hold as a major waste treatment facility. In theory, pyrolysis could be seen to have benefits over mass burn techniques. However, pyrolysis projects have been dogged by operational problems, such as clogging of equipment with the pyrolysis

modern technology of waste utilisation, another alternative is the use of the advanced refuse derived fuel process, a system that is capable of capturing 95% of greenhouse gases, it would appear that we are getting the cheapest, dirtiest incineration plant with no due respect to the local residents or environment.	tar that is produced and problems with process stability. For this reason, pyrolysis has never been adopted at scale. The Project is also designed to have full carbon capture with 95% capture rate availability once access to a suitable shipping route becomes available. In this respect, the Project is unusual in anticipating from the outset the desire to incorporate carbon capture.
<u>Environmental Considerations</u> How do you know what pollutants you will produce when you do not know what your waste is composed of? Are there any Nox gasses likely to be produced? How do intend to control Particulate Matter discharge that are small enough to enter the lungs and bloodstream of humans and animals?	The waste fuel arriving on site is obtained from processes that have initially separated out recyclable/reusable material. The processing and handling of waste is subject to a strict classification regime. As such, the sources of waste and its composition of waste is known and understood. The project is designed with the knowledge of the waste types that will be accepted by the plant and therefore the composition of the exhaust gases is known within a well defined set of parameters. The Project is designed in the knowledge of the waste type that will be accepted on site, and is designed specifically to meet Best Available techniques, and the associated emission limits set out in the IED and BREF. The assessment is therefore a worst case as the plant will be operated within the emission limits, in most cases, substantially below.

	Public Health England and the Environment Agency jointly state "PHE's risk assessment remains that modern, well run and regulated municipal waste incinerators are not a significant risk to public health. While it is not possible to rule out adverse health effects from these incinerators completely, any potential effect for people living close by is likely to be very small." This statement captures all emissions from the North Lincs facility, including particulate matter. No industrial activity is 'zero harm' and the overall context is important. Waste materials used at North Lincs would be disposed of somewhere, and as such emission from the facility are not 'new'. In the local context, the overall plant design is driven by the need to achieve acceptable impacts to air quality

15.0 APPLICANTS COMMENTS ON ADG AUTOTECH ON BEHALF OF MR GRAVEL WRITTEN REPRESENTATIONS

15.1 The Applicants Comments on ADG Autotech on behalf of Mr Gravel's written representation can be found below in Table 13.

Table 13: The Applicants Comments on ADG Autotech on behalf of Mr Gravel's written representation

Written Representation Issue	Applicant's Response
Our previous representation submitted on behalf of Mr Gravel on 8th August 2022 remains as stated. Additionally, The DCO Applicant has failed to adequately consult and engage with our client in relation to the acquisition of his property interests in advance of the powers now being sought to compulsory purchase. This is contrary to s.42 of the Planning Act 2008 and paragraph 25 of the DCLG's published guidance related to procedures for the compulsory acquisition of land.	The Applicant's consultation report sets out how the Applicant undertook various consultation activities including various non-statutory consultations between May 2021 and June 2021, and formal statutory consultation under section 42 of the Planning Act 2008 between 14 June 2021 and 25 July 2021 [APP-076]. As landowners and persons with an interest in the land the Mr Gravel was contacted throughout this process. The Applicant is confident that it has followed the DCLG Guidance in respect of the procedures for the compulsory acquisition of land throughout.
Further, in October 2022, an acquiring authority' s failure to adequately engage and negotiate in advance of seeking confirmation to compulsory purchase land was one of the principal grounds for the Inspector's decision not to confirm The London Borough of Barking and Dagenham Council (Vicarage Field and surrounding land) Compulsory Purchase Order 2021.	The Applicant is aware of the recent decision of the Vicarage Fields CPO and the Inspector's decision to not confirm the same CPO. Whilst the decision of the Inspector did reference that they felt the Acquiring Authority's negotiations with landowners was not adequate, this was not the main reason for the CPO not being made. The Inspector's main concerns went to the financial viability of the Scheme and ultimately its prospects of delivery, which the Applicant is confident is not at issue in

	respect of this Application. The Applicant has been engaging with affected landowners throughout the process including Mr Gravel and those discussions are set out in the Compulsory Acquisition Schedule (Document 9.3 [REP2-030] - the latest position being that set out in the version submitted at Deadline 3).
We therefore request the powers being sought by the DCO Applicant to acquire Mr Gravel's property and business interests be refused.	The Applicant notes these comments. The Applicant is looking to acquire land by agreement wherever possible including from the Mr Gravel, but in the event that voluntary agreement is not possible, refers the Examining Authority to its justification for the use of compulsory acquisition powers as set out in section 7 of the Statement of Reasons [REP2-010].

APPENDIX A - COMMENTS ON UNITED KINGDOM WITHOUT INCINERATION NETWORK (UKWIN) WRITTEN REPRESENTATION (in relation to NEED)

Version v003
12 January 2023
AFRY Management Consulting ("AFRY")

Introduction

This note sets out AFRY's response to the Written Representation received from United Kingdom Without Incineration Network (UKWIN) at Deadline 2, in relation to the comments on the RDF Supply Assessment Rev 1 (Appendix A to REP1-006) (the "RDF Supply Assessment").

The Applicant's response to UKWIN's comments pertaining to climate impacts are addressed in the document to which this note is appended.

Approach to uncertainty

The RDF Supply Assessment makes long term projections of residual waste arising and residual waste treatment capacity. Clearly there is uncertainty around both of these variables, and this uncertainty increases over time. In this section we summarise our approach to dealing with this uncertainty in the RDF Supply Assessment.

For waste arising, we have presented a base case which assumes Government policy on recycling targets and residual waste reduction are achieved, but have also shown trajectories where these are over- and under-achieved. The base case takes account of the residual waste reduction target announced by DEFRA in December 2022[1]. The Government states that "We set the target ambition at the upper limits of achievability based on our evidence base", and acknowledges that current policies on Collection and Packaging Reforms will only achieve around half of the reduction needed. Hence selecting this as the base case is a prudent approach in that it is more likely that this target will be under-achieved rather than over-achieved.

For treatment capacity there is uncertainty regarding which of the current pipeline of development projects will be realised, noting that not all consented projects progress to realisation. We have approached this by using expert judgment, informed by AFRY's experience in the sector, to exclude projects which we consider to be no longer under active development (for example if their planning consent has expired) and categorising the remaining projects as having higher or lower probability of realisation.

Given that the base case assumes Government policy on waste reduction is achieved, we believe it is appropriate to also assume Government policy on decarbonisation of the electricity grid is achieved. In its Net Zero Strategy[2], the Government states that "by 2035, all our electricity will need to come

[1] "Environmental targets consultation summary of responses and government response", DEFRA, December 2022.
[2] "Net Zero Strategy: Build Back Greener", October 2021, UK Department for Business, Enterprise, and Industrial Strategy

from low carbon sources". In its 2022 Progress Report[3], the Committee on Climate Change (CCC) recommends that no EfW facilities without carbon capture should be in operation beyond 2040. This introduces an additional level of uncertainty as to which existing facilities will be able to fit carbon capture both from a technical perspective (for example there may be insufficient space available) or from an economic perspective. Again this has been addressed by judging which facilities have a high or medium probability of fitting carbon capture and storage (CCS) economically, primarily based on their location. Whilst we recognise that this is a somewhat subjective assessment, we believe this is a reasonable (and conservative) approach given the high level of uncertainty of the economics of carbon capture in the future.

Overview

UKWIN's case that there will be a significant surplus of treatment capacity if recycling and waste reduction targets are met also assumes that all consented projects are realised and none of the current EfW capacity falls away and there is no requirement to fit carbon capture at existing facilities. We do not consider this to be a realistic scenario upon which the Examining Authority could base their Recommendation to the Secretary of State.

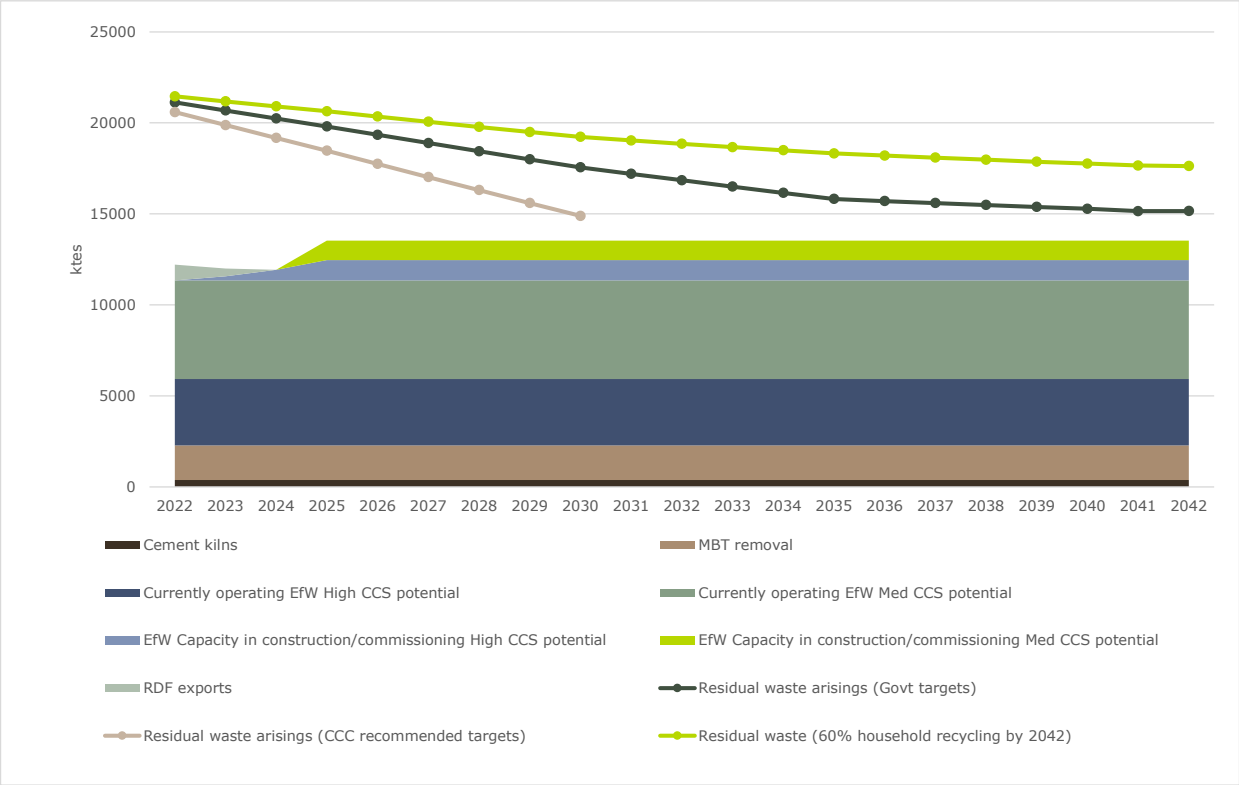
The assessment should take account of Government policy on Net Zero as well as on waste reduction, and in our base case we have applied CCC's recommendation that by 2040 only EfW facilities with carbon capture should be operating.

Figure 1 shows our assessment of existing and under-construction capacity which has a high or medium CCS potential[4]. This suggests that there is insufficient capacity to treat residual waste arising after recycling and waste reduction targets are met, and assuming all of the plants which have a high or medium CCS potential are successful in achieving CCS.

[3] "Progress in reducing emissions 2022 Report to Parliament", June 2022, Climate Change Committee

[4] Figure 1 corresponds to Figure 15 in the RDF Supply Assessment, with some minor data updates and extended to 2042.

Figure 1: Treatment capacity in England with High/Medium CCS potential



Waste arising

Figure 1 has been extended to 2042 to show the impact of the residual waste reduction target announced by the Government in December 2022. In its consultation response, the Government states that:

"This target is ambitious, with the major changes set out in CPR [planned Collection and Packaging Reforms] only expected to get us halfway towards our target. Meeting the target will require progress beyond the current commitment to achieve a 65% municipal recycling rate by 2035, and would represent a municipal recycling rate of around 70-75% by 2042".

In our base case projection we have set the municipal recycling rate at 70% in 2042[5]. As the Government itself states, existing policies will not achieve this target, so in our view the base case represents a very conservative view of residual waste arising.

Treatment capacity

We acknowledge UKWIN's comment that the Rivenhall Airfield project has now entered the construction phase and this is accounted for in Figure 1 above. UKWIN states that the Applicant has under-stated the capacity of existing facilities by 514 kte per annum. We have investigated this and

[5] We assume a C&I recycling rate of 85% in 2042.

made adjustments where we accept UKWIN's view – this amounts to an increase of 378 kte (also reflected in Figure 1). We have also added in an assumption that 375 kte per annum of residual waste is used in cement kilns[6]. These adjustments do not affect the main conclusion of the RDF Supply Assessment that there is insufficient capacity to treat residual waste arising after recycling and waste reduction targets are met, based on our view of plants which have a high or medium CCS potential.

UKWIN argues that the Applicant should include non-R1 facilities in the assessment. We disagree with this view since the waste hierarchy clearly prioritises energy recovery over disposal. We note that much of this capacity is relatively old so operators may not wish to incur significant capex in up-grading to R1 status even if this is possible. Currently non-R1 facilities treat less than 2 mte per annum, and we project this to decline to less than 0.6 mte by the mid-2030s as older facilities retire.

UKWIN argues that the Net Zero Strategy goal of decarbonising the power sector by 2035 does not necessarily imply all EfW needs to be fitted with carbon capture, as it allows for negative emissions from BECCs (biomass electricity carbon capture) to offset emission from some sources including energy from waste. However the Net Zero Strategy does state that "We are exploring options to reduce emissions from these plants within the power sector, including whether support for CCUS at Energy from Waste plants could be provided". In addition the Government issued a call for evidence on the UK Emissions Trading Scheme[7], which stated "We will use evidence gathered in this call for evidence, and via other means, to consider how effective the UK ETS could be to incentivise CCS uptake for EfW and waste incineration plants across the UK". We believe this shows a clear intent should reduce emissions through fitting carbon capture, and that facilities with carbon capture should be prioritised over facilities without carbon capture.

Future pipeline

Analysis of historic planning data[8] suggest that approximately 50% of consented capacity is realised. Figure 2 below adds in consented pipeline projects which we believe have a higher probability of realisation (which we have weighted at 60%) and which have a high or medium CCS potential. Only if all of these are fully realised in the anticipated timeframes does the capacity gap narrow by the mid 2030s based on the assumption that the more challenging recycling targets continue to be met in the required timeframes. In our view this represents the most optimistic end of the range of likely outcomes. For completeness, Figure 3 below adds in consented projects with high or medium CCS potential which we believe are less likely to be realised (weighted at 40%).

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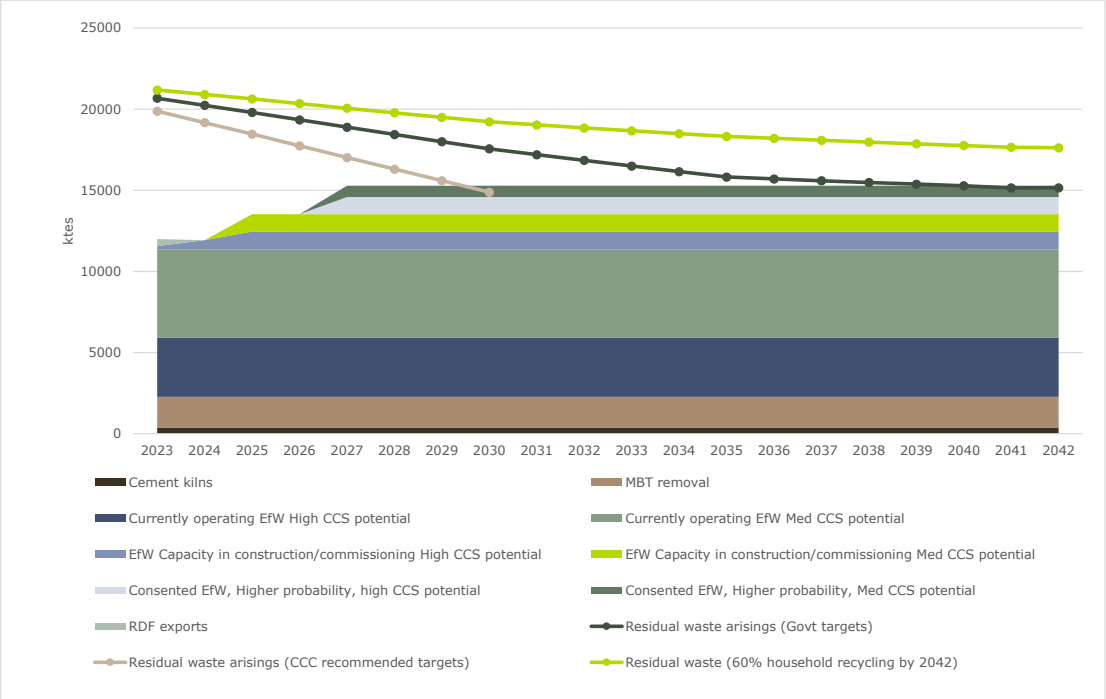
[6] Based on historic data published in "UK Energy from Waste Statistics", Tolvik Consulting, 2021

[7] "Developing the UK Emissions Trading Scheme", DEFRA (and devolved governments) March 2022

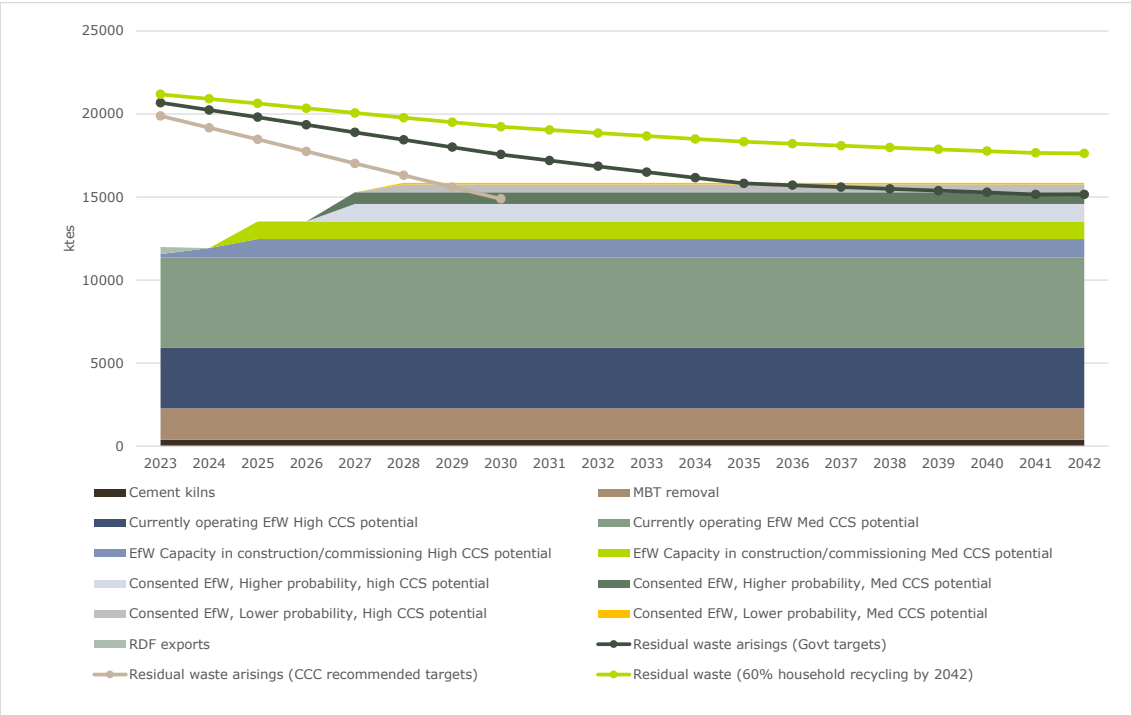
[8] Using BEIS's Renewable Energy Planning Database

Figure 2: Treatment capacity in England with High/Medium CCS potential including higher probability consented projects which are not committed



Capacity of higher probability consented projects weighted by 60%.

Figure 3: Treatment capacity in England with High/Medium CCS potential including higher and lower probability consented projects which are not committed



Capacity of higher and lower probability consented projects weighted by 60% and 40% respectively.