REPORT

Boston Alternative Energy Facility

The Applicant's Response to UKWIN's Comments

Client: Alternative Use Boston Projects Ltd

Planning Inspectorate

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Glossary of Acronyms

Term	Definition
APCr	Air Pollution Control residues
AUBP	Alternative Use Boston Projects Limited
BAEF	Boston Alternative Energy Facility
C&I	Commercial and Industrial
ccs	Carbon Capture and Storage
СНР	Combine Heat and Power
DCO	Development Consent Order
DDOC	Degradable Decomposable Organic Carbon
dDCO	Draft Development Consent Order
EfW	Energy from Waste
ES	Environmental Statement
ExA	Examining Authority
GHG	Greenhouse Gas
HRA	Habitats Regulations Assessment
MSW	Municipal Solid Waste
MWe	Megawatts electric
NPS	National Policy Statement
RDF	Refused Derived Fuel
SoCG	Statement of Common Ground
UKWIN	United Kingdom Without Incineration Network





1 The Applicant's Response to UKWIN's Comments

- 1.1.1 This document has been prepared in response to the Examiner's second written question "Please provide a single response to all the points raised in the various submissions by the United Kingdom Without Incineration Network (UKWIN). It would assist the ExA if this document also contained a summary section stating each main issue raised by UKWIN, along with the Applicant's position on that issue, highlighting conformance with the NPSs, or other relevant policies, where applicable.". **Table 1-2** includes the Applicant's responses to UKWIN's Deadline 2 submissions and **Table 1-3** includes a response to their Deadline 3 submissions.
- 1.1.2 In addition to this document the Applicant provided a response at Deadline 4 to UKWIN's summary of oral case (document reference REP3-039) in The Applicant's Response to UKWIN's Oral Submission at Issue Specific Hearing on Environmental Matters (Part 1) (document reference 9.55, REP4-020).
- 1.1.3 A summary of the Applicant's position on UKWIN's main points is provided below in **Table 1-1**.

Table 1-1 Position Summary

Main issue	Position
Policy	
UKWIN questions the approach and outcomes to the consideration of waste plans within the Fuel Sourcing and Waste Hierarchy Report.	The Applicant in response has highlighted that the approach adopted accords with NPS EN3 paragraphs 2.5, consistent with previous comparable Development Consent Order (DCO) determinations for Energy from Waste facilities. The Applicant highlights the proposed development is a merchant facility, which will be powered by refuse derived fuel transported to it by sea going vessel, optimising the opportunity for the most economic and best environmental solution, therefore an appropriate facility according with the proximity principle. With respect to waste plans, the Applicant draws the attention to Lincolnshire County Council's support for the proposed development and its acceptance that there is a national need for such facilities and that the proposal does not compromise the policies of the Lincolnshire Minerals and Waste Local Plan with
	respect to need and location.





Main issue	Position
	With reference to the effect of the proposed development upon waste plans generally from where refuse derived fuel may be sourced, the Applicant highlights no contractual arrangements are in place with suppliers of this material, however the proposed facility will rely upon such fuel presently exported to the continent or wastes presently landfilled. The addendum to the Fuel Availability and Waste Hierarchy Assessment (document reference 9.5, REP1-018) demonstrates that taking account of high recycling rates there will be some 3.9 million tonnes available annually by 2035 and, that the proposed development accords with the waste hierarchy.
Waste	
UKWIN has questioned the methodology of using the 2-hr drive time to define a waste catchment area around the indicative ports from which the RDF would be transferred to the proposed Facility.	The Applicant has used a 2-hour travel time to represent a practicable limit over which bulk waste transport becomes economically unattractive. This methodology has been used to demonstrate a large quantity of residual waste is available in the catchments around the proposed ports detailed in the Environmental Statement (ES). The movement of waste by vessel is common, demonstrated by the large quantities that have been exported overseas in the past and continue to be.
UKWIN has indicated that there is additional EfW capacity in the UK.	The Applicant has used the most up to date information on Energy from Waste (EfW) facilities that have reached financial close when the Tolvik report was published in 2021.
UKWIN has questioned why the Applicant has not used more recent waste data.	The Applicant has used the most up to date data from the most reliable sources (e.g. Defra, Environment Agency and SEPA) although there is often a lag time for the data to be published in the public domain. The Applicant has used the available data to include modelling of higher recycling rates that have been committed to by Governments to factor in reductions of residual waste in the long-term.
Climate Change	-
UKWIN questions the approach undertaken in the document 'Climate Change – Further Greenhouse Gas Emissions Analysis and Consideration of Waste Composition Scenarios' (document reference 9.6, REP1-019) to determine potential greenhouse gas emissions from different waste compositions.	The original Greenhouse Gas (GHG) emissions assessment set out in Chapter 21 of the ES (Climate Change document reference: 6.2.21, APP-059) has been developed as a cautious worst-case scenario, consistent with the best practice approach to Environmental Impact Assessment (EIA). The further sensitivity analyses conducted in the document 'Climate Change – Further Greenhouse Gas Emissions Analysis and Consideration of Waste Composition Scenarios' (document reference 9.6,





Main issue	Position
UKWIN has raised queries as to whether the carbon content ranges would be representative of current or future feedstocks, and the	REP1-019) were incorporated to provide an "envelope' around this central case assessment. The range of carbon and fossil carbon scenarios considered in the approach were within likely parameters for Refuse Derived Fuel (RDF) feedstocks. The Applicant notes that RDF feedstocks are likely to have a higher carbon content compared to some other waste streams. Due to uncertainties in the future of
assumed fossil carbon percentages in the scenarios considered in the document 'Climate Change – Further Greenhouse Gas Emissions Analysis and Consideration of Waste Composition Scenarios' (document reference 9.6, REP1-019).	waste compositions, and the source of the RDF feedstock, no attempt was made to try and predict RDF compositions in the future. However, it is likely that current and future RDF feedstocks will be within the parameters considered within the additional analysis (document reference 9.6, REP1-019).
UKWIN questions the approach of comprising potential emission figures from the proposed Facility and other waste treatment pathways such as landfill.	A comparison of potential emissions from a range of waste compositions with respect to carbon and fossil carbon contents was carried out. It is acknowledged that some of the scenarios are not exactly the same, but the analysis presented shows that emissions of greenhouse gases (GHGs) from processing waste at the proposed Facility would be lower under most scenarios than if the waste was sent to landfill.
Assessment of Alternative Solutions	
UKWIN disagrees with the objectives of the Assessment of Alternative Solutions and considers other options have not been considered which could meet these objectives.	The Applicant's position is that the objectives are in line with national and local planning policy as described in rows 7 – 9 of Table 1-2.
	The Applicant's position on the alternative solutions suggested by UKWIN is described in rows 10 – 11 of Table 1-2. The reasoning for the Applicant's approach to alternatives is based in the guidance as stated in these rows.
UKWIN notes more reasonable justification should be included for ruling out the use of alternative locations.	The Applicant will provide further information at Deadline 6 on this point with regards to financial and technical considerations.
Draft National Policy Statements (NPS)	1
UKWIN considers that draft EN-3 Paragraphs 2.10.4 and 2.10.5 are of particular relevance to the Facility	The Applicant considers that Paragraph 2.10.4 is not a relevant consideration relating to site selection for applicants and is also unnecessary given the provisions retained in EN-3 ¹ at Para 2.17.7., for waste combustion generating station proposals to have to demonstrate that they accord with the waste hierarchy and national and local waste management targets, or
	to demonstrate why a conflict with those targets is nonetheless appropriate. Similarly, Para 2.10.5 is an isolated and otiose inclusion which is not quantified in

¹ Department of Energy and Climate Change (DECC). 2011b. National Policy Statement for Renewable Energy Infrastructure (EN-3). London: HMSO.





Main issue	Position
	any way and which appears to place a limit on EfW projects; something which is not considered appropriate in the context of EfW remaining a technology which will play an important role in the UK meeting its climate change commitments.
	As with Paragraph 2.10.4, Paragraph 2.10.5 is not necessary as the test at Para 2.17.7 of the draft NPS already gives due consideration to the relevance of the waste hierarchy and national and local waste management targets, and therefore provides the appropriate criteria for assessing applications against the national and local context. In particular Para 2.17.7 recognises that there may be occasions where a deviation from the relevant waste strategy or plan is nonetheless appropriate, which is important context which is missing from Para 2.10.5.
	In any event, and notwithstanding paragraphs 2.10.4 and 2.10.5 of consultation draft EN-3, the Applicant's application (including its need case and Waste Hierarchy Assessment report (document reference 5.8, APP-037)) demonstrates that the Facility would not result in an over capacity of EfW waste treatment; the Facility is being developed to meet a need to treat national waste (arriving at the Facility by water) that may otherwise be exported.





Table 1-2 The Applicant's Response to UKWIN's Comments at Deadline 2

Table 1-2 The Applicant's Response to UKWIN's Comments at Deadline 2				
Paragraph Number	UKWIN's Comment	Applicant's Response		
Deadline 2 S	Submission: UKWIN Comments on Applicant's Deadline 1 Waste Subr	nission (REP2-058)		
Introduction	1			
1.	The Applicant made a number of statements regarding waste in their Deadline 1 submissions dated 19th October 2021, including within their:			
2.	UKWIN responds to some of these comments below. Many of our critiques are set out in our Written Representation and so do not need repeating.			
Applicant's	Applicant's Comments on Relevant Representations			
3.	On page 182 of their comments on RRs the Applicant, in response to UKWIN's RR, stated: "The Facility will provide an interim solution for the management of residual waste diverting it from overseas export and landfill while the UK transitions into a more circular economy in the future"	Please note that the operational life of the Facility is identified as being 25 years as an assumption, which is typical for such facilities. Paragraph 5.6.119 of the ES		
4.	While the Applicant refers to an 'interim solution' they are applying for permanent planning permission for a facility that would not commence full operations before 2026 at the earliest that could then operate for 30+ years, i.e. well beyond 2050.	Chapter 5 Project Description (document reference 6.2.5, APP-043) states, "A decision would be made at the appropriate time as to whether it would be 're-powered' after 25 years based upon an investment decision considering the market conditions and technical requirements prevailing at that time. If the operating life were to be extended the Facility would be		





Paragraph Number	UKWIN's Comment	Applicant's Response
		upgraded and re-permitted in line with the legislative requirements at the time".
		EfW facilities are accounted for in the Committee for Climate Change's Net Zero pathways (document reference - The Sixth Carbon Budget, Waste), with significant Carbon Capture and Storage (CSS) provision from 2030 onwards.
5.	While the Applicant refers to treating 'residual waste', the ongoing lack of detail regarding the source and composition of their intended feedstock raises serious concerns about the extent to which the feedstock would be comprised of material that could and should otherwise have been reduced, re-used, recycled, composted or substituted as distinct from exclusively comprising genuinely residual waste.	the Addendum to Fuel Availability and Waste Hierarchy Assessment (document reference 9.5, REP1-018).
6.	The Applicant has not ruled out the prospect that their proposal could act as a barrier to the transition to the circular economy to which they refer.	reducing the quantity of waste that is disposed of to landfill to meet the Government's target to have no more than 10% municipal waste going to landfill by 2035. The Facility will be required to comply with the waste hierarchy under Requirement 19 of the draft DCO (document reference 2.1(2), REP3-003) via the approval of a waste hierarchy scheme. The scheme must include details of: (a) the type of information that must be collected and retained on the sources of the residual waste after recyclable and reusable waste has been removed; (b) the arrangements that must be put in place for ensuring that as much reusable and recyclable waste as is reasonably possible is removed from





Paragraph Number	UKWIN's Comment	Applicant's Response
		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; (c) 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; (d) 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; (e) the arrangements that must be put in place for the provision of an annual waste composition analysis undertaken by the undertaker, with the findings submitted to the relevant planning authority within one month of the sampling being undertaken; and (f) the form of records that must be kept for the purpose of demonstrating compliance with (a) to (e) and the arrangements in place for allowing inspection of such records by the relevant planning authority.





Paragraph Number	UKWIN's Comment	Applicant's Response
7.	Temporarily exporting waste to Europe while UK recycling rates improve, or indeed biostabilising waste and sending it to landfill as a short-term low-CAPEX option, seem to offer far more flexible 'interim solutions' than creating 1.2 million tonnes of new incineration capacity that would in turn create a long-term feedstock demand to generate a return on investment.	available. In the interim, and as technologies and systems to support circular resource use continue to develop, there is policy support for the incineration of the residual
8.	The Addendum is seriously flawed in numerous respects, and should be afforded no weight. Instead, adverse inferences should be drawn regarding the lack of need for the facility, its adverse impact on the waste hierarchy, and the non-compliance of the proposal with relevant waste plans.	
9.	These flaws include problems with the Applicant's methods for calculating: • Waste catchment; • Additional new EfW capacity; and • Impact of higher recycling rates reducing residual waste.	Noted, specific responses are set out below.





Paragraph Number	UKWIN's Comment	Applicant's Response
10.	Waste catchment The Applicant's 2-hour drive time appears to ignore the distance travelledby boat. Thus the Applicant fails to provide the necessary detail regarding real world practicalities of transferring material from any given port to Boston.	of the UK.
11.	At Paragraph 1.7.1 of their Addendum the Applicant claims support for their approach from the 'Waste Hierarchy and Fuel Availability Assessment' carried out for the Wheelabrator Kemsley and Wheelabrator Kemsley North Waste to Energy facility.	
12.	However, while the cited document refers in footnote 10 to "a 2 hour drive time from the Application Site" it does not include a single reference to extending this to assuming that so long as an originating site is within 2 hours of a port it was considered a viable feedstock source. Indeed, the cited document does not contain a single use of the words 'port' or 'boat'.	time being used as representative for road transport to a
13.	The fact that the Applicant attempts to justify their approach by reference to a report that does not consider travel by ports could be indicative of there not being any genuine precedent for the Applicant novel approach.	
14.	Additional new EfW capacity The Applicant adopts a base year of 2019 for Table 4-1 Summary of UK Fuel Availability for the Proposed Facility. For example, they use a 2019 UK figure for landfilled combustible waste of 12,502ktpa.	





Paragraph Number	UKWIN's Comment	Applicant's Response
		Defra household waste data for England published on the 15 December 2021 indicates that less local authority waste was landfilled (200kt) in 2020 and the overall recycling rate fell by 1.5% to 44% in 2020 from 45.5% in 2019.
15.	However, their Table 4-1 figure of 3,830ktpa for UK 'Fuel demand of additional new EfW (construction & commissioning phase) capacity' is too low and does not fully take account of the increased incineration capacity that occurred in 2019 and 2020.	The Applicant has assault most up to date on EIV
16.	According to pages 19-20 of the Tolvik report cited by the Applicant ² UK incineration input tonnage for 2019 was around 12,696ktpa, which reflects not only the non-availability of operational plants but also the fact that some incineration plants only became operational part-way through 2019.	report published in 2021. This data is based those facilities that have reached financial close by the end of the first
17.	To compare the 2019 landfill rates with future incineration capacity one would have to compare the 12,696ktpa UK incineration input tonnage figure with the total existing UK incineration capacity currently operational, in commissioning, and/or under construction (i.e. 'total existing incineration capacity') as at the end of 2020 (or more recently).	See response to ID 14.
18.	The Applicant provides a figure for total existing UK incineration capacity for 2020 of 20,386ktpa in Table 3-1, and then argues that this should be reduced by 10% (to reflect the 90% utilisation rate), which would bring 2020 total UK incineration capacity down to 18,347ktpa.	The Applicant recognises that not all facilities run at 100% capacity due to maintenance down-time so has factored this based on the reported throughput data in the Tolvik
19.	The difference between 18,347ktpa and 12,696ktpa is 5,651ktpa. This means that the impact of new incineration feedstock demand is around 1,821ktpa greater than the 3,830ktpa figure assumed by the Applicant.	Tradicional to Laci rivaliability and Waste Hierarchy

² Tolvik (2021) UK Energy from Waste Statistics 2020





Paragraph Number	UKWIN's Comment	Applicant's Response
20.	These concerns regarding the Applicant's methodology would apply to any waste catchment.	
21.	Impact of higher recycling rates reducing residual waste Household waste represents around 45% of total residual municipal waste, with the other 55% comprising commercial & industrial (business) waste.	The Applicant has not included a detailed breakdown of the element of Commercial and Industrial (C&I) waste being recycled as robust data is not, at this stage in the project's evolution, available to support this.
22.	Despite the Government's recycling targets applying to all municipal waste, and despite the Applicant's landfill figures being based on the combustible fraction of all municipal waste, the Applicant only took into account the impact of meeting Government recycling targets on the household fraction of the residual municipal waste.	Illimitations and data gaps. No a result, Car estimates for
23.	As such, the Applicant's need assessment fails to take account of around half of the waste that can be expected to be diverted by improved business recycling.	
24.	This means the Applicant underestimated the impact of recycling by millions of tonnes per annum, thus significantly overestimating the material which would be left to treat were the 65% recycling target to be achieved for municipal waste.	Addendum to Fuel Availability and Waste Hierarchy Assessment (document reference 9.5, REP1-018). Please
25.	Calculation of the 45% fraction of household waste to municipal waste: To estimate the fraction of residual waste which is household waste in England one can compare Government figures for the household fraction of residual municipal waste with Government figures for total residual municipal waste in England.	





Paragraph Number	UKWIN's Comment	Applicant's Response
26.	The 2016/17 figure for total residual household waste in England was 12.5Mt³, and the 2016 figure for total residual municipal waste in England was around 27.8Mt⁴.	
27.	12.5 is 45% of 27.8, meaning household waste makes up around 45% of total residual municipal waste. This would also mean that non-household MSW in 2016 represented around 15.3Mt, or 55% of the total.	
28.	Confirmation that the Applicant is only taking into account household waste recycling: Table 4-1 of the Applicant's addendum subtracts a figure of 5,147kt for 'Higher recycling rates reducing residual waste'.	
29.	This 5,147kt figure was presumably derived using Table 3-2 by subtracting the total residual household waste figure for 2025 (based on 65% recycling) from the total residual household waste figure for 2019 (based on 46.2% recycling), i.e. 14,225kt - 9,078kt = 5,147kt.	The Applicant has used Defra's most recently published waste data. Recycling rates for C&I waste are not publish by Defra (see response above) so we are unable to apply
30.	As such, the Applicant only takes account of a reduction in residual household waste even thought the Applicant's figures for landfilled waste include significant quantities of non-household waste that could also be expected to reduce in line with Government recycling targets.	the same methodology to the portion of C&I waste.
31.	These concerns regarding the Applicant's methodology would apply to any waste catchment.	
Appendix 3 to	o 9.5 – BAEF Effects on Waste Plans	
32.	In their 9.5 addendum the Applicant states: To address point 2.5.70 that consideration has been given to strategies and plans, a comprehensive review has been undertaken of 189 waste	

³ Defra's Statistics on waste managed by local authorities in England in 2016/17

⁴ As per the Government's December 2020 Resources and Waste Strategy (Figure 8 on page 78 of the Technical Annex).





Paragraph Number	UKWIN's Comment	Applicant's Response
	planning authorities within England, Northern Ireland, Scotland and Wales. The results of this are presented in full as Appendix 3 of this report. The review concludes that the proposed Facility would be in compliance with the relevant waste plans of the waste planning authorities from which the Facility is likely to obtain its feedstock.	plan for the application site location and waste plans for areas from which refuse derived fuel may be sourced.
33.	However, as set out below, there are many reasons to conclude that the review does not support the stated conclusion and that the proposal would in fact conflict with a number of relevant waste plans.	
34.	It should also be noted that the review opens by referring not to 2.5.70 but rather to EN-3 paragraph 2.5.66: "An assessment of the proposed waste combustion generating station should be undertaken that examines the conformity of the scheme with the waste hierarchy and the effect of the scheme on the relevant waste plan or plans where a proposal is likely to involve more than one local authority".	
35.	The review does not include any reference to 2.5.70.	
36.	In summary, problems identified by UKWIN include the way that: • By enlarging the waste catchment to include such a wide area the Applicant may be underestimating the extent to which they would source feedstock from Waste Authorities located nearer the plant, thus underestimating the adverse impact that the facility would have on recycling rates at those nearer Authorities; • The review's claim regarding historic precedent for their adopted approach has not been demonstrated, and nor would such precedent be particularly relevant given the changes in circumstance since 2015. Furthermore, it is not clear that the review actually follows its stated approach; and	after recycling) in for the form of a refuse derived fuel from suppliers. Depending on commercial arrangements, any compatible, baled fuel that can be transported to the proposed facility by sea going vessel will be accepted by the Facility. The review undertaken in accordance with NPS EN-3





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	Many waste plans adopt the principle of 'net self-sufficiency' for waste management which would be incompatible with the centralised approach proposed by the Applicant.	consented MF2 facility ⁵ , also a merchant facility, where the potential catchment area which extended to the North of England, with fuel transported to site by train. There is a record of several positively determined DCO decisions ⁶ where waste is sourced from a larger catchment area than individual waste plan areas whilst demonstrating acceptability with respect to the Proximity Principle. The proposed development, and those other DCO facilities now permitted will contribute to national net self-sufficiency. Notwithstanding the principle of net self-sufficiency adopted by waste local plans, 'There is nothing in the legislation or
		the proximity principle that says accepting waste from another council, city or region is a bad thing and indeed in many cases it may be the best economic and environmental solution and/or be the outcome most consistent with the proximity principle'7.
		The carriage of fuel by sea going vessel as proposed optimises the opportunity for the most economic and best environmental solution. This is consistent with NPS EN-3 paragraph 2.5.25

⁵ MultiFuels (FM2) Fuel Sourcing Waste Hierarchy Assessment (July 2014) Document Ref. No: 5.9 PINS Ref: EN010061

⁶ Lostock Northwich - Planning Inspectorate Report DPI/A0665/11/10 LI A0665 5th March 2012; Rookery South Pit, near Stewartby, Bedfordshire. A File Ref EN0100011, 10 October 2011; MF2, Ferrybridge, File Ref: EN010061 29th July 2015.

⁷ Energy from Waste, A Guide to the Debate DECC February 2014 (revised edition) page 4, paragraphs 3 to 5





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37.	Adverse impact on waste plans from nearer Waste Authorities The review of waste plans fails to address the obvious threat to nearby Waste Authority waste plans posed by the introduction of more than 1 million tonnes of incineration capacity.	and the state of t	
38.	We note the position maintained by Lincolnshire County Council (LCC), e.g. as set out in their Initial Statement of Common Ground (SoCG) with AUBP, that insufficient information has been provided by the Applicant to underpin the Applicant's claims regarding either the national need for the proposed new incineration capacity or compliance with LCC's waste plan (in particular Policy W1).		
39.	We also note the concerns raised by LCC regarding proximity (see more, below), and the Waste Authority's view that "there is [sufficient] existing capacity for current levels of municipal waste in Lincolnshire".	Lincolnshire County Council considered the proposal at its Planning and Regulation Committee of 26 July 2021 and determined (council minutes) 'That the Committee support this application and includes an informative that the Committee would encourage the use of carbon capture if that was feasible'. Referencing the Applicant's responses to 36 to 38 above, additionally there is no suggestion on Lincolnshire County Council's part that the proposed development will put at risk the achievement of recycling and composting targets or the diversion of a significant proportion of waste from recycling rather than landfill.	
40.	Paragraph 1.4 of the review states: "it is anticipated that the majority of the refuse derived fuels transported to the Facility will be sourced from authority areas located in Yorkshire and the Humber; the North East, North West and the South East of England".		





Paragraph Number	UKWIN's Comment	Applicant's Response
41.	It is striking that the review does not include the East Midlands as an anticipated source of feedstock in preference to more distant regions such as the North West.	With respect to the draft Statement of Common Ground (document reference 8.1(1), REP4-003), Lincolnshire County Council finds the references concerning the Lincolnshire Mineral and Waste Local Plan, set out in Annex 3, Paras 1.48 to 1.51 to be sound and reasonable.
42.	The area defined in paragraph 1.4 is very broad, covering approximately 44% of the population of England (or 52% including the East Midlands), and there is no indication regarding the anticipated distribution of feedstock sources within this area in the review.	Lincolnshire County Council in its Local Impact Report (document reference REP1-053 paragraph 6.1.3) notes that 'The 2016 Minerals and Waste Local Plan sets out that there is only a modest need for additional capacity for
43.	No consideration is given within the review or elsewhere by the Applicant regarding adverse impacts on recycling in the event feedstock is sourced from a more concentrated area nearer Boston.	energy recovery from waste, and the latest Lincolnshire Waste Needs Assessment (July 2021) confirms that there is no requirement for additional energy recovery in Lincolnshire until at least 2045. However, there is a national
		need for such facilities and Lincolnshire County Council. accepts that the proposal does not compromise the policies of the Minerals and Waste Local Plan in terms of need and location'.
44.	If the Applicant's assumption is correct, that relatively little feedstock would originate from Lincolnshire and the rest of the East Midlands, then - in line with the proximity principle - this raises obvious questions about why the Applicant has chosen to site their facility in Boston, rather than in any of the ports located closer to their main sources of waste.	part that the Facility will put at risk the achievement of recycling and composting targets or the diversion of a
		With respect to the emerging Statement of Common Ground, Lincolnshire County Council found the references within the Fuel Availability and Waste Hierarchy Assessment to the Lincolnshire Mineral and Waste Local

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		Plan, Annex 3, Paras 1.48 to 1.51 to be sound and reasonable (document reference 8.1(1), REP4-003).
		Proximity Principle
		Article 16 Article 16 Directive 2008/98/EC further provides that the network shall enable waste to be disposed of or recovered in one of the nearest appropriate installations, by means of the most appropriate methods and technologies, in order to ensure a high level of protection for the environment and public health. The Defra publication Energy from Waste - A Guide to the Debate (revised edition) (February 2014) sets out succinctly the interpretation of the Proximity Principle. 'Councils have a duty to cooperate to ensure that waste needs across their respective areas are handled properly and appropriately. They need to have regard for the proximity principle, which requires all waste for disposal and mixed municipal waste (i.e. waste from households) to be recovered in one of the nearest appropriate facilities. However, this principle must not be over-interpreted. It does not require using the absolute closest facility to the exclusion of all other considerations.' What is an 'appropriate' facility depends on factors including use of sustainable transport'. The proposed development is appropriate locationally given it
		will be accessed by sea going vessel.
		The carriage of fuel by ship/ boat is encouraged NPS EN-3 (reference paragraph 2.5.25), which in respect to Biomass and Waste states: 'Government policy encourages multi-





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		modal transport and the IPC should expect materials (fuel and residues) to be transported by water or rail routes where possible".
		The Defra publication Energy from Waste, A Guide to the Debate DECC February 2014 (revised edition) provides - 'Where does the waste come from – the proximity principle. [Page 6] 'There is nothing in the legislation or the proximity principle that says accepting waste from another council, city or region is a bad thing and indeed in many cases it may be the best economic and environmental solution and/or be the outcome most consistent with the proximity principle. The ability to source waste from a range of locations/organisations helps ensure existing capacity is used effectively and efficiently, and importantly helps maintain local flexibility to increase recycling without resulting in local overcapacity.'
		The proposed development, which provides for the recovery of energy from RDF transported by water is appropriately located and consistent with the Proximity Principle. The sourcing of RDF for the Facility is subject to letting of contracts, which is a commercial matter. RDF will be sourced from potential locations throughout the UK served by port facilities.
45.	Basis of approach The review claims to follow the approach used for Ferrybridge Multifuel 2 but the Fuel Availability and Waste Hierarchy Assessment 8 is not	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \

⁸ Document reference no 5.9 PINS Reference EN010061

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Paragraph Number	UKWIN's Comment	Applicant's Response
	publically available and has not been provided by the Applicant, and in any case it pre-dates the Resources and Waste Strategy and the 2021 Waste Management Plan for England and their 65% recycling target.	NPS EN-3) was before the examination and the Examiner's reporting took account of this in arriving at the recommendation.
46.	Additionally, the paragraph cited in the review as endorsing their approach ⁹ does not even mention this approach.	
47.	While it is correct that the ExA concluded in 2015 that at that time, with respect to the Ferrybridge proposal, sufficient evidence was before the Examination to support compliance with EN-3 section 2.5, the ExA does not explicitly endorse the approach adopted.	
48.	Furthermore, even if that approach was acceptable in 2015 this not only pre-dates current recycling targets but also was applied to the context of a UK which had a far lower level of incineration capacity.	
49.	It remains unclear how the review actually follows the approach set out in paragraph 1.3: "The approach was to establish if there were considerations which reflect upon management in accordance with the waste hierarchy or that waste plans sought to restrict the movement of waste to outside the plan areas."	The proposed development seeks to source refuse derived fuel from a much wider area than the immediate area from which the Facility is to be located. The review seeks to identify how individual local authorities through policy (a) implemented the waste hierarchy with reference to new
50.	For example, most of the review consists of selective quotes from waster plans followed by a formula of words to the effect that "It is considered that the Facility will not have a material effect on the plan", without being accompanied by an adequate explanation of how the conclusion was reached.	explicitly prevent resultant residual wastes (non-recyclable waste) from being exported from the plan area by supplier for use as feedstock elsewhere, capturing this and reporting as a consideration for fuel sourcing.
51.	The conclusions may or may not have relied on unstated and potentially incorrect assumptions regarding, for example:	

⁹ Paragraph 4.33.29 of the Ferrybridge Examining Authority (ExA) Recommendation Report





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	 that little feedstock would be sourced from the area (when a higher than acceptable proportion of waste arising in one area could be used as feedstock for the Boston incinerator); that the Boston facility would have a significant positive climate change impact (when this is disputed by UKWIN and others); that only non-recyclable waste would be sourced from that area (when evidence shows that most material currently used as incinerator feedstock could have been recycled); 	For Lincolnshire where the proposed development is to be located, the review notes that The Lincolnshire Minerals and Waste Local Plan does not make reference to nationally significant infrastructure development, it places no limitation on energy recovery from wastes delivered to the Facility from outside, or waste arisings within the County.	
	 that the Boston proposal would not prejudice the development of local recycling or incineration capacity (see below); and/or that the Boston facility would operate as R1 (when the Boston plant has not been awarded R1 status - see below). 	Subject to the necessary contracts being in place, the proposed development is open to receiving a refuse derived fuel arising from Lincolnshire which has been baled and imported to site in accordance with the DCO. It is considered that the Facility would not have a material effect	
52.	Without knowing the basis for the conclusions it is impossible to assess the soundness of the logic used to arrive at those conclusions.	on the waste plan.	
53.	In some cases the review concludes the development would not have an effect on the policies of the plan without commenting on overall compliance with the plan. For example, in Herefordshire it is simply stated that "It is considered that the Facility would not impact the policies within the adopted UDP and the emerging MWLP".	With respect to the emerging Statement of Common Ground, Lincolnshire County Council found the Fuel Availability and Waste Hierarchy references to the Lincolnshire Mineral and Waste Local Plan, within Annex 3, Paras 1.48 to 1.51 to be sound and reasonable (document reference 8.1(1), REP4-003).	
54.	Furthermore, for some waste plans the review does not provide any conclusion whatsoever. For example, the Staffordshire entry notes "The Council seeks to minimise the movement of waste by ensuring that it is managed as locally as possible" but does not go on to state whether or not the Boston capacity would have a material effect on that local plan.	The proposed development will be a merchant facility for which contracts for feedstock have yet to be agreed therefore actual source of refuse derived fuel and quantities associated with individual authority areas is yet to be established. The likelihood is that refuse derived fuel will be sourced	





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		Addendum to Fuel Availability and Waste Hierarchy reporting (Document 9.5, REP1-018, section 4 page 20). The reporting identifies (Table 4.1, paragraph 4.1.9) that in total there will potentially be 3.9 million tonnes of fuel within the defined catchment areas that could be transported to the proposed Facility with the application of the higher recycling rate of 65% having been met. In this context, it is concluded that the proposed
55.	Net self-sufficiency Whilst the review acknowledges that many waste plans adopt the principle of 'net self-sufficiency' the review fails to rule out the prospect that the proposed 1.2 million tonnes of capacity might discourage the introduction of re-use, recycling, composting, or residual treatment infrastructure to support the waste plans' net self-sufficiency aspirations.	Waste Plans generally seek to achieve net self -sufficiency, however there has to be an acceptance that residual wastes do cross boundaries between authority and regional areas, where the economic and environmental circumstances allow for this. The most appropriate installation may be a greater distance away, and transport to it by sustainable means (such as by sea going vessel) contributes to locational appropriateness in accordance with the Proximity Principle. The Defra publication Energy from Waste, A Guide to the Debate DECC February 2014 (revised edition) provides - 'Where does the waste come from – the proximity principle. [Page 6] 'There is nothing in the legislation or the proximity principle that says accepting waste from another council, city or region is a bad thing and indeed in many cases it may be the best economic and environmental solution and/or be the outcome most consistent with the proximity





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		principle. The ability to source waste from a range of locations/organisations helps ensure existing capacity is used effectively and efficiently, and importantly helps maintain local flexibility to increase recycling without resulting in local overcapacity.'
56.	Given that local plans focus on development proposals within their area, it is of little value to observe that a plan does not have a specific policy against waste exports. What is relevant therefore is that these plans seek to achieve net self-sufficiency and that the development would go against these ambitions.	Waste Plans generally seek to achieve net self -sufficiency, however there has to be an acceptance that residual wastes do cross boundaries between authority and regional areas, where the economic and environmental circumstances allow for this. The most appropriate
		installation may be a greater distance away, and transport to it by sustainable means (such as by sea going vessel) contributes to locational appropriateness in accordance with the Proximity Principle.
57.	Similarly, the acknowledgement within such plans that there might be some level of cross-border movement is not the same as endorsing the construction of capacity which could result in significant increases in waste exports over great distances.	The DEFRA publication Energy from Waste, A Guide to the Debate DECC February 2014 (revised edition) provides - 'Where does the waste come from – the proximity principle. [Page 6] 'There is nothing in the legislation or the proximity principle that says accepting waste from another council, city or region is a bad thing and indeed in many cases it may be the best economic and environmental solution and/or be the outcome most consistent with the proximity principle. The ability to source waste from a range of locations/organisations helps ensure existing capacity is used effectively and efficiently, and importantly helps maintain local flexibility to increase recycling without resulting in local overcapacity.'





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58.	Increased demand for incineration feedstock from outside of a plan area could adversely impact the economic viability or contractual ability to build more local recycling or residual waste treatment capacity.	The proposed development seeks to use residual waste feedstock presently shipped to the continent for use as a fuel for energy generation as a or waste which is presently landfilled as has been set out in document 9.5 (REP1-018): Addendum to Fuel Availability and Waste Hierarchy Assessment (Section 4 pp20).
59.	UKWIN's WR set out how incineration poses a threat to recycling, pointing to Defra's acknowledgment that much of what is currently in the residual waste stream is recyclable, noting how for Wheelabrator Kemsley North the Secretary of State agreed that "the [incinerator] projects would divert a significant proportion of waste from recycling rather than landfill" risking the achievement of the recycling targets within the Waste Local Plan.	
60.	The review fails to adequately consider how the Applicant's centralised approach would fail to comply with the proximity principle endorsed within many waste plans.	
61.	R1 status and the Wheelabrator Kemsley North ExA report As noted in UKWIN's WR, the Wheelabrator Kemsley North refusal is a material planning consideration, and the review fails to take account of the associated concerns that R1 ('Other Recovery') status should not be taken for granted: 4.10.119. The Applicantsaid that R1 accreditation could not be gained at this time. As is clear from the Government's guidance on applications for R1 status, an application can be made based on design dataThe response to ExQ4was based on assumptions on its design and performance used for the purposes of the R1 calculation which indicated energy recovery efficiency value was over 0.65 4.14.59. It is not in dispute that Project K3 and Project WKN are both facilities proposed for the incineration of waste with energy recovery, which if they achieved R1 status, would represent Other Recovery facilities for the purposes of the waste hierarchy which sit above	The Facility is proposed to be an 'R1' plant and would therefore constitute recovery. The recovery efficiency determination would be provided in detail as part of the evidence to support the Environmental Permit application for the Facility which is being progressed.





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	'disposal'. The decision whether R1 status is achieved or not, is a matter for the EA. I cannot with a high level of confidence assume that either project within the Proposed Development would achieve R1 status.	
62.	As far as we are aware the Applicant has not secured Design-stage R1 certification for the plant, and should therefore be treated as a disposal facility for the purpose of placement within the waste hierarchy.	
Deadline 2 S	submission: UKWIN Comments on Applicant's Supplementary Climat	e Change Report Document 9.6 (REP2-057)
Introduction		
1.	The Applicant made a number of statements regarding climate change in their Deadline 1 submissions dated 19th October 2021, including within Document 9.6 which is the Applicant's Climate Change Report on Further Greenhouse Gas (GHG) Emissions Analysis and Consideration of Waste Composition Scenarios.	Noted
2.	Many of our critiques are set out in our Written Representation (WR) and so do not need repeating	Noted
Internal Inco	nsistency in Document 9.6	
3.	Instead of resolving the internal inconsistency problem associated with the Applicant's original Climate Change report, this latest addition exacerbates, and serves to highlight, the confused nature of the Applicant's approach, raising additional concerns.	Please see the response to paragraph 5 (helow)
4.	As such, no weight should be given to any claimed climate change benefits of the proposal, and an adverse inference should be drawn regarding the potential for this proposal to give rise to adverse climate change impacts and to hamper efforts to decarbonise the electricity supply	The original GHG emissions assessment set out in Chapter 21 of the ES (Climate Change document reference: 6.2.21, APP-059) has been developed as a cautious worst-case scenario, consistent with the best practice approach to EIA. The further sensitivity analyses conducted were





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		incorporated to provide an "envelope" around this central case assessment.
5.	As noted in UKWIN's WR, one of the key parameters for evaluating the climate impacts of a waste incinerator is the composition of the feedstock. The specific types and proportions of waste (paper, plastic, food, etc.) impact on how much energy is generated, how much fossil and biogenic CO2 is released, how much waste can be processed, and how the material would behave in landfill.	compositions of the RDF that would be processed at the proposed Facility are currently unknown, therefore the additional analysis set out in the document 'Climate Change – Further Greenhouse Gas Emissions Analysis and Consideration of Waste Composition Scenarios' (document reference 9.6, REP1-019) investigated the effects of different carbon and fossil carbon contents of the RDF processed at the proposed Facility and in landfill waste treatment options. The carbon and fossil carbon contents are the main factors in determining the overall effect of both waste treatment pathways on GHG emissions.
7.	The connection between the feedstock's carbon content and energy content (calorific value) means that it would not be valid to consider changes in carbon content without also considering the impact on energy generation.	It is acknowledged that there is potential that the calorific value will affect power outputs. Any future changes to the composition of waste and RDF feedstock are difficult to predict due to a number of uncertainties including





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		Government Policies, the ability to meet (or exceed) recycling targets and individual behaviour. Therefore, the export of 80MWe of electricity is a central estimate, and would be subject to a number of variables such as feedstock, fluctuations in demand, overhead line capacity and weather conditions. The calculations for the parasitic load for the proposed Facility of approximately 22MW were based on initial and conservative calculations. This included some plant which has now been removed from the design, and further calculations to provide updated parasitic load figures are being carried out. It is therefore likely that the parasitic load figures represent an overestimation, and the Applicant is confident that they can meet levels of (at least) 80 MWe output, even with accounting for changings to the calorific value of the feedstock over the period of a year.
		The approach adopted in document 'Climate Change – Further Greenhouse Gas Emissions Analysis and Consideration of Waste Composition Scenarios' (document reference 9.6, REP1-019) was to consider potential GHG emissions from a range of waste compositions by fossil and carbon content, in the absence of specific details for the source of the feedstock the proposed Facility. This analysis provided an overview of the range of potential emissions arising from the proposed Facility according to the feedstock.
8.	Page 2 of the Applicant's Climate Change Report on Further Greenhouse Gas (GHG) Emissions Analysis and Consideration of Waste Composition Scenarios claims that the report was "carried out to determine the	the document 'Climate Change – Further Greenhouse Gas





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	potential effect of changes to the composition of RDF waste on GHG emissions arising from the Facility".	019). The analysis considered differing levels of fossil and
9.	However, the approach adopted in the report does not actually assess the potential effects of changes in composition on the overall climate change impacts of the facility.	biogenic carbon, with a range of 40 – 60% of both components, as stated in Section 2.2 and on Page 4 of the document.
	It would have made sense for the applicant to have looked at different feedstock composition scenarios and from them determine the associated:	
10.	 amount of biogenic and fossil carbon, calorific value, and extent to which the material would decompose in landfill (i.e. DDOC value) 	This analysis therefore considered the impact of changes to waste compositions, in terms of fossil and carbon contents, to emissions from the proposed Facility, and similar scenarios for landfill.
11.	As part of this process the Applicant should have provided relevant sensitivity analysis for different key non-composition assumptions such as plant efficiency (taking account of anticipated downtime and underperformance) and the electricity generation offset.	The GHG emissions assessment in the ES (document reference: Chapter 21 Climate Change document reference: 6.2.21, APP-059) assumed that the Facility would operate for a maximum of 8,000 hours per year. This therefore accounts for anticipated downtime associated with the Facility for maintenance or repair.
		Please also refer to the response to paragraph 7 which discusses the electricity generation offset.
12.	Adopting such an approach would have allowed for the impact of changing composition on the direct CO2 emissions, energy generation and landfill impacts to be estimated (even if there remained significant uncertainty as to where within the range the proposal fell).	The approach set out in in the document 'Climate Change – Further Greenhouse Gas Emissions Analysis and Consideration of Waste Composition Scenarios' (document reference 9.6, REP1-019) does consider the impact of
13.	The Applicant instead ignored some crucial elements whilst only	changing composition in terms of carbon and fossil carbon

¹⁰ Defra (2014), Energy from waste, A guide to the debate, February 2014 (revised edition)





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	considered other elements in isolation, without providing any sensitivity analysis for key non-composition assumptions, and without demonstrating how their assumptions can be considered consistent with current or future RDF composition.	considered the effect on changing carbon and fossil carbon		
14.	Thus the Applicant's inadequate approach fails to show the impact of changing waste composition on the net impacts of their proposal.			
Carbon Con	Carbon Content of the Waste			
15.	The report does not show that a 20-30% carbon content range would be representative of current or future RDF feedstock.	The referenced statement refers to the parameters that were adopted in the updated assessment, which were		
16.	Furthermore, the report does not explore the implications of those feedstock scenarios on electricity generation, nor on the overall impacts that could be expected if waste of that composition were sent to landfill (with or without biostabilisation) or exported to a European incinerator.	obtained from the Defra 2014 ¹¹ reference. The reference for waste streams with a carbon content of 20 – 30% was obtained from a separate paper as part of a Defra R&D project in 2006 ¹² . This was supported by studies carried		
17.	The Applicant states on page 3 of the report that: "The parameters for the assessment were obtained from Defra guidance (Defra 2014a), where waste streams with a 20 – 30% carbon content were assumed."	out more recently for other EfW studies, as listed on page 3 in Section 2.2 of the document. The carbon content of waste streams is influenced by a		
18.	The Applicant does not state where this 20-30% figure appears in the cited Defra document.	number of factors, which are difficult to predict in the futur due to uncertainties national and regional policies and individual behaviours. The 20 – 30% carbon content		
19	Table 10 of Defra 2014a states that for the C (carbon) content of the waste that the range considered was derived from 'Carbon balances / WRATE model' without the upper and lower bounds being specified.			

¹¹ Energy recovery for residual waste, A carbon based modelling approach, February 2014
¹² Carbon balance and Energy Impacts of the Management of UK Wastes, Defra R&D Project WRT 237, Final Report, December 2006, ERM and Golder Associated





	id Skotting DTTV		
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20.	Many of the feedstock scenarios considered in the Defra report and in the additional studies cited by the Applicant relate to mixed municipal solid waste (MSW), not to RDF.	· ·	
21.	Given that RDF is nearly always composed of material that has been dewatered, and typically contains significant proportions of plastic and other hihgh-carbon materials, RDF is likely to fall on the upper end of any carbon content range.	It is noted that RDF feedstocks are likely to have a higher carbon content than some other waste streams, which is why the approach to predict emissions from a range of carbon and fossil carbon contents was adopted. This was adopted so as to reflect the uncertainty in the actual future composition of RDF, produced from differing pre-treatment processes and different source bulk MSW sources.	
Fossil Perce	entage of the Carbon		
22.	The Applicant states in page 4 of the report that: "a range of fossil and biogenic carbon proportions were tested, in accordance with the sensitivity analysis (Section 5.1) of the Defra 2014study (Defra, 2014a)."	The range of carbon and fossil carbon proportions were tested in the additional analysis to predict a range of emissions under different waste composition scenarios.	
23.	The Applicant sets out a number of fossil carbon content assumptions ranging from 40% to 60%. In many cases these are based on MSW rather than RDF, but the Applicant does not provide any indication of the most likely placement within the range for current or future RDF feedstock.	This approach was undertaken due to the uncertainties in the composition of RDF that will be processed at the proposed Facility, and to provide further analysis compared to the specific waste composition assumed for the GHG assessment in the ES (document reference: Chapter 21	
24.	Curiously, the Applicant does not include any consideration of the one waste composition scenario contained within the cited Defra report which specifically mentions RDF, that assumes 55% fossil carbon ¹⁴ .	Climate Change document reference: 6.2.21, APP-059). The modelling ¹³ to accompany the Defra report considers MSW and RDF in a similar manner, as stated in paragraph	
25.	The 2014 Defra report focuses primarily on MSW rather than RDF, and pre-dates the Resources and Waste Strategy (and the Government's	33 of the document, which states:	

¹³ Defra 2014 – Energy recovery for municipal waste, a carbon based modelling approach

¹⁴ This is the entry for 'Plastic and paper with contaminants of food at 10% (RDF from an MBT process)' set out in Table 13 on page 33 of the report. The assumption stated is that 45% of the carbon would be biogenic carbon, which means 55% would be fossil carbon.





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	plans regarding separate collection of food waste mentioned on page 2 of the Applicant's report).	"Although the model could potentially apply to residual
26.	As such, the Applicant's citation of the 2014 Defra report does not provide confidence regarding the Applicant's proposed range of figures.	waste of any type, our primary consideration is in relation to municipal solid waste (MSW) as the majority of plants in the UK currently burn this type of waste, or RDF derived from it." As UKWIN states within its response in paragraph 27, Defra's own figure suggests that the fossil carbon content is therefore within the range of carbon and fossil carbon contents presented in 'Climate Change – Further Greenhouse Gas Emissions Analysis and Consideration of Waste Composition Scenarios' (document reference 9.6, REP1-019). The 40-60% fossil carbon range considered encapsulates the Defra assumption of 55%.
27.	Defra's 55% RDF figure does however indicate that the proposal is likely to be on the upper range of fossil carbon content.	As stated in the responses to paragraphs $22-26$, a range of fossil carbon contents from $40-60$ % was assumed to provide a wide range of scenarios, due to uncertainties in likely waste compositions in the future. Should a 55% fossil carbon content be assumed, it would still represent a saving of $60,000-120,000$ tonnes of carbon dioxide equivalent (CO_2e) when compared to sending the waste to landfill, depending on the overall carbon content of the waste (ranging from $20-30\%$).
EfW and Lar	dfill 'Do Nothing' Counterfactuals	
28.	With respect to the two EfW 'Do Nothing' scenarios (Scenarios 2 and 3 in Table 3), the Applicant provides a range of potential emissions figures,	





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	but these do not correlate with the range of waste composition assumptions used elsewhere in the report.	from Table 21-25 of Chapter 21 of the ES (document reference: Chapter 21 Climate Change document reference: 6.2.21, APP-059). These scenarios are not intended to correlate with the waste composition assumptions used elsewhere in the document 'Climate Change – Further Greenhouse Gas Emissions Analysis and Consideration of Waste Composition Scenarios' (document reference 9.6, REP1-019). The purpose of Section 2.3 of the document was to outline that the addition of methane (CH ₄) and nitrous oxide (N ₂ O) emissions would not have a material impact on the outcome of the GHG assessment presented in Chapter 21 of the ES (document reference: Chapter 21 Climate Change document reference: 6.2.21, APP-059).
29.	Similarly, with respect to the Landfill element of the three 'Do Nothing' scenarios, as explained below, the Applicant does not adequately assess the impacts that would be associated with the different scenarios and does not demonstrate that those scenarios would be consistent with the six carbon content / fossil percentage scenarios listed on page 4 of Document 9.6.	assumed to be 50% in the mid-range of those presented





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30.	The Document 9.6 report also fails to demonstrate that the landfill and EfW export assumptions are representative of current or future RDF composition.	
31.	Pages 7-8 of Document 9.6 contains three scenarios for different rates of carbon content in landfill (A, B and C), while assuming a fixed rate of 50% fossil carbon percentage despite the Applicant stating on page 4 of the document that this could range between 40% and 60%.	compositions, this wide range was considered to determine
32.	Additionally, despite the different compositions implying different rates of DDOC (i.e. decomposability) the Applicant relies only a single fixed assumption for DDOC content of 50% for all three scenarios.	The degradable decomposable organic carbon (DDOC) content of 50% figure was adopted in accordance with Defra's Energy from Waste – A Guide to the Debate, which is considered to be a conservative figure.
33.	It is noted in the Good Practice Guidance for GHG Assessment that is before the Examination that the feedstock composition impacts on how much waste would not biodegrade in landfill (therefore acting as a biogenic carbon sink).	The Applicant recognises that there are many waste





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34.	Sending waste through an MBT process to produce RDF can also reduce the extent to which that waste would biodegrade in landfill, decreasing methane emissions from landfill and increasing the extent to which that material would act as a biogenic carbon sink in landfill.	methane emissions.
35.	As noted in UKWIN's WR and in the Good Practice Guidance, the use of aerobic digestion can further reduce the decomposability of landfilled materials. It could be expected that any waste sent to landfill would be increasingly likely to be biostabilised to minimise climate change impacts.	The approach to determining potential GHG emissions from
36.	It appears that the Applicant has failed to take account of either the way that RDF and biostabilisation can reduce the decomposability of waste or the way that RDF or biostabilised waste can act as a biogenic carbon sink in landfill for which it should be given credit.	guidance and values from Defra ¹⁵ , and accounted for factors such as the DDOC content of waste streams.
37.	These oversights are found in the Applicant's original assessment and remain uncorrected in their Document 9.6 assessment, despite the relevance of these factors to the overall impacts of changes to waste composition anticipated to occur during the lifetime of the proposed Boston incinerator.	There is consistency between some of the scenarios presented in 'Climate Change – Further Greenhouse Gas Emissions Analysis and Consideration of Waste Composition Scenarios' (document reference 9.6, REP1-019), particularly those with a 50% fossil carbon content. The analysis presented shows that emissions of GHG fro processing waste at the proposed Facility would be lower under most scenarios than if the waste was sent to landfi
38.	For a valid comparison it is crucial that the composition assumptions for the 'Do Nothing' scenarios are consistent with the other assumptions used to reach conclusions about the proposal's overall climate impacts.	
39.	Unfortunately this is still not the case for any of the 'Do Nothing' scenarios, for the reasons set out above and in UKWIN's WR.	

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 $^{^{\}rm 15}$ Defra (2014b), Review of Landfill Methane Emissions Modelling, Golder Associates





Table 1-3 The Applicant's Response to UKWIN's Comments at Deadline 3

Paragraph Number	UKWIN's Comment	Applicant's Response
Deadline 3 Submission: UKWIN's Deadline 3 Comments on Applicant's Assessment of Alternative Solutions (REP3-038)		
Introduction		
1.	As part of the applicant's Without Prejudice Habitats Regulations Assessment Derogation Case they provided an Assessment of Alternative Solutions (Applicant's Reference 9.28, Inquiry Reference REP2-011), dated 11th November 2021.	
2.	The applicant relies on that assessment to support their Imperative Reasons of Overriding Public Interest (IROPI) Case (Applicant's Reference 9.29, Inquiry Reference REP2-012), also dated 11th November 2021.	
3.	In particular, the applicant relies on REP2-011 for Stage 3 of their Shadow Habitats Regulations Assessment (HRA). Because UKWIN does not believe that the application meets the Stage 3 HRA requirements we do not believe that the proposal would ever reach Stage 4 of the HRA process.	
4.	In the event that the application were to reach Stage 4, then the case that UKWIN has already made regarding the lack of need for the proposed incineration capacity and how the claimed benefits have been overstated and/or under-evidenced by the applicant would be sufficient to demonstrate that the application would fail to meet Stage 4. As such there is no need for UKWIN to provide further evidence specifically on this point.	
5.	In light of this, UKWIN focuses only on HRA Stage 3 in this representation.	





Paragraph Number	UKWIN's Comment	Applicant's Response
UKWIN's com	nments on the Applicant's Assessment of Alternative Solutions	
6.	The applicant's approach to assessing alternatives is wholly inadequate, and falls well short of demonstrating that there are no viable alternatives to the scheme proposed for this capacity at this location.	
7.	It is noted in Draft EN-3 Paragraph 2.10.4 that: "the primary function of EfW plants is to treat waste".	The management of residual waste is one of the key objectives for the Facility; however, as clearly stated within
8.	This is a position endorsed by the incineration industry's trade body the Environmental Services Association (ESA). In their March 2021 Recovering energy from waste FAQs the ESA makes clear that, in their view: "the primary function of energy recovery is to treat residual waste rather than generate energy".	EN-1 ¹⁶ and EN-3, Energy from Waste forms an important role in managing security of supply of electricity. Paragraph 2.5.2 of the Draft EN-3 ¹⁷ also states "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.". Therefore, it is clear that although managing residual waste is important, it is not the sole objective of the Facility.
9.	It would therefore make sense for the key objective for the scheme proposed for Boston to be described as 'managing residual waste', with other outcomes described as 'claimed benefits' (or disbenefits) of the scheme.	In addition, the other objectives of the Facility are in line with national and local planning policy. The approach of basing project objectives on national and local planning policy is precedented in other HRA assessment of alternative solutions, such as those prepared for new nuclear build facilities at Sizewell C and the Wyfla Newydd Project.
10.	In line with this more conventional approach to assessing alternative solutions, a consideration of alternatives would entail assessing	·

Department of Energy and Climate Change (DECC). 2011a. Overarching National Policy Statement for Energy (EN-1). London: HMSO
 Department for Business, Energy & Industrial Strategy. 2021. Draft National Policy Statement for Renewable Energy Infrastructure (EN 3).





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11.	whether or not there are alternative waste management options to treat the proposed feedstock. Such alternatives could include treatment capacity either at a similar incineration facility located at a different port or a suite of existing or potential recycling, re-use and/or incineration facilities located throughout the UK.	in the context of HRA, the approach to alternative solutions should provide alternatives that meet the original objective of the proposal. The definition of an alternative solution is based on paragraph 4 of page 9 in Methodological Guidance for the Habitats Regulations ¹⁸ : "Alternative ways of achieving the objectives of the project or plan that avoid adverse impacts on the integrity of the Natura 2000 site". Within the Defra, NE, Welsh Government and Natural Resources Wales 2021 guidance ¹⁹ (Habitats regulations assessment: protecting a European site), "nuclear instead of offshore wind energy" is quoted as an example of an alternative solution which may not meet the original objective of the proposal. Therefore, alternative waste management options have not been considered.
12.	Instead, the applicant, in their Assessment of Alternative Solutions, adopts an absurdly long list of oddly specific so-called 'key' objectives that conveniently match the applicant's claimed benefits for the proposed scheme, and they then carry out their assessment on the basis that only a facility which would meet all those objectives at a single location would be acceptable.	Please see the response to rows 7 – 9.
13.	Unsurprisingly, this seemingly contrived process ruled out numerous reasonable alternative waste management options, leaving only	

¹⁸ European Commission. 2000. Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. ("Methodological Guidance for the Habitats Directive").

¹⁹ Department for Environment, Food and Rural Affairs (Defra), Natural England, Welsh Government and natural Resources Wales. 2021. Habitats regulations assessments: protecting a European site.





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	minor tweaks to the proposed scheme to be considered in the later stages of their shadow HRA Stage 3 assessment.	
14.	Each of the various objectives listed in REP2-011 Table 5-1 ('Overview of the Proposed Development's Objectives') could easily be met in alternative — and in many cases superior - ways when considered individually or by theme, as illustrated below:	The purpose of the Assessment of Alternative Solutions (document reference 9.28, REP2-011) was not to assess alternative solutions to each individual scheme objective but to assess "Alternative ways of achieving the objectives of the project or plan that avoid adverse impacts on the integrity of the Natura 2000 site". Please see responses below.
	i. Sustainable and renewable energy (To provide a sustainable and renewable form of energy recovery, to contribute towards meeting renewable targets and carbon emissions and is in line with the requirements of NPS EN-1 and EN-3) It is obvious that a genuinely sustainable source of wholly renewable energy, such as wind and solar, would better meet this objective, not least because unlike the Boston incinerator these forms of energy generation would not entail the release of significant quantities of fossil CO2.	The response in rows 10 and 11 above provides reasoning as to why alternative renewable energy sources have not been considered within this assessment. It is clear from NPS EN-1 and EN-3 that energy from waste contributes to the renewable energy supply in the UK as stated within the description of the objective (Table 5-1).
	ii. Waste management (To reduce the quantity of waste disposed to landfill) The top tiers of the waste hierarchy are the Government's preferred means for diverting waste from landfill. We also note, in this respect, the concerns raised by the Environment Agency during the second Issue Specific Hearing regarding the potential for the incinerator bottom ash (IBA) and air pollutions control residues (APCr) to be landfilled in the event that the aggregate proposed by the applicant either fails to meet end-of waste criteria or is not considered permittable, e.g. due to legal prohibitions on mixing IBA and APCr.	Although higher tiers of the waste hierarchy are preferable there is still a proportion of residual waste which is not managed by these higher tiers and is disposed of, so recovering this waste is one the Facility's key objectives. The Applicant has provided a note on the Lightweight Aggregate Facility at Deadline 4 to demonstrate that there are similar plants operating under an Environmental Permit in the UK (document reference 9.53, REP4-018). Therefore, it is not anticipated there will be an issue permitting this facility.





Paragraph Number	UKWIN's Comment	Applicant's Response
	iii. Waste management (To reduce the quantity of waste exported abroad) As noted above, The top tiers of the waste hierarchy are the Government's preferred means for diverting waste from landfill. Furthermore, we note the Committee on Climate Change's June 2020 Progress Report to Parliament, which makes clear that increased recycling, rather than increased domestic incineration capacity, "will be key to phasing out waste exports".	
	iv. Local employment and skills (To nurture and develop skills within Lincolnshire / To create employment opportunities within Lincolnshire) Far more jobs are created through repair and through recycling than through incineration, yet the applicant fails to consider these reasonable and preferable alternatives approaches to job creation. This matter is covered in further detail in UKWIN's Response to REP2-006 (UKWIN'S D3 Comments on the applicant's D2 comments on UKWIN'S D1 Written Representation).	The purpose of the Assessment of Alternative Solutions (document reference 9.28, REP2-011) was not to assess alternative solutions to each individual scheme objective but to assess "Alternative ways of achieving the objectives of the project or plan that avoid adverse impacts on the integrity of the Natura 2000 site". This objective for creating employment opportunities is specific to the particular scheme. Please see the response to row 10 and 11 above.
	v. Transport infrastructure (To minimise adverse impacts on the function and efficiency of strategic transport infrastructure / To minimise carbon emissions associated with transportation) A series of smaller facilities located nearer to where the waste arises would have lower adverse impacts on the function and efficiency of strategic transport infrastructure than the proposed Boston facility.	As discussed in the response provided in row 10 and 11 above, a series of smaller facilities has not been considered as an alternative option based on the objectives of the project.
	vi. Location (To develop the Facility at a location that aligns with local planning policy) Building an incinerator at a more suitable site in a location where there is greater demand for residual waste treatment would better meet this objective.	As the Facility is designed to meet a national need for waste management, it is key to have an objective to develop on land suitably allocated for this type of development.





Paragraph Number	UKWIN's Comment	Applicant's Response
	vii. Waste (To minimise waste and apply the principles of waste hierarchy) As previously set out by UKWIN, this large-scale proposal for an electricity-only incinerator with an unclear feedstock in an area which already has high levels of incineration capacity would fail to minimise waste arisings and could prejudice the waste hierarchy.	It is a general objective of the scheme to promote the waste hierarchy within its processes for example using ash and air pollution control (APC) residues in producing a lightweight aggregate. As noted in response to rows 5-6 above, the Facility is also required to comply with a waste hierarchy scheme approved by the relevant planning authority.
15.	The applicant rules out a facility at an alternative location outside of Lincolnshire in REP2-011 Table 7-2 ('Screening the long list of potential solutions') for the primary reason that it would not create jobs in Lincolnshire and Boston ("This option would be contrary to the local objective of providing employment and skills benefits within Lincolnshire and Boston").	
16.	The applicant appears to have overlooked the obvious point that locating the proposed facility elsewhere would then support job creation elsewhere in the country - so would still have the benefit of creating jobs - and this would leave the application site available for other uses, which could potentially create yet more jobs.	
17.	The applicant has not provided a reasonable justification for ruling out the use of one or more alternative locations as an alternative to their current proposal.	
18.	In their REP2-011 Table 8-1 ('Step 4: assessing the feasibility of shortlisted options') the applicant rules out the alternative option of reducing the amount of RDF required on the claimed basis that such a reduction would not be technically feasible, stating: "A higher calorific value (CV) would result in a lower feedstock requirement to achieve the same capacity to the National Grid.	The Facility is designed to deliver approximately 80 megawatts electric (MWe) to the National Grid. In order to meet objective 1 and to provide consistency of supply to the UK's energy needs (in line with EN-1 and EN-3), the Facility will operate at this level of electrical export.





Paragraph Number	UKWIN's Comment	Applicant's Response
	However, the design case for the Facility is a calorific value (CV) of 10.1 MJ/kg, which is based on a midrange value based on a range of calorific values (8-14 MJ/kg). It is not guaranteed that this value could be increased particularly as waste CV values could vary over the operational phase of the Facility. Therefore, it is not technically feasible to assume a higher CV would be available and could be utilised over the entire operational phase of the Facility".	
19.	This attempt at justification is not reasonable, not least because the applicant is free to simply lower the electrical output of their proposed facility to reflect a reduced level of feedstock.	
20.	It should be noted that across the UK there are many examples of incinerators treating RDF that operate at levels of feedstock input that are well below 1.2 million tonnes per annum.	
21.	One need not assume higher CV in order to reduce the level of RDF input, one simply needs to reduce the anticipated design output lowering the capacity to the National Grid.	
22.	Alternatively, the same National Grid capacity could be achieved through two or more smaller incineration facilities, and/or through other forms of electricity generation.	The grid connection point at the Facility facilitates the net export of 80MW to the National Grid. Therefore, the Facility fully utilises the electricity export at this location, providing a national solution to waste management. Having two smaller facilities is not considered to meet the project objectives as discussed in rows 10 and 11.
23.	As Refuse Derived Fuels are not normally sent to landfill, there are numerous alternative residual waste treatment options that would have a lesser effect on the integrity of the European sites under consideration.	As discussed in the response to row 10 and 11 above, alternative waste treatment options were not considered as alternative options based on the objectives of the project.

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Paragraph Number	UKWIN's Comment	Applicant's Response
24.	The Boston proposal amounts to a proposal to burn RDF destined for other incinerators (that could be expected to be more efficient, either because they are part of an existing Combined Heat and Power (CHP) scheme and/or because their parasitic load is lowered than that of the Boston facility) to be burnt instead at a new facility.	The efficiency of other EfW plants is not guaranteed and may vary due to a number of factors including the age of facility, location and emissions standards (such as for non-EU countries). The Boston Facility will be Combine Heat and Power (CHP) ready and includes benefits such as use of vessel transport, carbon dioxide recovery and production of a
25.	There is no overriding public interest in burning RDF in Boston instead of in existing facilities capable of burning RDF, including existing CHP plants.	
26.	Even if additional RDF processing capacity were required in the UK, it would not have to be at this specific port and it would not even have to be at one large facility rather than a suite of smaller plants located closer to the origins of residual waste arisings.	As discussed in the response provided in row 10 and 11 above, a series of smaller facilities has not been considered as an alternative option based on the objectives of the project.
27.	Just as there are preferable alternatives with respect to residual waste treatment, there are also preferable alternatives when it comes to generating genuinely renewable and low carbon energy. Yet, the applicant scopes out a consideration of alternative ways of generating energy, saying (at REP2-011 Paragraph 4.4.2) that: "an alternative would not include an alternative form of energy generation".	As discussed in the response to row 10 and 11 above, the Applicant stands by this methodology noting the relevant guidance which suggests such options would not be appropriate for the Assessment of Alternative Solutions.
28.	Based on the various shortcomings outlined above it is clear that the applicant provided a genuine evaluation of reasonable alternative solutions, fatally undermining their Habitats Regulations Assessment Derogation Case.	





Paragraph Number	UKWIN's Comment	Applicant's Response
Deadline 3 St (REP3-037)	ubmission: UKWIN's Deadline 3 Comments on Applicant's Deadli	ne 2 Comments on UKWIN's D1 Written Representation
RESPONSE T	TO THE APPLICANT'S TABLE 1-3 COMMENTS ON KEVIN BLANCH	ARD'S REPRESENTATION
1.3.3	Applicant's comment: " Under National Policy Statement EN-1 the electricity generated is classed as renewable" UKWIN response: "The applicant's is incorrect in their continued characterisation of the electricity generated as 'renewable' for the reasons set out in UKWIN's Written Representation (REP1-068) paragraphs 123-133."	Section 3.4 of NPS EN-1 'The role of renewable electricity generation' confirms at 3.4.3 'Energy from Waste' 'The energy produced from the biomass fraction of waste is renewable'.
1.3.3	Applicant's comment: "The economic benefits, locally and nationally, are linked with local employment, agreements between the Applicant and local authorities and service suppliers and others, and sizeable taxable revenue from this commercial operation". UKWIN response: "As the applicant claims that generating 'taxable revenue' is a potential benefit of the scheme, then - if one accepts the applicant's logic - it follows that the loss of landfill tax revenue and the loss of Landfill Communities Fund monies from waste diverted from landfill to the proposed facility would be a disbenefit. Given that the standard rate of landfill tax is currently £96.70/tonne and is expected to rise with inflation, this amounts to a potential loss of up to £116m (rising with inflation) of landfill tax and Landfill Communities Fund revenue per year. This disbenefit would far outweigh what the applicant refers to as the benefit of 'sizeable taxable revenue', resulting in a significant net tax revenue disbenefit of the scheme.	Development are set out in ES Chapter 20 (Socio-Economics) (document reference 6.2.20, APP-058). This makes no reference to taxable revenue. It does, however, identify the creation of new job opportunities (during both the construction and operation phases) and increased energy security/reliability as beneficial effects (see Table 20.19). With respect to employment, Table 20.13 of ES Chapter 20 (Socio-Economics) (document reference 6.2.20, APP-058) states that the Proposed Development could be expected to create 108 direct FTE (full-time equivalent) jobs. It may be the case that recycling creates more jobs per 10,000 tonnes of waste processed than landfill/incineration. However, it is not the purpose of the ES Chapter 20 (Socio-Economics)





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	are created through recycling and repair than through incineration, the use of the site for the latter rather than the former would result in a net loss of jobs. This situation is summarised in the graphic overleaf, which is based	of the proposed development against those associated with a hypothetical scheme focussed on recycling. With respect to supporting increased energy security and reliability, paragraphs 20.7.79 and 20.7.80 of the (Socio-Economics) (document reference 6.2.20, APP-058) state that the Proposed Development is capable of generating 640,000MW of energy each year. This will help to add to increase the proportion of energy generated from renewable/partially renewable sources both locally and nationally, thereby helping to reduce dependence on traditional
	processed a year 1 REPAIR 404 jobs RECYCLE 115 jobs COMPOST 7 jobs LANDFILL OR INCINERATE 2 jobs	fossil fuel energy sources and assisting with the transition to net-zero. This will help to protect UK residents from risk of price fluctuations/interruptions to supply arising from: Regulatory failures; Geo-political instability; and Conflict/breakdown in diplomatic relations in other par of the world. The Applicant agrees that the average standard landfill tax is in the order of £96.70/tonne (te). However, the tax situation is complex for a development such as this one with tax relationships relating to electrical wholesale power (added at around £80/MWh) and the two other products to be produced at the Facility (namely the lightweight aggregate product and Carbon Dioxide at today's price of £73/Te CO ₂ e). Additionally the direct and indirect employment generated through the project should be added to the increased wealth generated by





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		the project, which increases to the tax take of the UK plc by HM Treasury.
RESPONSES	TO APPLICANT'S TABLE 1-5 COMMENTS ON UKWN'S REPRESE	NTATION
Introduction		
1.5.3	Applicant's comment: "At the present time, the exact status of UKWIN's Good Practice Guidance document, dated July 2021, is unclear. In particular, whether it has been peer-reviewed" UKWIN response: "The Good Practice Guidance has indeed been peer reviewed, including by climate change practitioners, and the Guide has been in the public domain since July 2021 and therefore open to public scrutiny. Many of the documents and figures included within the Guidance were themselves subject to some form of peer review. It is important to note that the Good Practice Guidance document primarily constitutes a synthesis report or 'meta review' drawing together numerous key examples of good practice from throughout the industry (including from ESA members) in an organised and systematic way, accompanied by comprehensive referencing to the source material, encompassing 130 footnotes linking readers to Government and other sources of the information used in the report. As the Good Practice Guidance document points out: "The recommendations are based on an extensive review of approaches being taken or recommended by climate change professionals to	The content within the UKWIN 'Good Practice Guidance' is noted, however this document has not been adopted by organisations such as Defra or the Environment Agency, Environmental Services Association or the Chartered Institution of Waste Management or accepted as an appropriate methodology for evaluating the performance of energy from waste plants. The current Government guidance document is, "Energy from waste. A guide to the debate", published by Defra in 2014.





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Paragraph Number	UKWIN's Comment	Applicant's Response
	Consideration is also given to analysis carried out for this guide which indicates that real world performance reported at UK incinerators can be significantly worse than the climate change performance claimed within planning or permitting applications".	
	As the Guidance document includes analysis of the real world performance of a number of incinerators operated by Viridor, which formed the evidence base for Guidance document Recommendation 6 - including a consideration of how this data compares to the performance Viridor anticipated at the planning and permitting stages - in May 2021 UKWIN provided Viridor with an advance copy of our assessment so that we could take on board any feedback they had to offer about our analysis.	
	UKWIN also contacted the ESA (also in May 2021) and provided them with an opportunity to offer input regarding the CO2 emissions from existing UK incinerators. The ESA advised the use of data from Tolvik alongside information provided by operators to the Environment Agency, and these subsequently provided the underlying evidence base for Guidance document Recommendation 7."	
Achievability	of meeting (or exceeding) current waste targets	
1.5.47	Applicant's comment: "The Applicantis providing capacity to divert residual waste from landfill to avoid greenhouse gas emissions such as methane"	Facility is not yet known. Due to uncertainties in Government Policy, and future trends in recycling and individual behaviours, it is difficult to estimate the exact compositions of
	UKWIN response: "As UKWIN set out in our WR (REP1-068) and elsewhere, the feedstock most closely associated with the	tuture teedstocks to be processed at the proposed Facility.





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	production of methane is food waste. The applicant stated elsewhere in their Table 5-1 comments that they would not be targeting food waste for use as feedstock at their proposed Boston incinerator. It should also be noted that, as set out by UKWIN in our WR and elsewhere, many materials such as plastics do not degrade in landfill (and thus do not emit GHGs, in stark contrast to the incineration of plastics that result in significant quantities of fossil CO2 emissions). UKWIN has also already set out how a significant proportion of biogenic material does not degrade in a modern landfill, and how the level of methane release can be further reduced through biostabilisation prior to landfilling. Studies cited by UKWIN, including the study carried out by Zero Waste Scotland (ZWS), indicate that biostabilisation prior to landfilling can result in significantly lower GHG emissions than incineration. Thus, far from avoiding the release of greenhouse gas emissions, this proposal could result in a net increase in GHG emissions compared to sending the same material to landfill. Furthermore, the proposed 1.2 million tonnes of capacity could result in just the sort of 'lock-in' to greenhouse gas emissions that is a concern for the Committee on Climate Change (CCC) and others (including ZWS), as per the statements set out on Pages 66-69 of the Good Practice Guidance (included as part of UKWIN's REP1-068)."	a design case to determine likely GHG emissions arising from the Facility. Further analysis carried out in document in 'Climate Change – Further Greenhouse Gas Emissions Analysis and Consideration of Waste Composition Scenarios' (document reference 9.6), investigated potential GHG emissions from a range of carbon contents in waste feedstock and waste treatment pathways using standard values from accepted methodologies, such as "Energy from waste. A guide to the debate", published by Defra in 2014.





Paragraph Number	UKWIN's Comment	Applicant's Response
Failure to clea	arly explain assumptions, calculations and methodology and failu	ure to demonstrate internal consistency
1.5.72-1.5.74	Applicant's comment " the outcomes of the Climate Change chapter in the ESstates it is "likely that GHG emissions from the Facility would be lower or similar when compared to landfilled waste streams" remain valid." UKWIN response: "The applicant's concession that their proposal may have climate change impacts which are similar to sending waste directly to landfill undermines the applicant's need and IROPI arguments and should be given significant adverse weight in the planning balance."	The outcomes of the Climate Change assessments presented in Chapter 21 of the ES (Climate Change document reference: 6.2.21, APP-059) and 'Climate Change – Further Greenhouse Gas Emissions Analysis and Consideration of Waste Composition Scenarios' (document reference 9.6, REP1-019) show that predicted emissions from processing the waste at the proposed Facility are likely to be lower than the landfill waste treatment pathway. The use of the term 'similar' was used to account for uncertainties in the source of RDF feedstock, and future waste compositions which are influenced by Waste Policy and individual behaviours. Analysis shown in the 'Addendum to Fuel Availability and Waste Hierarchy Assessment' (document reference 9.5, REP1-018) shows that there are currently sufficient quantities of waste that are processed by existing waste treatment pathways such as landfill and exporting overseas. The results presented in both assessments do however show that processing the waste at the proposed Facility is likely to result in a lower GHG emission option compared to existing waste treatment options.
Level of energ	gy generation, carbon emissions and renewable energy generation	on
1.5.123	Applicant's comment: "RDF is referred to in EN-3, which serves the purpose of defining the policy for renewable energy in the UK." UKWIN response: "The applicant's claim is incorrect for a number of	generation' confirms at 3.4.3 'Energy from Waste' 'The energy produced from the biomass fraction of waste is renewable'
	reasons. Firstly, EN-3 does not include any references to RDF. Paragraph 2.5.9 of EN-3 does refer to SRF, stating that some	Paragraph 2.6.6 to 2.6.7 of the September 2021 draft NPS





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incinerator feedstock could come from SRF. EN-3 goes on to explain, at Paragraph 2.5.10, that: "A proportion of the biodegradable waste [e.g. within the SRF] may be classed as 'renewable' for the purposes of Renewable Obligation Certificates (ROCs) eligibility. However, this is not an issue of relevance to the IPC". This in no way equates to the applicant's suggestion that EN-3 defined RDF (or indeed SRF) as an inherently renewable sourced of energy. As was made clear by the Secretary of State in the Wheelabrator Kemsley North decision, cited by UKWIN at Paragraph 133 of our WR (REP1-068), "It is not disputed that the portion of energy output attributed to non-biomass based waste input in either Project K3 or Project WKN cannot be considered renewable and therefore the plants would be partially renewable at best".	'EfW generating stations take fuel that would otherwise be sent to landfill. Waste can come from municipal or commercial and industrial sources. Some of the waste suitable for such plant may comprise biodegradable waste. This may also include refuse derived fuel (RDF) and solid recovered fuel (SRF) from waste', further at 2.6.7 'A proportion of the biodegradable waste may be classed as "renewable" for the purposes of Renewable Obligation Certificates (ROCs) eligibility and under the CfD scheme.'
With respect to the September 2021 consultation draft version of EN-3, the reference to SRF is expanded to include RDF (at Paragraph 2.6.6) which includes (at Paragraph 2.6.7) the same observation about Renewable Obligation Certificates (ROCs). Thus, there is nothing in either the extant EN-3 or the emerging EN-3 to suggest that RDF or SRF should be considered inheritably renewable sources of energy magning that the considered draws	
i e k' () I - 0 e	ncinerator feedstock could come from SRF. EN-3 goes on to explain, at Paragraph 2.5.10, that: "A proportion of the biodegradable waste [e.g. within the SRF] may be classed as renewable' for the purposes of Renewable Obligation Certificates (ROCs) eligibility. However, this is not an issue of relevance to the PC". This in no way equates to the applicant's suggestion that EN-3 defined RDF (or indeed SRF) as an inherently renewable sourced of energy. As was made clear by the Secretary of State in the Wheelabrator (Cemsley North decision, cited by UKWIN at Paragraph 133 of our NR (REP1-068), "It is not disputed that the portion of energy output attributed to non-biomass based waste input in either Project K3 or Project WKN cannot be considered renewable and therefore the clants would be partially renewable at best". With respect to the September 2021 consultation draft version of EN-3, the reference to SRF is expanded to include RDF (at Paragraph 2.6.6) which includes (at Paragraph 2.6.7) the same observation about Renewable Obligation Certificates (ROCs).





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1.5.126- 1.5.130	Applicant's comment: "Whether the electricity is defined as 'renewable' or 'partially renewable', it does not change the outcome of the assessment." UKWIN response: "The applicant's purported citation of UKWIN's WR (REP1-068) Paragraph 128 mistakenly repeats Paragraph 127, meaning the applicant omitted the point made by UKWIN in Paragraph 128 of REP1-068, which in turn led them to misunderstand the point made by UKWIN in Paragraphs 129 and 130 of our WR. As such, the applicant has yet to respond to the observation that because energy generated through landfill gas capture is classed as wholly renewable, if the facility proposed for Boston would divert waste from landfill, the applicant is in effect proposing to replace wholly renewable energy with energy that could be described as 'partially renewable at best'."	Iconsidered in document "Climate Change - Further





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UKWIN's De	adline 3 Comments on the Applicant's Response to the ExA's Writ	iten Question Q12.0.7 (REP3-036)
4.	Further to the Examining Authority's PD-008 reference to the way that "emerging draft NPSs are potentially capable of being important and relevant considerations in the decision-making process" and further to the Examining Authority's invitation for the applicant to "Identify any aspects of the proposed development which could be affected by wording in the draft energy NPSs, which are currently at consultation stage, by comparison to the currently designated energy NPSs" UKWIN notes that draft EN-3 Paragraphs 2.10.4 and 2.10.5 are of particular relevance.	It is noted that the "emerging draft NPSs are potentially capable of being important and relevant considerations in the decision-making process" (our emphasis). The draft NPSs have been published for consultation, and that consultation ended on 29 November 2021. The Applicant has previously submitted a response to UKWIN's Oral Submission at Issue Specific Hearing 2 (ISH2) on Environmental Matters (Part 1) (document reference 9.55, REP4-020) that: 'Paragraph 2.10.4 is not a relevant consideration relating to site selection for applicants and is also unnecessary given the provisions retained in EN-3 at Para 2.17.7., for waste combustion generating station proposals to have to demonstrate that they accord with the waste hierarchy and national and local waste management targets, or to demonstrate why a conflict with those targets is nonetheless appropriate. Similarly, Para 2.10.5 is an isolated and otiose inclusion which is not quantified in any way and which appears to place a limit on energy-from-waste (EfW) projects; something which is not considered appropriate in the context of EfW remaining a technology which will play an important role in the UK meeting its climate change commitments. As with Paragraph 2.10.4,





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		of the waste hierarchy and national and local waste management targets, and therefore provides the appropriate criteria for assessing applications against the national and local context. In particular Para 2.17.7 recognises that there may be occasions where a deviation from the relevant waste strategy or plan is nonetheless appropriate, which is important context which is missing from Para 2.10.5.'
5.	These paragraphs read as follows: "2.10.4 As the primary function of EfW plants is to treat waste, applicants must demonstrate that proposed EfW plants are in line with Defra's policy position on the role of energy from waste in treating municipal waste. 2.10.5 The proposed plant must not result in over-capacity of EfW waste treatment at a national or local level."	
6.	The applicant's comments on these paragraphs are as follows: "The Proposed Development is a national infrastructure scheme not looking to directly take local waste or meet local waste management capacity requirements, but to take waste from UK ports that would normally be exported overseas or landfilled. The available capacity of refuse derived fuel (RDF) which could be transported to the Facility is assessed within the Addendum to Fuel Availability and Waste Hierarchy Assessment (document reference 9.5, REP1-018)".	Noted
7.	The applicant's comments fail to adequately grapple with the expectations and implications of this draft policy, especially in light	





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	of comments from UKWIN and others regarding the problems with the applicant's need case.	
8.	This failure to treat the policy with the significance it deserves is particularly surprising given that Richard Marsh from BDB Pitmans, who represented the applicant at the Examination Hearings, has publicly commented on the importance of this part of the draft energy policy.	Please see below.
9.	It has been reported that Mr Marsh observed that the draft EN-3 requirement that "an energy from waste plant must not result in overcapacity of EfW waste treatment at a national or local level" was "not as favourable as had been hoped", adding that: "this wording would mean they [promoters of new EfW waste treatment schemes] will need to be robust in making the case that there is demand for the project". ²⁰	The purpose of the quote referred to by UKWIN was to express concern in respect of the relevant draft NPS wording; it raises the irrelevance and potential consequences of the EN-3 draft wording, not its importance. The Applicant and others have made it clear that paragraphs 2.10.4 and 2.10.5 should, for clarity, be deleted from revised draft NPS EN-3. In any event, and notwithstanding paragraphs 2.10.4 and 2.10.5 of consultation draft EN-3, the Applicant's application (including its need case and Waste Hierarchy Assessment report (document reference 5.8, APP-037)) demonstrates that the Facility would not result in an over capacity of EfW waste treatment; the Facility is being developed to meet a need to treat national waste (arriving at the Facility by water) that may otherwise be exported.
10.	UKWIN agrees with the analysis that the wording would mean that a robust case would be needed in demonstrating a demand for the project.	The Applicant has made out a robust need case in respect of the proposed development in accordance with planning and waste policy.
11.	However, UKWIN is not at all not surprised by this requirement given the importance of increased recycling and the move to the circular	The Applicant's Waste Hierarchy Assessment report

²⁰ Richard Marsh as quoted in a Planning Resource article 'Five key proposed changes to planning for major energy projects' by Joey Gardiner, 23rd September 2021.

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	effect of the scheme on the relevant waste plan or plans where a proposal is likely to involve more than one local authority. "2.17.4 The application should set out the extent to which the generating station and capacity proposed is compatible	demonstrates conformity of the proposed development with the waste hierarchy. In relation to the effect of the scheme on relevant waste plans, the Applicant has explained in the Waste Hierarchy Assessment report (document reference 5.8, APP-037) the Facility will draw its supply of RDF from a national supply that would be influenced by the market conditions at the time of procuring relevant contracts. Therefore, the assessment of impact on relevant plans has focussed on plans at a National
12.	The Government therefore appears to be using the emerging NPSs to reemphasise how a general need for energy generation, or for renewable energy, does not exempt applicants from the requirement to robustly demonstrate a waste management justification for proposed new incineration capacity and that it is important that promoters of new EfW waste treatment schemes demonstrate that their proposed capacity would not prejudice recycling and the waste hierarchy.	Please see below.
13.	UKWIN's position remains that the applicant has so far failed to demonstrate, let alone robustly demonstrate, a waste management need for their proposed new incineration capacity, and that the applicant has not ruled out likely adverse impacts on the waste hierarchy and the proximity principle and by extension the environment.	The Application (including by the Applicant's Fuel Availability and Waste Hierarchy Assessment report (document reference 5.8, APP-037) has robustly demonstrated that the operation of the Facility would be in accordance with the waste hierarchy in that it would move the management of the UK's residual municipal wastes, away from landfill and up to recovery in the hierarchy.





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14.	In light of these serious conflicts with existing and emerging Government policy, we believe the application for the DCO should be refused.	