

## ***Response to ExQ3***

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# **UKWIN'S RESPONSE TO EXAMINING AUTHORITY QUESTIONS 3.1.0.7: SUMMARY OF UKWIN AND APPLICANT POSITIONS**

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### **Proposed Development:**

**Boston Alternative Energy Facility (BAEF)**

### **Proposed Location:**

**Nursery Road, Boston, Lincolnshire**

### **Applicant:**

**Alternative Use Boston Projects Limited**

### **Planning Inspectorate Ref:**

**EN010095**

### **Registration Identification Ref:**

**20028052**

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## **FEBRUARY 2022**

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## INTRODUCTION

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1. In ExQ3 Q3.1.0.7 the Examining Authority noted the Applicant's response to UKWIN's comments [REP5-009] and UKWIN's latest submission [REP6-042], and how it would assist the ExA if UKWIN summarised their position on each of the main issues, in a similar way to Table 1-1 in REP5-009, highlighting the key differences with the Applicant's position.
2. To assist the inquiry UKWIN has repeated the Applicant's position summary from Table 1-1 in REP-009 and Table 2-15 in REP6-032 adding a summary of the key ways UKWIN's position differs from that of the Applicant.
3. Additional matters that were not included in Applicant's Table 1-1 are highlighted in ***bold italics*** in the 'Main issue' column, with both the issue and the Applicant's position summarised by UKWIN.
4. We also add examples of the previously-made submissions that include UKWIN's evidence regarding the issues summarised within the main issue summary.

## POSITION SUMMARY WITH UKWIN COMMENTS

Main issue	Applicant position	Key differences
<p><b>Policy</b></p> <p>UKWIN questions the approach and outcomes to the consideration of waste plans within the Fuel Sourcing and Waste Hierarchy Report.</p>	<p>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.</p>	<p>Fundamentally there is a difference in opinion regarding whether a need for the proposed capacity (and a need for this to capacity to be located at the Port of Boston) has been demonstrated and the policy implications of this need not being demonstrated.</p> <p>UKWIN’s position is that EN-3, Draft EN-3 (2021), the Wheelebrator Kemsley North (WKN) decision, and a number of Government statements all support the idea that incineration can divert waste from recycling and therefore prejudice the management of waste in accordance with Government policy on the waste hierarchy, that incineration overcapacity should be avoided, and that robust evidence is needed to justify the need for the proposed capacity.</p> <p>The Applicant has not disputed the authenticity of UKWIN’s various quotes and citations as being from the relevant sources but has in some cases provided more self-serving interpretations of the statements and their implications that are at odds with UKWIN’s position.</p> <p>In some cases, the Applicant has simply ‘noted’ statements made by the Government and others without explicitly disputing or supporting UKWIN’s interpretation on the meaning and implication.</p>

Main issue	Applicant position	Key differences
		<p>UKWIN's position is that the Applicant has failed to meet the policy requirements, as set out further in the 'waste' section and elsewhere.</p> <p>UKWIN also disputes the notion that the facility would be consistent with the proximity principle or that it would deliver the best environmental solution.</p>
	<p>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.</p>	<p>UKWIN has not specifically commented on the Applicant's interpretation of Lincolnshire County Council's position. UKWIN has set out our position on the lack of need for 1.2mtpa of RDF capacity at this location and we have left it to Lincolnshire County Council to speak for themselves as to their own position.</p>
	<p>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.</p>	<p>UKWIN's position is that the proposed capacity would likely divert material and composting, and potentially from incinerators in closer proximity to where the waste arises.</p> <p>UKWIN's position is that the Applicant has not demonstrated that their proposal accords with the waste hierarchy.</p> <p>UKWIN's position is that even for waste <i>currently</i> going to landfill, a lot of this is material which could have been recycled, and so diverting that material to incineration means it is no longer available for recycling.</p>

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		<p>UKWIN's position is that with respect to RDF export, most if not all European EfW facilities that process RDF from the UK are connected to district heating schemes (i.e. they operate as 'combined heat and power' (CHP) facilities).</p> <p>The Applicant has not disputed that the Boston plant might divert RDF from a more efficient incinerator relied on as part of an established district heating scheme.</p> <p>As explored further below, UKWIN disputes that there would be 3.9 million tonnes of waste available annually by 2035 or that the Applicant's assessment is predicated on high recycling rates being achieved nationally in line with Government policy.</p>
<p><b><i>Relevance of the Kemsley WK3 decision</i></b></p>	<p>The Applicant's position, as set out in their REP6-032 submission, is that the Kemsley WK3 decision is of particular relevance to the determination of the Boston proposal because WK3 was treated as an NSIP, whereas WKN was not.</p>	<p>As set out in UKWIN's other Deadline 7 submission, UKWIN's position is that the Kemsley WK3 decision is not of particular relevance to the determination of the Boston proposal because: (a) WK3 relates to adding additional capacity at an already consented plant (which is not the case for Boston), and (b) WK3 relates to a proposal with CHP (which is not the case for Boston).</p>
<p><b><i>Relevance of the Kemsley WKN decision</i></b></p>	<p>The Applicant's position, as set out in their REP6-032 submission, is that Kemsley WKN decision is not of particular relevance to the determination of the Boston proposal because it related to a non-NSIP development.</p>	<p>As set out in UKWIN's other Deadline 7 submission, UKWIN's position is that the both the Kemsley ExA and SoS made it clear that the same conclusion would have been reached for WKN whether it was treated as an NSIP or not an NSIP.</p>

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		<p>In fact, the SoS treated the plant as an NSIP and came to the same conclusions, finding that there were policy conflicts with both EN-1 and EN-3.</p> <p>A High Court decision subsequently confirmed that the plant fared even worse when treated as an NSIP as the conflicts with national policy could be afforded greater weight, but that in either case the conclusion was that the benefits of the WKN project were outweighed by the scheme's non-compliance with policies in particular the policies in NPS EN-1 and EN-3 related to the issues associated with the waste hierarchy and local waste management plan policies.</p>
<b>Waste</b>		
<p>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.</p>	<p>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.</p>	<p>UKWIN's disputes the notion that applying a 2-hour drive time to all of the Applicant's 12 ports results in a meaningful assessment of feedstock availability.</p> <p>UKWN's position is that the Applicant's proposed approach is entirely unrealistic and should not be relied upon to assess need for the proposed incineration capacity.</p> <p>The concept of a 1-hour or a 2-hour isochrone is normally used with respect to the distance travelled from the source of the waste to the waste treatment facility. UKWIN's position is that there is no precedent for extending this to a 2-hour drivetime from a port.</p>

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		<p>The Applicant has not disputed that there is no direct precedent for their approach, but instead cites one example – where a port was not even involved – in an attempt to justify their unusual approach.</p> <p>UKWIN's position is that the Applicant's failure to provide direct precedent is indicative of there not being any genuine precedent for extending the concept of a 2-hour isochrone to include importing waste from nearly the whole of the UK.</p> <p>UKWIN does not accept as realistic the Applicant's assumptions as to which ports it will receive waste from and in what quantities.</p>
<p>UKWIN has indicated that there is additional EfW capacity in the UK.</p>	<p>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.</p>	<p>The Applicant has not directly disputed UKWIN's evidence that the Applicant's assessments failed to consider the increases in headline capacity which occurred in 2019 and 2020 but which were not fully reflected in the amount diverted from landfill in 2019 due to the facilities not being fully online throughout that period.</p> <p>Nor has the Applicant directly disputed the notion that this oversight means the Applicant underestimated incineration capacity by around 1.5 million tonnes based on a 90% utilisation rate.</p> <p>The Applicant has yet to respond to UKWIN's Deadline 6 submission (REP6-042). As such, their view has yet to be stated regarding UKWIN's evidence that there was an additional 575,000 tonnes of headline capacity from incineration plants that had</p>

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		<p>entered commissioning after 2021 (i.e. Kelvin Energy Recovery Facility and Oldhall Energy Recovery Facility).</p> <p>Similarly, the Applicant has yet to respond to UKWIN's REP6-042 observation that the Applicant fails to take account of how around 1.33 tonnes of waste is required to produce 1 tonne of RDF (due to dewatering), and how it is the case that many of the UK's largest existing operational incinerators are designed to accept RDF.</p>
<p>UKWIN has questioned why the Applicant has not used more recent waste data.</p>	<p>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.</p>	<p>UKWIN was not questioning the choice of base year, UKWIN was questioning the fact that the Applicant's methodology to get from the base year to the present situation was flawed and missed out on hundreds of thousands of tonnes of capacity. The Applicant has yet to directly address the issue that was actually raised by UKWIN.</p>
<p><b><i>Improvements in C&amp;I recycling</i></b></p>	<p>As set out in REP4-020, the Applicant's position is that because detailed data on recycling rates for C&amp;I are not available they are justified in ignoring any potential post-2019 improvements in C&amp;I recycling, e.g. to account for progressing towards the Government's 65% MSW recycling target (which include commercial and industrial waste).</p>	<p>UKWIN's position is that the Government has clearly set out its intention for C&amp;I recycling rates to improve, and that even if the precise rate of C&amp;I recycling cannot be determined there is no good reason for the Applicant not to be expected to model a number of scenarios based on different extents to which the improvements in household recycling are replicated with C&amp;I recycling improvements.</p>



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		<p>The Applicant has not disputed UKWIN's calculations, submitted as part of REP6-042, which demonstrate that when taking account of an improvement in C&amp;I recycling of just 33% of the anticipated improved level for household waste this results in national overcapacity of more than 300ktpa based on capacity currently operational and under construction, indicating that the proposed 1.2 million tonne RDF Boston incinerator would exacerbate existing national overcapacity.</p> <p>UKWIN's calculations were conservative (and were based on the Applicant's 90% utilisation rate and general methodology) and did not take of how around 1.33 tonnes of waste is required to produce 1 tonne of RDF, or the potential for residual waste to be converted into SRF for cement kilns, or the prospect of currently consented incineration capacity being implemented, or the prospect that some of the capacity at some of UK's existing incinerators could be expanded.</p>
<p><b><i>Waste requirements of the plant</i></b></p>	<p>The Applicant's capacity requirement calculations are based on needing only 1.2 million tonnes of residual waste per annum.</p> <p>UKWIN is not aware of any statements from the Applicant that indicate how they have considered the implications of dewatering as part of their capacity analysis.</p>	<p>As noted in REP6-042, UKWIN's position is that because the Boston facility is intended to incinerate RDF the proposed 1.2 million tonnes of RDF capacity equates to around 1.6 million tonnes of residual waste per annum (to account for the dewatering that occurs in the production of RDF).</p> <p>The Applicant has yet to respond to this observation.</p>

<p><b>Potential for SRF diversion to cement kilns</b></p>	<p>Page 6 of the Applicant's need assessment in APP-040 states that residual waste in the UK is currently presented in three forms, one of which is a refined Solid Recovered Fuel (SRF) prepared to a specification and generally for use in a cement kiln.</p> <p>However, potential increases in SRF exported to cement kilns is not included in the need analysis.</p>	<p>UKWIN's position is that the potential for increases in SRF being sent to cement kilns should be taken into account in the Applicant's need analysis because such uses of SRF reduce the quantity of combustible residual waste available for incineration.</p>
<p><b>Impact of the sourcing of RDF feedstock</b></p>	<p>The Applicant's assumption is that the demand for feedstock created by the Boston facility would not have a significant impact on waste management anywhere in the UK, with assessments based on the demand for 1.2 million tonne of waste dispersed across the UK in the form of 100,000 tpa each from a large area covered by 12 different ports, and that the proposed Boston incinerator would only divert waste which would otherwise be landfilled or exported as RDF for incineration in Europe, and that the Boston scheme would accord with both the waste hierarchy and the proximity principle and be consistent with local waste plans across the UK.</p> <p>The Applicant argues in REP5-009 that "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."</p>	<p>As set out in UKWIN's REP6-042 submission, UKWIN's position is that the notion that making use of waste treatment facilities located in a neighbouring local authority (which is in closer proximity to waste arising) being potentially preferable to treating that waste at a more distant facility within the boundaries of the originating local authority is a far cry from saying that waste ought to travel hours to a port and then all the way to a facility across the country. To pretend that the two concepts are similar makes a mockery of the proximity principle.</p> <p>In REP6-042, UKWIN also set out its position that a council is unlikely to achieve net self-sufficiency if a large proportion of their waste (and their neighbours' waste) is exported, as demand would diminish, eliminating the economies of scale and the economies of density necessary to make domestic infrastructure financially viable.</p> <p>In addition to arguing that the demand created by the Boston incinerator would be for a quantity of residual waste equal to or in excess of around 1.6 million tonnes, UKWIN's position is that the sourcing of</p>

		<p>feedstock that would be required to fulfil the demand to service the Boston incinerator could end up being concentrated amongst a small number of locations near a small number of ports.</p> <p>As noted by UKWIN, the implications of this have not been adequately assessed by the Applicant.</p> <p>UKWIN's position is that there remains a realistic prospect that the Boston facility could have a significant adverse impact on investment in local recycling infrastructure, discouraging the construction and use of more local waste treatment facilities, and would therefore go against both the waste hierarchy and the proximity principle, as well as running contrary to local planning policies and strategies which are based on adhering to the waste hierarchy, the proximity principle, and the principle of self-sufficiency.</p> <p>UKWIN's position is that these factors undermine the Applicant's assessments of the consistency of the Boston proposal with existing Waste Plans throughout the UK and more generally that it undermines the Applicant's assessment of the impacts of the development.</p>
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**Climate Change**

<p>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.</p>	<p>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, 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.</p>	<p>UKWIN’s position is that the Applicant’s main assessment and their further scenarios include assumptions, methodologies and comparators (‘counterfactuals’) that significantly underestimate the adverse climate change impacts of the proposal both in terms of direct emissions and emissions compared to alternative fates for the same feedstock</p> <p>UKWIN’s position is that the Applicant’s approach is not consistent with the best practice approach to Environmental Impact Assessment (EIA).</p> <p>UKWIN’s position is that the Applicant does not provide an adequate ‘envelope’ to show the potential adverse impacts of the development.</p>
<p>UKWIN has raised queries as to whether the carbon content ranges would be representative of current or future feedstocks, and the assumed fossil carbon percentages in the scenarios considered in the document ‘Climate Change – Further Greenhouse Gas Emissions Analysis and Consideration of Waste Composition</p>	<p>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 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).</p>	<p>UKWIN’s position is that it would be reasonable to expect the Applicant to provide a best guess estimate of current and potential future RDF feedstock compositions accompanied by calculations for the impact of this material being incinerated at Boston or alternatively being landfilled both with and without biostabilisation or being sent to a European incinerator with CHP. The Applicant accepts that they have not done this, but they have not stated whether or not they would be able to produce such an assessment if directed to do so by the ExA.</p>

<p>Scenarios' (document reference 9.6, REP1-019).</p>		<p>UKWIN provided evidence in its Deadline 6 submission which indicated that the carbon content of the feedstock is likely to significantly exceed the envelope offered by the Applicant. While the Applicant assumes a total carbon content of RDF of between 20 and 30%, UKWIN provided an example of a currently proposed RDF incinerator where the associated applicant adopted a core scenario of 35% carbon content based on compositional analysis of RDF feedstock. As this was submitted for Deadline 6, the Applicant has yet to comment on this evidence.</p>
<p><b><i>The carbon intensity of the electricity that would be exported by the Boston incinerator</i></b></p>	<p>Whilst the Applicant has not provided an estimate of the carbon intensity of the electricity, they critiqued UKWIN's estimate of 572 gCO<sub>2</sub>/kWh on the basis that they believed the figure had been based on a 60% fossil percentage.</p>	<p>In response to the Applicant's criticism UKWIN provided new (Deadline 7) evidence as part of our revised calculations that indicates how the 572 gCO<sub>2</sub>/kWh was an underestimate because it was based on 60% of the Applicant's central fossil CO<sub>2</sub> figure rather than on a proportion of the total CO<sub>2</sub> figure.</p> <p>Based on the fossil CO<sub>2</sub> figure from the Applicant's central scenario the fossil carbon intensity of the electricity that would be exported by the Boston facility would be 953 grams of fossil CO<sub>2</sub> per kWh of exported electricity, i.e. on the upper end of fossil carbon intensity for incineration plants, even after the proposed CO<sub>2</sub> recovery plant is taken into account.</p> <p>UKWIN's further analysis, based on the Applicant's data, also showed that fossil carbon intensity would be higher than CCGT for the other scenarios modelled by the Applicant (including 40% fossil</p>

		<p>carbon) based on the Applicant’s MWh export figures, with fossil carbon intensity being even higher if content was assumed in line with current proposals for other RDF incinerators.</p> <p>In line with REP2-057, UKWIN’s position remains that 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</p>
<p>UKWIN questions the approach of comprising potential emission figures from the proposed Facility and other waste treatment pathways such as landfill.</p>	<p>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.</p>	<p>As set out in more detail in UKWIN’s other Deadline 7 submission, UKWIN agrees with the Applicant’s previous statements that that the facility would have similar emissions to sending the waste directly to landfill.</p> <p>UKWIN agrees with the Applicant when the Applicant “recognises that there are many waste treatment processes that will assist in stabilising wastes prior to landfill that can potentially contribute to reducing the breakdown of available carbon in landfill that leads to methane emissions” as per Paragraphs 33-36 of REP5-009. Where the parties differ is whether this should be modelled, with UKWIN arguing that it should be and the Applicant presumably taking the position that they would only be obliged to do so if directed to by the ExA.</p> <p>UKWIN maintains its position that if best practice were applied to the assumptions and methodologies that it would find that the proposed facility could have significantly worse GHG impacts than sending the</p>

		<p>same waste to landfill, especially taking into account the potential for biostabilisation prior to landfill.</p> <p>The Applicant has not directly disputed that if UKWIN's proposed good practice assumptions and methodologies were followed that it would result in the Boston proposed performing than landfill UKWIN also maintains the position that a far better climate outcome would be achieved if the material were prevented or recycled rather than being incinerate. The Applicant has not directly disputed that this could be the case in the event that the development diverted material that would otherwise be prevented or recycled.</p> <p>As set out in more detail in UKWIN's other Deadline 7 submission, UKWIN agrees with the results of the Applicant's previous assessment indicating that the facility could have higher GHG emissions than sending the RDF to European incinerators (e.g. due to those incinerators typically operating as CHP facilities) but disagrees with the Applicant's recent unproven claims that their evidence showed the opposite.</p>
<p><b><i>The electricity generation offset to be used for determining how much CO<sub>2</sub> electricity generated by the incinerator would displace</i></b></p>	<p>The Applicant assumes that for the entire of the proposal the facility would be displacing CCGT.</p>	<p>UKWIN set out in REP1-068 that given efforts to decarbonise the electricity supply it is unreasonable to assume facility would displace CCGT for entire operational life.</p> <p>REP1-068 provides a significant, and to date unrebutted, body of evidence on this point, including within the GHG Good Practice Guidance. This</p>

		<p>included reference to advice and guidance from BEIS and the practice and recommendations of a number of environmental consultants employed by other incinerator applications, local authorities and others.</p> <p>The GHG Good Practice Guidance provided by UKWIN includes a quote from the Centre at the University of Exeter who assessed the carbon credentials of a proposed incinerator on behalf of Wiltshire Council and found that: “The electricity offset emissions factor used [by the applicant] is incorrect. Adopting Government emission factors increases lifetime total facility emission by 249%”.</p> <p>The Guidance also includes a quote from a review report produced by Atkins for Hampshire County Council in October 2020 which stated that: “ EMA’s best practice EIA [Environmental Impact Assessment] guidance...notes that the future baseline should be set to include anticipated future changes, for example ‘UK grid decarbonisation projection scenarios or the adoption of renewables’...For the electricity generation aspect of the development, a range of grid displacement factors are included in a sensitivity test, comparing a CCGT comparator with a long run marginal factor for 2023 (the year of completion). As the development will be operational through to the 2050s, it would have been appropriate to consider likely grid decarbonisation scenarios across that timeframe and consider the impact of the project in the context of these.”</p>
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		<p>In REP 2-057 UKWIN noted the Applicant should have provided relevant sensitivity analysis for the electricity generation offset.</p> <p>The Applicant claimed on page 27 in REP5-009 in response to paragraph 11 of table 1-2 that the electricity generation offset is discussed in paragraph 7 of REP5-009. However, as noted on page 13 of REP6-042 paragraph 7 does not discuss the electricity generation offset, only the amount of electricity generated/exported. As such UKWIN's request for sensitivity analysis of the electricity generation offset unaddressed.</p> <p>UKWIN's position remains that the Applicant's failure to carry out this sensitivity analysis reduces the weight to be given to their carbon benefit claims as the benefits from electricity generation can be expected to significantly reduce over the lifetime of the facility as the electricity grid decarbonises in line with Government policy and initiatives.</p>
<p><b><i>Whether or not to take account of the fact that biogenic CO<sub>2</sub> stored in landfill can act as a partial biogenic carbon sink</i></b></p>	<p>Whilst the Applicant takes credit for avoiding biogenic CO<sub>2</sub> as part of their 80,000 tpa of assumed CO<sub>2</sub> recovery, the Applicant does not give credit to landfill preventing the release of a far greater amount of biogenic CO<sub>2</sub> from carbon sequestration.</p> <p>The Applicant assumes 50% sequestration of biogenic carbon in landfill in REP1-019, whilst arguing that 0% of this should be given credit within the context of landfill acting as a biogenic carbon sink on the basis that: "There is considerable uncertainty in</p>	<p>The Applicant have acknowledged that there is a potential saving ('additional credit') from "landfill acting as a biogenic carbon sink" and has acknowledged that they have not given credit for this potential saving.</p> <p>Where the parties disagree is whether or not the Boston Applicant should be expected to take this into account, with the Applicant not even providing sensitivity analysis to show the scale of impact of this omission.</p>

	<p>literature surrounding the amount of biogenic carbon that is sequestered in landfill. The high sequestration used in this assessment (50%), combined with the use of high landfill gas capture rates (assumed 68% capture) is considered to be conservative. Therefore, it is not considered appropriate to give additional credit for sequestered carbon as this would result in an overly-conservative assessment”.</p>	<p>It is UKWIN’s position that to arrive at a valid result when comparing landfill and incineration (which release different quantities of biogenic CO<sub>2</sub>) it is necessary to account for differences associated with biogenic CO<sub>2</sub> emissions, especially because the impact of the biogenic carbon sink in landfill can significantly reduce landfill’s carbon footprint.</p> <p>This was set out by UKWIN in our Deadline 1 submission (REP1-068), both in the main body of the objection and in the Good Practice Guidance which accompanied the representation, and further developed in UKWIN’s subsequent submissions, including REP2-057 (Paras 28-39).</p> <p>The Applicant has failed to engage with the substance of the case put forward by UKWIN on this matter. The applicant has not provided any substantive rebuttal to the arguments advanced or to the huge body of evidence, authority and precedent submitted to show that the Applicant’s approach on this point is deficient and that it results in the Applicant’s carbon assessments significantly underestimating the adverse impacts of their proposal compared to landfill.</p> <p>UKWIN’s evidence disputed the case made by the Applicant that the 50% sequestration rate was a ‘high’ sequestration rate given the circumstances, and argued that in any case it would not be appropriate to simply ignore the benefit of carbon sequestration in landfill.</p>
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		<p>As explained in REP6-042, if a 50% DDOC figure is reasonable for unprocessed MSW, then a figure of less than 50% would be reasonable for RDF, as RDF has a lower level of biodegradability than unprocessed MSW.</p> <p>As explained by UKWIN, the correct approach would be to take into account the impact of biogenic carbon sequestration in landfill and to undertake sensitivity analysis to show the impacts of varying key assumptions, including assumptions about landfill sequestration rates for the proposed RDF feedstock.</p> <p>Within the Good Practice Guidance UKWIN provided evidence of credit being given for biogenic carbon sequestration in landfill in either the central or sensitivity analysis carried out by a range of applicants for EfW incineration proposals including:</p> <ul style="list-style-type: none"><li>• North Lincolnshire Green Energy Park - Climate &amp; GHG Assessment (Solar 21, June 2021)</li><li>• East Midlands Energy Re-Generation (EMERGE) Centre's Environmental Statement Appendix 8-4: Carbon Assessment and Sustainability (Uniper, June 2020)</li><li>• Proof of Evidence on Energy, Renewable Energy, Combined Heat and Power and Effects on Climate Change for planning inquiry ref 3195373 (Veolia, May 2018)</li></ul>
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		<p>For the purpose of this summary we provide a brief recap of the unrebutted evidence submitted by UKWIN regarding one of the examples listed above to highlight the reasons why failing to take biogenic carbon sequestration into account is considered 'bad practice'.</p> <p>As the EMERGE applicant's carbon assessment put it: "Under landfill conditions a proportion of the biogenic carbon will not decompose and therefore this carbon would not be released to the atmosphere as would be the case if the waste is combusted in the Proposed Development. Whilst CO<sub>2</sub> associated with biogenic emissions is considered carbon neutral, if this fraction is permanently sequestered in landfill, it could reasonably be considered to constitute a net carbon benefit".</p> <p>The EMERGE applicant's report acknowledged that taking this factor into account would have a significant impact on the conclusions of the report because it would reduce the impacts of landfill by 74%, which was sufficient to move the RDF incinerator from being better than landfill to being worse, stating: "...It can be seen that including sequestration...would suggest a disbenefit from the Proposed [Incineration] Development relative to landfill of around 30 kt...of carbon dioxide equivalent emissions per year".</p> <p>As set out in UKWIN's Good Practice Guidance, not only has taking into account biogenic carbon sequestration been the practice for many reports produced by climate change professionals but it has</p>
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		<p>also been acknowledged by various parties as being the recommended approach to take.</p> <p>For example, in a review carried out by Atkins for Hampshire County Council into the proposals for an incinerator proposed for Alton the consultancy said in October 2020 that they agreed with the recommendations of a different consultant that the climate benefits of carbon sequestration in landfill ought to be taken into account.</p> <p>In that case, Air Quality Consultants had produced a report which stated "The [Alton applicant's] assessment has also scoped out the potential benefit from sequestering biogenic carbon that is likely to be associated with waste treatment by landfill. Independent research by Defra indicates that this 'benefit' is not insignificant and would warrant further consideration". They went on to recommend a "Landfill CO<sub>2</sub>e assessment to consider impact of sequestering biogenic carbon".</p> <p>The Council's consultants agreed with Air Quality Consultants' recommendation and observed that following the recommendation: "...would provide a more complete picture of the baseline scenario against which the development is being compared. Currently, this element is missing, which potentially misrepresents the impact of landfill as being higher than would be the case were this mechanism addressed".</p>
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		<p>In REP2-006 the Applicant highlighted the move towards separately collected food waste and stated that: “the Applicant will not be competing for feedstocks such as food waste as the Facility will be fuelled by RDF”.</p> <p>UKWIN made the un rebutted case (e.g. in REP2-057) that, as a processed waste, RDF generally has a lower level of decomposability than raw mixed waste. UKWIN made the case that, coupled with a move away from food waste and towards paper and card as the main biogenic fractions of the residual waste stream, the level of sequestration could very well be higher than 50%.</p> <p>UKWIN also made the point that if waste were further biostabilised prior to landfill, e.g. through aerobic digestion, this would significantly reduce methane emissions, and this alternative option should have been considered as part of the Boston Applicant’s assessments.</p>
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**Assessment of Alternative Solutions**

<p>UKWIN disagrees with the objectives of the Assessment of Alternative Solutions and considers other options have not been considered which could meet these objectives.</p>	<p>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.</p> <p>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.</p>	<p>UKWIN maintains its position that considering 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, constitute the very definition of a feasible “alternative way...of achieving the objectives of the project or plan that avoid adverse impacts on the integrity of the Natura 2000 site” and that such considerations should not therefore have been dismissed by the Applicant.</p>
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		<p>UKWIN's position remains that the Applicant has failed to provide alternatives that meet the original objective of the proposal because the applicant has adopted an overly broad definition of the 'original objectives' and an overly narrow definition of 'alternative solutions'.</p> <p>UKWIN noted in REP3-038 that Draft EN-3 Paragraph 2.10.4 states that: "the primary function of EfW plants is to treat waste", and we set out in REP3-038 and REP5-020 and elsewhere that therefore alternative options for managing the intended feedstock should be the focus of the alternative solutions appraisal and that it was inappropriate for the Applicant to produce a long list of supposed primary purposes which would render meaningless the legal requirement of the Habitats Regulations to consider feasible alternatives.</p> <p>UKWIN maintains the position that the Applicant has failed to demonstrate compliance with the Defra / Natural England guidance on Habitats Regulations Assessments which states that: "3.1 Test 1: Consider alternative solutions – To allow a derogation you must decide that there's no alternative solution that would be less damaging to the site. You should work with the proposer and consider whether any alternative solutions are available. This might include considering whether the proposal could: happen at a different location...change its scale, size, design, method or timing"</p> <p>The Applicant has yet to provide a meaningful explanation of why their assessment is at odds with these Government guidelines.</p>
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		<p>Furthermore, the Applicant has not provided any technical reason why they could not reduce the electrical output of the proposed facility and the association tonnage input requirements.</p> <p>Thus, the Applicant has not provided any evidence that the scale and size of their proposed operation could not be reduced, and they have not provided any evidence that reducing the scale and size would not reduce the adverse impacts.</p> <p>As set out in REP6-062, the Applicant dismissed the prospect of considering multiple incineration facilities as an alternative solution, but its reasons for doing so do not stand up to scrutiny.</p> <p>The Applicant has inexplicably refused to consider the prospect that two facilities of half the scale would – in combination – be capable of producing an equivalent level of energy whilst treating an equivalent quantity of waste, thereby providing an equivalent waste management and energy generation solution which would avoid adverse impacts on sensitive sites.</p> <p>Based on the deficiencies outlined by UKWIN and not adequately addressed by the Applicant, the Applicant’s statements appear to be of no value whatsoever in ruling out the potential for feasible alternative solutions to the Boston proposal, which is one of the earliest steps in the IROPI process.</p>
<p>UKWIN notes more reasonable justification should be included for ruling</p>	<p>The Applicant will provide further information at Deadline 6 on this point with regards to financial and</p>	<p>While the Applicant provided additional information regarding compensation in REP6-025, the Applicant has yet to address the points raised by UKWIN with</p>



out the use of alternative locations.	technical considerations.	respect to the need for a more reasonable justification for ruling out the use of alternative locations for the siting of this RDF incineration capacity.
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**Draft National Policy Statements (NPS)**

<p>UKWIN considers that draft EN-3 Paragraphs 2.10.4 and 2.10.5 are of particular relevance to the Facility</p>	<p>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 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 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.</p> <p>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</p>	<p>UKWIN maintains our position that draft EN-3 Paragraphs 2.10.4 and 2.10.5 are not only “potentially capable of being important and relevant considerations in the decision-making process”, but are in fact of particular relevance to the consideration of the proposed Boston proposal.</p> <p>UKWIN agrees with the Applicant that a plain reading of EN-3 (2021) Paragraph 2.10.5 constitutes a Government-imposed limit on incineration capacity. UKWIN’s position is that such an interpretation is correct and is the intended interpretation of this paragraph and of Government policy.</p> <p>UKWIN’s position is bolstered by Paragraph 2.10.4 of EN-3 (2021), because when those two paragraphs are read together they provide a clear narrative that is entirely consistent with other Government statements and policies.</p> <p>UKWIN maintains our position that the currently adopted NPS statement also provides protections against incineration overcapacity and against proposals that could prejudice the management of waste in line with the Waste Hierarchy.</p>
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	<p>nonetheless appropriate, which is important context which is missing from Para 2.10.5.</p> <p>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.</p>	<p>For example, EN-3 states at Paragraphs 2.5.66 that: "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".</p> <p>UKWIN disagrees with the Applicant's position that Paragraph 2.10.5 of EN-3 (2021) was somehow included in error. UKWIN's position is that the Government deliberately chose to strengthen the requirement for applicants to demonstrate that new incineration capacity "must not result in over-capacity of waste treatment at a local or national level", and that this requirement sets a "high bar".</p> <p>UKWIN's position is based on a series of Government statements (including that Government seeks "...to minimise the amount of waste that goes to incineration..."), as outlined in pages 1 and 2 of REP5-020, which we noted is consistent with advice provided to the Government by the Committee on Climate Change (CCC) that: "If EfW usage is left to grow unchecked, EfW emissions will quickly exceed those of the CCC pathway while undermining recycling and reuse efforts".</p>
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**Other key differences between the position the Applicant and UKWIN**

<p><b><i>The operational life assumed for the incinerator for the basis of assessing potential adverse impacts or determining conflicts with local and national policies, strategies and targets</i></b></p>	<p>The Applicant claimed that “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”.</p> <p>The Applicant stated that “The operational life of the Facility is identified as being 25 years as an assumption, which is typical for such facilities...”</p>	<p>UKWIN’s position is that assessing potential adverse impacts on recycling, climate change, etc. over a longer period of at least 30 years would be appropriate on the basis that:</p> <p>(a) the applicant is seeking permanent planning permission rather than temporary planning permission. In the event that the applicant only wishes for the impacts of their facility to be considered over a 25-year period then they should propose means by which the plant would be required to be decommissioned at the end of that 25-year period;</p> <p>(b) The prospect that the plant could be operating for more than 25 years is supported by the fact that Defra’s Energy from Waste Guide to the Debate refers to such plants typically lasting up to 30 years once they have been commissioned, which would align with the proposed Boston plant operating into the mid-to-late-2050’s; and</p> <p>(c) The Edmonton incinerator in North London began operations in 1971 and is still operational more than 50 years later.</p>
<p><b><i>R1 Status and the weight to be given to any claimed benefit of the plant being ‘Other Recovery’ rather than ‘Disposal’ in the</i></b></p>	<p>The Applicant’s position is that the facility is proposed to be an ‘R1’ plant and would therefore constitute recovery.</p>	<p>As set out in REP2-058 and REP6-042, UKWIN’s position is that as Design Stage R1 status has not been secured from the Environment Agency there is no reason for the approach taken for Boston to diverge from that taken for K3 and WKN.</p>

<p><b><i>Waste Hierarchy in the absence of a Design Stage R1 Certificate issued by the Environment Agency</i></b></p>	<p>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 with the Environment Agency.</p>	<p>According to the Examining Authority's Report for K3/WKN: "The Applicant...said 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 data...The response to ExQ4...was 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... 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 '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."</p>
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