

Response to REP 9.64

UKWIN'S D6 COMMENTS ON APPLICANT'S RESPONSE TO UKWIN'S COMMENTS

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

FEBRUARY 2022



INTRODUCTION

1. Because most of the positions taken by the applicant have already been disputed or critiqued by UKWIN (with many of these comments being repeated within Document 9.64 itself which is also known as REP5-009) the focus on this most recent submission is to comment on new points raised by the applicant's new summary document rather than to repeat all of the previous submissions from UKWIN.
2. For the avoidance of doubt, UKWIN does not believe that the various points raised to date (either in our written or our oral submissions) have been satisfactorily addressed and we maintain our objections for the reasons previously set out in our submissions.
3. For example, UKWIN has already provided a significant body of evidence to dispute the applicant's claims that they have assessed climate change impacts based on a "cautious worst-case scenario", and to dispute the notion that the applicant's subsequent submissions provide a reasonable 'envelope' around this central case assessment.

COMMENTS ON TABLE 1-1 POSITION SUMMARY

Main issue	Applicant comment	UKWIN response
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.	UKWIN look forward to reviewing this new information once it has been submitted. We hope that further consideration will be given to alternative solutions (as set out by UKWIN), not just alternative locations for the same proposed capacity, technology and feedstock.

COMMENTS ON THE APPLICANT'S TABLE 1-2 RESPONSE TO REP2-058

Para	Applicant comment	UKWIN response
4	Please note that the operational life of the Facility is identified as being 25 years as an assumption, which is typical for such facilities...	<p>It should be noted that the applicant is seeking permanent planning permission rather than temporary planning permission, e.g. for 25 years. If 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 after the end of that 25-year period.</p> <p>Defra's Energy from Waste Guide to the Debate refers on page 7 and at paragraph 46 to plants typically lasting up to 30 years once they have been commissioned, which would align with the proposed Boston plant operating into the mid-2050's. We note that the Edmonton incinerator in North London began operations in 1971 and is still operational more than 50 years later.</p>
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.	<p>Requirement 19 of the draft DCO (document reference 2.1(2), REP3-003) does not negate the concerns raised by UKWIN with respect to the ongoing lack of detail regarding the source and composition of the anticipated feedstock.</p> <p>However, Requirement 19 does reinforce the unresolved concerns about the availability of suitable waste for the facility to burn.</p>
11 - 13	The Applicant provided the example of the 2-hour travel time being used as representative for road transport to a port which could service the Facility.	The example provided by the applicant relates to a 2-hour journey to an incinerator, not a 2-hour journey to a port. We do not believe that this a valid comparator.

Para	Applicant comment	UKWIN response
17	See response to ID 14.	<p>The applicant's ID 14 comment does not actually address the issue raised by UKWIN in ID 17.</p> <p>As noted in UKWIN's Deadline 1 submission, the applicant's methodology failed to include in 'additional new EW capacity' around 1.8 million tonnes of material that could be treated through a significant proportion of the capacity which came online during 2019 and 2020. These facilities were not operating to full capacity in 2019 (and therefore would not have fully diverted material from landfill), yet the applicant only accounts for the addition of capacity that comes online from 2021 onwards.</p> <p>The applicant's approach therefore fails to consider the increase in headline capacity which occurred in 2019 and 2020 but which was not fully reflected in the amount diverted from landfill in 2019 due to the facilities not being fully online throughout that period.</p> <p>This is a fundamental methodological failing that the applicant has yet to fix.</p>
19	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 EfW Statistics report published in 2021, as noted in the Addendum to Fuel Availability and Waste Hierarchy	<p>In line with the comments on Para 17, the issue is not maintenance downtime, the issue is that there is a 1.8 million tonne per annum gap in the applicant's figures due to the applicant's use of a flawed methodology which fails to take us from the base year to the present.</p> <p>There remains a significant quantity of operational capacity which the applicant's methodology missed from its calculations because that capacity came online between the start of 2019 and the end of December 2020 (the basis for the 2021 Tolvik report).</p> <p>Paragraphs 17-19 of UKWIN's Deadline 1 submission provided a means of calculating this discrepancy where we came to a 'missing capacity' figure of 1,821ktpa. The applicant has not offered any meaningful criticism of UKWIN's methodology, but simply ignores this issue.</p> <p>To provide greater transparency we recalculated these figures using a more sophisticated approach that looks at the facilities that the Tolvik reports for 2019 and 2020 list as having come online during 2019 or 2020, and which were therefore not properly discounted in the applicant's</p>

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	<p>Assessment (document reference 9.5, REP1-018).</p>	<p>figures. We then compared the headline capacities of these plants against the quantity of waste incinerated at those plants in 2019, to show the gap between what would have been diverted from landfill by those plants in 2019 and how much those plants could be assumed to divert from landfill in the future.</p> <p>FIGURE 1. INCINERATION CAPACITY MISSING FROM APPLICANT'S CAPACITY ANALYSIS (ASSUMING 100% UTILISATION; FIGURES IN KTPA)</p> <table border="1" data-bbox="707 517 1883 999"> <thead> <tr> <th>Facility</th> <th>Headline Capacity</th> <th>Included capacity</th> <th>Missing capacity</th> <th>Year operational</th> </tr> </thead> <tbody> <tr> <td>Ferrybridge Multifuel 2</td> <td>675</td> <td>129</td> <td>546</td> <td>2019</td> </tr> <tr> <td>Beddington</td> <td>303</td> <td>279</td> <td>24</td> <td>2019</td> </tr> <tr> <td>Dunbar</td> <td>300</td> <td>251</td> <td>49</td> <td>2019</td> </tr> <tr> <td>Parc Adfer</td> <td>200</td> <td>58</td> <td>142</td> <td>2019</td> </tr> <tr> <td>Millerhill</td> <td>190</td> <td>142</td> <td>48</td> <td>2019</td> </tr> <tr> <td>Glasgow</td> <td>150</td> <td>83</td> <td>67</td> <td>2019</td> </tr> <tr> <td>Kemsley</td> <td>550</td> <td>0</td> <td>550</td> <td>2020</td> </tr> <tr> <td>Severn Road RRC</td> <td>350</td> <td>0</td> <td>350</td> <td>2020</td> </tr> <tr> <td>Leveneat</td> <td>180</td> <td>20</td> <td>160</td> <td>2020</td> </tr> <tr> <td>Full Circle</td> <td>120</td> <td>34</td> <td>86</td> <td>2020</td> </tr> <tr> <td colspan="3">Other EfWs in Commissioning but not achieved Takeover in 2019</td> <td>-205</td> <td></td> </tr> <tr> <td colspan="3">TOTAL MISSING CAPACITY</td> <td>1,817</td> <td></td> </tr> </tbody> </table> <p>As figure 1 shows, this alternative analysis comes to an almost identical conclusion, which is that around 1.8 million tonnes of incineration capacity is missing from the applicant's Table 4-1 figure for 'Additional new EfW (construction & commissioning phase) capacity'. The applicant's 4,255 ktpa figure ought to be increased to around 6,072,000 tpa.</p> <p>As Figure 2 (below) shows, even if the headline capacities were reduced to 90% utilisation (which we think is unnecessary as some of these plants may exceed their headline capacity), there would still be around 1.5 mtpa of incineration capacity missing from the applicant's analysis.</p>	Facility	Headline Capacity	Included capacity	Missing capacity	Year operational	Ferrybridge Multifuel 2	675	129	546	2019	Beddington	303	279	24	2019	Dunbar	300	251	49	2019	Parc Adfer	200	58	142	2019	Millerhill	190	142	48	2019	Glasgow	150	83	67	2019	Kemsley	550	0	550	2020	Severn Road RRC	350	0	350	2020	Leveneat	180	20	160	2020	Full Circle	120	34	86	2020	Other EfWs in Commissioning but not achieved Takeover in 2019			-205		TOTAL MISSING CAPACITY			1,817	
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Para Applicant comment

UKWIN response

FIGURE 2. INCINERATION CAPACITY MISSING FROM APPLICANT'S CAPACITY ANALYSIS (ASSUMING 90% UTILISATION; FIGURES IN KTPA)

Facility	Headline Capacity	Included capacity	Missing capacity	Year operational
Ferrybridge Multifuel 2	607.5	129	478.5	2019
Beddington	272.7	279	-6.3	2019
Dunbar	270	251	19	2019
Parc Adfer	180	58	122	2019
Millerhill	171	142	29	2019
Glasgow	135	83	52	2019
Kemsley	495	0	495	2020
Severn Road RRC	315	0	315	2020
Leveneat	162	20	142	2020
Full Circle	108	34	74	2020
Other EfWs in Commissioning but not achieved Takeover in 2019			-205	
TOTAL MISSING CAPACITY			1,515	

As such, based on 90% utilisation, the applicant's Table 4-1 figure of 3,830 ktpa should be corrected to be 5,345,000 tpa.

The failings highlighted by UKWIN and ignored by the applicant render meaningless the applicant's conclusions regarding the need for their proposed additional 1.2 million tonnes of incineration capacity.

Instead of defending their historic numbers, arrived at through a flawed methodology, the applicant should update their assessment to take account of all additional new EfW capacity that has emerged since 2019 (as well as taking account of future increases in C&I recycling, as UKWIN noted elsewhere).

Para	Applicant comment	UKWIN response
		<p>In relation to capacity missing from the applicant's assessments, we also note that on 1st February 2022 the Government updated their list of incineration projects which are under construction. This has revealed the following capacity which is not included in Document 9.5 Table A (11 UK EfW Facilities in Construction or Commissioning Phase) but which ought now to be added:</p> <ul style="list-style-type: none"> • 395,000 tpa of headline capacity at Enfinium Energy Limited's Kelvin Energy Recovery Facility (PINS ref APP/G4620/W/18/3216591) • 180,000 tpa of headline capacity at Doveryard Limited's Oldhall Energy Recovery Facility (North Ayrshire Council planning ref 19/00539/PPM) <p>This amounts to 575,000 additional tonnes of headline capacity. If this is added to the 1,817,000 tpa of missing capacity the result is a figure of 2,392,000 tpa of missing capacity.</p> <p>To understand the impacts of these missing figures, it is useful to consider them within the context of taking account of improvements in C&I recycling rates. The applicant assumed that, in their catchment, higher household (HH) recycling rates would result in 5,147ktpa less residual waste arising.</p> <p>To determine how much this would mean if the same sort of improvements were made to C&I recycling rates we can assume, as per UKWIN's Deadline 2 submission from October 2021, that HH waste represents around 45% of the total residual waste stream and that C&I represents the other 55%.</p> <p>The additional impact of equivalent improvements in C&I recycling could therefore be calculated by multiplying the HH recycling figure of 5,147 ktpa by 0.55/0.45 (i.e. 1.222). This means an equivalent tonnage impact would be 6,291 ktpa (5,147 × 0.55/0.45). For sensitivity, we have also calculated the impact at 33% and 50% of this value, accounting for the potential impact of a lower level of improvement in C&I recycling. The results are overleaf:</p>

Para	Applicant comment	UKWIN response																																																												
		<p style="text-align: center;">FIGURE 3. IMPACT ON CATCHMENT CONCLUSIONS FOR REMAINING AVAILABLE FUEL WHEN TAKING ACCOUNT OF MISSING ADDITIONAL EFW CAPACITY AND INCREASE IN C&I RECYCLING RATES EQUIVELANT TO HOUSEHOLD INCREASES (ASSUMING 90% UTILISATION RATE FOR INCINERATORS) IN KTPA</p> <table border="1"> <thead> <tr> <th>Description</th> <th>33%</th> <th>50%</th> <th>100%</th> <th>Source</th> </tr> </thead> <tbody> <tr> <td>Landfilled combustible wastes</td> <td>10,437</td> <td>10,437</td> <td>10,437</td> <td>Applicant</td> </tr> <tr> <td>RDF exported</td> <td>2,450</td> <td>2,450</td> <td>2,450</td> <td>Applicant</td> </tr> <tr> <td>Available fuel</td> <td>12,887</td> <td>12,887</td> <td>12,887</td> <td>Applicant</td> </tr> <tr> <td>Additional new EfW (construction & commissioning phase) capacity</td> <td>4,255</td> <td>4,255</td> <td>4,255</td> <td>Applicant</td> </tr> <tr> <td>Missing additional new EfW capacity</td> <td>2,392</td> <td>2,392</td> <td>2,392</td> <td>UKWIN</td> </tr> <tr> <td>Fuel demand of additional EfW (construction & commissioning)</td> <td>3,830</td> <td>3,830</td> <td>3,830</td> <td>Applicant</td> </tr> <tr> <td>Fuel demand of missing additional EfW (construction & commissioning)</td> <td>2,153</td> <td>2,153</td> <td>2,153</td> <td>UKWIN</td> </tr> <tr> <td>Remaining available fuel (after under construction EfW operational)</td> <td>6,904</td> <td>6,904</td> <td>6,904</td> <td>Derived</td> </tr> <tr> <td>Higher recycling rates reducing residual waste (HH)</td> <td>5,147</td> <td>5,147</td> <td>5,147</td> <td>Applicant</td> </tr> <tr> <td>Higher recycling rates reducing residual waste (C&I)</td> <td>2,076</td> <td>3,145</td> <td>6,291</td> <td>Derived</td> </tr> <tr> <td>Remaining available fuel (after new EfW operational and higher recycling rates met)</td> <td>-319</td> <td>-1,388</td> <td>-4,534</td> <td>Derived</td> </tr> </tbody> </table> <p>This demonstrates that even when taking account of an improvement in C&I recycling rates that are just 33% of the anticipated improved level for household waste this results in overcapacity of more than 300ktpa, meaning that the Boston facility could be exacerbating national incineration overcapacity, let alone contributing to regional or local overcapacities. Higher rates of C&I recycling could result in millions of tonnes of incineration overcapacity.</p> <p>These estimates are conservative in several respects, e.g.:</p> <ul style="list-style-type: none"> • They take account only of incineration capacity currently under construction or operational, and do not include consented capacity which has yet to enter construction. • A 90% utilization rate is assumed, but incinerators are permitted to burn more than this. 	Description	33%	50%	100%	Source	Landfilled combustible wastes	10,437	10,437	10,437	Applicant	RDF exported	2,450	2,450	2,450	Applicant	Available fuel	12,887	12,887	12,887	Applicant	Additional new EfW (construction & commissioning phase) capacity	4,255	4,255	4,255	Applicant	Missing additional new EfW capacity	2,392	2,392	2,392	UKWIN	Fuel demand of additional EfW (construction & commissioning)	3,830	3,830	3,830	Applicant	Fuel demand of missing additional EfW (construction & commissioning)	2,153	2,153	2,153	UKWIN	Remaining available fuel (after under construction EfW operational)	6,904	6,904	6,904	Derived	Higher recycling rates reducing residual waste (HH)	5,147	5,147	5,147	Applicant	Higher recycling rates reducing residual waste (C&I)	2,076	3,145	6,291	Derived	Remaining available fuel (after new EfW operational and higher recycling rates met)	-319	-1,388	-4,534	Derived
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		<ul style="list-style-type: none"> • No account is taken for how it can take more than one tonne of waste to produce a tonne of RDF feedstock. Some estimates suggest that around 1.33 tonnes of waste is required to produce 1 tonne of RDF (due to dewatering), and many of the UK's largest incinerators are designed to accept RDF. • No account is taken for how some of the fuel could be diverted to non-incineration uses, such as to produce SRF for cement kilns. <p>Figure 3 generally follows the approach and values from the applicant's Table 4-1 Summary of UK Fuel Availability for the Proposed Facility correcting an error made by the applicant in the middle row which referred to 'Remaining available fuel (after consented EfW operational)' when the figure was actually the remaining available fuel based on the capacity <i>under construction</i> becoming available (based on 90% utilisation).</p>
21 - 22	<p>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.</p>	<p>To consider historic C&I going to landfill as potential feedstock without taking any account whatsoever of the prospect of some of this being diverted into recycling in line with Government ambitions simply does not provide a solid basis for demonstrating need.</p> <p>If the applicant's position is that there is no meaningful way to estimate future C&I residual waste arisings then this undermines their whole assessment which relies on such estimates.</p> <p>The applicant has not provided a meaningful explanation setting out why they could not estimate a number of potential C&I recycling scenarios and show how these would impact on their need assessment.</p> <p>Similarly, the applicant has not explained why they could not simply exclude C&I altogether on the basis that there is too much uncertainty as to how much residual C&I waste would arise. Instead, the applicant appears to have adopted an approach which results in the likely overstatement of the residual C&I waste that would be available throughout the operational lifetime of the proposed Boston incinerator.</p>

Para	Applicant comment	UKWIN response
29 - 31	<p>The Applicant has used Defra’s most recently published waste data. Recycling rates for C&I waste are not published by Defra (see response above) so we are unable to apply the same methodology to the portion of C&I waste.</p>	<p>The applicant has not shown why they would not be able to apply the methodology to several reasonable assumptions for future improvements in C&I recycling.</p> <p>If the applicant truly has so little insight into the feedstock that they intend to be relying upon then it raises broader questions about the reliability of their need assessment and IROPI arguments.</p>
36	<p>The review undertaken in accordance with NPS EN-3 follows the approach adopted by the application for the now consented MF2 facility, also a merchant facility, where the potential catchment area which extended to the North of England, with fuel transported to site by train...</p>	<p>The applicant fails to address UKWIN’s first point that: <i>“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”</i>.</p> <p>The applicant has further failed to address how the MF2 assessment from 2014 does not set the precedent that the applicant has claimed it set with respect to allowing overly broad waste catchments that extend well beyond neighbouring regions.</p> <p>Circumstances have in any case changed since 2014, e.g. the significant increase in incineration capacity which increases the likelihood of overcapacity, the introduction of the 65% recycling target, and the wording adopted by the Government in EN-3 (2021) and associated supporting Government statements regarding the intended policy direction being to move away from incineration and towards recycling and the circular economy.</p>

Para	Applicant comment	UKWIN response
36	<p>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'.</p>	<p>This is not about accepting non-local waste; it is about local waste being exported to a distant facility when it might otherwise be treated more locally in line with the proximity principle.</p> <p>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 of density necessary to make domestic infrastructure financially viable.</p> <p>Despite the applicant's assumptions, it is entirely foreseeable that some areas and some ports would be disproportionately used as the source of feedstock for the Boston facility rather than the impact being spread evenly across all catchment areas.</p> <p>Given the 1.2 mtpa capacity of the proposed Boston plant, which could require 1.6 million tonnes of waste to produce, this impact could be significant giving rise to long-lasting adverse impacts on an area's ability to reach their goal of net self-sufficiency in line with the proximity principle.</p> <p>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>It should be noted that for each of the ports listed as potential sources of 100,000 tonnes of RDF there are already between 145,000 tonnes of existing capacity (Belfast) to nearly 5 million tonnes of existing capacity (Ridham, and Sheerness) within a 2-hour isochrone. UKWIN provides a list of key existing EfW facilities located within a 2-hour isochrone of the 12 proposed ports in Annex A, at the end of this document.</p>

Para	Applicant comment	UKWIN response
		It is obvious that, for waste originating towards the edge of the applicant's 2-hour isochrone, there will be facilities located more than 2-hours from the port which are closer to the source of the waste, and so a comprehensive assessment would need to look at all capacity within a 4-hour drive of the ports names by the applicant - which in effect includes the entirety of the UK.
50 - 60	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 applicant does not appear to address the majority of the points raised by UKWIN, nor to correct the errors and omissions identified by UKWIN.
61 - 62	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 with the Environment Agency.	<p>The applicant appears to have failed to identify any distinction between the circumstances regarding R1 that were at play for Wheelebrator Kemsley North and the circumstances that are at play for the Boston proposal.</p> <p>In both cases the facility did not secure R1 status from the Environment Agency and yet the applicants in both cases ask the Examining Authority to treat the facility as 'Other Recovery' in the waste hierarchy.</p> <p>As such, there appears to be no basis for the Examining Authority not to come to a similar conclusion with respect to the Boston proposal, which is that they <i>"cannot with a high level of confidence assume that either project within the Proposed Development would achieve R1 status"</i>.</p>

COMMENTS ON THE APPLICANT'S TABLE 1-2 RESPONSE TO REP2-057

Para	Applicant comment	UKWIN response
3 - 7	<p>...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... It is acknowledged that there is potential that the calorific value will affect power outputs.</p>	<p>As set out detail in UKWIN's Good Practice Guidance for Assessing the GHG Impacts of Waste Incineration, the impacts of waste management are tied to the composition of the waste, and so to look at each impact in isolation fails to show how changing key variables for the composition impacts on the various different outputs for both incineration and landfill, such as electricity generation, CO₂ generation, and methane generation.</p> <p>The applicant has continued to fail to address the fact that it is not internally consistent to have changing assumptions for the waste composition without considering how those changes then impact on electricity generation and the impacts of how waste is treated in landfill. Instead, the applicant is looking at individual elements without showing the impact on the overall conclusions. The applicant cites their own work which has already been shown to be flawed and deficient as if those flawed reports addressed UKWIN's criticisms.</p>
8-10	<p>This is a misrepresentation of 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)...</p>	<p>The statement which the applicant is portraying as a misrepresentation of the approach undertaken by the applicant was a direct quote from page 2 of the applicant's Document 9.6. As far as we are aware, the applicant has not withdrawn or amended that document. What the applicant fails to respond to is UKWIN's request for them to assess the impact of the changes in composition on how the material would behave in landfill. As the applicant is comparing incineration with landfill, to constitute a fair comparison they would need to account for how changes in composition would impact on the overall net emissions from incineration and the overall net emissions from landfill. As pointed out by UKWIN (and not disputed by the applicant) the applicant's submissions to date have done neither.</p>

Para	Applicant comment	UKWIN response
10	<p>...Section 2.4 of the document considers emissions from landfill, whereby a degradable (sic)</p> <p>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.</p>	<p>The applicant has assumed a fixed sequestration rate of 50% rather than considering how changes in composition to remove food waste could increase the sequestration rate in line with what UKWIN has set out in its Good Practice Guidance for Assessing the GHG Impacts of Waste Incineration.</p> <p>Furthermore, the applicant has not set out the impact of biogenic carbon sequestration from either converting the material to RDF or using a dedicated aerobic composting process on the sequestration rate despite this potentially having a significant impact on reducing methane emissions from landfill.</p>
11	<p>Please also refer to the response to paragraph 7 which discusses the electricity generation offset...</p>	<p>The applicant's response to paragraph 7 does not discuss the electricity generation offset (i.e. the carbon intensity of any electricity displaced), only the amount of electricity generated/exported, and so UKWIN's concern remains unaddressed.</p>
12 - 14	<p>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 changing composition in terms of carbon and fossil carbon on the effect to GHG emissions. This analysis also considered the effect on changing carbon and fossil carbon composition of emissions if the waste was treated via landfill.</p>	<p>The approach adopted by the applicant does not provide sensitivity analysis for key non-composition assumptions, nor does it show how some of the assumptions which were made by the applicant are consistent with current and future RDF composition.</p> <p>The applicant consider various elements in isolation but fails to adequately 'bring it all together' into an assessment that shows the impact of changing waste composition (and changes in other key variables) on their overall claimed climate change credentials.</p>

15 - 21 ...The 20 – 30% carbon content figures were used to encompass a range of scenarios for future RDF feedstock, to provide an indication of the lower and upper end levels of GHG emissions that could arise from the proposed Facility...It is noted that RDF feedstocks are likely to have a higher carbon content than some other waste streams...

The applicant has not shown that any of the figures they are relying on to justify the 20-30% range relate to RDF as distinct from unprocessed municipal solid waste (MSW) streams. This is important because RDF, as UKWIN noted in paragraph 21, is made up of de-watered waste thereby concentrating the carbon relative to unprocessed MSW.

In December 2021 the applicant for the Reading Quarry Energy Recovery Centre, which is also proposed to treat RDF, assumed a carbon content of 35% for their RDF feedstock for their core scenario, and this was stated by the Reading applicant’s consultants to be an “Estimate based on compositional analysis of similar RDF feedstock”.

EXTRACT FROM ‘GREENHOUSE GAS ASSESSMENT: READING QUARRY ENERGY RECOVERY CENTRE’, DECEMBER 2021 BY AIR QUALITY CONSULTANTS

A1.1 GHG emissions from the ERC are linked to the carbon content of the input RDF fuel. The GHG emissions from the ERC have therefore been calculated based on the designed throughput and net calorific value (NCV) of the RDF.

A1.2 Key parameters assumed in the calculation of the GHG emissions from the ERC are summarised in Table A1.1.

Table A1.1: Input Parameters for ERC GHG Emissions Calculation

Parameter	Values		Unit	Source/Reference
	Core Scenario	Sensitivity Test		
RDF Throughput	108,000	150,000	tpa	Estimated from NCV of RDF
RDF NCV	14	8	MJ/kg	
RDF Total Carbon Content	35	20	%mass	From compositional analysis of RDF feedstock

		<p>Given that the 35% figure post-dates the 2006 source cited by the Boston applicant, and given that it relates specifically to RDF rather than unprocessed MSW, we would consider a 35% carbon content figure to be a more reasonable starting point for the central assumptions within the Boston applicant's GHG assessment.</p> <p>Based on a 35% carbon content, burning 1 tonne of waste would result in the production of 1.283 tonnes of CO₂ ($0.35 \times 3.6667 = 1.283$).</p>
27	<p>Should a 55% fossil carbon content be assumed, it would still represent a saving of 60,000 – 120,000 tonnes of carbon dioxide equivalent (CO₂e) when compared to sending the waste to landfill, depending on the overall carbon content of the waste (ranging from 20 – 30%).</p>	<p>UKWIN disagrees with the applicant's suggested 60-120ktpa saving range for the reasons previously stated, e.g. this range fails to take into account:</p> <ul style="list-style-type: none"> • the reduction in methane generation of RDF compared to unprocessed MSW; • the difference in biogenic CO₂ emissions between incineration and landfill, with landfill acting as a partial biogenic carbon sink; • decarbonization of the electricity supply; • the potential for waste to otherwise be sent to biostabilisation; and • how incineration can divert waste from recycling and not just from landfill. <p>When all of these factors (which are set out in more detail in UKWIN's Good Practice Guidance for Assessing the GHG Impacts of Waste Incineration) are taken into account there would either be no meaningful GHG savings from the Boston incinerator, and instead there would be the potential for a significant adverse GHG impact.</p>
28-39	<p>This comment is a misunderstanding of the figures presented in Table 3 of the report, which were obtained from Table 21-25 of Chapter 21 of the ES (document reference: Chapter 21 Climate</p>	<p>Rather than identifying a misunderstanding on UKWIN's part, the applicant's response confirms UKWIN's critique, which is that the applicant fails to show the impact of the various sensitivities on the overall climate change impacts of the proposed facility.</p>

	<p>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)...</p> <p>It is noted that not all of the scenarios are comparable...</p> <p>no attempt was made to try and predict RDF compositions in the future...</p>	
32	<p>The degradable decomposable organic carbon (DDOC) content of 50% figure was adopted in accordance with Defra's Energy from</p>	<p>If a 50% figure is reasonable for 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>

	Waste – A Guide to the Debate, which is considered to be a conservative figure.	
33 - 36	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....	Whilst UKWIN welcomes the applicant's belated recognition of this fact, this does not address the shortcoming arising from the fact that such considerations are not reflected in either the landfill options considered in the applicant's climate change assessments or in the applicant's IROPI assessment of alternative solutions.

COMMENTS ON TABLE 1-3 RESPONSE TO REP3-038

Para	Applicant comment	UKWIN response
7-9	The management of residual waste is one of the key objectives for the Facility; however, as clearly stated within EN-116 and EN-3, Energy from Waste forms an important role in managing security of supply of electricity	<p>We note that the applicant has not maintained in their response that electricity generation is a primary purpose of their plant, and so they appear to be confirming UKWIN's criticism that their IROPI assessment of alternatives should not have been premised on that basis.</p> <p>This is not surprising, as claiming that energy is secondary formed part of the applicant's response to our criticism of the high carbon intensity of the electricity generated, which they provided in paragraph 3.1.7 of document 9.5.5.</p> <p>However, it does mean that the applicant's Assessment of Alternative Solutions remains flawed for the reasons set out by UKWIN.</p>
10-13	...the approach to alternative solutions should provide alternatives that meet the original objective of the proposal....	As already set out by UKWIN, 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'.
11 - 28	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...	<p>It is easy to discern why wind is not comparable to nuclear in terms of an assessment of alternative solutions. However, when it comes to 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, this seems to be the very definition of a feasible "<i>alternative way...of achieving the objectives of the project or plan that avoid adverse impacts on the integrity of the Natura 2000 site</i>".</p> <p>The applicant has provided no logical reason why these alternatives are not considered, other than by reference to their choice to adopt an overly broad definition of the objective of the project.</p>

	<p>... a series of smaller facilities has not been considered as an alternative option based on the objectives of the project....</p> <p>... alternative waste treatment options were not considered as alternative options based on the objectives of the project....</p>	<p>The ‘Department for Environment, Food and Rural Affairs (Defra), Natural England, Welsh Government and natural Resources Wales. 2021. Habitats regulations assessments: protecting a European site’ guidance cited at footnote 19 of the applicant’s response does in fact allow for consideration of different scale, location, size, design and method.</p> <p>The guidance clearly states that:</p> <p><i>“3.1 Test 1: Consider alternative solutions</i></p> <p><i>To allow a derogation you must decide that there’s no alternative solution that would be less damaging to the site.</i></p> <p><i>You should work with the proposer and consider whether any alternative solutions are available. This might include considering whether the proposal could:</i></p> <ul style="list-style-type: none"> <i>• happen at a different location</i> <i>• use different routes across a site</i> <i>• change its scale, size, design, method or timing”</i> <p>Thus, it appears that the applicant’s approach goes against the very guidance that they have cited.</p>
14	<p>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,</p>	<p>The applicant’s Deadline 4 note was clearly inadequate to satisfy the Environment Agency as the EA raised a number of serious concerns in their Deadline 5 submission. As far as we are aware there remains serious issues with permitting the Lightweight Aggregates Facility, and the applicant’s failure to anticipate that the EA would find the applicant’s note inadequate raises concerns about the Applicant’s ability to satisfy the regulatory requirements</p>

	REP4-018). Therefore, it is not anticipated there will be an issue permitting this facility.	necessary to obtain an Environmental Permit for the Lightweight Aggregates Facility.
14	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.	<p>The applicant has not provided any evidence to date to demonstrate that there are no other sites allocated for waste management purposes at or near to other ports within the UK.</p> <p>Furthermore, a facility could meet local planning policy without being an allocated site if it met the relevant exception criteria.</p>
18 - 21	The Facility is designed to deliver approximately 80 megawatts	<p>UKWIN's comments were focussed on the applicant's assessment of alternative solutions, not the precise details of the proposed facility. There is surely a reason why the Methodological Guidance for the Habitats Regulations refers to looking for an "<i>alternative ways...of achieving the objectives of the project or plan</i>" rather than 'an alternative location for precisely the same proposal'.</p> <p>As noted with respect to paragraphs 11 – 28, the Guidance acknowledges that it is appropriate to consider a change to the scale and size of the proposed option so as to reduce adverse impacts.</p> <p>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. That is to say, they have not provided any evidence that the scale and size of the 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>
22	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,	The applicant seems to avoid responding to the concern raised by UKWIN - which is that the same contribution to the National Grid capacity could be achieved through two or more smaller incineration facilities, and/or through other forms of electricity generation.

	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.	It is not clear why two facilities of half the scale, for example, would not cumulatively be able to produce an equivalent level of energy and treat an equivalent quantity of waste. Presumably the applicant is not actually arguing this could not be the case. The applicant's statements therefore appear to be of no value whatsoever in ruling out feasible alternative solutions.
24 - 25	The efficiency of other EfW plants is not guaranteed....	The efficiency of the proposed EfW plant is not guaranteed, but the degree of confidence to be afforded to the efficiencies reported for other facilities is higher because they have an operational track record. Facilities with CHP generally have a higher efficiency than electricity-only plants, and whilst the applicant pledges to make the Boston facility 'CHP-ready' this is far less certain than existing plants which are already connected to district heating schemes.
24 - 25	The efficiency of other EfW ...may vary due to...emissions standards (such as for non-EU countries).	UKWIN is confused by the applicant's reference to emissions standards for non-EU countries as RDF export is generally to countries which are in the EU or follow EU emissions standards.

COMMENTS ON TABLE 1-3 RESPONSE TO REP3-037

Para	Applicant comment	UKWIN response
1.3.3	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'...	<p>At Paragraph 1.3.3 UKWIN stated that the applicant is incorrect in their continued characterisation of the electricity generated as 'renewable' (i.e. 'wholly renewable') for the reasons set out in UKWIN's Written Representation (REP1-068) paragraphs 123-133.</p> <p>It is unclear whether or not the applicant has accepted UKWIN's point but they do not actually challenge it.</p> <p>The status of the energy generated from the biomass fraction of the waste is not the whole story. As the applicant is also proposing to incinerate non-biomass waste, UKWIN is correct that the energy produced from the non-biomass fraction of the waste is not renewable. As such, the electricity is partially-renewable at best, and characterising it as simply 'renewable' is incorrect.</p>
1.3.3	The key socio-economic benefits of the Proposed Development are set out in ES Chapter 20 (Socio-Economics) (document reference 6.2.20, APP-058). This makes no reference to taxable revenue.	The applicant is the one who claimed that the proposed commercial operation would result in " <i>sizeable taxable revenue</i> " in their comments on Kevin Blanchard's representation. If they wish to resile from that position now that we have shown it to be flawed, then we ask that they make this explicit.
1.3.3	...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	<p>As noted above, the energy is 'partially renewable' at best, and not 'renewable'.</p> <p>Replacing 'traditional fossil fuel' with incinerating plastic, which is also a fossil fuel, is hardly a step forward.</p>

	sources both locally and nationally, thereby helping to reduce dependence on traditional fossil fuel energy sources and assisting with the transition to net-zero....	Indeed, as the plant might be displacing non-fossil fuel sources such as 100% renewable energy and because the Boston plant would be likely to have a far lower efficiency than the conventional use of fossil fuels (as using natural gas in CCGT has a typical conversion efficiency of >70% compared to ~25% for incineration) the plant is likely to lock the UK into more carbon-intensive forms of electricity generation
1.5.3	The content within the UKWIN 'Good Practice Guidance' is noted, however...	<p>It is not clear in what way the applicant has 'noted' the substance of UKWIN's Guidance. As with all inquiry evidence, UKWIN's Guidance should be assessed on its merits. The document provides copious references and is extremely well sourced, showing examples of the best practice adopted by industry and the GHG impacts of real-world UK incinerators based on information provided by the relevant incinerator operators.</p> <p>While the applicant is free to criticise specific elements of the document, the applicant has not engaged with the content of the Guidance which supports UKWIN's case that the applicant has not followed good industry practice in numerous key respects. The applicant's use of <i>ad hominem</i> arguments lays bare their failure to counter the various important points made by UKWIN about the deficiencies in the applicant's adopted approach to assessing the GHG impacts of their proposal.</p>
1.5.123	<p>...The energy produced from the biomass fraction of waste is renewable'...</p> <p>...Paragraph 2.6.6 to 2.6.7 of the September 2021 draft NPS EN3 states...</p>	<p>It is noted that the applicant does not actually dispute the point made by UKWIN, which is that EN-3 (as opposed to its draft successor) does not include any explicit reference to RDF.</p> <p>It is also noted that while the applicant refers to the renewable status of the biomass portion of the energy, they do not actually dispute that the Boston proposal is similar to the Wheelabrator Kemsley North proposal in that <i>"the portion of energy output attributed to non-biomass based waste input...cannot be considered renewable and therefore the plants would be partially renewable at best"</i>.</p>

<p>1.5.126 – 1.5.130</p>	<p>In this analysis document, any biogenic sources of carbon were discounted from both scenarios as they are not net contributions to the global system... Therefore, the biogenic and fossil carbon contribution of both waste treatment pathways is accounted for in the analysis.</p>	<p>As is clear from Table 5 of Document 9.6 (REP1-019), the applicant does in fact take account of biogenic carbon as part of their consideration of methane (CH₄). Indeed, without that landfill would have zero emissions as it is not associated with the release of fossil CO₂.</p> <p>The applicant ignores the fact that while both landfill and incineration produce biogenic CO₂, some of the biogenic CO₂ is sequestered in landfill but not with incineration, which means that incineration results in the net release of more biogenic CO₂ than landfill. Or, to put it another way, the applicant fails to credit landfill for acting as a partial carbon sink.</p> <p>As noted by UKWIN in our previous submissions, and as set out in our Good Practice Guidance, it is not methodologically sound to ignore this difference in the release of biogenic CO₂ – if the release of biogenic CO₂ from incineration is carbon neutral, then the avoidance of that release in landfill is a carbon benefit.</p> <p>This methodological error is significant enough to make the difference between the Boston proposal being considered to be comparable or marginally better than landfill and it being significantly worse.</p>
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COMMENTS ON TABLE 1-3 RESPONSE TO REP3-036

Para	Applicant comment	UKWIN response
4-7	... The draft NPSs have been published for consultation, and that consultation ended on 29 November 2021....	See UKWIN's Deadline 5 submission (REP5-020) paragraphs 1-15.
8-10	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.	<p>The intended purpose of Mr Marsh making the statement is irrelevant. What is crucial is that Mr. Marsh was right to emphasise the significant consequences of applying the emerging Government policy as it is currently drafted.</p> <p>That is, the implication of Mr. Marsh's analysis is that draft EN-3 as it is currently worded means that a robust case needs to be demonstrated for the proposed Boston project, and we agree with this reading of this policy statement.</p>
9-14	In any event, ...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...	<p>As set out above and in UKWIN's previous submissions, UKWIN respectfully disagrees.</p> <p>We maintain the position that the applicant's need case is methodologically flawed and therefore cannot be relied upon to demonstrate that the facility would not result in local and/or national overcapacity.</p> <p>Given that the proposed capacity is for 1.2 million tonnes of RDF, it is clear that the proposal would rely on the continued generation of a significant quantity of waste. The feedstock demands are even higher when one considers that it can take around 1.33 tonnes of waste to produce 1 tonne of RDF, meaning the proposed 1.2 million tonnes of RDF capacity could require around 1.6 million tonnes of waste per annum. Over 25 years this would amount to around 40 million tonnes of waste.</p>

ANNEX A: CAPACITY OF EXISTING INCINERATORS LOCATED WITHIN A 2-HOUR ISOCHRONNE OF THE 12 PORTS LISTED BY THE APPLICANT

145,000 tonnes within 2 hours of the port at Belfast:

- 145,000 tonnes at Full Circle Generation EfW, 7 Airport Road, Belfast Harbour Estate (10 minute drive)

2,028,000 tonnes within 2 hours of the port at Fleetwood:

- 127,000 tonnes at Bolton Thermal Recovery Facility / "Bolton Incinerator", Raikes Lane, Bolton (1 hour drive)
- 1,100,000 tonnes at Runcorn EFW Facility, Picow Road Farm, Weston Point, Runcorn (1.5 hour drive)
- 175,000 tonnes at "Protos Energy Hub", Protos, Grinsome Road, Ellesmere Port Runcorn (1.5 hour drive)
- 266,000 tonnes at Hooton Park Sustainable Energy Facility, Hooton Park, North Road, Eastham Kirklees (1 hour 40 minute drive)
- 150,000 tonnes as Kirklees Energy from Waste Facility, Vine Street, Huddersfield, Kirklees (1 hour 40 minute drive)
- 210,000 tonnes at Stoke Energy from Waste Facility / "Hanford", Campbell Road, Sideway, Stoke-on-Trent (2 hour drive)

1,347,000 tonnes within 2 hours of the port at Glasgow:

- 150,000 tonnes at Glasgow Recycling and Renewable Energy Centre (GRREC), Next to the Polmadie Recycling Centre, 425 Polmadie Road (25 minute drive)
- 180,000 tonnes at Levensat Waste Management Site, By Forth, Lanark (1 hour drive)
- 237,000 tonnes at Earls Gate Energy Centre, Earls Road, Grangemouth (1 hour drive)
- 155,000 tonnes at Millerhill Energy Recovery Centre, Former Millerhill Marshalling Yards, Whitehill Mains Road, Millerhill, Dalkeith, Midlothian (1.5 hour drive)
- 120,000 tonnes at DERL, Forties Road, Baldovie Industrial Estate, Angus (2 hour drive)
- 110,000 tonnes at Baldovie EfW CHP Facility, Forties Road, Baldovie Industrial Estate (2 hour drive)
- 325,000 tonnes at Oxwellmains EfW, Dunbar Landfill, Oxwellmains, Dunbar (2 hour drive)
- 180,000 tonnes at Doveryard Limited's Oldhall Energy Recovery Facility, North Ayrshire (45 minute drive)

1,457,000 tonnes within 2 hours of the port at Grangemouth:

- 237,000 tonnes at Earls Gate Energy Centre, Earls Road, Grangemouth (10 minute drive)
- 150,000 tonnes at Glasgow Recycling and Renewable Energy Centre (GRREC), Next to the Polmadie Recycling Centre, 425 Polmadie Road (35 minute drive)
- 180,000 tonnes at Levensat Waste Management Site, By Forth, Lanark (35 minute drive)
- 155,000 tonnes at Millerhill Energy Recovery Centre, Former Millerhill Marshalling Yards, Whitehill Mains Road, Millerhill, Dalkeith, Midlothian (45 minute drive)
- 120,000 tonnes at DERL, Forties Road, Baldovie Industrial Estate, Angus (1.5 hour drive)
- 110,000 tonnes at Baldovie EfW CHP Facility, Forties Road, Baldovie Industrial Estate (1.5 hour drive)
- 325,000 tonnes at Oxwellmains EfW, Dunbar Landfill, Oxwellmains, Dunbar (1 hour drive)
- 180,000 tonnes at Doveryard Limited's Oldhall Energy Recovery Facility, North Ayrshire (1 hour drive)

380,000 tonnes within 2 hours of the port at Great Yarmouth:

- 295,000 tonnes at Suffolk Energy from Waste Facility, Highways depot opposite Masons Landfill Site, Great Blakenham, Ipswich (1.5 hour drive)
- 85,000 tonnes at Peterborough CC EFW Plant, Fourth Drove, Fengate, Peterborough (2 hour drive)

3,051,000 tonnes within 2 hours of the port at Hartlepool:

- 500,000 tonnes at Wilton 11, Wilton International, Middlesbrough (30 minute drive)
- 450,000 tonnes at Teesside Energy from Waste Plant, Haverton Hill Road, Billingham (20 minute drive)
- 306,000 tonnes at North East Energy Recovery Centre (NEERC), Haverton Hill Road, Billingham, Stockton (20 minute drive)
- 320,000 tonnes at Allerton Waste Recovery Park, Allerton Park Quarry, Knaresborough (1 hour drive)
- 200,000 tonnes at Leeds Recycling and Energy Recovery Facility, Former wholesale market on Pontefract Lane in Cross Green, Leeds (1.5 hour drive)
- 675,000 tonnes at Ferrybridge Multifuel Facility 1 (FM1), near Ferrybridge C power station, Knottingley (1.5 hour drive)
- 675,000 tonnes at Ferrybridge Multifuel Facility 2 (FM2), near Ferrybridge C power station, Knottingley (1.5 hour drive)
- 245,000 tonnes at Sheffield Energy Recovery Facility, Bernard Road, Sheffield (2 hour drive)

3,612,000 tonnes within 2 hours of the port at Hull:

- 250,000 tonnes at Cleveland Street (former ADM Cocoa Plant) Dalton Street (Council Waste Depot Site) connecting to a strip of land alongside The River Hull (5 minute drive)
- 56,000 tonnes at Newlincs Grimsby Incinerator, South Marsh Road, Stallingborough, Grimsby (45 minute drive)
- 190,000 tonnes at Lincolnshire Energy from Waste Facility, Whisby Road, North Hykeham, Lincoln (1.25 hour drive)
- 320,000 tonnes at Allerton Waste Recovery Park, Allerton Park Quarry, Knaresborough (1.5 hour drive)
- 200,000 tonnes at Leeds Recycling and Energy Recovery Facility, Former wholesale market on Pontefract Lane in Cross Green, Leeds (1.25 hour drive)
- 675,000 tonnes at Ferrybridge Multifuel Facility 1 (FM1), near Ferrybridge C power station, Knottingley (1 hour drive)
- 675,000 tonnes at Ferrybridge Multifuel Facility 2 (FM2), near Ferrybridge C power station, Knottingley (1 hour drive)
- 245,000 tonnes at Sheffield Energy Recovery Facility, Bernard Road, Sheffield (2 hour drive)
- 450,000 tonnes at Teesside Energy from Waste Plant, Haverton Hill Road, Billingham (2 hour drive)
- 306,000 tonnes at North East Energy Recovery Centre (NEERC), Haverton Hill Road, Billingham, Stockton (2 hour drive)
- 245,000 tonnes at Sheffield Energy Recovery Facility, Bernard Road, Sheffield (1.25 hour drive)

622,000 tonnes within 2 hours of the port at Montrose:

- 237,000 tonnes at Earls Gate Energy Centre, Earls Road, Grangemouth (2 hour drive)
- 155,000 tonnes at Millerhill Energy Recovery Centre, Former Millerhill Marshalling Yards, Whitehill Mains Road, Millerhill, Dalkeith, Midlothian (2 hour drive)
- 120,000 tonnes at DERL, Forties Road, Baldovie Industrial Estate, Angus (40 minute drive)
- 110,000 tonnes at Baldovie EfW CHP Facility, Forties Road, Baldovie Industrial Estate (40 minute drive)

1,961,000 tonnes within 2 hours of the port at Port Talbot:

- 425,000 tonnes at Trident Park, Cardiff Bay (45 minute drive)
- 190,000 tonnes at Javelin Park, Haresfield (1.5 hours)
- 120,000 tonnes at Land at Showground Road, Bridgwater (1.75 hour drive)
- 500,000 tonnes at Severnside Energy Recovery Centre, Severn Road, Avonmouth (1.25 hour drive)
- 350,000 tonnes at Severn Road ReSource Recovery Centre, Severn Road, Avonmouth, Bristol (1.5 hour drive)

- 156,000 tonnes at Avonmouth Low Carbon Energy Facility, Former Britannia Zinc Site, Kings Weston Lane (1.25 hour drive)
- 220,000 tonnes at Newport Alexandra Dock, Newport (1 hour drive)

4,892,000 tonnes within 2 hours of the port at Ridham:

- 657,000 tonnes at Kemsley Sustainable Energy Plant, DS Smith Paper's site, Kemsley Mill, Sittingbourne (10 minute drive)
- 560,000 tonnes at Allington Integrated Waste Management Facility, 20/20 Business Park, Allington, Maidstone (45 minute drive)
- 785,000 tonnes at Riverside Resource Recovery Facility / "Belvedere", Norman Road, Belvedere (1 hour drive)
- 560,000 tonnes at Edmonton Solid Waste Incinerator, Advent Way, Edmonton (1.5 hour drive)
- 488,000 tonnes at SELCHP, The Kennels Site, Landmann Way, Lewisham (1.25 hour drive)
- 350,000 tonnes at Sutton Waste Management Facility / "Beddington Energy Recovery Facility ", Beddington Lane, Sutton (1.5 minute drive)
- 450,000 tonnes at Lakeside Energy from Waste Incinerator, Colnbrook, Slough (1.5 hour drive)
- 480,000 tonnes at Slough Multifuel, 342 Edinburgh Avenue, Slough Trading Estate, Slough (1.5 hour drive)
- 110,000 tonnes at Integra North Energy Recovery Facility / "Basingstoke Incinerator", Whitmarsh Lane, Reading Road, Chineham, Basingstoke (1.75 hour drive)
- 242,000 tonnes at Newhaven Incinerator, North Quay, Newhaven (1.5 hour drive)
- 210,000 tonnes at Portsmouth Incinerator / "Integra South East ERF", Quartremaine Road, Copnor, Portsmouth (2 hour drive)

4,892,000 tonnes within 2 hours of the port at Sheerness:

- 657,000 tonnes at Kemsley Sustainable Energy Plant, DS Smith Paper's site, Kemsley Mill, Sittingbourne (10 minute drive)
- 560,000 tonnes at Allington Integrated Waste Management Facility, 20/20 Business Park, Allington, Maidstone (45 minute drive)
- 785,000 tonnes at Riverside Resource Recovery Facility, Norman Road, Belvedere (1 hour drive)
- 560,000 tonnes at Edmonton Solid Waste Incinerator, Advent Way, Edmonton (1.25 hour drive)
- 488,000 tonnes at SELCHP, The Kennels Site, Landmann Way, Lewisham (1.25 hour drive)
- 350,000 tonnes at Sutton Waste Management Facility / "Beddington Energy Recovery Facility ", Beddington Lane, Sutton (1.5 hour drive)
- 450,000 tonnes at Lakeside Energy from Waste Incinerator, Colnbrook, Slough (1.5 hour drive)
- 480,000 tonnes at Slough Multifuel, 342 Edinburgh Avenue, Slough Trading Estate, Slough (1.5 hour drive)

- 110,000 tonnes at Integra North Energy Recovery Facility / "Basingstoke Incinerator", Whitmarsh Lane, Reading Road, Chineham, Basingstoke (1.75 hour drive)
- 242,000 tonnes at Newhaven Incinerator, North Quay, Newhaven (1.75 hour drive)
- 210,000 tonnes at Portsmouth Incinerator / "Integra South East ERF", Quartremaine Road, Copnor, Portsmouth (2 hour drive)

3,967,000 tonnes within 2 hours of the port at Southampton:

- 220,000 tonnes at Marchwood Incinerator / "Integra South West ERF", Oceanic Way, Marchwood Industrial Park, Marchwood, Southampton (20 minute drive)
- 210,000 tonnes at Portsmouth Incinerator / "Integra South East ERF", Quartremaine Road, Copnor, Portsmouth (30 minute drive)
- 242,000 tonnes at Newhaven Incinerator, North Quay, Newhaven (2 hour drive)
- 110,000 tonnes at Integra North Energy Recovery Facility / "Basingstoke Incinerator", Whitmarsh Lane, Reading Road, Chineham, Basingstoke (45 minute drive)
- 480,000 tonnes at Slough Multifuel, 342 Edinburgh Avenue, Slough Trading Estate, Slough (1.5 hour drive)
- 450,000 tonnes at Lakeside Energy from Waste Incinerator, Colnbrook, Slough (1.25 hour drive)
- 350,000 tonnes at Sutton Waste Management Facility / "Beddington Energy Recovery Facility ", Beddington Lane, Sutton (2 hour drive)
- 560,000 tonnes at Edmonton Solid Waste Incinerator, Advent Way, Edmonton (2 hour drive)
- 785,000 tonnes at Riverside Resource Recovery Facility, Norman Road, Belvedere (2 hour drive)
- 560,000 tonnes at Allington Integrated Waste Management Facility, 20/20 Business Park, Allington, Maidstone (2 hour drive)