Comments on Document 9.46

UKWIN COMMENTS ON APPLICANT'S JANUARY 2024 RESPONSE TO SOS REQUEST FOR FURTHER INFORMATION

Proposed Development:

North Lincolnshire Green Energy Park

Proposed Location:

Flixborough Wharf, Flixborough Industrial Estate, North Lincolnshire

Applicant:

North Lincolnshire Green Energy Park Limited

Planning Inspectorate Ref:

EN010116

Registration Identification Ref:

20031828

JANUARY 2024

United Kingdom Without Incineration Network

INTRODUCTION

1. On 8th December 2023 the Secretary of State (SoS) wrote to the Applicant requesting information regarding a variety of topics. The Applicant's response to this was published on the 16th January 2023. UKWIN has comments to make on a number of these points, which are set out below.
2. Comments are made in the order of the Applicant's statements.
3. This submission should be read alongside UKWIN's previous submissions, including our response to the SoS letter of 8th December 2023.
4. For the avoidance of doubt, just because UKWIN does not comment on a matter should not be taken as agreement. In some cases, UKWIN already provided a substantive rebuttal of the arguments within the context of our previous submissions on these topics. In other cases, the Applicant makes the same or similar statements within their submission and UKWIN only responds to the first such statement to avoid repetition.

SOS PARA 3 – BOSTON, TOLVIK AND OVERCAPACITY

Impact of consented capacity coming forward

5. On electronic page 8 the Applicant claims their analysis: **"confirms that approximately 50% of consented projects are ultimately developed".**
6. It should be noted that in REP6-032 the Applicant showed that incineration overcapacity would occur at various geographic scopes even without any consented capacity coming forwards, and that if the consented capacity were taken into account alongside existing capacity then the level of overcapacity would be far higher.
7. This 50% figure is not new, and UKWIN draws attention to our comment in REP8-037 paragraphs 77-78 that:

> "Even in the event that a few older incinerators do close in the coming years, the loss of their capacity is likely to be outweighed by additional consented capacity that is not currently under construction coming forward (e.g. some or all of the 9 million tonnes of consented capacity still under active development listed by the Applicant in Table 8 and page 9 of REP4-020)."
>
> "4.5 million tonnes of that 9 million tonnes of consented capacity still under active development coming forward would be in line with the Applicant's REP4-020 evidence combined with the Applicant's evidence set out on electronic page 134 of AP3-022 that: 'Analysis of historic planning data suggest that approximately 50% of consented capacity is realised'."

Claim that historic landfilling/export proves there is no EfW overcapacity

8. On electronic page 8 the Applicant claims: **"It is clear that there is not EfW overcapacity today, as significant volumes of waste are still being landfilled (or exported)"** and the Applicant claims on electronic page 10 (in response to the SoS letter para 5) that: **"Currently, there is insufficient operating EfW capacity to divert all residual waste capable of recovery from landfill to a higher stage in the hierarchy. Although there is further capacity in planning and already permitted, this cannot all be relied upon to become operational".**

9. While we disagree that overcapacity should be assessed based on current levels of waste arising, as waste arisings should be expected to fall in line with Government policies and associated legal requirements, the Applicant's assessment would be flawed even based on current levels of waste arisings.

10. The Applicant has not shown that current levels of EfW capacity (operational and under construction) exceed current levels of combustible residual waste.

11. Firstly, account needs to be taken of EfW capacity that is/was under construction.

12. Page 11 of the Tolvik's May 2023 report setting out 2022 EfW statistics states that 5,716 tonnes of EfW capacity was in construction / commissioning across the UK in 2022, meaning that at 90% utilisation around 5.1 million tonnes of UK capacity exists but did not treat waste due to being under construction or in commissioning, with most of this capacity (c. 80%) located in England.

13. Meanwhile, page 2 of Tolvik's May 2023 report shows permitted operational incineration capacity increased from 2021 to 2022 by 1.15 million tonnes (comparing the "Fully Operational" values in Tolvik's Figure 3).

14. Based on a 90% utilisation rate, this would imply that just over 1 million tonnes of incineration capacity in the UK was only available for part of the year 2022, and so could not have been fully reflected in the statistics.

15. For the English context, the SoCG between UKWIN and the Applicant [REP9-029] acknowledges 4,727 kte of EfW capacity was under construction in England as of May 2023.

16. UKWIN also provided evidence that additional capacity has subsequently entered construction over and above these May 2023 figures, and yet more capacity is expected to soon begin construction and/or constitutes capacity converted from existing waste wood/biomass plants to treat RDF/SRF.

17. This means that new EfW capacity coming on stream far outstrips the 1.7 million tonnes of RDF that the Applicant states was exported in 2020.

18. In terms of landfill, the Applicant did not do what was asked of them in terms of showing how much landfilled waste would be suitable for treatment at the incinerator proposed for North Lincolnshire.

19. According to the Applicant's own figures in REP6-032 Annex A Table 3, the Applicant modelled that in Yorkshire & Humber in 2023 there would be 2,428 ktpa of 'Waste as fuel as fuel available' of which 258 tonnes would be processed through 'Other uses', leaving only 2,170 ktpa of waste as fuel available to feed EfW plants in the region.

20. On the other side of the equation, Table 3 indicates that in 2023 there would be 2,349 ktpa of EfW treatment capacity across Yorkshire and The Humber.

21. This means that there would be 179 ktpa of EfW overcapacity in the region in 2023 (i.e. 2,349 – 2,170). This is the "-179" ktpa figure shown in the Applicant's REP6-032 Annex A Table 3.

22. If instead of looking at current capacity one takes account of EfW capacity currently under construction, as set out in REP6-032 Annex A Table 3, then the figure for operational EfW capacity available in Yorkshire & Humber rises to 2,718 ktpa (i.e. the Table 3 figure from 2025 onwards), which would indicate that based on 2023 waste counting <u>all</u> of the Applicant's assumed EfW capacity (operational and under construction in 2023, coming on line by 2025) there would be an overcapacity in Yorkshire & Humber of 548 ktpa (i.e. 2,718 – 2,170), even before the North Lincolnshire NSIP capacity enters the equation and without taking account of any falls in residual waste arising to reflect Government targets.

23. However, simply relying on the Applicant's Table 3 figures fails to account for the capacity that has already been converted from biomass / waste wood processing capacity into RDF / SRF processing capacity.

24. Applying a 90% capacity factor to such existing converted capacity in Yorkshire and Humber would be increase the EfW capacity by around a further 78 ktpa, resulting in around 626 ktpa of overcapacity in Yorkshire and the Humber alone based on 2023 waste levels.

25. While the waste arisings increase if the East Midlands is also included, the level of additional capacity to take into account also rises, as is explored later with respect to the Applicant's Annex 1 scenario deficiencies.

26. UKWIN's previous January 2024 response highlighted how much of what is currently being landfilled is not combustible, also noting how there can be overlap between what is combustible and what would be recyclable or compostable, e.g. paper and card.

27. Whilst it is clear that some waste continues to be sent to landfill sites for disposal, it is not at all clear that the reason for this is a shortfall in EfW capacity, rather than because some existing capacity has yet to come online because it is still under construction or in commissioning, and/or because this landfilled material is unsuitable for incineration, e.g. because this material is not combustible.

28. UKWIN has already provided evidence in relation to the non-combustibility of landfilled waste, including UKWIN's recently submitted representation and the accompanying technical note from Beyond Waste (regarding the true nature of waste classified as 19 12 12 using the EWC (European Waste Catalogue) code, and in previous UKWIN representations, including REP2-108, REP2-110, and REP8-038.

Claim that only the best environmental solutions will go forward

29. On electronic page 8 the Applicant claims: **"Consented facilities will compete for residual waste fuel supply contracts and once project finance is secured those facilities presenting the best environmental solution for waste treatment will be the more likely to go forward".**

30. The Applicant has not demonstrated that that the facilities with the best environmental credentials are the most likely to go forward.

31. As businesses decisions are based on economic calculations, anticipated return on investment will in most cases be the dominant consideration. Economies of scale indicate that larger EfW plants – such as the Boston Alternative Energy Facility – could be the most likely to go ahead even in circumstances where the proximity principle might indicate that more local solutions would minimise travel distances and best align with local plans.

32. If, as the Applicant suggests, there is a low potential for EfW overcapacity then it would not make sense for the Government to place such emphasis on the need to avoid EfW overcapacity within their updated NPS policies. Following the Applicant's logic, the Government would not have explicitly included EfW plants in development as needing to be considered as part of assessments carried out with the intention of avoiding EfW overcapacity.

33. Thus, the Applicant's fallacious and self-serving approach to evaluating the potential for EfW overcapacity does not align with Government's approach.

Applicant's failure to update its REP6-032 Annex A tables

34. On electronic page 8 the Applicant states: **"...the Applicant presents a number of scenarios for waste availability in Annex 1. These take into account information on project status from the May 2023 Tolvik report".**

35. It should be noted that while the Applicant has updated some of their scenarios, crucially they have not provided any update to their REP6-032 Annex A tables.

36. The closest we get is Annex 1 Figure 1 Scenario A on electronic page 33 of the Applicant's response to the 8th December 2023 SoS letter, which in low resolution provides a graphical national update to their previous estimate. This states there would be ~3m tonnes per annum of overcapacity in 2040 across England in a scenario where no further capacity (including any capacity associated with Boston) came forwards. It is unclear why this figure is lower than the ~4m tonnes of overcapacity identified in REP6-032 Annex A Table 1 given the new capacity that has entered construction or become available since their previous estimate in March 2023, but the conclusion that there is significant national overcapacity in such a scenario remains.

37. UKWIN's evidence shows that the level of incineration overcapacity identified by UKWIN [REP6-043] and by the Applicant [REP6-032] following the processes requested by the ExA in PD-012 would now be greater if updated to take account of the latest information on current capacity.

38. The Applicant's January 2024 Annex 1 scenario updates for both medium and low capacity (Scenarios D-J) rely on an assumption that significant levels of existing capacity would be voluntarily closed by operators.

39. UKWIN has already provided a significant body of evidence (e.g. in REP4-042 electronic pages 5-6, REP4-045 electronic pages 2-3, and REP6-042 electronic pages 8-11) to show that this is not a safe assumption to make.

Annex 1 scenario deficiencies

40. The Applicant states, on electronic page 8, that: **"…The Applicant's 'best view' or 'median' scenario (Scenario E) concludes that the Proposed Development does not result in over-capacity at the national or regional level. This scenario takes into account projects which are consented but have not yet achieved financial close (including Boston), attaching a probability of realisation to these to reflect the reality that not all of these projects will progress"**.

41. Whilst the Applicant claims to have taken Boston into account, whilst an unspecified proportion of the Boston Alternative Energy Facility's (BAEF's) 1.2 million tonnes of headline capacity (assumed to be 50% of 90%, i.e. around only 540 kpta) appears to have been included in Scenario E, none of the BAEF's capacity appears to have been included in any of the Applicant's High or Low Capacity scenarios (i.e. scenarios A, B, C, G, H, and J).

42. With respect to the Applicant's Medium Capacity scenarios (D, E, and F) the Applicant appears to have omitted Eastcroft and other capacity not currently classed as R1 despite UKWIN's evidence (referred to above) showing that the operators of these EfW facilities have not announced any plans to abandon this capacity.

43. Despite these omissions, scenarios A and D show EfW overcapacity nationally, and scenarios B and G (depicted in the Applicant's Annex 1 Figure 1, on electronic page 33) show only a very narrow English capacity gap, indicating a lack of justification for the capacity proposed for North Lincolnshire whilst showing that the proposed capacity is likely to be incompatible with meeting Government recycling targets.

44. The Applicant's Annex 1 Table 3, on electronic page 34, shows that even in the Applicant's Median Recycling/Capacity scenario (Scenario E), there would be overcapacity in Yorkshire & The Humber from 2030 onwards.

45. With respect to both the Applicant's Annex 1 Table 3 and Table 4 (electronic page 34), there would be no point where the modelled capacity gap would justify the introduction of 760,000 tpa of new EfW capacity, as the peak capacity gap identified in Table 3 (i.e. the gap in 2022) was 631 ktpa (falling steadily thereafter), and the peak gap for North Lincolnshire never rises above 332 ktpa.

46. Furthermore, we note that the Applicant provides no evidence to clarify whether or not Annex 1 Table 2 include any of the circa 278 ktpa of capacity located within the Yorkshire & Humber and East Midlands as identified in UKWIN's other January 2024 submission, i.e. the c. 173 ktpa of EfW capacity arising from the conversion of existing operational EfW facilities in Boston and Hull combined with the 105 ktpa at the Newhurst Quarry EfW plant associated with the permit variation issued by the Environment Agency on 12th December 2023.

47. When 90% of this c. 278 ktpa of capacity (c. 250 ktpa) is combined with the 188 ktpa of capacity at Eastcroft (i.e. based on the Applicant's assumed 94% capacity factor applied to the Applicant's assumed 200 ktpa of headline capacity) this amounts to more than 438 ktpa of omitted capacity.

48. When this missing capacity is factored into the Table 2 figure for 2035 then the capacity gap would be nearly halved to 473 ktpa, which more or less equates to the missing half of the BAEF capacity, and certainly does not justify a grant of permission for the proposed 760,000 capacity for North Lincolnshire even in a Medium Recycling scenario.

SOS PARA 4 – 'NO EXCESS EFW CAPACITY' ASSERTION

Recycling assumption used as the basis for assessment

49. On electronic page 8 the Applicant states: **"The tables presented in REP6-032 are for a 'conservative' (ie high recycling) scenario which is not the Applicant's best view of the likely outcome".**

50. The Applicant's REP6-032 Annex A assessment is based on the Applicant's attempt to assess the quantities of waste that would be available as potential incinerator feedstock were the UK Government's residual waste reduction targets to be met.

51. As the 8th December 2023 SoS letter states: "The Applicant [REP6-032, Annex A] considered that the government targets on waste reduction and recycling would be met".

52. Indeed, we read on electronic page 44 of REP6-032 how the Applicant stated that: "Projections for residual waste arising are for a 'base case' where recycling and waste reduction targets are met".

53. While UKWIN might consider that the Applicant underestimated the impact of meeting those targets on reducing potentially available EfW feedstock within that base case, the fact that the Applicant nevertheless showed that there would be no room for their proposed 760,000 tonnes of new incineration capacity under their assessment is significant.

54. While the Applicant has not updated their estimate of regional overcapacity based on a High Recycling scenario, their Annex 1 Figure 1 Scenario A – which is the nearest the Applicant provides to an updated REP6-032 Table 1 – confirms that there would be millions of tonnes of EfW overcapacity at a national level were Government targets to be met (even without taking account of the proposed North Lincolnshire capacity).

55. As noted in UKWIN's most recent representation, the situation regarding EfW overcapacity has worsened since December 2022, which was the basis for the May 2023 Tolvik report.

56. UKWIN's most recent representation also highlights policy statements in the updated EN-1 and EN-3 about the need to "ensure" that there is no EfW overcapacity and how "The Secretary of State should have regard to any potential impacts on the achievement of resource efficiency and waste reduction targets set under the Environment Act 2021 or wider goals set out in the government's Environmental Improvement Plan 2023".

57. In light of these policies, targets and wider goals, it cannot be right to do as the Applicant suggests and base an EfW need assessment on failing to meet Government recycling and residual waste reduction targets. To do so would run the risk of creating a self-fulfilling prophecy, with targets being missed due to EfW overcapacity that is allowed because recycling targets might be missed.

Misleading description of Annex 1 Tables 1-4

58. On electronic page 9 the Applicant states: **"Annex 1 presents the same table as per REP6-032 for the Applicant's 'best view' or 'median' scenario (see Scenario E)"**.

59. Whilst the Applicant uses a similar layout for their table, using the same headings as per REP6-032, it is misleading to describe the Annex 1 tables as "the same table" because the methodologies used are very different.

60. In REP6-032 the Applicant's methodology was to include all existing EfW capacity (reduced by their assumed capacity factors), including both R1 and non-R1 facilities for all levels of CCS potential, what the Applicant now refers to as a 'High Capacity' scenario, despite excluding all consented capacity (such as that associated with BAEF) from coming forward.

61. In stark contrast, the Applicant's Annex 1 Scenarios D, E and F exclude non-R1 capacity altogether in what they now describe as their 'Medium Capacity' scenarios.

62. Furthermore, while REP6-032 was based on what the Applicant described as 'Base case on waste arising (Recycling targets met)', which is what they now term 'high recycling', their recent Scenario E is based on recycling targets being missed (what they now refer to as a 'Medium Recycling' case.

63. As is stated in Annex 1 Figure 1, only Scenario A (which shows significant overcapacity) is actually an update to REP6-032, with all other scenarios (B-J) deviating from the methodology used by the Applicant in REP6-032.

Excluding existing capacity and missing recycling targets

64. On electronic page 9 the Applicant states: **"In this median scenario, the Applicant has assumed a 55% household recycling rate is achieved by 2035, rising to 60% by 2042, together with a rate of 77.5% C&I waste recycling by 2042. These rates are coupled with the assumption that EfW capacity includes <u>only</u> existing and under-construction capacity which is assessed as being of 'high' or ''medium' CCS potential, together with consented pipeline projects with high or medium CCS potential which are assessed as still under active development". (<u>emphasis added</u>)**

65. As noted above, UKWIN has already provided a significant body of evidence to dispute this approach.

66. The Applicant has not shown that their proposal is compatible with the achievement of the Government's target to halve residual waste by 2042 or the Government target to recycle 65% by 2035.

67. Given the policies in the updated EN-1 and EN-3 highlighted in UKWIN's most recent representation, the Applicant's position that there would only be a need for their plant if significant quantities of capacity was voluntarily shut down by operators – and/or that current recycling targets are missed – should be taken as an admission that there is a real threat of EfW overcapacity and as such the SoS ought to refuse this proposal to "ensure" that EfW overcapacity at a local and national level is avoided or minimised.

EN-3 paragraph 2.7.29

68. On electronic page 9 the Applicant refers to EN-3 paragraph 2.7.29, quoting only the following portion of that paragraph: **"Applicants must ensure EfW plants are fit for the future"**.

69. The whole of that paragraph from EN-3 reads as follows:

> "2.7.29 Applicants must ensure EfW plants are fit for the future, do not compete with greater waste prevention, re-use, or recycling and do not result in an over-capacity of EfW waste treatment provision at a local or national level".

70. There is nothing in EN-3 paragraph 2.7.29, or indeed elsewhere in the National Policy Statements, that says that the Government expects the closure of any currently operational EfW capacity.

71. The requirement with respect to EfW applicants needing to demonstrate that their proposal is fit for the future would obviously apply to all future NSIP applicants but would not retroactively apply to existing EfW facilities.

72. So, for example, whilst this policy could be used to refuse the North Lincolnshire EfW proposal on the basis that it has inadequate likelihood of actually delivering significant levels of carbon capture and heat export, the Government cannot shut down existing plants on this basis.

73. When read as a whole, there is nothing in EN-3 paragraph 2.7.29 to suggest that the Government believes there is no need to be concerned about the potential for EfW overcapacity. On the contrary, that paragraph is clearly raising the alarm about the potential for EfW overcapacity.

74. The context for the Applicant's invocation of EN-3 paragraph 2.7.29 is the SoS' paragraph 4 observation that "the Applicant's own forecasts [REP6-032] predict a base-case capacity gap of 16 kilotons per annum (ktpa) in the Yorkshire & Humber waste catchment region and an overcapacity of 1,841 ktpa in England by 2030. The contribution of the Proposed Development could result in overcapacity by 2030 at both spatial scales" and the SoS' request that: "In light of these forecasts, the Applicant is requested to provide further justification and reasoning to support its assertion [REP8-020] that there 'will not be an excess of energy from waste capacity as a result of the Proposed Development, at a local, national or regional level'".

75. Considering this context, the most relevant portions of EN-3 paragraph 2.7.29 are the references to ensuring that EfW applicants demonstrate that their proposals "do not compete with greater waste prevention, re-use, or recycling and do not result in an over-capacity of EfW waste treatment provision at a local or national level".

76. The North Lincolnshire NSIP Applicant appears to be placing the burden of avoiding EfW overcapacity on their market competitors, conveniently assuming that if new capacity is built in North Lincolnshire, existing operators elsewhere will benevolently shut down their EfW facilities to make way for the new North Lincolnshire capacity.

77. Such an absurd approach to assessing the potential for EfW overcapacity flies in the face of EN-3 paragraph 2.7.44, which states that:

> "Applicants should set out the extent to which the generating station and capacity proposed is compatible with, and supports long-term recycling targets, taking into account existing residual waste treatment capacity and that already in development". (emphasis added)

78. As such, Government policy is clear, decision makers should take account of, and not ignore, existing residual waste treatment capacity.

SOS PARA 5 – IS THE PROPOSAL NONETHELESS JUSTIFIED?

Applicant's unsubstantiated claims of insufficient EfW capacity

79. On electronic page 10 the Applicant asserts that: "**Currently, there is insufficient operating EfW capacity to divert all residual waste capable of recovery from landfill to a higher stage in the hierarchy".**

80. The Applicant's assertion is not supported by any evidence.

81. UKWIN comments on this unsubstantiated claim in paragraphs 8-28 above.

82. It is a pity that the Applicant continues to resort to unsubstantiated and false claims regarding insufficient EfW capacity when this is clearly not the case.

83. Once again, the Applicant's approach flies in the face of Government policy statements, e.g. the Government's repeated warnings of the need to avoid EfW overcapacity.

Ince Marshes and Runcorn

84. On electronic pages 10 and 11 the Applicant cites the Ince Marshes decision and what that historic decision had to say about taking into account capacity at Runcorn as well as the fact that Ince Marshes ended up processing 100 ktpa less than originally planned.

85. These arguments are flawed for at least three different reasons.

86. Firstly, it should also be noted that the Ince Marshes decision cited by the North Lincolnshire Applicant was made in 2009 under the Electricity Act rather than the NSIP regime.

87. The timing of that decision means the Ince Marshes decision pre-dates the EN-1 (2024) and EN-3 (2024) policies that place great emphasis on avoiding EfW overcapacity and within that context calls for the capacity already in development to be considered.

88. Secondly, the Applicant provides no analysis of the many more examples of incinerators that have significantly increased their capacity once they became operational.

89. EfW capacity has continued to enter construction and come into operation, and existing plants are tending to increase their capacity (in some cases because of the lower than previously expected calorific value of the feedstock due to the removal of plastic, thereby increasing the feedstock demands of those plants).

90. As a result of these EfW capacity increases, the threat of local, regional, and national EfW overcapacity now is notably higher than it was in the past, especially when compared to decisions that pre-date the adoption of the current recycling and residual waste reduction targets and goals.

91. To illustrate this we look at the example that the Applicant seems to cite as their strongest precedent, which related to historic uncertainty as to whether or not the Runcorn capacity would become operational. In that instance, both of Runcorn's original 425 ktpa phases went ahead for a combined permitted capacity 850 ktpa of capacity.

92. The Runcorn plant became operational in 2015, and by 2016 it was already exceeding its 850 ktpa of permitted capacity. After several years of exceeding its permitted capacity, sometimes by more than 100ktpa, Runcorn's permitted capacity was formally increased from 850 ktpa to 1.1 million tonnes per annum in 2019 (an increase of 250 ktpa).

93. Finally, the Appellant's RPE6-032 evidence and UKWIN's REP6-042 evidence show there would be both regional and national EfW overcapacity even if no new residual waste treatment plants entered construction.

94. As such, a finding of EfW overcapacity can be reached irrespective of the level of uncertainty that exists with respect to consented facilities coming forwards.

Operational capacity and claim that 'some resilience' is necessary

95. On electronic page 11 the Applicant argues that:

"…planning for 'just enough' capacity to meet the need to divert residual waste from landfill is almost certain to result in insufficient capacity being available in practice. Therefore, capacity to provide some contingency or resilience in the system will be required if as least waste as possible is to be landfilled".

96. The concept of providing a buffer is incompatible with EN-1 and EN-3's statements about the need to "ensure" that EfW overcapacity is avoided.

97. However, even with a buffer the Applicant's own evidence suggests the North Lincolnshire NSIP would create or exacerbate EfW overcapacity. We know this because the Applicant's calculations already include various buffers, and still finds EfW overcapacity when recycling targets are met.

98. In the round, the Applicant's calculations already accounted for plants not always operating to full capacity by reducing permitted capacity used in their calculations by applying "assumed capacity factors".

99. As noted in REP6-032 electronic page 48, "For operating plant this [assumed capacity factor] is based on historic data as reported by Tolvik, averaged across last three years. For new plants we assume 90%".

100. It was on the basis of applying this methodology that the Applicant stated on pages 10-11 of their May 2023 SoCG with UKWIN [REP9-029] that: "The committed facilities and capacities within Table A6 of the RDF Supply Assessment were updated slightly for the analysis in REP3-022, and an updated table is shown in this document (at the end of this List of Matters). The total capacity of 15,649kte within this updated Table is considered a reasonable portrayal of committed facilities and capacities to base the RDF supply assessment on".

101. As noted above, while some plants might operate below their permitted level, there are also examples of plants increasing their capacity over their lifetime and burning more than their historic headline capacities. As such, over time, even basing capacity on historic performance or a percentage of currently permitted capacity can underestimate future EfW overcapacity.

102. As previously noted by UKWIN, the Applicant's capacity factors that underpin their capacity analysis are based on historic usage of EfW plants, but if the use of plastics as incinerator feedstock falls in line with the Applicant's predictions, then this would reduce the calorific value (CV) of the remaining waste and therefore increase the quantity of waste that current EfW plants need to burn in order to maintain their electrical output.

103. UKWIN's position on this was set out on electronic page 12 of the SoCG [REP9-029], with the Applicant responding by defending their assumed capacity factors as accurate based on historic usage, and stating that: "We do not speculate on potential changes to CV and the ability of particular plants to accept more waste as a result".

104. While the Applicant has not been prepared to give evidence on the potential impact of changes in CV on future capacity of EfW plants, UKWIN provided such evidence.

105. For example, in the Written Representation back in December 2022 [REP2-110], UKWIN noted how our incineration overcapacity methodology paper [REP2-111] showed that "reducing the amount of plastic in the incinerator feedstock can increase the effective capacity of UK incinerators by 21-31% (with the lower end of the range assuming decreases in plastic coincide with decreases in food waste)".

106. While the Applicant had been given more than a year to challenge this evidence by providing alternative analysis, as shown in the SoCG [REP9-029] they have opted not to do so.

107. However, the Applicant's failure to account for operational capacity increases due to falling CV means that if a 'buffer' is already baked into their calculations, that also fail to account for the impact of Government policies to reduce plastics in the residual waste stream (e.g. as set out in the Government's Environmental Improvement Plan 2023 [REP6-045]).

108. Further buffering is also provided by the Applicant's assumption that some existing incinerators will close due to their age without being replaced by other EfW capacity on the same site, even where these facilities are connected to established district heating schemes.

109. Indeed, two of the three EfW facilities that the Applicant assumes will close without being replaced are connected to established district heating schemes, i.e. Coventry and Eastcroft (which is located in the city of Nottingham, which is in the East Midlands).

110. The capacities associated with the Applicant's REP6-032 assumptions about closures, as set out on electronic pages 48 and 50, are provided in a table overleaf.

EfW Facility	Applicant's assumed year of closure	Applicant's headline capacity figure	Applicant's capacity factor	Applicant's adjusted capacity
Coventry	2025	315 ktpa	96%	302.4 ktpa
Eastcroft	2033	200 ktpa	94%	188.0 ktpa
Stoke	2028	210 ktpa	88%	184.8 ktpa
	Total	**725 ktpa**		**675.2 ktpa**

111. From the table above it is clear that the Applicant discounts between 675 and 725 ktpa of existing EfW capacity based on unproven conjecture that these facilities would close without being either refurbished or replaced, which is in addition to the buffer set out above relating to capacity factors and changes in residual waste composition, and conversions of existing waste wood/biomass plants to treat RDF/SRF.

112. These buffers, created by understating future EfW capacity at existing EfW plants, are coupled with the potential for increased non-EfW uses for residual waste as fuel (e.g. as feedstock for Sustainable Aviation Fuel and to power cement kilns). UKWIN explores this potential in REP6-042 and elsewhere.

113. While for some purposes the Applicant assumes "a 50% probability of realisation" for consented EfW projects (e.g. as per electronic page 31 of their January 2024 submission), their 'High Capacity' scenarios (including Scenario A used in REP6-042 and the updated version submitted in January 2024) do not account for any such capacity coming forward.

114. As such, this buffer would be further extended if account is also taken of the now consented Boston BAEF capacity, or indeed any other EfW capacity, entering construction.

115. It should also be noted that the Applicant's EfW capacity analysis (and the analysis by UKWIN) is premised on an assumption that there will be no RDF export in the future.

116. As noted on electronic page 13 of the SocG with UKWIN [REP9-029], the Applicant assumes "RDF exports are assumed to be zero from 2024".

117. However, that is nothing more than an assumption, as at present there is no legal moratorium on the export of RDF.

118. As UKWIN noted in the SoCG [REP9-029, electronic pages 13-14]: "UKWIN's position is that we do not expect there to be any ban on RDF exports, and that in the event that 'waste as a fuel' has no viable domestic treatment destination it would be more likely for this 'WaF' feedstock to be exported as RDF to be recovered abroad at facilities connected to district heating schemes / CHP networks rather than landfilled domestically".

119. As such, if there is a need for a temporary buffer of EfW capacity beyond the capacity considered above (e.g. to account for any short-term residual waste treatment needs as recycling and residual waste treatment capacity under construction comes online), then this could potentially be achieved through some level of RDF export beyond 2023.

120. RDF export has the advantage of avoiding creating long-term incinerator lock-in (see more about lock-in below), and does not have the same long lead-in times as does the North Lincolnshire NSIP which is unlikely to be operational for many years and so cannot address any short-term demand for residual waste treatment.

Lessons from Europe

121. On electronic pages 11 and 12 the Applicant argues:

> **"Some mainland European markets where EfW was adopted more rapidly than in the UK have experienced a degree of overcapacity whilst recycling rates rose. In Germany and the Netherlands, a shortfall in fuel has been met through imports of residual waste from other member states where there is a less mature infrastructure, whilst local recycling rates have continued to rise.**
>
> **In Denmark, there will be a planned closure of EfW plants that are no longer needed, with the worst-performing facilities closed first. The Bornholm plant, for example, will not be replaced when it is fully depreciated in 2032.**
>
> **In Belgium, only EfW facilities compatible with a carbon neutral society will be authorised to operate beyond 2050.**
>
> **In these markets, recycling rates have still risen as EfW capacity has grown and have continued to rise as the need to treat local residual waste has declined and their throughput met with residual waste imports. There is no evidence that recycling rates have been affected by the potential shortfall in throughput".**

122. If the Applicant wants the SoS to learn lessons from Europe, then account should be taken of actual statements from European countries and from the European Commission rather than providing their own flawed analysis that does not stand up to scrutiny.

123. In 2017 the European Commission's Communication on 'The role of waste-to-energy in the circular economy' warned of the risk of incinerators becoming 'stranded assets' as we move towards a more circular economy, stating that:

> "The transition towards a circular economy requires striking the right balance when it comes to waste-to-energy capacity for the treatment of non-recyclable waste. This is critical to avoid potential economic losses or the creation of infrastructural barriers to the achievement of higher recycling rates. Previous experience in some Member States shows the risk of stranded assets is real." (page 6)
>
> "…the statistics show that some individual Member States are excessively reliant on incineration of municipal waste…such high rates of incineration are inconsistent with more ambitious recycling targets." (page 7)
>
> "…the role of waste incineration…needs to be redefined to ensure that increases in recycling and reuse are not hampered and that overcapacities for residual waste treatment are averted…" (page 11)

124. The UK Government's then Resource Minister Thérèse Coffey subsequently gave oral evidence to the Environmental Audit Committee on 12th September 2018 on this topic.

125. As the official transcript (excerpts included below) demonstrates, in her evidence Dr Coffey characterised the European Commission's position as one of incineration scepticism rather than one of unqualified support:

> "Dr Thérèse Coffey: …the [European] Commission itself is very concerned about the explosion, if you like, of incineration around the European Union. It does not want to massively encourage it in the future...I am not convinced that in respecting the waste hierarchy, we want to massively increase the amount of incineration that we are doing..." (Q93)
>
> "Dr Thérèse Coffey: I think, actually, there is sufficient capacity out there for incineration. Often what happens with policies is that they come out with unintended consequences. The general view I get from the [European] Commission in the report they did is that we now have too much incineration across the European Union, and we need to do more to refocus on recycling…" (Q94)
>
> (Source: Oral evidence: The National Audit Office Report on Packaging Recycling Obligations, HC 1548.)

126. Since 2017/18 the European Commission has in fact made progress towards a more circular economy, including through their Circular Economy Package which is mirrored in the measures set out in the UK's Resources and Waste Strategy.

127. Part of Europe's, and the UK's, move towards the circular economy is a desire to move away from both landfill and incineration – both of which constitute 'leakages' from the circular economy, as is evident form the following statements:

- When explaining their 'Cohesion policy support for the circular economy' the Commission made the following statement on their website: "The European Commission adopted the Circular Economy Action Plan in 2015 which established a long-term approach to promote waste prevention, increase recycling and reuse, and reduce landfilling and incineration".
- A news item published on DEFRA's website in July 2020, entitled 'Circular economy measures drive forward ambitious plans for waste' is subtitled as follows: "The Circular Economy Package includes a target to recycle 65% of municipal waste by 2035 and measures to reduce the amount of waste sent to landfill or incinerated".
- This is consistent with the statement made earlier in 2020 as part of the Westminster Hall debate on 'Industrial and Commercial Waste Incineration' by Rebecca Pow, then Parliamentary Under-Secretary of State for Environment, Food and Rural Affairs, that: "I wanted to be very clear, and I hope it has come out in what I have said, that the measures in the resources and waste strategy and the Environment Bill will enable a paradigm shift, in relation to reducing, reusing and recycling our waste, that should limit the amount that ever has to go to incineration and landfill. I hope that, from what I have said, hon. Members understand what is happening, the direction that the Government are absolutely committed to, and the move to a circular economy".
- According to the Ellen MacArthur Foundation's 'Towards the circular economy Vol. 1: an economic and business rationale for an accelerated transition': "Today, 'reverse cycles' are significantly impaired by...leakage from the system through subsidised incineration".

128. And in October 2023 a European Commission Notice entitled ‘Technical guidance on the application of “do no significant harm” under the Recovery and Resilience Facility Regulation’ was published in the Official journal of the European Union (Reference C/2023/111). The preamble explains the document’s purpose as follows:

> "The Regulation establishing the Recovery and Resilience Facility (RRF) provides that no measure included in a Recovery and Resilience Plan (RRP) should lead to significant harm to environmental objectives within the meaning of Article 17 of the Taxonomy Regulation. According to the RRF Regulation, the assessment of the RRPs should ensure that each and every measure (i.e. each reform and each investment) within the plan complies with the ‘do no significant harm’ principle (DNSH). The RRF Regulation also states that the Commission should provide technical guidance on how DNSH should apply in the context of the RRF. The present document provides this technical guidance…"

129. Within this context, the technical guidance notes that one of the six environmental objectives that may be subject to “significant harm” includes the circular economy (including waste prevention and recycling), and that harm to the circular economy could be caused by activities that “significantly increases the…incineration or disposal of waste”.

130. Annex IV of the technical guidance provides various examples of how to implement the DNHS (do no serious harm) assessment, including in relation to “the construction of new waste incinerators to increase the existing capacity in the country”.

131. In that example the guidance notes that even when the new incineration capacity is intended “to reduce the landfilling of non-hazardous municipal solid waste and generate energy through waste incineration (waste-to-energy)" it could result in serious harm to the circular economy. As the example puts it:

> "While this measure aims to divert, among others, combustible nonrecyclable waste from landfills, the Commission would likely consider this measure to develop or ‘lead to a significant increase in the generation, incineration or disposal of waste, with the exception of the incineration of non-recyclable hazardous waste’ for the following reasons.
>
> The construction of new waste incinerators to increase the existing incineration capacity in the country leads to a significant increase in the incineration of waste, which does not fall under the category of nonrecyclable hazardous waste. Therefore, it is in direct breach of Article 17(1)d(ii) (‘Significant harm to environmental objectives’) of the Taxonomy Regulation.

The measure hampers the development and deployment of available low-impact alternatives with higher levels of environmental performance (e.g. reuse, recycling), and could lead to a lock-in of high-impact assets, considering their lifetime and capacity. Significant amounts of non-hazardous waste (recyclable and non-recyclable, indistinctively) might be used as feedstock, thus hampering, as regards recyclable waste, treatment ranking higher in the waste hierarchy, including recycling. This would undermine the achievement of recycling targets at national/regional level and the national/regional/local Waste Management Plan adopted in accordance with the amended Waste Framework Directive".

132. As such it is clear that the European position supports, rather than undermines, the UK Government's strong desire to avoid incineration overcapacity.

133. UKWIN has provided a wealth of evidence regarding the potential for incineration overcapacity to harm recycling, e.g. in UKWIN Written Representation [REP2-110, electronic pages 12-17], and accompanying Good Practice Guidance [REP2-109, electronic pages 66-74], and elsewhere.

134. Whilst the Applicant refers to how "In Denmark, there will be a planned closure of EfW plants that are no longer needed", they do not refer to how the Danish Government has had to "set aside a pool of a total of DKK 200 million to compensate municipalities for stranded cost of up to 70 per cent of the loss associated with winding up a waste incineration facility" as is explained on electronic pages 51 and 52 of the 'Enough is enough: The case for a moratorium on incineration' report cited by the Applicant at footnotes 4 and 5 of their January 2024 submission.

135. Given that the Applicant is not committing to paying towards the costs of shutting down existing EfW capacity, nor is the Applicant proposing to accept a DCO requirement to delay the commencement of operations at North Lincolnshire until after an equivalent level of other EfW capacity has been decommissioned, the Danish example seems to undermine rather than support their case.

136. The fact that EfW shutdowns are associated with the payment of compensation in Europe could be a consideration that fed into the UK Government's desire to ensure that the NSIP regime has policies in place to avoid EfW overcapacity at local and national levels.

137. As mentioned above, there are concerns about how EfW overcapacity could give rise to, or exacerbate, lock-in and to how preferable (i.e. less environmentally damaging) ways to manage residual waste can be expected to increase (unless inhibited by EfW overcapacity).

138. Such concerns are usefully explored in the September 2023 'Enough is enough: The case for a moratorium on incineration' report cited by the Applicant.

139. For example, electronic page 53 draws lessons from Belgium to state that: "…the time taken to move from feasibility, through consenting, to construction, followed by commissioning, is a lengthy one. There is not only a lock-in effect from the fact that facilities have a lengthy operating life / authorisation period, but an additional problem of inertia in the pipeline. Effectively, decisions are being taken today whose impact will still be being felt in twenty years' time. The need for planning for future capacity is an urgent one, not least to avoid investment in what may become stranded assets".

140. And on electronic page 55 of the study cited by the Applicant we read how:

> "…Sweden appears to have increased capacity well in excess of what is needed to manage waste being generated within its borders. It may yet be the case that climate change becomes the main driver for reducing incineration capacity as it steadily dawns upon policy makers that, whether configured to generate electricity or heat, the carbon intensity of energy generated by incineration no longer offers a justification for additional capacity: on the contrary, the associated greenhouse gas emissions will increasingly emerge as a problem.
>
> Member States where a significant proportion of capacity is used to provide district heating – such as Sweden – might find a particularly strong lock-in to the existing capacity. This is a point alluded to in the case of Swedish incineration by the Stockholm Environment Institute:
>
> *At the same time, continued investment in new waste-burning combined heat and power plants has led to a debate about over-capacity, lock-in of waste incineration, and dependency on waste imports. The Swedish heat regime is thus experiencing increasing tensions, disagreements and competing interests among regime actors. A lock-in of waste incineration as a major fuel source would conflict with the EU Waste Framework Directive (2008/98/EC), which defines disposal through incineration as the second least effective treatment of waste, after landfills. In addition, waste incineration may be disrupting the potential of industrial waste heat in district heating systems.*

Ideally, in such situations, other fuel sources – such as heat pumps – replace the incinerators as the sources of heat for the network. Of some concern is the move to link more incineration capacity to district heating networks, given that a key 'network externality' may be the locking-in of incinerators as a heat source for the network".

141. The 'Enough is enough: The case for a moratorium on incineration' study's conclusions include the following:

> "In a recent review of three Member States' (Austria, Sweden and Finland) paths to higher recycling, incineration capacity was noted as 'an issue'. The author noted: *'Incineration as a dominant treatment method is difficult to change because of the existing economic (investments in facilities and agreements between waste dealers and facilities) and political lock-ins (interests of certain waste operators)*…"

142. In summary, the evidence base cited by the Applicant undermines their assertion that the proposed North Lincolnshire EfW capacity should be justified in the name of providing 'resilience' to minimise landfill, and instead supports and reinforces the importance that the Government ascribes to avoiding both incineration and landfill to allow for the transition to a more circular economy.

SOS PARA 6 – WHETHER CAPACITY GAP WILL CLOSE BY 2035

143. UKWIN has already responded (above) to most of the points raised by the Applicant in response to paragraph 6 of the SoS's letter (on electronic pages 13-15 of the Applicant's most recent submission).

144. For example, as noted above, due to prevalence of EfW capacity alongside the emergence of other paths for the utilisation of residual waste, even if reduction and recycling targets are not fully achieved, and even if the North Lincolnshire EfW is not built, it is unlikely that a significant quantity of combustible waste would be sent to landfill from 2028/29 onwards, i.e. when the North Lincolnshire EfW might become operational.

145. As such, the overriding risk to be avoided (in line with the policies set out in EN-1 and EN-3) is therefore the risk of EfW overcapacity jeopardising improvements to recycling and to residual waste reduction efforts.

146. Looking, as the Applicant does, to the historic recycling rates as precedent for future recycling and residual waste reduction performance is of only limited value as the Government is introducing a number of new measures – such as inclusion of incineration in the ETS, inclusion of packaging in Extended Producer Responsibility, and a larger core set of materials to be collected at the kerbside for recycling – all of which constitute new interventions whose impact have yet to be reflected in recycling rates.

147. Such interventions, when combined, could be expected to encourage product and packaging redesign, which we are already witnessing, to increase thereby increasing recyclability, alongside encouraging investment in waste education (and making that education more effective due to greater consistency), and so on.

148. Generally speaking, these measures are set out in the Environmental Improvement Plan 2023 [REP6-045].

149. As set out in the Environmental Targets (Residual Waste) (England) Regulations 2023 [REP6-037], in accordance with the Environment Act, the Secretary of State has "sought advice from persons the Secretary of State considers to be independent and to have relevant expertise, and is satisfied that the target in these Regulations can be met".

150. The inclusion of incineration in the ETS is over and above the measures set out in the Environmental Improvement Plan.

151. However, it is noteworthy that the UK Government stated in their June 2023 'Developing the UK Emissions Trading Scheme: Main Response' that: "In the Call for Evidence, we proposed exploring expansion of the UK ETS to waste incineration [ERF] and EfW by the mid-to-late 2020s. This was on the basis that this would align with wider reforms to resources and waste policies later this decade and would help to achieve the UK Government's target to halve residual waste arisings (excluding major mineral wastes) on a kilogramme per capita basis by 2042 from 2019 levels".

152. As such, contrary to what is implied by the Applicant, the Government's decision to include incineration in the ETS weighs against, rather than in favour of, their proposal as it will support the Government's efforts to reduce residual waste arisings going to either incineration or landfill.

153. The inclusion of incineration in the ETS highlights the Government's continued commitment to achieving Environmental Improvement Plan policies and to fulfilling the Environmental Targets (Residual Waste) (England) Regulations 2023.

154. Further evidence of such continued commitment can also be found in the Government's decision to pursue the increase in the cost of the plastics tax in line with inflation.

155. As Gareth Davies (Exchequer Secretary to the Treasury) told the Public Bills Committee on the 16th of January 2024:

> "The plastic packaging tax is charged on plastic packaging that does not contain at least 30% recycled plastic. It was introduced on 1 April 2022, as part of the Government's resources and waste strategy. The tax provides an economic incentive to use recycled plastic rather than virgin plastic in packaging. It is designed to create greater demand for recycled plastic, which, in turn, will stimulate more investment in the collection and recycling of plastic waste, **diverting it away from landfill and incineration**. Increasing the rate of the plastic packaging tax in line with CPI will maintain the real-terms value of the price incentive to use recycled plastic in packaging. Clause 30 increases the rate of the plastic packaging tax from £210.82 to £217.85 per tonne from 1 April 2024". (**emphasis added**)

SOS PARA 7 – BEST, WORST OR MEDIAN SCENARIO?

156. In response to a question from the SoS about REP3-040 the Applicant refers to a range of scenarios included as Annex 1 to their January 2024 submission, stating that "Scenario E represents the Applicant's 'best view' or 'median' scenario".

157. For the avoidance of doubt, as mentioned above (see paragraphs 58-63), the Applicant's Annex 1 scenarios do not represent the "full achievement of waste reduction and recycling targets by 2035".

158. The Applicant's Scenario A is intended to update their REP6-032 Annex A assessment which was said to have been based on a "recycling targets met" scenario, and scenarios D and G (which update Figures 3 and 1 or REP3-022 respectively) are also based on "recycling targets met" but with differing levels of EfW capacity.

159. All three of these updated "recycling targets met" scenarios show either EfW overcapacity or only a vanishing small capacity gap.

160. However, as per UKWIN's Comments on responses to the ExA's ExQ2 [REP7-037]: "Despite claiming the contrary, as set out by UKWIN in REP6-042 and REP6-043, the Applicant's 'base case' is not in fact consistent with available residual waste falling in line with UK Government waste reduction targets".

161. Furthermore, the Applicant's other scenarios (including Scenario E) are not based on even attempting to meet recycling targets, let alone statutory residual waste minimisation targets.

162. As per UKWIN's previous comments on this topic (both above and in previous submissions), none of the Applicant's updated scenarios represent a true 'worst case' scenario with respect to the potential level of EfW overcapacity that could arise from allowing the new EfW capacity proposed for North Lincolnshire.

163. Finally, as noted above, the Applicant has not shown that refusing the North Lincolnshire NSIP proposal would increase the amount of residual waste sent to landfill.

SOS PARA 8 – EWC CODES AND LANDFILL PROPORTIONS

164. The Applicant's response to the SoS's question is clearly erroneous.

165. The Applicant's response constitutes a contrived reinterpretation of the Environment Agency's (EA's) comments.

166. Adopting the Applicant's interpretation would give no meaningful effect to the EA's REP9-046 statement that "it is the relevant planning authority that is responsible for driving waste generated in a given area up the waste hierarchy and for considering the implications of energy from waste treatment capacity in that area".

167. The whole purpose of the EA's REP9-046 submission was to explicitly amend their previous REP6-040 statement.

168. In REP9-046 the EA explains how: "On further consideration of the question, we would like to amend our response to avoid any possible confusion around our remit in planning decisions. This is because when it comes to planning decisions, it is the relevant planning authority, and not the Environment Agency, who is responsible for driving waste generated in a given area up the waste hierarchy and for considering the implications of waste treatment capacity in that area. As such, we feel it is not appropriate for us to comment on whether the proposal could have an adverse effect on prevention, reuse or recycling, and we would therefore like to amend our response so that it instead reads as follows…"

169. This statement by the EA means that any part of the EA's response to Q2.17.0.1 of ExQ3 that is not included within the EA's REP9-046 amendment no longer forms part of the EA's position, and should be considered to have been withdrawn by the EA.

170. As such, for the Applicant to rely exclusively on the EA's REP6-040 statement without acknowledging how that statement was superseded (clarified) by REP9-046 results in a fundamental misrepresentation of the EA's true position.

171. It is entirely wrong for the Applicant to say that they “concur with the EA” when it is clearly **not** the EA’s position “that Regulation is the principal mechanism for ensuring conformity with the waste hierarchy”.

172. The Applicant does not refer to any portion of the EA’s REP9-046 that comes remotely close to indicating that regulation “is the principal mechanism for ensuring conformity with the waste hierarchy”.

173. The reason for this is presumably because this is not a position expressed by the EA in REP9-046.

174. The EA is the industry regulator, yet the EA’s REP9-046 clarification does not suggest anywhere that “ensuring conformity with the waste hierarchy” is the principal responsibility of regulation.

175. Instead the EA highlights the key role that the planning system has to play in relation to supporting the waste hierarchy and in avoiding EfW overcapacity, as is also clearly set out in the updated NPS EN-1 and EN-3 (as per UKWIN’s previous January 2024 submission).

176. As the EA makes clear in their REP9-046 submission that: “…for planning decisions, it is the relevant planning authority, and not the Environment Agency, who is responsible for driving waste generated in a given area up the waste hierarchy and for considering the implications of energy from waste treatment capacity in that area. As such, we feel it is not appropriate for us to comment on whether the proposal could have an adverse effect on prevention, reuse or recycling”.

177. Despite the invitation from the SoS, the Applicant completely fails to respond to the Environment Agency’s REP9-046 comments.

178. While the Applicant implies that REP6-032 confirms which EWC codes are relevant to the waste the Proposed Development would treat and what of the landfill waste is/would be comprised of waste with these EWC codes, REP6-032 does not do so, and therefore the Applicant also fails to respond to this portion of the invitation from the SoS as well.