Response to 29 January 2024 SoS invitation for IPs to comment on responses received

UKWIN'S COMMENTS ON APPLICANT'S RESPONSE TO 10 JAN 2024 SOS LETTER

MVV VOL 20.2 APPLICANT'S RESPONSE TO SECRETARY OF STATE'S LETTER 10 JANUARY 2024

Proposed Development:

Medworth EfW CHP

Proposed Location:

Land on the Algores Way Industrial Estate to the west of Algores Way in Wisbech, Fenland, Cambridge

Applicant:

Medworth CHP Limited

Planning Inspectorate Ref:

EN010110

Registration Identification Ref:

20032985

1ST FEBRUARY 2024



NATIONAL POLICY STATEMENT UPDATE

- 1. Paragraph 8 of the Secretary of State (SoS) letter of 10th of January 2024 stated: "The Secretary of State invites the Applicant to provide an update on any other outstanding matters which may have been resolved since the close of the examination between the Applicant and any of the LPAs or any other interested party".
- 2. In response to this request, one of the updates provided by the Applicant in MVV Vol 20.2 was under the heading: 'National Policy Statement update'.
- 3. On the 29th of January 2024 the SoS wrote to all interested parties (IPs) and invited them to comment on the responses to the 10th of January SoS letter.
- 4. In line with this, UKWIN's comments below focus on the Applicant's response regarding the National Policy Statement update, which is outlined on pages 9-11 of the Applicant's response to the 10th of January SoS letter.

Claim of Medworth constituting Critical National Priority Infrastructure

- 5. The Applicant claims on page 10 of their submission that "...the Medworth EfW CHP Facility constitutes 'low carbon infrastructure' and is therefore CNP [Critical National Priority] infrastructure" and refers to "paragraph 4.2.5, first bullet" as the basis for this claim.
- 6. We do not believe that the Applicant has demonstrated that their proposal constitutes 'low carbon infrastructure' or that it therefore constitutes CNP infrastructure.
- 7. Paragraph 4.2.5 of EN-1 (2024) on page 53, whose relevant text is mirrored in the glossary on page 171 of EN-1 (2024) and in paragraph 2.17 on page 8 of EN-3 (2024) and the glossary on page 116 of EN-3 (2024), provides a definition of low carbon infrastructure for the purpose of the Critical National Priority (CNP).
- 8. Below, UKWIN sets out two reasons why the SoS should conclude that the Medworth EfW proposal does not constitute CNP infrastructure, namely that it entails fossil fuel combustion and that it does not meet existing definitions of low carbon.

MEDWORTH PROPOSAL ENTAILS FOSSIL FUEL COMBUSTION

9. This NPS definition of low carbon infrastructure states: "...for electricity generation, and all onshore and offshore enabling electricity generation that does not involve fossil fuel combustion (that is, renewable generation, including anaerobic digestion and other plants that convert residual waste into energy, including combustion, provided they meet existing definitions of low carbon; and nuclear generation), as well as natural gas fired generation which is carbon capture ready". (emphasis added)

- 10. The Applicant has not ruled out using fossil fuel derived material, such as plastic, as part of their feedstock for the Medworth EfW plant.
- 11. According to paragraph 39 of the UK Government's Energy from Waste Guide to the Debate: "Some of the waste materials, e.g. plastics, will have been made from **fossil fuels** such as oil and the carbon stored in them is known as 'fossil carbon'.
- 12. In their Environmental Statement Chapter 14 [APP-041], the Applicant's Table 14.24 waste composition summary includes 7.8% Dense Plastic and 8.2% Plastic Film as part of the feedstock.
- 13. The Applicant also includes Textiles and 'Misc Combustibles' in their anticipated feedstock mix, and around half of these categories could be expected to include a fossil fuel derived components, e.g. synthetic textiles.
- 14. However, simply looking at the percentage of the feedstock that would be plastic (i.e. that would be derived from fossil fuels) can be misleading.
- 15. Burning even small amounts of plastic can be significant in climate terms because even a small quantity of plastic can result in the release of a large quantity of fossil CO₂. This is because plastic has a high carbon content, and when that carbon is combusted it combines with oxygen in the air to produce 3.67 tonnes of CO₂ per tonne of carbon.
- 16. The Applicant's ES Chapter 14 Climate [APP-041] Table 14.27 ('EfW CHP Facility: annual operational GHG emissions') shows the 70,142 tonnes of 'fossil carbon in residual waste' would result in the release of 257,187 tonnes of 'Fossil derived CO₂ emissions' per year, representing 94% of the total EfW CO₂e emissions per annum.
- 17. And in the Applicant's additional climate sensitivity analysis [REP6-030] they provide Table 2.1 'Residual waste composition scenarios and operational parameters' which includes a variety of different waste composition scenarios, all of which include some level of plastics to be used as feedstock for the proposed Medworth EfW.
- 18. As such, it would not be correct to categorise the Medworth facility as one that "does not involve fossil fuel combustion".
- 19. Such a conclusion is consistent with the statement on page 217 of the Main Report produced by the Department for Energy Security & Net Zero (DESNZ) in their November 2023 'National Policy Statements for Energy Appraisal of Sustainability' which states that: "Energy from waste is only partially renewable due to the presence of **fossil fuel carbon** in the waste".
- 20. This means that, due to the presence of plastic and other fossil fuel derived material as part of Applicant's proposed feedstock, the EfW proposed for Medworth fails at the first hurdle to constitute CNP infrastructure.

MEDWORTH PROPOSAL FAILS TO MEET DEFINITION OF 'LOW CARBON'

- 21. Bracketed text found in paragraph 4.2.5 of EN-1 (2024) and paragraph 2.17 of EN-3 (2024), etc. refers to: "...renewable generation, including anaerobic digestion and other plants that convert residual waste into energy, including combustion, provided they meet existing definitions of low carbon". (emphasis added)
- 22. Anaerobic digestion (AD) constitutes wholly renewable generation because the AD process produces energy from biogenic and not from fossil material.
- 23. This means that even when gas from the AD process is burned to produce electricity it meets UK definition of 'low carbon' on the basis that the CO₂ released as part of that combustion process constitutes biogenic CO₂ and not fossil CO₂.
- 24. In sharp contrast to AD, a significant proportion of the energy generated through combustion at the Medworth EfW plant would be derived from the combustion of fossil fuel derived plastics (which contribute disproportionately to the fossil carbon intensity of the electricity generated by EfW plants).
- 25. As such the Medworth EfW would not meet 'existing definitions of low carbon'.
- 26. One such definition of low carbon can be found in the National Planning Policy Framework (NPPF), last updated on 20th December 2023, which states on in its glossary on page 74 that: "Low carbon technologies are those that can help reduce emissions (compared to conventional use of fossil fuels)".
- 27. UKWIN has already provided a wealth of evidence to the Examination to show that the Medworth proposal would not meet that and other definitions of 'low carbon' due to the anticipated presence of fossil fuel derived waste in the feedstock.
- 28. Such inclusion of fossil fuel derived waste in the feedstock renders any energy generated by the Medworth EfW 'high carbon' energy when compared to the conventional use of fossil fuels (i.e. CCGT) and when compared to genuinely low carbon sources of energy such as wind and solar.
- 29. In REP4-036 UKWIN noted on paragraphs 91-94 that:

The Applicant does not dispute UKWIN's calculations showing that the proposed Medworth EfW facility could be expected to generate electricity with a carbon intensity of 621 tonnes of fossil CO₂e per gigawatt hour of electricity generated.

As explained at paragraph 99 of REP2-066, this level of carbon intensity implies that the electricity generated by the proposed Medworth plant "would have a higher carbon intensity than unabated CCGT and far higher than the current and future grid average, in turn indicating that the Medworth proposal could be expected to hamper Government efforts to decarbonise the electricity grid supply".

As noted at paragraph 105 of REP2-066, and on electronic page 168 of REP1-096, the Climate Change Committee has advised that: "In a Net Zero world EfW facilities are likely to be significantly higher carbon than other forms of energy production..."

The Applicant has not demonstrated that their proposed EfW for Medworth would be an exception to this rule.

- 30. Here, the Climate Change Committee adopt a definition of 'low carbon' which is to compare EfW against "other forms of energy production", and the CCC make it clear that EfW is not low carbon by this definition.
- 31. The 621 tCO₂/GWh figure (above) is based on the Applicant's own figures for estimated CO₂ emissions and electricity generation set out in APP-088 tables 14.27 and 14.30 ('EfW CHP Facility: annual operational GHG emissions)'.
- 32. This carbon intensity of 621 tCO₂/GWh can be compared against the Applicant's figure for the conventional use of fossil fuels, which in section 1.1.4 of their ES Chapter 14 on Climate [APP-088] they put as 380 tCO₂/GWh.
- 33. Further information regarding the calculation and context of the 621 tCO₂/GWh carbon intensity figure, which is significantly higher (c. 63% higher) than the carbon intensity of unabated CCGT, is set out on electronic pages 89-106 of UKWIN's Written Representation [REP2-066].
- 34. As noted in REP3-050 (on electronic page 52), page 38 of the UK Government's March 2023 summary report on the consultation response for Draft National Policy Statements (NPSs) for energy infrastructure stated that: "Some respondents highlighted that EfW is not low carbon".
- 35. And as noted on paragraph 104 of REP2-066, the fact that energy from mixed waste should not be described as 'low carbon' is covered within the context of pages 165-170 of REP1-096, which contains UKWIN's Good Practice Guidance for Assessing the GHG Impacts of Waste Incineration (July 2021).
- 36. The Good Practice Guidance includes further evidence that the Medworth proposal would not be low carbon.

- 37. For example, page 83 of UKWIN's Good Practice Guidance (on electronic page 168 of REP1-096) notes that the Committee on Climate Change's (CCC's) Policies for the Sixth Carbon Budget and Net Zero states in Table 1.2 that unabated Energy from Waste (EfW) is one of the 'high-carbon' activities to be phased out.
- 38. If EfW is classed as a 'high-carbon' activity, then it stands to reason that it cannot simultaneously be considered 'low-carbon' infrastructure.
- 39. As noted by the CCC's current Interim Chair, Piers Forster: "Energy-fromwaste is not low-carbon" [see REP1-096, electronic page 168].
- 40. The high carbon impacts of incineration have been acknowledged by the Government on numerous occasions, including the May 2021 statement (quoted below) that acknowledged the high carbon impact of EfW.
- 41. As set out in REP1-096, the Government stated in May 2021 that: "Incineration of fossil derived waste is a contributor to greenhouse gas emission. Total greenhouse gas emissions from waste incineration accounted for around 1.4% (6.47 million tonnes of carbon dioxide equivalent) of the UK's greenhouse gas emissions in 2019. Of this, about 6.19 million tonnes of carbon dioxide equivalent was emitted from Energy from Waste plants..."
- 42. In the Applicant's Environment Statement Chapter 14 on Climate [APP-041] they cite, as one of their sources of desktop data, the Zero Waste Scotland study entitled 'The climate change impacts of burning municipal waste in Scotland Technical Report' (July 2021). The use of this source is also noted by the Applicant on pages 22-23 of REP5-035.
- 43. As explained on page 83 of UKWIN's Good Practice Guidance (on electronic page 168 of REP1-096) this same Zero Waste Scotland report from July 2021 found that: "...EfW can no longer be considered a source of low carbon energy within a **UK** and Scottish context". (emphasis added)
- 44. The context referred to in that instance relates to the progressively decarbonising electricity mix, and in that context EfW is considered, by Zero Waste Scotland, not to constitute low carbon energy.
- 45. As such, whether it is the existing NPPF definition, the CCC definition, or the Zero Waste Scotland definition of 'low carbon' Energy from Waste (and the Medworth proposal) does not meet those existing definitions of 'low carbon'.

46. A conclusion that the Medworth proposal would not constitute low carbon infrastructure would also be in line pages 117 and 118 of the Main Report produced by the Department for Energy Security & Net Zero (DESNZ) in their November 2023 'National Policy Statements for Energy Appraisal of Sustainability', which states that:

"Most of the energy infrastructure promoted in EN-1 Part 3 will produce low carbon/renewable energy: energy from waste with CCS, biomass with CCS, blue hydrogen (from natural gas with CCS), zero carbon energy (nuclear) and renewable energy (offshore wind, solar PV, wave, tidal Range, tidal Stream, pumped hydro, green hydrogen from renewables).

The exceptions are natural gas without CCS, energy from waste without CCS and biomass without CCS which would result in higher carbon intensity energy due to continuing unabated carbon emissions to the atmosphere. CCS is not required from the outset for any of these three technologies thus allowing for the development of unabated energy generation plant if they are capable of being retrofitted with CCS at a later stage. (emphasis added)

- 47. As noted in the Applicant's Closing Position Statement on Climate (their ref 18.6), the Applicant has not committed to a condition requiring that the proposal would only operate with CCS, merely that as paragraph 4.9 of the document puts it "the feasibility of carbon capture and export is kept under review".
- 48. As the Examining Authority put it in their Third Written Questions [PD-017], "...as highlighted and discussed through the Examination, there is no certainty at this point that the Proposed Development will include an operational carbon capture component".
- 49. In line with the Applicant's GHG assessment [APP-088], the Medworth proposal should be assessed on the basis of being an EfW plant without CCS.
- 50. For the reasons set out above, it should be concluded that the Medworth EfW proposal does not meet the definition of low carbon infrastructure within the context of the Critical National Priority due to the high carbon intensity of the energy generated / exported by the plant.

Relationship between CNP and 'need'

51. On Page 10 of the Applicant's response to the 10th of January 2024 SoS letter the Applicant notes: "NPS EN-1 November 2023 at paragraph 4.2.7 states that the policy (CNP) applies following the normal consideration of the need case...", but the Applicant does not adequately explain the implications of this statement.

- 52. The implication that the CNP policy's application *follows* the normal consideration of need is significant because it means that even if the proposal was considered to be CNP infrastructure then this does not justify consenting the capacity where need for that new EfW capacity would not otherwise have been demonstrated.
- 53. UKWIN has already provided a significant body of evidence to this Examination showing that the proposed capacity is not needed, and that it would create / exacerbate EfW overcapacity at a local and/or national level, and that it would run contrary to both the statutory waste reduction targets set under the Environment Act 2021 and the wider goals set out in the government's Environmental Improvement Plan 2023.
- 54. The significance of this is strengthened by the formal designation of EN-1 and EN-3 (2024) and the statements that these updated National Policy Statements contain with respect to the need to avoid EfW overcapacity, etc.

EN-1 COMMENTS ON NEED, EFW OVERCAPACITY, ETC.

- 55. EN-1 (2024) paragraph 3.2.3 states: "It is not the role of the planning system to deliver specific amounts or limit any form of infrastructure covered by this NPS. It is for industry to propose new energy infrastructure projects that they assess to be viable within the strategic framework set by government. This is the nature of a market-based energy system. With the exception of new coal or large-scale oil-fired electricity generation [Footnote: A further exception to this is EfW plants where the primary function is to treat waste and planning decision will be made on the demand for waste infrastructure. See EN-3 for further detail] the government does not consider it appropriate for planning policy to set limits on different technologies but planning policy can be used to support the government's ambitions in energy policy and other policy areas." (emphasis added)
- 56. EN-1 (2024) paragraph 3.3.40 states: "The proposed [EfW] plant must not compete with greater waste prevention, re-use, or recycling, or result in over-capacity of EfW waste treatment at a national or local level".
- 57. EN-1 (2024) paragraph 4.3.20 states: "The Government has set 13 legally binding targets for England under the Environment Act 2021, covering the areas of: ...resource efficiency and waste reduction...Meeting the legally binding targets will be a shared endeavour that will require a whole of government approach to delivery. The Secretary of State have regard to the ambitions, goals and targets set out in the Government's Environmental Improvement Plan 2023 for improving the natural environment and heritage. This includes having regard to the achievement of statutory targets set under the Environment Act".

- 58. EN-1 (2024) paragraph 5.15.7 states that: "The proposed [EfW] plant must not compete with greater waste prevention, re-use, or recycling, or result in over-capacity of EfW or similar processes for the treatment of residual waste at a national or local level".
- 59. EN-1 (2024) paragraph 5.15.19 states: "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".

EN-3 COMMENTS ON NEED, EFW OVERCAPACITY, ETC.

- 60. EN-3 (2024) paragraph 2.7.7 states: "The proposed [EfW] plant must not compete with greater waste prevention, re-use, or recycling, or result in over-capacity of residual waste treatment at a national or local level".
- 61. EN-3 (2024) paragraph 2.7.27 states: "Waste combustion plants are unlike other electricity generating power stations in that they have two roles: the principal purpose being treatment of waste; and secondly the recovery of energy".
- 62. EN-3 (2024) paragraph 2.7.29 states: "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".
- 63. EN-3 (2024) paragraph 2.7.43 states: "Applicants should undertake an assessment of the proposed waste combustion generating station examining the conformity of the scheme with the waste hierarchy and the effect of the scheme on the relevant Waste Local Plans or plans where a proposal is likely to involve more than one local authority".
- 64. EN-3 (2024) paragraph 2.7.44 states: "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".
- 65. EN-3 (2024) paragraph 2.7.54 states: "Applicants must ensure proposals do not result in an overcapacity of EfW waste treatment provision at a local or national level".
- 66. EN-3 (2024) paragraph 2.7.102 states: "The Secretary of State should be satisfied, with reference to the relevant waste strategies and plans, that the proposed waste combustion generating station is in accordance with the waste hierarchy and of an appropriate type and scale so as not to prejudice the achievement of local or national waste management targets in England..."

67. EN-3 (2004) paragraph 2.7.103 states: "Where there are concerns in terms of a possible conflict, evidence should be provided to the Secretary of State by the applicant as to why this is not the case or why a deviation from the relevant waste strategy or plan is nonetheless appropriate and in accordance with the waste hierarchy".

COMMENTARY ON ABOVE EN-1 AND EN-3 PARAGRAPHS

- 68. These policies confirm the following Government positions:
 - EfW facilities, such as that proposed for Medworth, have the potential to compete with greater waste prevention, reuse, and recycling.
 - New residual waste treatment capacity can result in overcapacity of EfW waste treatment provision at a local or national level.
 - EfW capacity may be incompatible with long term recycling targets, including both national recycling targets and those in Local Waste Plans.
 - EfW capacity may be of an inappropriate type or scale that could prejudice achievement of local or national waste management targets.
 - It is necessary to consider both existing residual waste treatment capacity and capacity "already in development".
 - If the proposed new EfW capacity is not required for the treatment of waste, then the proposal cannot be justified on the basis that it would recover some energy (or, to put it another way, the creation or exacerbation of EfW overcapacity and/or any potential harm to the management of waste in accordance with the top tiers of the waste management hierarchy, cannot be justified by reference to the energy generation benefits).
 - It is for the planning system to address these possibilities and to act to prevent EfW overcapacity at either local or national levels, with the burden of proof resting squarely with the applicant to demonstrate compatibility of their proposal with the principles set out above.
- 69. The paragraphs taken from EN-1 (2024) and EN-3 (2024) discussed above should be afforded great weight in this NSIP decision because they reflect current Government thinking with respect to the importance of avoiding EfW overcapacity at local and national levels, the importance of ensuring compliance with the 2027 and 2042 residual waste reduction targets, and the importance of protecting the top tiers of the waste hierarchy.

- 70. Giving such weighting to these policies would be consistent with the EN-1 (2024) statement at paragraph 1.3.6, which reads: "...any emerging draft NPSs (or those designated but not yet having effect) are potentially capable of being important and relevant considerations in the decision-making process. The extent to which they are relevant is a matter for the relevant Secretary of State to consider within the framework of the Planning Act 2008 and with regard to the specific circumstances of each Development Consent Order application".
- 71. It is clear that the need to avoid EfW overcapacity is, in the Government's view, a general principle and not simply a test that is only relevant for NSIP proposals that have been accepted for Examination after the January 2024 designation of the 2023 amendments.
- 72. This is evident from the statement to Parliament made by Victoria Prentis, replying on behalf of Defra on 11th July 2022, which included: "The Government's view is that Energy from Waste (EfW) should not compete with greater waste prevention, re-use, or recycling. Proposed new plants must not result in an over-capacity of EfW waste treatment provision at a local or national level".
- 73. The planning system has a key role to play in constraining EfW overcapacity, and this is especially important for Nationally Significant Infrastructure Projects, both because of their scale and because of the specific National Policy Statements that explicitly call for the avoidance of EfW overcapacity and that support the management of residual waste in accordance with the top tiers of the waste hierarchy, as set out in EN-1 (2024) and EN-3 (2024).
- 74. Based on the evidence provided by UKWIN, and the Applicant's failure to carry their evidential burden for their need case, it should be concluded that even if the Medworth proposal were deemed to constitute CNP infrastructure this should not override the need to refuse the application on waste hierarchy grounds, including the need to avoid EfW overcapacity and the need to protect recycling and support the achievement of statutory residual waste reduction targets.
- 75. Furthermore, as the proposal is not CNP it does not benefit from paragraph 4.2.15 of EN-1 (2024) with respect to residual impacts, which is relevant for example to the SoS' consideration of the implications of EN-1 (2024) paragraph 5.4.43 which reads: "If significant harm to biodiversity resulting from a development cannot be avoided (for example through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then the Secretary of State will give significant weight to any residual harm".

76. It is also the case that the Applicant's position with respect to need and EfW overcapacity has worsened since the close of the Examination because EfW capacity that is operational or under construction has increased.

Additional evidence regarding lack of need and EfW overcapacity

- 77. In light of what EN-1 and EN-3 say about avoiding EfW overcapacity (see above), it is worth noting that there have been a number of trends that should be taken into account that indicate that more residual waste treatment capacity exists now than existed at the time of the Applicant's Waste Fuel Availability Assessment Rev 3 [REP5-020] and at the close of the Examination.
- 78. As such the Applicant's need case is weaker, and UKWIN's EfW overcapacity case is stronger, than at the time of the Examination.
- 79. The Applicant's Waste Fuel Availability Assessment (Rev 3) [REP5-020] is dated June 2023, and the Examination closed on the 21st of August 2023.
- 80. Key trends indicating worsening EfW overcapacity include:
 - Conversion of biomass plants to accept mixed waste RDF / SRF
 - Increased use of cement/lime kilns to treat mixed waste SRF
 - Increases in permitted capacity at existing EfW facilities
 - Consented incinerators continue to enter construction

CONVERSION OF BIOMASS PLANTS TO ACCEPT MIXED WASTE RDF / SRF

- 81. In UKWIN's REP3-050 submission we stated at paragraph 109 that: "...the Applicant does not mention the various dedicated biomass facilities that either are already burning MSW/RDF, or that are intending to burn MSW/RDF, such as Aviva's plants in Hull and Boston (both of which incinerated RDF in 2022, and together represent a combined capacity of around 173,000 tonnes per annum), and the Port Clarence plant (where the operator has applied to the Environment Agency for a permit variation to enable the facility to incinerate up to 330,000 tonnes of RDF per annum)".
- 82. The Boston biomass conversion is also mentioned in UKWIN's REP6-042 submission, e.g. at paragraph 103 which reads: "One reason for the differences in the figure for waste operational or under construction relates to the Applicant's omission of the Boston Aviva capacity (86ktpa) which was historically limited to biomass but has now been converted into treating RDF".
- 83. UKWIN can now confirm that three former dedicated waste wood (biomass) facilities were permitted by the Environment Agency to process mixed waste RDF/SRF (see table overleaf).

EXAMPLES OF EXISTING FORMER BIOMASS PLANTS NOW PERMITTED TO TREAT RDF/SRF

Facility	Region	Permitted capacity	Details	
Boston Energy Production Facility (Operational) Permit: UP3131DF	East Midlands	86.4 ktpa	Switched from waste wood (biomass) to mixed waste RDF/SRF feedstock in Q3 2022.	
Hull Energy Production Facility (Operational) Permit: DP3932RS	Yorkshire and Humber	86.4 ktpa	Switched from waste wood (biomass) to mixed waste RDF/SRF feedstock in Q3 2022.	
Port Clarence (Constructed) ¹ Permit: MP3333WX	North East	333 ktpa	Permit varied 9 th January 2024 to switch fuel from waste wood/biomass to Refuse Derived Fuel (RDF).	

- 84. This means that more than half a million tonnes per annum of operational or constructed residual waste treatment capacity was not included in the Medworth Applicant's REP5-020 Waste Fuel Availability Assessment (WFAA).
- 85. It should be noted that the 86.4 ktpa of capacity at the operational Boston Energy Production Facility is located within the Applicant's WFAA 'Local study area" (due to being located within Lincolnshire), and the remaining capacity is within the Applicant's 'National study area'.
- 86. In terms of trends, it is also possible that more of this sort of biomass / waste wood capacity will be converted to process mixed waste RDF/SRF feedstock in the future.

INCREASED USE OF CEMENT/LIME KILNS TO TREAT MIXED WASTE SRF

- 87. In our D6 comments [REP6-042] UKWIN noted the upward trend in the use of residual waste for co-incineration at cement kilns.
- 88. In REP6-042 the subsection on 'Co-incineration capacity', starting at paragraph 181, UKWIN explained how "Tolvik's May 2023 report on 2022 EfW Statistics shows the upwards trend of residual waste (in the form of SRF) being accepted at UK cement and lime kilns, alongside the variation of existing biomass permits to allow them to burn RDF, which rose by 109ktpa (from 284ktpa to 493ktpa) in 2022 compared to 2021".

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¹ On 10th January 2024 it was reported in ENDS that: "The facility, which is fully built but not operational, was bought by...Womble Energy in June last year, following years of industry speculation it would switch from biomass processing to taking [mixed] waste".

- 89. The subsection went on to explain how: "If cement kiln use continued to increase at this rate of just over 100ktpa per annum until 2027 then the amount of residual waste co-incinerated would double to around 1 million tonnes per annum" and "It would be reasonable to expect that this upwards trend of the use of residual waste at cement and lime kilns will continue as these sectors seek to decarbonise by moving away from the conventional use of fossil fuels".
- 90. And UKWIN's REP6-042 paragraphs 186 and 187 set out how: "As the production of 1 tonne of SRF requires more than 1 tonne of 'raw' waste (e.g. due to dewatering as waste dries), the figure of 493ktpa of SRF being coincinerated in 2022, and the 1Mtpa figure reflecting a continuation of this trend to 2027, understate the impact of such increases on the level of waste available for conventional incineration" and how: "As such, the assumption that demand for residual waste for use in powering cement kilns could double from around 500ktpa in 2022 to around 1,000ktpa by 2027 is considered conservative, especially as it is assumed to remain stable rather than to continue increasing".
- 91. The modelling included within UKWIN's REP6-042 demonstrated that "even without increases in cement kiln capacity there will be incineration overcapacity, and if it is assumed that trends in cement kiln usage of RDF/SRF will increase to 1Mt by 2027 then the level of overcapacity would be worse".

INCREASES IN PERMITTED CAPACITY AT EXISTING EFW FACILITIES

- 92. UKWIN has identified more than 180,000 tonnes of capacity that has been added to existing EfW plants since the Medworth examination closed on the 21st of August 2023, including 130 ktpa of capacity located within the Applicant's WFAA 'Local study area" (due to being located in Leicestershire and Peterborough).
- 93. This 182 ktpa of additional permitted residual waste treatment capacity at existing operational EfW facilities is summarised in a table overleaf.

PERMITTED EFW CAPACITY CHANGES AT EXISTING OPERATIONAL EFW FACILITIES

Facility	Location	Old permitted capacity (ktpa)	New permitted capacity (ktpa)	Details
Newhurst ERF	Leicester- shire, East Midlands	350 ²	455	105 ktpa increase through permit variation EPR/RP3004MA/V005 issued on 12 th December 2023.
Peterborough EfW Facility (Fourth Drove)	Peter- borough, East of England	85 ³	110	25 ktpa increase through permit variation EPR/NP3638ZS/V007 issued on 26 th June 2023.
Ardley EfW Facility	Oxford- shire, South East	326 ⁴	378	52 ktpa increase through permit variation EPR/UP3005LJ/V002 issued 11 th January 2023.

- 94. Additionally, the Environment Agency issued a draft decision for permit variation EPR/GP3305LN/V003 on the 21st of July 2023 indicating that they were minded to increase the permitted capacity for the existing operational Beddington from 347,000 tpa to 382,286 tpa.
- 95. The consultation for the Beddington expansion closed on the 15th of September 2023. While the EA has yet to finalise the requested variation, as they have issued a draft decision to approve, it would be highly unusual for the variation not to be issued in due course.
- 96. Given the Government's intention to reduce how much plastic is in the residual waste stream which can be expected to reduce the calorific value of potential incinerator feedstock and therefore increase the amount of waste that needs to be incinerated to maintain electricity generation levels, combined with the economic incentive maximise how much is incinerated, it seems likely that the trend of increased incineration capacity will continue.
- 97. This means that we can expect that even more existing incinerators will increase their processing capacity in the future, therefore increasing the level of EfW overcapacity at local, regional, and national levels.

² As per the Applicant's REP5-020, Appendix C on electronic page 118

³ As per the Applicant's REP5-020, Appendix C on electronic page 116

⁴ As per the Applicant's REP5-020, Appendix C on electronic page 116

- 98. The proposed Medworth capacity would therefore be likely to create or exacerbate EfW overcapacity across a range of spatial levels.
- 99. Additionally, the 1.2 million tonnes of capacity proposed for Boston as part of the Boston Alternative Energy Facility (BAEF) that was subject to NSIP Examination was granted a DCO in July 2023.
- 100. In REP8-032, our D8 comments on REP7-040, UKWIN provided evidence regarding the implications of the BAEF approval on the Medworth Applicant's capacity assessment, and there is no need to repeat that evidence here.

CONSENTED INCINERATORS CONTINUE TO ENTER CONSTRUCTION

- 101. On the topic of new capacity that has entered or that is about to enter construction, UKWIN notes that on 5th January 2024 it was reported in the waste and resources trade press (e.g. LetsRecycle) how "An energy from waste (EfW) plant under construction by Encyclis" in Walsall (in the West Midlands), described as "due to be finished in 2027", would be entering construction in February 2024.
- 102. The article notes that: "Encyclis outlined that it will build, own and operate the facility, the first site to be 100% owned by the company. Hitachi Zosen Inova will be the principal contractor, with construction of the facility to begin next month" (i.e. February 2024).
- 103. The Environmental Permit (EPR/AP3832WS) associated with Encyclis' Walsall Energy Recovery Facility lists the facility's permitted EfW processing capacity as 478,300 tonnes of non-hazardous waste per annum.
- 104. As UKWIN has previously noted, even if only a small proportion of currently consented EfW projects move forward then it could have a significant impact on EfW overcapacity across a range of geographic scales.
- 105. As such, it is important to consider the potential for consented EfW capacity to be built within the context of the duty under EN-1 (2024), EN-3 (2024), etc. to ensuring that consenting yet more new EfW capacity does not result in creating or exacerbating EfW overcapacity at local or national levels, and/or prejudice the achievement of local or national recycling and residual waste reduction targets.

ENVIRONMENT PERMIT UPDATE

- 106. On page 9 of the Applicant's response to the SoS's letter of 10th January 2024 we read the following statement: "The EA consider that, in reaching their decision, it has [taken] into account all relevant considerations and legal requirements and that the Environmental Permit will ensure that a high level of protection is provided for the environment and human health".
- 107. For the avoidance of doubt, we want to highlight how the Environment Agency's Draft Decision Document [MVV Vol 20.3 Appendix 7a] makes clear that the Environment Agency, as the industry regulator, has left to the planning system various considerations and determinations in relation to the acceptability or otherwise of the proposal regarding its potential impacts and environmental credentials as these matters fell outside the scope of the permitting regime. **All emphasis below has been added**.

EA STATEMENTS ON LOCATION, LAND USE, POLLUTION, AIR QUALITY, ROAD TRAFFIC, LIGHT POLLUTION AND OTHER ADVERSE VISUAL AND AMENITY IMPACTS

- 108. Page 26 of the Draft Permit Decision Document: "The location of the Installation largely determines the extent to which waste heat can be utilised, and this is a matter for the planning authority. The Applicant carried out a feasibility study and provided a CHP-R assessment as part of their Application. The study showed there was potential to provide district heating to local businesses; suitable opportunities are being explored, though there are no firm commitments at this stage. There is provision within the design of the steam turbine to extract low-grade steam for a district heating scheme. Establishing a district heating network to supply local users would involve significant technical, financial and planning challenges such that this is not seen as a practicable proposition at present".
- 109. Page 33: "Of these the amenity impacts during construction and air quality impacts arising from additional road traffic have not been considered as these are essentially matters for the local planning authority when considering the parallel application for planning permission, and outside the scope of our determination under the Environmental Permitting Regulations".
- 110. Page 125: "The air quality assessment considered existing background pollution levels which includes emissions from traffic. Movement of traffic to and from the Installation is outside of our remit but will normally be <u>an issue</u> for the planning authority to consider".

- 111. Page 152: "Pollution from light or plumes are primarily a concern for considering visual impacts and as such generally <u>covered by the planning</u> <u>process..."</u>
- 112. Page 154, in reply to the view expressed by a consultee that this is not the right location for the Installation, the EA explained how: "Decisions over land use are **matters for the planning system**..."
- 113. It should be noted that even pollution considered within the context of the permitting regime is not excluded from consideration as part of the planning regime.
- 114. For example, EN-1 (2024) notes:
 - 5.2.16 The Secretary of State should give air quality considerations substantial weight where a project would lead to a deterioration in air quality. This could for example include where an area breaches any national air quality limits or statutory air quality objectives. However, air quality considerations will also be important where substantial changes in air quality levels are expected, even if this does not lead to any breaches of statutory limits, objectives or targets.
 - 5.2.17 The Secretary of State should give air quality considerations substantial weight where a project is proposed near a sensitive receptor site, such as an education or healthcare facility, residential use or a sensitive or protected habitat.
 - 5.2.18 Where a project is proposed near to a sensitive receptor site for air quality, if the applicant cannot provide justification for this location, and a suitable mitigation plan, the Secretary of State should refuse consent.
- 115. This is in line with the Environment Agency's briefing on the role of the Environment Agency and the Scottish Environmental Protection Agency in in waste incinerators, which states: "The National Planning Policy Framework (NPPF) is clear that the planning system should not duplicate the controls of other regulatory regimes, so we will only recommend the inclusion of planning conditions for things we can't control through the permit. That does not mean to say that the residual impacts of matters controlled through the permit cannot be material planning considerations. Such impacts are relevant to whether the proposal represents an acceptable use of the land and they can legitimately have a bearing on any planning decision".5

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⁵ https://www.parliament.uk/globalassets/documents/commons-committees/environment-food-rural-affairs/correspondence/171214-Environment-Agency-briefing-on-role-of-EA-and-SEPA-towards-incinerators.pdf

- 116. As such, adverse pollution impacts can weigh against a development proposal even where those impacts have been reduced, controlled or minimised, e.g. as part of the permitting regime.
- 117. In this regard we note the EA's Draft Decision Document for Medworth, where on page 44 it is stated that: "The modelled NOx PC [process contribution] does exceed 1% of the ES [Environmental standard] at Wisbech AQMA [Air Quality Management Area] No.3, however, as the proposed emissions comply with BAT associated emission levels and the resulting PECs [Predicted Environmental Concentrations] do not exceed environmental standards, the Applicant's modelling shows that the Installation is unlikely to result in a breach of the ES within the AQMA".
- 118. Even if the NOx impacts on the AQMA was not enough to prevent the EA from issuing an Environmental Permit, the fact that the Medworth proposal is predicted to diminish air quality at an AQMA can weigh against the NSIP proposal in the planning balance.

EA STATEMENTS ON PROXIMITY PRINCIPLE AND WASTE FEEDSTOCK ORIGIN

- 119. On page 145 the EA notes that: "The Permit does not control where the waste comes from because that <u>falls outside the scope of this permit determination</u>".
- 120. And on page 156 of the Draft Permit Decision Document the EA notes the concern that: "Waste should not be imported from other area of the country" and responds that: "This matter is not relevant to whether an environmental permit can be granted", confirming that the EA does not consider the proximity principle as part of the permitting process.

EA STATEMENTS ON ADVERSE IMAPCTS ON RECYCLING, AND AVOIDING ENERGY FROM WASTE OVERCAPACITY

- 121. On pages 144-145 of the Draft Permit Decision Document the concern that: "Some waste types could be recycled or recovered" is met with the response that: "This is primarily <u>outside the scope of this determination</u>".
- 122. In terms of EfW overcapacity, on page 156 the EA responses to "Concerns that waste is not currently available" (presumably a comment on EfW overcapacity) by stating: "This is <u>outside of the scope of this</u> determination".
- 123. Similarly, on page 157 the EA notes the concern that: "The need for and size of the plant was questioned, with many incinerators already in operation in the UK" and commented that: "We determine the application that has been submitted to us... Whether an incinerator is needed is not relevant to that determination".

124. The above comments about how the permitting regime cannot prevent EfW overcapacity and does not have primary responsibility for preventing the incineration of recyclates is in line with the Environment Agency's comments on the North Lincolnshire NSIP dated 10 May 2023 [REP9-046 of EN010116] where the EA states that: "...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..."

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https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010116/EN010116-001252-Environment%20Agency%20-%20Comments%20on%20responses%20to%20the%20ExA%E2%80%99s%20ExQ3.pdf