

# Medworth Energy from Waste Combined Heat and Power Facility



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## **Closing Position Statement on Waste Need**

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with energy.**



## 1. Purpose of this Position Statement on Waste Need

- 1.1 This Position Statement has been prepared to assist the Examining Authority in preparing its Recommendation and the Secretary of State in determining the DCO Application for the Proposed Development by collating and summarising the key points relating to waste need.

## 2. The Policy Lens

- 2.1 The Applicant notes that the important role of, and need for, electricity generation from EfW technology is established via National Policy Statements EN-1 and EN-3 (both adopted and the revised drafts dated March 2023). The recovery of energy from the combustion of waste is said to form an important element of waste management strategies in both England and Wales (paragraph 2.5.2 of adopted NPS EN-3 and 3.7.2 of revised draft EN-3).
- 2.2 The Applicant notes that the revised draft NPS EN-1 and EN-3 constitute important and relevant matters for the Secretary of State to consider under s104 of the Planning Act 2008 (as confirmed in paragraph 4.4 of the Secretary of State's Decision Letter for the Boston Alternative Energy Facility DCO).
- 2.3 The Proposed Development's compliance with the adopted and revised draft NPSs is comprehensively addressed and demonstrated in the Applicant's **National Policy Statement Tracker (Rev 3.0) (Volume 9.18) [REP7-038]**. The detail of those submissions is not repeated here.
- 2.4 During Examination there has been a focus on, amongst other aspects, paragraph 3.7.29 of revised draft NPS EN-3, which states that Applicant's must ensure that 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'*.
- 2.5 There has also been an understandable focus during Examination on the 'proximity principle'. Although this principle is not considered or identified in either NPS-EN1 or EN3, the Waste Management Plan for England (January 2021) sets out the need to reflect the 'proximity principle'. This is the requirement to establish an integrated and adequate network of waste disposal installations for recovery of mixed municipal waste collected from private households. The focus of the policy on the proximity principle is not only to enable waste to be disposed of, or be recovered, in one of the nearest appropriate installations, but also to ensure the most appropriate methods and technologies are provided, in order to ensure a high level of protection for the environment and public health. Furthermore, while the network shall be designed in such a way as to enable a movement *towards* the aim of self-sufficiency in waste disposal and the recovery of waste, importantly, consideration must be given to the geographical circumstances or the need for specialised installations for certain types of waste.
- 2.6 Taking each of these policy requirements in turn, evidence for how the Proposed Development's compliance with policy has been established within the DCO Application documents and the oral and written submissions submitted during Examination is signposted.



### 3. Reasons why the Proposed Development is “Fit for the Future”

3.1 The Proposed Development is ‘*fit for the future*’ in at least three key respects:

- it is Combined Heat and Power (CHP) ready;
- it is Carbon Capture/Decarbonisation ready; and
- it is significantly above the threshold for R1 compliance.

3.2 **CHP** – Revised draft NPS EN-1, section 4.7 states that to be economically viable as a CHP plant, a generating station needs to be located sufficiently close to users with heat demands.

3.3 The availability of potential CHP industrial users was an essential siting criterion when identifying a site for the Proposed Development. The site selection process is set out in more detail in **[APP-029]** and compliance with the applicable statutory requirements and policies relating to site selection is set out in **[REP5-037]**.

3.4 Paragraph 4.7.19 of Revised Draft NPS EN-1 states that where it is “*reasonably possible for the applicant to reach agreement with a potential heat customer during the lifetime of the station, the Secretary of State may wish to impose requirements to ensure that the generating station is CHP-ready and designed in order to allow heat supply at a later date*”.

3.5 The **Combined Heat and Power Assessment [APP-097]** sets out the viability of a CHP Connection from the EfW CHP Facility Site. In this regard, the policy is framed in terms of the ‘reasonable possibility’ of an applicant reaching agreement with heat customers “*during the lifetime of the station*”. There is no requirement for any evidence that such agreements are in place prior to determining an application. The absence of any such agreements with heat customers accordingly does not count against the Proposed Development. Indeed, it is only to be expected that commercial agreements will be concluded following a grant of development consent, when potential customers have clarity as to whether or not a facility will actually come forward.

3.6 Requirement 25 in the **draft DCO (Rev 7) (Volume 3.1)** provided at Deadline 8 also requires the Applicant to install apparatus to facilitate the CHP Connection when constructing the EfW CHP Facility (further details of the CHP embedded design measures secured by Requirement 25 are set out in **[REP5-038]**), and to regularly submit a CHP review report to the Secretary of State. The Proposed Development will therefore be CHP-ready and designed to allow heat supply. The Proposed Development accordingly complies with the adopted and revised draft NPS EN1 and the commitments set out in Requirement 25 mean that positive weight can and should be given in the planning balance in respect of the ability of the Proposed Development to provide CHP.

3.7 **Carbon Capture/Decarbonisation Readiness** – Revised draft NPS EN-1, section 4.8, requires combustion plants with a generating capacity of 300MW or greater to be Carbon Capture or Decarbonisation Ready by retaining control over sufficient land to install and use carbon capture equipment, and to submit update reports to the Secretary of State on the technical aspects of its carbon capture readiness



status. The Applicant has ensured that the Proposed Development meets this standard, despite being, at 58MW, below the threshold where this is currently required.

- 3.8 Carbon Capture/Decarbonisation Readiness is secured by Requirement 22 and Requirement 23 of the **draft DCO (Rev 7) (Volume 3.1)** provided at Deadline 8. Requirement 22 ensures that appropriate land is set aside and maintained for future carbon capture and export equipment. It also requires the Applicant to install apparatus to facilitate installation of the carbon capture and export equipment when constructing the EfW CHP Facility Site (further details of the carbon capture and export embedded design measures secured by Requirement 22 are set out in **[REP5-038]**). Requirement 23 ensures that the feasibility of carbon capture and export is kept under review, biannually. This approach has precedent in The Drax Power (Generating Stations) Order 2019 and The Thurrock Flexible Generation Plant Development Consent Order 2022.
- 3.9 As set out in the Applicant's response to PND.3.8 in the **Applicant's response to the ExA's Written Questions (ExQ3) (Volume 16.2) [REP7-040]**, and in PND.2.8 in **[REP5-032]**, this approach to Carbon Capture/Decarbonisation Readiness is fully in compliance with the adopted and revised draft NPS policies, and the commitments set out in Requirements 22 and 23 means that positive weight can and should be given in the planning balance in respect of the ability of the Proposed Development to provide CHP in the future.
- 3.10 **R1 compliance** – In order to comply with the Waste Framework Directive, and to qualify as an energy recovery facility, a development must be capable of achieving an R1 value in excess of 0.65. The R1 design calculation for the Proposed Development is 0.81, significantly above the current threshold for an energy recovery facility. By ensuring the Proposed Development will recover energy in excess of the R1 threshold, the Applicant has ensured that the Proposed Development is as efficient as possible, and that it is future-proofed against any increases to the R1 threshold that may occur. Details of this calculation are set out in the **Technical Note: R1 Calculation (Volume 9.24) [REP1-058]**.

#### **4. Reasons why the Proposed Development will not compete with greater waste prevention, re-use, or recycling and complies with the waste hierarchy**

- 4.1 The Applicant's **Waste Fuel Availability Assessment (WFAA) (Rev 3.0) [REP5-020]** focuses entirely on the availability of residual household, industrial and commercial waste, being that fraction of waste which is left over after the removal of reusable and recyclable materials, and which is currently being sent to landfill or being exported abroad.
- 4.2 All residual waste capacity gaps identified in the **WFAA**, by definition, do not compete with waste prevention, re-use or recycling. In considering increased recycling and other targets, the **WFAA** demonstrates that there will remain a need for the waste management capacity provided by the Proposed Development even if ambitious national targets for the reduction of waste and increase in recycling set out in the Environmental Improvement Plan 2023 are met during the lifetime of the Proposed Development. The Applicant's responses to PND.1.5 and PP.1.2 in **[REP2-019]**, PND.2.8 and PND.2.9 in **[REP5-032]**, and PND.3.7 in **Volume 16.2**



**[REP7-040]** set out in detail how the Proposed Development will not compete with greater waste prevention, re-use or recycling.

4.3 Requirement 14 in the **draft DCO (Rev 7) (Volume 3.1)** provided at Deadline 8, requires the Applicant to submit a scheme to maintain the waste hierarchy and aiming to minimise any recyclable and reusable waste received at the Proposed Development. This Requirement is intended to operate in tandem with the terms of the Environmental Permit governing the categories of waste that can be accepted at the Proposed Development. This type of Requirement has precedent, most recently in The Boston Alternative Energy Facility Order 2023. Further detail on how the Proposed Development complies with the waste hierarchy is found in the Applicant's responses to PND.1.5 and PP.1.2 in **[REP2-019]** and PND.2.9 in **[REP5-032]**.

4.4 The Applicant is also exploring opportunities to recycle incinerator bottom ash (IBA) and air pollution control residue (APCr), moving these byproducts of the EfW process up the waste hierarchy. Please see Appendix 10.2B in **[REP2-019]**.

## **5. Reasons why the Proposed Development will not result in an over-capacity of EfW waste treatment provision at a local or national level**

5.1 The Applicant notes that the term "local" is not defined in either NPS EN-3 or the revised draft NPS EN-3. The **WFAA [REP5-020]** sets out, in a clear and transparent way, the methodology used to identify the Study Area which has been used to carry out the local assessment of waste fuel availability, and explains why that is appropriate.

5.2 The local analysis demonstrates that, in 2021, almost 2.4 million tonnes of residual waste was sent to landfill, and around 163,000 tonnes of RDF was exported to Europe (section 4.1). Up to 2030, there is a local requirement for ~1.3 million tonnes per annum of waste management capacity, and around ~1.5 million tonnes per annum up to 2035. (section 4.2). It must be stressed that these are conservative estimates. The true waste management capacity requirement may be between ~2.8 and ~5.4 million tonnes of additional capacity (3<sup>rd</sup> bullet of paragraph 4.3.4).

5.3 The national analysis demonstrates that, in 2021, around 9 million tonnes of residual waste was disposed in landfill that could be treated at an EfW facility, and that, in 2022, around 1.5 million tonnes of RDF was exported to Europe (section 5.1).

5.4 Appropriate consideration has also been given by the Applicant to the implications of the ambitious national targets in the Environmental Improvement Plan 2023 and, for reasons set out above, the Proposed Development would not hamper or compete with efforts to achieve those targets.

5.5 For the avoidance of doubt, the Applicant supports the national targets in the Environmental Improvement Plan 2023. It is no criticism to describe them as ambitious – that is undoubtedly the case. Nor should that distract from the fact that, in the event the ambitious targets in the Environmental Improvement Plan 2023 are achieved, by 2028, a minimum shortfall of ~3.5 million tonnes of waste capacity is still identified.





- 5.6 It is more challenging to identify the waste capacity gap in 2042, being 19-years hence. However, Appendix C to the **WFAA** demonstrates that, by this time, the 10 oldest EfW facilities will all be over 40-years old, accounting for 3.2 million tonnes of capacity that may be lost.
- 5.7 The **WFAA** conclusively demonstrates the need for the additional 625,600 tonnes of capacity offered by the Proposed Development, at both a local and a national level, including where future recycling and waste reduction targets are met.
- 5.8 The Applicant's response to PND.3.7 in the **Applicant's response to the ExA's Written Questions (ExQ3) (Volume 16.2) [REP7-040]** sets out in detail how the Applicant's detailed future local baseline, being a bespoke assessment considering the waste requirements identified by the relevant local waste planning authorities, forms a reliable assessment of future waste treatment capacity need, whilst the national targets can only reliably be applied to the national assessment.
- 5.9 The impact of the recently approved Boston Alternative Energy Facility (BAEF) has also been considered in the **WFAA** (see paragraph 5.1.23) and is also considered in detail in the Applicant's responses to PND.3.1 to PND.3.4 of **Volume 16.2 [REP7-040]** and GCT.3.3 of **Volume 18.4** (provided at Deadline 8). The only potential fuel source that would be available to both the Proposed Development and BAEF, and in respect of which it can be said there would be any scope for competition between the facilities, is limited to the 163,000 tonnes of RDF that is exported from the local area. This is because BAEF is only capable of accepting waste that has been processed into RDF bales, whilst, in contrast, the Proposed Development will be able to accept residual waste that has not been subject to additional processing and treatment (see PND.3.1). The Applicant's position is that BAEF will therefore not compete with the Proposed Development, certainly not to any material degree, and there remains sufficient residual waste (which BAEF cannot accept) such that the Proposed Development would not result in an over capacity at a local or national level.
- 5.10 The North Lincolnshire Green Energy Park (NLGEP) (EN010116) Examination closed on 16 May 2023, and a recommendation report is due to be submitted to the Secretary of State on 15 August 2023. NLGEP seeks to receive waste from Yorkshire and The Humber and the East Midlands regions, in respect of which there is only limited overlap with the local Study Area for the Proposed Development.<sup>1</sup> NLGEP is also, in common with the BAEF, designed to only accept RDF, with waste requiring further processing before final treatment. NLGEP also expressly seeks to capture the RDF export market, a market that is declining following tax changes in the Netherlands (see section 3.5.4 of the RDF Supply Assessment **[REP3-040]** in the NLGEP Examination Library), which is not a market targeted by the Proposed Development. The NLGEP has been considered in the **WFAA** (see paragraph 5.1.23) and the Applicant's position and conclusions in respect of the NLGEP are the same as for the BAEF. NLGEP will not compete with the Proposed Development to any material degree, and there remains sufficient residual waste (which NLGEP

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<sup>1</sup> The East Midland Waste Planning Authorities included in the WFAA are Leicester City Council, Leicestershire County Council, Lincolnshire County Council, Northamptonshire County Council (now West and North Northamptonshire unitary authorities) and Rutland County Council. This accounts for 1.23 million tonnes of local authority collected waste in 2021/22, of the total 4.2 million tonnes of local authority collected waste collected from the Study Area.



cannot accept) such that the Proposed Development would not result in an over capacity at a local or national level.

- 5.11 Whilst some Interested Parties have sought to provide the Examining Authority with comparable fuel availability assessments, such assessments are misleading as they have been based upon incorrect assumptions around residual waste. Most notably, assumptions that the Proposed Development would only accept residual municipal waste are simply wrong. The EfW CHP Facility, if permitted, would accept residual waste from household, industrial and commercial waste sources.

## 6. Reasons why the Proposed Development complies with the proximity principle

- 6.1 Whilst the ‘proximity principle’ does not form part of the relevant NPSs, the Applicant recognises that this policy is likely to be an important and relevant consideration for the Secretary of State when determining the application for development consent. As such, the **WFAA** assessment of available waste complies with the proximity principle, both in how it has identified the local Study Area (see section 3.2 of the **WFAA**) and (in later revisions) by focusing on England, rather than the UK, for the national assessment (see paragraph 3.2.18 of the **WFAA**). The national and local Study Areas have been informed by and embody the proximity principle. Consideration has also been given to the proximity principle throughout the **WFAA**, including when looking at alternatives to EfW such as cement kilns (see paragraph 5.2.34 of the **WFAA**).
- 6.2 It is important to keep in mind that the proximity principle aims to enable waste to be disposed or recovered in one of the nearest *appropriate* installations, using the most *appropriate methods* and *technologies*. Crucially, consideration must always be given to the geographical circumstances and the need in any given case. The Proposed Development would be a modern, highly efficient facility, which is “fit for the future” for the reasons described above, and which is a more appropriate technology and method for dealing with residual waste than continued landfilling.
- 6.3 The Proposed Development, being a Nationally Significant Infrastructure Project (NSIP), is larger, with higher generating capacity, than smaller facilities. The local area must be defined accordingly. The use of a two-hour drive time as the starting point to identify the local area is a standard approach taken in similar projects, including the BAEF.<sup>2</sup> NGLP goes further, identifying the local area, having regard to the proximity principle, as the two closest waste planning regions.<sup>3</sup> It would be wholly inappropriate to consider ‘proximity’ without given consideration to the capacity of the Proposed Development and its status as an NSIP.
- 6.4 Finally, DCO Requirement 29 (Origin of Waste), which is agreed with Cambridgeshire County Council, reflects the proximity principle and will ensure it is complied with, by ensuring that the vast majority of waste (a minimum of 80%) processed at the Proposed Development originates from the local Study Area. In addition, Requirement 29 goes further still, in that it imposes an additional, minimum

<sup>2</sup> The Applicant sought to identify sources of RDF within two hours drive time of Ports, for onward transport to the Boston Alternative Energy Facility. Please see section 1.7 Waste Catchment Areas of the 9.5: Addendum to Fuel Availability and Waste Hierarchy Assessment [REP1-019] of the Examination Library for EN010095.

<sup>3</sup> See section 3.2 of 5.2 RDF Supply Assessment [REP3-040] of the Examination Library for EN010116.



requirement for at least 17.5% of waste to originate from within a much smaller 75km fixed radius of the Proposed Development. More detail on the operation of Requirement 29 is set out in the Applicant's responses to PND.3.5 and PND.3.6 in the **Applicant's response to the ExA's Written Questions (ExQ3) (Volume 16.2) [REP7-040]**. However, the twin controls imposed by Requirement 29 serve to ensure that compliance with the proximity principle is guaranteed. Not only will the overwhelming majority of waste (minimum 80%) be sourced from the local area, a significant minority of waste (minimum 17.5%) will originate 'on the doorstep' of the facility. The fact that the Cambridgeshire County Council, as the local waste authority, has agreed the terms of the Requirement is significant.

## 7. Conclusions

- 7.1 For the reasons set out in summary above, supported by the detailed evidence contained in the **WFAA [REP5-020]** and the analysis in the Applicant's **National Policy Statement Tracker (Rev 3) (Volume 9.18) [REP7-038]**, the Proposed Development is fully compliant with the adopted and revised draft NPS EN-1 and EN3.
- 7.2 It respects the proximity principle and facilitates the waste hierarchy by diverting residual waste away from landfill. It will be fit for the future, will not compete with greater waste prevention, re-use, or recycling and will not result in an over-capacity of EfW waste treatment provision at a local or national level.



