

Medworth Energy from Waste Combined Heat and Power Facility

PINS ref. EN010110
Document Reference: 15.3
Revision 1.0
July 2023



Written Summary of the Applicant's Oral Submissions at ISH7

**We inspire
with energy.**



Contents

Table 1.1 Draft Written Summary of the Applicant's Oral Submissions at ISH7	2
Table 1.2 ISH 7 Action Points: Applicant's response	25

Appendix A	Technical Note: Reduction in Energy Inputs
Appendix B	Technical Note: ISH7 Action Point 4 Cumulative Effects
Appendix C	Briefing Note Waste Fuel Availability Assessment Refined Appendix C
Appendix D	WDI-Guide



Table 1.1 Draft Written Summary of the Applicant’s Oral Submissions at ISH7

Item	ExA Question/ Context for Discussion	Applicant’s Response
Agenda item 1 - Welcome, introductions, arrangements for the hearing		
1	[The Examining Authority (“ExA”) opened the hearing, introduced themselves and invited those parties present to introduce themselves.]	<p data-bbox="1070 549 1178 580"><u>Applicant</u></p> <p data-bbox="1070 612 1901 644">The following parties introduced themselves on behalf of the Applicant:</p> <ul data-bbox="1115 667 2085 1118" style="list-style-type: none"> • Gary McGovern, Partner, Pinsent Masons LLP for the Applicant • Claire Brodrick, Legal Director, Pinsent Masons LLP for the Applicant • Alison Dablin, Associate, Pinsent Masons LLP for the Applicant • Paul Carey, Managing Director, MVV • Mike Turner, Managing Director, MVV • Gerran McCrea, Head of Development, MVV • Jane Ford, Communications and Community Relations Manager, MVV • Tim Marks, Head of Planning, MVV • David Kenyon, Technical Director, Planning, WSP for the Applicant • Claire Brown, Technical Director, WSP for the Applicant • Patrick Hoyle, Principal Consultant for Acoustics Noise and Vibration, WSP for the Applicant • Ben Warren, Technical Director, WSP for the Applicant • Neil Furber, Landscape Architect at HCUK for the Applicant <p data-bbox="1070 1150 1417 1182"><u>Host Local Authorities (HLAs)</u></p> <ul data-bbox="1115 1214 2085 1273" style="list-style-type: none"> • Andrew Fraser-Urquhart, for Cambridgeshire County Council (CCC) and for Fenland District Council (FDC) <p data-bbox="1070 1305 1267 1337"><u>Statutory Parties</u></p> <ul data-bbox="1115 1369 1653 1401" style="list-style-type: none"> • Emma Barnett for Wisbech Town Council



Item	ExA Question/ Context for Discussion	Applicant's Response
<u>Other Interest Parties (IPs)</u>		
<ul style="list-style-type: none"> • Shlomo Downen & Josh Downen for UKWIN • Jenny Perryman • Valorie MacRea 		
2	The main purpose of the ISH7 is to undertake an oral examination on Environmental Matters, particularly in relation to waste issues and cumulative effects.	
3 Waste Issues		
<p>The purpose of this item is to examine issues linked with Waste, principally the Waste Fuel Availability Assessment (WFAA) (clean) [REP5-020] and (tracked) version [REP5-019], which underpins the need for the development, including waste availability, composition and compliance with waste hierarchy and examine if the Development Proposal is of an appropriate type and scale so as not to prejudice the achievement of local or national waste management targets.</p>		
3a	<p>The ExA will ask the Applicant to provide an update on the latest version of the Waste Fuel Availability Assessment and how the proposed waste combustion generating station is in accordance with the waste hierarchy, the proximity principle and of an appropriate type and scale so as not to prejudice the achievement of local or national waste management, drawing heavily on the information set out in the Statement of Reasons (tracked) [REP3-010] and (clean) [REP3-011] and Waste Fuel Availability Assessment (clean) [Ref tbc] and (tracked version) [Ref tbc].</p>	<p>Claire Brown, on behalf of the Applicant, explained that the updated WFAA (Volume 7.3) (Rev 3) [REP5-019 (tracked); REP5-020 (clean)] remains a conservative assessment and is focused on the availability of suitable residual waste that is currently managed at the bottom of waste hierarchy. The assessment is in two parts: the local assessment based on the defined study area and then a national assessment.</p> <p>The WFAA (Volume 7.3) (Rev 3) [REP5-019 (tracked); REP5-020 (clean)] has been updated to reflect new baseline data which became available on the date the previously updated version was submitted – most notably:</p> <ul style="list-style-type: none"> • Defra Local Authority Collected Waste Statistics, 2021/22 (published May 2023). • Data published by Tolvik Report 'UK Energy from Waste Statistics – 2022', (May 2023).



Item	ExA Question/ Context for Discussion	Applicant's Response
		<p>The WFAA (Volume 7.3) (Rev 3) [REP5-019 (tracked); REP5-020 (clean)] local assessment study area has been refined. Through discussion with interested parties and other consultees, we are now excluding Milton Keynes from the Study Area for the local/ regional assessment.</p> <p>The evidence of the Waste Local Plans in the Study Area has been updated, and it has been made clear where data is being directly reported from extant plans; where data is being taken from untested, emerging plans and where the Applicant has provided commentary/ interpretation.</p> <p>For the national assessment, the WFAA (Volume 7.3) (Rev 3) [REP5-019 (tracked); REP5-020 (clean)] fully reflects the Government's targets for residual waste as set out in the 2023 Environmental Improvement Plan (published after the first version of the WFAA was produced).</p> <p>The first target is the interim target (Target 2) is a 2028 target to reduce the total level of residual waste being produced to a level not exceeding 25.5 million tonnes.</p> <p>The second target is the ultimate achievement of government's 2042 target of halving residual waste produced per person.</p> <p>The national assessment now includes consideration of co-incineration. Specially, cement works and how much residual waste management capacity they offer, as a means of fuelling cement works. This has been reflected in the updated assessment.</p> <p>The local assessment for the east of England, along with the in scope East Midlands planning authorities, covers how reliant these areas are on landfill. In 2021-22, around 23% of residual waste was landfilled in the east of England, in comparison to a national average of 8%.</p> <p>The updated WFAA (Volume 7.3) (Rev 3) [REP5-019 (tracked); REP5-020 (clean)] conclusions are clear that there remains a minimum shortfall of non-landfill capacity for both household and industrial and commercial waste. The EfW CHP Facility is designed to take the smaller household waste stream as well as the larger industrial and commercial waste stream. There is a minimum shortfall of ~1.5 million tonnes of non-landfill HIC residual waste management capacity in the local area.</p>



Item	ExA Question/ Context for Discussion	Applicant's Response
		<p>Nationally, the updated WFAA has concluded that by 2028, even if the Government's ambitious waste reduction targets are met, the shortfall equates to a minimum of 3.5 million tonnes. Against this backdrop, the Proposed Development will not result in an oversupply of EfW capacity at either the local/ regional level or national level.</p> <p>The Proposed Development accords with waste hierarchy. The fundamental focus of the WFAA (Volume 7.3) (Rev 3) [REP5-019 (tracked); REP5-020 (clean)] is on how much in scope waste is currently sent to landfill, the very bottom of the waste hierarchy. The facility will not take recyclable waste. In fact, there is a Requirement in the draft DCO (Volume 4.3) (Rev 4) [REP5-005] on the waste hierarchy that goes further and ensures that recyclable materials are not managed at the Proposed Development.</p> <p>In terms of compliance with proximity principle, the WFAA (Volume 7.3) (Rev 3) [REP5-019 (tracked); REP5-020 (clean)] has applied a proportionate study area. To guarantee to Applicant's commitment to adhering to the proximity principle, we have agreed a Requirement with Cambridgeshire County Council which seeks to apply a catchment area to the Proposed Development, sourcing 17.5% of the Proposed Development's inputs within 75km and at least 80% than within the study area defined within the WFAA.</p> <p>Finally, in response to the question of whether the proposed development would prejudice the achievement of waste management targets, one of the key changes of the updated WFAA is the consideration of how much residual waste would be available if the Government's ambitious waste reduction targets were met. We have concluded within the WFAA that by 2028, there would still be 3.5 million tonnes of capacity shortfall and by 2042, based upon current data and arisings, we can say that current capacity broadly equates to future arisings. However, current capacity may not be the current capacity in 20 years' time. The WFAA looks at the age of the existing EfW assets across England – by 2042, the 10 oldest EfW facilities in England will be over 40 years old and will need to be updated. These facilities account for 3.2 million tonnes of capacity. This is a large proportion of capacity that is very likely to need replacing with CHP-enabled, more modern, potentially carbon capture facilitated, updated infrastructure. There is therefore a very likely shortfall by 2042.</p>



Item	ExA Question/ Context for Discussion	Applicant's Response
		<p>In summary, the Applicant is of the view that the Proposed Development will not result in an oversupply of capacity, and that the Proposed Development will make a contribution to moving waste up the hierarchy and is in accordance with the proximity principle.</p> <p>In response to the ExA asking for clarification on what Waste Areas 1 and 2 were, Ms Brown confirmed that Waste Area 1 is 75km from the Proposed Development and Waste Area 2 comprises the study area as defined in the WFAA. Ms Brown confirmed the indicative two-hour travel time identified which waste planning authorities fall into the study area and this is what Waste Area 2 had been based upon.</p> <p>In response to ExA's request to explain at how the Applicant has arrived at 3.5 million tonnes of shortfall residual waste management capacity in England, Ms Brown noted that the environmental improvement plan interim Target 2 is specific about reducing the total mass of residual waste to a level not exceeding 25.5 million tonnes by 2028. This figure is a UK figure, so the Applicant has used government data which states that England is responsible for approximately 84% of all national waste arisings and have applied that to the 25.5 million tonnes figure, which means for England would be looking to achieve a level not exceeding 21.4 million tonnes. As at end of 2022, the consented and in construction EfW capacity equated to 17.9 million tonnes of predicted capacity by 2027. A subtraction from 21.4 of 17.9 gives a residual waste management capacity of 3.5 million tonnes.</p> <p>In response to ExA asking for clarification on the figure of 17.7 million tonnes of residual waste that will require management, Ms Brown noted that the target set out in the environmental improvement plan is a per capita target. By 2042, the Government is looking to limit the residual waste per head down to 287 kg. Using ONS data, we calculated this amount to 17.7 million tonnes of residual waste that would require management in England. Current EfW capacity data shows that by 2026 there is predicted to be 17.9 million tonnes of capacity which is more than the 17.7 million tonnes of waste predicted by 2042. However, the 17.9 million tonnes of capacity is capacity that will exist in 2026-27, but we are looking much further ahead to 2042 and, by that time, a lot of that capacity will be aging considerably. The 10 oldest EfW facilities will all be 40 years or older which equates to over 3 million tonnes of capacity. The Applicant's</p>



Item	ExA Question/ Context for Discussion	Applicant's Response
		<p>position is that looking that far ahead, we cannot rely on the 17.9 million tonnes of capacity still all being available in 2042.</p> <p>In response to the ExA asking how information translates in relation to the proximity principle considering that it states that it should be treated as close to the development as possible, Ms Brown noted that this is the reason the WFAA has two parts which have sought to comply with existing and emerging national policy – looking at the position nationally and locally. The Applicant considers that, nationally, it has demonstrated a shortfall in capacity, and when looking at localised level – which is even more important to avoid transporting material across the country – there is the need to ensure compliance with the proximity principle and bring the waste from as close to the facility as possible. Ms Brown added that this is why the Applicant has agreed to a waste origin requirement in the draft DCO, to ensure that material is brought in from the east of England and the relevant parts of the East Midlands region.</p>
3b	At this point, the ExA is likely to invite comments from Natural England in relation to the Government's target to half the waste that ends up in landfill or incineration by 2042.	N/A
3c	The ExA will then ask questions of the Applicant in relation to the spatial scope (Study Area), mainly the origin and composition of waste, and query the Applicant in relation to certainty of availability of waste from all the different waste authorities within the study area (2 hour travel time of heavy goods vehicles).	<p>Ms Brown on behalf of the Applicant noted that the updated WFAA (Volume 7.3) (Rev 3) [REP5-019 (tracked); REP5-020 (clean)] includes some additional graphics – Graphic 4 looks at in-scope residual waste and where this will come from. This is waste currently sent to landfill. Whilst this demonstrates that Essex accounts for 27% of residual waste in the study area, it also demonstrates a further 7 authorities that all account for sizeable proportions of residual waste – almost 70% of residual material is being derived from authorities that are not Essex. The Proposed Development would therefore not be reliant on Essex.</p> <p>In response to the ExA querying the suitability of the 17.5% number in relation to Waste Area 1, Mr Turner on behalf of the Applicant advised that this was put forward by CCC. The Applicant agrees that this is a reasonable and proportionate figure to use. The Applicant will not know the detail of waste contracts until after development consent is granted, and the Applicant engages with the market. The Requirement must be</p>



Item	ExA Question/ Context for Discussion	Applicant's Response
		<p>sufficiently flexible to be able to cope with any future situations which may arise which may dictate where waste will be available from. The figure is a reasonable and proportionate radius to use, and the Applicant is confident that it will be able to comply with it.</p> <p>In response to ExA querying how the Proposed Development was compliant with the proximity principle where only 17.5% of waste comes from Waste Area 1, Ms Brown noted that the Applicant's position is that Waste Area 2 is an area that fully complies with the proximity principle. Waste Area 1 sits within that. Waste Area 2 is a proportionate study area as set out in the WFAA (Volume 7.3) (Rev 3) [REP5-019 (tracked); REP5-020 (clean)]. Ms Brown reiterated that the Applicant is of the view that Proposed Development is compliant with the proximity principle.</p> <p>In response to ExA querying how the Applicant arrived at the future capacity figure, Ms Brown confirmed the 17.9 million capacity figure includes all available capacity and does not take anything away or assume that any will close after 40 years. However, the Applicant wanted to highlight the age of some of that capacity to the ExA.</p>
3d	The ExA will then give the Local Host Authorities (LHAs) and other IPs the opportunity to comment on these topics.	<p>In response to submissions from CCC, Ms Brown confirmed that the requirement in respect of Waste Area 2 is that a minimum of 80% of waste must originate from within this area. The Waste Area 2 plan will be provided at Deadline 6 as Volume 15.9.</p> <p>In response to a question as to what would happen if there was insufficient fuel at a future date, Mr Turner confirmed that the EfW CHP Facility was capable of operating for a lower number of hours or being run on a partial load – it is not an all or nothing facility. Mr Turner highlighted that the WFAA (Volume 7.3) (Rev 3) [REP5-019 (tracked); REP5-020 (clean)] does not envisage that a shortage of fuel will occur in the short, medium, or long term.</p> <p>In response to queries from Wisbech Town Council as to whether 75km was the two-hour drive time radius or something different, Mr Turner advised that 75km was put forward by CCC. Waste Area 2 is the study area used in the WFAA (Volume 7.3) (Rev 3) [REP5-019 (tracked); REP5-020 (clean)] which was also put forward by CCC. The Waste Area 2 plan shows the radius of the second area.</p>



Item	ExA Question/ Context for Discussion	Applicant's Response
		<p>In response to the ExA asking whether WFAA Study Area map is the latest version, Ms Brodrick confirmed it was and Waste Area 2 is the Study Area as confirmed in the Schedule of Changes (Volume 9.2) [REP5-028].</p> <p>In response to comments from Wisbech Town Council about Waste Area 2, Mr Turner advised that the two-hour drive time was used as an indicator to establish the Waste Area 2 / Study Area and that economics means that waste outside of Waste Area 2 is only viable if the cost of transport can be overcome. The Applicant is comfortable from the current WFAA that Waste Area 1 and Waste Area 2 are a reasonable and proportionate response as to where the EfW CHP Facility will draw waste from.</p> <p>Ms Brown confirmed that Milton Keynes had been removed from the Study Area as part of the dialogue with statutory bodies. The indicative 2-hour drive time skirted the edge of Milton Keynes, and Milton Keynes also falls within the former southeast planning region. It was the only area that fell into this region, so it neaten up the Study Area to remove Milton Keynes. The WFAA is only looking at the whole of the former east of England planning region and relevant East Midlands regions that fall within the 2-hour drive time.</p> <p>In response to Ms Perryman asking if landfill figures include taking waste from London, Ms Brown advised that the data is based on Local Waste Planning Authority data. Waste does move across boundaries and waste does come from other parts of the country, but the WFAA is looking at how much waste is currently landfilled in the local authorities within the Study Area.</p> <p>In response to comments from Wisbech Town Council as to the reliability of the WFAA, Ms Brown confirmed that the Applicant considers that the approach adopted in the WFAA is transparent and auditable in terms of the Study Area selected. Ms Brown reiterated that areas have been taken out of the Study Area as a consequence of dialogue with stakeholders on the WFAA.</p> <p>In response to Wisbech Town Council comments on environmental improvement targets not being assessed at the local level, Ms Brown noted that the targets are new</p>



Item	ExA Question/ Context for Discussion	Applicant's Response
3e	The ExA will then ask questions in relation to engagement and confirmation of reported anticipated capacity from those local waste authorities.	<p>target. They are national targets and will ultimately filter through the requirements to be set out in the waste local plan evidence bases, as has the adherence to recycling targets. The assessment is a robust one at the national level.</p> <p>In response to Ms Perryman comments about diverting waste from other EfW Facilities, Ms Brown confirmed that the Proposed Development does not rely upon diverting waste from any other EfW facility. The basis of the WFAA (Volume 7.3) (Rev 3) [REP5-019 (tracked); REP5-020 (clean)] is on how much waste the local waste planning authorities currently divert to landfill and that is why this facility moves waste up the hierarchy. Mr Turner noted that with regard to Norfolk waste, this is a matter for Norfolk, and the Proposed Development is not dependent on Norfolk's waste. The WFAA relies upon suitable residual waste being sent to landfill, of which the assessment identifies there is a surplus.</p> <p>In response to comments from Ms Perryman that residual waste could be recycled, Mr Carey advised that the Proposed Development will take the waste it is permitted to take under the environmental permit, and this will be waste after people have removed items that can be recycled.</p> <p>Ms Brown on behalf of the Applicant advised that the evidence of residual waste from local waste authorities is set out in Tables 4.6 and 4.7 of the WFAA (Volume 7.3) (Rev 3) [REP5-019 (tracked); REP5-020 (clean)]. This is based upon publicly available data. The Applicant has sought, in updated WFAA, to make clear to the ExA where evidence has been taken directly from a waste local plan or its supporting evidence base (black text). The WFAA then seeks to differentiate this from where evidence bases are emerging or untested (blue text), and from where the Applicant is applying its own interpretation or commentary (red text).</p> <p>Ms Brodrick confirmed that the evidence of expressions of interest (Action Point 3 from Issue Specific Hearing 3) is provided in Appendix A of the Written Summary of the Applicant's Oral Submissions at ISH3 (Volume 12.2a) [REP4-019].</p>



Item	ExA Question/ Context for Discussion	Applicant's Response
3f	<p>The ExA will then ask the Applicant to explain the overall conclusions in the WFAA and also any differences identified in relation to Waste Fuel Availability when compared to the previous version of the WFAA.</p>	<p>In response the ExA's request to clarify the inclusion of / changes to Appendix C, Ms Brown advised that Appendix C looks at available capacity information. This is split into 4 key categories:</p> <ol style="list-style-type: none"> 1) Consented and operational capacity – England based. 2) Capacity that is under construction and not operational. 3) Capacity that is consented but has not been built. 4) Capacity that sits within the planning system yet to be determined. <p>The purpose for preparing Appendix C was a validation exercise for the national assessment, to check other data that the WFAA (Volume 7.3) (Rev 3) [REP5-019 (tracked); REP5-020 (clean)] draws upon around available capacity. It was also intended to provide some narrative around those capacities that are consented and not built or are in the planning process.</p> <p>In response to ExA asking the Applicant how confident it is that there will be sufficient waste to fuel the facility for the lifetime of the facility, Ms Brown noted that the key point to note in relation to all types of capacity in Appendix C is that the capacity is presented on a regional basis – where we have a operational capacity figure for the East of England, that is of direct relevance to the WFAA because the WFAA includes all of the East of England. However, the same relationship cannot be drawn between the East Midlands in that the Appendix C groups capacity according to what's available in the East Midlands. This is the worst-case assessment as the WFAA is based only upon part of the East Midlands.</p> <p>The WFAA is only based on part of the East Midlands and therefore the 5 waste planning authorities that we need to pull out of any capacity listed in Appendix C is that which relates to Leicestershire, Leicester City, Northamptonshire, Lincolnshire and Rutland, as they are the five parts of the former East of England region that sit with the study area.</p> <p>In relation to operational capacity, Appendix C for East Midlands is reporting 446,000 tonnes, but when you remove those areas of the East Midlands that do not fall within the study area, the consented and operational capacity falls to 246,000 tonnes.</p>



Item	ExA Question/ Context for Discussion	Applicant's Response
		<p>Therefore, only part of the capacity that forms part of the East Midlands should actually be taken notice of.</p> <p>The same is true for the consented and under construction capacity. Appendix C reports a total figure for the East Midlands of 520,000 tonnes but when you refine that to only look at the five authorities being considered from the East Midlands, that comes down to 350,000 tonnes of consented capacity.</p> <p>The biggest change is with the consented and not built capacity, where there is 1,099,000 tonnes of consented and not built capacity, this reduces to 154,000 tonnes from the five authorities.</p> <p>The in-planning capacity remains the same at 1 million tonnes.</p> <p>In response to the ExA asking how the assessment complied with emerging policy around capacity, Ms Brown noted that the assessment very much focuses upon the operational capacity and capacity in construction and commissioning. The Applicant has looked at the report produced by Tolvik who have reported a total capacity of just under 17.9 million tonnes by 2026.</p> <p>Tolvik do not regard permitted capacity as being the fully available capacity and instead considers around 88% of permitted capacity to be a plant's throughput. The Applicant has compared the data set out in Appendix C of the WFAA to the Tolvik data.</p> <p>For example, with operational capacity, Tolvik reported in England that there are 13.9 million tonnes of capacity. The data in Appendix C is based on permitted capacities and finds 15.8 million tonnes of capacity. By applying the 88% operation level, this equates to 13.9 million tonnes. We are, therefore, happy that the Tolvik data marries up with our own findings.</p> <p>The ExA asked if the Applicant had carried any more detailed work in terms of analysing regional data. Ms Brown advised that the focus of the local assessment has been on the amount of residual waste that is currently sent to landfill and how this could be diverted. In terms of looking at capacity in Appendix C, the extent of the work done to</p>



Item	ExA Question/ Context for Discussion	Applicant's Response
		<p>look at what's available in east of England is being presented more categorically in the Applicant's last submission to ExA. The conclusion is that there is still a shortfall in waste capacity. The WFAA (Volume 7.3) (Rev 3) [REP5-019 (tracked); REP5-020 (clean)] looks in detail at capacity that has got consent that has not been built in the study area and a narrative around that is provided in the WFAA. The Applicant has concluded that these facilities would not be able to meet the shortfall in capacity.</p> <p>In response to the ExA asking if any assessment has been done looking at the proximity of the competing facilities to the main sources of waste, Ms Brown noted that the extent of the Applicant's work in Appendix C is to break down the capacity that is relevant to the East Midlands and East of England areas. There is more detail in the supplementary information the Applicant provided as part of the response to the ExA's questions (Volume 14.2 Applicant's Response to the ExA's Written Questions - ExQ2 – [REP5-032]). The local assessment has been based upon the Study Area, so the East of England and those sections of the East Midlands form the basis of the assessment.</p> <p>Post hearing note: A refined version of Appendix C of the WFAA is attached at Appendix C, which sets out existing and emerging capacity in the Study Area of the WFAA only. In preparing this refined table, two errors in the Applicant's response to the ExA questions at Deadline 5 (Volume 14.2 Applicant's Response to the ExA's Written Questions - ExQ2 [REP5-032]) have been identified as follows:</p> <p><i>“The ‘consented and not built’ capacity in the East of England of 1,099,000 tonnes per annum capacity (just under 1.1 million tonnes not 1,099 million tonnes) for the East Midlands relates to x4 facilities. However, only one of these sits within the WFAA Study Area – this is Gretton Brock Road in Northamptonshire, which has a capacity of 154,000 tonnes per annum.”</i></p> <p>Firstly, this should have read as follows: <i>“The ‘consented and not built’ capacity in the East of England of 1,099,000 tonnes per annum capacity for the East Midlands.....”</i></p> <p>Secondly, of the ‘x4 facilities’, there are two (not one) that are in the WFAA Study Area – Gretton Brook Road (at 154,000 tonnes per annum) and Willbrook East Industrial</p>



Item	ExA Question/ Context for Discussion	Applicant's Response
3g	The ExA will give the Local Host Authorities (LHAs) and other IPs the opportunity to comment.	<p>Estate Energy Recovery Facility (at 260,000 tonnes per annum). This equates to a total tonnage of 414,000 tonnes.</p> <p>These corrections have been addressed in Appendix C of this document and do not alter the Applicant's overall conclusions on the clear need for the capacity offered by the Proposed Development.</p> <p>In response to comments from Ms Perryman, Ms Brown noted that the WFAA (Volume 7.3) (Rev 3) [REP5-019 (tracked); REP5-020 (clean)], Appendix E in relation local authority collected waste carries out a high-level analysis as to which local authorities within the Study Area already separately collect food waste and plastics. The majority of authorities already do so. On this basis, the Applicant would not expect to see a big change in the composition of waste as that material is already taken out at source by the local authorities.</p> <p>Mr Turner noted that the Applicant has made it clear as to the composition of waste being sought for the Proposed Development.</p> <p>In response to the ExA asking of the effect of any potential required increase to the amount of waste needed by the Proposed Development, Ms Brodrick noted that the draft DCO (Volume 3.1) [REP5-005] sets out in Schedule 1 the maximum tonnage being applied for. If, in the future, the Applicant wanted to increase that figure, it would need to make an application to change the DCO, and the Secretary of State would need to consider relevant policies and other environmental topics. There would therefore be a formal consenting process before the Proposed Development could accept more waste.</p> <p>In response to Ms Perryman noting that regardless of what is contained in the WFAA, this facility must not have an adverse effect on other facilities, Ms Brown confirmed that when looking at local authority collected waste, the Applicant looked at how many local authorities were separately collecting food waste, as well as separately collecting plastic waste, and the majority already were.</p>



Item	ExA Question/ Context for Discussion	Applicant's Response
3h	Drawing from the Applicant's responses to ExQ2 [Ref tbc], the ExA is likely to probe the Applicant further on its answers in relation to Waste matters.	N/A
3i	<p>The ExA will invite further comments on waste matters first of all, from CC and FDC, in line with their Relevant Representation [RR-002], Written Summary of Oral Case for Cambs CC Open Floor Hearing 2 [REP1-068], Cambs CC and Fenland DC joint Local Impact Report [REP1-074], Cambs CC and Fenland DC response to ExQ1 [REP2-030], Cambs CC and Fenland DC comments on the Applicant's D1 Submissions [REP2-031], Cambs CC and Fenland DC Deadline 2 Written Representation [REP2-033], Additional Submission from Cambs CC and Fenland DC [AS-014], Cambs CC and Fenland DC Deadline 3 Submission – Post-hearing submissions including written submissions of oral cases [REP3-044], Cambs CC and Fenland DC post hearing submission [REP4-029], Cambs CC and Fenland DC Comments on any further information/submission received by Deadline 3 [REP4-031] and Cambs CC and Fenland DC response to ExQ2 [Ref tbc],.</p> <p>The ExA asks that CC and FDC concentrate on the main outstanding areas of disagreement.</p>	<p>In response to a question from the ExA as to whether the Applicant had considered other ways it could deal with reduced availability of waste, Mr Turner noted that the Applicant does not envisage running out of waste whilst complying with the requirements of the draft DCO (Volume 3.1) [REP5-005] and the Requirement to prioritise waste from Waste Areas 1 and 2. Should a shortage of waste occur, there is potential to reduce operating hours or operate on a partial load as previously mentioned.</p> <p>The Applicant notes that CCC agreed that there is currently sufficient waste for the Proposed Development, but that it is difficult to predict the future need case. In response to the ExA asking whether the CHP component would continue to be operational if there are reduced hours, Mr Carey advised that it would. The Applicant would reduce the electricity production to the national grid, in advance of any reduction in heat and power supply directly to customers.</p> <p>Mr Carey accepted an action for the consequences of a reduction in output (particularly in relation to electricity and CHP) to be further investigated. <i>[Post hearing note: This is included as Appendix A to this document (see Table 1.2)].</i></p>
3j	The ExA will also ask Wisbech Town Council to comment, particularly in line with the information submitted in the Deadline 3 Submission from Wisbech Town Council [REP3-052], the Wisbech Town Council post-hearing submissions [REP4-032] and Wisbech Town Council responses to ExQ2 [Ref tbc] in relation to the information and conclusions of the WFAA.	N/A



Item	ExA Question/ Context for Discussion	Applicant's Response
3k	<p>The ExA will then ask for comments from WisWin and UKWin, in line with Relevant Representation from UKWIN [RR-055], Deadline 1 submission from WisWin [REP1-095], Deadline 1 submission from UKWin [REP1-096], Deadline 2 Submission UKWin [REP2-066], Deadline 3 Submission from UKWin [REP3-050] and UKWIN Comments on any further information/submissions [REP4-040] particularly in relation to waste matters.</p>	<p>In response comments from UKWIN as to the range of the Study Area, Ms Brown advised that draft NPS EN3 does not define what 'local' means. The Applicant's position is that if the Government had intended "local" to only refer to the local waste planning authority area then it would have explicitly said so. The WFAA (Volume 7.3) (Rev 3) [REP5-019 (tracked); REP5-020 (clean)] has interpreted 'local' in a way that is fully auditable and transparent, by way of the Study Area; the Study Area is what the Applicant considers to be the local area. Additionally, the Applicant's agreement to comply with the new Requirement to take a proportion of the waste from as close to the Proposed Development as possible reflects the Applicant's commitment to the proximity principle.</p> <p>In response to comments around the waste reduction and recycling targets, Ms Brown noted that the targets are national targets and therefore a national assessment has been carried out.</p> <p>Ms Brown further noted that the national assessment is based on the data set out in the environmental improvement plan which does exclude non-combustible waste such as mineral waste and rubble.</p> <p>In response comments as to the closure of existing facilities, Mr Carey advised that some facilities last longer than others. The lifespan is typically 40-45 years depending on how well you look after the facility in question and whether the technology remains suitable. Whilst the Applicant regularly speaks to other participants in the market it does have any information regarding their plans for closing their facilities as this would be commercially confidential.</p> <p>In response to comments on future capacity levels, Ms Brown confirmed the Applicant has not assumed that any plants over 40 years old would automatically close, but makes the point that in 40 years' time, we are going to have some aging infrastructure which equates to over 3 million tonnes of capacity. In relation to the Tolvik data and the two different types of capacity, Ms Brown noted that the difference between the permitted capacity and operational capacity is that operational capacity tends to be 88% of that ultimate headline figure that is available. Applying this to the likely capacity lost through</p>



Item	ExA Question/ Context for Discussion	Applicant's Response
		<p>aging facilities still equates to more capacity than is offered by the Proposed Development.</p> <p>In response to comments about the years between the targets, Ms Brown noted that the inclusion of the 2028 figure is the intervening year, and the Environmental Improvement Plan only has two targets: Target 2 (2028 target) and the overall 2042 target. These targets have been reflected in the report.</p> <p>In response to comments on impact of operating on reduced hours such as odours, vermin, flies, etc., Mr Carey noted that reduced hours is one option to deal with a significant waste shortfall, and partial load is another. The Applicant would at all times comply with the waste catchment area Requirement. The impacts of reduced hours / closure on odours would be the same as if there was a planned outage, which has been assessed in the Environmental Statement.</p>
3I	<p>The ExA will then give an opportunity for other IPs to comment on any issues raised under this point of the Agenda.</p>	<p>Miss Perryman requested clarification on the Applicant's meaning of source in relation to waste. The Applicant stated that it would respond in writing. <i>[Post Hearing Note: A written response has been provided as Action Point 3, see Table 1.2].</i></p>
<p>4 –Cumulative Effects</p> <p>The purpose of this item is to examine the cumulative effects of the Proposed Development.</p>		
4a	<p>The ExA gave CCC the opportunity to raise their points on cumulative effects.</p> <p>The ExA will ask the Applicant to present, in broad terms, its approach to cumulative effects detailed in Chapter 18 of the ES, Cumulative Effects [APP-045], focusing particularly on inter-related effects assessment, the inter-project effects assessment and the conclusions reached.</p>	<p>The Applicant notes that Mr Fraser-Urquhart read an extract on the consideration of cumulative impacts from the judgment in <i>R (on application of Leicestershire County Council) v Secretary of State for Communities and Local Government and UK Coal Mining</i> [2007] EWHC 1427 Admin.</p> <p>Mr Kenyon noted that the four criteria raised in the case cited are familiar and are considered in Chapter 18 of the Environmental Statement [APP-045], in particular the issue around whether one or more effect may be significant is detailed in Table 18.10.</p>



Item	ExA Question/ Context for Discussion	Applicant's Response
		<p>Beyond this, the assessments in paragraphs 18.7.3 to 18.7.7 of Chapter 18 [APP-045] are taken forward with conclusions drawn on whether the effects would be significant.</p> <p>The Applicant's approach to the assessment of cumulative effects was informed by PINS Advice Note 17, which provides a methodology for the cumulative effects assessment. The scope of the assessment was presented within the PEIR issued at statutory consultation to obtain agreement with the host authorities and consultees on the approach being taken to assess the cumulative effects. Chapter 18 [APP-045] confirmed the methodology to be used which was to consider both inter-related and inter-project effects. With regard to inter-project effects, the Applicant introduced an initial long and short-list of projects for consideration.</p> <p>Comments on the PEIR were received from the host authorities, which included CCC concurring with the proposed approach to the assessment and with others commenting on the need to consider cumulative historic and landscape effects and greenhouse gas emissions. They also recognised that the long and short lists would be updated as part of preparing the Environmental Statement.</p> <p>The Applicant signposted where comments received at statutory consultation had been addressed within Table 18.2 to ES Chapter 18 [APP-045].</p> <p>In view of the Applicant's commitment to re-present and agree the long and short list of projects to be considered, a list updated from the PEIR was issued to each host authority on 14 February 2022. Additional projects were suggested by BCKLWN and CCC and these were incorporated into the long list and screened into the short list.</p> <p><u>Inter-related effects</u></p> <p>The Applicant's approach, consistent with PINS Advice Note 17, is to identify common receptors from the individual environmental assessments and to then identify the impact source pathways that could affect these common receptors. The individual environmental effects are then identified and from these the inter-related effects are assessed. Traffic and Transport, Climate, Health and MADs were excluded from the assessment as the individual aspect assessments are inherently cumulative.</p>



Item	ExA Question/ Context for Discussion	Applicant's Response
		<p>Common receptors are presented within Table 18.10 together with the significance of identified effects and these include but are not limited to No. 9 and 10 New Bridge Lane, together with public rights of way and national routes. Mr Kenyon explained that some topics are inherently cumulative and are therefore not included in Table 18.10, for example climate, traffic & transport, health and major accidents & disasters. For all common receptors the conclusions reached are that cumulative effects would not be significant.</p> <p><u>Inter-project effects</u></p> <p>The approach to the inter-project assessment is to firstly identify a long list of projects. These projects were selected based on their scale and proximity to the Proposed Development, and include local plan allocations within the study area and consider the maximum extents that effects can occur. Relevant proximity, and the extent to which a project may contribute towards a cumulative effect with the Proposed Development will differ for individual environmental topics. For example, for another project to have a potentially significant cumulative noise effect it would need to be relatively close to the Proposed Development, whilst a cumulative visual effect for example could extend to 17km.</p> <p>From the long list, a short list is prepared and it is these projects which are then assessed in combination with the Proposed Development. Two submitted development proposals and eight plan-land proposals were short-listed for detailed assessment. In all cases, whilst the projects/proposals themselves might give rise to significant effects individually, the likely cumulative effects with the Proposed Development were found to be not significant.</p> <p>ES Chapter 18 Figure 18.1 [APP-067] identifies the long list projects and Figure 18.2 [APP-067] the short list.</p> <p>In response to a question from the ExA in relation to the inter-related effects methodology [APP-045] and why the list deems chapter 6, 14, 16 and 17 to be out of scope, Mr Kenyon explained that these chapters are cumulative in themselves. For</p>



Item	ExA Question/ Context for Discussion	Applicant's Response
		<p>example, the modelling that is undertaken to prepare the transport assessment is used by other environmental chapters, such as noise and air quality. Therefore, the cumulative assessment is inherent. There is a danger of doubling up if they are included in a separate cumulative assessment as well. The purpose of the cumulative chapters is to pick up the other topics that are not inherently cumulative. Chapter 18.8 [APP-045] identifies those interrelationships which are then addressed in that chapter.</p> <p>The ExA queried whether if the nature of the specific chapters is picked up by other chapters and, to avoid duplication, they are not included in the cumulative impact assessment, this means the topics that are out of scope in Table 18.8 will not, unless specifically mentioned, be counted as part of the cumulative effects. Mr Kenyon noted the table is identifying where the potentially significant effects could lie and within that, the impacts on the topics are inherent in those individual chapters.</p> <p>The ExA queried, in relation to socio-economic tourism and land use, if it is the Applicant's view that traffic and transport would not have a cumulative impact on socio-economics. The Applicant noted that Chapter 15 [APP-042] provides an explanation of this and cross references back to the traffic and transport chapter.</p> <p>The ExA asked the Applicant could talk through table 18.10. Mr Kenyon noted that the table is split into construction and operational effects and identifies receptors that are affected by more than one individual environmental effect (i.e., common receptors) and records what the other chapters have concluded against those various receptors. The table notes whether the effects are significant or not significant. The table picks up on the concepts raised in the case law cited by Mr Fraser-Urquhart and helps to identify what should be taken forward in the remaining assessment to conclude if they are cumulatively significant. It allows the Applicant to identify receptors where effects are not significant individually but may be combined to become significant.</p> <p>The ExA asked in relation to Table 18.10 how a significant plus a non-significant can equal a non-significant conclusion. Mr Kenyon noted this is matter of professional judgement and that there is no specific methodology or published guidance – it is a case of speaking to the experts around the topics and coming to a combined position. It is also a case of understanding the meaning of “being close to objectionable” (the</p>



Item	ExA Question/ Context for Discussion	Applicant's Response
		<p>phrase used in the aforementioned case law) – for example, 10 New Bridge Lane has significant LVIA effects and non-significant noise and air quality effects, however the air quality effects are negligible, which is not “close to objectionable”. With regard to noise, the mitigation measures reduce the noise effects considerably below the threshold that would be determined to be significant, which pushes it to considerably below the “objectionable” level. When brought together and looking at the context of the receptor (i.e., what is it presently experiencing) it does not necessarily mean that one significant effect equates to significant cumulative effects, otherwise this would be double counting. Therefore, another level of assessment is required in the context of all other effects when determining the final level of cumulative significance.</p> <p>The ExA asked if the Applicant had stated the thresholds and further reasoning in relation to professional judgement when assessing the significance. Mr Kenyon noted there is no clear methodology when assessing cumulative effects, therefore there is no threshold that can be explained – it is based on experience, understanding of the situation and discussions with other professionals.</p> <p>The ExA asked the Applicant to point out in the Applicant's documents where a narrative is provided which points out what criteria was utilised in determining the overall cumulative impact on the specific receptor considering that significant effects have already been identified. Mr Kenyon noted it was paragraph 18.7.3-18.7.7. The ExA noted that it is not clear on how the Applicant arrived at that conclusion and requested this be provided in a written submission.</p> <p>Mr Furber noted that in relation to the visual and noise impact at 10 New Bridge Lane, the common approach in NSIPs is that this is encapsulated in a residential amenity assessment that the Applicant has carried out in terms of visual aspects and also the noise assessment in relation to amenities (i.e., living conditions). This is a common scenario where there is more than one environmental impact on one receptor. The purpose of doing the cumulative assessment is to identify if any additional mitigation measures are warranted in order to make those cumulative effects acceptable. As the Applicant has carefully considered the noise and visual effects in conjunction, which resulted in the acoustic fence, this leads to the overall conclusion that there would not be any adverse effects on the Receptor that equate to significant cumulative effects.</p>



Item	ExA Question/ Context for Discussion	Applicant's Response
		<p>The Applicant agreed to provide further information to the ExA to allow the ExA to assess what was taken into consideration as part of the 'professional judgement' referred to by Mr Kenyon, particularly on the receptors that have one significant effect plus another effect which is not significant. This was agreed to be provided as part of the Deadline 6 summary. <i>[Post hearing Note: the Applicant has prepared a Technical Note which is appended to this document as Appendix B].</i></p>
4b	<p>The ExA will ask specific questions in relation to the assessment of cumulative effects on 9 and 10 NBL Lane and also the assessment of cumulative effects onto businesses located in the proximity of the Proposed Development.</p>	<p>The ExA requested clarification of future plans and how it will be guaranteed that the property will not be used for residential purposes during the lifetime of the Proposed Development, so that they don't have to be considered as part of the assessment. Ms Brodrick explained that 9 New Bridge Lane will not be put back in as a residential property throughout the lifetime of the Proposed Development. This is secured through Requirement 19(1) of Schedule 2 of the DCO which requires its residential use to cease prior to the commencement of construction and Requirement 19(2) which provides that it cannot be used for residential purposes until the Proposed Development is decommissioned. It is a criminal offence not to comply with these requirements and therefore the Applicant is confident that 9 New Bridge Lane can be removed as a receptor.</p> <p>The ExA asked what measures the Applicant has considered to address significant effects at 9 and 10 New Bridge Lane and why, after consideration of all additional measures, the impact remains significant in relation to landscape and visual effects. Mr Kenyon noted that there are significant landscape and visual effects on 9 and 10 New Bridge Lane, but the need to address the landscape effects is then addressed in the relevant landscape and visual chapter. Chapter 18 of the ES [APP-045] goes beyond this to discuss the additional cumulative effects.</p>
4c	<p>Drawing from the Applicant's responses to ExQ2 [Ref tbc] the ExA is likely to probe the Applicant further on its answers in relation to cumulative effects.</p>	<p>The ExA asked the Applicant to share any further information in relation to the short and long list. Mr Kenyon noted the Applicant responded to a number of the additional projects provided by the host authorities at ExQ1 [REP3-041]. The Applicant screened these additional projects to understand the zones of influence between those projects and the Proposed Development. The Applicant then provided an assessment of the</p>



Item	ExA Question/ Context for Discussion	Applicant's Response
		likelihood of cumulative effects. The Statement of Common Ground between the Applicant and the host authorities [REP5-023] covers this and there is agreement with the host authorities with regard to methodology, the approach, the list and the conclusions that are reached in that cumulative assessment.
4d	The ExA will then ask the LHAs for confirmation of agreement with the short and long list presented, in line with comments made in the Cambs CC and Fenland DC response to ExQ1 [REP2-030] and BCKLWN response to ExQ1 [REP2-027].	No further comments were made.
4e	The ExA will then ask the Applicant to particularly provide an overview of the cumulative effects, particularly those in relation to noise and vibration and air quality.	No further comments were made.
4f	The ExA will then give the Local Host Authorities (LHAs) and Interested Parties (IPs) the opportunity to comment, highlighting particular areas of disagreement between the parties. The ExA will particularly be looking for comments from BCKLWN in line with their Relevant Representation [RR-001] and BCKLWN Local Impact Report [REP1-064] which might not have been adequately addressed yet by the Applicant.	No further comments were made.
4g	The ExA will also ask for comments from CCC and FDC in line with concerns identified in the Cambs CC and Fenland DC joint Local Impact Report [REP1-074] and Cambs CC and Fenland DC response to ExQ2 [Ref tbc] which might not have been adequately addressed yet by the Applicant.	No further comments were made.
4h	The ExA will then invite IPs to comment on any issues covered under this agenda point.	No further comments were made.
5. Review of issues and actions arising		



Item	ExA Question/ Context for Discussion	Applicant's Response
6. Any other business		
7. Closure of Hearing		Mrs Brodrick asked if the reserve date for Friday ISH is no longer required. ExA noted that it is unlikely that this slot will be needed.



Table 1.2 ISH 7 Action Points: Applicant's response

Ref	Party	Action Point	Deadline	Applicant's Response
1	Applicant	Applicant limits itself to certain waste types for its local analysis in recognition that some of the household and commercial waste material will not represent suitable fuel for the current proposal. Can the Applicant confirm if it has applied this approach to the National analysis and, if not, justify why?	6	<p>The WFAA draws upon a number of sources to establish baseline levels of residual waste. This includes the UK Residual Waste: 2030 Market Review, produced by Tolvik Consulting Ltd on behalf of the Environmental Services Association (November 2017), which concluded that in 2016, there were approximately 27.1 million tonnes of residual waste (+/- 2 million tonnes), of which 12.2 million tonnes were going to landfill. It can be confirmed that this figure for residual waste is based on the following definition of residual waste:</p> <p><i>“Household Waste and that from other sources which is similar in nature and composition to Household Waste.”</i></p> <p>It is also noted that this definition of residual waste excludes a wide range of non-recyclable wastes which are not suitable for treatment alongside Household Waste. These include but are not limited to sludges, various low calorific value wastes, automotive shredder residues, hazardous wastes etc which are either subject to separate treatment and/or landfilled.</p> <p>By way of an update to the 2017 data, the WFAA goes on to reference the UK Energy from Waste (EfW) Statistics – 2021', Tolvik Consultancy Ltd (May 2022) as a means of calculating current residual waste levels across England. This report's definition of Residual Waste is as follows: “Solid, non-hazardous, combustible waste which remains after recycling either treated (in the form of RDF or SRF) or untreated (as “black bag” waste)” – see page 20 of the 2022 Tolvik report.</p> <p>With these points in mind, the Applicant can confirm that the national assessment has only considered residual waste that would be suitable for treatment at the Proposed Development.</p>
2	Applicant	Applicant to produce a technical note focusing on the effects that a reduction in the predicted calorific content of waste and/or overall available fuel can	6	Please see Appendix A of this document.



Ref	Party	Action Point	Deadline	Applicant's Response
		have, particularly in relation to the operability of the CHP and electricity components of the Proposed Development.		
3	Applicant	Applicant to clarify, at the request of Ms Perryman, the sources used for the waste data information included in the last version of the WFAA.	6	The sources of the waste data used in the latest (Revision 3) of the Waste Fuel Availability Assessment (WFAA) are set out in detail in Table 3.2 of the WFAA. In addition to this, the Applicant has prepared a note detailing a step-by-step process which was followed when analysing data in the Waste Data Interrogator to arrive at the figures set out in Table 4.2 of the WFAA – see WDI-Guide.pdf (presented in Appendix D of this document).
6	Applicant	To submit additional information on how it has assessed the cumulative effects of the proposal on 9 and 10 New Bridge Lane and PRoW identified with one significant effect and, at least 1 additional non-significant effect.	6	Please see Appendix B of this document.



Appendix A Technical Note: Reduction in Energy Inputs

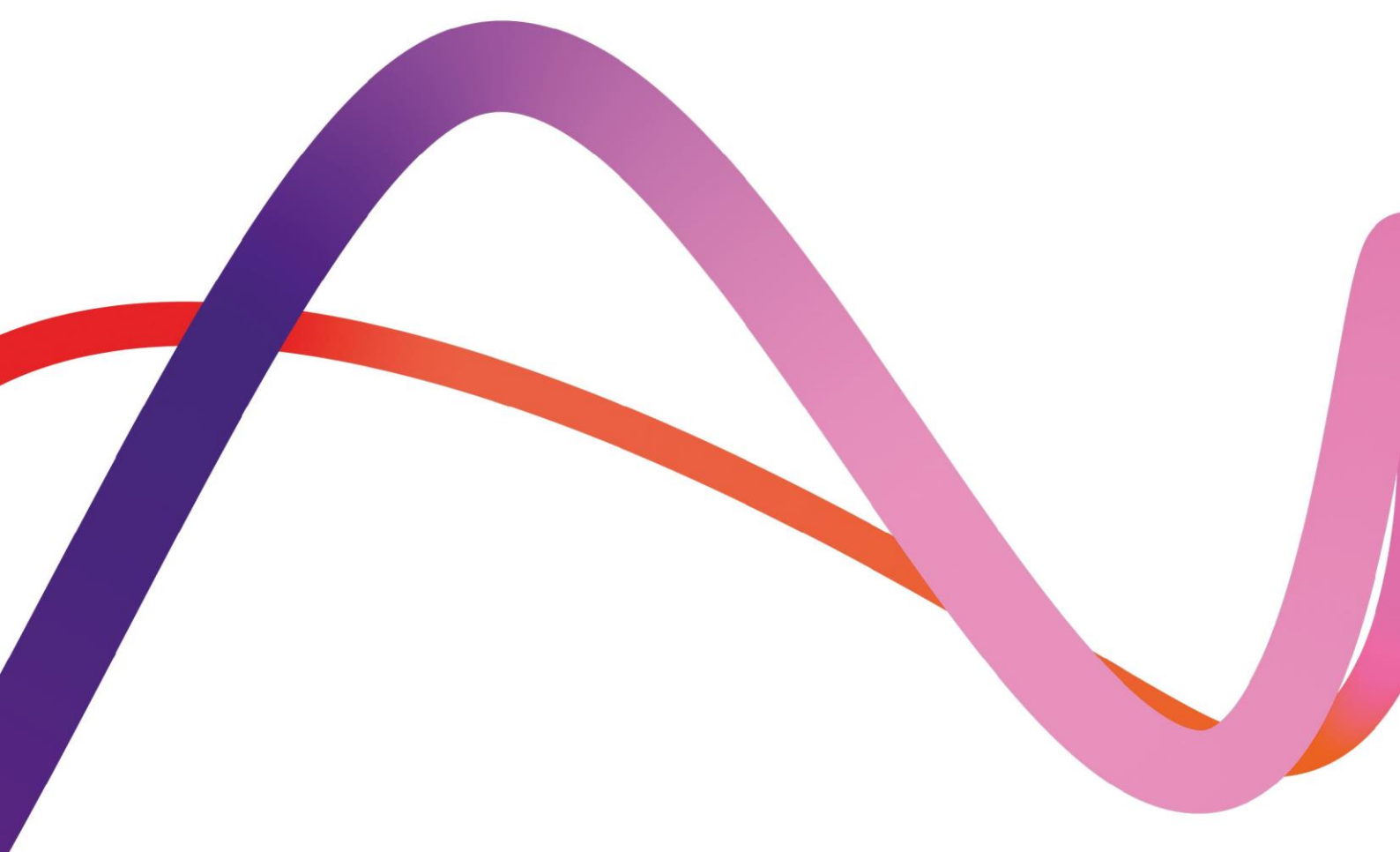
Medworth Energy from Waste Combined Heat and Power Facility

PINS ref. EN010110

Document Reference: Volume 15.3 Appendix A

Deadline 6

July 2023



Volume 15.3 Appendix A. Technical Note

Reduction in Energy Outputs

**We inspire
with energy.**



Contents

1.	Background	2
1.1	Introduction	2
1.2	Purpose of this Technical Note	2
1.3	Structure of this document	2
2.	Position at ISH 7	3
2.1	The Applicant's Methods	3
2.2	The Examining Authority's Further Questions	3
3.	Proposed Development	4
3.1	Method 1	4
3.2	Method 2	4
3.3	Method 3	4
3.4	ExA Question 1	5
3.5	ExA Question 2	5
3.6	Comparison of Methods	5
4.	Conclusion	7
Table 3.1: Summary of Methods		6



1. Background

1.1 Introduction

1.1.1 During Issue Specific Hearing 7 the Applicant was asked how they would deal with a reduction in energy input at the Proposed Development. A brief summary was provided, before the Examining Authority (ExA) asked further questions regarding the Applicant's approach.

1.1.2 It is still the Applicant's view that there is sufficient waste within the catchment area and therefore, it is not anticipated that the methods detailed in this Technical Note will be employed, see the **Waste Fuel Availability Assessment [REP-020]**. However, the Applicant has now considered reductions of energy input of 5% and 10%.

1.2 Purpose of this Technical Note

1.2.1 This Technical Note presents information to provide clarity on the Applicant's approach to dealing with a reduction in energy output at the Proposed Development.

1.3 Structure of this document

- Section 2.0 – Position at ISH 7
- Section 3.1 – Method 1
- Section 3.2 – Method 2
- Section 3.3 – Method 3
- Section 3.4 – ExA Question 1
- Section 3.5 – ExA Question 2
- Section 3.6 – Comparison of Methods
- Section 4.0 – Conclusion



2. Position at ISH 7

2.1 The Applicant's Methods

2.1.1 During ISH 7 the Applicant agreed to explain how the Proposed Development would be operated in the event of a reduction in energy arising from a reduction in waste inputs. Such reductions could be caused by:

- Short term (temporary) reductions in waste tonnages;
- General (long term) reduction in waste tonnages; and
- Extremely low calorific value of waste without a reduction in tonnages.

2.1.2 The Applicant has considered the following methods with which a hypothetical reduction in energy inputs would be dealt with at the Proposed Development:

- Method 1 – Reduction of operating hours; or
- Method 2 – Reduction of boiler load; or
- Method 3 – A combination of Method 1 and 2 above.

2.2 The Examining Authority's Further Questions

2.2.1 After the Applicant had explained their proposed methods given above, the ExA asked the following additional questions:

1. How would the Proposed Development deal with odours from the waste bunker in the event of method 1?
2. Would the Proposed Development still supply a heat customer with the same heat demand in the event of these methods?



3. Proposed Development

3.1 Method 1

- 3.1.1 Method 1 would be a reduction of operating hours, which are 7,884 hours for the nominal operating scenario and 8,500 hours for the maximal operating scenario, as described in **Section 3.5.2 ES Chapter 3: Description of the Proposed Development (Volume 6.2) [APP-030]**.
- 3.1.2 A reduction in waste throughput of 5% would result in approximately 394 less operational hours under the nominal scenario and 425 less operating hours under the maximal operating scenario. A reduction in waste throughput of 10% would result in approximately 788 less operational hours under the nominal scenario and 850 less operating hours under the maximal operating scenario.
- 3.1.3 Operating hours would be reduced through additional short maintenance outages in which minor ancillary maintenance and emergent works would be conducted. The EfW CHP Facility would have two boiler lines, providing the flexibility to stagger these outages so that a single boiler line continues to run, whilst the other is shut down. With a 5% reduction in waste throughput these outages would be taken as a single additional 197 hour or 213 hour outage per boiler line. With a 10% reduction in waste throughput these outages would be taken as a two additional 197 hour or 213 hour outages per boiler line.

3.2 Method 2

- 3.2.1 Method 2 would be a reduction of boiler load, which is 125 tonnes/h and 100.5MWth (per boiler) for the nominal operating scenario and 125 tonnes/h and 100.2MWth (per boiler) for the maximal operating scenario.
- 3.2.2 A reduction in waste throughput of 5% would result in a 5% reduction of boiler load, equating to 95.5MWth under the nominal scenario and 95.2MWth under the maximal operating scenario. A reduction in waste throughput of 10% would result in a 10% reduction of boiler load, equating to 90.5MWth under the nominal scenario and 90.2MWth under the maximal operating scenario.
- 3.2.3 Boiler load would be reduced in 1% increments between 99% and 90%, rather than to 95% or 90%. Actual load points would vary depending on the actual waste supply and operational situation.

3.3 Method 3

- 3.3.1 Method 3 would be a combination of reduction of operating hours and reduction of boiler load. Actual combinations employed would vary depending on the actual waste supply and operational situation.



3.4 ExA Question 1

- 3.4.1 In the event of method 1, only one boiler would be shut down. The second boiler line would remain in operation and continue to draw combustion air from the waste bunker and tipping hall.
- 3.4.2 If the second boiler line then suffered an unexpected outage air from the waste bunker and tipping hall would pass through the dust and activated carbon filters of the shutdown exhaust system and/or a permanently installed odour neutralisation system would be deployed to neutralise odours as outlined in **Section 3.4.8 ES Chapter 3: Description of the Proposed Development (Volume 6.2) [APP-030]**.

3.5 ExA Question 2

- 3.5.1 In the event of any of the three methods, the Applicant would still supply steam to its heat customers. The EfW CHP Facility would have two boiler lines and a single boiler line would comfortably produce and supply the maximum proposed heat export, even with a reduction of boiler load.
- 3.5.2 During normal operation any heat export would result in a reduction in gross power generation. Any reduction of operating hours or boiler load would result in a further reduction in gross power generation.

3.6 Comparison of Methods

- 3.6.1 Under the nominal operating scenario, employing method 1 would reduce gross electrical efficiency by 4% and method 2 would have no effect. Under the maximal operating scenario, employing method 1 would reduce gross electrical efficiency by 4% and method 2 would also reduce it by 1%.
- 3.6.2 It should be noted that a reduction in efficiency would only apply whilst employing these methods and, since method 1 would only be applied for up to 10% of the annual operating hours, the overall loss of efficiency would be much lower. For the nominal operating scenario this would be 0.2% and the maximal operating scenario 0.4%. If method 2 was applied for the entire annual operating hours, the overall loss of efficiency would be 1% under the nominal and maximal operating scenarios. This is summarised in **Table 3.1** below.

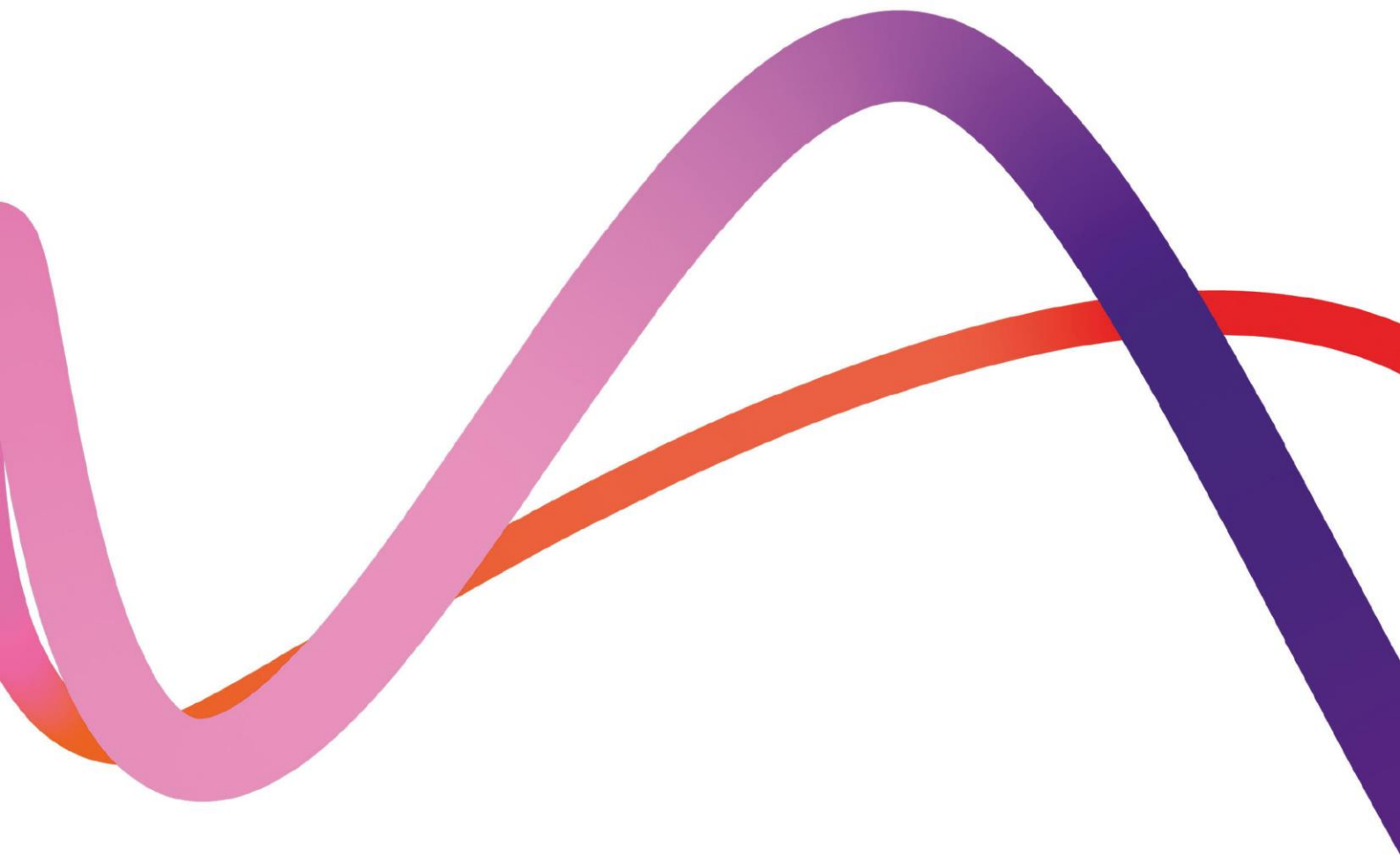

Table 3.1: Summary of Methods

	NCV 10.9 MJ/kg			
	Nominal	1 boiler	95% load	90% load
Thermal input (MWth)	201	100.5	191	180.9
Gross power output (MW)	60	25.9	56.7	53.4
Gross electrical efficiency	30%	26%	30%	30%
Annual loss of efficiency	0%	0.2%	0%	0%
	NCV 9.8 MJ/kg			
Thermal input (MWth)	200.4	100.2	190.3	180.3
Gross power output (MW)	59.4	25.6	56.1	52.9
Gross electrical efficiency	30%	26%	29%	29%
Annual loss of efficiency	0%	0.4%	1%	1%



4. Conclusion

- 4.1.1 Should the situation arise where there is a reduction in energy input at the EfW CHP Facility, there are three methods that would be employed; a reduction of operating hours, a reduction of boiler load or a combination of both. If these methods were employed, the Applicant is confident that the risk of odours from the waste bunker would not increase, and that the maximum proposed heat supply would remain available to its customers. A reduction in energy input at the Proposed Development could be dealt with, and with minimal impact on gross electrical efficiency.
- 4.1.2 The Applicant's view that there is sufficient waste within the catchment area and therefore, it is not anticipated that the methods detailed in this Technical Note will be employed.



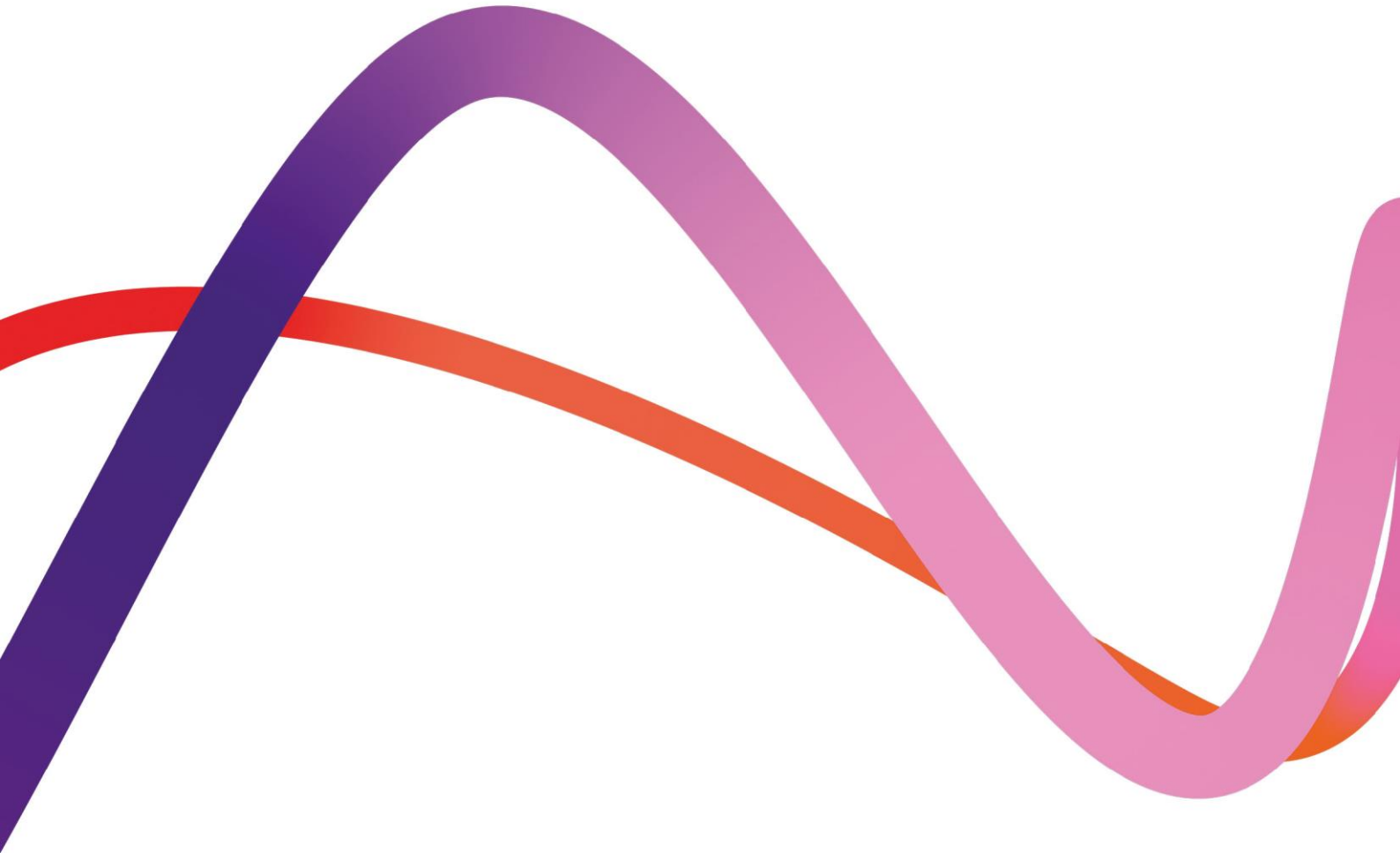


Appendix B Technical Note: ISH7 Action Point 4 Cumulative Effects

Medworth Energy from Waste Combined Heat and Power Facility



PINS ref. EN010110
Document Reference: Vol 15.3 Appendix B
Revision 1.0
July 2023



Volume 15.3 Appendix B. ISH7 Action Point 4. Technical Note Cumulative Assessment

**We inspire
with energy.**



Executive Summary

This document has been prepared in response to the ExA Action Point 4 requesting further clarification and explanation concerning the Applicant's conclusion that cumulative effects upon the occupiers of 9 and 10 New Bridge Lane and users of certain Public Rights of Way (PRoWs) would not be significant.

Nos. 9 and 10 New Bridge Lane are identified as cumulative receptors within ES Chapter 18 Cumulative Effects [APP-045]. Individual environmental effects with the potential to be significant are noise and vibration, visual and air quality. Visual effects are assessed as being significant.

No. 9 New Bridge Lane has been purchased by the Applicant. Draft DCO Requirement 19 (Noise Management) confirms that the new site access and access improvements on New Bridge Lane (Work No. 4A) may not commence until the residential use of 9 New Bridge Lane has ceased and that such a use should not recommence until such time as the Proposed Development has been decommissioned. For this reason, the assessment of cumulative effects upon 9 New Bridge Lane is scoped out from the cumulative assessment.

The combination of the different, individual environmental effects arising from the Proposed Development upon 10 New Bridge Lane are not considered to result in an additional significant effect from a cumulative perspective. This is because the air quality effects are considered to be negligible whilst the noise and vibration effects would be substantially mitigated by the proposed acoustic fence. The remaining significant effect, being a visual effect, by itself would not give rise to an additional significant cumulative effect.

The potential for cumulative effects upon users of certain PRoWs concern those west of Begdale and The Still south of Leverington, users of sections of Halfpenny Lane, users of the Nene Way and users of the national cycle network route 63. Significant visual effects are identified. The other effects which are assessed within Chapter 15 Socio economic, Tourism, Recreation and Land Use [APP-042] are considered not significant. As a result, there would be no additional cumulative effects upon PRoWs that would be considered significant.

The Applicant's conclusion that there are no significant inter-related cumulative effects as a result of the Proposed Development is agreed as common ground with the relevant host authorities.



Contents

1.	Introduction	3
1.1	Background	3
1.2	PINs Advice Note 17: Cumulative effects assessment relevant to nationally significant infrastructure projects	3
1.3	The Applicant's assessment of inter-related cumulative effects on 9 and 10 New Bridge Lane	3
	9 New Bridge Lane	4
	10 New Bridge Lane	4
1.4	Public Rights of Way	6
1.5	Cumulative effects Common Ground	7



1. Introduction

1.1 Background

1.1.1 ES Chapter 18 Cumulative Effects [APP-045] assesses the inter-related and inter-project cumulative effects arising from the Proposed Development. At the request of the ExA, this technical note provides additional explanation to substantiate the Applicant's conclusion that the inter-related cumulative effects upon the occupiers of Nos. 9 and 10 New Bridge Lane and to users of certain PROWs would not be significant.

1.2 PINs Advice Note 17: Cumulative effects assessment relevant to nationally significant infrastructure projects

1.2.1 The cumulative effects assessment undertaken by the Applicant adopted a methodology consistent with PINs Advice Note 17. This advice note is primarily focussed on the methodology for the assessment of inter-project effects as opposed to inter-related effects which are the main focus of this note. However, the Applicant has had regard to Advice Note 17 in assessing inter-related effects.

1.2.2 Inter-related effects occur where a single receptor is affected by more than one source of effect arising from different aspects of a project. An example of an inter-related effect would be where a receptor is affected by dust, noise and visual effects during the construction of a project, with the combined impacts on the receptor resulting in a greater effect than each individual effect alone.

1.2.3 Relevant to the ExA2 Question CE.2.1 (Applicant's response to the ExA's Written Questions' Volume 14.2 [REP5-032]) and questions asked during ISH7 on the methodology used in ES Chapter 18 Cumulative Effects [APP-045], the Applicant refers to paragraph 3.4.4 of Advice Note 17 which relates to scoping out of assessments that may be inherently cumulative:

- Advice Note 17 Paragraph 3.4.4. *'Certain assessments, such as transport and associated operational assessments of vehicular emissions (including air and noise) may inherently be cumulative assessments. This is because they may incorporate modelled traffic data growth for future traffic flows. Where these assessments are comprehensive and include a worst case within the defined assessment parameters, no additional cumulative assessment of these aspects is required (separate consideration may be required of the accumulation or inter-relationship of these effects on an individual set of receptors e.g. as part of a socio-economic assessment)...'*

1.3 The Applicant's assessment of inter-related cumulative effects on 9 and 10 New Bridge Lane

1.3.1 ES Chapter 18 Cumulative Effects [APP-045] sets out the methodology for the assessment of inter-related effects at Section 18.5 including an overview of potential



inter-related effects at Table 18.8. In section 18.7 the individual environmental topic chapters of the Environmental Statement are identified for those Receptors where potential significant effects have been predicted in respect of at least two or more environmental topics. Table 18.10 lists those receptors which are common to more than one environmental topic and summarises whether the topics consider the residual effects to be significant or not significant (after taking into account any embedded and additional mitigation identified in each topic chapter). In the case of 9 and 10 New Bridge Lane, Noise and Air Quality effects are *not significant* and Visual (LVIA) effects are recorded as *significant*.

- 1.3.2 ES Chapter 18 paragraphs 18.7.3 to 18.7.4 provide the Applicant's explanation as to why the cumulative effects assessment concludes not significant for 9 and 10 New Bridge Lane. Additional clarification is provided below.

9 New Bridge Lane

- 1.3.3 The property is removed as a receptor from the cumulative assessment. This is because it has been purchased by the Applicant and the residential use has ceased. The Draft DCO submitted at Deadline 5 [REP5-005] confirms at Requirement 19 that the use for residential purposes must cease before the Access Improvement works to New Bridge Lane are commenced and that residential use cannot recommence until the Proposed Development has been decommissioned. As this property is no longer a receptor, no effects, significant or otherwise, apply to it.

10 New Bridge Lane

Noise

- 1.3.4 The assessment reported within ES Chapter 7 Noise and Vibration [APP-034] initially identifies a significant effect at 10 New Bridge Lane for weekday and weekend daytimes, with all other periods identified as a not significant effect (see ES paragraph 7.9.68) without additional mitigation. The assessment includes for the consideration of operational traffic noise (see ES paragraph 7.8.23) within the wider assessment of operational noise, whilst noise generated by construction traffic, which would consist of fewer vehicle movements than during operation, would be lower. The mitigation is secured via Requirement 19 of Schedule 2 to the Draft DCO in the form of a 3m tall acoustic fence to replace the existing timber garden fence of 10 New Bridge Lane (Work No.10 in Schedule 1 to the Draft DCO [REP5-005]).
- 1.3.5 Increases in ambient noise as a result of the Proposed Development are assessed as ranging from +1dB (weekend night-time) to +6dB (weekend daytime) but the mitigation provided by the acoustic fence achieves a reduction in noise at the property (see ES para 7.10.29) of 7dB during weekday daytimes (with a similar reduction anticipated during weekend daytimes).
- 1.3.6 The acoustic fence would therefore provide a substantial reduction in noise levels, which would begin at the start of the construction period and which would result in a maximum change of +2dB for weekday daytime over baseline conditions. Noise change of 2db is considered to be low. The noise assessment therefore concludes that, as a result of the mitigation provided by the acoustic fence, the effects upon



the occupiers of the property would be *not significant* for both the construction and operation phases.

- 1.3.7 Consistent with Advice Note 17, the noise assessment also uses modelled traffic data and is therefore inherently cumulative in nature.

Air Quality

- 1.3.8 With regard to emissions to air, the Air Quality assessment (ES Chapter 8 Air Quality [APP-035]) concludes that effects upon 10 New Bridge Lane would be negligible and *not significant*. The results for this location can be found for modelled Receptor R2 in Deadline 2 Submission - 6.4 Environmental Statement Appendix 8B: Air Quality Technical Report (Clean) - Revision: 3.0 [REP2-006]. Dispersion modelling was carried out to predict pollutant concentrations in 'without development' and 'with development' scenarios in the construction and operational phases. The results for construction (Table 8B.H1) show that nitrogen dioxide (NO₂), PM₁₀ and PM_{2.5} concentrations are expected to increase by 0.14µg/m³, 0.01µg/m³ and 0.01µg/m³ respectively. In view of the low pollutant concentrations in the area, and with reference to Institute of Air Quality Management (IAQM) guidance, these impacts are considered to be negligible.
- 1.3.9 Tables 8B.H2, 8B.H4 and 8B.H6 in REP2-006 show that annual mean NO₂, PM₁₀ and PM_{2.5} concentrations at Receptor R2 are predicted to increase by 0.31µg/m³, 0.02µg/m³ and 0.01µg/m³ respectively during the operational phase. Again, in view of the low pollutant concentrations in the area, these impacts are considered to be negligible.
- 1.3.10 Consistent with the noise and vibration assessment the Air Quality assessment also uses the modelled traffic data and is therefore inherently cumulative.

Visual

- 1.3.11 ES Chapter 9 Landscape and Visual [APP-036] considers the visual effects upon receptors which include residential properties within a defined study area. Receptors include 10 New Bridge Lane and the conclusion reached is that visual effects would be *significant*. However, whilst the effects are significant, the visual assessment recognises that this effect would be primarily experienced in views northwards, towards the EfW CHP Facility and not from within the rooms facing south or east, or from the south-facing garden. Furthermore, the retention of an existing area of trees directly opposite, on northern side of New Bridge Lane would provide an element of screening to the EfW CHP Facility. The residential visual amenity assessment (ES Chapter 9 Appendix 9K [APP-079]) recognises that 10 New Bridge Lane is in a location strongly characterised by the extension of the light industrial and commercial development on the southern edge of Wisbech Industrial Estate over recent decades.

Conclusion with regard to cumulative effects 10 New Bridge Lane

- 1.3.12 The assessment of whether significant cumulative effects would be experienced by occupiers of 10 New Bridge Lane requires professional judgement because there is not a specific threshold that can be applied to dictate whether none, some, or all



individually significant and non-significant effects can combine to become cumulatively significant.

- 1.3.13 Notwithstanding the above, the extent to which individual effects are significant or not significant can be indicative as to whether a significant cumulative effect is likely to occur. As above, inter-related effects require the combined impacts to result in a greater effect on a receptor than occurs as a result of the simple sum of the individual impacts. The combination of not significant effect(s) together with a single significant effect will not automatically create a potentially significant cumulative effect; it is necessary to consider the extent to which each component effect would sit either just below, or far below, the threshold of individual significance, and the extent to which each impact may combine with other effects to become more impactful.
- 1.3.14 In the case of 10 New Bridge Lane the noise and air quality assessments conclude that effects would sit far below the threshold of individual significance. Consequently, when these non-significant effects are combined with the single significant visual effect (taking into account the conclusions of the residential visual amenity assessment and existing locational context of the property), the cumulative assessment conclusion is that there would be no additional impact from the combination of these effects, and that the cumulative effect is *not significant*.
- 1.3.15 Inter-related cumulative effects involving noise at a not significant level and visual impact at a significant level are commonplace in the energy sector, often being experienced by individual receptors in relation to commercial scale onshore wind farm projects or onshore substations for offshore wind farm projects for example. In these scenarios, the scheme design and separation distances ensure that significant noise impacts are avoided, although some *not significant* increases above baseline levels would typically be perceived. The combination of a *not significant* noise and a *significant* visual impact is typically considered to be a *not significant* cumulative effect.

1.4 Public Rights of Way

- 1.4.1 ES Chapter 18 Cumulative Effects [APP-045] recognises that *significant* visual effects have been recorded upon users of PRowS located to the west of Begdale and to The Still south of Leverington, and to users of sections of Halfpenny Lane, the Nene Way and the national cycle network route 63 during construction and operation (The Still would experience significant visual effects during operation only).
- 1.4.2 Consistent with the guidance contained within PINs Advice Note 17 referenced in Section 1.2 above, the cumulative effects upon users of these PRowS with regard to effects upon usage are assessed within ES Chapter 15 Socio economics, Tourism, Recreation and Land use [APP-042] (Advice Note 17, paragraph 3.4.4 '*separate consideration may be required of the accumulation or inter-relationship of these effects on an individual set of receptors e.g. as part of a socio-economic assessment*').
- 1.4.3 ES Chapter 15 paragraphs 15.9.62 to 15.9.66 and 15.9.96 to 15.9.10 consider construction and operation effects respectively. With regard to the national cycle



network route and Halfpenny Lane, significant effects during construction arising from noise and air quality would be as a result of the construction of the Grid Connection.

- 1.4.4 ES Chapter 3 Description of the Proposed Development [APP-030] confirms that construction works would take place overnight, a time when use of the routes is likely to be low. Furthermore, the locational context, which requires users of these routes to cross the A47, suggests that noise and smell generated by the traffic would be the over-riding feature on the approach to Wisbech. Visual effects would only be experienced when walking either towards the Grid Connection construction activities, or when looking towards the EfW CHP Facility construction site. Given the existing character of these routes in this location the socio-economic assessment conclusion is that effects upon the amenity of users and consequently the usage of the routes would be *not significant* during construction.
- 1.4.5 The socio-economic assessment (ES Chapter 15) is inherently cumulative in that it considers noise, air and visual effects to arrive at a conclusion as to whether the use of the PRowS would be affected significantly. Visual effects alone, whilst considered significant within the Landscape and Visual Assessment, would be experienced for a short length, in locations closest to the EfW CHP Facility. They would impact upon only a small proportion of the routes and, when combined with the socio-economic conclusions referenced, cumulative effects would be *not significant*.
- 1.4.6 There are other PRowS with a potential for cumulative effects and these are recorded as being located to the west of Begdale and at The Still south of Leverington, together with the Nene Way. Effects to these receptors would be from the EfW CHP Facility only, with no contribution from the Grid Connection.
- 1.4.7 ES Chapter 15 considers the extent to which visual effects during construction and operation would dissuade users from these PRowS during construction and operation recognising that as the distance from the EfW CHP Facility increases, the noise and air quality effects will reduce. Whilst the Landscape and Visual assessment records significant visual effects, these are from views experienced by users travelling towards Wisbech and the EfW CHP Facility only, and experienced against the existing townscape, including, in some directions, the cold store. There would be no direct effects, no noise and air quality effects and the socio-economic assessment therefore concludes that during both the construction and operational phases, effects would be *not significant*.
- 1.4.8 On the basis that there would be no significant direct effects upon the ability of users to access the PRowS, nor any indirect effects sufficiently significant to dissuade users from accessing them, combined with the significant visual effects being on only limited lengths of the wider PRow network, cumulative effects are considered to be *not significant*.

1.5 Cumulative effects Common Ground

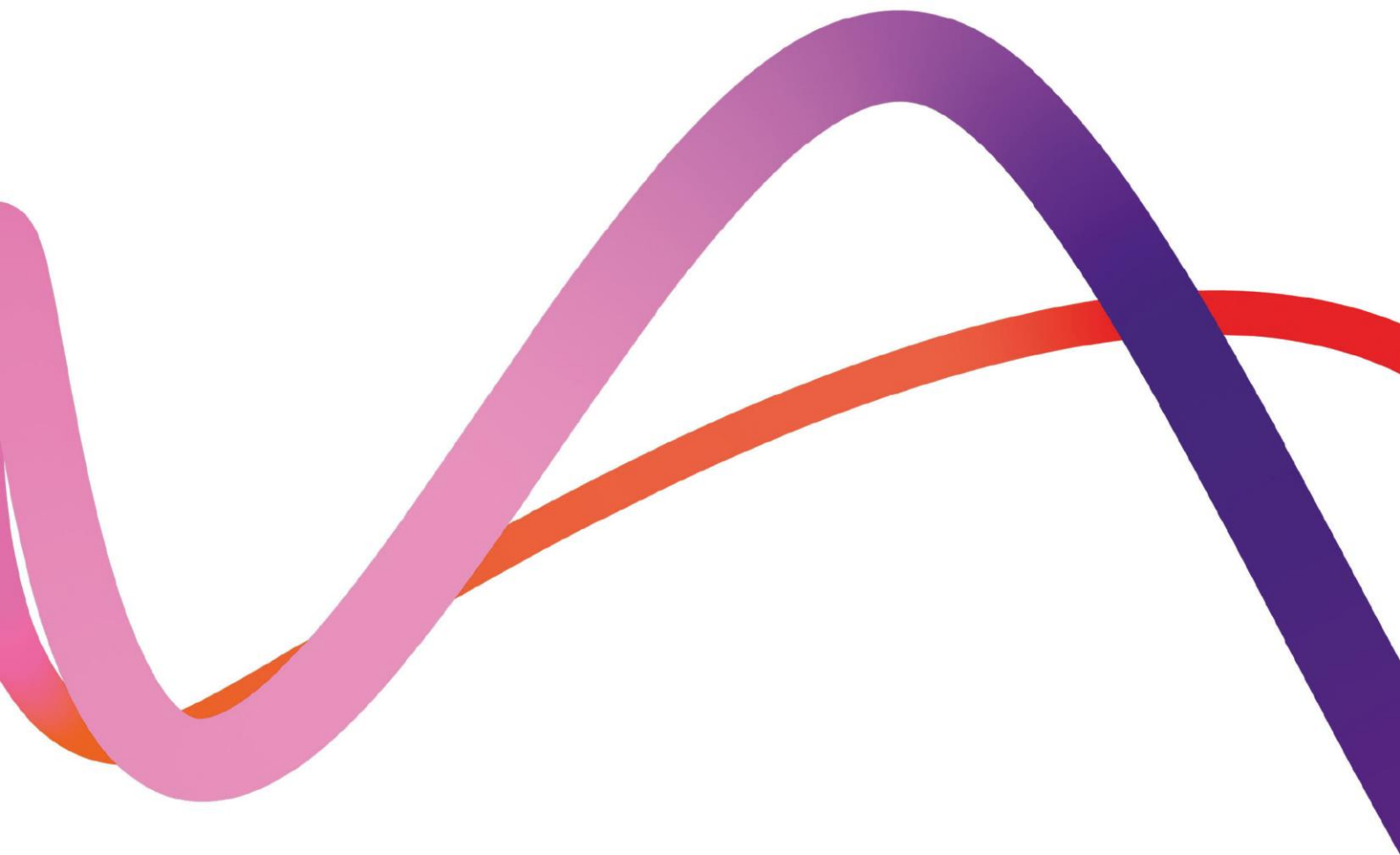
- 1.5.1 The significance assessment conclusions reported within Chapter 7 Noise and Vibration [APP-034] and Chapter 8 Air Quality [APP-035] are agreed with the relevant host authorities (see Statement of Common Ground between Medworth



CHP Limited and the Host Authorities (DRAFT) - Revision 2.1 [REP5-023]). As such all parties agree with the noise and air quality significance conclusions for 9 and 10 New Bridge Lane and PRowWs (see IDs 7.3.3 and 8.3.2).

1.5.2 The Statement of Common Ground [REP5-023] also records agreement between the parties that there would be no significant inter-related cumulative effects (ID 18.3.3). On this basis, the Applicant's assessment which is explained within this technical note is based on experienced professional judgement and considered to be appropriate.

1.5.3 Without prejudice to the Applicant's position set out in this technical note, and in the event that the Secretary of State is minded to conclude that there would be a significant inter-related cumulative effect on No 10 New Bridge Lane and/or users of certain PRowWs, the Applicant's position is that the need for, and benefits of, the Proposed Development outweighs any significant cumulative effects on these receptors.





Appendix C Briefing Note Waste Fuel Availability Assessment Refined Appendix C

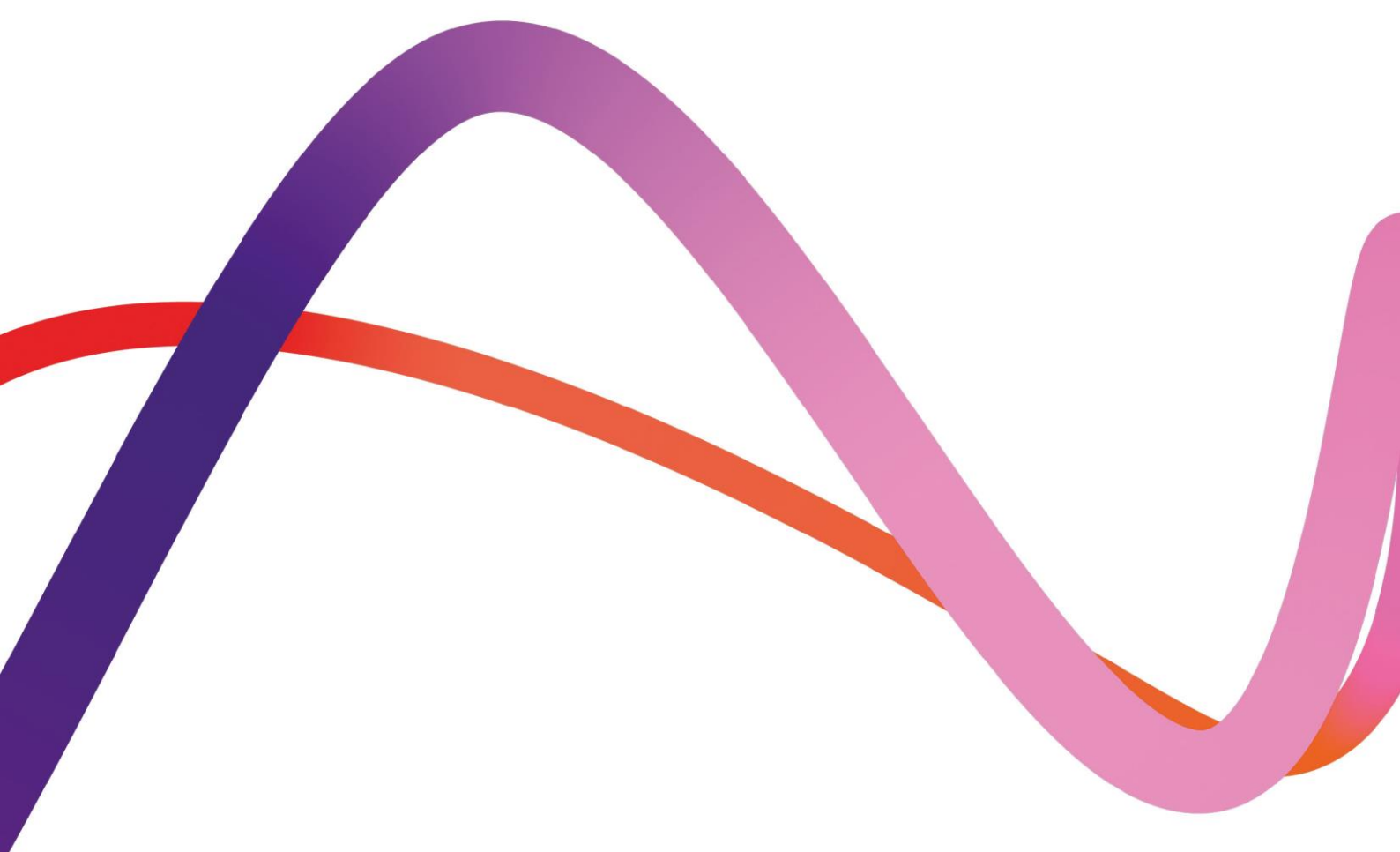
Medworth Energy from Waste Combined Heat and Power Facility

PINS ref. EN010110

Document Reference: Vol 15.3 Appendix C

July 2023

Deadline 6



Volume 15.3 Appendix C Briefing Note

Waste Fuel Availability Assessment Refined Appendix C

**We inspire
with energy.**

Contents

1.1	Introduction	2
1.2	Refined Capacity Data	2

Annex A

1.1 Introduction

1.1.1 At the Issue Specific Hearing (ISH) 7 on Waste Issues, held on 27 June 2023, the Examining Authority (ExA) asked a series of questions around the extent to which the Applicant was confident that there was a suitable amount of waste in the Study Area defined by the Waste Fuel Availability Assessment. These questions were asked in the context of Appendix C of the Waste Fuel Availability Assessment (WFAA), which seeks to set out the following **national** (England wide) waste capacity data:

- Consented and operational;
- Consented and under construction;
- Consented and not built; and
- In planning capacity.

1.1.2 The purpose of this briefing note is to present a refined version of the data set out in Appendix C of the WFAA, which seek to only relate to the Study Area of the WFAA.

1.2 Refined Capacity Data

1.2.1 Attached as **Annex A** to this briefing note is a refined version of Appendix C of the WFAA, which seeks to only show operational, under construction, consented and not build; and in planning capacity for the WFAA Study Area. This data has also been updated to reflect the Secretary of State's recent approval, on 6 July 2023, of a further 1 million tonnes of waste management capacity at the Boston Alternative Energy Facility.

1.2.2 Key points to note from this refined waste capacity data are as follows:

- The local assessment in the WFAA concludes that there are 2.4 million tonnes of in-scope residual waste currently sent to landfill in the Study Area (and 163,000 tonnes of RDF exported). This is in addition to the 1,171,000 tonnes of residual was that is presently managed at the Study Area's existing EfW facilities - as per the attached refined version of Appendix C (Study Area Only).
- The 945,000 tonnes of capacity being constructed (as per the attached refined version of Appendix C (Study Area Only)), will go some way to meeting the 2.4 million tonnes shortfall, but this will still leave a shortfall of 1.5 million tonnes.
- Of the consented and not built capacity of ~2 million tonnes, it is the Applicant's view that only ~565,000 tonnes of this will be realised/ relevant to the Study Area market – leaving a gap of ~935,000 tonnes – a gap that the Proposed Development would contribute to meeting. This is because:
 - ▶ The Applicant does not consider that the 595,000 tonnes of capacity offered by the Peterborough Renewable Energy Ltd will be realised. This is because:
 - Planning permission was granted in 2009 and has not been built yet; and

- The facility uses Advanced Combustion Technology – a technology that the UK funding market is now reluctant to fund.
- ▶ Of the 1 million tonnes per annum, of capacity recently permitted at the Boston Alternative Energy Facility, only a small amount of this capacity (~160,000 tonnes per annum) represents an alternative for the management of residual waste assessed in the Study Area as being available for the Proposed Development. This is due to:
 - The Boston facility requires RDF fuel to arrive at the facility via boat at a purpose-built dock; no waste or RDF may be transported to the facility by road;
 - The RDF fuel base this facility is looking to capture is UK based material, currently being exported to Europe; and
 - Only ~160,000 tonnes per annum of RDF is identified as coming from the Study Area.

1.2.3

To conclude therefore, taking account of existing, in construction and permitted but as yet unbuilt capacity in the Study Area, the Applicant is of the view that there remains a shortfall of residual waste management capacity in the Study Area of **at least 935,000 tonnes per annum.**

Annex A

Type of Capacity	Total EfW Capacity in WFAA Study Area ('000 tonnes)	Commentary
Consented and operational	1,171	
Consented and under construction	945	
TOTAL CAPACITY	2116	
<i>Other potential capacity:</i>		
Consented and Not Built	1009	595 of this relates to Peterborough Renewable Energy, which is highly unlikely to be constructed.
In Planning	1150	This capacity has the same 'status' as the Proposed Development and therefore is not considered could 'replace' the capacity offered by the Proposed Development.

Region	Name of Facility	Waste Planning Authority	Operator	Capacity ('000 tonnes per annum)	Commentary/ Notes	Operational Start Year
Consented and operational capacity in the WFAA local study area:						
East of England	SUEZ Suffolk - EfW Facility / Great Blakenham	Suffolk County Council	Suez	295	As reported in the UK EfW Statistics 2022 (May 2023) and the RTAB report (May 2021).	2014
	Rookery South ERF (Central Bedfordshire)	Central Bedfordshire Council	Covanta/GIG	545	As reported in the UK EfW Statistics 2022 (May 2023) and the RTAB report (May 2021). 2018 Tolvik report notes headline capacity as 585ktpa.	2022
	Peterborough EfW Facility	Peterborough City Council	Viridor	85	As reported in the UK EfW Statistics 2022 (May 2023) and the RTAB report (May 2021).	2015
Sub-total				925		
In-scope 'East Midlands' WPAs	Lincolnshire EfW Facility / North Hykeham	Lincolnshire County Council	FCC	190	As reported in the UK EfW Statistics 2022 (May 2023).	2014
	NewLincs ERF	Lincolnshire County Council	Tiru	56	As reported in the UK EfW Statistics 2022 (May 2023).	2003
Sub-total				246		
GRAND TOTAL FOR WFAA STUDY AREA				1,171		

Sources:

UK Energy from Waste Statistics - 2022 (May 2023), Tolvik Consulting Ltd

Residual Waste in London and the South East: Where is it going to go.....? - (October 2018), Tolvik Consulting Ltd

Landfill and Residual Treatment Capacity in the Wider South East of England , Report for the Regional Technical Advisory Body (RTAB) (May 2021), Sacks Consulting

Residual Waste EfW Wiki Waste - website accessed 05/04/22

Region	Name of Facility	Waste Planning Authority	Operator	Capacity ('000 tonnes per annum)	Commentary/ Notes
Consented and under construction capacity in tthe WFAA local study area:					
<i>East of England</i>	Rivenhall	Essex County Council	Indaver	595	As reported in the RTAB (May 2021) report. The planning portal shows that planning permission was successfully implemented prior to 2 March 2016. In February 2022 the Council voted to extend the permission for the site but not to allow for the incinerator to be built without the associated infrastructure which formed part of the original application.
Sub-total				595	
<i>In-scope 'East Midlands' WPAs</i>	Newhurst ERF	Leicestershire County Council	Biffa/Covanta/GIG	350	As reported in the UK Efw Statistics 2022 (May 2023).
Sub-total				350	
GRAND TOTAL FOR WFAA STUDY AREA				945	

Sources:

UK Energy from Waste Statistics - 2022 (May 2023), Tolvik Consulting Ltd

Residual Waste in London and the South East: Where is it going to go.....? - (October 2018), Tolvik Consulting Ltd

Landfill and Residual Treatment Capacity in the Wider South East of England , Report for the Regional Technical Advisory Body (RTAB) (May 2021), Sacks Consulting

Residual Waste Efw Wiki Waste - website accessed 05/04/22

--	--	--	--	--	--

Region	Name of Facility	Waste Planning Authority	Operator	Capacity ('000 tonnes per annum)	Commentary/ Notes
Consented and not built capacity in the WFAA local study area:					
<i>East of England</i>	Storeys Bar Road, Fengate, Peterborough	Peterborough City Council	Peterborough Renewable Energy Ltd	595	Principal planning consent is 08/01081/ELE issued by the Secretary of State in November 2009. The permission was subject to an subsequent amendment (ref. 18/01259/DISCHG), which was permitted on 10 May 2019. Three planning conditions associated with this permission were discharged in July 2019 (Ref: 19/00467/DISCHG). If this facility was to be built, there is a condition attached to the consent (condition 28) which states that a minimum of 80% of the feedstock must originate from (a) an area within a 32km radius of the site; or (b) an area within the administrative boundary of Peterborough; or (c) an area within the administrative boundary of Cambridgeshire.
Sub-total				595	
<i>In-scope 'East Midlands' WPAs</i>	Energy Recovery Centre, Willowbrook East Industrial Estate, Shelton Road, Corby	Northamptonshire County Council	Corby Ltd	260	Planning application submitted in January 2019 (reference: 19/00027/WASFUL) proposal announced in January 2019 for an EfW capable of receiving RDF derived from HIC waste streams. Full permission granted on 4 October 2019. In May 2020 Corby Ltd put in an application to discharge a number of the planning conditions (20/00025/WASDOC).
	Gretton Brook Road	Northamptonshire County Council		154	In April 2020 the applicant put in a planning application to vary the consent to allow a change of technology to bubbling fluid bed (BFB) combustion and to increase the total maximum throughput to 154,000 tonnes per annum and this was approved in August 2020 (20/00022/WASVOC and 20/00023/WASVOC).
	Boston Alternative Energy Facility (BAEF)	Lincolnshire County Council	Alternative Use Boston Projects Limited	1,000	National Infrastructure application accepted for examination in 2021. Approved by the Secretary of State on 6 July 2023. Water borne RDF only thus would only be ~100,000 tonnes of the Medworth market.
Sub-total				1414	
GRAND TOTAL FOR WFAA STUDY				2009	

Sources:

United Kingdom without Incineration Network (UKWIN), website - accessed 06/03/22

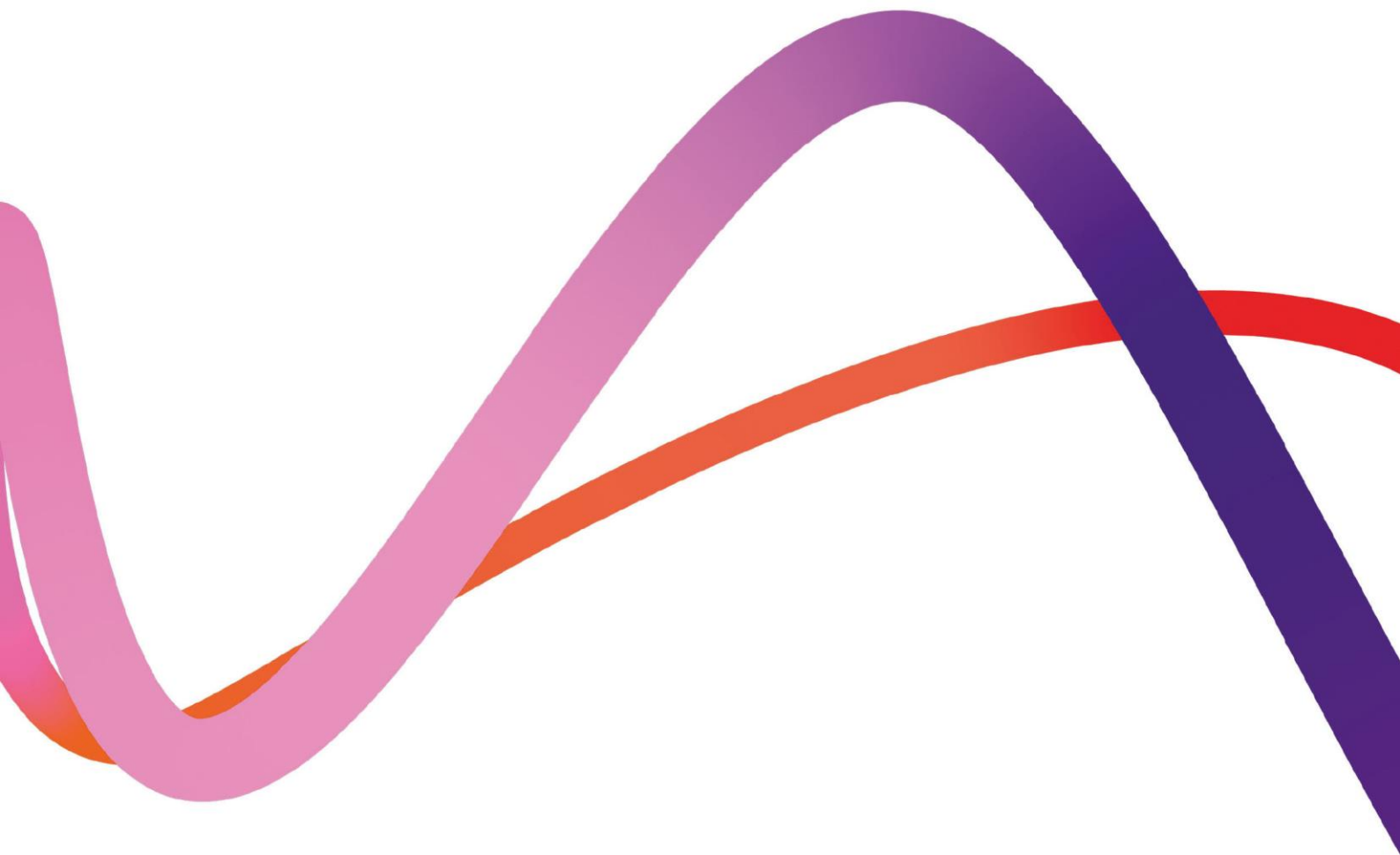
Residual Waste in London and the South East: Where is it going to go.....? - (October 2018), Tolvik Consulting Ltd

Residual Waste EfW Wiki Waste - website accessed 05/04/22

Region	Name of Facility	Waste Planning Authority	Operator	Capacity ('000 tonnes per annum)	Commentary/ Notes
In planning' capacity in the WFAA local study area:					
<i>East of England</i>	Archers Fields Energy Recovery Facility	Essex County Council	Clearaway Recycling Ltd	150	Planning application submitted in October 2020 (ESS/120/20/BAS). Application validated on 29 January 2021. Proposal is for gasification technology to manage RDF entirely from Clearaway Recycling Ltd operations. Portal states that the committee report is being drafted but no indication of when this application may go to committee.
Sub-total				150	
GRAND TOTAL FOR WFAA STUDY AREA				150	

Sources:





United Kingdom without Incineration Network (UKWIN), website - accessed 06/03/22
 Residual Waste in London and the South East: Where is it going to go.....? - (October 2018), Tolvik Consulting Ltd
 Residual Waste E/W Wiki Waste - website accessed 05/04/22





Appendix D WDI-Guide

Guide: Determining HIC arisings for defined LoW codes using the Waste Data Interrogator

1. Open the Waste Data Interrogator (WDI) Excel sheet for Wastes Received in 2021.
2. Use data sheet/tab titled 'Interrogator – Waste Received'.
3. Keep the 'Site Location' field unaltered.
4. Under 'Waste Origin' find the 'Origin WPA' table and select the area of interest. If interested in multiple Origin WPAs, first select one of the areas of interest, then click on the multi-select icon  (located at the top-right corner of the table) and then select the remaining fields of interest. **See example below for further guidance.**
5. Under 'Waste Types' find the 'Waste Code' table and select one waste code of interest and then use the multi-select function  as above to select the remaining fields. For this study, we looked at the following waste codes:
 - **19 12 10** combustible waste (refuse derived fuel)
 - **19 12 12** other wastes (including mixtures of materials) from mechanical treatment of wastes
 - **20 03 01** mixed municipal waste
 - **20 03 07** bulky waste
6. Under 'Facility Type' find the 'Site Category' table and first click on the multi-select icon  then click on the 'Mobile Plant' and 'On/In Land' categories (if they appear) to deselect them – these were excluded from the data.
7. The 'Total Waste (tonnes)' value will be indicated in the bottom right field.
8. If you need to clear your selections, click on the clear-filter icon: 

Example: HIC arisings with Essex (including Southend-on-Sea and Thurrock) as the Origin WPA

Step 1: Open the WDI for Wastes Received in 2021 and click on the 'Interrogator – Waste Received' tab (highlighted in red).

The screenshot displays the Microsoft Excel interface with the '2021 Waste Returns - Waste Received Interrogator' tool. The tool is embedded in a spreadsheet with the 'Interrogator - Waste Received' tab highlighted in red. The tool interface includes several filter sections:

- Site Location:** Facility RPA, Facility Sub Region, Facility WPA, Facility District.
- Waste Origin:** Origin Region, Origin WPA.
- Waste Types:** Basic W..., EWC Chapter, Waste C...
- Facility Type:** Site Category, Facility Type.

A 'Total Waste (tonnes)' section shows 236,702,048. The bottom navigation bar includes tabs for 'Information', 'Glossary', '2021 Waste Received', 'Interrogator - Waste Received', 'Active Sites', 'Configurable Reports', 'One Click Summaries', and 'Waste Data Links'. The Excel ribbon shows the 'Home' tab with various formatting and editing options.

Step 2: Scroll down the 'Origin WPA' list and select 'Essex'.

The screenshot displays the Microsoft Excel interface for the '2021 Waste Returns - Waste Received Interrogator'. The ribbon at the top shows the 'Home' tab with various formatting and editing options. The main content area is divided into several sections:

- Site Location:** Includes slicers for Facility RPA, Facility Sub Region, Facility WPA, Facility District, and Waste Origin. The 'Origin WPA' slicer is highlighted with a red box, and 'Essex' is selected.
- Waste Types:** Includes slicers for Basic W..., EWC Chapter, Waste C..., and Facility Type.
- Facility Type:** Includes a slicer for Facility Type.
- Total Waste (tonnes):** Displays the total waste as 7,809,931 tonnes, with buttons for 'View Data' and 'Clear all slicers'.

Instructions on the right side of the interface provide guidance on using the slicers:

- # Narrow down the data you wish to view by selecting the relevant option from the slicers. Hold Ctrl to select multiple items in a slicer.
- # Press 'View Data' to see the raw data behind your selections. The data will appear in a new worksheet. You may need to delete these additional worksheets if the file becomes too large.
- # Use the 'Clear all slicers' button to reset the slicers and pivot table to show all data.

The bottom of the screen shows the Windows taskbar with the search bar and system tray, indicating the time is 13:01 on 16/05/2023.

Step 3: Click on the multi-select function and then select 'Southend-on-Sea' and 'Thurrock'.

The screenshot displays the Microsoft Excel interface with the '2021 Waste Returns - Waste Received Interrogator' application. The application window title is 'Waste Data Interrogator - Wastes Received 2...'. The Excel ribbon is visible, showing the 'Home' tab with various options like Font, Alignment, Number, Styles, Cells, Editing, Analysis, and Sensitivity. The application interface is divided into several sections:

- Site Location:** Includes filters for Facility RPA, Facility Sub Region, Facility WPA, and Facility District.
- Waste Origin:** Includes filters for Origin Region and Origin WPA. A red box highlights the 'Multi-Select' button in the Origin WPA filter.
- Waste Types:** Includes filters for Basic W..., EWC Chapter, and Waste C....
- Facility Type:** Includes filters for Site Category and Facility Type.
- Total Waste (tonnes):** Shows a total of 7,809,931 tonnes, with buttons for 'View Data' and 'Clear all slicers'.

The bottom of the screen shows the Windows taskbar with the search bar and system tray, indicating the time is 13:02 on 16/06/2023.

Step 4: Under 'Waste Types' find the 'Waste Code' table and select one waste code of interest (e.g. 19 12 10). Then use the multi-select function to select the remaining waste codes: 19 12 12, 20 03 01, 20 03 07.

The screenshot displays the '2021 Waste Returns - Waste Received Interrogator' interface within an Excel spreadsheet. The interface is divided into several sections for filtering data:

- Site Location:** Includes filters for Facility RPA, Facility Sub Region, Facility WPA, and Facility District.
- Waste Origin:** Includes filters for Origin Region and Origin WPA.
- Waste Types:** This section is highlighted with a red box. It contains a 'Waste C...' table with the following waste codes: 20 02 01, 20 02 02, 20 02 03, 20 03 01, 20 03 02, 20 03 03, 20 03 04, 20 03 06, 20 03 07, and 20 03 99. The codes 20 03 01 and 20 03 07 are selected.
- Facility Type:** Includes filters for Site Category and Facility Type.
- Total Waste (tonnes):** Displays a total of 2,622,518 tonnes, with buttons for 'View Data' and 'Clear all slicers'.

Instructions on the right side of the interface provide guidance on using the slicers:

- # Narrow down the data you wish to view by selecting the relevant option from the slicers. Hold Ctrl to select multiple items in a slicer.
- # Press 'View Data' to see the raw data behind your selections. The data will appear in a new worksheet. You may need to delete these additional worksheets if the file becomes too large.
- # Use the 'Clear all slicers' button to reset the slicers and pivot table to show all data.

The Excel ribbon at the top shows the 'Home' tab with various formatting and editing options. The status bar at the bottom indicates the current cell is AG49 and the system time is 13:16 on 16/06/2023.

Step 5: Under 'Facility Type' find the 'Site Category' table and first click on the multi-select icon then deselect the 'Mobile Plant' and 'On/In Land' categories.

The screenshot displays the '2021 Waste Returns - Waste Received Interrogator' dashboard in Microsoft Excel. The dashboard is organized into several sections:

- Site Location:** Includes filters for Facility RPA, Facility Sub Region, Facility WPA, Facility District, Origin Region, and Origin WPA.
- Waste Types:** Includes filters for Basic W..., EWC Chapter, and Waste C...
- Facility Type:** This section is highlighted with a red box. It contains a 'Site Category' table with the following items: Incineration, Landfill, Mobile Plant, MRS, On/In Land, Processing, Storage, Transfer, and Treatment. The 'Mobile Plant' and 'On/In Land' categories are currently selected.
- Total Waste (tonnes):** Displays a total of 2,622,008 tonnes, with buttons for 'View Data' and 'Clear all slicers'.

Instructions on the right side of the dashboard provide guidance on using the slicers:

- # Narrow down the data you wish to view by selecting the relevant option from the slicers. Hold Ctrl to select multiple items in a slicer.
- # Press 'View Data' to see the raw data behind your selections. The data will appear in a new worksheet. You may need to delete these additional worksheets if the file becomes too large.
- # Use the 'Clear all slicers' button to reset the slicers and pivot table to show all data.

The Excel ribbon at the top shows the 'Home' tab, and the taskbar at the bottom indicates the system time is 13:17 on 16/06/2023.

Step 6: The 'Total Waste (tonnes)' value will be indicated in the bottom right field.


The screenshot displays the Microsoft Excel interface for the '2021 Waste Returns - Waste Received Interrogator'. The ribbon at the top shows the 'Home' tab with various formatting and editing options. The main content area is divided into several sections:

- Site Location:** Includes filters for Facility RPA, Facility Sub Region, Facility WPA, and Facility District.
- Waste Origin:** Includes filters for Origin Region and Origin WPA.
- Waste Types:** Includes filters for Basic W..., EWC Chapter, and Waste C...
- Facility Type:** Includes filters for Site Category and Facility Type.

In the bottom right corner, a red box highlights the 'Total Waste (tonnes)' field, which displays the value 2,622,008. Below this field are buttons for 'View Data' and 'Clear all slicers'. To the right of the filters, there are three instructional notes:

- # Narrow down the data you wish to view by selecting the relevant option from the slicers. Hold Ctrl to select multiple items in a slicer.
- # Press 'View Data' to see the raw data behind your selections. The data will appear in a new worksheet. You may need to delete these additional worksheets if the file becomes too large.
- # Use the 'Clear all slicers' button to reset the slicers and pivot table to show all data.

The bottom status bar shows the current sheet is 'Interrogator - Waste Received', and the system tray indicates the time is 13:17 on 16/06/2023.

Step 7: If you need to clear your selections in any table, click on the clear-filter icon 

2021 Waste Returns - Waste Received Interrogator
© Environment Agency 2022

Site Location

- Facility RPA: East Midlands, East of England, London, North West, South East, South West, West Midlands, Yorks & Humber
- Facility Sub Region: Bath, Bristol and S Glo, Bedfordshire, Berkshire, Buckinghamshire, Cambridgeshire, Cumbria, Devon, East London Waste Auth..., East Sussex
- Facility WPA: Barking and Dagenham, Bedford, Bexley, Bristol City, Buckinghamshire, Cambridgeshire, Central Bedfordshire, Cumbria, Devon
- Facility District: Adur, Babergh, Barking and Dagenham, Basildon, Bedford, Bexley, Braintree, Breckland, Brentwood

Waste Origin

- Origin Region: East of England
- Origin WPA: Surrey, Sutton, Swansea, Swindon, Tameside, Telford and Wrekin, Thurrock, Torbay, Torfaen

Waste Types

- Basic W...: Hhold/ind/Com
- EWC Chapter: 19 - WASTE AND WATER TREATMENT WASTES, 20 - MUNICIPAL WASTES
- Waste C...: 20 02 01, 20 02 02, 20 02 03, 20 03 01, 20 03 02, 20 03 03, 20 03 04, 20 03 06, 20 03 07, 20 03 99

Facility Type

- Site Category: Incineration, Landfill, Mobile Plant, MRS, On/In Land, Processing, Storage, Transfer, Treatment
- Facility Type: Anaerobic Digestion, Biological Treatment, CA Site, Car Breaker, Chemical Treatment, Composting, Haz Waste Transfer, Haz Waste Transfer / Treatment, Hazardous Merchant LF, Inert LF, Inert Waste Transfer

Total Waste (tonnes)
2,622,008

View Data
Clear all slicers

Clear Filter (Alt+C)

Narrow down the data you wish to view by selecting the relevant option from the slicers. Hold Ctrl to select multiple items in a slicer.
Press 'View Data' to see the raw data behind your selections. The data will appear in a new worksheet. You may need to delete these additional worksheets if the file becomes too large.
Use the 'Clear all slicers' button to reset the slicers and pivot table to show all data.

Information | Glossary | 2021 Waste Received | **Interrogator - Waste Received** | Active Sites | Configurable Reports | One Click Summaries | Waste Data Links | E ...

Ready | Accessibility: Investigate | Display Settings | 13:18 | 16/06/2023

