HOUSE OF COMMONS

LONDON SW1A 0AA

Mr Andre Pinto
National Infrastructure Planning
Temple Quay House
2 The Square
Bristol
BS1 6PN

9 March 2023

Medworth Energy from Waste Combined Heat and Power (EfW CHP) Facility Project

Dear Mr Pinto

Please find attached a written representation further to my oral evidence at the OFH2 on 23 February.

Yours sincerely,

[redacted]

Stephen Barclay MP

Steve Barclay
MP FOR NORTH EAST CAMBRIDGESHIRE

Proposed Medworth Energy from Waste Combined Heat and Power Facility
Written Submission from Rt Hon Stephen Barclay following Open Floor Hearing 2 held on Thursday 23 February 2023 from 10:00am.

This document presents the arguments made by Rt Hon Stephen Barclay MP on behalf of his constituents at the Open Floor Hearing 2 held on Thursday 23 February 2023.

Please note that it is my intention to put forward a line of reasoning that reflects on, and integrates the consideration of, the matters below, and others, in subsequent submissions. In this respect, the first point, regarding need, is relevant. Although NPSs for Energy effectively assume that 'need' for energy infrastructure has been established, waste constitutes a particular case because the source of the energy to be generated is materials which Policy and Law require to be handled following the waste hierarchy, within which, Energy from waste lies one rung from the bottom.

Need for the facility / Waste Fuel Availability
The applicant's document of relevance is APP-094 Medworth CHP Limited Volume 7.3 Waste Fuel Availability Assessment.

I understand the applicant intends to provide an update to the Waste Fuel Availability Assessment (WFAA). I welcome this as the extant version is somewhat dated.
I note for the time being that the data as regards wastes outside the control of local authorities are of relatively poor quality. In particular, data regarding municipal wastes which are not being managed by local authorities are relatively unreliable. Furthermore, the reliability of the information linked to non-municipal wastes in England is also incredibly shaky.

I also note that various sources indicate – and common sense suggests - that it would be unwise to assume that the calorific value of wastes which are not representative of those examined by the study cited by the applicant as the basis for its assessment. Its composition would be unlikely to be the same.

I note the Resources and Waste Strategy, which states (p.137):[1]

> *Residual waste is the mixed material that is typically incinerated for energy recovery or landfilled.* ***Much of the products and materials contained in this waste could have been prevented, reused or recycled. This is inefficient not only because materials that hold value are being lost, but also incineration and landfill are the most expensive ways to treat waste****. Understanding waste composition is fundamental to the Strategy's objectives of eliminating avoidable plastic waste over the lifetime of the 25 Year Environment Plan, working towards eliminating food waste to landfill by 2030 and eliminating avoidable waste by 2050.*

The above suggests that even if EfW might deal, at a given point in time, with waste which might otherwise be landfilled, that situation represents a static (time-bound) perspective. It is self-evident that if, at a given point in time, all waste landfilled was suddenly treated through EfW, then the only way to increase recycling (other things being equal) would be to reduce the amount of waste being sent to EfW. In short, it should not be assumed that EfW always deals with waste which would otherwise be landfilled. Policy and law make it absolutely clear that increasing recycling and reducing residual (i.e., waste which is generated but not recycled or reused) waste is, in fact, the express intention of Government (further detail on this is given below).

[1] Defra (2018) Our Waste, Our Resources: A Strategy for England, 2018.

I look forward to reviewing the updated WFAA, and notably, how the proposed facility justifies the scale of operation, in terms of both the waste received, how that waste is proposed to be managed whilst respecting the waste hierarchy (and the duties the applicant would have in this regard) and the amount which is proposed to be incinerated.

Technology Alternatives
The applicant's document of relevance is APP-029 Medworth CHP Limited Volume 6.2 ES Chapter 2 Alternatives.

Because of the way in which policy and law apply to the management of waste in England, it is important to understand whether the application is consistent with the applicant fulfilling its duties under the same policy and law. In this respect, the assessment of alternatives is rather too narrowly conceived. It is surprising to see rather little by way of technological alternatives and different design configurations.

For example, if the opportunities for heat use are so evident, why not focus more on heat use (and less on electricity)? It is well known that the generation efficiency for 'heat only' facilities is far higher (it can approximate to 100% when assessed relative to net calorific value if flue gas condensation is in place) than where energy is used to generate electricity only, or electricity and heat (the facility proposed has an efficiency of generation for electricity of 30%, or 27% net of parasitic load[2]).[3] The expressed intent in the Resources and Waste Strategy is, after all:[4]

> *'to help the companies that run EfW plants to use the heat produced to improve their efficiency, and to help industry make the right decisions over infrastructure investment.*
>
> *Work is underway across Government to make the remaining plants more efficient, by assessing and removing barriers to making use of heat produced when incinerating waste[104]. The Department for Business, Energy and Industrial Strategy (BEIS) has a Heat Networks Investment Project[105], with a £320m capital fund, and we are working to ensure that this project helps to utilise EfW plants as a source of heat for district heat networks where possible. As part of the review of the Waste Management Plan for England[106] in 2019, Defra will work with the Ministry of Housing, Communities and Local Government (MHCLG) to ensure that the Waste Management Plan for England and the National Planning Policy for Waste and its supporting planning practice guidance reflects the policies set out in this Strategy. This will consider how to ensure, where appropriate, future plants are situated near potential heat customers.'*

If the intention is to remain consistent with the waste hierarchy, then it would seem odd that the applicant could overlook – not least given the proposed scale - adoption of mixed waste sorting in front of the incinerator to remove plastics, metals, some paper and card and some textiles for recycling / reuse, thereby, i) associated with recycling, avoiding GHG emissions from manufacture of primary materials, and ii) reducing the fossil carbon fraction of the remaining waste to be incinerated. These facilities are already operating in cities and countries which have set themselves challenging targets for reducing greenhouse gas emissions. I highlighted examples, in oral evidence, on the outskirts of Oslo and in Friesland, whilst the facility in Stavanger (Norway) also provides an

[2] This is our calculation calculated based on figures in APP-041 Volume 6.2 ES Chapter 14 Climate (June 2022).
[3] See, for example, Equanimator (2023) Debunking Efficient Recovery: the Performance of EU Incineration Facilities, Report for Zero Waste Europe, January 2023.
[4] Defra (2018) Our Waste, Our Resources: A Strategy for England, 2018.

excellent example, that has been closely studied, of the capability of facilities sorting 'leftover mixed waste' (the waste remaining after source separation efforts by citizens) to extract materials suitable for recycling.[5]

There is no reason why this should not have been considered: indeed, it should be considered as part of the commitment on a handler of waste to complying with the waste hierarchy. It is an obvious improvement to the proposed scheme. Application of the technology would increase recycling, enhance GHG performance, and other things being equal, reduce the need for combustion of waste.[6] Indeed, studies estimate a reduction in the quantity of waste of the order 20%, but a greater reduction (because of the effective targeting of plastics) in the calorific content of the remaining residual waste, one study indicating a 32% reduction (depending on waste composition).[7]

The relevance of this to the Examination is that had the applicant considered this approach, then the gross and net electrical output from a facility treating the same waste as that which the applicant claims to be readily available would fall from 60MW and 55MW, respectively, to (ballpark) around 45MW and 41MW, respectively.

I am concerned, therefore, that the NSIP status is being conferred on the proposed facility in part as a consequence of the applicant's own failure to consider alternatives which are consistent with its own obligations to manage waste in line with the waste hierarchy.

The Resources and Waste Strategy, published in 2018, notes:[8]

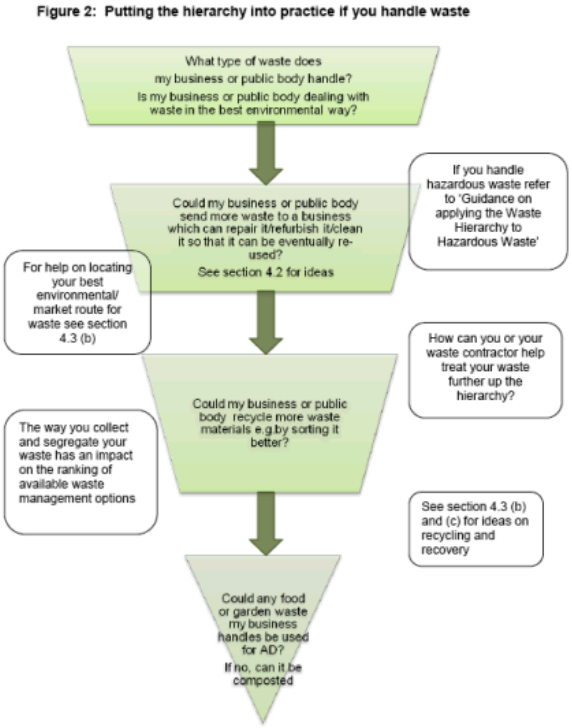
> *We manage this* [residual] *waste in three main ways: sending it for energy recovery, exporting it as a refuse-derived fuel (RDF), and landfilling it. We also attempt to extract recyclables from this waste where the technology exists to do it, although the quality of this material tends to be poor.*

This underlined sentence is consistent with the application of the waste hierarchy. The technology in respect of sorting has moved on considerably over the past 15 years, and Defra can, perhaps, be forgiven for taking the view, in 2018, that extracting recyclables from mixed waste would deliver poor quality materials (this being based on past UK experience before the turn of the millennium). This is, though, no longer the case, and it would be consistent with the hierarchy to ensure the opportunity for extraction of recyclables from mixed waste was taken, the more so given the proposed scale of the facility (which would reduce the unit costs), and the quantum of recyclables that might be considered available for extraction.
Defra Guidance in respect of the waste hierarchy for those who handle waste is summarised in Figure 2 from p.11, reproduced below.[9]

[5] Eunomia (2021) Waste in the Net-Zero Century: Testing the Holistic Resources System via Three European Case Studies, Report for TOMRA, July 2021.
[6] Eunomia (2021) Waste in the Net-Zero Century: Greenhouse Gas Impacts of Mixed Waste Sorting, August 2021; Equanimator (2021) Rethinking the EU Landfill Target, Report for Zero Waste Europe, October 2021.
[7] D. Hogg (2022) The case for sorting recyclables prior to landfill and incineration, Report for Reloop, June 2022.
[8] Defra (2018) Our Waste, Our Resources: A Strategy for England, 2018.
[9] Defra (2011) Guidance on Applying the Waste Hierarchy, June 2011.

Figure 2 from Guidance on Applying the Waste Hierarchy

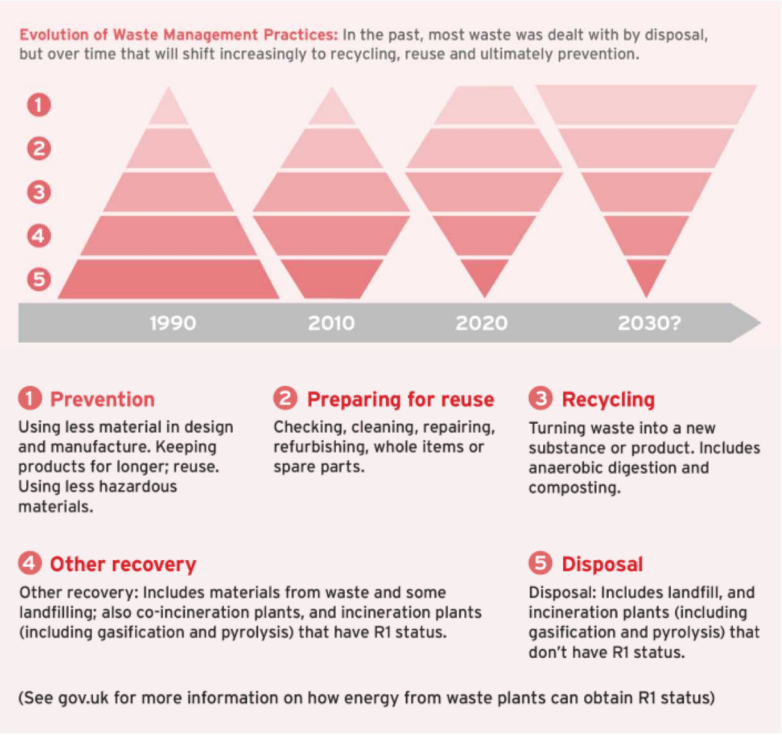
Figure 2: Putting the hierarchy into practice if you handle waste



The Waste Management Plan for England shows, graphically, the expected evolution of waste management in relation to the hierarchy on p15.[10]

Figure 2 from Waste Management Plan for England

Figure 2 Evolution of waste management practices



[10] Defra (2021) Waste Management Plan for England, January 2021.

These highlight the clear trajectory which existing policy seeks to achieve: a declining share of waste sent for landfill and other recovery; and an increasing emphasis on waste recycling, reuse and prevention.

The intention has since been given further impetus by The Environmental Targets (Residual Waste) (England) Regulations 2022, pursuant to the Secretary of State's duty in Section 1 of the 2021 Environment Act. A residual waste long-term target has been set as follows:[11]

> *2.—(1) This regulation specifies a target ("the residual waste long-term target") for the purposes of the Secretary of State's duty in section 1 of the 2021 Act to set a long-term target in respect of a matter within the area of resource efficiency and waste reduction.*
> *(2) The residual waste long-term target is that by the end of 31st December 2042 the total mass of residual waste for the calendar year 2042 does not exceed 287 kilograms per head of population in England.*
> *(3) In paragraph (2), "residual waste" means any waste, other than excluded waste, which—*
> *(a)originated in England; and*
> *(b)is treated by a method specified in paragraph (4) in the year in question.*
> *(4) The methods referred to in paragraph (3)(b) are that the waste is—*
> *(a)sent to landfill in the United Kingdom;*
> *(b)put through incineration in the United Kingdom;*
> *(c)used in energy recovery in the United Kingdom; or*
> *(d)sent outside the United Kingdom for energy recovery.*

For comparison, on page 76 of the Resources and Waste Strategy, it is noted that 29 million tonnes of municipal residual waste were generated in England, equivalent to well over 500kg per head.[12]

Given the significant weight carried by the Act, then the role of these targets, and also, the waste hierarchy[13] in shaping choices regarding how waste is managed now and in the future is material, and of particular significance.

Climate Change

The following draws on material in APP-041 Volume 6.2 ES Chapter 14 Climate (June 2022) (i.e. the Climate Change part of the Environmental Statement).

I noted that the comparative assessment between landfill and incineration was flawed for two main reasons. The first reason relates to the treatment of non-fossil CO_2 emissions, which is methodologically unsound. In the comparative assessment of landfill and incineration, I would expect:

- EITHER all non-fossil CO_2 emissions to be reported for each, and compared accordingly;
- OR, alternatively, if the non-fossil CO_2 emissions from incineration are to be discounted from the analysis, then:
    - at the landfill, the amount of non-fossil carbon sequestered in the landfill should be estimated and deducted from the landfill emissions; and
    - the global warming potential (GWP) figure used for methane should be adjusted downwards to reflect the non-fossil nature of the source of the emission (and the

[11] The Environmental Targets (Residual Waste) (England) Regulations 2022
[12] Defra (2018) Our Waste, Our Resources: A Strategy for England, 2018.
[13] The Waste (England and Wales) Regulations 2011, 28th March 2011 (as amended by The Waste (Circular Economy) (Amendment) Regulations 2020); see also Defra (2011) Guidance on Applying the Waste Hierarchy, June 2011.

fact that had the methane not been generated, the assumption is that the carbon would have degraded into CO_2).

As it is, the assumption made is that the non-fossil CO_2 emissions from incineration are excluded, yet there is no 'sequestration credit' associated with the landfill.

The second reason relates to the treatment of the carbon intensity of the energy source avoided by energy generated from the proposed development. The approach appears to have been to assume that:

a) the avoided source of electricity has the carbon intensity of the grid average mix in 2021, and
b) that the carbon intensity of the avoided source of electricity does not change for the next 40 years.

If it is consented, the facility is unlikely to complete commissioning much before 2027 on an optimistic view (the applicant claims a 36 month period post consent – see para 3.7.2 in of APP-030 Environmental Statement Chapter 3: Description of the Proposed Development – *"Should consent be granted in Q3 or Q4 2023, it is anticipated that construction of the Proposed Development will commence the same year and take approximately 36 months to complete. The Proposed Development would therefore be operational in 2026"*).

The BEIS Tables which supplement HM Treasury's Green Book give guidance as to what should be assumed for the carbon intensity of the long-run marginal source of electricity when additional generation capacity comes on stream.[14] By 2027, this figure has already fallen to 157g CO_2/kWh, and it falls over the following ten years to 25g CO_2/ kWh. After twenty years operation, the avoided source has a carbon intensity of 5 g CO_2/kWh. The avoided source of energy should reflect the ongoing, and dynamic, reduction in carbon intensity of power generation.

Perhaps the clearest expression of this is given in the example in Box 3.5 of BEIS's Guidance document of January 2023, 'Valuation of energy use and greenhouse gas (GHG) emissions: Supplementary guidance to the HM Treasury Green Book on Appraisal and Evaluation in Central Government.'[15] This is reproduced below, and it indicates that where an energy efficiency programme avoids use of electricity, it is not assumed that the CO_2 saving per unit of electricity saved is to be kept constant at the level which was indicated in the year the programme took effect. Similarly, introducing a new source of electricity generation, such as an EfW facility, cannot claim to be avoiding a source whose carbon intensity remains constant from the point at which the facility is operated. A moment's reflection indicates why this would be the case: if the EfW facility does indeed have a 40 year lifetime, then the avoided emissions associated with its generation cannot reflect a form of generation which has long since ceased to be used.

[14] The Data Tables (Data tables 1 to 19: supporting the toolkit and the guidance) can be downloaded from here - https://www.gov.uk/government/publications/valuation-of-energy-use-and-greenhouse-gas-emissions-for-appraisal

[15] BEIS (2023) Valuation of energy use and greenhouse gas (GHG) emissions: Supplementary guidance to the HM Treasury Green Book on Appraisal and Evaluation in Central Government, January 2023.

Box 3.5 from Valuation of energy use and greenhouse gas (GHG) emissions: Supplementary guidance to the HM Treasury Green Book on Appraisal and Evaluation in Central Government

Box 3.5 Using emissions factors to convert electricity use changes into GHG emissions changes

An energy efficiency programme which reduces the use of electricity by households is being considered. Electricity consumption is predicted to be cut by 10GWh (10 million kWh) relative to the "do nothing" option in each year between 2022 and 2041. The calculations below demonstrate how this change in energy use is multiplied by the appropriate marginal emissions factor (see data table 1) to derive the change in emissions.

	Change in electricity use	Marginal emissions factor (Table 1) - Domestic Households		Change in emissions
	GWh	kgCO2e /kWh	tCO2e /GWh (see Annex B)	tCO2e
2022	-10	0.26	264	-2645
2023	-10	0.25	248	-2485
…	…	…	…	…
2039	-10	0.02	19	-193
2040	-10	0.02	16	-160
2041	-10	0.02	15	-153

Had the consultants properly considered the declining carbon intensity of the long-run marginal source of electricity (based on generation), then the relative performance of EfW incineration and landfill would change significantly over the lifetime of the proposal.

I would ask that the methodological flaws be addressed in a revised assessment in APP-041 Volume 6.2 ES Chapter 14 Climate (June 2022).

Air Quality

On air quality, I recognise that this matter brings into view matters that are often considered as being the appropriate domain of the permitting process, but I would ask for some greater clarity on what the air quality modelling assumes in respect of emissions from the incinerator given the nature of the abatement equipment described in the application. This is of relevance to those conducting a significant part of their lives nearby.

In the Environmental Statement, the Description is as follows:[16]

> *3.5.18 The combustion process generates oxides of nitrogen (NOx). To not exceed the emission limit for these substances, the secondary combustion zone would be equipped with a NOx reduction system. The oxides of nitrogen would be reduced to nitrogen by injecting urea solution into the secondary combustion zone of the furnace. As the reaction is sensitive to temperature, the injection nozzles would be installed at several levels within the*

[16] APP-030 (Medworth CHP Limited Volume 6.2 ES Chapter 3 Description of the Proposed Development).

> *combustion zone to enable the injection of urea or ammonia solution to be precisely adjusted to the temperature conditions within the zone.*
> *3.5.19 Urea (ammonia) acts as a reducing agent which decomposes during injection in the hot flue gas stream, primarily to ammonia. The hydrogen in the ammonia reacts with the oxygen in the oxides of nitrogen to produce molecules of water vapour and nitrogen. This is a Selective Non-Catalytic Reduction (SNCR) process, which is optimised at temperatures of between 850°C and 1,000°C. The gases would pass through a combination of water-cooled radiant chambers and an evaporator tube bundle which would reduce the temperature of the gases to around 600°C before coming into contact with the steam super-heaters. This serves to minimise corrosion and also to ensure that the majority of the small ash particles entrained in the combustion gases are below their melting point and are therefore less likely to adhere to the heat transfer surfaces.*

This is a non-catalytic approach to dealing with NOx, this choice having potential consequences also for dioxin emissions.

Later the assessment of air quality notes:[17]

> *8.6.22 BAT Conclusions for incineration activities were published in November 2019 as a Commission Implementing Decision. The BAT Associated Emission Levels (BAT-AELs) established by the BAT Conclusions have been used as the basis for defining the pollutant emission concentrations in preference to the ELVs in Annex VI of the IED.*
> *8.6.23 The assessment assumes that the EfW CHP Facility is emitting at these concentrations and at maximum waste throughput continually for 24-hours a day, 365-days a year. This provides a conservative estimate of annual mean impacts since the EfW CHP Facility is expected to achieve an annual availability closer to 90%*

This is not especially helpful as some BAT-AELs are given as ranges.[18] For example, and in respect of NOx emissions, Table 6 in the Commission Implementing Decision is as set out below.

BAT-associated emission levels (BAT-AELs) for channelled NO_X and CO emissions to air from the incineration of waste and for channelled NH_3 emissions to air from the use of SNCR and/or SCR

(mg/Nm³)

Parameter	BAT-AEL		Averaging period
	New plant	Existing plant	
NO_X	50–120 (1)	50–150 (1) (2)	Daily average
CO	10–50	10–50	
NH_3	2–10 (1)	2–10 (1) (3)	

(1) The lower end of the BAT-AEL range can be achieved when using SCR. The lower end of the BAT-AEL range may not be achievable when incinerating waste with a high nitrogen content (e.g. residues from the production of organic nitrogen compounds).
(2) The higher end of the BAT-AEL range is 180 mg/Nm³ where SCR is not applicable.
(3) For existing plants fitted with SNCR without wet abatement techniques, the higher end of the BAT-AEL range is 15 mg/Nm³.

The associated monitoring is in BAT 4.

[17] APP-035 (Medworth CHP Limited Volume 6.2 ES Chapter 8 Air Quality).
[18] Commission Implementing Decision (EU) 2019/2010 of 12 November 2019 establishing the best available techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council, for waste incineration.

The footnotes to the Table indicate that the lower end NOx emissions are likely to be achievable only when using catalytic, as opposed to non-catalytic NOx abatement. The Description from the applicant above, however, indicates that non-catalytic NOx removal has been selected, which would likely give rise to higher emissions than needs to be the case.

I would have expected the facility to demonstrate a more responsible approach to reducing emissions of air pollutants, such as NOx, not least given its scale and location, through consideration of the alternative abatement techniques available, either in the consideration of alternatives in the Environmental Statement (see above), or in the description of the facility / the Air Quality chapter of the Environmental Statement. It would be useful, for example, to understand why the applicant has not opted for selective catalytic reduction as opposed to non-catalytic, given the recommendations in the BAT Conclusions for new facilities.

I understand that these matters might not always be considered of relevance to the ExA's deliberations (as they would be expected to be addressed through permitting), but given proximity of some sensitive receptors, I suggest these are extremely relevant. It would be useful to have clarity from the applicant as to the AELs selected for use in the air quality modelling, and hence, to understand the extent to which the applicant plans to emit NOx (and other emissions) at levels somewhat above those which can readily be achieved using better abatement techniques. It is the case, after all, that many of the pollutants concerned, notably NOx and particulate matter, are ones for which there is no obvious 'no observable effect level' (in other words, higher emissions, leading to changes in concentrations, will have consequences for human health).[19]

Finally, I would ask the applicant to comment on the validity of its assessment of baseline air quality in the light of the potential confounding impact of the Covid-19 pandemic. Below, I show the graphic from the Institute of Government regarding the timing of lockdowns in the UK.[20] Set against this, it is reasonable to consider the degree to which the monitoring conducted for the baseline can be considered to have been representative of a normal situation. The Applicant's Environmental Statement notes:[21]

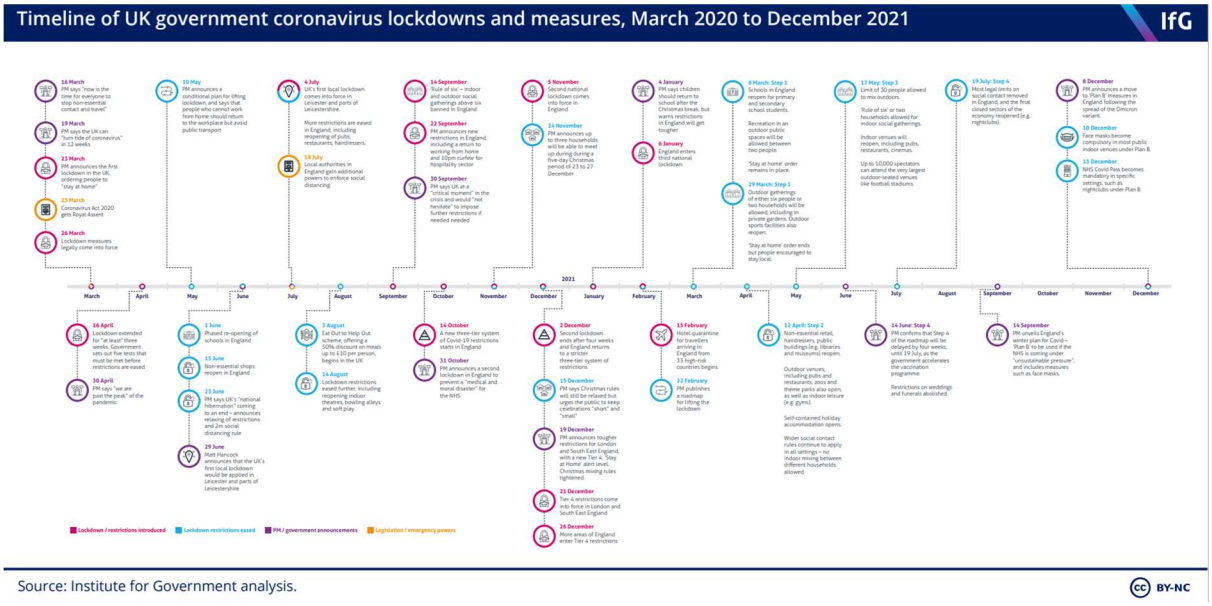
---

[19] So, for example, in relation to particulate matter, the Committee on The Medical Effects of Air Pollutants (COMEAP) indicates that (see COMEAP (2022) Statement on quantifying mortality associated with long-term exposure to PM2.5, Appendix B: Summary of COMEAP views on the studies in populations with low-level exposures and the shape of the concentration-response curve, Report by Committee on the Medical Effects of Air Pollutants):
"9. In summary, there is some evidence that the adverse health effects associated with increases of the same increment in PM2.5 may be greater for low exposures than higher exposures but no evidence of a lower exposure threshold. Therefore, continuing to reduce concentrations of PM2.5, even where exposures already low, would be expected to have a benefit to public health. There is, as yet, are no consensus on the shape of the CRF [concentration-response function] at lower levels of PM2.5 and I do not consider the evidence sufficient, at this time, to recommend any change from the current assumption of a linear CRF when quantifying the effects associated with long-term exposure to PM2.5."
Similarly, in respect of NOx, COMEAP includes the following regarding threshold effects in a 2018 report (see COMEAP (2018) Associations of long-term average concentrations of nitrogen dioxide with mortality, Report by Committee on The Medical Effects of Air Pollutants):
"6.2.1 Summary
Associations were observed in studies with NO2 concentrations as low as 5 µg/m3 NO2. The available studies do not suggest that a threshold for effects exists at the population level. However, as only some of the studies have included formal tests for this, the possibility of a threshold cannot be ruled out."

[20] Downloadable here - [redacted]

APP-035 (Medworth CHP Limited Volume 6.2 ES Chapter 8 Air Quality).

8.4.1 A desktop study of baseline air quality was undertaken utilising publicly available data. In addition, a monitoring survey was commissioned in October 2020 extending to November 2021 employing passive diffusion tubes whilst the installation of a continuous monitor measuring concentrations of NO2, PM10 and PM2.5 began in June 2021 for a period of six months and was extended for a further six months to capture one year's worth of data. Further information is provided in Appendix 8B Air Quality Technical Report (Volume 6.4).



The above extract, when considered alongside the Institute for Government presentation, highlights that matters were only approaching anything close to pre-Covid levels of activity after December 2021. I could find no reference, in the applicant's document, of Covid-19 as a possible confounding factor in establishing baseline emissions. I accept that the applicant has also made reference to historic data (as well as the data from its own monitoring), but I believe a clear statement as to the extent to which the pandemic may have affected baseline measurements, as well as a summary of what that might imply for the analysis in the Air Quality chapter, is warranted.

DCO and Compulsory Purchase

I stated that it was my view that the proposed DCO, and in particular, the associated compulsory purchase powers, would seem to be disproportionate to the contribution made by the proposal. Some of the reasons for this are given above, but I will provide further information in subsequent written submissions.

Written Submissions

As indicated in my introduction, I plan to make further written submissions I would have liked to have made a comprehensive submission at Deadline 2, but given that the revised WFAA will not be available (as I understand it) before Deadline 2, our preference would be to submit our written submission once the revised WFAA is made available. After all, if the case made to support the applicant's contention that there is sufficient waste fuel available is a weak one, then whatever the proposed generation capacity, the stated output of the facility might always be well below the 50MW which an NSIP EfW, operating at a high level of availability and close to full capacity (which is suggested in the application), would be expected to deliver. It may simply be that the proposal is for a facility whose capacity is in excess of that which can be reasonably sustained without undermining the waste management hierarchy, which might, in any case, be compromised by the choice made by the applicant given the available alternatives.