Planning Application Representation

UKWIN COMMENTS ON ENZYGO RESPONSE OF 13TH JULY 2021

Proposal:
Energy from Waste Facility

Location:
Hownsgill Industrial Park, Templetown, Consett

Applicant:
Project Genesis Ltd

Durham County Council Planning Reference:
DM/20/03267/WAS

JULY 2021

United Kingdom Without Incineration Network

BACKGROUND

1. On the 3rd of June 2021 the United Kingdom Without Incineration Network (UKWIN) made a submission regarding the above application entitled 'objection and comments on climate change and need issues'.
2. The issues that provide the focus for UKWIN's objection were the applicant's:
    - Claim of better carbon performance than landfill and other options;
    - Claim of 200g of CO2 per tonne savings relative to landfill;
    - Claim of carbon performance based on unspecified other plant;
    - Claim of accordance with the requirements of the County Plan;
    - Claim that the facility would only displace fossil fuels or CCGT plants; and
    - Claim of benefit from Paragraph 154 of the NPPF
3. The applicant submitted a document entitled 'Response to comments from Low Carbon Economy Team and UKWIN' on the 13th of July 2021 which focussed on UKWIN's submission as well as those from the Low Carbon Economy Team
4. Below are UKWIN's comments on that Enzygo document.
5. UKWN's latest comments are informed by UKWIN's July 2021 Good Practice Guidance for Assessing the Greenhouse Gas Impacts of Waste Incineration[1] which provides a significant amount of arguments and evidence that support the points being made by UKWIN and others. A copy of UKWIN's guidance accompanies this submission.

COMMENTS ON THE OPENING PARAGRAPHS

6. The 13th July Enzygo letter does not, as it claims, confirm the validity of the conclusions of the submitted ES Climate Change chapter. For the reasons previously stated, and set out below, the applicant's conclusions cannot be considered sound and the applicant has not ruled out that the overall climate change impacts of the proposal would be significantly adverse.
7. We ask that, for the purpose of determining this planning application, the applicant be expected to demonstrate compliance with the recommendations set out within UKWIN's July 2021 Good Practice Guidance for Assessing the Greenhouse Gas Impacts of Waste Incineration[2] (hereafter *'UKWIN's GHG Guidance'*), at the very least with respect to sensitivity analysis.

[1] https://ukwin.org.uk/climate/
[2] https://ukwin.org.uk/files/pdf/UKWIN-2021-Incinerator-GHG-Guide.pdf

CLAIM OF BETTER CARBON PERFORMANCE THAN LANDFILL AND OTHER OPTIONS

8. Despite concerns raised by UKWIN and the Low Economy Team, and despite the opportunity that the applicant has been afforded to provide more detail, the applicant has failed to provide sufficient detail regarding their proposed feedstock to rebut UKWIN's assertions, and the applicant has also failed to provide sufficient assurance for the Planning Officers at Durham County Council that the proposed development would not be disastrous in carbon terms.

9. As noted in UKWIN's GHG Guidance, waste composition is expected to change over time and the biodegradable fraction of waste is often over-estimated at the planning stage, meaning the fossil fuel fraction (and therefore the quantity of fossil CO_2 emitted from incinerators) is often significantly under-estimated at the planning stage.

10. It is the applicant who states that the waste, if not sent to the proposed Consett incineration, would otherwise go to landfill or to other incinerators. It is therefore curious that the applicant does not seem interested in accurately assessing the impacts of these potential alternative fates.

11. The applicant has neither demonstrated that: *"The majority of the material sourced by the applicant is currently sent to landfill in England",* nor that *"a portion exported abroad as RDF for onwards processing in facilities such as that proposed".* For example, the applicant does not state which English landfills are currently receiving this waste, nor do they identify the European incinerators to which they refer. Additionally, despite referring to the supposed destination of the feedstock, the applicant fails to provide compositional analysis of this feedstock.

12. Even if this waste is currently sent to landfill and/or exported to existing R1 incinerators on the Continent, this does not mean that the material might not be recyclable or able to be removed from the residual waste stream in the future.

13. As noted in UKWIN's GHG Guidance, a significant proportion of the current residual waste stream is recyclable, the UK Government has plans to increase recycling (at the expensed of incineration and landfill), and the Committee on Climate Change recommends even higher rates of recycling for England and the UK. This means the proposed capacity could present a barrier to future improvements in recycling rates, and/or might necessitate the import waste from much further afield.

14. There is already a significant quantity of incineration capacity operational, in commissioning and under construction in the North East region.

15. UKWIN welcomes Enzygo's recognition that the energy generated from burning plastic is not considered renewable, however, for the reasons set out in UKWIN's GHG Guidance, we disagree that the energy generated from the plant should be considered 'low carbon'.

16. The applicant states that *"food, paper, wood, textiles, and many other materials which the proposed development would be permitted to treat do break down in landfill, giving off methane".* As noted in UKWIN's GHG Guidance, much of this biogenic or partially-biogenic material would be sequestered in landfill and so would not emit methane.

17. Furthermore, as noted in UKWIN's GHG Guidance, if the waste were bio-stabilised prior to landfill then hardly any of the biogenic materials would release methane in landfill. This is relevant when considering the potential alternative fate of material which is intended for feedstock throughout the lifetime of the project, although as noted above much of the material might otherwise be reduced, reused, recycled or composted.

18. Additionally, even absent of bio-stabilisation pre-treatment prior to landfill, much of any methane that would be released could be expected to be captured and either flared (avoiding methane emissions) or used as landfill gas for energy generation.

19. The applicant refers to *"food waste"* in paragraph 1.1.3 of their letter, yet as noted in their own Appendix 7 'Response to Public Comments': *"No food, perishable or organic waste will be used at the plant meaning that the RDF is relatively dry in composition and therefore odour-free"*:

Smell	No food, perishable or organic waste will be used at the plant meaning that the RDF is relatively dry in composition and therefore odour-free. All deliveries will be in enclosed vehicles and materials will be tipped, stored and processed in sealed buildings with odour control systems in place, including negative pressure which sucks air into the building. The reception hall will also be equipped with a dedicated odour control unit which is self-sufficient and therefore able to treat odours at any time, even when the Plant is not running.

20. Paragraph 1.1.4 of the Enzygo letter states that the applicant is *"seeking to minimise the presence of this material* [i.e. food and garden waste] *in the feedstock"*, whereas the applicant previously stated that they would use "*no food, perishable or organic waste"*.

21. Furthermore, in paragraph 1.16 of their response the applicant now raises the prospect that their waste stream would include significant quantities of *"Sanitary products and disposable nappies"* and *"Other Organic Waste".*

22. The applicant states that *"…it is also in the applicant's interest to minimise the portion of plastic in the feedstock, which is generally of a too high calorific value for the technology proposed…"* but the applicant does not substantiate this statement.

23. These statement highlight how the applicant has not shown how they expect to achieve their anticipated level of electricity generation, for example they are not clear about the source of the calorific value (energy) that would be in the feedstock. This is especially important in light of the findings of UKWIN's GHG Guidance that real-world incinerator performance is often lower than predicted at the planning and permitting stages.

24. These inconsistencies also raise serious concerns about potential odours from the plant, as well as about the robustness and internal consistency of the applicant's various impact assessments, and their claims regarding the need or otherwise for the proposed incineration capacity.

25. In short, the 13th July letter from Enzygo raises more questions than it answers, casting further doubt on the adequacy of the Environmental Impact Assessment, as well as the justification for proposing this capacity in this location.

26. In terms of heat export, UKWIN notes the high level of uncertainty as to whether or not this will come forward, and we would expect very little, if any, weight to be given to this claimed benefit in the planning balance.

27. While UKWIN would support the imposition of an R1 Condition applied to the proposal in the event that planning permission were granted, this R1 Condition could not be expected to resolve the issues raised by UKWIN regarding the poor climate performance and lack of need for the proposed capacity. This means that UKWIN still believes that the application should be refused planning permission.

28. Incinerators with R1 status remain inferior to reduction, re-use, recycling and composting in the Waste Hierarchy and, as noted earlier, the plant proposed for Consett could be reliant on a significant quantity of material that could otherwise be treated at these higher tiers of the Waste Hierarchy, thus driving waste management down - and not up - the Waste Hierarchy.

Claim of 200kg CO2e per tonne savings relative to landfill

29. The applicant confirms UKWIN's suspicions that their 200kg claim comes from an outdated and undetailed report from 2014 which states that: *"The exact saving is influenced by a number of factors, including the efficiency of the plant, the nature of the waste and the extent of materials recycling".*

30. As such, for the reasons set out in UKWIN's GHG Guidance, it is clearly not appropriate to assume that the impacts of the proposed Consett facility would be the same as was predicted in 2014 for an entirely different facility operating in a substantially different waste and energy context. It is therefore all the more important for the applicant to carry out a bespoke assessment based on the impacts of the proposed facility together with the proposed feedstock. The applicant has still not done this, and so the potential for significant adverse climate impacts have not been ruled out.

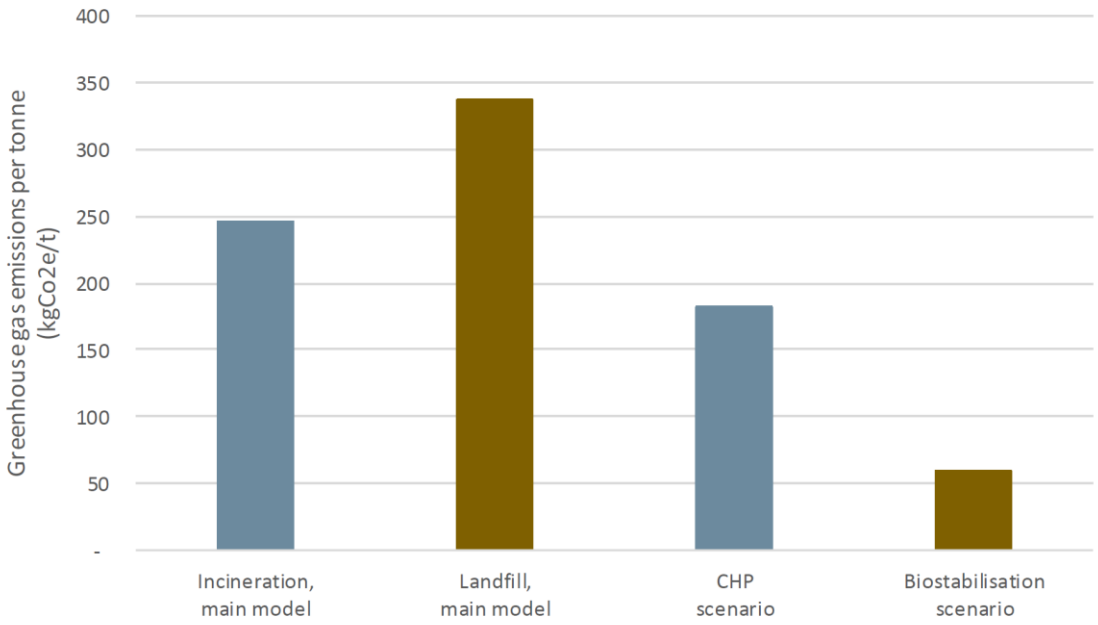
31. The applicant claims: *"A full lifecycle carbon and/or GHG assessment, with sensitivity testing would be subject to the same uncertainties and undertaking this would not change the conclusions of the submitted assessment"* but this has not been demonstrated. As shown in UKWIN's GHG Guidance, the sensitivities noted by UKWIN can have a significant impact on the conclusions reached.

32. The applicant cites Zero Waste Scotland (ZWS), but fails to note that the ZWS report itself says that *"The emissions of residual municipal waste sent to both EfW and landfill is highly dependent on the composition of that waste"*.

33. The applicant also overlooks the fact that the ZWS report makes clear that when bio-stabilisation is taken into account landfill has significantly lower emissions than incineration, as depicted in Figure 16 of the ZWS report (reproduced below).

EXTRACT FROM ZERO WASTE SCOTLAND'S JULY 2021 TECHNICAL REPORT

Figure 16. Converting to CHP or biostabilisation technologies lowers the GHG emissions of waste management facilities



34. In the supporting text below Figure 16 ZWS explains how:

"Figure 16 also shows a comparison to the potential savings from reducing biodegradable material to landfill. This could be achieved using biostabilisation. If levels of biogenic carbon can be reduced from 15% to 5% of residual municipal waste, landfill impacts would fall from 337 kgCO2e/t to 59 kgCO2e/t."

35. According to Zero Waste Scotland's report webpage:[3]

"…for residual waste which cannot be recycled, Biostabilisation technologies could offer a low carbon solution to landfill…"

"Residual waste treatment, whether landfill, or incineration, is the last port of call for waste. Our position is that we can make a lot more from the materials we have before EfW or landfill becomes the choice of disposal. If we are going to address the climate crisis, we must reuse products far more than we do just now. All our efforts need to go into keeping materials in use and in the system for as long as possible. Incineration and landfill are reserved for residual waste once all other, less environmentally damaging options, such as prevention, reuse and recycling, have been exhausted. The development of waste management technologies must consider the national climate change strategy to ensure Scotland is not locked into management routes which are higher carbon than necessary"

[3] https://www.zerowastescotland.org.uk/content/climate-change-impact-burning-municipal-waste-scotland

36. The applicant has not shown that their proposal for Consett would have lower emissions than increasing recycling/composting, or sending the same waste to a European incinerator which is part of a substantial heat network, or sending the same waste untreated to landfill, or sending the same waste to landfill preceded by bio-stabilisation (either with or without additional recyclate removal).

37. As such, the applicant's claimed savings figures remain unsubstantiated, and should be given no weight in the planning balance.

Claim of carbon performance based on unspecified other plant

38. If the applicant wishes their claims regarding performance to be given any weight then it is their responsibility to substantiate those claims, especially when they are based on theoretical (rather than real-world) performance which the applicant admits would be far in excess of levels of efficiency currently being achieved anywhere in England, and where that performance is for an unspecified London-based feedstock which could differ significantly from what would be treated at the proposed Consett facility.

Claim on accordance with the requirements of the County Plan

39. Given the uncertainty regarding the anticipated feedstock, is it unclear to what extent the facility proposed for Consett would be able to manage any local waste (especially taking into account the additional 500ktpa of capacity at Wilton 11).

40. As noted above, the applicant has still not demonstrated that their proposal would be low carbon or that it would not have an adverse climate change impact.

Claim that the facility would only displace fossil fuels or CCGT plants

41. For the reasons set out in UKWIN's GHG Guidance, if the proposed facility is intended to provide baseload energy it is more likely to displace nuclear than CCGT. As such, the performance of the incinerator proposed for Consett would be even worse than assuming the BEIS Marginal Emissions Factor (MEF) as previously proposed by UKWIN.

42. We also note that, according to the Committee on Climate Change[4], heat export from waste incinerators *"is not particularly low-carbon".* As noted above, the Zero Waste Scotland report shows that even with Combined Heat and Power, incinerators release more greenhouse gasses than sending bio-stabilised waste to landfill. Furthermore, as noted above, the Government's preference is for the material to be reduced, re-used, recycled and composted which would bring even more greenhouse gas savings.

Claim of benefit from Paragraph 154 of the NPPF

43. For the reasons set out above, and in UKWIN's previous objection, and in UKWIN's GHG Guidance, energy from the proposed Consett plant would be likely to have a higher carbon intensity than the conventional use of fossil fuels. As such, it would clearly not benefit from Paragraph 154 of the NPPF.

[4] https://www.theccc.org.uk/publication/sixth-carbon-budget/