

Open Floor Hearing (OFH1) Weds 22nd February 2023

My name is Alan Wheeldon. I am a Scientist and a local resident of 8 years. I am also a member of WisWin a local anti-incinerator group and the Wisbech Town Council working Party against the incinerator. I thank the inspectorate for allowing me this opportunity to state why I think this incinerator is not in the National interest and its operation would directly conflict with National policies directed at reducing greenhouse gas emissions and climate change. Pertinent to this I will show that MVV have not accurately calculated the net negative contribution that this incinerator will have on greenhouse gas emissions, following the daily operation over its 40 year lifespan.

Summary

In Chapter 14 of their planning application (1) on Climate, MVV state that the proposed Medworth Incinerator will burn 625,000 tonnes of municipal waste per year (2). In doing so they state that the incinerator will generate and release 273.33 ktCO₂e/year (2), which amounts to 10,993.2 ktCO₂e over the incinerators 40 year lifespan, from 2026 to 2066.

By adding together the emissions from burning the waste with the net emissions created to collect and deliver the waste, means that in its lifetime, the incinerator will be responsible for the release of a combined total of 11,157.2 ktCO₂e into the atmosphere.

At the end of the planning application chapter on Climate, MVV then assessed the likely effects of the Proposed Development with respect to our climate.

MVV concluded that in spite of being responsible for the net release of over 11 million tonnes of CO₂e into the atmosphere the Proposed Development will have a significant beneficial effect on the climate and that the Proposed Development will have a positive impact on the UK Government meeting its carbon budget targets (5).

This seems an incredulous claim so I looked into how they could come to this conclusion.

The reason MVV can claim this, is that they have calculated that the incinerator will prevent CO₂e from being released from landfill and from fossil fuel generated electricity and so they offset this CO₂ as 'avoidable emissions' thus claiming a net benefit by the incinerator.

However, their calculations are highly flawed.

The reason MVV's calculations are flawed, is that MVV failed to incorporate into their calculations the fact that the Environment Act 2021 legislates that from 2026 all food and green waste must be removed from municipal waste heading for landfill (6) and that food and green waste is the primary source of Greenhouse gas such as methane and CO₂, making up a total of 30.3% of all municipal waste (7).

In addition, MVV have failed to incorporate the scheduled rapid decarbonisation of the power generating industry. The government have announced plans to completely remove gas as a fuel for generating electricity by 2035 (10). However, in their calculations MVV have assumed that gas and other fossil fuels would continue to be used to generate electricity from 2026-2066, throughout the whole 40 year lifetime of the incinerator.

Both these omissions falsely elevate the amount of CO₂e generated in the absence of an incinerator and thus greatly exaggerates the reduction in CO₂e that result because of the incinerator.

MVV are claiming reductions in CO₂e as being the result of the incinerator but reductions will be the result of the new legislation.

MVV knew of these impending changes to landfill composition and the cessation of using gas to generate electricity because they state so in their Climate chapter.

Quote 'There are a number of national and regional market and policy trends that are likely to lead to carbon emission reductions in the future which are beyond the control of the Proposed Development. Examples include the decarbonisation of power generation and the reduction in the amount of food in municipal waste.' (11).

To get around this inconvenient negative effect that this would have on their calculations, MVV cleverly discounted both of these factors by stating that for their assessment, these two market and policy trends, in the absence or presence of an incinerator, would be the same.

However, this is not correct. By not taking into account both of these factors MVV have skewed the data in their favour, by falsely elevating the CO₂e released from landfill and by falsely increasing the CO₂e produced from fossil fuels in the absence of an incinerator. This exaggerates the amount of CO₂e

that the incinerator would reduce by burning that waste. By showing a false net benefit of operating the incinerator has allowed MVV to reach the incorrect conclusion that the incinerator was of significant benefit to the climate and would have a positive effect on carbon budgets and targets.

MVV's conclusion using their contrived figures state that 10,816.83 ktCO₂e would be generated without the incinerator being built but only 8,246.0 ktCO₂e with the incinerator in operation (9). Thus, they were able to declare the benefit of having an incinerator. This conclusion is totally incorrect.

However, if they had used the correct calculations which would have removed the Greenhouse gas emissions generated from Green and food waste from 2026-2066 and by removing the contribution made by burning gas from 2035 until 2066, the correct figures show that only 7334.7 ktCO₂e would be generated in the absence of the incinerator but a much larger 10,456.24 ktCO₂e, would be generated with the incinerator in operation.

This corrected calculation allows the correct conclusion that MVV should have made, that operating this incinerator would result in an extra 3121.54 ktCO₂e being generated than if the incinerator was not built. This incinerator would therefore have a significant negative and detrimental effect on the climate and a negative impact on the UK Government being able to meet its carbon budget targets by 2050.

So, I put it to MVV to revisit their calculations and present them correctly by properly including the two market and policy trends, namely the decarbonisation of power generation and the reduction in the amount of food in municipal waste. that they admit will actually happen in their application.

The Detailed Objection (with references)

In their planning application (1) MVV state that the proposed Medworth Incinerator will burn 625,000 tonnes of municipal waste per year (2). In doing so they state that the incinerator will generate and release 273.33 ktCO₂e/year (2), which amounts to 10,993.2 ktCO₂e over the incinerators 40 year lifespan, from 2026 to 2066.

To keep the incinerator fed, MVV also state that fleets of lorries will make 80,496 two-way journeys per year (3), to collect waste from 12 authorities covering 9 counties (4), each lorry

travelling up to 164 km (4) to collect waste and then deliver the waste back to the Wisbech incinerator, travelling a total of 9,849,728 km per year (3). This means that in the 40 years the incinerator is operational, those lorries would have travelled 393,989,120 km pumping out a total of 271.68 ktCO₂e (3).

However, it is reasonable to deduct the CO₂e generated by the same number of lorries when they would still have to deliver waste to landfill, in the absence of the incinerator. This means that the net release of CO₂e due to the further distance travelled to the incinerator would be 164 ktCO₂e.

Adding together the emissions from burning the waste with the emissions created to collect and deliver the waste, will mean that in its lifetime, the incinerator will be responsible for the release of a combined total of 11,157.2 ktCO₂e into the atmosphere.

At the end of the planning application chapter on climate, MVV then assessed the likely effects of the Proposed Development with respect to our climate.

MVV concluded that the Proposed Development will have a significant beneficial effect on the climate and that the Proposed Development will have a positive impact on the UK Government meeting its carbon budget targets (5).

It seems incredible that after releasing over 11 million tonnes of CO₂e into the atmosphere that MVV could reach a conclusion which states that this would have a significant beneficial effect on our climate.

So, I looked at how they came to this conclusion.

MVV, in their calculations offset the CO₂e produced by the incinerator, against the amount of CO₂e the incinerator saved from being released elsewhere.

So, for example in the incinerator's absence, landfill would generate CO₂e but if the waste destined for landfill was burnt, then this 'avoided emission' could be claimed as a net saving. The use of net savings in their calculations also allowed MVV to claim that the CO₂e released from generating electricity by burning waste, was lower than if the electricity in the National grid had been generated by other means such as burning fossil fuels.

However, in making these calculations MVV have manipulated the data, to increase CO₂e released from landfill and to increase the CO₂e produced from fossil fuels. This exaggerated the amount of CO₂e the incinerator had saved by burning that waste. Showing a false net benefit of operating the incinerator allowed MVV to reach the incorrect conclusion that the incinerator was of significant benefit to the climate and would have a positive effect on carbon budgets and targets.

The reason MVV's calculations were flawed, with regard to the landfill data, MVV failed to incorporate into their calculations the fact that the Environment Act 2021 legislates that from 2026 all food and green waste must be removed from municipal waste heading for landfill (6) and that food and green waste is the primary source of GHG such as methane and CO₂.

Green and food waste make up a total of 30.3% of all municipal waste (7).

According to MVV the lifetime avoided GHG emissions from landfill for the Proposed Development, over the 40-year (2026-2066) (8) operational lifetime is estimated to be 11,489.35 ktCO₂e (9).

However, this figure is incorrect because from 2026, 30.3% of the GHG emissions would have been removed from the landfill. As the incinerator's lifespan is predicted by MVV to be 40 years from 2026-2066, 30.3% of the total GHG released from landfill should be removed from the 11,489.35 ktCO₂e giving the correct figure of 8,008.07 ktCO₂e.

In addition, MVV also reasoned that burning waste would generate electricity and thus reduce the release of GHG when electricity is generated from other sources including the burning of fossil fuels.

Again, this presumption is flawed because MVV have failed to incorporate the scheduled rapid decarbonisation of the power generating industry. The government have announced plans to completely remove gas as a fuel for generating electricity by 2035 and its replacement by wind turbine generated electricity which is carbon free (10). However, in their calculations MVV have assumed that gas and other fossil fuels would continue to be used to generate electricity from 2026-2066, throughout the whole 40 year lifetime of the incinerator.

According to MVV the lifetime avoided emissions for the Proposed Development, from electricity generated by other means in the national grid, over the 40-year (2026-2066) operational lifetime, is estimated to be 3,203.20 ktCO₂e (9). However, this figure is incorrect because it does not subtract the 31 years of the incinerator's lifespan when GHG emitted from gas generated electricity would have stopped.

Currently 39.8% of electricity in the national grid is produced by burning gas (12).

The correct figure is calculated when 3,203.2 ktCO₂e is reduced by 39.8% for 31 years which would make the actual figure 992.99 ktCO₂e.

MVV knew about the impact of stopping the burning of fossil fuels to generate electricity and they also knew that food waste was going to be removed from burnable municipal waste, as they stated so in their climate assessment. Quote :

'There are a number of national and regional market and policy trends that are likely to lead to carbon emission reductions in the future which are beyond the control of the Proposed Development. Examples include the decarbonisation of power generation and the reduction in the amount of food in municipal waste.' (11).

To get around this inconvenient negative effect that this would have on their calculations, MVV cleverly discounted both of these factors by stating that for their assessment, these two market and policy trends, in the absence or presence of an incinerator, would be the same.

What MVVV dishonestly failed to state was that by ignoring the reduction of CO₂e released from landfill by the removal of food waste and by ignoring the reduction of CO₂e produced when gas generated electricity is removed from the national grid, greatly inflates the benefit of an incinerator, because the amount of 'avoidable emissions' had been massively increased.

Furthermore, failure to subtract the CO₂e released from landfill by the removal of food waste and by ignoring the reduction of CO₂e produced when gas generated electricity is removed from the national grid, falsely increases the amount of CO₂e emitted in the absence of the incinerator because MVV failed to deduct it from their calculations.

MVV are claiming that it will be the incinerator that would be reducing the release of CO₂e this is not entirely true as it will be the new legislation that will be reducing CO₂e release.

MVV's conclusion using their contrived figures state that 10,816.83 ktCO₂e would be generated without the incinerator built but only 8,246.0 ktCO₂e with the incinerator in operation (9). Thus, they were able to declare the benefit of having an incinerator.

However, by using the correct calculations which have removed the GHG generated from Green and food waste from 2026-2066 and by removing the contribution made by burning gas from 2035 until 2066 the correct figures show that only 7334.7 ktCO₂e would be generated in the absence of the incinerator but a larger 10,456.24 ktCO₂e, with the incinerator in operation.

This then allows the correct conclusion that MVV should have made, that operating this incinerator from 2026-2066 would result in an extra 3121.54 ktCO₂e being generated than if the incinerator was not built, which would have a significant negative and detrimental effect on the climate and a negative impact on the UK Government being able to meet its carbon budget targets by 2050.

- 1) Medworth Energy from Waste Combined Heat and Power Facility PINS ref. EN010110 Document Reference: Vol 6.2 Revision 1.0 June 2022 Environmental Statement Chapter 14: Climate.
- 2) As above Chapter 14: Climate. 14-9-23 Table 14.27
- 3) As above Chapter 14: Climate. 14-9-28 Table 14.29
- 4) As above Chapter 14: Climate. 14-9-26 Table 14.28
- 5) As above Chapter 14: Climate. 14-12-2
- 6) Legislation.Gov.UK Environment Act 2021 57 45A
- 7) WRAP National Municipal Waste Composition, England 2017 3.1 Table 2
- 8) As above Chapter 14: Climate. 14-5-6
- 9) As above Chapter 14: Climate. 14-62 Table 14.31
- 10) Gov.UK . Department Business, Energy and Industrial strategy. Plans unveiled to decarbonise UK power systems by 2035.
- 11) As above Chapter 14: Climate. 14-27 14-5-5

12) Department for Business, Energy and Industrial Strategy, UK Energy Brief 2022 page 28.