

P-05-1040 Introduce a moratorium on the approval any new large scale waste incinerators in Wales, Correspondence – Petitioner to Committee, 09.11.20

I have seen the Minister's initial response to my petition and I would like to make a number of further comments.

1. Firstly, I would like to urge the Minister and her Deputy Minister to acknowledge that there is growing international scientific concern around incinerators and their environmental impact. The Welsh Government has declared a Climate Emergency and set 2050 as the target to achieve zero carbon. The UK has also signed up to the international Paris Agreement.
2. Incinerators produce high levels of greenhouse gases in the form of Carbon Dioxide (Co2). The quantities depend very much on what is burnt, but research this year by the Environment Agency has found that between 0.7 and 1.7 tonnes of Co2 is generated per tonne of waste incinerated (link to research below). If large amounts of plastic are burnt, this ratio will increase significantly. Incinerator developers refer to incineration as 'green' and 'low carbon'. This is not correct.
3. Incinerator developers argue that incineration is better than landfill. However, this depends very much on what is contained in the waste. It is important to highlight that it is the organic waste in landfill that produces methane. Inorganic waste in landfill, such as plastics, produce neither methane nor carbon dioxide. Furthermore, in Wales we have a good track record. Methane levels are, significantly reduced in Wales in a number of ways. Firstly, Wales successfully recycles a high proportion of its organic waste through separate collections of food waste. This is then recycled into compost. Secondly, landfill sites recover methane and turn it into energy. Thirdly waste is covered to prevent the escape of methane.
4. In the case of incinerators, the emissions of carbon dioxide depend on what is burnt. Unfortunately there is no requirement for these emissions to be restricted and so there is no incentive to reduce Co2 emissions by changing the mix of the waste. A study by Zero Waste Scotland in October 2020 (linked below), commissioned by the Scottish Government, found that Energy From Waste Incinerators can "no longer be considered a Low Carbon Technology". The study found that Energy from Waste plants in Scotland had a carbon intensity of 509g /kWh. The only source of electricity that was higher was coal. As we know, coal fire stations are in the process of being decommissioned. Truly green energy sources create very low levels of carbon (i.e. wind, 20 to 30 g of CO2 per kWh, solar 88 g of CO2 per kWh, hydro 2 to 13 g of CO2 per kWh). The reality is that even Energy from Waste EfW incinerators will soon be the most damaging form of electricity production in terms of greenhouse gases.
5. It should also be said that incinerator developers claim that their EfW facilities will be ready to provide heat. In practice this very rarely happens simply because there are no suitable customers available, sufficiently close at hand for this to be financially viable.
6. Incinerator developers may also argue that the more modern R1 classification incinerators are not environmentally problematic. Again, this argument is being rebutted by scientists across Europe, as has been highlighted by Dr Ingrid Behrsin, a researcher in the fields of waste and renewable energy policy, who states, *"It has become clear that the R1 formula and its subsequent modifications are criticised by not only anti-incineration activists, but member states' technical representatives and career scientists as well. They decry it as explicitly political and economic, rather than an objective scientific formula; economic interests do not necessarily, and often don't, translate into good science."* (Article linked below).

With regard to the Minister's comment that incineration is a "transitional step" in the efforts to become a circular zero waste economy. I'd like to respond as follows:

1. A recent study commissioned by the Welsh Government and carried out by WRAP Cymru (linked below) found that 74.5% of residual Commercial and Industrial waste sent to incineration in Wales could potentially have been recycled.
2. I would like to highlight Wales' "ahead of the game" track record on waste management. Wales achieves high recycling rates and has a target of 70% by 2025. Due to the efforts to become a circular economy (including elimination of waste at source, reuse and recycling increase), waste going to incineration and landfill will reduce over the next 30 years, which will release more and more capacity to existing incinerators.
3. There is a concern that in order for incineration to remain commercially viable, we will see more non-recyclable waste incinerated. Because of this, very careful consideration needs to be given to how much incinerator capacity is required in Wales over the next 30 years. In reality, the operation of already operating incinerators cannot be gradually phased out as the requirement for them diminishes. To be commercially viable, they need to operate at full or close to full capacity.
4. The new breed of incinerators will not be PFI developed in partnership with Welsh Government to process Local Authority waste. Instead they will be fully privately funded facilities that will be free to contract waste from anywhere in the UK. This highlights another concern, that there are private waste incinerators in the pipeline that plan to bring in waste from outside of Wales, in order to ensure they can run at capacity so they are commercially viable. There is a worry that any new incinerators in Wales would increasingly source waste from England and beyond to fill their capacity shortfall. This would be bad for Wales and it would also be bad for England because it would disincentivise recycling and encourage excessive transportation, contrary to the principle of proximity.
5. I would also like to ask the Minister whether waste imported into Wales from England which is subsequently not recycled will increase the amount of total waste not recycled in Wales and impact our strive to meet recycling targets?
6. I refer the Minister to comments made by Professor Ian Boyd, the previous DEFRA Chief Scientist, to the UK Government Environment Committee and his comments and concerns about adding particulate matter to the atmosphere, incineration being worse than modern landfill as well as the economic fragility of incinerators:
<https://www.parliamentlive.tv/Event/Index/9c6b4590-5882-4464-a945-29783d4af339>
As highlighted by Professor Ian Boyd, incineration destroys resources forever and breaks the Circular Economy. We know from the WRAP report (referred to above) that a large proportion of what is incinerated could have been recycled at the present time. In the future, as technology improves, there will be an opportunity to recover even more waste materials for recycling. This opportunity will remain if those materials are landfilled but not if they are incinerated.
7. It is important therefore that Wales should carefully assess its diminishing need for future waste incineration capacity and compare this with the capacity that is already available. It may well be that any shortfalls in capacity are short-term only. It would be wrong in these circumstances to make a commitment to additional incinerators, which could result in considerable over capacity in relation to Wales' needs in the medium and long term.

I urge the minister to consider these points and to once again, show that Wales can lead the way on this. A moratorium would provide an opportunity for Wales to reassess both its needs for incineration in the light of all the initiatives it is taking at the upper levels of the waste hierarchy, as well as the environmental impact that incineration is having. In light of the above, if the Minister is still minded to not put in place a Moratorium, I would like to see the detailed reasoning for this.

Finally, please note that in addition to the online signatures, members of my community have also collected physical signatures from residents and I have a further 47 signatures. I am not aware of this petition having been shared nationally, and so I believe that this amount of signatures from a fairly small rural area of Wales, is significant.

RESEARCH LINKS

- https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/923125/Pollution-inventory-reporting-incineration-activities-guidance-note.pdf
- <https://www.wrapcymru.org.uk/reports/composition-analysis-commercial-and-industrial-waste-wales>
- <https://www.zerowastescotland.org.uk/sites/default/files/ZWS%20%282020%29%20CC%20impacts%20of%20incineration%20SUMMARY%20REPORT%20FINAL.pdf>
- <https://www.parliamentlive.tv/Event/Index/9c6b4590-5882-4464-a945-29783d4af339>
- <https://www.euractiv.com/section/circular-economy/opinion/waste-incineration-is-waste-incineration-no-matter-the-classification/?fbclid=IwAR1-D5AmRZVhgyjFGpnl4xEobRy66VXmYPupg-bxOBYJKC0aK7J-uCP1pYo>