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**Concerns regarding the Government's irresponsible and unambitious reply to the
10-point action plan to phase out waste incineration and accelerate the transition to zero waste**

Dear Minister,

Thank you for your letter of 22nd June 2023 (Your reference PO2023/09442/JA) responding to the letter of 24th April 2023, which was addressed to the Prime Minister. We have carefully read your reply and we have not identified any convincing reasons why the UK Government should not adopt all 10 points advanced in our letter. The reply from Defra gives rise to serious concerns regarding the Government's irresponsible and unambitious approach. Defra's specious excuses for Government inaction fail to reflect the urgent need for additional actions.

Below we repeat the 10 action points (in bold) and respond to your corresponding comments.

1. An immediate moratorium to prevent any new incineration schemes coming forward. This means a ban on the granting of new planning permissions and on the issuance of new permits.

We note that Defra's letter starts by explaining that the reason the Government has no plans to introduce a moratorium on new energy-from-waste (EfW) capacity in England is because the Government does not recognise any "financial advantage for either the public sector or the market to deliver excess capacity and we are clear that proposed developments must not result in overcapacity of EfW treatment at a national or local level" with respect to incineration overcapacity. This ignores current market distortions that mean the waste and resources market is not free and unfettered.

These distortions are so extreme that even the Director of a waste consultancy regularly used by the industry has felt compelled to publicly expose how those proposing EfW projects are increasingly abandoning their 'common sense' and asking for unreasonable assumptions to be made in due diligence reports on waste availability to justify new capacity.¹

In this market-driven approach to waste and resources, material that could be recycled is likely to be incinerated instead if the cost of incineration is less than the cost of recycling. This appears to be the case, as we know that material that could and should be recycled is instead being used as incinerator feedstock. As Defra's 2020 *Resources and Waste Strategy: Monitoring Progress* report notes: "Of total residual waste from household sources in England in 2017, an estimated 53% could be categorised as readily recyclable, 27% as potentially recyclable, 12% as potentially substitutable and 8% as difficult to either recycle or substitute". Clearly the current situation means that the market is prioritising incineration over recycling, in contravention of the waste hierarchy.

The landfill tax was a successful intervention in discouraging landfill that resulted in some unintended consequences. The fact that the landfill tax has not been accompanied by an incineration tax means that material diverted from landfill is all too often sent for incineration, irrespective of the best environmental outcome for that material.

Unfortunately, the full costs to society of incineration are not factored into the price of incineration. Even with inclusion in the UK Emissions Trading Scheme (ETS), incinerator operators will not be paying the full cost of incinerator emissions, nor the true cost of incineration acting as a barrier to the circular economy.

Incinerators release significant amounts of air pollution, including pollutants with no safe threshold below which harm does not occur, and including those that are neither regulated nor monitored. Incinerator operators pay nothing for the harm to human health arising from such increased air pollution.

These market failures are made even worse because the mining/extraction/manufacture of raw materials, which are also typically associated with significant greenhouse gas emissions and other air pollutants, are also not fully factored into the cost of those processes. Damaging extraction of raw materials is effectively subsidised, with society paying the price. As a result of these externalities, both incineration and raw materials are cheaper than they should be. This interference with the free market perversely encourages more incineration and discourages recycling.

In 2021 the Climate Change Committee (CCC) argued that: “If EfW usage is left to grow unchecked, EfW emissions will quickly exceed those of the CCC pathway while undermining recycling and re-use efforts”.ⁱⁱ

Another market failure that justifies intervention, such as a moratorium, is the fact that those making decisions about new incineration capacity do not have the benefit of the Government report that the CCC stated in 2022 was necessary when they called upon Defra to: “Publish an assessment of residual waste treatment capacity needs through to 2050, consistent with meeting committed and prospective recycling and waste reduction targets.”

Following such statements, on the 30th of June 2023 the CCC called for “a moratorium on additional EfW capacity until a review of capacity requirements has been completed and an updated assessment of residual waste treatment capacity requirements published”.ⁱⁱⁱ

Both Scotland and Wales saw fit to ban new incinerators to support the move towards a more circular economy, and we agree with the CCC that a moratorium is similarly justified for England. As set out above, the Government’s current excuse for inaction simply does not stand up to scrutiny.

2. The formulation of a comprehensive National Incineration Exit Strategy, to include a strategic approach to decommissioning the oldest and least efficient incinerators first and then to progressively phasing out other capacity as we move towards zero waste.

The Government draws attention to its ambition to halve residual waste per capita by 2042 relative to the 2019 base year. Given the currently high level of English incineration capacity, if this target is to be met then there is an obvious need to progressively reduce this incineration capacity whilst increasing domestic recycling and composting capacity.

In response to a Parliamentary Question about the assessment that Defra has made of the effectiveness of the UK’s recycling infrastructure on meeting domestic demand, Defra set out how “Defra intends to publish a Waste Infrastructure Roadmap in the coming months. This will set out anticipated waste arisings to 2035, taking into account the impact of Defra’s Collection and Packaging Reforms, and will map this against known waste management infrastructure. Once published, this will provide a signal as to where there is considered to be a likely over or under-provision of waste management capacity to support investors and local authorities in decision making”.^{iv}

This reply from Defra highlights the shortcomings of the proposed Waste Infrastructure Roadmap:

- The Roadmap would fail to account for the impact of halving residual waste by 2042 and of reducing municipal residual waste in line with the Environmental Improvement Plan and Environment Targets, despite the CCC’s recommendation that the impact of waste reduction targets be considered; and
- The Roadmap would only consider the situation up to 2035, but as incineration capacity can last for decades consideration needs to be given as to whether incineration capacity built today would still be needed between 2035 and 2050, in line with the CCC’s call for such an assessment to extend to 2050.

The Government’s proposed Roadmap appears to run out of road and could end up taking us in the wrong direction. Consequently there remains a need for a National Incineration Exit Strategy which sets out how we move away from incineration and towards the circular economy.

3. The ring-fencing of Central Government funding to enable councils to curtail contractual commitments to send waste to existing incinerators (to address ‘lock-in’), alongside the withdrawal of any public funding that supports waste incineration.

Defra’s response to our letter is suspiciously quiet on this point, but the Government will need to grapple with these issues if it wants its various waste and resource measures and targets to be delivered by local councils.

It does not matter how many ‘signals’ the Government’s proposed Roadmap sends to potential investors when councils are locked into waste contracts that tie them to high rates of incineration and low rates of recycling.

When Dr Therese Coffey MP, then Parliamentary Under Secretary of State for Defra, wrote to councils with the lowest recycling rates in July 2017 to ask them to explain why they were doing so poorly, many responded by explaining how their poor recycling rates were due to the long-term waste contract that they had entered into at the encouragement of the UK Government.^{v, vi}

For example, the East London Waste Authority explained in July 2017 that their waste PFI contract “presents a major obstacle, both in terms of technical restrictions put on what materials can be collected separately, but also on the costs of disposing of waste and the lack of financial incentives for achieving higher recycling rates”.

Given the trajectory needed to reduce residual waste arisings and improve recycling rates in line with Government commitments, it is imperative that those barriers be addressed as a matter of urgency. If the Government wants councils that are going down the wrong path to perform a U-turn, then they need to give them an off-ramp.

Furthermore, if the Government continues to provide financial support for EfW schemes then this will continue to send a mixed message that further distorts the market in favour of incineration over recycling.

For example, it is not acceptable to fund heat networks that depend on incinerators to continue operating without first having produced a strategy to assess and address the issue of long-term incineration overcapacity, or else the Government could be encouraging the construction or extension of incinerators that are later identified as a priority for cancellation or early closure.

4. The revocation of all environmental permits for incinerators that have yet to enter commissioning.

Not only is the Government wrong not to recognise the importance of introducing an explicit blanket moratorium on new incineration capacity in England, the Government also fails to appreciate the need to go further than this by revoking or suspending all environmental permits for incinerators that have yet to enter commissioning.

Dr Colin Church, in his incineration review report commissioned by the Scottish Government, found that: “given the risks that incineration poses to human health and the environment, and the risk of lock-in, Scotland should not construct more capacity than it needs”.

England faces similar risks, but with the added complication that it has a very high level of incineration capacity that has planning permission that has not yet entered construction. It is thus imperative that the UK Government stop issuing not only planning consents to new incinerators, but also environmental permits for incinerators. Incinerators will not be built if they do not have a permit to operate. There is scope to go further, by revoking existing incinerator permits for EfW plants that have yet to enter commissioning.

There is currently around 18 million tonnes of incineration capacity in England that is either operational or under construction. Given that the level of residual waste arisings needs to fall significantly, and that not all waste is combustible, it should be clear that to allow any more English incineration capacity to be operated – even that which has planning permission – would exacerbate incineration overcapacity at the local, regional and national levels.

Professor Sir Ian Boyd, former Chief Scientific Adviser to Defra (2012-2019), explained the link between increases in incineration capacity and the undesirable perpetuation of residual waste arisings in March 2021, stating: “There are a lot of people who are highly incentivised to incinerate waste. Because of the investments we make in waste power plants, we end up a lot of the time creating a market for waste, and therefore trying to generate more waste in order to generate the inputs for the power plants that we’ve made such large investments in. My feeling is that we’ve got to use the capacity we have rather than create more capacity, because if you create more capacity you create more demand for materials, and that is simply cranking up the amount of material that comes into the system, and the very last thing we should be doing is, when we throw it away, is putting it in an incinerator”.^{vii}

When the Government announced its proposals to halve residual waste, they rightly stated that: "Tackling residual waste reduces the environmental impacts of treatment, including air, soil, and water pollution [...]. It is more sustainable to prevent waste completely and, where waste is unavoidable, to recycle it [...]. The proposed target can drive both waste minimisation and recycling of unavoidable waste..." It also noted that a reduction in residual waste treatment "will lead to an increase in the reuse, repair and remanufacture [...]" and move England's waste system to a more circular economy".^{viii}

If the UK Government allows more incinerators to be built and brought into use, then that would undermine this move by creating a continued demand for residual waste that could far exceed the level of genuinely residual waste that would be available to burn. Excess incineration capacity would, by the Government's argument, give rise to avoidable air, soil, and water pollution. As such, the Government should do everything it can to avoid such overcapacity, including by revoking, suspending, or withholding permits for new incineration capacity.

5. The immediate inclusion of incineration in the UK Emissions Trading Scheme and the introduction of an incineration tax, priced to ensure alternatives such as recycling and waste minimisation are always less expensive than incineration and thus more attractive to investors and decision-makers. These measures should include incineration at cement kilns to avoid unintended consequences.

Whilst the Government's inclusion of incineration in the UK's ETS is to be welcomed, it will not come into force until 2028, and the delays are giving rise to significant unpaid costs to society. According to Tolvik, over 7 million tonnes of fossil CO₂e was emitted from UK incinerators in 2022.^{ix} Based on Government carbon values, this equates to a central unpaid cost to society of more than £1.7bn.^x Not only is the amount incinerated expected to go up as more capacity comes online, but the abatement cost of those greenhouse gases is also projected to rise, meaning the unpaid cost to society will also rise in the absence of prompt Government action.

The inclusion of incineration in the UK ETS does not remove the need for an incineration tax, priced to ensure alternatives such as recycling and waste minimisation are always less expensive than incineration and thus more attractive to investors and decision-makers. The UK ETS reflects the direct fossil CO₂ emissions of incinerators, whereas an incineration or a 'linear economy' tax would reflect the loss to the circular economy of incinerated materials and would bolster the preference for the top tiers of the waste hierarchy.

Because residual waste can be converted into fuel for cement kilns, it is important that attempts to implement the 'polluter pays' principle for incineration prevents a diversion of residual waste to cement kilns as a loophole, as such a diversion from one form of combustion to another would not protect the circular economy.

6. The urgent completion and publication of the Government's long-overdue residual treatment capacity analysis. This must take account of all residual treatment capacity that is operational or under construction and be premised on the achievement of the Government's targets for reducing municipal residual waste by 29% by 2027 and reducing all residual waste by 50% by 2042.

While Defra's response to our letter of 24th April 2023 refers to the development of a Roadmap that would include capacity analysis, as noted above, that Roadmap is not currently expected to do what is being called for in our letter and by the CCC. Defra's response makes no attempt to justify this failure. We therefore reiterate our call for the urgent publication of a residual treatment capacity analysis that accounts for all residual treatment capacity that is operational or under construction and that is premised on the achievement of the Government's targets for reducing municipal residual waste by 29% by 2027 and reducing all residual waste by 50% by 2042.

7. A halt to the incineration and export of waste plastic through radical reduction of plastic at source.

The Government's currently proposed plan with respect to addressing the plastic crisis is wholly inadequate, lacking the leadership and ambition required to turn off the plastics tap and minimise plastic pollution.

8. A ban on the import of refuse-derived fuels (RDF) and solid recovered fuels (SRF) from outside the UK.

This is another point that was simply not addressed in Defra's response to our letter of 24th April 2023. As long as waste, in the form of RDF or SRF, is allowed to be imported from outside the UK, those considering adding yet more English incineration capacity can be expected to bypass the Government's stated intention, as expressed in Defra's response, to "reduce the volume of waste needing to be treated via EfW".

The prospect of such waste imports is already being discussed by the incineration industry,^{xi} and the Government's continued inaction in this area is alarming, not least because of the prospect of increasing the UK's greenhouse gas footprint whilst worsening domestic air quality.

9. Enhanced commitments to monitoring and reducing pollution from incineration, including through unannounced inspections, more frequent monitoring of dioxins, stricter emissions limits, and more funding for enforcement. These steps are required given that incinerators are imposed on communities against their will, harming their air quality without their consent, and that incinerators are more likely to be built in poorer areas and in areas with higher racial and ethnic diversity. Everyone deserves clean air.

Whilst Defra's response refers to existing regulation of the incineration industry by the Environment Agency, no mention is made of improving upon the current regulatory regime, issues related to incinerators being imposed on communities against their will, or the disproportionate impacts on air quality in poorer areas with higher racial and ethnic diversity. That the Government's response does not even seek to address the fact that "A rapidly increasing number of incinerators in the UK are being disproportionately built in low-income areas and neighbourhoods with high populations of people of colour" is deeply worrying.^{xii}

Defra's response claims the Environment Agency, as the incineration industry regulator, requires "the use of best available techniques to minimise emissions". This statement is misleading. As we know from dozens of environmental permit consultations and subsequent decisions, the permitting system does not actually require the 'best' available technique. 'BAT', as it is called, is a technical term with a narrower meaning than that advanced in Defra's response. In practice, as per the evidence provided by UKWIN to the Environment, Food and Rural Affairs Committee (EFRACOM) inquiry into the work of the Environment Agency, BAT simply means that the levels of pollution are deemed by the Environment Agency to be justifiable based on the preference of the operator, the cost to the operator and other relevant considerations.^{xiii}

The Keighley (North Yorkshire) incinerator provides an example where prioritisation of operator costs resulted in increased levels of pollution. In that case, the Environment Agency permitted a lower stack height because requiring a higher stack would increase developer costs. Despite the Environment Agency's position that the higher stack would reduce the facility's adverse impact, they decided to reward the operator by allowing them to include the additional costs in their cost-benefit analysis (rather than considering those costs to have been self-inflicted and thus 'artificial').

The Environment Agency confirmed that the Government's approach is to prioritise the protection of operator profits over and above requiring the best outcomes for environmental and human health, stating in its Decision Document that: "The Applicant submitted an assessment of pollutant process contribution against the marginal cost of increasing stack. The assessment showed that increasing costs outweigh any environmental improvements from further stack height increases above 60m".^{xiv}

Defra's response refers to how incinerators "must also meet strict emissions limits for a number of pollutants such as oxides of nitrogen, sulphur dioxide, particulate matter and dioxins" without acknowledging that incinerator operators are not required to meet the emissions limits all of the time, as there are a number of exceptions which allow them to exceed the limits without exceedances of permitted levels being considered a breach. Incinerators routinely breach their permits, but operators are very rarely fined for these breaches.

Defra's response also fails to acknowledge that dioxins are typically only monitored twice a year, or that there is no monitoring at all of the quantity of microfine particulate matter released by incinerators as this is lost in the measurement of the mass of larger microparticles such as PM 2.5s and PM10s. Furthermore, the permitting regime does not ensure that air pollution levels remain within WHO recommended levels, and according to a Defra briefing: "There is no safe level for particulate matter (PM10, PM2.5), while NO2 is associated with adverse health effects at concentrations at and below the legal limits".^{xv}

10. The introduction of mandatory audits of incinerator feedstock to establish and make public how much of the material being sent to incineration could have been recycled or composted.

In light of Defra's finding, mentioned above, that material that could and should be recycled is instead being used as incinerator feedstock, it is both surprising and disappointing that Defra has not engaged with us regarding this point. This is especially concerning when one considers that the Government, in the Resources and Waste Strategy, acknowledges how "Understanding waste composition is fundamental to the Strategy's objectives [...]. We only have a partial understanding of how much value is lost in residual waste because we do not know enough about the composition of the waste. Compositional studies do exist but are neither recent nor comprehensive in coverage".

We therefore once again repeat our call for the publication of mandatory audits of incinerator feedstock to establish how much of the material being sent to incineration could have been recycled or composted. Such facility-level information would help inform those sending material to those incinerators, provide valuable feedback to improve collection methodologies, and inform public information campaigns.

Conclusion

We look forward to hearing the detail of how the Government plans to ensure swift, decisive action on each of these ten points to deliver the transition UK residents require.

Please respond to coordinator@ukwin.org.uk.

Sincerely,



Joined by



and Carlisle Residents Against Incinerator (CRAIN), Docks Incinerator Action Group (DIAG), Parishes Against Incinerator (PAIN), Residents Against Incinerators (RAIN), Rockcliffe and District Action Group, and Stop Incineration North East (S.I.N.E).

Endnotes

- ⁱ 'Understanding the risk of EfW overcapacity' (19 August 2020) available at <https://www.letsrecycle.com/news/understanding-risk-efw-overcapacity/>
- ⁱⁱ 2021 Report to Parliament: Progress in reducing emissions (Climate Change Committee, June 2021) available at <https://www.theccc.org.uk/publication/2021-progress-report-to-parliament/>
- ⁱⁱⁱ 2023 Report to Parliament: Progress in reducing emissions (Climate Change Committee, June 2023) available at <https://www.theccc.org.uk/publication/2023-progress-report-to-parliament/>
- ^{iv} Recycling: Infrastructure – Question for Department for Environment, Food and Rural Affairs, UIN 184374, tabled on 10 May 2023 available at <https://questions-statements.parliament.uk/written-questions/detail/2023-05-10/184374>
- ^v Examples of incineration harming recycling (UKWIN, July 2019) available at <https://ukwin.org.uk/files/pdf/UKWIN-Examples-of-incineration-harming-recycling-July-2019.pdf>
- ^{vi} Local authority letters on recycling rates (published by Defra in March 2018) available at <https://www.gov.uk/government/publications/local-authority-letters-on-recycling-rates>
- ^{vii} Dirty Truth About Your Rubbish (Channel 4 Dispatches, 8 March 2021) available at <https://www.channel4.com/programmes/dirty-truth-about-your-rubbish-dispatches>
- ^{viii} 'Consultation on environmental targets' (opened by Defra on 16 Mar 2022) available at <https://consult.defra.gov.uk/natural-environment-policy/consultation-on-environmental-targets/>
- ^{ix} 'UK Energy from Waste Statistics – 2022' (Tolvik, May 2023) available at <https://www.tolvik.com/published-reports/view/uk-energy-from-waste-statistics-2022/>
- ^x 'Valuation of greenhouse gas emissions: for policy appraisal and evaluation' (BEIS, 2 September 2021) available at <https://www.gov.uk/government/publications/valuing-greenhouse-gas-emissions-in-policy-appraisal/valuation-of-greenhouse-gas-emissions-for-policy-appraisal-and-evaluation>
- ^{xi} 'UK could move to a waste import market - RDF experts' (ENDS, 17 March 2023) available at <https://www.endswasteandbioenergy.com/article/1816895/uk-move-waste-import-market-rdf-experts>
- ^{xii} 'UK waste incinerators three times more likely to be in poorer areas' (Unearthed, 31 July 2022) available at <https://unearthed.greenpeace.org/2020/07/31/waste-incinerators-deprivation-map-recycling/>
- ^{xiii} EFRACOM Work of the Environment Agency Inquiry – Written Evidence Submitted by UKWIN (2 March 2023) available at <https://committees.parliament.uk/writtenevidence/118874/pdf/>
- ^{xiv} Environment Agency Permit Decision Document for EPR/ZP3537AT for Endless Energy Limited at: Airedale Road, Keighley, West Yorkshire, BD21 4LW available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/942409/Decision_Document_-_ZP3537AT.pdf
- ^{xv} 'Air Quality: A Briefing for Directors of Public Health' (Page 61) (Defra, March 2017) available at <https://laqm.defra.gov.uk/assets/63091defraairqualityguide9web.pdf>