

**Additional written evidence submitted by Matthew Clark
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Chartered Institute of Environmental Health) and Jim McManus
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**Environmental Audit Committee oral evidence
hearing – Outdoor air quality targets
Response to follow up questions**

Objectives and Scope

Following the [joint submission of written evidence by ADPH, ADEPT and CIEH on air quality](#) and the subsequent oral hearing session on 14th June 2023 at Westminster, Matthew Clark (Member of the Environmental Protection Advisory Panel, The Chartered Institute of Environmental Health) and Jim McManus (President, Association of Directors of Public Health) provide written responses on two follow-up questions from the Environmental Audit Committee.

Our Position

Q1: According to the Department for Environment, Food and Rural Affairs (DEFRA), industrial combustion of biomass fuels contributed to 18% of PM_{2.5} nationally. Does that 18% include or exclude Drax?

The [National Atmospheric Emissions Inventory](#) states that 'Industrial use of biomass fuels is increasing and has, as a result, become a more significant contributor to UK emissions – 18% of UK emissions of PM_{2.5} in 2020'.¹ When considering the [DEFRA National Statistics Emissions of air pollutants in the UK – Particulate matter \(PM10 and PM2.5\) Updated 22 February 2023](#), it notes that: 'The burning of fuel used on industrial sites, either to generate energy, or to drive mobile machinery, is a major source of particulate matter emissions, accounting for 26% of PM_{2.5} emissions and 16% of PM₁₀ emissions in 2021. Emissions from this have increased, largely due to the combustion of biomass fuels which increased by 379% between 2010 and 2021 to represent 18% of total PM_{2.5} emissions.'²

Data on large emitters can be found on [National Atmospheric Emissions Inventory's website](#) by accessing the 'Get Data' link at the bottom of the page. The Drax site is included on this list and is by far the largest contributor in the sector (Major power producers).³

Taking this publicly available data into account, and to the best of our knowledge, this suggests that all sources of energy generation activity have been included in the industrial combustion statistics which would include Drax power station. The data suggests that these sources are large contributors given the scale at which they operate.

It is often stated that wood burning is renewable. Some also argue that wood burning is carbon neutral, and its impact is lower than fossil fuels if we plant as many trees as we are burning. However, it is also important to consider the long time required for biomass to capture the carbon released by burning as

well as the need to fulfil global targets to reduce greenhouse gas emissions by 45% by 2030 and reach net zero by 2050.^{4 5} Even if wood burning may be more sustainable from a climate change perspective, it would also result in air pollution and PM_{2.5} emission which would harm human health. There should be a strong, funded national policy to reduce emissions from power generation activity in future years.

Q2: What does a framework look like to control, and reduce, the emissions and health impact from domestic solid fuel burning?

Domestic combustion is a major source of particulate matter emissions in 2021, accounting for 16% of PM₁₀ emissions and 27% of PM_{2.5} emissions.⁶ It leads to both indoor and outdoor pollution. In order to create a framework to control and reduce the emissions and health impact of domestic solid fuel burning, a strong regulatory framework should be created to substitute the fragmented policies on smoke control areas (SCAs), as currently there is no duty to put in place SCAs and different LAs place different emphasis on this. Any framework will require adequate and support to local authorities (LAs). To integrate this agenda into the wider policy area on sustainability, efforts should be made to cut heat demand in residential properties to reduce the need for domestic combustion.

The central government plays a key role in joining up the work of different departments at local, regional and national levels to enable a more robust regulation framework. It should provide a country wide perspective to support and inform advice, guidance, and regulations' enforcement at local level.

A robust regulation framework on domestic combustion

The revised Air Quality Strategy has laid out a few proposals on domestic solid fuel burning. We agree that significant action should be taken to better regulate domestic wood burners, particularly in urban areas, with a particular focus on removing the most polluting appliances and prohibiting new appliances from being installed. We would welcome the proposed ban on retailers selling coal for domestic burning and the phasing out of smoky coal considering that 40% of UK emissions come from households. We would also welcome tougher emission standards and policies to incentivise a shift towards newer appliances. Trading Standards play a key role in enforcing emission standards.

Although the mandatory certification scheme does help to indicate that wood being sold is deemed 'dry', more could be done to encourage the use of more modern burning stoves and less polluting wood. More restrictions should also be imposed within the existing regulatory framework to outlaw the more polluting wood burners, particularly open fire scenarios, in urban areas as a first step. Increased regulation for the installation of solid fuel burners, such as minimum chimney height and installation only of Eco-design burners, to reduce impacts and local air quality impacts should be considered.

There are areas of domestic burning which are not regulated, such as bonfires as a waste disposal method. There are many alternatives which are much more environmentally friendly and less polluting such as composting and digestion processes. These methods should be promoted to reduce the need for domestic burning. In addition, businesses should not be allowed to apply for exemptions to burn 'green' waste. Relevant legislation should be revised to put a stop to pollution from burning.

We appreciate that the paragraph above strays away from domestic burning. However, it is important to consider all similar sources of air pollution so as not to create perceived or actual divides in public consciousness. For these reasons, we urge the Government to establish a stronger framework on reducing air pollution in general as part of the sustainability agenda with domestic combustion

incorporated as one of the key policy areas. The Government should take immediate action on the burning of solid fuels in all public spaces so that emission reduction could be achieved at a larger scale, benefitting the health of a larger population. Agricultural emissions and other pollutants created in the home (e.g., the burning of gas) should be given sufficient attention as well. Domestic premises should be moved away from all sources of all air pollutants.

An improved policy on smoke control areas (SCAs)

The enforcement of legislation around smoke emissions from domestic properties is problematic for LAs due to the large scale of burning taking place and reduced resources available to deal with offending properties. Realistically LAs cannot effectively control what people burn on their stoves and lengthy prosecutions for offences will not likely affect demand for appliances. Whilst the new powers introduced by the revised Air Quality Strategy to issue fixed penalties for clean air act offences are welcomed, the significant scale of domestic solid fuel burning requires action at a national level to control the fuel and stoves which are available. It should also be made easier for LAs to declare SCAs and it is crucial to promote a national policy to extend SCAs over urban centres in a way that does not burden LAs. This would help to avoid post code lottery in the future. Promoting a level playing field will reduce confusion and promote greater clarity for all those involved.

In addition, it is important to provide targeted messaging to reduce solid fuel burning. This could be achieved through health/environment themed campaigns. It seems that the current 'Burn Better' campaign and the 'Ready to burn' logo on certified fuels have limited focus on disincentivising air pollution. The 'Burn Better' campaign and all future campaigns should raise public awareness of the potential health harms of domestic combustion.

Adequate funding and support to LAs

We welcome the Government's commitment in the revised Air Quality Strategy to consider how it could boost LA regulatory capacity and capability including exploring how the fees and charges system can be improved to provide better cost recovery. LAs should be supported with resources, adequate staffing, and additional capacity to enforce restrictions and reduce pollution from inappropriate domestic burning.

- **Regulation and prosecution:** The Government does not currently provide sufficient funding to LAs in England to improve air quality. Dedicated funding should be provided to LAs to raise awareness and increase enforcement capacity. Enforceable restrictions should also be imposed within the existing regulatory framework.
- **Annual DEFRA air quality grant:** Funding for LAs which are not captured in the EU Directive regime in particular is limited to the annual DEFRA air quality grant which is competitive and provides little funding to deliver large improvements in air quality. Due to the grant being competitive it also relies on officers having sufficient capacity to submit a bid and implement a project which is a key limiting factor for many LAs. Therefore, non-competitive funding for cost-effective measures should be provided. If additional, non-competitive funding is introduced, there should be adequate consultation and promotion before the release of the funding to encourage feedback and efficient use. It is noted that funding has been put forward through the Air Quality New Burdens grant to enable LAs with existing SCAs to act more in their SCAs. Funding opportunities are also now available for those looking to declare additional SCAs. However, if funding is provided only in a piecemeal fashion, it will not be possible to create a system which could reduce emission effectively and promote population health. Sufficient

funding should be provided with strong national policy.

- **More public health funding** is needed to reduce harm and mortality caused by air pollution. In England, LAs' public health funding has suffered a 26% cut (in real terms on a per person basis) since 2015/16. It is estimated that £0.9 billion will be needed annually to restore funding to 2015/16 levels.⁷
- **Wood burning:** The Environment Act 2021 has brought in additional powers to tackle wood burning. However, monitoring and regulating non-compliant burning in SCAs is extremely difficult. More resources and support should be provided to LAs.

Reduce domestic combustion through better planning policies

Planning and housing policies have a key role to play to reduce solid fuel burning emissions. The Government should consider how emission from domestic combustion could be reduced through appropriate planning policies and building control regulations. Measures should be in place to ensure that new developments do not increase emissions in the community.

The Government should also provide initiatives to cut heat demand through insulation. There is strong evidence of poor insulation in many rented properties. The energy crisis in 2022/2023 and the resulted fuel poverty also led to an increase in demand for cheap but polluting firewood and wood-burning stoves. Continued funding and commitment from the Government is key to addressing fuel poverty and achieving improved energy efficiency and ventilation in all properties across the UK to prevent pollutants concentrating indoors and air quality worsening. However, the current funding of £3.4 billion falls short of the £104 billion required for this mass retrofit.

Public health role

Public health play an important role in protecting the health of the population through working on the wider determinants of health and working constructively with other professionals in creating healthier environments. We welcome future engagement opportunities, and we could provide further input should additional information be required.

Reference

- ¹ National Atmospheric Emissions Inventory, Pollutant Information: PM2.5 (Particulate Matter < 2.5µm). 2020. https://naei.beis.gov.uk/overview/pollutants?pollutant_id=122 [Accessed June 2023]
- ² Department for Environment, Food and Rural Affairs, Emissions of air pollutants in the UK – Particulate matter (PM10 and PM2.5). 2023. <https://www.gov.uk/government/statistics/emissions-of-air-pollutants/emissions-of-air-pollutants-in-the-uk-particulate-matter-pm10-and-pm25> [Accessed June 2023]
- ³ National Atmospheric Emissions Inventory, Emissions from NAEI large point sources. 2022. <https://naei.beis.gov.uk/data/map-large-source> [Accessed June 2023]
- ⁴ United Nations, For a livable climate: Net-zero commitments must be backed by credible action. 2022. <https://www.un.org/en/climatechange/net-zero-coalition> [Accessed April 2023]
- ⁵ Climate Change Committee, 2021 Progress Report to Parliament. 2021. <https://www.theccc.org.uk/publication/2021-progress-report-to-parliament/> [Accessed April 2023]
- ⁶ Department for Environment, Food and Rural Affairs, Emissions of air pollutants in the UK – Particulate matter (PM10 and PM2.5). 2023. <https://www.gov.uk/government/statistics/emissions-of-air-pollutants/emissions-of-air-pollutants-in-the-uk-particulate-matter-pm10-and-pm25> [Accessed June 2023]
- ⁷ The Health Foundation, Public Health Grant. 2023. <https://www.health.org.uk/news-and-comment/charts-and-infographics/public-health-grant-what-it-is-and-why-greater-investment-is-needed> [Accessed March 2023].