

LONDON BOROUGH OF HAMMERSMITH & FULHAM

Report to: Climate Change and Ecology Policy and Accountability Committee

Date: 28/03/2023

Subject: Air quality and wood burning

Report author: Jim Cunningham, Climate Policy & Strategy Lead

Responsible Director: Bram Kainth, Strategic Director of Environment

SUMMARY

This covering report welcomes a presentation by Dr Gary Fuller of Imperial College London on the effects of wood burning on air quality.

RECOMMENDATIONS

1. For the Committee to note and comment on the presentation.

Wards Affected: All

Our Values	Summary of how this report aligns to the H&F Values
Creating a compassionate council	Long-term exposure to poor air quality results in tens of thousands of deaths per year in the UK. Its impacts are felt unequally, with those particularly at risk including older people, children, people with cardiovascular and respiratory disease, pregnant women, communities in areas of poor air quality, and poorer communities.
Rising to the challenge of the climate and ecological emergency	The burning of solid fuels has negative impacts on biodiversity and climate change. An estimated 233 tons of carbon dioxide equivalent (CO ₂ e) was produced from burning coal in the borough in 2020. Although technically carbon neutral, burning wood also releases stored carbon dioxide, as well as producing 'black carbon', which has a short-lived but powerful global warming effect. Wood burning also

	places pressure on ecosystems from land use for commercial forestry, and unregulated felling sources.
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Background Papers Used in Preparing This Report

None.

DETAILED ANALYSIS

1. The committee is invited to welcome Dr Gary Fuller of Imperial College London, the UK Research and Innovation Clean Air Champion.
2. The burning of wood and solid fuels is a major source of particulate emissions (PM₁₀ and PM_{2.5}) in the borough. Data from the London Atmospheric Emissions Inventory suggests that wood burning accounts for 17% of particulate matter in London, a higher proportion than road transport or industrial combustion, and can account for as much as 60-70% of these emissions with a particularly high contribution during the evenings.
3. Poor air quality is the largest environmental risk to public health in the UK, according to Public Health England. It is responsible for tens of thousands of premature deaths, and results in a variety of health problems including cardiovascular disease and lung cancer.
4. This risk falls unequally on different people and communities. Poorer communities, and those in areas of particularly poor air quality, are at higher risk. Younger children, older adults, and those with various underlying health conditions are particularly badly affected.
5. Dr Fuller will give a presentation on the insights of research to date around the effects of wood burning on air quality and health. The committee is asked to note and comment on the presentation.

LIST OF APPENDICES

No appendices; presentation to follow during the committee meeting.