Global Action Plan
LMLF.203 The Leather Market, Lafone House
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Emma Hardy MP, Minister of State in the Department for Environment, Food and Rural Affairs
Ministerial Contact Unit
Defra
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16 November 2026

Dear Minister Hardy,

As health professionals and experts, we are deeply concerned about the growing health burden that unnecessary domestic burning is creating for the UK public.

Air pollution from domestic wood burning can cause many serious health conditions including heart and lung disease, as well as increasing the risk of someone developing lung cancer, diabetes or dementia. It also impacts the health of unborn children.

Domestic burning is one of the biggest sources of harmful fine particulate matter air pollution (PM2.5) in the UK, producing a similar quantity of these emissions to those from all the country's cars, vans and lorries combined. Wood burning smoke also contains many known and suspected carcinogens, including high levels of polycyclic aromatic hydrocarbons (PAHs), benzene and formaldehyde.

Despite relatively few people choosing to heat their home with a wood burner or open fireplace (only 8% of the population, of which 92% have an alternative heat source), the air pollution emissions from domestic burning are putting an enormous burden on the health and quality of life of people across our population.

Research commissioned by Global Action Plan estimates that air pollution from burning in the home contributes to nearly 2,500 deaths each year in the UK, as well as over 27,000 life years lost to early death. Air pollution from wood burners and open fires is also creating a significant burden on the NHS by contributing to thousands of new cases of diabetes and asthma in the UK each year, and over 2,000 lung and heart health hospital admissions on average each year.

If non-essential burning (i.e. burning in homes where another primary heat source is available) stopped across the UK, we could save the NHS over £54 million in healthcare costs and prevent £164 million wider productivity costs to the UK economy annually.

The health impacts of domestic burning are not limited to those who choose to burn wood or other solid fuels in their homes. The pollution also affects people in the surrounding areas. This inequality is most visible in urban areas, where wood burning stoves are often installed by more affluent

people as a secondary heat source for aesthetic reasons, producing air pollution that damages the health of people in surrounding neighbourhoods.

This growing health crisis is solvable but requires bold action from government.

Wood burning also contributes to climate change by creating more carbon emissions than other sources of heat. It takes decades for trees to regrow and reabsorb the carbon emitted when wood is burned. If trees were not cut down and harvested for burning, they would continue to absorb carbon emissions and help protect our climate.

Thanks to public health campaigns like Clean Air Night, people are becoming more aware of the health harms of domestic burning. And when people become aware of these harms, they overwhelmingly support strong action. 92% of people aware of Clean Air Night are willing to see at least one policy measure introduced to tackle air pollution from wood burning in their local area.

As health professionals and experts, we are asking that you urgently take the following actions to tackle the health burden of domestic burning and stop preventable illness:

- Commit to phasing out non-essential domestic burning, through the new Air Quality Strategy.
- Devolve more powers to local leaders by 2028 so they can better tackle air pollution from domestic burning locally.
- Create a national public health campaign on air pollution, featuring the health harms of domestic burning.

## Signed by:

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## References:


- Chief Medical Officer's annual report 2022: air pollution https://www.gov.uk/government/publications/chief-medical-officers-annual-report-2022-air-pollution
- Emissions of air pollutants in the UK – Particulate matter (PM10 and PM2.5) https://www.gov.uk/government/statistics/emissions-of-air-pollutants/emissions-of-air-pollutants-in-the-uk-particulate-matter-pm10-and-pm25
- Indoor Air Pollution from Residential Stoves: Examining the Flooding of Particulate Matter into Homes during Real-World Use https://www.mdpi.com/2073-4433/11/12/1326
- Emissions of air pollutants in the UK - Summary https://www.gov.uk/government/statistics/emissions-of-air-pollutants/emissions-of-air-pollutants-in-the-uk-summary
- Worst London air pollution in six years as home fires burn https://www.theguardian.com/environment/2023/jan/27/worst-london-air-pollution-in-six-years-as-home-fires-burn
- Air Pollution in the UK report - Defra, UK https://uk-air.defra.gov.uk/library/annualreport /
- London Atmospheric Emissions Inventory LAEI 2022 https://data.london.gov.uk/dataset/london-atmospheric-emissions-inventory--laei--2022/
- Fine particulate air pollution and human mortality: 25+ years of cohort studies https://pubmed.ncbi.nlm.nih.gov/31831155/
- Estimates, trends, and drivers of the global burden of type 2 diabetes attributable to PM2·5 air pollution, 1990–2019: an analysis of data from the Global Burden of Disease Study 2019 10.1016/S2542-5196(22)00122-X
- Putting Fine Particulate Matter and Dementia in the Wider Context of Noncommunicable Disease: Where are We Now and What Should We Do Next: A Systematic Review https://doi.org/10.1159/000515394
- Air pollution: cognitive decline and dementia https://www.gov.uk/government/publications/air-pollution-cognitive-decline-and-dementia
- Ambient and household PM2.5 pollution and adverse perinatal outcomes: A meta-regression and analysis of attributable global burden for 204 countries and territories 10.1371/journal.pmed.1003718
- Residential heating with wood and coal: health impacts and policy options in Europe and North America https://apps.who.int/iris/handle/10665/153671
- A systematic review on solid fuel combustion exposure and respiratory health in adults in Europe, USA, Canada, Australia and New Zealand https://pubmed.ncbi.nlm.nih.gov/35149281/
- A rural community intervention targeting biomass combustion sources: effects on air quality and reporting of children's respiratory outcomes https://oem.bmj.com/content/69/5/354.short?casa_token=qva4nRQsnI4AAAAA:duqLhlwWG6OknGbNi3J_NJRVQBMdhbc0SQDDjMxrhZFIulZ5piFe5WGS5t-K9FsvP7z78tbZ39fA4A





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- Evaluation of interventions to reduce air pollution from biomass smoke on mortality in Launceston, Australia: retrospective analysis of daily mortality, 1994-2007 https://www.bmj.com/content/346/bmj.e8446
- Effectiveness of Residential Wood-Burning Regulation on Decreasing Particulate Matter Levels and Hospitalizations in the San Joaquin Valley Air Basin https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4358186/
- Range and uncertainties in estimating delays in greenhouse gas mitigation potential of forest bioenergy sourced from Canadian forests https://onlinelibrary.wiley.com/doi/10.1111/gcbb.12327
- Pollutionwatch: wood fires are bad for planet, more evidence shows https://www.theguardian.com/environment/2022/feb/25/pollutionwatch-wood-fires-bad-for-planet-more-evidence-shows
- Greenhouse gas emissions from burning US-sourced woody biomass in the EU and UK https://www.chathamhouse.org/2021/10/greenhouse-gas-emissions-burning-us-sourced-woody-biomass-eu-and-uk
- Does replacing coal with wood lower CO2 emissions? Dynamic lifecycle analysis of wood bioenergy https://iopscience.iop.org/article/10.1088/1748-9326/aaa512
- A stand of trees does not a forest make: Tree plantations and forest transitions https://www.sciencedirect.com/science/article/abs/pii/S0264837716303507
- Wood burning is more expensive than central heating https://urbanhealth.org.uk/insights/reports/wood-burning-is-more-expensive-than-central-heating
- Clean Air Public Insights Tracker (September 2025), Opinium on behalf of Global Action Plan https://www.globalactionplan.org.uk/our-work/clean-air/clean-air-public-insight-tracker-capit
- Burning in UK Homes and Gardens https://www.burnright.co.uk/wp-content/uploads/2022/02/14972_Finalreport-BurninginUKhomesandgardens-1.pdf
- High-resolution mapping of residential wood burning heat sources using Energy Performance Certificates: A case study of England and Wales https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5110085




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