

Chris Stark  
Chief Executive  
Committee on Climate Change

By email

4 May 2021

Dear Chris

## **Phasing out the sale and use of solid fuel burners in cities and towns**

Thank you for responding promptly to my tweet on Saturday 1 May about ending the sale and use of solid fuels burners in cities and towns and suggesting that I write to you. The thread with our twitter conversation can be seen here:

<https://twitter.com/CleanAirLondon/status/1388492330597064706?s=20>

In it, I commented that:

*Next steps will include a ban on the sale and then use of #Woodburners in towns and cities.*

The reason I said this is that these steps are, for the reasons set out below, necessarily implied by the law and policy on climate change, clean air and human health.

I referred for example to Table 3.2a on page 112 of the Committee on Climate Change's Sixth Carbon Budget published in December 2020<sup>1</sup>. This is titled 'Implications in the Balanced Pathway for Buildings'. The lower section refers to 'Heating':

*Oil and coal phase out (outside of any zones designated for low-carbon district heat) 2028: 100% of heating system sales off the gas grid are low-carbon from 2028, with exemptions for any buildings in zones designated for low-carbon district heat. Earlier dates may be possible in public and commercial buildings.*

*Natural gas phase out (outside of any zones designated for low-carbon district heat) 2033: 100% of heating system sales are low-carbon from 2033, with exemptions for any buildings in zones designated for low - carbon district heat or hydrogen-conversion. We assume an earlier date of 2030 in public buildings so as to achieve the Clean Growth Strategy target of 50% emission reduction by 2032.*

*CHP phase out for low-carbon district heat 2025: Currently, around 93% of district heat networks use a fossil fuel based primary fuel source. We assume that all new district heat network connections from 2025 are low-carbon. All heat networks supplied by legacy CHP schemes convert to low - carbon heat sources by 2040.*

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<sup>1</sup> <https://www.theccc.org.uk/wp-content/uploads/2020/12/The-Sixth-Carbon-Budget-The-UKs-path-to-Net-Zero.pdf>

*Notes: The fossil phase-out dates drive uptake of building-scale low-carbon heating – predominantly heat pumps, with some flexible resistive electric heating such as storage heating and panels.*

You will be aware of most, if not all, of a number of important matters:

1. The law sets limits on pollution from certain emissions and must improve and preserve the quality of ambient air.
2. One of the most dangerous pollutants is particulate matter (PM<sub>2.5</sub>). For example, Public Health England estimates that 5.1% of deaths in England in 2019 were attributable to PM<sub>2.5</sub><sup>2</sup>.
3. Defra estimates that the use of wood in domestic combustion activities accounted for 38% of UK primary PM<sub>2.5</sub> emissions in 2019<sup>3</sup>.
4. Defra estimates that emissions of PM<sub>2.5</sub> from domestic wood burning more than doubled between 2003 and 2019 (from 20 to 41 thousand tonnes) and increased by 1.0% between 2018 and 2019<sup>4</sup>.
5. Defra has published important research on understanding burning in UK homes and gardens (December 2020)<sup>5</sup>.
6. Scientists at Imperial College London have also published excellent information about wood burning in London<sup>6</sup>. Some of their other work showed that smoke control legislation has not worked in recent years<sup>7</sup>.
7. Wood burning can contribute to serious air pollution episodes (as well as day to day nuisance). For example, concentrations of PM<sub>10</sub> were HIGH and VERY HIGH in London in mid-January 2017<sup>8</sup> in significant part due to wood burning<sup>9</sup>.
8. The Coroner for the inquest touching on the death of Ella Roberta Adoo Kissi-Debrah has made three important recommendations in his Report to Prevent Future Deaths<sup>10</sup>.
9. At the press conference following the publication of (8) above, World Health Organisation (WHO) said it expected to publish new Air Quality Guidelines in early July 2021 i.e. its first update since the original guidelines published in 2006. It is expected that the new guidelines will be significantly lower than the 2006 version, not least for PM<sub>2.5</sub> (for which no safe level of human exposure has been found).
10. The UK almost certainly breached the National Emission Ceilings Regulations 2018 (NECR) cap for PM<sub>2.5</sub> emissions in 2020. The duty to keep to limits is enshrined in law and flows from the Gothenburg Protocol.

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<sup>2</sup> [https://fingertips.phe.org.uk/profile/public-health-outcomes-framework/data#page/3/gid/1000043/pat/6/par/E12000004/ati/302/are/E06000015/iid/30101/age/230/sex/4/cid/4/tbm/1/page-options/ovw-do-0\\_car-do-0](https://fingertips.phe.org.uk/profile/public-health-outcomes-framework/data#page/3/gid/1000043/pat/6/par/E12000004/ati/302/are/E06000015/iid/30101/age/230/sex/4/cid/4/tbm/1/page-options/ovw-do-0_car-do-0)

<sup>3</sup> <https://www.gov.uk/government/statistics/emissions-of-air-pollutants/emissions-of-air-pollutants-in-the-uk-particulate-matter-pm10-and-pm25>

<sup>4</sup> <https://www.gov.uk/government/statistics/emissions-of-air-pollutants/emissions-of-air-pollutants-in-the-uk-particulate-matter-pm10-and-pm25>

<sup>5</sup> <http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&ProjectID=20159&FromSearch=Y&Publisher=1&SearchText=AQ1017&SortString=ProjectCode&SortOrder=Asc&Paging=10#Description>

<sup>6</sup> <https://www.londonair.org.uk/londonair/guide/WoodBurning.aspx>

<sup>7</sup> <https://www.londonair.org.uk/london/asp/LAQNSeminar/pdf/july2011/Gary%20Fuller%20Wood%20Smoke%20PM%20in%20London.pdf>

<sup>8</sup> [https://londonair.org.uk/london/asp/publicisodes.asp?region=0&site=&postcode=&la\\_id=&level=All&bulletindate=17%2F01%2F2017&MapType=Google&zoom=&lat=51.4750&lon=-0.119824&VenueCode=&bulletin=peakvalues&episodeID=PM10middleJanuary2017&pageID=page2&cm-djitdk-djitdk=](https://londonair.org.uk/london/asp/publicisodes.asp?region=0&site=&postcode=&la_id=&level=All&bulletindate=17%2F01%2F2017&MapType=Google&zoom=&lat=51.4750&lon=-0.119824&VenueCode=&bulletin=peakvalues&episodeID=PM10middleJanuary2017&pageID=page2&cm-djitdk-djitdk=)

<sup>9</sup> [https://londonair.org.uk/london/asp/publicisodes.asp?species=All&region=0&site=&postcode=&la\\_id=&level=All&bulletindate=17%2F01%2F2017&MapType=Google&zoom=9&lat=51.4750&lon=-0.119824&VenueCode=&bulletin=explanation&episodeID=PM10middleJanuary2017&cm-djitdk-djitdk=](https://londonair.org.uk/london/asp/publicisodes.asp?species=All&region=0&site=&postcode=&la_id=&level=All&bulletindate=17%2F01%2F2017&MapType=Google&zoom=9&lat=51.4750&lon=-0.119824&VenueCode=&bulletin=explanation&episodeID=PM10middleJanuary2017&cm-djitdk-djitdk=)

<sup>10</sup> <https://www.judiciary.uk/wp-content/uploads/2021/04/Ella-Kissi-Debrah-2021-0113-1.pdf>

11. New restrictions on the sale of coal and wet wood for home burning began on 1 May 2021<sup>11</sup>. Defra has published further information<sup>12 and 13</sup>. In CAL's view, these measures are too little, too late.
12. The Environment Bill is due to set one or more targets for the reduction of PM<sub>2.5</sub>.

In any event, a policy which ignores the climate change effects of domestic solid fuel burners would permit their widespread use which in turn would mean that climate change targets could not be met. On that ground alone (leaving aside the consequences for human health) such a policy is irrational.

In CAL's view, it is vital that greenhouse gases and other pollutants should be tackled together. Failure to do so results in seriously flawed policies – such as the recommendation to use diesel to reduce greenhouse gases but without addressing other pollutants and their detrimental effects on lives and health in our cities and towns.

In CAL's view, it would be irrational for the Committee on Climate Change to recommend reductions in heating emissions that fail to take account of solid fuel burners (within the gas grid and/or more generally). The Committee is also bound by the need to meet the air quality requirements set out in the NECR. In addition, as a public body as defined by the Human Rights Act, the Committee has duties to protect life and health in accordance with Articles 2 and 8 of the European Convention on Human Rights. A policy to reduce greenhouse gases but which could increase, or certainly fail to decrease, harmful particulates would, in CAL's view, be unlawful.

In essence, CAL considers that we need to consider local air pollutants and greenhouse gases holistically in a 'One atmosphere' approach to achieve zero air emissions from fossil fuel combustion sources as soon as possible to keep global warming within 1.5c and certainly 2.0c. In practice this will require a ban on the sale of solid fuel burners and then their use (within the gas grid and perhaps everywhere) in the same way that sales of petrol and diesel cars will be banned (by 2030).

Failure to send clear signals to consumers now will create an ever-increasing legacy problem and increasing calls for a costly scrappage scheme.

I would welcome your clarification of the Committee on Climate Change's position on: the above matters; its expectations for ending (a) the sale and then (b) use of solid fuel burners (within the gas grid and perhaps everywhere); and reassurance that you understand the need to act lawfully in your recommendations with respect to air pollution and PM<sub>2.5</sub> in particular.

I am an enthusiastic supporter of your work generally and most grateful for your helpful response on Saturday.

Yours sincerely

Simon Birkett  
Founder and Director  
Clean Air in London

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<sup>11</sup> <https://www.gov.uk/government/news/restrictions-on-sale-of-coal-and-wet-wood-for-home-burning-begin>

<sup>12</sup> <https://consult.defra.gov.uk/airquality/domestic-solid-fuel-regulations/>

<sup>13</sup> <https://uk-air.defra.gov.uk/library/burnbetter/>