DEFRA

Call for evidence on domestic burning of house coal, smokeless coal, manufactured solid fuel and wet wood

CIBSE Response

Submitted 28th February 2018[1]

Note – for clarity, the inquiry questions are in non-italic black, and *CIBSE response in italic green*.

Introduction

Defra is seeking information on the use of solid fuels such as house coal, manufactured solid fuel and wood for domestic heating, and the impact that changes to the availability of these fuels would have on consumers and businesses.

The Government's long term strategy is to see households move away from these polluting fuels towards cleaner technologies. This call for evidence is a series of questions which will help Government consider what steps should be taken as we transition towards this long term goal. It will help us understand the costs, impacts and benefits associated with any changes.

Responses will be used to feed into the Government's Clean Air Strategy which will be published for consultation in 2018.

This survey is open to all who have an interest in the topic.

CALL FOR EVIDENCE

Section 1 – Introduction: about you

Q1. What is your name?

Julie Godefroy, on behalf of The Chartered Institution of Building Services Engineers (CIBSE).

Q2. What is your email address?

JGodefroy@cibse.org

Q3. What is your organisation:

- ~~Academic~~
- ~~Distributor e.g. retailer~~
- ~~Fuel Supplier <10 employees~~
- ~~Fuel Supplier 10-49 employees~~
- ~~Fuel Supplier =>50 employees~~
- ~~Householder/individual~~
- ~~Industry Body~~
- ~~Local Authority~~

[1] *(due to special circumstances preventing submission 27th February)*

- ~~NGO - Industry~~
- ~~NGO - Environmental~~
- Other - please specify: *CIBSE is a professional engineering institution licensed by the Engineering Council*

The Chartered Institution of Building Services Engineers (CIBSE) is the professional body that exists to:

> *'support the Science, Art and Practice of building services engineering, by providing our members and the public with first class information'*

CIBSE members are the engineers who design, install, operate, maintain and refurbish the energy using systems installed in buildings, including homes, and are specifically trained in the assessment of heat loss from building fabric and the design of energy using systems for the provision of heating and hot water, lighting, ventilation and cooling and small power distribution in homes. Many CIBSE members work in the public sector in general and in higher education in particular.

CIBSE has over 20,000 members, of whom around 75% operate in the UK and many of the remainder in the Gulf, Hong Kong and Australasia. Many are actively involved in the energy management of commercial buildings for larger businesses, and so this consultation is highly relevant to us and to our members.

CIBSE is the sixth largest professional engineering Institution, and along with the Institution of Structural Engineers is the largest dedicated to engineering in the built environment. Our members design, install, manufacture, maintain, manage, operate and replace all the energy using systems in buildings as well as public health systems.

As an Institution CIBSE publishes Guidance and Codes which provide best practice advice and are internationally recognised as authoritative. The CIBSE Knowledge Portal, makes our Guidance available online to all CIBSE members and is the leading systematic engineering resource for the building services sector. Over the last twenty-one months it has been accessed over 200,000 times, and is used regularly by our members to access the latest guidance material for the profession. Currently we have users in over 170 countries, demonstrating the world leading position of UK engineering expertise in this field.

www.cibse.org

Q4. Would you like your response to be confidential?

~~Yes /~~ no

Section 2 – House Coal, Smokeless Coal and Manufactured Solid Fuels - for retailers/consumers/users

Section 3 – Wood fuels - for retailers/consumers/users

Section 4 – House Coal, Smokeless Coal and Manufactured Solid Fuels - for suppliers - businesses

Section 5 – Wood fuels - for suppliers - businesses

Section 6 – Local Powers to tackle air pollution from smoke

The Government is not seeking to hinder the routine household practices of garden waste bonfires or garden barbecues, nor discourage the practice of bonfire night or firework celebrations.

Q32. Should government consider giving powers to local authorities to issue fixed penalty notices against those responsible for creating persistent smoke pollution to the environment, where there is harm to local amenity?

a. Yes

b. No

If this option is taken then will there be additional resource, or will local authorities have to absorb this duty in addition to existing duties? If that is the case then there is a real risk of Ministers announcing new measures and powers when there is no resource available to enforce, bringing the new measures and powers into disrepute. If government wishes to achieve a change in air quality through the measures it is considering, then a robust, proportionate and adequately resourced enforcement regime is required. Otherwise this exercise seems highly unlikely to succeed.

Please also see our response to Q35 below.

Q33. From your experience, what duration or frequency of smoke emissions would be considered as 'persistent'?

no response

CIBSE comments to this section

We recommend referring to another Defra consultation in 2014 which explored similar questions, as the summary of responses[2] is likely to provide useful ideas and recommendations. Broadly speaking, we consider there is a need for two areas of action:

- *Better implementation of **existing limits in Smoke Control areas,** in particular to address the non-compliant installation and use of non-exempt appliances in Smoke Control areas: Limits are not widely known by consumers and not widely implemented by local authorities. We would also highlight the recent National Audit Office report[3] which recommends better collaboration between Ofgem (who handle Renewable Heat Incentive payments from biomass boilers) and local authorities (who are statutorily responsible for handling smoke and air quality complaints).*
- ***Modification of Smoke Control area principles,** including fewer exemptions (e.g. end of exemptions for canal boats), emissions limits for appliances, labelling of products that can be clearly understood by consumers when purchasing products.*

Please also see our comments to section 8 for recommendations which apply to air quality including (but not limited to) smoke issues.

Section 7 - General evidence

It is difficult to precisely quantify the air quality impact of domestic burning due to a large range of uncertainties, for example: what fuel is used, how frequently people burn and what appliance, if any, is used.

The attached background document provides information about Particulate Matter emissions and sets out the Government evidence in this area so far.

Q34. Do you have any additional evidence to add to this or wish to comment on the Government's data?

If not already sought, relevant trade bodies may have data on numbers of appliances sold that may assist.

Q35. Do you have other evidence that could inform Government policy? If so, please attach it here.

[2] https://cleanair.london/app/uploads/Defra_Review-of-the-Clean-Air-Act_Call-for-evidence-summary-of-responses_July-2014-1.pdf
[3] https://www.nao.org.uk/wp-content/uploads/2018/02/Low-carbon-heating-of-homes-and-businesses-and-the-Renewable-Heat-Incentive.pdf

CIBSE response:

As previously quoted, we would like to refer Defra to the recent report by the National Audit Office on the Renewable Heat Incentive[3], which highlights the ineffectiveness of existing management procedures at the local authorities' level and makes recommendations for improvements – see also our response to sections 6 and 8.

Section 8 - General comments

Q36. Do you have any additional comments/views that you wish to provide on the content of this call for evidence?

CIBSE Response

The call for evidence states that "Domestic burning of house coal, smokeless solid fuels and wood is the single largest source of harmful particulate matter emissions in the UK, at around 40% of the total in 2015. This compares with industrial combustion (17%) and road transport (13%)."

The impact of wood burning on UK-borne particulate emissions, particularly in cities, is also supported by King's College studies[4].

*We would also stress the impact of solid-fuel appliances such as stoves on **indoor air quality**. People spend the large majority of their time indoors (typically, over 90% in the US and Western Europe). Both indoor and outdoor air quality therefore need to be considered when reviewing the impacts of solid fuel appliances on human health.*

In our recent response to the Joint Committees' enquiry on air quality we have highlighted the importance of the built environment on air quality, including distributed small scale appliances, and we have recommended that it should be taken into account in the Government's upcoming Air Quality Strategy.

We therefore welcome the attention given by Defra to this issue.

*We broadly support the fact that "the Government's long term strategy is to see households move away from these polluting fuels towards cleaner technologies". We would however recommend that in the case of **Air Quality Management Areas (AQMAs)**, this strategy should not be in the long term, but **shorter term**, with stepped limits being introduced for the most polluting appliances, up to a complete phase-out in AQMAs within, say, 10 years at the latest i.e. the maximum reasonable replacement timeline for existing appliances.*

*This should be **coordinated with a review of the Renewable Heat Incentive (RHI)**, to limit financial incentives from one government department jeopardising the government's overall air quality objectives. Recommendations from the National Audit Office[3] should also be followed to improve the implementation of RHI conditions on air quality, including better collaboration between Ofgem and Local Authorities, and emissions testing by Ofgem as a condition of RHI payments.*

Outside of AQMAs and urban areas, particularly in rural areas with no gas connection, the impact on local air quality may be limited and burning biomass is likely to offer carbon emissions reduction benefits, particularly over oil or coal, as well as other benefits such as lower running costs and reduction of pollution incidents from oil. Longer-term heating options in these areas should be considered as part of the overall national air quality and heat decarbonisation strategy, including for example heat pumps if electricity decarbonisation continues on its current trend.

*We would also highlight that energy efficiency offers **significant potential beneficial synergies** including health and comfort improvements, fuel poverty reduction and carbon emissions reductions, as well as air pollution reduction. We would therefore strongly recommend a comprehensive programme to improve the **energy***

[4] https://uk-air.defra.gov.uk/assets/documents/reports/cat05/1801301017_KCL_WoodBurningReport_2017_FINAL.pdf

***efficiency of existing buildings**; we are aware this is mentioned in the Clean Growth Strategy, but without yet much detail.*

Planning framework

We believe the planning process offers more opportunities to incorporate air quality considerations, and in a more robust way:

- *In the current planning application process, the requirement to carry out **Air Quality Assessments (AQAs) is typically linked to the size of developments**. The background information used in this call for evidence shows the **cumulative importance of small schemes**. We would therefore recommend a review of the approach to AQAs to prevent the continued installation of new appliances, particularly in areas that are already AQMAs.*
- *AQAs are by nature an impact assessment, which results in the following:*
    - *The impact is often assessed to be insignificant or minor compared to the existing situation, rather than in relation to health-based objectives, and*
    - *The assessment focuses on the impact of the scheme on local air quality; how outdoor air quality may impact the future users of the building is often not assessed nor considered.*

National outdoor air objectives

While this is slightly outside the scope of this consultation, we would like to recommend, as part of the broader picture, that air quality objectives be aligned with scientific health-based recommendations from the World Health Organization[5], rather than seeing current legal objectives for UK ambient air as an end in themselves. For more detail, we would refer to our recent response to the Joint Committees enquiry on Air Quality[6].

There is also scope for Defra to seek to co-ordinate policy on solid fuels with MHCLG in relation to building regulations, with BEIS in relation to the Clean Growth Strategy, and with OFGEM, to ensure that government has a consistent approach to solid fuels that is based on their overall health and environmental impact and not just on their carbon dioxide emissions potential.

END

Response collated and submitted by:

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[5] WHO, *Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide, Global update 2005, Summary of risk assessment, 2006*

[6] http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/environment-food-and-rural-affairs-committee/joint-inquiry-into-improving-air-quality/written/73321.pdf