

Ecodesign for solid fuel space heaters

– contribution to call for evidence –

The European Respiratory Society (ERS) and the European Public Health Alliance (EPHA) welcome the revision of the ecodesign requirements for solid fuel space heaters and the opportunity to provide feedback to the decision-making process. The key messages we would like to emphasise are as follows:

1. The health community should be consulted on relevant product policies

The call for evidence acknowledges health impacts but regrettably overlooks consultation with the health community. We emphasize the need for direct involvement of health experts, ensuring a comprehensive understanding of the implications related to product policy, including solid fuel local space heaters and boilers. This would also be aligned with the 'Health in All Policies' approach, that needs to see a more meaningful implementation in all the European decision-making processes.

The health community's expertise is vital to communicate health risks associated with such heating practices and to dispel misconceptions.

2. It is crucial to align health and climate policies

There are numerous direct health co-benefits from climate and environment policies. Concepts such as One Health, or Planetary Health, which are increasingly prominent in expert and policy discussions, further emphasize how closely connected health and environmental issues are. We advocate for a harmonized approach that aligns health and climate policies, ensuring that one does not compromise the other.

3. There are no known safe levels of air pollution

Scientific evidence shows that there is no evidence of a safe level of air pollution¹. Therefore, any regulation must strive to achieve the highest air quality standards, while safeguarding public health comprehensively. Meanwhile, pollutant emissions from the buildings sector are largely unknown to the public and often only minimally considered in sectoral policies, despite their significant contribution to poor air quality in Europe. For example, *Europe's air quality status 2023* report by the European Environment Agency recognises solid fuel burning as the main source of PM10 and as one of the top three sources of PM2.5 respectively.

4. Air pollutants and health effects from biomass burning need to be considered carefully

Careful consideration must be given to the specific air pollutants emitted during biomass burning, recognising their direct correlation with health impacts. Epidemiological studies point to causal links between PM and asthma in children and adults, acute lower respiratory infections in young children, chronic obstructive pulmonary disease (COPD), ischemic heart diseases, and diabetes in adults, and development of cataracts in women. Links between lung cancer and inhalation of biomass combustion

¹ <https://iris.who.int/bitstream/handle/10665/345329/9789240034228-eng.pdf?sequence=1&isAllowed=y> or <https://erj.ersjournals.com/content/58/6/2102447>

products have also been found². The review should therefore prioritise minimising emissions and promoting clean alternatives., with a view to reaching indoor and outdoor pollution levels that are aligned with the World Health Organization Air Quality Guidelines and the latest scientific evidence.

5. Indoor Air Quality levels and health effects in Europe should receive more policy attention and be further studied

Special attention must be paid to indoor air quality (IAQ) in European homes and to tackling all indoor sources of pollution, such as solid fuel stoves, including wood and coal burning. Longer indoor exposure times and higher intake fractions – the total mass of inhaled pollutant – mean that even small variations in pollution concentrations may have a significant impact on health. The World Health Organization (WHO) recognised “the right to healthy indoor air”³ over two decades ago. Yet little action has been taken at the EU or national level to address this issue in a targeted manner. Further research into IAQ implications of solid fuel local space heaters is paramount to understanding and mitigating potential health risks associated with indoor air pollution.

6. The sale of new coal-based appliances should be phased out

To protect public health and the environment, we strongly support the phasing out of coal as a heating source. This transition aligns with broader sustainability goals and is pivotal in reducing air pollution-related health issues. While coal use is not widespread in the EU, having the smallest share in the final energy consumption in the residential sector⁴, the associated health impacts and health costs are a matter of significant concern. To illustrate the magnitude of the problem, a study by CE Delft⁵ for EPHA found that, in 2018, coal was responsible for almost 30% of the health-related social costs from outdoor air pollution resulting from heating and cooking, despite representing less than 5% of energy used in the total final energy consumption for domestic heating that year.

7. It is important that testing methods be representative of real-life use

Any Ecodesign requirements should be informed by real-life, representative testing scenarios. This approach ensures that regulatory standards reflect actual usage conditions, providing more accurate insights into the health impacts associated with solid fuel local space heaters. This is particularly important as emissions during the starting phase are known to be considerably higher than during the stationary phase, even for modern appliances⁶.

² Sigsgaard, Torben, Bertil Forsberg, Isabella Annesi-Maesano, Anders Blomberg, Anette Bølling, Christoffer Boman, Jakob Bønløkke, et al. ‘Health Impacts of Anthropogenic Biomass Burning in the Developed World’. *European Respiratory Journal* 46, no. 6 (1 December 2015): 1577–88. <https://doi.org/10.1183/13993003.01865-2014>.

³ World Health Organization. ‘The Right to Healthy Indoor Air’, 2000.

⁴ Eurostat. ‘Energy Consumption in Households’, 2023. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Energy_consumption_in_households.

⁵ Kortekand, Marisa, Joukje de Vries, Pien van Berkel, and Sander de Bruyn. ‘Health-Related Social Costs of Air Pollution Due to Residential Heating and Cooking’, 2022. https://cedelft.eu/wp-content/uploads/sites/2/2022/03/CE_Delft_210135_Health-related_social_costs_of_residential_heating_and_cooking_Def_V1.2.pdf.

⁶ Sigsgaard, Torben, Bertil Forsberg, Isabella Annesi-Maesano, Anders Blomberg, Anette Bølling, Christoffer Boman, Jakob Bønløkke, et al. ‘Health Impacts of Anthropogenic Biomass Burning in the Developed World’. *European Respiratory Journal* 46, no. 6 (1 December 2015): 1577–88. <https://doi.org/10.1183/13993003.01865-2014>.

8. The social and equity dimensions need to be considered and reflected in the approach to solid fuel heaters and boilers

Solid fuel use is predominant among the lowest-income groups, who are at higher risk of living in unfit housing⁷. Additionally, the number of households using biomass for primary or secondary heating has increased in recent years, both due to policies encouraging it as a renewable energy source, and in relation to cost of living increases. Similarly, though oftentimes considered an issue of the lower income countries, solid fuel use for cooking remains surprisingly high in Europe⁸. The increasing use of biomass due to policies promoting renewable energy and economic considerations demands attention to the social and equity dimensions. Biomass usage, while often economical, can exacerbate health inequities. Policymakers must consider the broader societal impacts and work towards solutions that address health disparities.

In conclusion, EPHA and ERS urge the European Commission to integrate these considerations into the energy efficiency and ecodesign requirements for solid fuel space heaters. By prioritising public health, aligning policies, and acknowledging the equity dimensions, the EU can lead the way in fostering a healthier, more sustainable future.

Thank you for considering our input. We remain committed to collaborating on initiatives that protect public health and the environment.

⁷ Feldmar, Nora, and Anna Bajomi. 'Fuel of the Poor: Household Use of Firewood in Central and Eastern Europe'. Habitat for Humanity, 2022. https://habitat.hu/wp-content/uploads/2022/10/HfHH_Fuel_of_The_Poor_BioBalance_2022.pdf

⁸ Eurostat. 'Disaggregated Final Energy Consumption in Households', 2023. https://ec.europa.eu/eurostat/databrowser/view/NRG_D_HHQ_custom_7003819/default/table.