

Net Zero, Energy and Transport Committee
Tuesday 1 April 2025
13th Meeting, 2025 (Session 6)

Consideration of petition PE2123: Update air quality standards in Scotland to align with 2021 World Health Organisation guidelines

Public Petitions

1. Petitions are a way to ask the Parliament to do something. Under the Parliament's Standing Orders (rules 15.4 to 15.8) the Committee may take such action as it considers appropriate in relation to any petition. This may include—
 - (a) referring the petition to the Scottish Ministers, any other committee of the Parliament or any other person or body for them to take such action as they consider appropriate;
 - (b) reporting to the Parliamentary Bureau or to the Parliament;
 - (c) taking any other action which the Committee considers appropriate; or
 - (d) closing the petition. If a petition is closed, the petitioner must be notified of the reasons. It is good practice for the Committee to agree in its public discussion of any petition it intends to close, the reason(s) why it is being closed.
2. More information on the petition process is on the [Scottish Parliament website](#).

Background

3. The petitioner (Gareth Brown on behalf of Asthma and Lung UK Scotland) is calling on the Scottish Parliament to urge the Scottish Government to amend the [Air Quality Standards \(Scotland\) Regulations 2010](#) by setting new limit values for nitrogen dioxide (NO₂) and fine particulate matter (PM_{2.5}) which align with the 2021 World Health Organisation (WHO) air quality guidelines. The full petition PE1750 can be viewed on the Scottish Parliament website [here](#).
4. The current legal limits for NO₂ and PM_{2.5} (40 µg/m³ and 10 µg/m³ respectively) are set out in the Air Quality Standards (Scotland) Regulations 2010. These are based on the 2005 WHO air quality guidelines.
5. In 2021, [WHO produced updated air quality guidelines](#), which halved the previously recommended limits. Using the 2023 local authority annual reports, [Asthma and Lung UK Scotland found](#) that 60 of the 85 automatic monitoring sites

would meet the new 2021 guidelines for NO₂ and 35 of the 82 monitoring sites would meet the guidelines for PM_{2.5}.

6. A background [paper](#) from the Scottish Parliament Information Centre (SPICe) was published ahead of consideration by the Citizen Participation and Public Petitions Committee.

Prior consideration of the petition

7. The Petitioner had provided written evidence to accompany the petition on [25 November 2024](#). This is provided in the Annexe.
8. In its initial consideration of the petition, the Citizen Participation and Public Petitions Committee agreed to write to the Scottish Government for its views. The Scottish Government provided a response on [11 December 2024](#). This says:

“The Government’s current air quality strategy, Cleaner Air for Scotland 2 [“CAFS2”], expires in July 2026. A planned review of the strategy will consider current air quality standards and objectives, and the World Health Organisation’s updated guideline values will be a factor in our considerations. We will be engaging with stakeholders as the review progresses, and updates will be made publicly available in due course.”

9. On [22 January 2025](#), the Citizen Participation and Public Petitions Committee considered the response and agreed to refer the petition to this Committee on the suggestion that the Scottish Government’s progress towards its new air quality strategy is something that this Committee would already be scrutinising at some point.

Consideration of air quality by this Committee

10. On 11th May 2023, this Committee published its [report](#) on the Scottish Government's Air Quality Improvement Plan and wider air quality issues. Regarding the 2021 WHO Guidelines, the report stated that:

“The Committee supports the aspiration of adopting the 2021 WHO guidelines on air pollutants as a statutory measures, but accepts that immediate adoption presents major practical challenges. We urge the Scottish Government to work with local authorities and others to map out pathways for achieving these ambitious targets. We also ask the Scottish Government to consider enshrining a continuous improvement approach into air quality policy, as part of its upcoming review of CAFS2”

11. The Scottish Government’s [response](#) of 12 June 2023, stated that:

“We are currently considering the ambitious targets referenced by the Committee (the new WHO guidelines) in the context of both CAFS2 delivery and development of the next air quality strategy which will be the outcome of the CAFS2 review. We will announce the outcomes of these considerations in due course. Continuous improvement is at the heart of our work on air quality and we will ensure that this is fully reflected in our review of CAFS2 and future strategies.”

12. The Committee asked SEPA (as the principal regulator in relation to air quality) in its evidence session on [25 February](#) whether it considers that current air quality standards in Scotland are compatible with the best evidence in relation to delivering a healthy environment. SEPA said that: “If the Scottish Government were to undertake a review of them [air quality standards], we would be supportive of a shift towards aligning with the new WHO guidelines from 2021”. SEPA also suggested that the Scottish Government “is looking to explore a new air quality framework in 2025-26”.
13. On 1 February 2024, [ESS published a report based on its analytical work into particulate matter in air](#). This work followed the publication of revised air quality guidelines by the World Health Organisation in 2021. The report recommends that the Scottish Government review its standards for particulate matter as part of its forthcoming review of the Cleaner Air for Scotland strategy.
14. On [25 March](#), the Committee asked ESS about the Scottish Government’s response to its report on particulate matter in the air. ESS told the Committee that the Scottish Government was considering this report in the context of its review and revision of its Clean Air for Scotland strategy. Their understanding was that the Scottish Government is currently working on its next air quality strategy. They also indicated that this is an area of work ESS will continue to monitor. ESS stated that it “would very much like to see a tightening of the air quality standards to meet or move towards what is recommended by the World Health Organisation.”
15. The Committee has also received written [correspondence](#) on the petition from Zircon Smart Buildings. They are calling on the Scottish Government to change school inspections and include indoor air quality as a mandatory and standalone area of assessment, which appears to be a somewhat different ask than that of the petitioner.

Decision on the petition

16. Options for next steps could include:

- Writing to the Scottish Government and/or any stakeholders the Committee considers relevant seeking further information. While the initial response from the Scottish Government states there will be a review of Cleaner Air for Scotland 2 (CAFS2) strategy, further detail on timelines, scope, and specific commitment toward adopting the WHO 2021 guidelines could inform any future work the Committee agrees to undertake on air quality. Stakeholders who engaged with the Committee's 2023 report on air quality (e.g., SEPA, Environmental Standards Scotland (ESS), local authorities, health experts) provided insights into the practicalities, challenges, and policy implications of adopting the updated WHO air quality standards but the Committee may wish to approach these stakeholders again in case they have any updated views.
- Highlighting the written correspondence provided by Zircon Smart Buildings to the Education, to the Children and Young People Committee given their comments regarding indoor air quality in schools.
- Holding an evidence session with key stakeholders to explore the implications, feasibility, and timescales associated with adopting the updated WHO guidelines.
- Closing the Petition. The Committee could close the petition on the grounds that it has already considered this issue in the context of its 2023 air quality report and indicated its support for aligning with WHO guidelines, and the Scottish Government has committed to reviewing air quality standards as part of the upcoming CAFS2 strategy review and has committed to stakeholder engagement. The Committee could continue to monitor progress for the remainder of the session and ESS has committed to ongoing monitoring.

Clerks to the Committee
March 2025

Annexe – Written submission from Petitioner

PE2123/B: Update air quality standards in Scotland to align with 2021 World Health Organisation guidelines

Petitioner written submission, 11 December 2024

Air pollution is the greatest environmental threat to public health. The causes of air pollution are complex with numerous sources and the harms to human health are widespread. Everyone is exposed to air pollution, short-term or long-term, and at all stages of life, no matter where they live, work and play. It is a cause of ill-health and mortality for people across Scotland, especially for those living with a lung condition, such as asthma or chronic obstructive pulmonary disease (COPD). There is no safe level of air pollution.

Toxic air is a public health emergency, causing new lung conditions and worsening existing ones. It can stunt the growth of children's lungs and travel deep into the lungs and brains of unborn babies. The evidence on the damage to public health by air pollution is well-documented. Depending on the source, between 1,800 and 2,700 people die prematurely each year in Scotland as a result of toxic air. There is a clear link between air pollution and respiratory disease, lung cancer and cardiovascular disease, and there is growing research and evidence linking air pollution to brain health issues, mental health problems, neurological conditions, and diabetes. Air pollution has been shown to cause cancers, with research showing that for every 10 µg/m³ of increased exposure to fine particulate matter (PM_{2.5}), the risk of dying from any cancer rose by 22%.¹

As well as the serious impacts on public health, there are economic consequences on individuals, communities, and society as a whole. Air pollution is estimated to cost the Scottish economy over £1.1 billion each year in days lost at work and costs to the NHS². As air quality improves and the effects on people with respiratory and other health conditions ease, the financial burden on the NHS and employers will be significantly reduced. However, given the growing evidence associating air pollution with various conditions, the estimated cost to the economy and NHS is likely to rise as research progresses. This is also true for the numbers of estimated early deaths attributable to air pollution.

A parliamentary question (S6W-03401)³ submitted by Mark Ruskell MSP to the Scottish Government, following the publication of the updated World Health Organisation (WHO) air quality guidelines in September 2021, asked what its response was to the new air quality guidelines and what new targets were planned to meet the new WHO guidelines accordingly. Responding for the Scottish Government, then Minister for Environment, Biodiversity and Land Reform, Màiri

¹ <https://aacrjournals.org/cebip/article/25/5/839/71066/Cancer-Mortality-Risks-from-Long-term-Exposure-to>

² <https://foe.scot/press-release/scottish-budget-announcement-a-strong-step-towards-changing-transport/>

³ <https://www.parliament.scot/chamber-and-committees/questions-and-answers/question?ref=S6W-03401>

McAllan MSP said that the Scottish Government welcomed, and was “carefully considering” the recommendations, adding that the “case for making any changes to air quality targets in Scotland to reflect the new guidelines will be assessed and taken forward during implementation of the Cleaner Air for Scotland 2 strategy.” In June 2023, then Cabinet Secretary for Transport, Net Zero and Just Transition, Màiri McAllan MSP responded to the Scottish Parliament’s Net Zero, Energy and Transport Committee’s inquiry ‘Air pollution in Scotland’ to state that the Scottish Government was “currently considering the ambitious targets” in the new WHO guidelines “in the context of both CAFS2 and development of the next air quality strategy”. The 2024 ‘Cleaner Air for Scotland 2 strategy: progress report’ confirmed that the updated WHO guidelines will be considered as part of the review of CAFS2, however made it clear that adopting the 2021 guidelines will “have implications for the current system of LAQM [Local Air Quality Management].”

Using local authority Annual Summary Reports for 2023, we found that 60 of the 85 automatic monitoring sites for NO₂ and 35 of the 82 sites recording PM_{2.5} would meet the new WHO guidelines. Only four local authorities would meet these new limits – East Renfrewshire, Inverclyde, Midlothian, and North Lanarkshire. This shows that Scotland could adopt the lower limits for NO₂ and PM_{2.5}, but more work will need to be done to achieve these targets and we hope that the next version of the Cleaner Air for Scotland strategy will go further than previous strategies to tackle sources of air pollution like domestic burning and transport. More information on [the summary reports and local authority monitoring performance can be found on page 14 of our Clearing the Air: Transport + Lung Health report](#).

Furthermore, we believe that for Scotland to meet its ambition to have the best air quality in Europe, every part of the country should have better monitoring. Other stakeholders have expressed similar positions with the Royal College of Physicians Edinburgh, the Royal College of Paediatrics and Child Health, and the Royal College of General Practitioners Scotland calling for greater monitoring where groups of vulnerable people are.⁴

The Net Zero, Energy and Transport Committee heard during the ‘Air Quality in Scotland’ inquiry that a more robust system of monitoring is required. Environmental Standards Scotland questioned if the existing network of monitoring was “comprehensive enough to detect poor air quality”. The data in paragraph four of this submission, taken from the Clearing the Air: Transport + Lung Health report, excludes Aberdeenshire, Argyll and Bute, Moray, Nan Eilean Siar, and Orkney Islands as no information was available.

Asthma + Lung UK Scotland strongly encourages the Scottish Government to align its air quality ambitions with the 2021 World Health Organisation air quality guidelines. Meeting the new targets may prove challenging for the Scottish Government, local authorities, and other public bodies. However, with no safe levels of air pollution, lower limits will better protect human health, particularly those living with lung conditions and those at risk from developing lung conditions. Greater monitoring will determine if Scotland is on track to have the best air quality in Europe.

⁴ <https://www.rcpe.ac.uk/news/doctors-call-action-air-pollution>