

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

Submission from Environmental Rights Centre for Scotland (ERCS), 17 June 2025

Introduction

The Environmental Rights Centre for Scotland (ERCS) assist the public and civil society to understand and exercise their rights in environmental law and to protect the environment. We carry out advocacy in policy and law reform to advance the right to a healthy environment and compliance with the Aarhus Convention on access to information, public participation in decision-making, and access to justice on environmental matters.

This is our response to the NZET Committee's call for views in response to petition PE2123, which calls for the adoption of WHO 2021 air quality guidelines.

Views on air quality in Scotland

Do you support amending the Air Quality Standards (Scotland) Regulations 2010 to align with the 2021 WHO air quality guidelines? Please explain your reasoning.

Yes – the WHO is the world's preeminent public health organisation, and its guidelines are based on the best available scientific evidence and data. Air pollution is a major cause of premature deaths and diseases and the largest environmental health risk in Europe.¹ In Scotland, it is attributed to 2,700 deaths annually, and the associated burden of disease now estimated to be equivalent to tobacco smoking or unhealthy diet.² Improving air quality is therefore critical to environmental wellbeing and public health, and should be construed as a policy priority.

Higher air quality standards, if robustly enforced, can reduce demand on the health service from people experiencing asthma, lung cancer, and cardiovascular and respiratory conditions. Strengthened air quality standards are also vital to meet our emissions reduction targets under the Climate Change (Scotland) Act 2009 and the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 – recent analysis show that transport and agriculture are the sectors contributing most to Scotland's greenhouse gas emissions,³ and the adoption of WHO guidelines can help to accelerate progress in these areas.

Scottish standards were in line with WHO guidelines at the time they were introduced, but are now outdated. Under the Continuity (Withdrawal from the European Union) (Scotland) Act 2021, the Scottish Government introduced 'keeping pace' powers for Ministers to ensure that Scottish law remained aligned with evolving EU environmental standards. The EU has since agreed new air quality standards as part of the revised Ambient Air Quality

Directive — proposed to come into force in 2030 — which are more ambitious than existing Scottish standards and seek to align more closely with WHO recommendations.⁴

What progress has been made in reducing nitrogen dioxide and fine particulate matter in Scotland since 2022/23, when we last sought views on this?

Evidences shows that the introduction of Low Emission Zones (LEZs) in cities across Scotland has had a positive effect in reducing air pollution.⁵ Alongside LEZs, the expansion of Low Traffic Neighbourhoods (LTNs), active travel infrastructure, EV charging points, and the removal of peak rail fares are all positive steps that help incentivise a modal shift away from polluting private vehicles, which are a primary cause of nitrogen dioxide and fine particulate matter.

However, there are many other policies and laws designed to improve air quality that have not been implemented or effectively enforced. FOI data from ERCS and Asthma + Lung UK has revealed that despite hundreds of public complaints, there is a widespread lack of enforcement of Scotland's ban on engine idling, which remains commonplace and is a significant contributor to air pollution hotspots outside schools and hospitals.⁶ Following a representation by ERCS, this is now under active investigation by Environmental Standards Scotland. ERCS, alongside nineteen other organisations, has written to Scottish Ministers with a list of recommendations to improve the efficacy of the engine idling enforcement regime, but these have not been implemented.⁷

Sales of highly polluting Sports Utility Vehicles (SUVs) have also increased by over one fifth in the past year across the UK, yet there have been limited efforts to curb their use.⁸ Various policy measures have been proposed, including increasing vehicle excise duty on the most polluting vehicles, and banning SUV on advertising (the latter has been introduced by Edinburgh City Council), but are not yet enacted at a national level.

To what extent has scientific and public health evidence about air quality evolved since the current standards were adopted? In your answer you could refer, for instance, to impacts on nitrogen dioxide or fine particulate matter on particular groups of people, the effect of Low Emission Zones (or other interventions of a similar nature) on air quality, or any new information or data about the effect of burning particular types of fuel.

Beyond well-established impact on physical health, emerging evidence highlights the adverse impact of air pollution (especially PM 2.5) as a cause of poor mental health, dementia and cognitive decline.⁹ There is also growing evidence on the harm caused by indoor air pollution from wood or coal burning fires and stoves, which contributes to PM 2.5, and gas powered boilers, which release nitrogen oxides. These pollutants can accumulate and reach concentrations higher than outdoor levels – especially if there are no effective ventilation systems in place.¹⁰

The Scottish Government is currently reviewing the CAFS2 strategy with the goal of establishing a long-term policy framework to replace the strategy once it expires. What practical steps can the Scottish Government set out in its new strategy to reduce nitrogen dioxide and fine particulate matter levels?

There are a number of practical steps that the Scottish Government should introduce as part of its CAFS strategy. However, it should start by ensuring effective mechanisms for enforcement of laws and regulations already in place to limit nitrogen dioxide and fine particulate matter.

Proper enforcement of Scotland's ban on engine idling is a simple first step: The Scottish Government should amend its [2003 Guidance](#) to encourage local authorities to issue fines as the first point of enforcing the engine idling ban, publicise the offence and environmental/health impacts more widely online via websites and social media, and extend enforcement powers to parking attendants. Local authorities' duty to report engine idling enforcement activities to the Scottish Government as set out in the 2003 Guidance should also be re-established to ensure accountability on the effectiveness and enforcement of the regime.

Air Quality Action Plans (AQAPs) should be strengthened and updated, with specific and measurable timeframes for local air quality objectives. Their contents should be reviewed and scrutinised by environmental and public health experts, with councils held to account if plans are out of date or not acted upon.

Concerning ambient air pollution, more ambitious policies must be introduced to accelerate a modal shift to public transport and active travel, in line with the Scottish Government's commitment to achieving a 20% car km reduction. The Scottish Government should build on the success of LEZs by expanding the model to more Scottish cities and increasing the territorial area in cities where they have already been introduced, whilst simultaneously making public transport and active travel more affordable and accessible. It could utilise the powers of the Transport (Scotland) Act 2019 to support bus travel in underserved communities, creating affordable council-run services that address issues of cost, poor connectivity and journey time.

There should also be increased investment to replace diesel- and petrol-powered buses and trains, and to restrict the growth of SUVs through replicating the advertising ban introduced by Edinburgh City Council¹¹ in other local authorities. So that low-income people are not penalised, charges placed on the most polluting vehicles can be used to provide financial support for low-income groups to switch away from petrol and diesel vehicles.

Concerning indoor air pollution, the Scottish Government should strengthen regulations to improve ventilation, with a priority focus on public buildings such as schools, hospitals and care homes. It should also strengthen the Heat in Buildings (Scotland) Bill to prohibit the

installation of new polluting stoves and accelerate the replacement of gas and oil boilers with clean heating systems.

The Scottish Government should also expand and increase air quality monitoring, prioritising areas around schools, hospitals, maternity units and care homes. A lack of reliable data on air quality will weaken efforts to meet WHO guidelines. This is especially the case since Scotland no longer has access to EU wide comparative data, limiting the evidence base for policy decisions. Increased transparency, and public access to ambient air quality data, can stimulate greater accountability and responsiveness over time. Special efforts should be made to expand coverage to rural areas where data records are limited, and to increase public access to air quality alongside public information campaigns on the environmental and health effects of air pollution.

¹ European Environment Agency (2022) [Air quality in Europe 2022](#)

² UK Health Security Agency (June 2022) [Chemical Hazards and Poisons Report](#), p.19

³ Scottish Government (June 2024) [Scottish Greenhouse Gas Statistics 2022](#)

⁴ European Commission (Dec 2024) [Zero Pollution: New EU rules enter into force for cleaner air by 2030](#)

⁵ See for example Shin *et al.* (Sept 2024) [Did the Implementation of Low Emission Zone in Glasgow Change the Traffic Flow and Air Quality?](#) And Mueller *et al.* (April 2025) [Travel behaviour and Edinburgh's Low Emission Zone: a cross-sectional survey](#)

⁶ ERCS (Aug 2024) [engine idling briefing](#) and Asthma + Lung UK (Sept 2024) [Clearing the Air: Transport + Lung Health](#)

⁷ See ERCS *et al.* (March 2025) [Letter to Scottish Ministers on engine idling](#) and [Scottish Government response](#)

⁸ Transport & Environment UK (Feb 2024) [UK SUV sales have increased by more than a fifth in one year](#)

⁹ Committee on the Medical Effects of Air Pollutants (2022) [Cognitive decline, dementia and air pollution: A report by the Committee on the Medical Effects of Air Pollutants](#)

¹⁰ Lewis *et al.* (2023) [Hidden Harms of Indoor Air Pollution – Five Steps to Expose Them](#)

¹¹ Edinburgh City Council (May 2024) [Policy on advertising and sponsorship](#)