

ERCS submission to Net Zero, Energy and Transport Committee on air quality in Scotland

28 March 2023

About ERCS

The Environmental Rights Centre for Scotland (ERCS) was established in January 2020. We 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.

Views on air quality in Scotland

The Scottish Government has committed to incorporating recommendation 2 of the National Taskforce for Human Rights Leadership Report: *'To include the right to a healthy environment with substantive and procedural elements into the statutory Framework.'*¹ Clean air is one of the six substantive features of the Human Right to a Healthy Environment (HRHE), as recommended by Prof. David Boyd, UN Special Rapporteur on Human Rights and the Environment.² The HRHE is due to be incorporated into Scots Law as part of the Human Rights (Scotland) Bill. The Scottish Government will launch their pre-legislative consultation for the Human Rights (Scotland) Bill in the first half of 2023 and the Bill will be introduced in the current parliamentary term which runs 2021-2026.

Air pollution is now ranked as the single biggest environmental threat to human health, and the associated burden of disease now estimated to be equivalent to tobacco smoking or unhealthy diet. For the right to clean air to be fulfilled, robust regulations and standards must be in place that meet the most recent WHO guidelines, prevent pollutants from exceeding dangerous levels, and ultimately aim to eliminate harmful emissions at source.³ We would encourage the NZET committee to consult guidance in Prof. Boyd's thematic report on Clean Air to the Human Rights

¹ Scottish Government (Mar 2021) [National Taskforce for Human Rights Leadership \(2021\) Report](#), p.12. See also Annex D – explanatory note

² Boyd, D. (Dec 2019) [Right to a Healthy Environment: Good Practices: Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment](#), p 8

³ WHO (2021) [WHO Global Air Quality Guidelines](#)



Council (A/HRC/40/55).⁴ In it, he states that, to protect the clean air component of the right to a healthy environment, States must take seven key steps including 1) monitoring air quality and impacts on human health; 2) assessing sources of air pollution; 3) making information publicly available, including public health advisories; 4) establishing air quality legislation, regulations, standards and policies; 5) developing air quality action plans at the local, national and, if necessary, regional levels; 6) implementing air quality action plans and enforcing the standards; and 7) evaluating progress and, if necessary, strengthening plans to ensure that the standards are met. We elaborate below on how the UN Special Rapporteur's recommendations relate to Scotland.

Outdoor air pollution

The 2016 Air Quality (Scotland) Amendment Regulations incorporated the World Health Organisation (WHO) guideline value for PM 2.5 of 10µg m³, as an annual mean, into domestic legislation. The Regulations require local authorities to take action to reduce PM levels in areas where this is exceeded. However, in 2021, the European Court of Justice (ECJ) judged that, across the UK, breaches of air quality limit values for nitrogen dioxide (NO₂) had been 'systematic and persistent' between 2010 and 2017.⁵ Environmental Standards Scotland (ESS) has since conducted an investigation into air pollution in Scotland to address these outstanding issues. Their report concluded that while there has been some incremental improvement, ongoing non-compliance with NO₂ limits is not tenable and requires a strengthening of Air Quality Action Plans (AQAPs) prepared by government and local authorities.⁶ ERCS would endorse this conclusion, proposing that AQAPs are updated 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. This can be achieved by expanding free or low-cost public transport, promoting all inclusive/integrated travel cards, improving active travel infrastructure, re-designating parking spaces to increase cycle storage and limit private vehicle use, and extending Low Emission Zones (LEZs) across Scotland. So that low-income people are not penalised, charges placed on the most polluting vehicles in LEZs can be used to provide financial support for low-income groups to switch away from petrol and diesel vehicles.

While clean air policies tend to concentrate on pollutants emitted from vehicles and industry in built-up urban areas, the spreading of manure, slurries and fertiliser on agricultural land causes distinct pollution concerns – especially around the release of ammonia (NH₃), which is a growing contributor to air pollution in both rural and urban areas. A recent study found that farming is now responsible for more than one quarter of particle emissions in UK cities.⁷ However, as the Clean Air

⁴ Boyd, D. (Jan 2019) [Issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment - Report of the Special Rapporteur \(A/HRC/40/55\)](#)

⁵ European Court of Justice (March 2021) [Judgement of the Court \(Seventh Chamber\)](#)

⁶ Environmental Standards Scotland (Sept 2022) [Air Quality Investigation Improvement Report](#)

⁷ Kelly et al. (2023) [Diagnosing domestic and transboundary sources of fine particulate matter \(PM_{2.5}\) in UK cities using GEOS-Chem](#)



for Scotland 2 (CAFS2) strategy itself observes, with the exception of large pig and poultry units, there are currently no regulatory mechanisms in place in the UK to tackle at source the release of most agricultural ammonia emissions. Dedicated policies must urgently be brought in to bring these pollutants within the scope of regulatory enforcement and restrict activities that cause their release. Greater attention is also needed to understand and address the impact of other pollutants such as microplastics, fibres, and brominated flame retardants, which fall outside the scope of WHO standards. These policies also advance other substantive features of the HRHE, including healthy and sustainably produced food; healthy biodiversity and ecosystems; and non-toxic environments.

Indoor air pollution

Effective standards must also be in place to address indoor air pollution, which scientists have identified as a growing threat to human health.⁸ PM 2.5 emissions from wood and coal burning fires and stoves, nitrogen oxides (NO_x) from gas boilers, and other pollutants including carbon monoxide, formaldehyde, and Volatile Organic Compounds (VOCs) require greater monitoring and dedicated policies, such as targeted measures to improve ventilation, that fall outside the scope of existing clean air legislation.

Enforcement Mechanisms

Measures to tackle air pollution in Scotland are codified in existing legislation and associated policies, including the 1995 Environment Act, the 2000 Clean Air (Scotland) Act, the 2016 Air Quality (Scotland) Amendment Regulations, the Planning (Scotland) Act 2019 (which requires that the National Planning Framework must have regard to Scotland's national strategy for the improvement of air quality), and the 2021 Cleaner Air for Scotland 2 (CAFS2) strategy. ERCS is supportive of many provisions within CAFS2, especially the proposals for enhanced monitoring of air pollution through traffic data, remote sensing, and low cost sensors at a local level. There is an overall need for improved monitoring and reporting, especially in rural areas, and for the establishment of a dedicated, nation-wide monitoring body. SEPA is required to undertake pollution prevention and control through an integrated approach: considering emissions to air, water and land in the monitoring and regulation of pollutants from industrial sites.⁹ However, 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.

The Human Rights (Scotland) Bill can build on CAFS2 by advancing a human rights-based approach that clarifies relationships between rights holders and duty bearers (public bodies, and private bodies with public responsibilities). The 2022-23 Clean Air (Human Rights) Bill is currently

⁸ Lewis et al. (2023) [Hidden Harms of Indoor Air Pollution – Five Steps to Expose Them](#).

⁹ [The Pollution Prevention and Control \(Scotland\) Regulations 2012](#)



undergoing passage through the House of Lords¹⁰, and would establish the right to breathe clean air in England and Wales. It provides a robust legislative template for Scotland to follow in pursuit of environmental and public health objectives.

Recommendations

ERCS recommend that the Scottish Government build on the 2021 WHO air quality guidelines, and Environmental Standards Scotland's investigation into air pollution in Scotland, taking steps to:

- **Keep pace with revised 2021 WHO guidelines on PM2.5 and PM10, ozone, nitrogen dioxide, sulphur dioxide and carbon monoxide,¹¹ and respond to emerging evidence on air pollution risks.** Scottish standards were in line with WHO guidelines at the time they were made, but are now outdated. Similarly, evidence is growing on the health risks posed by indoor air pollution. Consultation with bodies such as NHS Scotland, Health Protection Scotland, and the Committee on the Medical Effects of Air Pollution (COMEAP) can ensure appropriate policies are in place to uphold the right to clean air.
- **Update and strengthen Air Quality Action Plans (AQAPs) prepared by local authorities.** Plans should include 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.
- **Expand, implement and enforce policies to remove the most polluting vehicles, and ensure a modal shift to public transport and active travel in line with the Scottish Government's commitment to a 20% car km reduction.** Policies such as free or low-cost public transport, all inclusive/integrated fares and travel cards, improved active travel infrastructure, and financial support for low-income groups to replace petrol/diesel cars can assist this process.
- **Expand and increase air quality monitoring and reporting, and introduce an appropriate monitoring body.** Special efforts should be made to expand coverage to rural areas where data records are limited. New measures should ensure that coverage for other pollutants such as ozone, nitrogen dioxide and sulphur dioxide matches PM monitoring, since they have received less attention and lower levels of monitoring to date.
- **Increase public access to air quality data,** through sharing datasets with global and open access databases such as the WHO Global Ambient Air Quality Database and OpenAQ.

¹⁰ [Clean Air \(Human Rights\) HL Bill 210](#) (2022-23)

¹¹ According WHO (2021: 8), 'Implementation of the guidelines requires the existence and operation of air pollution monitoring systems; public access to air quality data; legally binding, globally harmonized air quality standards; and air quality management systems'