Clean air in Europe: no delay, no exemptions, no more pollution

Statement from the European Respiratory Society (ERS) and European Lung Foundation (ELF) on the results of the European Parliament vote and ongoing negotiations in the Council on the revision of the Ambient Air Quality Directive

As the EU Environment Council prepares to adopt its position (General Approach) on the revision of the EU Ambient Air Quality Directives (AAQD), ERS and ELF urge the EU environment ministers to prioritise health, follow the science on health effects of air pollution and fully align the new air quality standards with the World Health Organization (WHO) 2021 Air Quality Guidelines (WHO, 2021) by 2030.

This is an essential step towards clean air in Europe for all, which will improve lung health, prevent substantial numbers of new cases of lung diseases and improve quality of life of respiratory patients, lower the economic cost of health care, boost economic growth, and help mitigate the effects of climate change (Turner et al. 2023). In September 2023, the European Parliament voted to support the full alignment with WHO AQGs, an important step in the right direction towards clean air for all, but with a delay of five years, from 2030 to 2035. As the Council considers allowing even longer delays, this is of great concern to ERS and lung patients around Europe.

Delays cost money

The main argument against strict new Air Quality Directive come from concerns about the costs of clean air regulations and their potential burden on European economies. However, the opposite is the case. Air pollution is already posing huge costs to Europe’s economies, which amount to 4.6% of its gross domestic product (GDP) (World Bank, 2022). The European Commission (EC) estimates that air pollution costs EU €500 billion EUR every year, from air pollution-related premature deaths and health care costs, in terms of doctor visits, hospitalisations, medication costs, sick days, etc. (EC, 2022). Employers alone lose €8 billion EUR each year due to lost workdays. Damage to crops and forests amounts to €30 billion EUR lost each year.

In fact, the EC Cost Benefit Analysis showed clearly that the cost of cleaning up the air and bringing PM$_{2.5}$ limits down to 5 µg/m$^3$ (full alignment with WHO guidelines) by 2030 of around €7 billion annually is much lower than the cost of inaction of €45 billion (Table 8, EC, 2022). Indeed, the most significant net benefit for the economies in Europe comes with full alignment with WHO 2021 AQGs in 2030, at around 38 billion EUR (Table 8, EC, 2022)). As the health care systems around Europe are struggling with increasing visits and costs related to ageing and multi-morbidities from non-communicable diseases (NCDs), saving costs by preventing air pollution-related NCDs and enhancing healthy ageing, is an opportunity that must not be missed.

Delays mean missed opportunities for economic growth

Cleaning the air does not supress, but it supports economic growth. Net gains of the EU’s gross domestic product (GDP) will increase by 0.44% upon fully attaining WHO 2021 AQG by 2030 (Table 9, EC 2022). The most ambitious clean air policies will lead to the highest gross domestic product (GDP)
gains. One example is the projected increase in the number of jobs in air pollution abatement equipment production (page 48, EC, 2022).

**Delays cost lives**

In Europe, fine particulate matter air pollution (PM$_{2.5}$) caused 412,000 premature deaths in 2020, and of these, 238,000 were at the levels above WHO 2021 AQG for PM$_{2.5}$ of 5 µg/m$^3$ (EEA, 2022). Furthermore, there are millions of air pollution-related new cases of asthma, COPD, acute respiratory infections, lung cancer, stroke, myocardial infarction, hypertonension, diabetes, dementia and other mental health disorders, as well as aggravations of these diseases in already ill persons each year.

The Parliament in September proposed an intermediate target of 10 µg/m$^3$ for 2030, allowing a 5-year delay to reach complete alignment with 5 µg/m$^3$ by 2035. In 2030 alone, the delay of the full alignment (difference between 5 and 10 µg/m$^3$) would cost 187,000 premature deaths, resulting in around 600,000 premature deaths over the 5-year delay period, until 2035.

Allowing for any further delays and relaxing the ambition for full alignment with WHO 2021 AQGs will impose a substantial and unacceptable loss of human lives in Europe. Children, pregnant women, elderly, chronic disease patients, and people in low socio-economic groups are especially susceptible to the harmful effects of air pollution and will suffer most from a delay in action.

**Delays mean missed opportunity for elimination of energy poverty in Europe**

Energy poverty is a widespread problem across Europe, and primarily in Eastern and South Eastern Europe, where air pollution levels have the highest burden on health. Energy poverty is directly linked to health and socio-economic inequalities, to low household income, high-energy costs and energy inefficient homes (Jevtic et al. 2021).

Energy poverty encompasses the already vulnerable population using inefficient old stoves and polluting fuels, such as coal and wood, as their major heat (and cooking) source. This leads to high indoor and outdoor air pollution as well as energy loss. Energy poverty is a distinct form of poverty associated with various adverse consequences for people's health and well-being (respiratory diseases, CVD, mental health, and stress associated with unaffordable energy bills).

An ambitious AAQD could be the opportunity needed to eliminate energy poverty, create new jobs in providing alternative affordable heating sources, such as central heating and heat pumps, insulating houses, and reduce health and productivity costs, etc.

**Right to breathe clean air versus freedom to pollute**

An argument against the strict new Ambient Air Quality Directive comes from concerns that it may lead to restrictions on mobility by car traffic in the cities. However, reducing air pollution from traffic could encompass initiatives to shift from privately owned polluting cars to shared electric vehicles and, more importantly, to support active mobility and public transport.
Reduced air pollution would give the freedom back to chronic lung patients (asthmatic children and adults, chronic obstructive lung disease patients and lung cancer patients), for whom air pollution in the cities causing exacerbations of their diseases presents a barrier to being outdoors and moving freely. Health-based urban and mobility planning can both improve everyone's mobility and freedom to move, as well as help reduce air pollution and improve health for all.

Furthermore, these initiatives would provide additional health co-benefits by enhancing physical activity, reducing road traffic noise, and helping mitigate climate change impacts. By guaranteeing good air quality, we are not taking away anyone’s freedom but protecting the right to life and health. Other interventions based on new technologies, such as efficient and sustainable production of energy for heating, the reduction of ammonia emissions from intense livestock, or behavioural changes, will be beneficial for the air and address the climate crisis and its impact on health.

To conclude, member states in the Council must follow the science and listen to citizens to put health at the centre of their political decision, as this is a unique public health opportunity toward clean air for all. It will save lives and money, enhance economic growth, and provide improved cities and enhance the quality of life in Europe.

About ERS:
The ERS is one of the leading medical organisations in the respiratory field, representing over 35,000 respiratory clinicians, scientists and allied healthcare professionals, spanning more than 160 countries worldwide. ERS prioritises science, education and advocacy in order to promote lung health, alleviate suffering from disease and drive standards for respiratory medicine globally.

About ELF:
ELF is a patient-driven organisation that works in partnership with the European Respiratory Society (ERS) to develop the union between lung health professionals and patients. ELF brings together patients and the public with healthcare professionals to improve lung health and advance diagnosis, treatment and care. Its vision is for people living with lung conditions to centrally be involved in lung healthcare and research. ELF works with people from all over the world, including a volunteer patient network of more than 350 people and a patient organisation network with more than 200 respiratory organisations in Europe.
References

European Commision (EC). 2022. Study to support the impact assessment for a revision of the EU Ambient Air Quality Directives. Written by Trinomics, Rotterdam.


