Revision of the Ambient Air Quality Directives –
EEB’s Response to the Public Consultation Questionnaire

The EU Ambient Air Quality Directives need to be updated

Air pollution is largely preventable and EU air quality standards, especially legally binding limit values, have proven to be vital in cleaning up the air. The 2008 EU Ambient Air Quality Directive (AAQD) is one of the cornerstones of the EU’s clean air policies, setting standards for air quality for the protection of people’s health and the reduction of environmental damage. However, the current air quality standards are insufficient and outdated, i.e. they do not reflect the latest available science. In September 2021 the World Health Organisation (WHO) published their updated recommendations for air quality, based on a thorough scientific review process. EU air quality standards should urgently be updated in line with these recommendations.

Air pollution is the number one environmental health risk in the EU, causing both chronic and serious diseases such as asthma, cardiovascular problems and lung cancer. Air pollution is responsible for some 400 000 premature deaths in the EU every year and for damage to ecosystems and biodiversity through eutrophication, acidification and excess ozone levels. Moreover, most Member States still do not comply with the EU’s air quality standards and have not been taking enough effective action to sufficiently improve air quality. Thus, the revision should result in improved implementation and enforcement.

Effective policy action to quickly and drastically reduce the health and environmental damage caused by air pollution is urgently required. The long-awaited revision of the Ambient Air Quality Directives provides a golden opportunity to ensure cleaner air and to achieve a high level of protection for citizens and ecosystems, in line with the EU’s zero pollution ambition.

EEB’s response document presents desired developments for a successful revision of the AAQD. Below is a summary of the key points which are addressed in more detail later on. The document is structured along with the Commission’s public consultation questionnaire according to the three policy areas. In addition, it includes a feasibility section in line with Part 3 of the public consultation.

Key points for a successful revision of the Ambient Air Quality Directives

1. Ensure full alignment of the EU air quality standards with scientific knowledge, including the latest recommendations of the World Health Organisation and the work on critical levels and loads under the Air Convention;

2. Ensure that the revised directive has a very ambitious timeline;
3. Extend the scope of the air quality standards to include the pollutants ammonia, mercury, black carbon and ultrafine particles;

4. Air quality standards in the form of binding limit values have been and must continue to be a key driver;

5. Improve implementation and enforcement, e.g. through the introduction of provisions on sanctions and penalties;

6. Harmonise and improve access to up-to-date information related to air pollution;

7. Strengthen provisions on air quality monitoring, modelling and plans in the revised directive, but also before the revision is complete by making use of the EC’s implementing powers now;

8. Strengthen supporting legislation and other initiatives that will reduce air pollution (such as EU policies and legislation on climate, transport, industry, energy and agriculture).

9. Improve the legislative framework for delivery plans as well as remedial plans

EEB’s demands by policy area of the revision

Policy area 1: EU standards

The revised EU air quality laws must include full alignment with the recently published 2021 WHO air quality guidelines for the protection of health and with the Air Convention’s scientifically based critical levels for protection of vegetation. In September 2021 the World Health Organisation (WHO) published their updated recommendations for air quality. Having in mind that no safe levels of air pollution exist, EU air quality standards should, as a minimum, urgently be updated in line with these recommendations. The new WHO guidelines are the gold standard, having been developed through a transparent, evidence-based quality control process that assures that each and every guideline is impactful and meets the highest international scientific standards. The guidelines have to be the compass when closing the gap between science and current protection through legislation.

The urgency to reduce health and environmental damage due to air pollution means that the revised Directive must set a very ambitious timeline for achieving the revised air quality standards (which must be fully aligned with the most recent WHO guidelines).

The revised AAQD should also broaden the scope of air quality standards. The body of evidence has grown on how air pollutants currently not covered by EU’s air quality standards contribute to poor air quality. To elaborate these new standards, the Commission should also consider scientific evidence on critical loads and levels for the protection of the environment as elaborated in the framework of the Air Convention. This is especially important regarding ammonia - critical levels for ammonia concentrations (provided here) must be included in the new AAQD. Air quality standards for ammonia are necessary to prevent damage to ecosystems, but as ammonia is also an important precursor of PM2.5, a standard for ammonia concentration will also deliver benefits for human health. Other pollutants not covered by the AAQD include mercury, black carbon, and ultrafine particles and critical levels for these should be a priority as well. Ambient air pollution is also a major contributor to indoor air pollution where it is combined with pollutants originating from indoors such as chemicals, damp
and mould, indoor combustion). Therefore, the Commission should consider developing an integrated framework for clean air both indoors and outdoors.

**Air quality standards in the form of binding limit values** have been and will continue to be a key driver for reducing air pollution concentrations. The importance of binding limit values was stressed by the Commission in its Fitness Check of the Ambient Air Quality Directives (SWD(2019) 427 final). Other forms of standards, such as exposure reduction targets or target values, should only play a complementary role (i.e. not an alternative one). We therefore urge that binding limit values must continue to be the primary legislative instrument in the revised AAQD.

A process for **automatic adjustment of air quality standards as soon as new scientific evidence is available** should be part of the revised AAQD. Target values can be useful as a temporary step for pollutants that are currently non-regulated (standards for these pollutants could initially be set as target values, but should eventually become limit values. The body of evidence on how air pollution harms health has been steadily increasing, with 40,000 research papers just in the last ten years. The EU’s current air quality standards are based on a review of the evidence from the beginning of the 2000s, and haven’t been updated since 2008. The starting point for any update mechanism after the new legislation enters into force should be the latest science currently already available and which the new legislation should reflect immediately from the beginning.

**Strengthen supporting legislation and other initiatives that will reduce air pollution (such as EU policies and legislation on climate, transport, industry, energy and agriculture).** The role played by the revised AAQD will be complemented by policies to reduce pollution at source and reductions of emissions at national level. New actions which will also deliver on air pollution reduction (e.g. Smart and Sustainable Mobility Strategy, Renovation Wave and Zero-Pollution Action Plan, Farm to Fork, together with the Climate Law for a climate neutral EU). These initiatives will and should drive the development of more ambitious source policies which should be based on the latest technological and scientific developments. These three elements (air quality standards, reduction of national emissions and reduction of emissions at the source) are complementary: the revised AAQD will be part of a legal framework where parallel paths to reduce air pollution exist and others will materialise in the coming years. An ambitious AAQD will also be key to further push for the development of urgently needed source policies and updated national emissions reduction targets. This makes an ambitiously revised AAQD (aligned with the updated WHO air quality guidelines) an imperative choice, to make sure that the resulting picture is coherent and forward looking alongside the zero pollution ambition.

**Policy area 2: legislative frame**

The revision of the AAQD offers an opportunity to improve the legislative framework on the development of Air Quality Plans. Changes to the legislative framework can be vital to ensure better implementation and enforcement of the AAQD and more timely and effective compliance with the air quality standards.

The revision should consider improvements to the legislative framework for delivery- as well as remedial plans. Delivery plans are the air quality plans that competent authorities are required to adopt before the attainment deadline, to ensure compliance with air quality standards (limit values or target values). Remedial plans are the air quality plans to be adopted in the event of exceedances of limit values for which the attainment deadline is already expired.
Delivery plans are essential to ensure timely compliance with air quality standards and the legal framework for delivery plans is very vague and weak. As a result, the Commission and civil society were unable to take early enforcement action even when it was clear that limit values were going to be infringed. Thus, enforcement activities and infringement proceedings have started only when Member States failed to comply with limit values after the attainment deadline.

It would be important to further elaborate the legal provisions on delivery plans to make sure that competent authorities, the Commission and civil society can regularly review the impact of pollution abatement policies adopted before the attainment deadline. When there is a risk of non-attaining the limit values by the deadline, the legal framework should require the authority to review and improve the delivery plans. The legal framework should offer an opportunity for early enforcement interventions rather than having to wait until the deadline for compliance will be missed and focus only on remediation.

The legal framework for National Air Pollution Control Programmes in the NEC Directive 2016/2284 (EU) provides a good example for requirements on delivery plans and programmes. In particular, it is important to add the following requirements to strengthen the legal framework for delivery plans in the Air Quality Directive.

Additionally, the revised AAQD should include provisions ensuring access to justice at the national level when the matter is related to air quality, as well as more detailed provisions on penalties and provisions to harmonise rules on compensation for damages. In October 2021 the United Nations Human Rights Council adopted a resolution recognizing that a clean, healthy and sustainable environment is a human right. The right to breathe clean air is one of the key components of this right. Air pollution negatively impacts on the entitlement of many human rights, especially in relation to vulnerable groups. The AAQD should enable citizens to exercise their rights and ensure that they are being fulfilled. Detailed provisions on penalties and provisions are needed to improve as well as to ensure compliance with limit values and citizen involvement and awareness of air pollution.

The AAQD should also define an air quality information system to present up-to-date information to the general public in an accessible and harmonised way, allowing for comparability and that could serve as a common alerting system. The revised AAQD should also introduce harmonised information and alert thresholds for all air pollutants covered by the Directive, especially for particulate matter.

Given the wide discrepancy in the national systems for penalties which results in a lack of effective remediation in several countries, there is the need to revise provisions on penalties and introduce a more detailed provision than the current Article 30 of Directive 2008/50/EC.

Policy area 3: monitoring, modelling, plans

While it is important to include key changes in the revision of the AAQD, the Commission should immediately provide additional guidance on air quality monitoring, modelling and plans through the
adoption of implementing acts under Article 28 of Directive 2008/50/EC; these provisions could then be reflected in the revised AAQD.

When it comes to strengthening the air quality monitoring, modelling and plans there are several key steps to be considered, including:

- Increase the minimum number of PM$_{2.5}$ stations and set clearer requirements for the proportion between different types of monitoring stations;
- Introduce definitions of different types of monitoring stations;
- Require the installation of monitoring stations for black carbon, ultra-fine particles and ammonia;
- Ensure continuity of measurements for all pollutants covered by the revised AAQD;
- Strengthen the siting criteria;
- Provide clearer requirements for the content, publication and review of the documentation on network design and site locations;
- Require a more regular use of models and indicative measurements to support information from fixed sampling points and introduce reference methods for modelling and indicative measurements;
- Strengthen and clarify the requirements in Annex XV regarding the minimum content of air quality plans and provide an extensive checklist of pollution abatement measures to be considered during the preparation of air quality plans;
- Set out clearer requirements concerning the process for the adoption and revision of air quality plans, including requirements on timeframes, public participation and provision of information on technical assessment and forecasting.

When assessing the cost-effectiveness of monitoring, reporting and assessment regimes, it is essential to take into account the huge benefits of improved knowledge about concentrations of pollutants in the air and population exposure, as this data and information has allowed significant developments in science on the health and environmental impacts of air pollution. While it is difficult to put a monetary value on this benefit, it is clearly of high importance, not least because improved scientific knowledge of air pollution is essential to support decision-making and clean air policies.

**Part 3: Feasibility and importance**

When assessing feasibility of compliance with the 2021 WHO recommendations, the baseline scenario should include full implementation of the whole EU acquis that will contribute to lower emissions of air pollutants. That includes the NEC Directive, all relevant source regulations (including the revised Industrial Emissions Directive, the upcoming Euro 7/VII standards and new CO2 targets for road vehicles) and other sector policies, such as for energy (incl. domestic heating), transport/mobility (incl. international and domestic shipping) and agriculture/food. The impact assessment should also account for the overlaps and co-benefits between air pollution and climate change policies, including the increased climate ambition towards reducing greenhouse gases by at least 55% by 2030 in the EU. The MTFR scenario should not be limited solely to technical measures but should also include structural (non-technical) measures and the use of economic instruments. Examples of structural measures include promotion of energy efficiency and dietary change, faster
replacing of old polluting vehicles and combustion installations, alternative (cleaner and more efficient) transport/mobility systems, etc. Moreover, the MTFR scenario should include assumptions on applying MTFR as well as structural measures also outside of the EU, in particular in those countries and sea areas neighbouring to the EU and whose emissions therefore contribute to air quality impacts within the EU.

The Impact Assessment should fully consider that the socio-economic benefits from reducing air pollution are much higher than the related costs, and that reduced air pollution contributes to improved quality of life and an incremental GDP growth. This will make air quality standards, aligned with the latest WHO guidelines key to ensure that the EU has a legislative framework that really promotes necessary change and reduces air pollution to the minimum, in line with the zero pollution ambition.