

# Consultation on options for revision of the EU Thematic Strategy on Air Pollution and related policies

Welcome to the Consultation on the review of the EU Thematic Strategy on Air Pollution and related policies.

This questionnaire is intended to inform the current review of the Thematic Strategy on Air Pollution of the EU. The review evaluates the progress made towards both the interim and long-term objectives as well as the overall fitness of the EU Air Quality policy framework, with a view of confirming, updating and strengthening the existing objectives. More information on the current review process can be found in the **explanatory notes accompanying the public consultation**.

The questionnaire consists of five sections and asks your opinion about the following issues and drivers: ensuring compliance with EU air quality requirements; reducing exposure to damaging air pollution in the long term; revising the Ambient Air Quality Directive (AAQD); and revising the National Emission Ceilings Directive (NECD). The questions included in the survey are mostly multiple choice; you will be able to provide any written comments at the end of the questionnaire.

The questionnaire should take approximately 15-20 minutes of your time. Your answers are saved as long as a network connection is established. If your browser is closed it might be possible to recover answers, but this however cannot be guaranteed. For this reason, we encourage you not to interrupt the session once you have started the questionnaire. You may wish to download the text of the questionnaire from the main consultation page in order to examine the questions and elaborate on your replies before starting an on-line session.

Once you have submitted your answers, you will have the option to download a copy of your answers.

Unless you specify otherwise, your contribution will be published on the Commission's website. In the introductory section, you will be given the opportunity to indicate whether you wish your contribution to be anonymous.

*This document does not represent an official position of the European Commission. It is a tool to explore the views of interested parties. The suggestions contained in this document do not prejudge the form or content of any future proposal by the European Commission.*

Questions marked with an asterisk \*require an answer to be given.

## Section 1/5: Introductory Questions

A. Please indicate the country where you reside: \*

- |                                      |                                   |                                      |
|--------------------------------------|-----------------------------------|--------------------------------------|
| <input type="radio"/> Austria        | <input type="radio"/> Greece      | <input type="radio"/> Portugal       |
| <input type="radio"/> Belgium        | <input type="radio"/> Hungary     | <input type="radio"/> Romania        |
| <input type="radio"/> Bulgaria       | <input type="radio"/> Ireland     | <input type="radio"/> Slovakia       |
| <input type="radio"/> Cyprus         | <input type="radio"/> Italy       | <input type="radio"/> Slovenia       |
| <input type="radio"/> Czech Republic | <input type="radio"/> Latvia      | <input type="radio"/> Spain          |
| <input type="radio"/> Denmark        | <input type="radio"/> Lithuania   | <input type="radio"/> Sweden         |
| <input type="radio"/> Estonia        | <input type="radio"/> Luxembourg  | <input type="radio"/> United Kingdom |
| <input type="radio"/> Finland        | <input type="radio"/> Malta       | <input type="radio"/> Rest of Europe |
| <input type="radio"/> France         | <input type="radio"/> Netherlands | <input type="radio"/> Outside Europe |
| <input type="radio"/> Germany        | <input type="radio"/> Poland      |                                      |

B. Please indicate your title and name: \* (maximum 150 characters)

C. Do you now work on air pollution issues, or have you done so in the past? \*

- ☐ Yes, air pollution has been an area of my professional work
- ☐ No

D. What type of area do you live in? \*

- ☐ Rural area
- ☐ Suburban area
- ☐ Urban area: town/small city
- ☐ Urban area: large city

Unless you specify otherwise, your contribution will be published on the Commission's website. Please indicate here if you wish your contribution to be anonymous. (For full information please refer to the Specific Privacy

Statement point 3) \*

- ☐ You can publish this contribution as it is.
- ☐ Please make this contribution anonymous.

## Section 2/5: Ensuring compliance with EU air quality requirements

The current EU-wide framework for air pollution control consists of three main elements: (1) a legal regime for air quality management in zones and agglomerations; (2) caps on emissions at a national level; (3) source specific emission legislation established at Union level. This is described further in the **explanatory notes accompanying the public consultation**.

### Current compliance situation:

EU air quality limit values must be achieved everywhere, but many EU Member States do not comply with those set in the Ambient Air Quality Directive 2008/50/EC (AAQD) for several pollutants. As a consequence, the European Commission is currently pursuing infringement cases with a number of Member States, whilst also supporting exchange of information on best practices to achieve compliance. However, other options to ensure widespread compliance in the short term should also be considered.

The implementation of the National Emissions Ceilings Directive 2001/81/EC (NECD) generally gives a more encouraging picture. Most of the 2010 ceilings should be complied with, with the notable exception of the NO<sub>x</sub> (nitrogen oxides) ceilings, which are exceeded in many Member States.

Reasons for non-compliance include the transboundary fluxes of pollutants across national borders, lack or limited efficacy of emission controls in certain sectors (for instance road transport and residential heating), and the lack of coordination between national and local levels on air quality management.

For further information regarding non-compliance with the current air policy framework, please see Sections 4.1 and 6.1 of the **explanatory notes accompanying the public consultation**.

1. How should the EU modify or supplement its approach to ensure compliance with current air quality legislation? (Please choose one or more responses) \* (at least 1 answer)

- ☐ No adjustment of the approach described above is needed.
- ☐ Additional non-legislative options: for example by establishing partnership agreements with MS that focus Member State efforts to address non-compliance with air quality objectives
- ☐ Relaxing the obligations under Ambient Air Quality Directive
- ☐ Strengthening emissions controls: for example more stringent emissions ceilings or source controls that support the attainment of air quality limit values
- ☐ Don't know



1a. Which option should be considered as additional non-legislative measures? (Please choose one or more responses) \* (at least 1 answer)

- ☐ Governance support, for example through competence building programmes and guidance on increased and more effective use of existing EU funding sources
- ☐ Partnership implementation agreements negotiated between the Commission and Member States in infringement, where further legal action would be suspended subject to proper implementation of agreed transparent and binding programmes to address air pollution
- ☐ Other
- ☐ Don't know



1b. Which options should be considered to relax obligations under the AAQD? (Please choose one response) \*

- ☐ Weaken those air quality limit values for which there is currently widespread non-compliance (in particular PM and NO<sub>2</sub>)
- ☐ Postpone the date for attainment of the existing limit values
- ☐ Other
- ☐ Don't know



1c. Which options should be considered to set more stringent obligations on air pollution emissions? (Please choose one response) \*

- ☐ Set more stringent emission ceilings for 2020 in a revised EU National Emissions Ceilings (NEC) Directive. This option would set the priority on air pollution measures taken by national authorities to meet the ceilings
- ☐ Set more stringent emission source controls at an EU level (e.g. on combustion plants, motor vehicles and other sources), focusing on the sectors where measures to reduce emissions will be most cost effective in terms of improving air quality
- ☐ Combine, in a matched approach, more stringent national ceilings under the NEC Directive with more stringent source controls at EU level
- ☐ Other
- ☐ Don't know

## Section 3/5: Further reducing exposure to damaging air pollution in the medium to long term

The EU's long-term objective for air policy is the attainment of '*levels of air quality that do not give rise to significant negative impacts on, and risks to human health and the environment*', and successive phases of air policy are designed to move towards this by setting interim standards and objectives designed to tap as much as

possible the medium term improvement potential. The World Health Organisation advises that the present air quality standards are insufficient to protect human health and the environment, notably for PM and O<sub>3</sub>, and so the revision of the Thematic Strategy will consider the possibility of setting further, more ambitious objectives.

For further information regarding reducing exposure to damaging air pollution in the medium to long term, please see Section 6.3 of the **explanatory notes accompanying the public consultation**.

### Sub-section 3.1: Ensuring coherence between air pollution and climate change policies

The Commission's work programme for 2013 foresees a new climate and energy framework for the 2030 time horizon. This will, in all likelihood, also inform ongoing international negotiations on a new legally binding climate agreement that is expected to be agreed before the end of 2015. The relation between the forthcoming air and climate policies, which address many of the same substances and sources, is an important strategic issue.

There are both synergies and trade-offs to consider. Improved energy efficiency and renewable energy sources mostly reduce air pollution as well as climate pollution. (An exception is biomass, which can result in increased emissions of particulate matter and poly-aromatic hydrocarbons (PAHs).) Some air pollutants also act as short-lived climate pollutants (SLCP): potent climate forcers over their shorter lifetimes in the atmosphere compared to other climate gases such as CO<sub>2</sub>. The main ones are a fraction of particulate matter known as black carbon, and ground level ozone.

2. How should future EU air pollution policy interact with a new climate and energy framework for 2030?

(Please choose one response) \*

- ☐ It should maximise the synergies between the policies, but with no new air pollutant emissions reductions except those delivered by the climate and energy policy
- ☐ It should maximise the synergies between the policies, and set out additional measures to reduce air pollutant emissions and improvements to air quality
- ☐ Other
- ☐ Don't know

3. Should specific complementary action in the EU be pursued to curb emission of short-lived climate pollutants (SLCP) and their precursors, to improve both air quality impacts on health but also to boost climate mitigation in the short term? \*

- ☐ Yes
- ☐ No
- ☐ Don't know



3a. Should specific complementary action be pursued to curb black carbon emissions? (Please choose one response)

- ☐ Yes
- ☐ No
- ☐ Don't know



3b. Should specific action to address ozone precursors that are short-lived climate pollutants, such as methane, be reinforced? (Please choose one response)

- ☐ Yes
- ☐ No
- ☐ Don't know

### Sub-section 3.2: Strategic approach and target year of future air pollution policy

The amount of additional progress on air quality the EU should aim for is defined in terms of reducing impacts on both human health and the environment.

The greatest reduction that can be achieved is called the maximum technically feasible reduction (MTFR), which would be the outcome of applying every pollution control measure available in the market, irrespective of cost.

Some such control measures are much more expensive than others; by concentrating efforts on the more affordable ones it is therefore possible to deliver a substantial share of the MTFR at only a fraction of the cost, ensuring that the environmental and health benefits outweigh the costs incurred to reduce emissions.

4. How much additional progress should EU air pollution policy pursue in the revised Thematic Strategy?

(Please choose one response) \*

- ☐ No change: only the level of protection delivered by current legislation
- ☐ The level delivered by the forthcoming climate and energy framework for 2030, without additional air pollutant emission reductions
- ☐ Substantial progress beyond the climate and energy framework, towards the maximum achievable pollution reduction
- ☐ The maximum achievable pollution reduction (MTFR)
- ☐ Don't know

### Sub-section 3.3: Setting Priorities

EU air pollution policy and legislation addresses impacts on both human health and the environment (including both impacts on the natural environment as well as those on crops). While both goals will remain, legislation could set a priority on achieving further reductions.

For further information on the emission control measures that are most effective to improve on either health or environmental impacts, please see Section 4.3 and Annex A of the **explanatory notes accompanying the public consultation**.

5. How should EU air pollution policy give priority to addressing either human health or the environment? (Please choose one response )\*

- ☐ Equal weight to both
- ☐ Give priority to addressing human health impacts
- ☐ Give priority to addressing environmental impacts
- ☐ Other
- ☐ Don't know

### Section 4/5: Revising the Ambient Air Quality Directive (AAQD)

The Ambient Air Quality Directive sets binding limit values for the maximum concentrations in ambient air of eight pollutants: sulphur dioxide (SO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>) and oxides of nitrogen (NO<sub>x</sub>), particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), lead (Pb), benzene (C<sub>6</sub>H<sub>6</sub>) and carbon monoxide (CO). The Directive also sets non-binding target values for ground-level ozone (O<sub>3</sub>). Limit or target values are expressed as short-term (8-hour or daily) averages, or long-term (annual) averages, and for some pollutants both kinds are set.

#### Sub-section 4.1a: Aligning with latest scientific and technical knowledge

The World Health organization (WHO) has identified guidance values for ambient concentrations of major pollutants to protect human health; these are more stringent than the limit values currently set in the AAQD. The reference levels in the table below include EU limit or target levels and WHO air quality guidelines (AQG).

Table of EU limit or target values vs WHO guidelines for air quality (all levels in µg/m<sup>3</sup> except where otherwise indicated, averaging periods also listed).

Pollutant	EU reference value	WHO reference level
PM <sub>2.5</sub>	Year (25)	Year (10)
PM <sub>10</sub>	Day (50)	Year (20)
O <sub>3</sub>	8 hour (120)	8 hour (100)
NO <sub>2</sub>	Year (40)	Year (40)
BaP	Year (1ng/m <sup>3</sup> )	Year (0.12 ng/m <sup>3</sup> )
SO <sub>2</sub>	Day (125)	Day (20)
CO	8-hour (10mg/m <sup>3</sup> )	8-hour (10mg/m <sup>3</sup> )
Pb	Year (0.5)	Year (0.5)
C <sub>6</sub> H <sub>6</sub>	Year (5)	Year (1.7)

Source EEA

Particulate matter includes several different components. A specific limit value of 25 µg/m<sup>3</sup> is set for fine particles (PM<sub>2.5</sub>), as long-term exposure to this pollutant has been found to have strong health effects. The AAQD calls for a review of this limit value by 2013, with a view to tightening it indicatively to 20µg/m<sup>3</sup> subject to feasibility

6. Should the indicative limit value for PM<sub>2.5</sub> of 20 µg/m<sup>3</sup> for 2020 be made mandatory? (Please choose one response) \*

- ☐ Yes
- ☐ No
- ☐ Don't know

7. Should the PM<sub>2.5</sub> or other limit values in the AAQD be made more stringent to bring them closer to WHO guidance values? (Please choose one response) \*

- ☐ No change
- ☐ Yes, review the limit values and bring them closer to WHO guidance values
- ☐ Bring AAQD limit values closer to WHO guidance values only in the future, once the EU has made further emissions reductions
- ☐ Don't know

### Sub-section 4.1b: Aligning with latest scientific and technical knowledge (black carbon)

Another component of PM, black carbon (BC), has health impacts and is also a short-lived climate pollutant. BC is one of the constituents of total PM mass, but requirements to separately monitor or reduce BC concentrations are not established in current air quality legislation. Such requirements may help further reducing health impacts and at the same time have a positive synergistic effect with climate change mitigation.



8. Should monitoring and regulation be introduced for black carbon/elemental carbon? (Please choose one response) \*

- ☐ Yes, introduce monitoring requirement
- ☐ Yes, introduce non-binding target value (along with a monitoring requirement)
- ☐ Yes, introduce binding limit value (along with a monitoring requirement)
- ☐ No
- ☐ Don't know

## Sub-section 4.2: Management framework

A significant proportion of the EU population still lives in areas, especially cities, where exceedances of the EU limit values and target values – in particular, for PM, ozone and nitrogen dioxide.

In zones where EU air quality limit values are exceeded, zone-specific action plans for attainment are required. Recent experience indicates that local and regional authorities face substantial difficulties in meeting their responsibilities, as they lack the means to control pollution from outside their regions and from sources, and so must resort to more expensive and less effective local actions. One option to address this is to consolidate zone-specific plans into national action plans, to ensure their coherence. Another option is to focus on transboundary pollution flows that affect the attainment of EU limit values.

9. Should zone-specific plans be consolidated into coordinated national plans? (Please choose one response) \*

- ☐ Yes
- ☐ No
- ☐ Don't know

10. Should cooperation among Member States be reinforced to better address transboundary pollution flows that affect local air quality problems? (Please choose one response) \*

- ☐ Yes
- ☐ No
- ☐ Don't know

## Section 5/5: Revising the National Emission Ceilings Directive (NECD)

The National Emission Ceilings Directive establishes – for 2010 and beyond – upper ceilings for the emission of four pollutants – sulphur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), ammonia (NH<sub>3</sub>) and non-methane volatile organic compounds (NMVOC). The ceilings are set so as to limit the long-range transport of air pollutants and their associated health and environmental burden.

Competent authorities for local air quality management are often local administrations, whereas compliance with national emission ceilings is managed at national level. Coherence between national emission reduction plans and local air quality plans could be improved by including additional provisions in the NEC Directive that would require the Member States to take explicit account of existing and projected air quality non-compliances when developing emission reduction plans, which could then be optimised to deliver also air quality benefits at the same time.

### Sub-section 5.1: Aligning with latest scientific and technical knowledge

With the incorporation of the revision of the Gothenburg Protocol into EU law, ceilings will be set for PM<sub>2.5</sub>, a component of primary particulate matter. To ensure coherence with the Gothenburg Protocol, ceilings for PM<sub>2.5</sub> will need to be established also for a revised NEC Directive. The revised NEC Directive could however go further and set ceilings also for black carbon (another component of particulate matter with both health and climate change impacts), or for other pollutants, provided that appropriate emission inventories are in place.

11. Should national emission ceilings be adopted for black carbon/elemental carbon? (Please choose one response)

- ☐ Yes
- ☐ No
- ☐ Don't know

### Sub-Section 5.2: Management framework

Competent authorities for local air quality management are often local administrations, whereas compliance with national emission ceilings is managed at national level. Coherence between national emission reduction plans and local air quality plans could be improved by including additional provisions in the NEC Directive that would require the Member States to take explicit account of existing and projected air quality non-compliances when developing emission reduction plans, which could then be optimised to deliver also air quality benefits at the same time.

12. Should coordination be required between the national and local levels in respect of emissions reduction measures and local air quality management? (Please choose one response)\*

- ☐ Yes
- ☐ No
- ☐ Don't know

## Final comments

13. Please feel free to provide any further comments related to the revision of the Thematic Strategy on Air Pollution:(maximum 2400 characters)