# Comments by Parties on the evaluation of mitigation measures for black carbon emissions and of ammonia control measures (Gothenburg Protocol, article 10, paragraphs 3 and 4, respectively)

### **Comments by the European Union**

## **Background**

At the 58<sup>th</sup> session of the Working Group on Strategies and Review (virtual, 14-17 December 2020) and the 40th session of the Executive Body (virtual, 18 December 2020), delegations were invited to submit comments and additional views on the evaluations foreseen in articles 10(3) and 10(4) of the Gothenburg Protocol. These evaluations were initiated during the December meeting sessions based on the following informal documents: (a) Considerations for ammonia relevant to future review of the Gothenburg Protocol; and (b) Prioritizing reductions of particulate matter to also achieve reduction of black carbon, with a view to its discussion by WGSR at its 59<sup>th</sup> session. Delegations were invited to send these inputs to the Air Convention Secretariat by 1 February 2021.

With a view to provide a joint EU and its Member States submission to the Air Convention Secretariat, the EU and its Member States have the following comments and preliminary feedback on these evaluation processes.

#### General comments/clarification

As one of the inputs to the evaluations for the EU and its Member States, the Commission's <u>Second</u> <u>EU Clean Air Outlook</u><sup>1</sup> and the data and modelling results underpinning that report (<u>IIASA report</u><sup>2</sup> + <u>annex</u>)<sup>3</sup> should be used.

In order to ensure a swift process for the evaluations, the task to coordinate the gathering and summarising of information (the various tasks listed in Annex I of the document *Preparations for the review of the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone as amended in 2012*) for the two evaluations should be clearly assigned to a lead body.

Finally, these evaluations should give due consideration to the main barriers that may exist for non-Parties to effectively reduce NH<sub>3</sub> and BC emissions and take into account as appropriate any implications for facilitating the increased ratification and implementation of the protocol; increased ratification is a key element to maximise the impact of the Air Convention as defined in the Long-Term Strategy.

## Evaluation of mitigation measures for black carbon emissions

The EU and its Member States consider the background document for the 40<sup>th</sup> session of the Executive Body (*Informal document on prioritising reductions of particulate matter to also achieve reduction of black carbon*) to be interesting and it provides useful inputs. However, the approach on

Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - The Second Clean Air Outlook (COM/2021/3 final). https://eurlex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2021%3A3%3AFIN

International Institute of Applied Systems Analysis Support to the development of the second Clean Air Outlook -Report

https://ec.europa.eu/environment/air/pdf/CAO2-MAIN-final-21Dec20.pdf

International Institute of Applied Systems Analysis Support to the development of the second Clean Air Outlook - Annex

https://ec.europa.eu/environment/air/pdf/CAO2-ANNEX-final-21Dec20.pdf

this *informal document* is less broad than originally intended to meet the requirement of article 10(3) of the amended Gothenburg Protocol; it does not provide a comprehensive guide to the evaluation process from now on. The evaluation of mitigation measures for black carbon emissions should go beyond an analysis of the new *Draft guidance document on prioritising reductions of particulate matter so to also achieve reduction of black carbon.* 

The continued evaluation should also include other variables, such as cost-effectiveness of measures. The evaluation should cover more measures than those included in the GAINS model emission scenarios and database (primarily end-of-pipe emission reductions) and should also look into other types of solutions, such as non-technical or structural measures that might be more cost-effective. An illustrative example is switching from domestic wood and coal combustion to alternative heating technologies, which could be a better choice than replacing old wood and coal combustion stock by new appliances.

Other sources of black carbon emissions, other than those mentioned in the *informal document*, would be appropriate to cover in the continued evaluation (e.g. diesel vehicles, shipping, gas flaring, etc.).

Additionally, the evaluation of mitigation measures for black carbon emissions should take into account the effects on both clean air and climate, within and beyond the UNECE region, including effects on the Arctic region. For this, cooperation and information exchanges with the Arctic Council and its relevant working groups should be sought. The evaluation should also consider information from updated energy scenarios in order to capture the latest development in the energy and climate policy area.

As input to the evaluation, the information from the EU in-depth review of black carbon emission inventories, expected to be completed by the end of 2021, should be used.

#### Evaluation of ammonia control measures and consideration of the need to revise annex IX

The EU and its Member States take note of the information provided in the background document for the 40<sup>th</sup> session of the Executive Body (*Considerations for ammonia relevant to future review of the Gothenburg Protocol*) and notably the reminder that annex IX is based on the scientific knowledge available in the mid-1990s.

The evaluation launched in December 2020 should also integrate, when assessing ammonia control measures, the information and updated scientific knowledge regarding the impact of these measures on other nitrogen pollution aspects (integrated sustainable nitrogen management approach), as relevant. For the sake of comprehensive information to the policy-makers, we propose that any evaluation of cost-efficiency of ammonia control measures should take into consideration also nitrogen pollution of water and soil as well as related greenhouse gas emissions.

We also consider to be essential that this evaluation gathers information about the link between ammonia control measures and the  $NO_x$  emissions from sources currently excluded from the scope of the amended Gothenburg Protocol (e.g.  $NO_x$  emissions from soil).

## Comment by Switzerland

One general comment with regard to wording in context of prioritizing reductions of PM to also reduce black carbon: We have to be careful when addressing emission reductions in sectors with low shares of black carbon. It is very important not give the impression that PM mitigation in these sectors is "bad" and that it should be avoided in the interest of climate. Not to reduce PM emissions with low

shares of black carbon cannot be an instrument to counteract climate change. In the interest of human health and the environment all emissions of air pollutants must be reduced as far as possible.