

UNECE's Air Convention Gothenburg Protocol Review

20 April 2021

International Cooperative Programme on
Modelling and Mapping of Critical Levels & Loads
and Air Pollution Effects, Risks and Trends

*For the GP Review Group:
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Gothenburg Protocol

- Multi-pollutant, multi-effect approach looking together at problems and pollutants that contribute to acidification, eutrophication and ground-level ozone.
 - Signed in 1999, entered into force in 2005, amended in 2012
- Includes national emission reduction commitments for NO_X, SO₂, VOCs, ammonia, and PM (since 2012)
 - With this change, the amended GP became the first legal agreement to include an SLCP - Parties should prioritize reductions of PM that are also significant sources of black carbon
- Emission reduction commitments expressed as percentage reductions from 2005 levels; to be met by 2020
- Specific emission limit values for sources and pollutants that apply to all Parties included in Annexes.
- The amended Protocol entered into force on October 7, 2019

Review provision of the Protocol

- Now that the Protocol is in force, it must be reviewed for its effectiveness and adequacy (article 10)
 - Specifically calls for an evaluation of mitigation measures for black carbon emissions and ammonia control measures
 - A list of elements that is to be considered in the review was developed, based on the Long-term Strategy, recommendations from the Policy Review Group on the 2016 Scientific Assessment of the Convention, as well as inputs from the science bodies
- The review was launched in 2019 by decision EB 2019/4. At this time the WGSR was tasked with leading the review process and with developing the scope, content and work schedule of the review
- The WGSR Chair, in consultation with the EB Bureau, created the Gothenburg Protocol Review Group (GPG) to assist in undertaking this work

Key Priorities of the review

- Initial focus on the legally required elements, including under article 10 of the Protocol (**black carbon** and **ammonia**); and broadly on existing elements like the **sufficiency** and **effectiveness** of current obligations and success in **achieving the Protocol's objectives**
- Review will also include elements meant to address gaps and additional inputs
- Gather information that will help inform recommendations and conclusions of the review to also support the increase in ratifications of Parties

Gothenburg Protocol Review Group

- Developed the “**Preparations for the review of the Protocol to Abate Acidification, Eutrophication, and Ground-level ozone, as amended in 2012 (2020/3).**” Includes the scope and content of the review and elaborates on the elements found in EB Decision 2019/4. (Adopted at EB in December 2020)
- **Annex I** of the “Preparations” document provides a list of questions to the subsidiary bodies.
- Based on the elements contained in the “Preparations” document for the review, a “**Draft annotated outline of the report on the review of the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone (2021/4)**” has been prepared as official document for the 59th Session of the WGSR

Annex I of the “Preparatory” Document

- List of questions to help guide Subsidiary Bodies (EMEP SB, WGE, WGSR and IC) in preparing for the review
 - Each question has a suggested group, TF or centre that the GPG has proposed answer the question – some have more than one group identified
- The answers to the questions will provide inputs needed to address the review elements (which were identified in the preparatory document and elaborated on in the outline)

Elements of the review as reflected in Annex I of the “Preparatory” Document

- Questions to Subsidiary Bodies of the Convention are related to:
 - Review of **obligations** in relation to emission reductions
 - Review of **progress towards achieving** the environmental and health **objectives of the Protocol**
 - Review of **adequacy** of obligations in attaining the environmental and health **objectives of the Protocol**
 - Evaluation of mitigation measures for **black carbon** emissions
 - Evaluation of **ammonia** control measures and consideration of the need to revise annex IX

Draft Outline of the Review Report

- Introduction
- Legal requirements for the review
- Emissions
- Measured and modelled atmospheric concentrations and deposition levels
- Measures and modelled effects on natural ecosystems, materials and crops and assessment of human health effects
- Emission reduction commitments for Parties
- Emission limit values, technical annexes and the related guidance documents of the Protocol (with priority given to black carbon and ammonia measures)
- Specific sector approaches (e.g., residential solid-fuel, agriculture, shipping)
- Non-technical measures, best available technology and energy-efficiency requirements
- Flexibility provisions
- Convention Parties that are not Parties to the Protocol
- Canada and the United States
- Hemispheric Transport
- Integrated multi-pollutant, multi-effect approach,
- Synergies and interactions with other policy areas
- Progress towards achieving the objectives of the protocol
- Additional policy issues
- Conclusions

Inputs

- Annex I Questions: appropriate questions listed in each section
- Key documentation: see correlation table. Subsidiary bodies to add documentation to the table as well as reports or separate informal documents needed for the Review.
- Timeline for completion of input: Bodies to insert timing of products and completion of work to answer the Annex I questions.
- Resource implications (as appropriate): Bodies to add needs to complete work.
- This information will evolve into the eventual conclusions and/or recommendations of the review

Process for submitting input

- Initial input was due April 9 – the Chairs of EMEP SB and WGE will work with GPG to streamline the input
- The next draft of the annotated outline will become an informal document for WGSR59
- That informal document will become Draft 1 of the Review Report
- Further input can be provided to EMEP SB/WGE Chairs who will work with GPG as we continue to work on Draft 1 over the summer; by September 2021 it will become an official document for the EB in December
- Progress on Draft 1 will be discussed at EB in December 2021, and further work on the review will continue into 2022
- Additional input into the review will continue to be accepted until Jan 10, the GPG will then work on Draft 2 and submit it by Jan 17 for the official document deadline
- Draft 2 to be discussed at WGSR 60 in April; between April-Sept GPG will be further elaborate the remaining inputs
- This will become Draft 3/final draft and will be discussed at EMEP SB/WGE meeting in September 2022
- Draft 3/final draft will be submitted by official UNECE doc deadline in Sept 2022

Timeline

Meeting	Title of report tabled for consideration	Deadline
WGSR 58 / EB 40	<p><i>Preparations for the review (final)</i> <i>ECE/EB.AIR/WG.5/2020/3</i></p> <p><i>Consideration for ammonia relevant to future review of the Gothenburg Protocol</i></p> <p><i>Informal document on prioritizing reductions of PM to also achieve reduction of BC</i></p>	<p><i>25 September 2020 for official documents</i></p> <p><i>Evaluation per Article 10.3 & 10.4 (WGSR informal documents)</i></p>
WGSR 59 (18-20 May 2021)	First draft annotated outline on the Review	February 2021
TF/centre/ICP meetings	First draft of the report for the review Informal Document	<u>Initial Input April 2021</u>
EMEP SB/WGE meeting (13-17 Sept 2021)	First Draft of report of the review ECE/EB.AIR/WG.#/##	September 2021
WGSR 60 (11-14 April 2022)	Second Draft of report of the review ECE/EB.AIR/WG.#/##	January 17 2022
EB 42 (Dec 2022)	Final report of review adopted/Conclude the Review	September 2022

GPG Members

- *Chair:* Kimber Scavo
- *WGSR Bureau:*
Ivan Angelov, Dominique Pritula, Till Spranger
- *WGE & EMEP SB Chairs:*
Isaura Rabago, Laurence Rouil
- *Invited experts:*
Richard Ballaman, Noe Megrelishvili, Peter Meulepas
- *Task Force Co-Chairs:*
Rob Maas & Stefan Åström (TFIAM); Claudia Marques dos Santos, Tommy Dalgaard & Mark Sutton (TFRN); Tiziano Pignatelli & Jean-Guy Bartaire (TFTEI)
- *Advisors:* Anna Engleryd (EB), Susanne Lindahl (EC)
- *Secretariat:* Alina Novikova