

CLRTAP Assessment report: Achievements and prospects for the future

Outline for further discussion elaborated at the request of the Bureau of the Executive Body

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Background: Transboundary air pollution within UNECE has not been a topic for complete assessments. Ecosystems effects were assessed some years ago¹ and the Co-operative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP) monitoring and modelling work was a topic for an assessment in 2004². A policy-oriented assessment was also made as a background for the revision of the Gothenburg Protocol (2007)³. A historic review of the Convention was also published in connection with its 25th anniversary⁴. Discussions on a more complete assessment have been going on for some years and the issue was brought up as a follow-up of the Long Term Strategy for the Implementation of the Convention⁵.

The Executive Body (EB) Bureau therefore requested the chairs of Working Group on Strategies and Review, EMEP and Working Group on Effects to prepare an outline of such a report and to present the outline at the EB at its 32nd session for a possible inclusion in the Convention workplan.

Objective: To produce a state of the art document for parties, experts and scientists. To address the questions: How successful have the Protocols been in reducing emissions, concentrations, depositions and effects? What are the problems which remain? Is there evidence from studies of intercontinental transport for better integration of policies across the whole CLRTAP region and beyond?

Time frame: 2014-2016

Outline: We propose two levels of reporting

1. A comprehensive study including scientific understanding and a more detailed analysis of trends etc. (model reports: National Expert Group on Transboundary Air Pollution (NEG TAP) 2001⁶ and Our Nation's Air – Status and Trends through 2010 – a US assessment report⁷).

¹ See http://www.unece.org/fileadmin/DAM/env/documents/2004/eb/wg1/InformalDocument4_SubstantiveReport2004FinalDraft.pdf

² See <http://www.unece.org/fileadmin/DAM/env/documents/2004/eb/ge1/eb.air.ge.1.2004.4.e.pdf> and http://emep.int/publ/reports/2004/assessment_2004.html

³ Review of the Gothenburg Protocol Report of the Task Force on Integrated Assessment Modelling and the Centre for Integrated Assessment Modelling (2007). CIAM report 1/2007. With contributions of the Coordination Centre for Effects (CCE) and the Meteorological Synthesizing Centre-West (MSC-W). See http://www.unece.org/fileadmin/DAM/env/lrtap/TaskForce/tfiam/TFIAM_ReportReviewGothenburgProtocol.pdf

⁴ Clearing the Air. 25 years of the Convention on Long-range Transboundary Air Pollution. Editors Johan Sliggers and Willem Kakebeeke (2004).

⁵ See http://www.unece.org/fileadmin/DAM/env/lrtap/conv/long-term_strategy.pdf

⁶ See http://pollutantdeposition.defra.gov.uk/sites/pollutantdeposition.defra.gov.uk/files/NEG TAP_10Dec2001.pdf

2. A summary for policymakers.

Full report outline (No 1) (What you see below is probably more of building blocks than chapters. The scientific understanding can for example be divided into several chapters):

1. Executive Summary
2. Introduction: The problems and a short description of the history (The book from the 25th anniversary has already done a comprehensive review of the history). Short review of earlier assessments including some national assessments. Items of particular importance: The changes in policy drivers – from acidification to health and nitrogen. From single compounds and effects to multi-pollutants and multi-effects. The role of CLRTAP in relation to the European Union and countries.
3. Scientific understanding: Give an updated description of the underlying science for atmospheric transport, chemistry and deposition, biogenic emissions, effects on health and ecosystems etc.
4. Environmental status and trends: Monitoring networks (atmospheric and ecosystems). Trends and their interpretations. Comparisons between trends in monitoring and modelling. Emission trends. Decoupling.
5. Policy development including science-policy interactions: Convention and protocols. Scientific support to policy. Integrated assessment modelling. Abatement costs and Cost-benefit analysis. Compliance. Policy outcomes. European Union. North America.
6. Widening the scope: Intercontinental transport and hemispheric pollution. SLCP. Nitrogen. (We can probably take a lot of material from what is already published.) Policy development.
7. Connections to climate change
8. Future challenges

Summary for policymakers. Should bring forward the most important conclusions from the report. (Should it be the same as the Executive summary of the full report?). Concentrate messages to 4 and 5 and to some extent 6-8.

Issues to discuss: Organisation of work. Should one or a couple of centres take the lead or should there be an external editor? How to finance the work? Will there be parties ready to support the process economically or through offering experts/leading authors?

We suggest that heavy metals and persistent organic pollutants should be a topic for a separate assessment 2016-2018.

Proposed decision: EB decides that EMEP, WGE and WGSR jointly should prepare an assessment in line with the outline and that the chairs of EMEP/WGE/WGSR (and EB) should further develop the outline and organisation of work together with their bureaux and the centres. Support to the work should be given from EMEP and WGE trust funds.

⁷ See <http://www.epa.gov/airtrends/2011/>