

Saltsjöbaden V: Taking International Air Pollution Policies into the Future

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Session on ‘Air Pollution Agreements – Going for Global Governance of the Troposphere’

Discussions, Conclusions and Recommendations

Participants in the Working Group

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Introduction

As understanding of air pollution has increased, the more important the global scale has come to appear. In particular, attention is increasingly focused on air pollution interactions with climate change, with the development of global approaches to reducing Short-Lived Climate Pollutants and the increasing importance given to the air quality co-benefits of climate strategies. Meanwhile, the extent and significance of damage to health and to crops have become increasingly apparent as their global scale has come into focus, and tropospheric ozone and particulate matter, in particular, are increasingly seen as hemispheric problems.

Despite successful negotiation of some global agreements (e.g. stratospheric ozone and POPs), extensive scientific work at the hemispheric scale (e.g. the Task Force on Hemispheric Transport of Air Pollution), the LRTAP Convention's extensive suite of regional protocols, and the beginnings of regional cooperation in Asia, Latin America,

and Africa, it is arguable that much more needs to be done. In particular, there is no regulation at the global scale of the two transboundary pollutants that are most damaging to health – small particulate matter and tropospheric ozone.

The aim of this session was therefore to identify action that could be taken at the global scale to promote the further reduction of air pollution problems globally. It reviewed the need for enhanced global governance of air pollution, explored the pathways by which this might be achieved, and tried to identify constructive steps forward that could be taken by the major institutions and interests involved.

The co-chairs had prepared a background note that was provided to the participants in advance. The note identified a number of major issues and questions to guide the presentations and discussions. In the morning there were a number of invited presentations to further introduce the issues.

Talks (morning)	Presenters (and institution)
1. Developing the role of global governance to air pollution issues: an introduction to the session	Johan Kuylenstierna (SEI – the Stockholm Environment Institute)
2. Developments in international policy and governance i. a global perspective ii. perspectives from Asia	Richard Mills (IUAPPA – the International Union of Air Pollution Prevention and Environment Protection Associations) and Katsunori Suzuki (Kanazawa University, Japan)
3. The scientific and monitoring base for global governance	Terry Keating (US EPA)
4. Harmonization and convergence: the lessons of international developments in vehicle emissions control	Mike Walsh (ICCT – the International Council for Clean Transportation)
5. Climate and Pollution: the voluntary approach of Climate and Clean Air Coalition (CCAC)	Annika Markovic (Environment Ambassador, Ministry for Foreign Affairs, Ministry of the Environment, Sweden)
6. Potential contribution of the LRTAP Convention	Martin Williams (Kings College, London; CLRTAP EB Chair)
7. Conclusions: major issues and defining the next steps	Terry Keating (US EPA)

The afternoon session discussed the major issues introduced in the background note and morning presentations. Some highlights of the discussion are summarized below. Based on the discussion the group developed a series of recommendations directed at specific audiences.

Discussion

There is a patchwork of different initiatives dealing with different parts of the air pollution problem at different scales – e.g. CCAC at the global scale dealing with products of incomplete combustion (BC etc.), methane and aspects of tropospheric ozone (as well as HFCs); regional bodies dealing with all air pollution (e.g. LRTAP Convention and emerging agreements – Malé Declaration, EANET, etc.); and Clean Air Asia working at the urban scale in Asia. However, there is no comprehensive global governance of air pollution.

There are a number of reasons to improve global governance of air pollution including:

- Intercontinental flows of PM (especially inorganic aerosols – sulphate, ammonium and nitrate) and ozone (NO_x is not addressed as a precursor in CCAC), which have major impacts on health, and are not sufficiently addressed by existing international agreements or programs;
- Areas with the biggest air pollution problems have the least capacity to deal with the issues. Technical assistance is *ad hoc* and not globally organised. And there is a need to increase equity in terms of access to clean air for people across the world;
- Linkages between air pollution and climate change require convergence at global scale.

There is a need for capacity building and knowledge transfer to develop the basic building blocks for air pollution management – such as emission inventories, monitoring of air pollution concentrations and deposition, atmospheric modelling, impact assessment and understanding of the technologies and policies to reduce emissions. The CCAC is addressing some of these issues such as helping countries to assess emissions and impacts as part of national planning, but it is not the function of the CCAC to undertake new scientific activities such as monitoring and research on impacts. Some of the existing regional agreements have focused on these aspects, but significant disparities remain across the globe.

The need for enhanced global governance of air pollution reflects the need to allow transboundary issues to be better addressed, but also to better address local and regional air pollution problems that are common problems affecting many regions. Despite the commonalities in air pollution problems, policy solutions, priorities, and opportunities may differ significantly in different regions due to a variety of environmental, economic, technological, political, and social factors. Therefore there is a need for flexibility, allowing diverse approaches to the development of policy in different regions and contexts.

The climate and air quality linkages are important and addressing these issues in an integrated fashion has many merits. The CCAC is an important global initiative that is acting as a significant global catalyst for discussions linking air pollution and climate change and it is very important that this be successful. However, there are issues that link air pollution and climate change that are not considered by CCAC and where policy development is not integrated. For example, the CCAC is dealing with primary particle emissions affecting health and climate (BC, OC) but not specifically addressing the inorganic sources of secondary PM (SO₄, NO₃, NH₄) and their impacts on climate, health, and ecosystems (acidification and eutrophication).

Enhancing the global governance of air pollution includes engaging and motivating different actors including national governments, urban authorities, large companies, NGOs etc. There are new technologies that offer opportunities for enhanced information flows and, if harnessed properly, collaboration, including developments in distributed information management systems and earth observing satellites.

In taking forward the further development of global governance there are a number of other key issues that need to be considered. One is the lack of understanding of the impact of globalisation and trends in such areas as trade and development on the trajectory of air pollution emissions. Here, an example of a globalised driver is the

transport sector, where the development of increasingly stringent emission standards in some regions affects the technological development of engines generally which should improve emissions in all regions. If these linkages are understood then it may be possible to understand better how such drivers can be harnessed to the benefit of air quality globally.

Other issues include how improved global governance could strengthen information and capacity building on air pollution; and increase the chances of better integration of air pollution and climate change and ease interactions with UNFCCC.

It is important that new developments enhance existing initiatives and do not duplicate or damage the progress of current regional air pollution networks and initiatives nor that of the CCAC, but rather draw on their experience. This points to the need for care and flexibility, and close co-operation with organisations such as LRTAP, CCAC, UNEP and the regional initiatives such as the Malé Declaration, EANET, ASEAN Haze Protocol, and representatives of the LAC Ministerial Agreement: and organisations at urban scale such as Clean Air Asia, Council of Mayors, and private sector bodies such as the motor manufacturer associations. An important contribution to enhanced global governance of air pollution will also be better communication of air pollution issues to different audiences perhaps focussing in particular on health impacts.

There are a number of existing institutions that could contribute to enhanced global governance and cooperation on air pollution; each with its own strengths and limitations. Ultimately, there is a need for one or more champions to emerge that are able to raise funds and catalyze action across the global scale to address the remaining gaps described above. In the meantime, there are incremental steps that some organizations can take that would help move in the right direction.

The LRTAP Convention can play an important leadership role, setting an example for other regions to follow, reaching out and supporting the work of other regional bodies, and raising awareness of air pollution issues at the international scale. One step that the Convention could take is to modify the Article 14 provisions to open the Convention to participation by parties outside the UNECE. Whether or not countries outside of the UNECE sign up, the act of opening the Convention would send a constructive message to the rest of the world about the global nature of the air pollution problem and the willingness of the LRTAP Convention parties to work with others. In addition, the LRTAP Convention could actively reach out, by sending representatives to meetings of other bodies or by organizing joint meetings with other bodies, to engage with other organizations about what their needs are for cooperation and what types of efforts may be organized globally. The LRTAP Convention could also contribute to global efforts to improve the accessibility and interoperability of earth observations and information being organized through the Group on Earth Observations (GEO) and its Air Quality Community of Practice.

The IPCC could contribute to furthering the understanding of air pollution-climate linkages and advance global governance of these issues through the process of developing an IPCC Special Report on Air Pollution and Climate Change. At a minimum, a special report could bring together the relevant topics that are currently scattered in different chapters of the WG1 (Physical Basis) report and expand on the limited treatment of the issues in WG2 (Impacts) and WG3 (Mitigation) reports. There is

a significant amount of on-going research that could be summarized and reported. The process of developing the special report could contribute significantly to advancing global cooperation if the IPCC used the opportunity to bring the climate research community together with a wide range of experts from the air pollution community. The assessment process would generate a number of new analyses, create opportunities for new expert interactions, and build relationships that are likely to continue beyond the production of the report. The report would be widely considered to be an authoritative reference and receive a high level of attention. There is a risk, especially if the process is less inclusive, that the report focuses only on global and long-term perspectives and its conclusions are not constructive with respect to local and regional air quality management.

Recommendations

The meeting recognised the global nature of many atmospheric issues, the world-wide occurrence of many atmospheric issues, and therefore the merits of enhanced global cooperation. It recognised that there is a patchwork of initiatives and agreements at regional to global scales (e.g. LRTAP Convention, CCAC, Malé Declaration, EANET, Asia Co-benefits Partnership etc.), but no comprehensive global framework for cooperation on air pollution issues. The meeting, therefore:

- Asks the LRTAP Convention Executive Body (EB) to take steps to open the Convention to parties outside the UN ECE, in recognition of the general character of the obligations of the Convention and to facilitate building upon the work of TF HTAP;
- Invites the LRTAP Convention EB to open discussion with other regional networks and relevant bodies on the appropriate elements of a Global Framework for Cooperation of Air Pollution, particularly to improve coordination and information sharing and to enhance capacity for managing transboundary and local air pollution issues;
- Requests countries interested in linkages between air pollution and climate change to consider organizing, through the IPCC or other process, the development of a special report on air pollution and climate change that would engage the IPCC, the climate research community, CCAC, and the air pollution community, globally;
- Encourages the UN Law Commission to continue to explore the scope for a 'Law of the Atmosphere' which would facilitate integrated action on climate change and tropospheric air pollution;
- Invites the GAP Forum to widen its interest, from developing linkages between air pollution networks and mechanisms, to clarify the role of broader trends and drivers affecting air pollution, including globalisation and trade;
- Requests the LRTAP Convention EB, along with secretariats and coordinating centres of other regional agreements, and the WMO, to engage through the Group on Earth Observations (GEO), to take advantage of the progress in information technology to improve information sharing and bring these communities together.