



Saltsjöbaden V
Gothenburg, Sweden 2013

Taking international air pollution policies into the future




Swedish Environmental
Research Institute

SWEDISH
ENVIRONMENTAL
PROTECTION
AGENCY

NATUR
VÅRDS
VERKET



Saltsjöbaden V, Gothenburg, SE, June 24 – 26, 2013



Number 5 in series of international workshops to support development of air pollution science and policy (No 1 held in Saltsjöbaden, No 2-5 in Gothenburg)

Aims

- To set the scene for future international and global air pollution policies for the protection of health, ecosystems and materials and to ensure benefits for climate change, biodiversity and other related policy areas.
- To provide input to international policy processes with respect to both air pollution and climate change.
- Build on on-going and recently finalised international activities such as the CLRTAP Long Term Strategy, the on-going review of the EU Thematic Strategy on Air Pollution, and several initiatives in relation to Short Lived Climate Pollutants (SLCP).

Saltsjöbaden V - Workshop details

- Organisers:
 - the Swedish Environmental Protection Agency
 - IVL Swedish Environmental Research Institute
 - in collaboration with Convention on Long-range Transboundary Air Pollution (CLRTAP), the European Commission, Global Atmospheric Pollution Forum and the Nordic Council of Ministers
- Over 130 leading experts, policy makers and negotiators, representatives from international organisations and industry.



Saltsjöbaden V
Gothenburg, Sweden 2013

Topics of particular interest

- Combined air pollution and climate change policies
- Actions for the control of emissions of reactive nitrogen
- Health impacts of air pollution
- Future effects-based international air pollution policies
- Roadmap for going from regional to global air pollution policies.
- Future work on POPs and heavy metals under CLRTAP and other conventions.

Conclusions and recommendation

- General conclusions – Summary of all groups
- Conclusions from each group:
 - 1. Air pollution and Climate, including the role of Short Lived Climate Pollutants
 - 2. Nitrogen - why is so little happening?
 - 3. Effects-based international air pollution strategies
 - 4. Future air pollution agreements – Going for global governance of the troposphere
 - 5. Air quality & health
 - 6. Persistent organic Pollutants and Heavy Metals
 - 7. Mid-term policies for Europe and its vicinity
- All conclusions and recommendations with “tag” suggesting a responsible organisation.

Conclusions and recommendation

- **General conclusions – Summary of all groups**
- Conclusions from each group:
 - 1. Air pollution and Climate, including the role of Short Lived Climate Pollutants
 - 2. Nitrogen - why is so little happening?
 - 3. Effects-based international air pollution strategies
 - 4. Future air pollution agreements – Going for global governance of the troposphere
 - 5. Air quality & health
 - 6. Persistent organic Pollutants and Heavy Metals
 - 7. Mid-term policies for Europe and its vicinity
- All conclusions and recommendations with “tag” suggesting a responsible organisation.

www.saltsjobaden5.ivl.se/



Future direction of policy and science

- Air quality has improved but **more work is needed** to protect human health, ecosystems, crops, cultural heritage and to contribute to short-term mitigation of climate change. The integrated **effect-based approach** – that has underpinned the Convention on Long-Range Transboundary Air Pollution to date – should remain the basis for further steps. (EB)
- Further emission reductions, especially from **diesel cars, non-road mobile machinery, domestic coal, wood combustion and agriculture** are needed to reduce long-term population exposure. (EB, European Commission)

Future direction of policy and science

- It is crucial that **Euro-6 and VI** will deliver. Member States should ensure that their views are properly represented throughout the consultation process (EU Member States, European Commission, EB)
- The revised NEC Directive (2013) could be used as a first step towards addressing emissions of the **ozone precursors, methane and carbon monoxide** for both air quality and health purposes, and near term climate. (European Commission, EB, Arctic Council, CCAC)

Future direction of policy and science

- Emissions data on **Black Carbon** and knowledge of its impacts on health and climate should be further improved. (EMEP, TFEIP, TFHTAP, TFH, scientific community)
- Development of **indicators for protection of ecosystems** complementing critical loads and critical limits should be investigated. Needed both for impacts assessments and analyses provided by the GAINS model. (EB, TFRN, WGE)
- Proposed indicators:
 - AQ limit value for ammonia;
 - regional emission ceilings for nitrogen;
 - indicators relating nitrogen concentrations/deposition or ozone fluxes to impacts on ecosystems (“no net loss of biodiversity”).

Future direction of policy and science

- Further work needed to assess **benefits of air pollution reductions** (ecosystems improvements, human health and ecosystem services). (WGE, EMEP, TFH, TFIAM, ICP M&M and other ICPs)
- Future importance of **structural changes in transport, energy and food supply as well as behavioural change** – e.g. energy efficiency measures, renewables and switching from coal to gas, explore ways to encourage sustainable and healthy lifestyles. (WGSR, TFIAM, TFRN)

Future direction of policy and science

- **Improved emission inventories** are needed in order to improve the scientific basis for policy development.
- **Increased cooperation with EECCA countries** on science and implementation is of high priority. (EB, EMEP, WGE, TFEIP, and other TFs/ICPs as appropriate)

Future direction of policy and science

- Long range transport contributes to exposure of **HM and POP** either directly or indirectly (e.g. via uptake in food chains in remote areas). New scientific evidence of low dose human health effects **warrants further policy action** to reduce atmospheric emissions and long-range transport.
- The **unique characteristics of CLRTAP** among the various international conventions and programs on HM and POP are the **strong links between science and policy** as well as the **integrated scientific approach**.
 - CLRTAP can provide an infrastructure and a mechanism by which parties can meet many of their obligations to other international agreements (EB, WGSR, EMEP, WGE)

Communication

- EB and the CLRTAP secretariat to consider its communication strategy, redesign its webpage and establish a position for a communications officer. (EB, CLRTAP secretariat)
- Involve professional support to communicate with the public and politicians via media: Change the **public perception of air quality**, make adverse air quality impacts a reputational risk for industry, and so change the political context for regulation. (EB, European Commission, EEA, national administrations etc.)
- The achievements and potentials of CLRTAP and the role played by an integrated scientific approach should be actively promoted. (EB and CLRTAP subsidiary bodies)

Outreach to the global scale

- CLRTAP should 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. (EB and TFHTAP)
- CLRTAP should initiate discussions with other networks and bodies on a Global Framework for Cooperation on Air Pollution. Not for global negotiating but rather an agreed process for **information sharing, policy coordination and to enhance capacity for managing transboundary and local air pollution issues**. (EB, UNEP, GAP Forum)
- CLRTAP should invite the International Law Commission (ILC), established by the United Nations, to continue exploring the scope for a ***'Law of the Atmosphere'***, which would facilitate integrated action on climate change and tropospheric air pollution. (EB, UNEP, UN ILC)

Outreach to the global scale

- Scientific cooperation with e.g. UNEP, the Arctic Council, AMAP, the Stockholm Convention and the Minamata Convention should be developed and **co-funding** should be sought where appropriate. (EB, EMEP, WGE, UNEP, Arctic Council, AMAP, Stockholm Convention, Minamata Convention, CCAC, European Commission)
 - An **ad-hoc group** with representatives for WGE, EMEP, WGSR should be formed to address potentials and actions to enhance cooperation and synergies **on POPs and HM** with other conventions, programs and policies, and also to evaluate possibilities for funding of these activities (EB).
- A special **report on air pollution and climate change**. Cooperative effort between IPCC, CCAC, and the air pollution community both globally and locally, including subsidiary bodies of CLRTAP. (National governments, IPCC, CCAC, EB, EMEP, WGE)

Outreach to the local scale

- Involve **experts** from local and city administrations, NGOs and experts from industry or agriculture in CLRTAP scientific network. (EMEP, WGE, TFIAM, TFH, TFRN)
- WGSR, Parties and EU to further develop **standards** for large animal production units and for products
 - Euro standards, Ecodesign, Non Road Mobile Machinery and machinery for manure application to agricultural land (WGSR, European Commission, national governments)
- Additional incentives to reduce emissions from **local combustion sources**.
 - Fuel switching, retrofitting, early replacement of vehicles and small-scale combustion installations, incentives to reduce car mobility and energy use. (European Commission, national governments, local administrations, WGSR)
- Reduction plans to **reduce nitrogen** deposition, and ammonia and nitrogen oxides concentrations **over designated nature protection areas**, down towards critical loads and levels. (local administrations, national governments, European Commission)

Short and long term ambitions for the European Union

- NEC Directive: include regular interim **review of progress** towards the emission targets and require a scheduled **national assessment process** with Member States reporting on projected emissions and compliance progress. (European Commission)
- Making optimal use of the available technical abatement potential in 2025 and **move towards long term ‘no significant impacts on health and ecosystems’ by 2030.** Incorporate potential **co-benefits** from the climate and energy package and the Common Agricultural Policy revision. (European Commission)
- Stimulating technological **innovations** needed for cleaner air. (European Commission)

Capacity-building and information infrastructure

- **Sustain the monitoring programs** under EMEP and WGE. (parties to the CLRTAP, EMEP, WGE)
- Require **ecosystem monitoring** under the NEC Directive, build on existing monitoring systems. (European Commission)
- Enable national experts to participate in CLRTAP scientific network and **secure financing of research and monitoring activities**. Awareness of air pollution and improvements of technical capacities in the EECCA countries. (parties to the CLRTAP)
- Promote the prioritisation of topics relevant for CLRTAP in available **funding programs** (e.g. LIFE, Horizon 2020, Structural Funds). (European Commission, national governments and agencies)
- Engage with Group on Earth Observations (GEO) Air Quality Community of Practice to **improve information access and exchange** within the Convention and the broader global air quality community. (EB, EMEP, WGE, TFHTAP)

Summary

- **More work needed** to improve air quality
- **CLRTAP is unique:** Integrated scientific approach including emissions, monitoring, modelling, integrated assessments, and policy scenario evaluations is essential.
- **Secure funding** for CLRTAP activities and research – including EECCA countries
- **Global co-operation:** Science and policy, links to climate change, HM and POP
- **Local co-operation:** Local measures, transport, domestic heating, nitrogen.

www.saltsjobaden5.ivl.se

Contacts:

Peringe Grennfelt, peringe.grennfelt@ivl.se

Anna Engleryd, anna.engleryd@naturvardsverket.se

John Munthe, john.munthe@ivl.se

