



SUMMARY

Workshop on Science and Policy of Short-lived Climate Forcers

September 9-10, 2011

Mexico City

Objectives of the Workshop

- To discuss the role of Short-Lived Climate Forcers (SLCF) on near-term climate protection and clean air benefits;
- To identify emission sources and mitigation strategies of SLCFs that could be addressed at international, regional and national levels;
- To promote interaction, share best practices and facilitate collaboration among the interested partners in SLCFs;
- To discuss and develop plans for future activities, especially in the Latin American region.

Structure of the Workshop

- The workshop included five sessions:
 - Challenges and opportunities for near-term climate protection and clean air benefits;
 - Characterization of emissions sources and mitigation strategies implemented in selected regions;
 - Impacts of SLCF and co-benefits of mitigation strategies;
 - International cooperation and financing mechanisms;
 - An international panel discussion, followed by conclusions.
- The event was attended by an international group of about 80 scientists, policymakers, and representatives from NGOs and private and public industries.
- Latin America was particularly well represented.
- Many of the world's leading experts on short-lived forcers gave presentations.

Session 1: Challenges and opportunities for near-term climate protection and clean air benefits (1)

- Drs. Mario Molina and Gregory Carmichael discussed the findings of the UNEP and WMO integrated assessment on black carbon and tropospheric ozone and the importance of non-CO₂ and short-lived forcers for achieving near-term results on climate change.
 - In particular, they noted that aggressive actions on BC and methane, when coupled with carbon dioxide mitigation, can keep global warming below 2 degrees Celsius through at least 2050, in addition to achieving dramatic reductions in premature deaths and significant increases in crop productivity.
 - Dr. Molina noted that work outside the UNFCCC has contributed significantly to reductions in climate forcing emissions.
 - He cited as an example the successful phase-out of many ozone-depleting substances and noted the potential climate benefits of the Montreal Protocol HFC amendment proposal.

Session 1: Challenges and opportunities for near-term climate protection and clean air benefits (2)

- Dr. Molina suggests that innovative approach and financing mechanism will be needed to accelerate mitigation of SLCF, such as the Prototype Methane Financing Facility (PMFF) proposed by the Methane Blue Ribbon Panel.
- Biol. Julia Martinez mentioned that as part of the Mexico's Low Emission Development Strategy, INE will carry out an Integrated Assessment of SLCFs.
 - She noted that Mexico has already implemented various approaches and technologies for mitigation of SLCFs. However, wider implementation would require further research, especially in emission characterization and co-benefit studies.

Session 2: Emissions sources and mitigation strategies implemented in selected regions (1)

- Eleven experts from government agencies, academia and industry presented SLCF emissions sources and mitigation programs and opportunities.
 - These sessions illustrated technologically viable and cost-effective measures across a range of sectors, including the oil, gas and coal sectors; industrial coolants; waste and wastewater treatment; the residential sector; biomass burning; and small industry, including brick kilns.

Session 2: Emissions sources and mitigation strategies implemented in selected regions (2)

- The presenters highlighted successful case studies implemented in selected region around the world and challenges for wider implementation, including:
 - Integrated air quality and climate change programs.
 - Measurements and monitoring data, especially in developing countries
 - Multi-pollutant approach to account for all co-benefits
 - Coordination among different levels of national government agencies as well as regional collaboration.
 - Holistic approach – taking into consideration social, economic, political and technological aspects.

Session 3: Impacts of SLCF and co-benefits of mitigation

- There is strong scientific evidence of the impacts of SLCFs on regional and global climate, population health, crop production, and regional ecosystems.
- However, more research is needed to quantify the co-benefits and the indicators used.

Session 4: International cooperation and financing mechanisms

- This session illustrated a number of existing programs and institutions that provide financing and technical assistance for methane, black carbon, and HFC mitigation, including
 - Global Methane Initiative
 - Swisscontact for brick kilns
 - Global Environment Facility
 - Montreal Protocol Multi-lateral Fund
 - Inter-American Development Bank
 - World Meteorological Organization
 - Global Atmospheric Pollution Forum

- Presenters also reviewed new programs and proposals on methane abatement and improved cookstoves, including
 - Prototype Methane Financing Facility
 - Global Alliance for Clean Cookstoves

Main Conclusions

- New climate impetus helps lend greater urgency to air quality agenda.
 - Urgent action to decrease concentrations of ground-level ozone, black carbon and methane in the atmosphere provide major opportunities, especially in developing countries, to linking air quality management programs with climate strategies, which provide significant air pollution benefits and near-term climate protection.
 - For developing countries, health concerns are often more important than climate.
- Challenges for wider implementation:
 - Compliance, even with good regulation
 - Human resources: to meet institutional and technical challenges
 - Climate and air quality crosses many ministries – need for integration.

Next Steps

- Organize this type of workshop again to promote and facilitate regional and global cooperation.
- Raise public awareness: use all media more effectively.
- Strengthen interaction between science community and policy community.
- Improve scientific basis for mitigation strategies: need more observation and monitoring data.
- Build and strengthen capacity to meet institutional and technical needs and challenges.