ISAP2014 Session Summary

PL-3 Bringing SLCPs and PM2.5 into Integrated Air Pollution and Climate Change Strategies in Asia: Linking Science, Models, and Action

14:00 – 15:30 23 July 2014

Following a series of high-profile reports from the United Nations Environment Programme (UNEP) in 2011, both governments and researchers have paid a growing amount of attention to air pollutant species known as short-lived climate pollutants (SLCPs). SLCPs—such as black carbon, tropospheric ozone, and methane--can destabilise climate systems while degrading air quality over relatively short atmospheric lifetimes. In fact, international initiatives such as the Climate and Clean Air Coalition (CCAC) have been formed to help catalyse action on SLCPs. However, taking action on SLCPs often requires strong linkages between science, modelling and policy. This session, therefore, was held with an aim to familiarise the audience with science, modelling and policies related to SLCPs and other atmospheric pollutants.

Dr. Zusman offered a framing presentation that helped familiarise the audience with SLCPs, why they are important to Asia, and why it has been difficult to mitigate SLCPs in Asia.

Dr. Akimoto underlined that as simultaneous reductions of NO_x/NMVOC emissions are more appropriate than mitigation scenarios focusing solely on the SLCPs (and the methane precursors of ozone) in Asia, a co-control approach in Asia should target the reduction not only of CH_4 but also of NO_x/NMVOC.

Dr. Masui concentrated on quantifying the costs and benefits of chiefly low-carbon strategies and showed that air quality co-benefits can significantly offset costs upon simulation results. More work will be needed to look at the complementarities between low-carbon and SLCP mitigation strategies.

Mr. Fujita introduced Japan's future activities to address air pollution issues in Asia by highlighting the importance of a regional cooperative programme with Clean Air Asia and UNEP.

Professor Suzuki emphasised the importance of science-policy interface and need for an epistemic science community in Asia. He then explained the proposal on Asia Science Panel for Air Quality (ASPAQ).

Mr. Iyngrarasan provided an overview of how recognition of SLCP and UNEP's related programmes has evolved over the years and noted that more consolidated work to convey one science voice to policy makers is needed.

Dr. Hicks provided views from a broader international perspective. He outlined the activities of CCAC, and the significant steps to international cooperation to reduce SLCPs.

During the Q&A session, one of the questions raised was about the reliability of health impact estimates. Responses from the panelists included: the challenges of transferability of epidemiological studies to other regions, various effects of the pollutants not only cardiovascular but also cancerous, and socio-economic factors.

Key messages of the session

- The health, agricultural and climate benefits of mitigating SLCPs are several orders of magnitude greater in Asia than other regions. A stronger interface between science, models, and policy will help realise these benefits.
- In terms of science, there is a need to tailor work on SLCPs to the needs of stakeholders in Asia; this requires working on methane and non-methane precursors of ozone.
- In terms of modelling, there is a need to look at the relationship between low-carbon and SLCP reduction strategies.
- In terms of policy, new modelling and science can be used to strengthen existing regional cooperation frameworks.

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