

ISAP SESSION SUMMARY 8

L-1: Mitigating Air Pollution and Climate Change in Asia: Toward an Integrated Approach

Tuesday, 23 July 2013, 13:15

A series of recent air pollution crises has focused attention on improving air quality management in Asia. To understand the sources and impacts of the recent crises, the session began with an overview of current air pollution science and modelling in Asia. It then looked at how science and modelling were reflected in local, national and regional air pollution control efforts. From there, the session highlighted the fact that some air pollutants pose an immediate threat to local and national air quality while also disrupting regional and global climate systems. The presentation also underlined that mitigating these pollutants could bring air pollution and climate co-benefits. Finally, discussions focused on the potential for regional and international initiatives to promote the consideration of co-benefits in local and national air pollution policies in Asia.

Dr. Eric Zusman opened the session by underlining that air pollution crises were not new phenomena. He said that ever since the London smog broke out in the early 1950's, there has been a growing interest in atmospheric science. But while atmospheric science has evolved steadily the current air pollution policy has tended to lag behind. He therefore highlighted that it was important to link science and policy in order to link climate change and air pollution.

Dr. Hajime Akimoto explained the science of air pollution in Asia. He underlined that Asia needs a strategy that combines reduction of CO₂ and several air pollutants, such as Nitrogen Oxides (NO_x)/ Volatile Organic Compounds (VOC), methane (CH₄) and black carbon, in order to achieve co-benefits from air pollution and climate change mitigation. He also set out that the SLCPs co-benefit approach could offer a practical solution to trans-boundary air pollution problems in East Asia.

Mr. Hideaki Koyanagi noted that there had been various examples of Japan-China cooperation on air pollution, including yen loans from 1979 to 2007, more recent joint research on total emission reduction of NO_x and a network on improvement of China's air pollution. He noted that international cooperation in the area of air pollution control was easier said than done, especially in the private sector.

Dr. Supat Wangwongwatana explained the air pollution situation in Thailand. He explained that the government introduced an air quality management system in response to heavy air pollution in Bangkok in the early 1990's. However, while the air quality during the past decade had improved, concentrations of particulate matter (PM) and ozone (O₃) still remained high. He thus said that the future challenges were addressing PM and O₃ through improving air quality management and harnessing global opportunities for local air quality improvement in order to achieve co-benefits.

Dr. Kevin Hicks explained that there are many international initiatives to facilitate cooperation on mitigation of short-lived climate pollutants (SLCPs). Listing existing regional institutions, he said that the Climate and Clean Air Coalition (CCAC), launched in February 2012 with 66 partners, was the first global effort to reduce SLCPs. He underlined that Bangladesh developed a national action plan to reduce SLCPs, and that the Asian region needed a harmonising framework and collaborative partnership between organisations working in this area. He also said that it was important to consider combining voluntary and regulatory approaches to air pollution controls under a new framework to promote synergies.

Prof. Katsunori Suzuki explained about the emerging needs for better air quality management in Asia by strengthening the link between climate change and SLCP mitigation. He said that addressing these challenges required more effective policy frameworks. He further recommended that countries in Asia adopt voluntary initiatives leading to more concrete legal instruments in the future. Prof. Suzuki proposed to establish a regional epistemic community of scientists (Asian Science Panel on Air and Climate: ASPAC) in order to provide a solid scientific basis to facilitate policy dialogues for international cooperation.

Mr. Hiroshi Fujita summarized the Japanese government's response to severe air pollution originating in China. He noted that the government announced "The Future Efforts for the Solution of the Air Pollution Issue in Asia" in March 2013 right after the air pollution event happened, and it was agreed at the Fifteenth Tripartite Environment Ministers Meeting (TEMM15) in May that a tripartite policy dialogue among Japan, China and Korea would be set up between the three countries. The policy dialogue would be designed to promote cooperation and leverage existing regional efforts on air pollution in the Asia region. He concluded that the MOEJ would take advantage of this policy dialogue and existing regional efforts, and further consider specific cooperative actions to address air pollution issues in Asia including air pollution from China.

Key messages of the session

- A series of recent air pollution crises in Asia has focused attention on the opportunity to improve the region's air quality and stabilize climate systems.
- Realizing this opportunity will require mitigating short-lived climate pollutants (SLCPs) such as black carbon and tropospheric ozone.
- Realizing this opportunity will also require improving communication between and within national governments as well as across science and policy.
- Capitalizing on this opportunity in Asia could bring benefits that go beyond cleaner air and a stable climate.