

Parallel/ Lunch Sessions

Lunch Session

MITIGATING AIR POLLUTION AND CLIMATE CHANGE IN ASIA: TOWARD AN INTEGRATED APPROACH

Objectives

It is increasingly clear that air pollution poses a threat to public health, agriculture production, ecosystem services and climate systems. It is also increasingly clear that a critical component of green development will be explicitly recognising the multiple benefits from a more integrated approach to air quality management. By underlining the multiple benefits of this integrated approach, this session had several important policy implications for sustainable development and green economy in Asia.

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. From there, the session looked at how science and modelling is reflected in local, national and regional air pollution control efforts. It then 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. Mitigating these pollutants can 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.

List of Speakers

[Moderator]

Mark Elder, Senior Coordinator / Principal Policy Researcher, Programme Management Office, IGES

[Speakers]

Hajime Akimoto, Director General, Asia Center for Air Pollution Research (ACAP)

Hideaki Koyanagi, Director, Beijing Office, IGES

Supat Wangwongwatana, Coordinator, the EANET Secretariat

Kevin Hicks, Senior Research Fellow, Stockholm Environment Institute (SEI) / Environment Department, University of York

Katsunori Suzuki, Director & Professor, Environment Preservation Center, Kanazawa University

Eric Zusman, Leader / Principal Policy Researcher, Integrated Policies for Sustainable Societies Area, IGES

[Discussants]

Hiroshi Fujita, Deputy Director, Air Environment Division, Ministry of the Environment, Japan



Key Messages

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

Summary of the Session

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 1950s, 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 reductions in CO₂ with several air pollutants—such as Nitrogen Oxides (NO_x) / Volatile Organic Compounds (VOC), methane (CH₄) and black carbon—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. He also underlined more recent joint research on total emissions 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). In listing existing regional institutions, he said that the Climate and Clean Air Coalition (CCAC), launched in February 2012 and currently consisting of 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 summarised 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.

In summing up the discussions, the prevailing view is that legally binding mechanisms and commitments are critical to controlling air pollution. However, the ASEAN haze agreement is legally binding but still suffers from several weaknesses. This suggests that voluntary mechanisms may be an effective first step to reduce air pollution in Asia.

It was also mentioned that discussions at IGES now emphasise looking at embedding best practices in legal frameworks, while previously the focus was on gaining compliance with legal restrictions. This is a more bottom-up perspective, and has potential to attract more support from local stakeholders.

While Europe focused more on legally binding mechanisms, Asia could take an approach consistent with its own legal traditions. This could consist of working within the context of existing mechanisms, and then developing common principles and standards that can be built into an effective institutional framework.

Certainly, China took impressive strides with the inclusion of air pollution reduction targets in the 12th Five Year Plan. It will be critical for China to enhance coordination across and within its 31 provincial governments to reach these targets. Reforms to China's domestic policies and institutions—such as improved coordination—might set the stage for broader and deeper regional coordination on air pollution in Asia.

Finally it could be said that one of the key characteristics of the CCAC is its voluntary nature. Much can be solved by voluntary efforts and working with affected industries.