



# **Clean Air Week:**

## **Air Quality Management in Asia and the Pacific**

9 – 13 September 2024, Seoul, Republic of Korea

A high proportion of the population in the Asia-Pacific region breathes air that does not meet WHO air quality standards. Air pollution in the region has severe local and transboundary impacts and addressing the complexity of managing air quality requires approaches that go beyond individual country efforts and foster cooperation among various levels of jurisdiction, including regional, national and subnational authorities.

Sharing data, monitoring systems, and policy approaches across countries can lead to more effective and cost-efficient air pollution management strategies. Coordinated regional actions can maximize the benefits and minimize the costs compared to unilateral efforts. Regional cooperation also facilitates the exchange of scientific knowledge, best practices and technological innovations to tackle this complex challenge. Peer-to-peer learning and joint problem-solving can accelerate progress.

For this reason, ESCAP, in cooperation with the Republic of Korea as the host country, will hold a series of meetings and trainings on air quality management. The aim of this series will be to encourage greater dialogue and cooperation on air pollution, share and learn the management of air pollution and showcase the utilization of science for effective decision and policy making.

This series of events will be held from 9 to 13 September in Seoul, Republic of Korea. Participants will include government officials and experts responsible for air quality management in ESCAP member States, with each day covering a different air quality event:

### **Day 1. Regional Action Programme on Air Pollution**

Organized by ESCAP, the first day will centre around the theme of implementation of the Regional Action Programme on Air Pollution (RAPAP) adopted by ESCAP member States in 2022. The Regional Action Programme provides a comprehensive blueprint of activities to support better air quality management through five core themes: improving regulatory standards and policies on air quality; improving access to data and air quality monitoring to guide science-based decision making; exchanging best practices on air quality management; facilitating capacity building and technical support for national action; and mobilizing multilateral cooperation on air pollution management.

Participating officials and experts will share their national policies and practices, experience and challenges in addressing air pollution. Breakout sessions will also aim to generate concrete plans for better policy and technical cooperation.

## Day 2. NEACAP Symposium on Air Pollutant Emissions Inventory and Air Quality Management

North-East Asian Subregional Programme for Environmental Cooperation (NEASPEC), established in 1993, covers six member States, i.e., China, the Democratic People's Republic of Korea, Japan, Mongolia, the Republic of Korea and the Russian Federation. To mobilize subregional cooperation on air pollution, the member States launched the North-East Asia Clean Air Partnership (NEACAP) in 2018.

Following on from the successful NEACAP Symposium on Air Pollutant Emissions Inventory and Air Quality Management in 2023, the Symposium of 2024 will focus on the interlinked challenges of air pollution management and climate change along with possible policy interventions and technical approaches for addressing these challenges.

## Day 3. Air Pollution Monitoring

Effectively managing air pollution involves establishing a quality monitoring system and obtaining robust air quality data for decision-making purposes. Day 3 will review the national air quality monitoring systems and specifically showcase the work undertaken in the Republic of Korea. The meeting will include site visits to key components of the monitoring system and a detailed overview of the technologies and skills involved in establishing this system.

## Day 4. Air Pollution Management

Day 4 will dive into the techniques of air pollution emission inventories, with a series of lectures from experts from the National Air Emission Inventory and Research Center (NAIR) of the ROK on emission inventory techniques, data collection and modelling. The meeting will also engage participants from other Asian countries on the need for technical support in establishing their own national emission inventory system.

## Day 5. Use of data from the Geostationary Environmental Monitoring Spectrometer (GEMS) for monitoring air pollution

The final day will review the work under the project "Building a Pan-Asia Partnership for Geospatial Air Pollution Information". Site visits to the satellite control centre of the National Institute of Environmental Research (NIER) and to ground based spectrometer locations will demonstrate the progress of the satellite, GEMS, and the Pandora system, while discussing and facilitating the establishment of the Pan-Asia Partnership among participating project member States. Issues and lessons learned, along with future needs and the potential for additional project and technical support will also be discussed in an open dialogue between participants.

Finally, participants will be introduced to the GEMSAT software which is a tool developed by NIER for more easily using GEMS and other satellite data for air pollution monitoring and analysis. A short, hands-on training session will be held on the afternoon of day 5. Participants not immediately involved in the project or not attending the training will be invited to visit NIER's advanced monitoring centre.

# Tentative Programme

9 September 2024

## Day 1. Regional Action Programme on Air Pollution (RAPAP)

Venue: Silla Stay

Organizer: ESCAP

Time	Programme
08:30-09:00	Registration
09:00-10:00	Opening and Overview of RAPAP
10:00-12:20	Session 1. National clean air action plans
12:20-14:00	Lunch Break
14:00-16:00	Session 2. Air quality monitoring and management
16:00-17:00	Session 3. Breakout groups on policy and technical cooperation
17:00-17:30	Group feedback and wrap-up

10 September 2024

## Day 2. Symposium on Air Quality Management and Climate Change

Venue: Pullman Hotel

Organizer: NAIR – ESCAP Subregional Office for East and North-East Asia (SONEA)

Time	Programme
09:30-10:30	Opening
10:30-10:50	Keynote: Climate Change and Air Quality Management – a mid-to long-term perspective
10:50-12:20	Session 1. Impact of climate change on air pollutant emission sources and direction for air quality management policy
12:20-14:00	Lunch Break
14:00-15:30	Session 2. Air pollutant reduction goals for air quality management policy
15:30-15:50	Break
15:50-17:20	Session 3. Impact of air quality management policy on GHG reductions
17:20-17:30	Closing

11 September 2024

## Day 3. Air Pollution Monitoring

Venue: Korea Environment Corporation (KECO) Clean SYS Center

Organizer: Korea Environment Corporation (KECO)

Time	Programme
08:00-09:00	Move to KECO
09:00-09:20	Introduction of KECO and international cooperation
09:20-10:40	(Lecture1) Overview of the CleanSYS system
11:00-11:40	(Lecture 2) Automobile exhaust gas comprehensive computer system
12:00-13:30	Lunch Break
13:45-15:00	(Lecture 3) Air pollutants monitoring and Air Korea System

Time	Programme
15:00-15:30	Move to Cheongna
15:30-16:40	(Site visit) Cheongna air pollution monitoring site

12 September 2024

**Day 4. Air Pollution Management**

Venue: Silla Stay

Organizer: National Air Emission Inventory and Research Center (NAIR)

Time	Programme
09:00-10:10	(Lecture1) Emission data collection and verification (NEAS modeling)
10:30-11:40	(Lecture2) Emission inventory of air pollutants
12:00-13:30	Lunch Break
13:30-14:40	(Lecture3) Effect analysis of air management policy
15:00-17:30	(Group Activity) In-depth discussions on technical support project

13 September 2024

**Day 5. Use of data from the Geostationary Environmental Monitoring Spectrometer (GEMS) for monitoring air pollution**

Venue: NIER Satellite Center

Organizer: National Institute of Environmental Research (NIER)

Time	Programme
08:00-09:00	Move to NIER
09:10-10:10	(Lecture 1) Overview of GEMS / (Site 1) Satellite Control Center
10:30-11:30	(Lecture 2) Pandora Asia Network (PAN) project overview / (Site 2) Remote Sensing Instruments Tour
12:00-13:30	Lunch Break
13:30-17:00	(Lecture 3) GEMSAT Program   (Site 3) Advanced Monitoring Center
17:00-18:00	Wrap-up (ESCAP)

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