FICAP

Forum for International Cooperation on Air Pollution

1st Taskforce Meeting of The Forum for International Cooperation on Air Pollution

11th & 12th October 2022
Engineers House
Bristol, UK

UK Government

NATUR VÅRDS VERKET

SWEDISH ENVIRONMENTAL PROTECTION AGENCY

FICAP

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Opening and Welcome

11th & 12th October 2022
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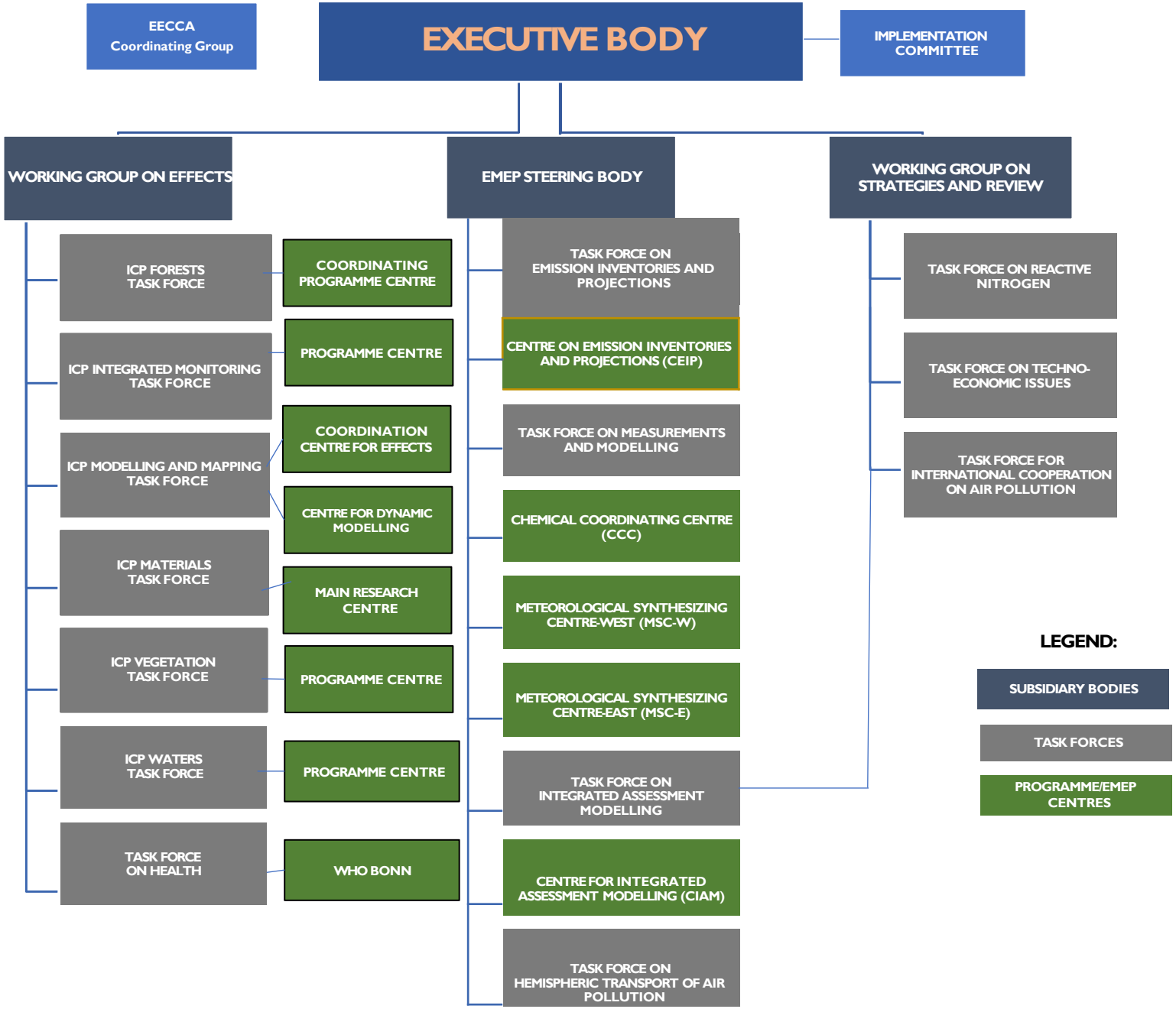
EECCA
Coordinating Group
EXECUTIVE BODY
IMPLEMENTATION COMMITTEE
WORKING GROUP ON EFFECTS
EMEP STEERING BODY
WORKING GROUP ON STRATEGIES AND REVIEW
ICP FORESTS TASK FORCE
COORDINATING PROGRAMME CENTRE
ICP INTEGRATED MONITORING TASK FORCE
PROGRAMME CENTRE
ICP MODELLING AND MAPPING TASK FORCE
COORDINATION CENTRE FOR EFFECTS
CENTRE FOR DYNAMIC MODELLING
ICP MATERIALS TASK FORCE
MAIN RESEARCH CENTRE
ICP VEGETATION TASK FORCE
PROGRAMME CENTRE
ICP WATERS TASK FORCE
PROGRAMME CENTRE
TASK FORCE ON HEALTH
WHO BONN
TASK FORCE ON EMISSION INVENTORIES AND PROJECTIONS
CENTRE ON EMISSION INVENTORIES AND PROJECTIONS (CEIP)
TASK FORCE ON MEASUREMENTS AND MODELLING
CHEMICAL COORDINATING CENTRE (CCC)
METEOROLOGICAL SYNTHESIZING CENTRE-WEST (MSC-W)
METEOROLOGICAL SYNTHESIZING CENTRE-EAST (MSC-E)
TASK FORCE ON INTEGRATED ASSESSMENT MODELLING
CENTRE FOR INTEGRATED ASSESSMENT MODELLING (CIAM)
TASK FORCE ON HEMISPHERIC TRANSPORT OF AIR POLLUTION
TASK FORCE ON REACTIVE NITROGEN
TASK FORCE ON TECHNO-ECONOMIC ISSUES
TASK FORCE FOR INTERNATIONAL COOPERATION ON AIR POLLUTION
LEGEND:
SUBSIDIARY BODIES
TASK FORCES
PROGRAMME/EMEP CENTRES


Координационная группа стран ВЕКЦА
ИСПОЛНИТЕЛЬНЫЙ ОРГАН
КОМИТЕТ ПО ОСУЩЕСТВЛЕНИЮ
РАБОЧАЯ ГРУППА ПО ВОЗДЕЙСТВИЮ (РГВ)
РУКОВОДЯЩИЙ ОРГАН ЕМЕП
РАБОЧАЯ ГРУППА ПО СТРАТЕГИЯМ И ОБЗОРУ (РГСО)
Целевая группа по МСП по оценке и мониторингу воздействия на леса
Программный координационный центр
Целевая группа по МСП по комплексному мониторингу воздействия на экосистемы
Программный центр
Целевая группа по МСП по разработке моделей и составлению карт
Координационный центр по воздействию
Центр по разработке динамических моделей
Целевая группа по МСП по воздействию на материалы
Главный исследовательский центр
Целевая группа по МСП по воздействию на растительность
Программный центр
Целевая группа по МСП по воздействию на реки и озера
Программный центр
Целевая группа по аспектам воздействия на здоровье
ВОЗ Бонн
Целевая группа по кадастрам и прогнозам выбросов
Центр по кадастрам и прогнозам выбросов (ЦКАП)
Целевая группа по измерениям и разработке моделей
Координационный химический центр (КХЦ)
Метеорологический синтезирующий центр-Запад (МСЦ-ЗАПАД)
Метеорологический синтезирующий центр-Восток (МСЦ-ВО)
Целевая группа по разработке моделей для комплексной оценки
Центр по разработке моделей для комплексной оценки (ЦРМКО)
Целевая группа по переносу загрязнения воздуха в масштабах полушария (ПЗВП)
Целевая группа по химически активному азоту
Целевая группа по технико-экономическим вопросам
Целевая группа по международному сотрудничеству в области сокращения загрязнения воздуха
Условные обозначения:
Вспомогательные органы
Целевые и экспертные группы
Программные центры/ Центры ЕМЕП
МСП: Международная совместная программа

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Convention on Long-range Transboundary Air Pollution

Overview

Capacity-building and outreach activities

1st Meeting of the Task Force for International Cooperation on Air Pollution

11 October 2022

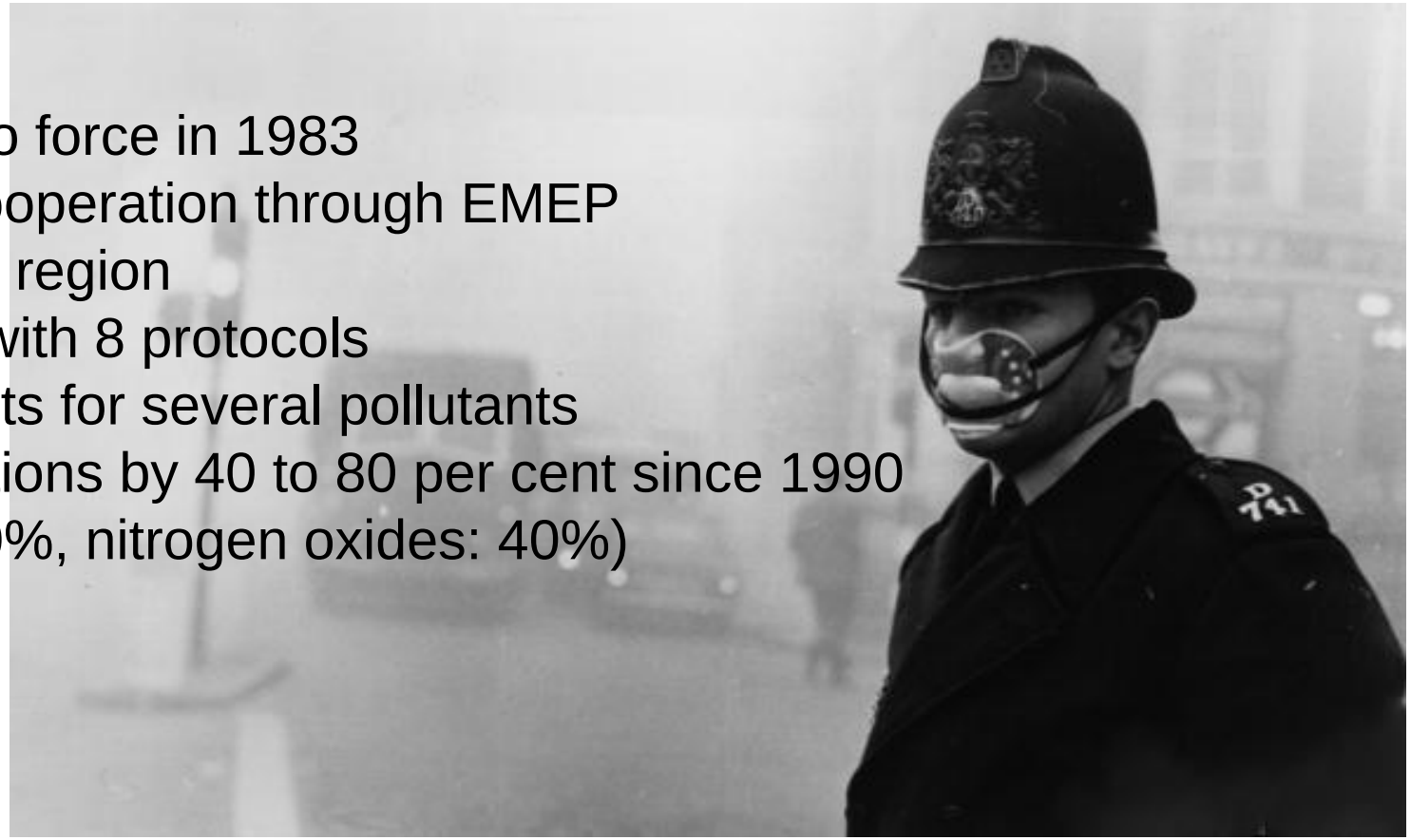
Albena Karadjova and Carolin Sanz Noriega

UNECE

ENVIRONMENT

Overview of the Convention

- Signed in 1979, entry into force in 1983
- Preceded by scientific cooperation through EMEP
- 51 Parties in the UNECE region
- Framework Convention with 8 protocols
- Emission reduction targets for several pollutants
- Results: Emission reductions by 40 to 80 per cent since 1990 in the region (sulphur: 70%, nitrogen oxides: 40%)



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ENVIRONMENT

The functioning of the Convention

Policy

- Platform to negotiate emission reduction targets
- Guidance on Best Available Techniques
- Exchange on experiences and mutual learning

Science

- Development over time: stable financing
- Effects-based approach: critical loads and levels
- Multi-pollutant, multi-effect
- Strong expert network: monitoring across Europe
- Source apportionment and integrated assessment: importance of common models

→ cost-effective abatement strategies

- From environmental to health concerns

Compliance monitoring

Capacity-building and awareness raising

Outreach to other regions

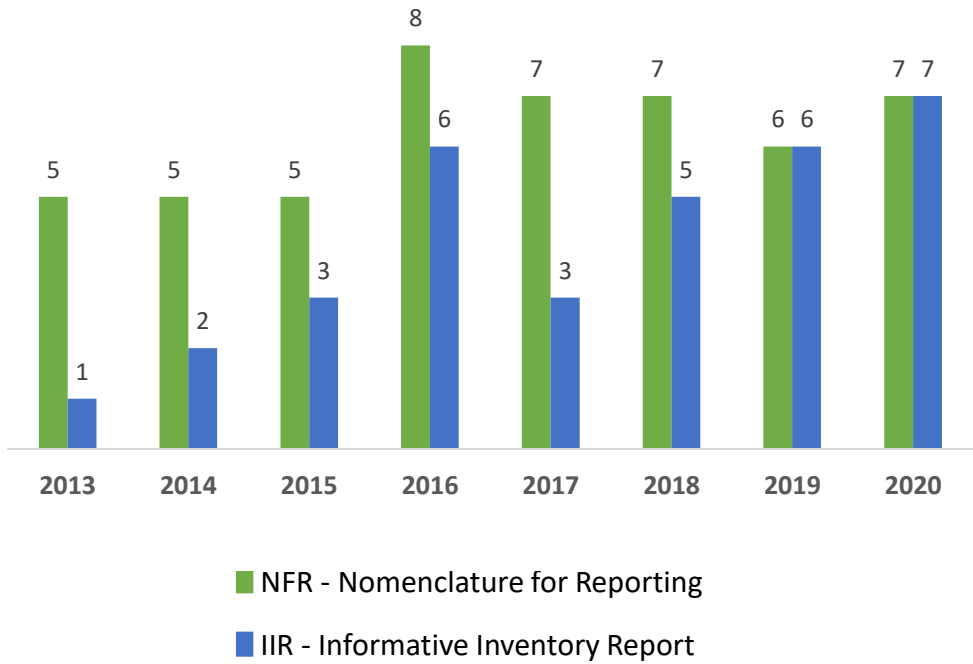
UNECE

ENVIRONMENT

Capacity-building: support to emission reporting

Series of face-to-face, virtual and hybrid workshops on emission inventories

Year	Round I	Round II	Round III
2014	AZ, GE MD		
2015	AM, KZ, UA, UZ		
2016	KG		
2017	TJ	KZ, GE, AZ	
2018		AM, KG, TJ, UA, MD, UZ	
2019		AM, AZ	
2020			MD, KZ, KG
2021			MD, KZ, KG, GE



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ENVIRONMENT

Capacity-building: support to ratification

National legislation analysis, NAPs and high-level roundtable discussions

2015: Uzbekistan

2016: Kyrgyzstan; Kazakhstan

2017: Azerbaijan; Tajikistan

2018: Ukraine; Georgia;

2019: Armenia; Azerbaijan

2021: Kazakhstan

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ENVIRONMENT

Capacity-building: subregional workshops and meetings

Increased exchange of information and participation in the activities under the Convention

- Special session on emission inventories and projection on the margins of the TFEIP meetings (2015, 2017, 2018)
- Minsk workshop on synergies between CLRTAP and protocol on PRTRs in data collecting and reporting (2016)
- Sub-regional Workshop on GAINS model at IIASA (2018)
- Workshops on BATs organized by TFTEI (2016, 2019)
- “Saltsjobaden VI” workshop and sub-session on barriers towards ratification in EECCA and ways to overcome them (2018)
- Join meetings of EECCA CG and TFTEI workshop (2016, 2018, 2021)
- Sub-regional workshop on advanced method (COPERT) for estimating road transport emissions (2021, 2022)
- Participation of EECCA delegates in regular meetings under the Convention in Geneva (WGSR, EMEP/WGE, EB)
- Annual EECCA Coordinating Group meetings at regular meetings of the Convention

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ENVIRONMENT

Outreach and awareness-raising

- 7 September 2021: International Day of Clean Air for Blue Skies; contribution to the official campaign
- Cooperation with UN ESCAP
- Cooperation and information exchange with other UN organization (UNEP, WHO, WMO, UNDP, …) in the framework of the task team on air pollution of the Issue-Based Coalition on Environment and Climate Change

CONVENTION ON LONG-RANGE TRANSBOUNDARY AIR POLLUTION

E-learning Course

UNECE

Federal Ministry
for the Environment, Nature Conservation
and Nuclear Safety

Umwelt Bundesamt

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SWEDISH ENVIRONMENTAL PROTECTION AGENCY

Aim of the course

- Assist countries in addressing air pollution
- Improve air quality management
- Raise awareness about air pollution and its effects
- Improve learners' understanding of ways to prevent and reduce harmful emissions
- Promote Convention and its protocols as an international framework for cooperation on cleaner air

For whom?

- Policymakers
- Government officials
- Staff from intergovernmental/non-governmental organizations
- Private sector professionals
- Students/academia
- Other stakeholders

Learning objectives

After completing the course, learners will be able to:

- Identify key air pollutants and their sources and effects
- Recall measures to reduce and prevent air pollution
- Recognize the value of the Convention as a framework for international cooperation to reduce air pollution
- Define basic principles under the Convention and its protocols
- Explain the basic obligations under the Convention’s protocols
- Identify the key stakeholders and processes under the Convention and its protocols

Course content and structure

- Module 1: The Convention on Long-range Transboundary Air Pollution
- Module 2: The Protocol to Abate Acidification, Eutrophication and Ground-Level Ozone (Gothenburg Protocol)
- Module 3: The Protocol on Heavy Metals
- Module 4: The Protocol on Persistent Organic Pollutants

Methodology and certification

- Self-paced
- Mix of learning tools
- To prepare for the end-of-course assessment, it is recommended that learners complete all modules
- Certificate of successful completion (passing score 70%)
- Evaluation form

unccelearn.org

Apps | Neuer Tab | Visitor Announcem... | Module 1 - Mentim... | The Nordic working... | Аудиотека | Новос... | Les barèmes de per... | Simulateur de tarifs... | Wikimedia Commons | Stock Fotos, Lizenzf... | 2.4 million+ Stunni... | Beautiful Free Imag... | Other bookmarks

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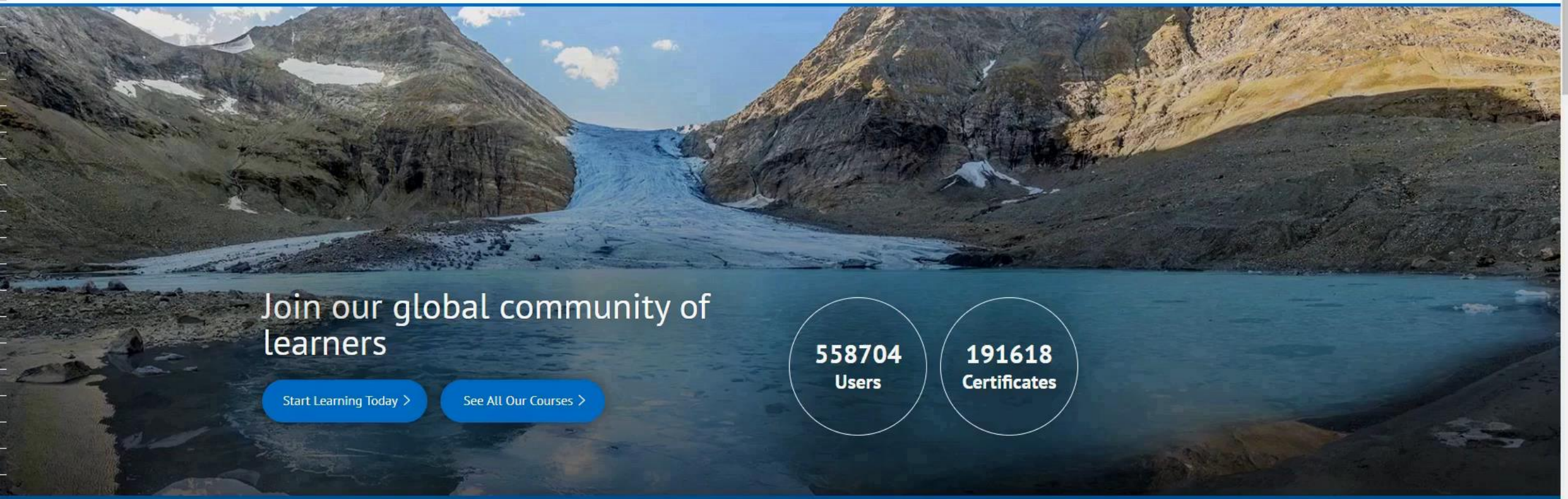

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https://unccelearn.org/course/view.php?id=150&page=overview
https://unccelearn.org/course/view.php?id=152&page=overview

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Ideas to support the mandate of the Task Force

ENVIRONMENT

- Promotion of tools and guidance documents (incl. BATs) for different emission sources developed under the Convention and adapted to the respective regional/sub-regional context
- Fitness tests of policy documents
- Emission inventory development
- Promotion of lessons learned from the Convention's institutional framework
- Exchange of experiences and best practices for mutual learning
- E-learning in other languages

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ENVIRONMENT

Thank you!

Albena Karadjova and Carolin Sanz Noriega

Convention on Long-range Transboundary Air Pollution

UNECE

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Carolin.SanzNoriega@un.org

https://unece.org/capacity-building-4

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Department
for Environment
Food & Rural Affairs

UK Air Quality: Context, Policy & Innovation

Bill Parish, Deputy Director

Air Quality and Industrial Emissions

UK Perspective: FICAP

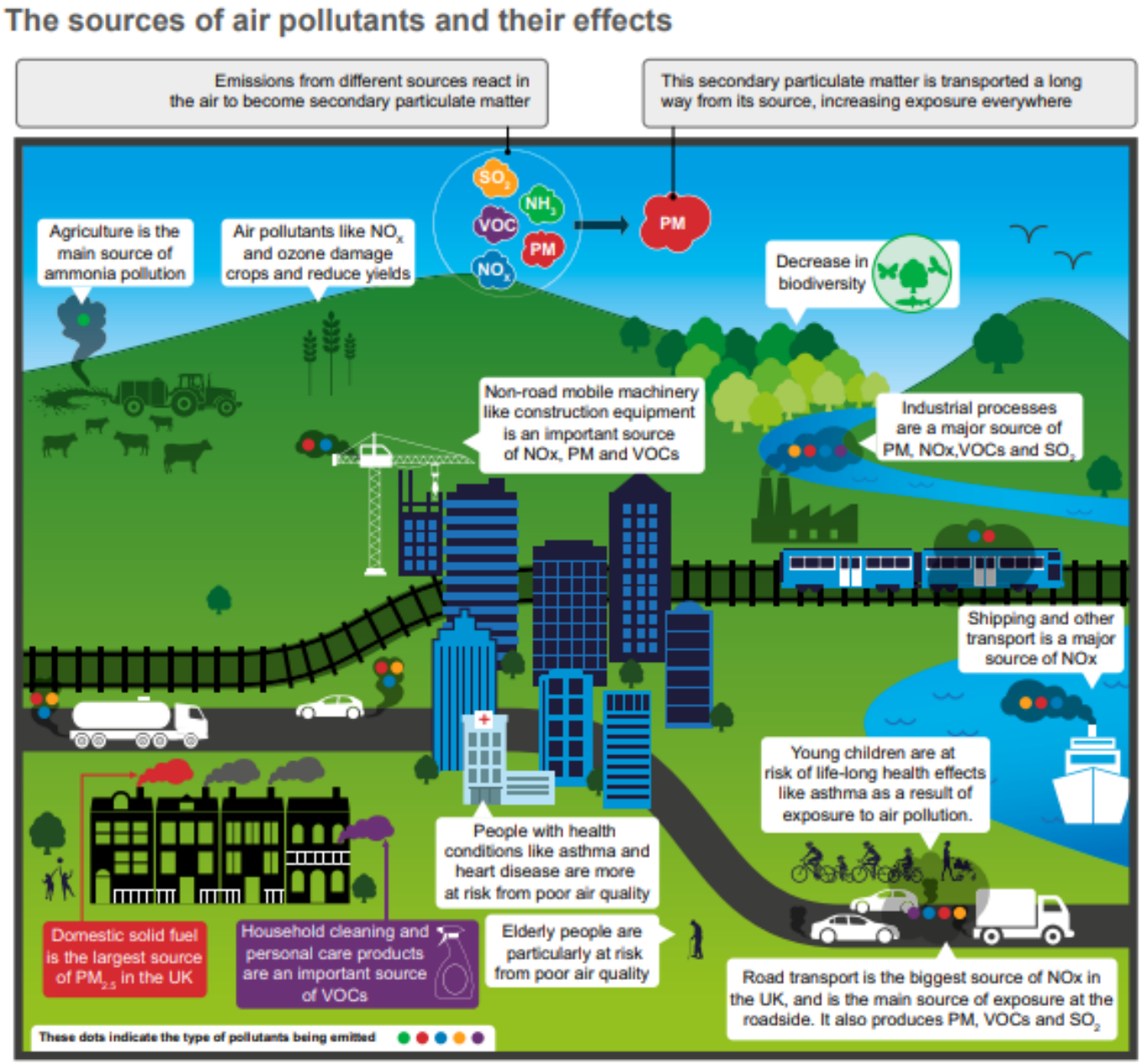
- Valued cooperation with international partners through the Air Convention
- We must solve domestic and transboundary air pollution issues
- We face common challenges and can share common solutions
- We are Co-Chairing this Task Force to set a strong programme for broader international cooperation

FICAP

Forum for International Cooperation on Air Pollution

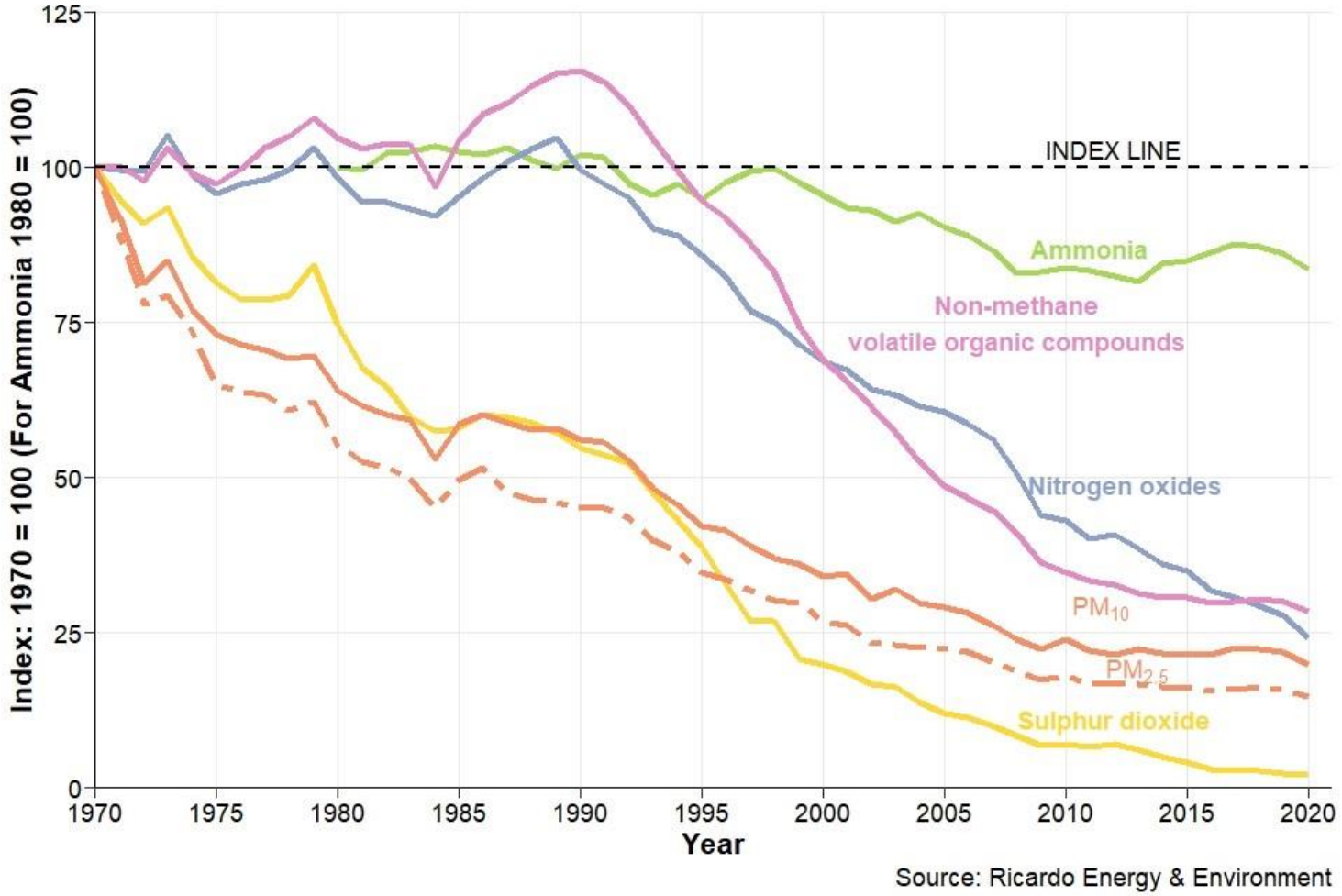
UK Context:

- We deal with multiple pollutants (5 key pollutants)
- Pollution comes from a range of sources, both natural and man-made
- We experience both domestic and transboundary contributions to our air pollution.



UK Policy Experience

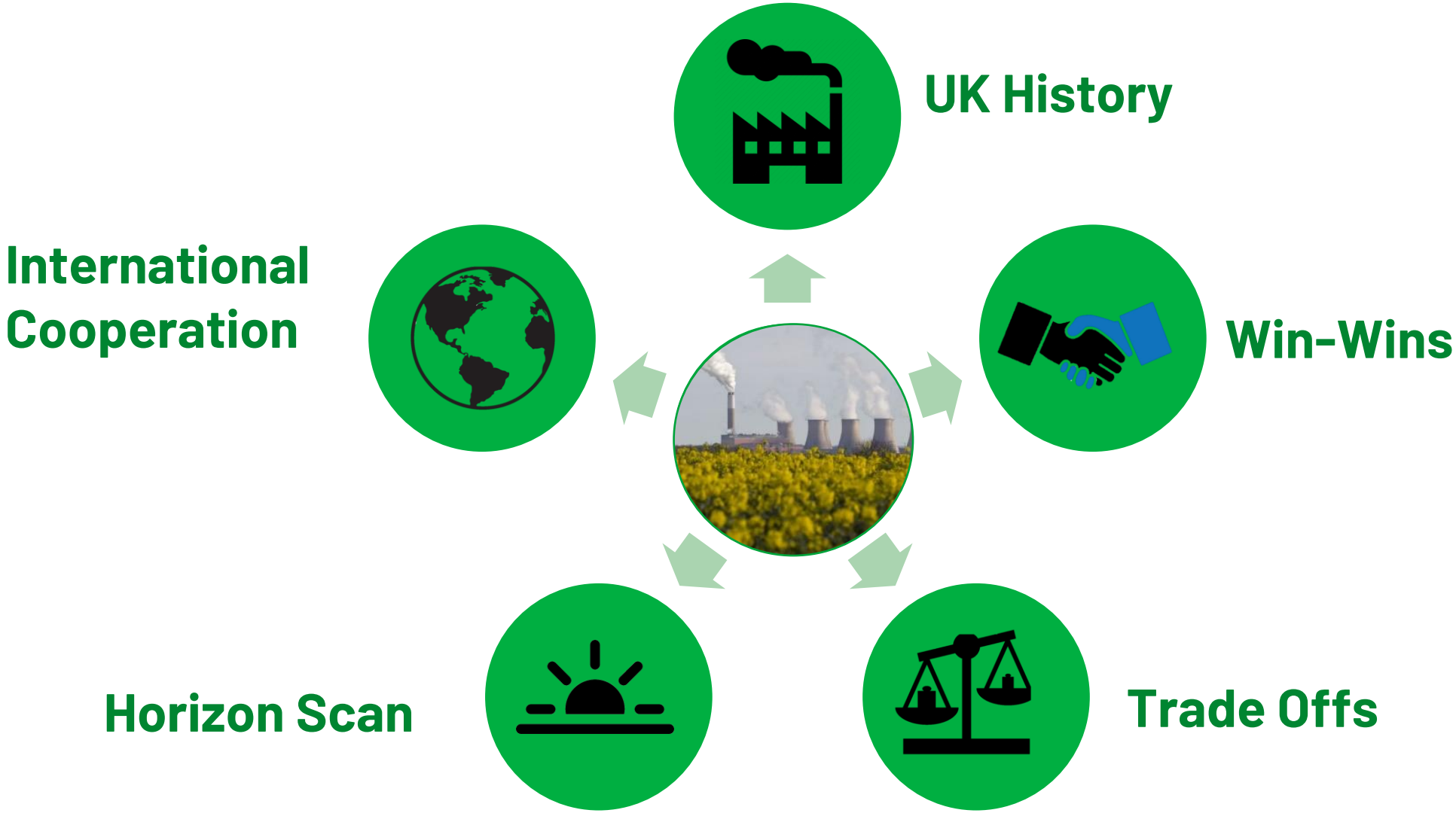
- Emissions reductions have slowed
- We have invested in research that shows more causal impacts of air pollution on health
- We face an ever more complex set of factors when developing policies



New PM2.5 Targets

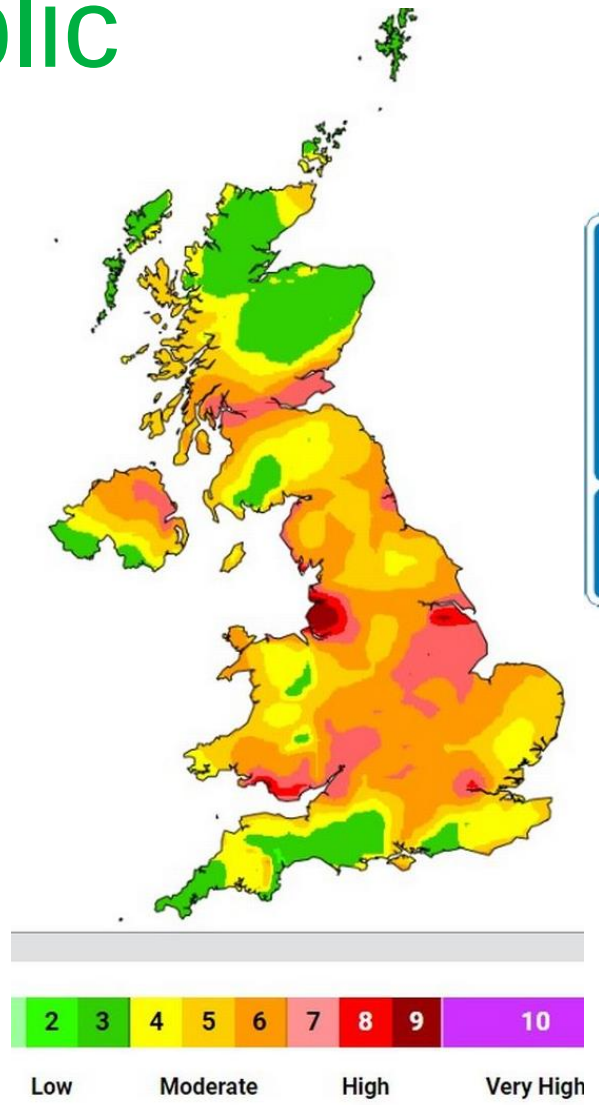
- The UK focuses on health outcomes to plan new policy instruments.
- We established a new framework of legally binding environmental targets in 2021.
- Under this framework two PM2.5 targets are proposed:
  - Annual mean concentration target of 10 µg m-3 by 2040
  - Population exposure reduction target (PERT) of 35% by 2040 compared to 2018
- This will protect those most at risk by driving action where concentrations are highest.
- The PERT will drive action to reduce concentrations across the whole country, benefitting everybody.

Aligning UK Policies: Net Zero



Communicating to the Public

- We communicate to the public to:
  - **Alert** them to air pollution episodes and forecasts
  - **Effect** changes of behaviour or awareness of impacts from sources of air pollution
- Increasingly new policies do require behaviour change by larger sections of the population
- We have initiated a comprehensive review of how we communicate air quality information.



Summary

- The UK has had some successes in tackling air pollution. However, we know we have further to go to tackle domestic pollution and our contribution to transboundary pollution.
- The UK and others have invested in developing new scientific and technical methods to understand our challenges and assist in policy planning. These can help other regions overcome barriers in tackling air pollution in other regions.
- There are co-benefits in tackling air pollution in tandem with the other big challenges we collectively face, such as climate change and biodiversity loss. Therefore, inter-regional cooperation can benefit us all to share knowledge and the means to tackle problems collectively.

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Presentation at TFICAP Meeting – Online (Bristol, U.K.)

Improving Air Quality in South Korea

- Recently Implemented Policies & Regional Cooperation -

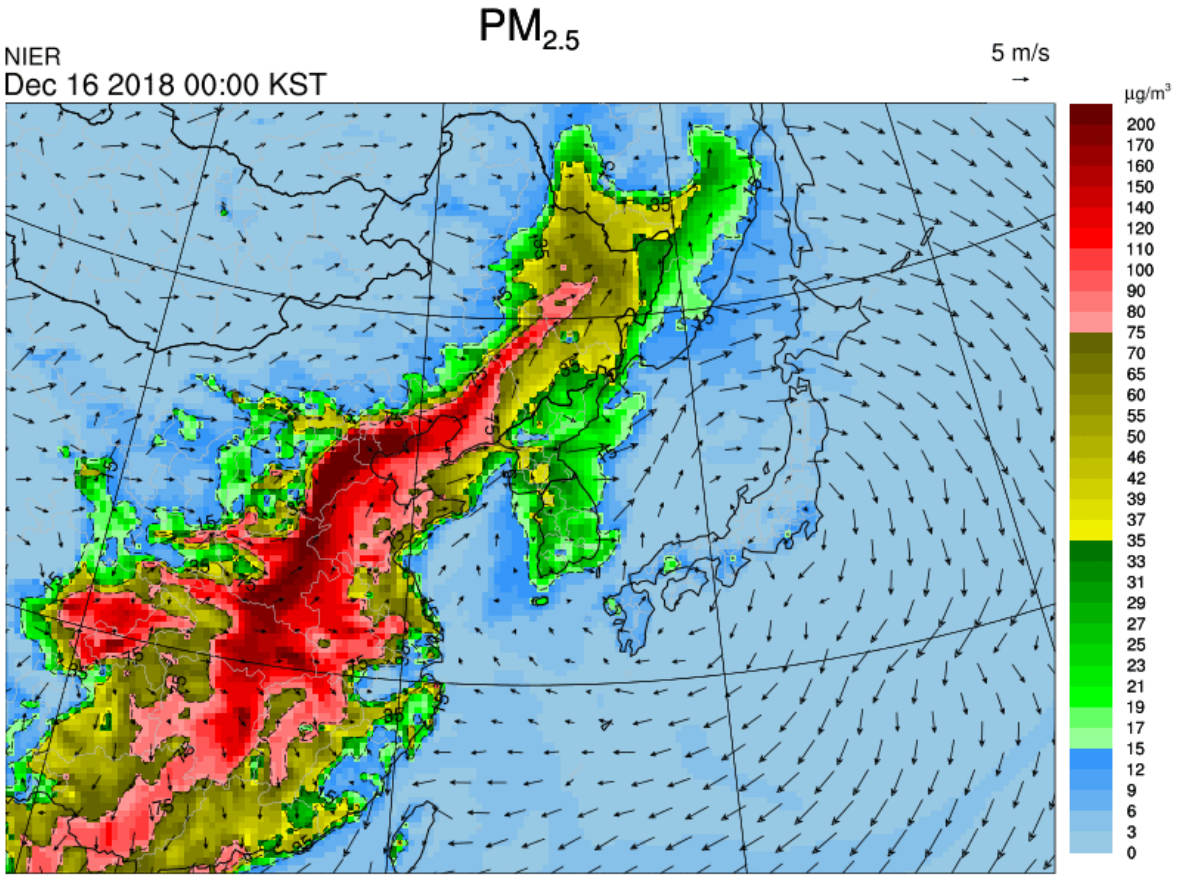
Young Sunwoo

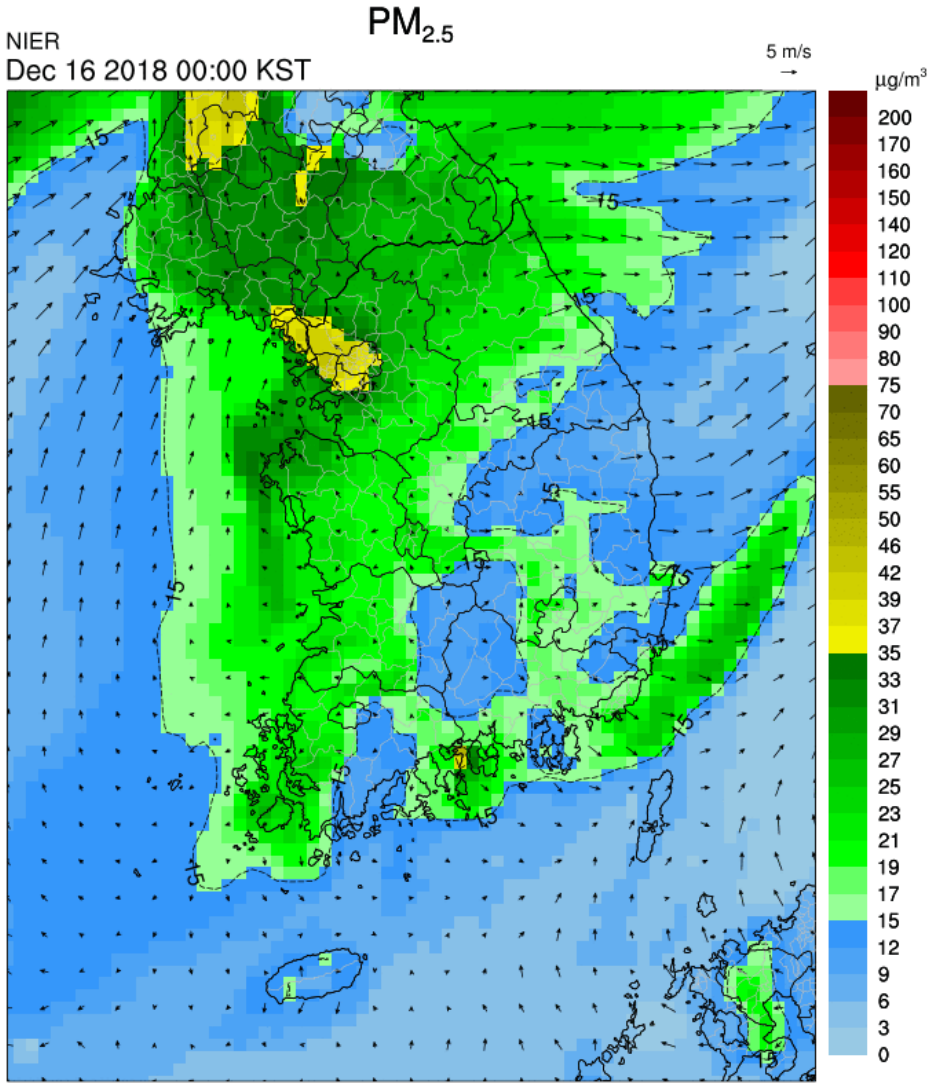
Dept. of Environmental Engineering, Konkuk University
Director General, IUAPPA

11 October 2022

Sample Case

Air quality modeling results (16~17 Dec, 2018)





(Source : National Institute of Environmental Research of Korea)

Blame: China vs. Us

Beating air pollution in Seoul, Incheon, and Gyeonggi (SIG) through evidence-based solutions

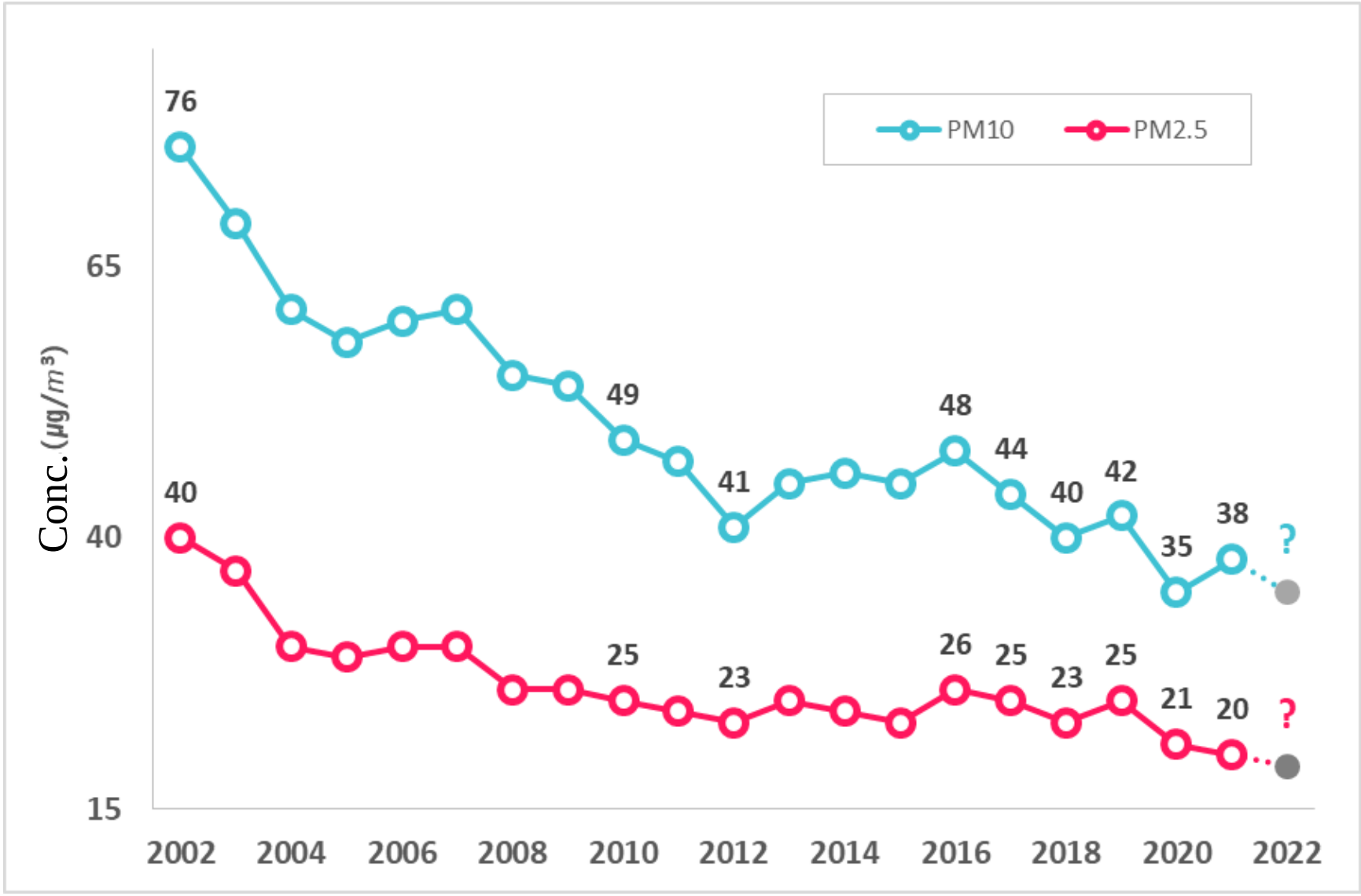
Stakeholder Workshop

1st September 2022

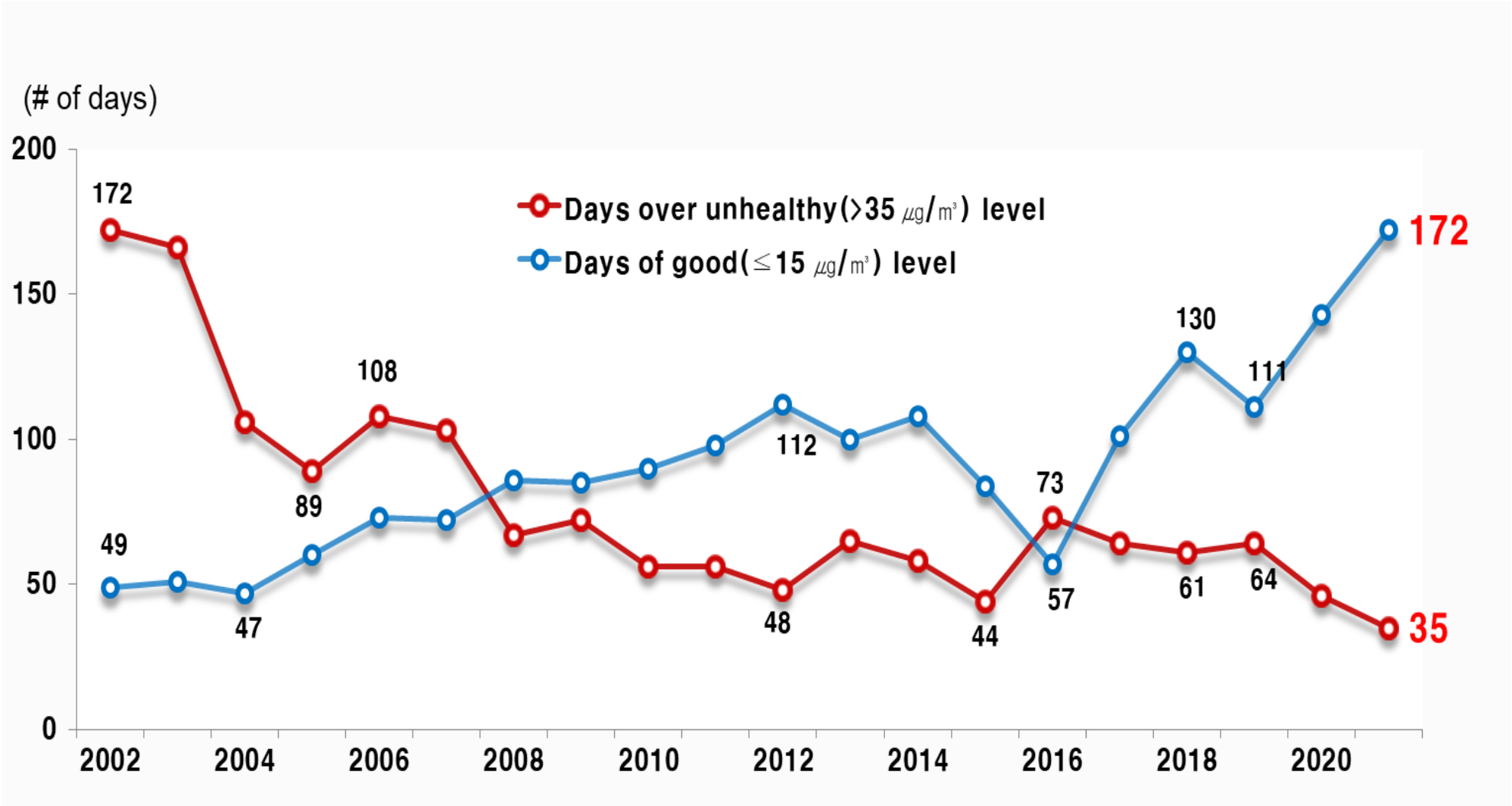
SEI Stockholm Environment Institute

Eleni Michalopoulou
Chris Malley

PM concentration in Seoul

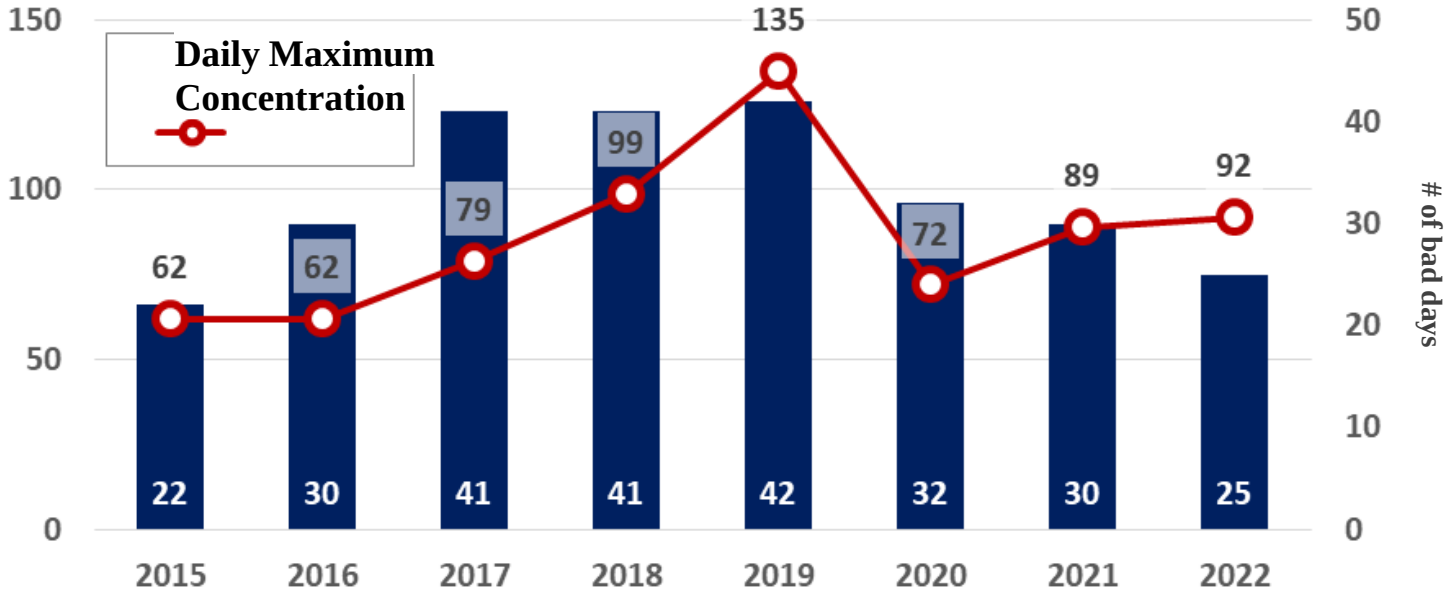


Changes in the number of days of PM “good”/“bad”



PM and Meteorological Conditions in Seoul over the past five years (December to March)

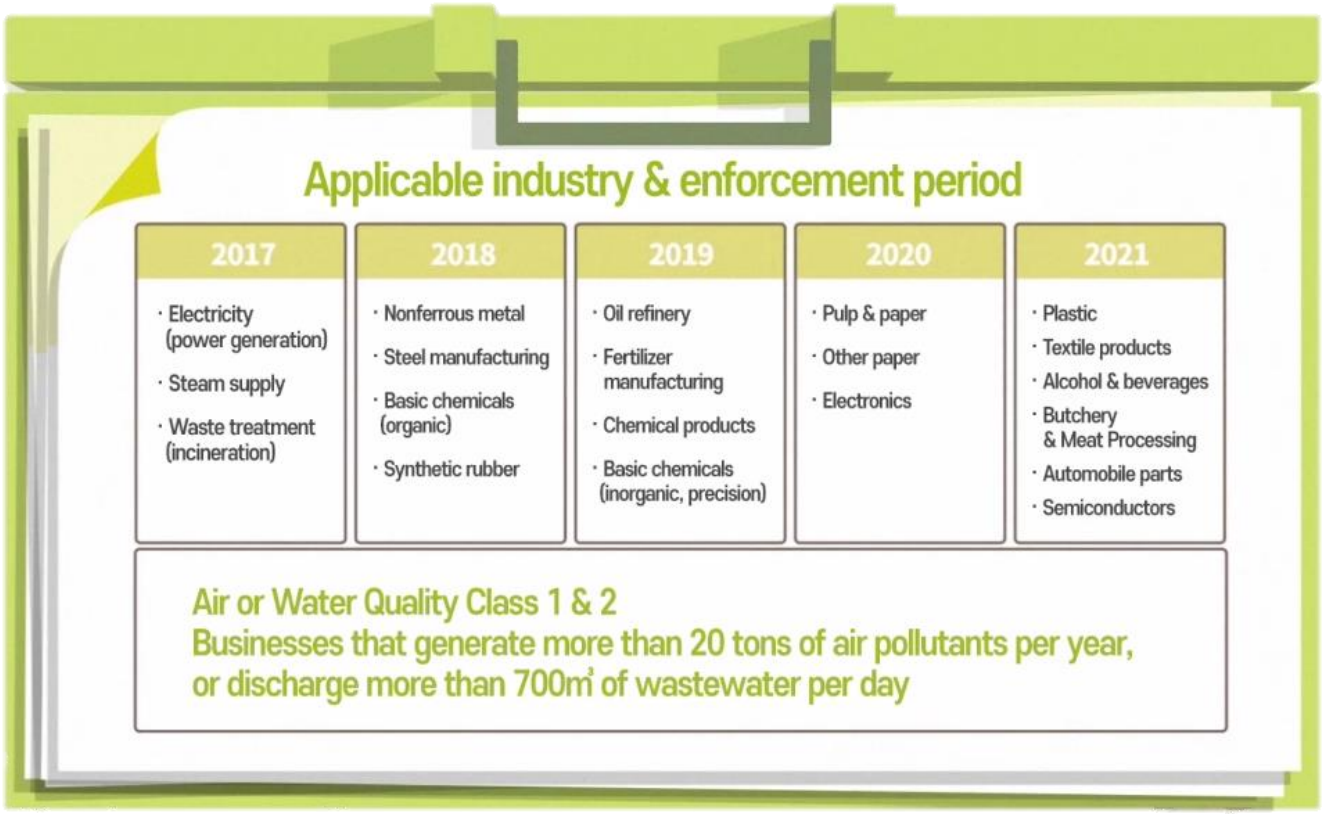
	Concentration (㎍/㎥)			# of "Bad days"	Meteorological factors					
	Mean	Max	Min		Wind speed (m/s)	Temp. (℃)	Precip. Amount (mm)	Precipi-tation days	Stagnant days	Main wind direction
2022	25	92	2	25	2.4	1.3	122.4	30	**35**	W
2021	27	89	6	30	2.4	2.2	67.0	27	**37**	W
2020	28	72	5	32	2.3	3.3	152.5	34	51	WNW
2019	35	135	8	42	1.9	1.7	141.5	16	71	WNW
2018	25	99	5	25	1.9	0.9	120.7	30	71	WNW



※ Bad days : PM2.5 concentration exceeding 35μg/day
※ Precipitation days: 0.1mm or more, total
※ Stagnant days: 2m/s or less in average daily wind speed

Integrated Environmental Management System

An integrated environmental approach means that emissions to air, water and land, plus a range of other environmental effects, must be considered together, and integrated protection of the environment as a whole must be implemented. Korea has adopted ***integrated environmental management*** in large-scale businesses since 2017 (Choi et al., 2017).



(Source : Korea Environment Corporation)

Fine dust Management

Korean government established the "***Comprehensive Plan on Fine Dust Management***", which is believed to be one of the most ambitious and advanced package of measures ever. The plan aims to reduce PM2.5 emissions by 35.8% by 2022 from the level of 2014. This is expected to result in the annual PM2.5 concentration decreasing to 17~18 ㎍/㎥ from 25 ㎍/㎥ and the annual number of poor air quality days from 64 to 40 per year.

Power generation: Strengthen control over emissions from coal-fired power plants and increase penetration rates of new renewable energy

Daily surroundings: Mitigate fugitive dust from roads, root out illegal incinerations, and reduce emission sources of fine dust in urban and rural areas

Industries: Introduce the "Dust Cap Regulation" targeting emission facilities in the Seoul Metropolitan Area and apply stricter permissible emissions levels to business facilities

Transportation: Apply tighter emission standards to diesel vehicles, expand restrictions of driving diesel vehicles, and encourage the use of eco-friendly cars

(Source : Ministry of Environment of Korea)

‘The Seasonal Fine Dust Management System’ Cases

*** California, United States**

South Coast Air Quality Management District(SCAQMD)

“Check Before You Burn”
is South Coast Air Quality Management District’s late fall and early winter program
that became mandatory on Nov. 1, 2011,
under the provisions of SCAQMD’s Rule 445
– Wood-Burning Devices.

The seasonal air pollution prevention program extends from November through the end of February, every year.

A No-Burn day is a 24-hour ban on wood-burning in residential fireplaces, stoves or outdoor fire pits in the South Coast Air Basin. During this season, if the concentration of ultrafine dust on the next day is predicted to exceed 30, "NO-Burn Date Air Alerts" will be issued, and burning of wood indoors and outdoors will be banned for 24 hours the next day. On average, "NO-Burn Date Air Alerts" are issued for about 20 days every year.

Seasonal PM Management System in Korea

: refers to enforcement of stricter reduction and management policies for PM from December to next March, a period that generally records higher PM concentrations than usual.

Korea experiences frequent high concentrations of PM from December to next March.

While the mean concentrations of PM2.5 from April to November are 20 $\mu g/m^3$ (2017~19), the mean concentrations of PM2.5 from December to next March are about 45% higher.

In response, the government introduced the Seasonal PM Management System that includes stricter reduction and management policies for PM from December to mitigate the frequency and intensity of high PM emissions in order to protect public health.

National PM Information Center

National Air Emission Inventory and Research Center

VISION

Provide the Latest, Reliable, and Accurate Information on Particulate Matter (PM)

- ✓ Systematize national estimation of latest and accurate emission data
- ✓ Identify and analyze causes and policy impacts in a reliable and feasible manner
- ✓ Strengthen internal and external collaboration · communication and organizational capability

Emergency Reduction Measures

Order emergency countermeasures when fine dust levels are high

- ✓ When fine dust levels are high, enforce emergency dust reduction measures - driving restrictions, change in operation of hours at emission facilities and construction sites
- ✓ When issuing a fine dust warning, reduce operation of half of government vehicles and enforce a mandatory ‘alternate no-driving day’ policy for all city workers
- ✓ Emergency operation of road cleaning, using water wagon de-dusting vehicles
- ✓ Reduce incineration by 20 percent at large-scale incineration plants and cut fuel use at air pollution discharge facilities

PM Preliminary Reduction Measures

Order emergency countermeasures when fine dust levels are predicted to be high

- ✓ Measures to curb air pollution is implemented when concentration level of fine particles in the air is forecast to exceed 50 micrograms per cubic meter
- ✓ Civil servants are required to follow the alternate driving day system to help curb vehicle emissions
- ✓ Cars with license plates that end in even/odd numbers should stay off the road
- ✓ Public sector construction sites are required to reduce work hours and take steps to prevent dust emissions

Related Activities in Seoul

Record low $PM_{2.5}$ levels in Seoul

The Seoul Metropolitan Government (SMG) confirmed that the city's PM2.5 levels hit a record low of 20 μg/m3. Ever since the city codified its urban

06/15/2022 4881

Lowest levels of $PM_{2.5}$ through seasonal PM management

The Seoul Metropolitan Government (SMG) conducted its third seasonal particulate matter (PM) management from last December to the end of this

04/06/2022 5285

Operation of Seoul Mobile Air Quality Laboratory in Areas with High PM Concentration

The Seoul Metropolitan Government's (SMG) Fine Dust Research Institute will be operating its Mobile Air Quality Laboratory (Mobile Lab) that will run

01/22/2021 1557

Seoul Reorganizes Website for Offering Information on Air Quality & Particulate Matter

The city of Seoul has now integrated its website's Air Quality Information and Particulate Matter Information. On March 16, Seoul reorganized the

03/20/2020 4210

Seoul to Host 2019 Northeast Asia Forum on Air Quality Improvement in May

Seoul will host the 2019 Northeast Asia Forum on Air Quality Improvement, a conference that seeks a solution for the improvement of air

04/24/2019 3417

Seoul City Plants Trees in Mongolia to Help Block Yellow Dust and Fine Dust

Seoul City Plants Trees in Mongolia to Help Block Yellow Dust and Fine Dust Digging holes for trees Planting and watering trees The air quality in Seoul

02/08/2018 4225

32 Asian Cities Meet in Seoul to Find Solution for Fine Dust

The '2018 Northeast Asia Forum on Air Quality Improvement' is holding it's largest scale meeting yet for two days starting Tuesday, September 4 at

09/03/2018 2448

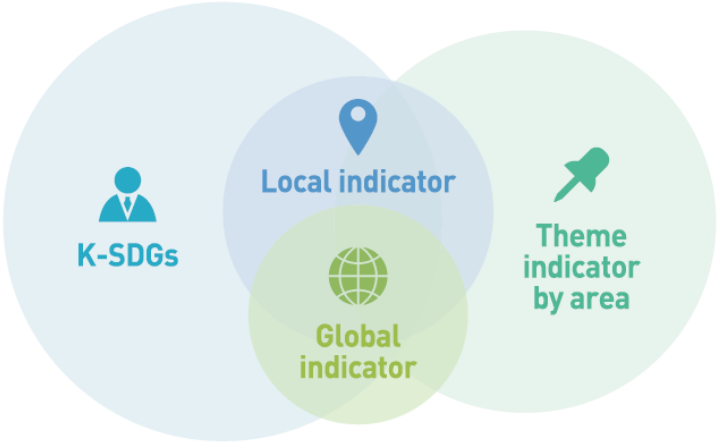
Seoul City Strives to Reduce Fine Dust

The Seoul Metropolitan Government (SMG), upon deciding that fine dust, designated as carcinogenic to humans (Group 1) by the World Health

04/10/2017 10171

(Source : Seoul Metropolitan Government)

K-SDGs & International-Relations



For the last two decades since 1999, the Tripartite Environment Ministers Meeting of Korea, China, and Japan (TEMM) has served as the highest-level environmental cooperation platform in Northeast Asia. TEMM's Joint Action Plan 2015-2019 has set nine priority areas including air, water, wastes, climate change and green economy under which thirty-seven official programs have been carried out in the form of policy dialogue, joint research, training/education, and pilot projects.

The Ministry has also been offering numerous training opportunities to developing country officials for their capacity building. Also, through the Green Climate Fund (GCF) based in Korea, the Ministry is sponsoring developing countries in preparing their GCF project proposals. Since its first signing of the agreement in 1987, the Ministry has signed 14 agreements and 419 MOUs with government entities and international organizations so far. The areas of cooperation under the agreements and MOUs are extensive: general environmental cooperation, biodiversity, water, personnel & technology exchange, climate & air, waste, etc.

(Source : Ministry of Environment of Korea)

International Day of Clean Air for Blue Skies

Adopted by a UN General Assembly Resolution in 2019, ***the International Day of Clean Air for blue skies –*** whose observance is facilitated by the UN Environment Progamme (UNEP) – stresses the importance of and urgent need to raise public awareness at all levels and to promote and facilitate actions to improve air quality.

The Republic of Korea initiated global efforts to create this new International Day of Clean Air for blue skies and continue to host events to celebrate achieving ‘clean air’.

#TheAirWeShare

This year’s theme of “The Air We Share” focuses on the transboundary nature of air pollution, stressing the need for collective accountability and action.

International Cooperation

- ✓ Establishment of a platform for Northeast Asian countries to jointly respond to air pollution
- ✓ Joint research program regarding transboundary movement of air pollutants
- ✓ Strengthening of bilateral cooperation and joint response for tackling air pollution with neighboring countries

Korea-China-Japan	Korea-China	Korea-Japan	Regional
-Tripartite Environmental Ministers Meeting (TEMM) - Air Pollution Policy Dialogue WG1: Scientific Research of Air Pollution Prevention &Control WG2: Technology and Policy on Air Quality Monitoring & Forecasting	- Joint Research Project (Office based in Beijing) - Data Sharing (35 cities of China ↔ 3 cities of Korea)	PM 2.5 Bilateral Cooperation Meeting	- EANET (Acid Deposition Monitoring Network in East Asia) - LTP (Long-range Transboundary Air Pollutants in Northeast Asia)


Thank you for
your attention :)

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Forum for International Cooperation on Air Pollution

1st Taskforce Meeting of The Forum for International Cooperation on Air Pollution

11th & 12th October 2022
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Coffee Break

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Morning Session – Part II

12:10 – 13:00

Presentations on capacity building perspectives from Countries and NGOs, including lessons learned, from:

- Regional, National Government perspectives
  - South America

Presentations on capacity building perspectives from Countries and NGOs, including lessons learned, from:

- International Organisations:
  - USEPA

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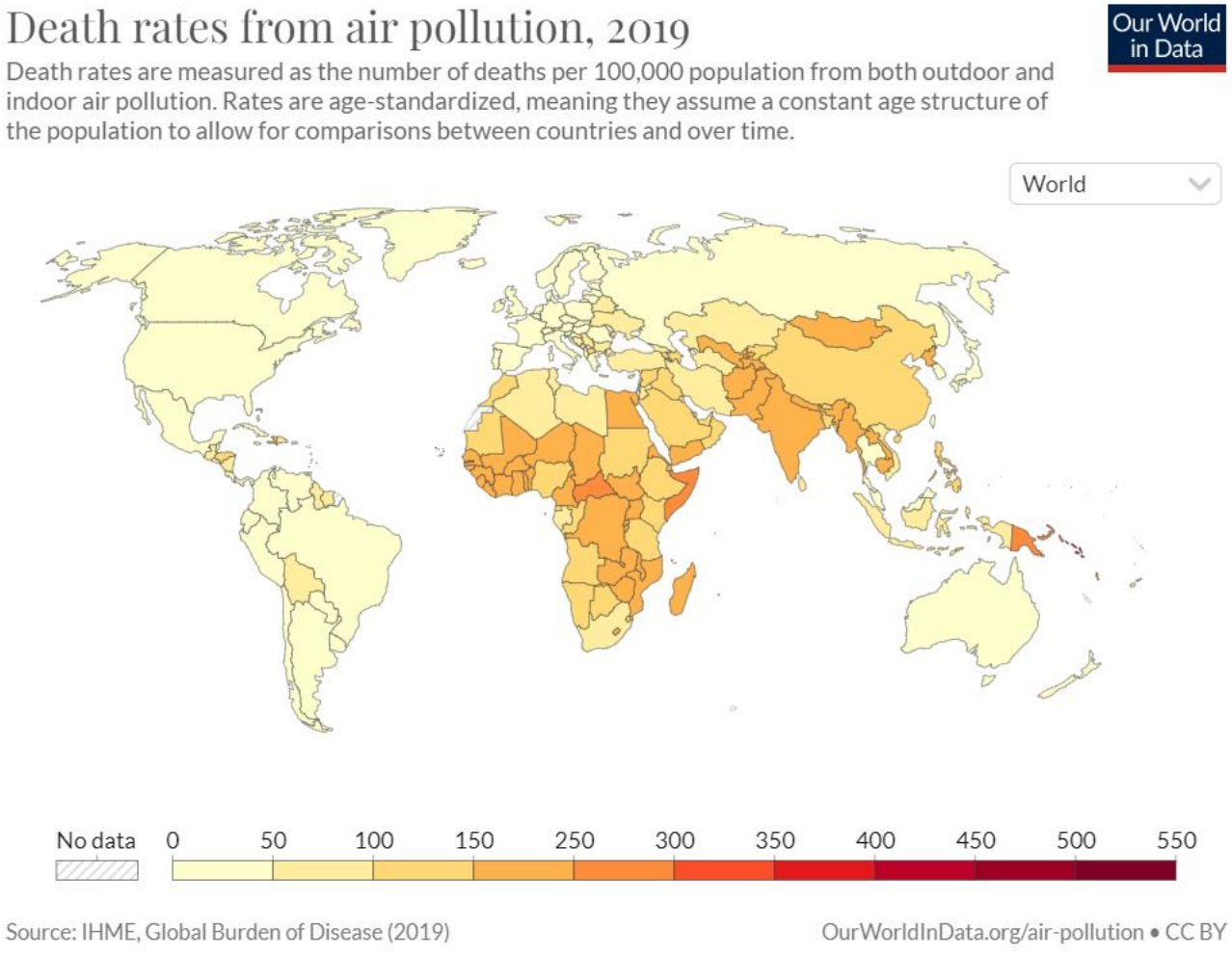
UNITED NATIONS
ESCAP
Economic and Social Commission for Asia and the Pacific

Regional Cooperation for Capacity Building on the Mitigation of Air Pollution in Asia-Pacific

Sangmin Nam

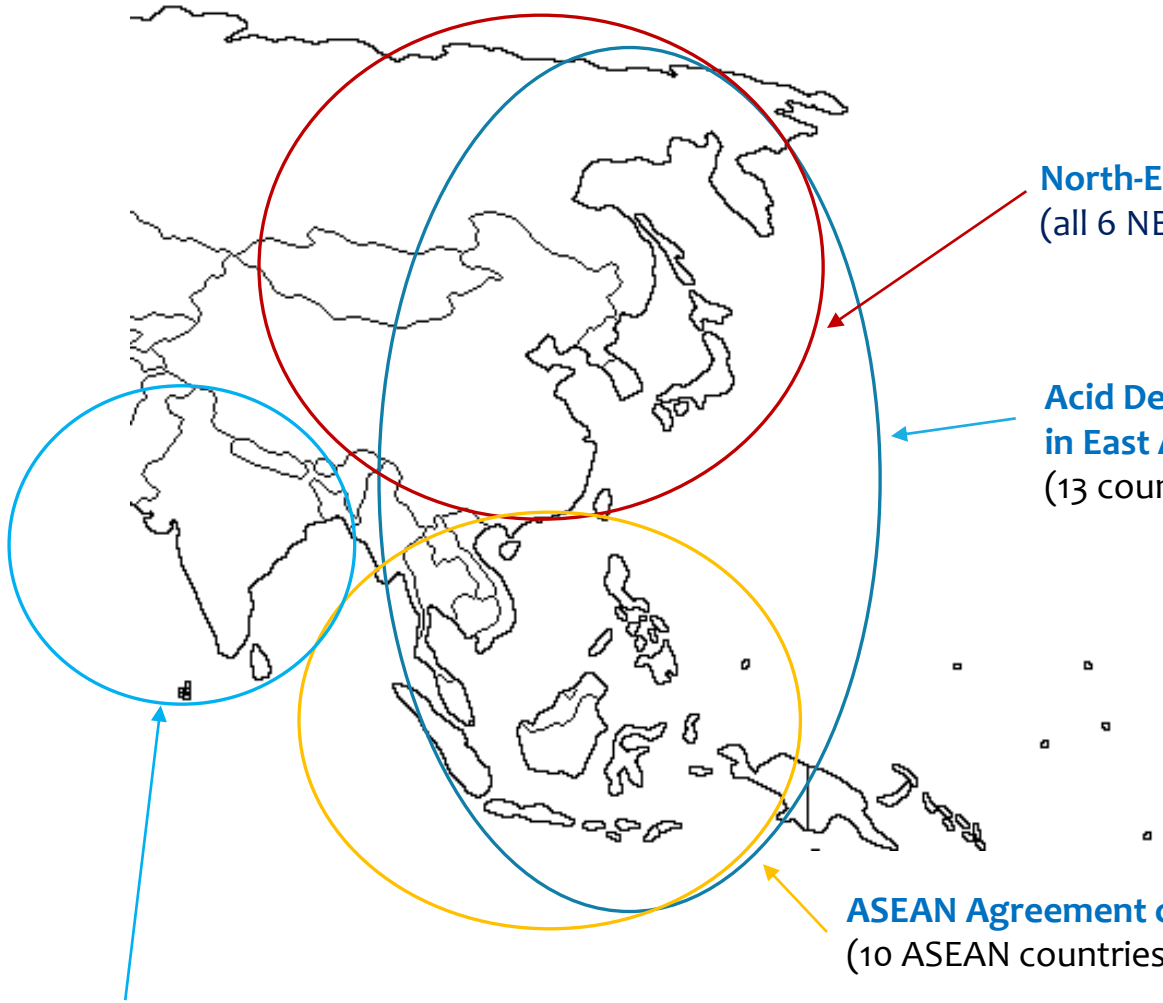
Director, Environment and Development Division



Asia and the Pacific

- High level of air pollution concentration and premature death
- Diverse cooperation mechanisms but limited scope, mandate and capacity
- Increasing awareness and commitment

Multilateral cooperation on air pollution in Asia and the Pacific



North-East Asia Clean Air Partnership (NEACAP)
(all 6 NEA countries)

Acid Deposition Monitoring Network in East Asia (EANET)
(13 countries in East Asia, excl. DPRK)

ASEAN Agreement on Transboundary Haze Pollution (Haze Agreement)
(10 ASEAN countries)

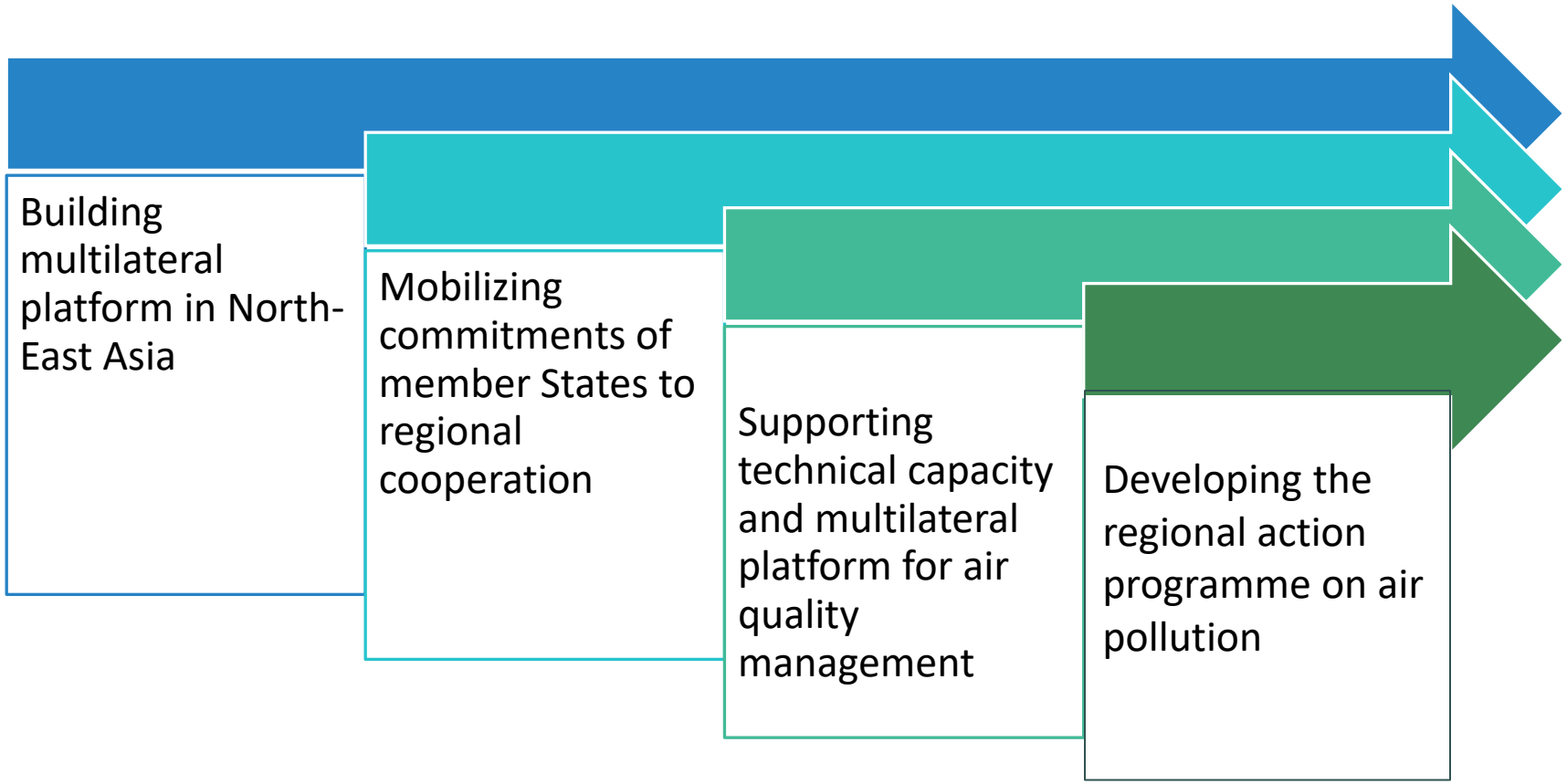
Malé Declaration on Control and Prevention of Air Pollution and its Likely Transboundary Effects for South Asia (Malé Declaration)
(8 member countries)

Multilateral Mechanisms	Inception	Legal status	Main scope of work	Members
Acid Deposition Monitoring Network in East Asia (EANET)	1998	Voluntary	Monitoring of acid deposition	13 countries in North-East and South-East Asia
Malé Declaration on Control and Prevention of Air Pollution and its Likely Transboundary Effects	1998	Voluntary	Capacity building and coordination on emission inventory, impact assessment, monitoring	8 countries in South Asia
ASEAN Agreement on Transboundary Haze Pollution (Haze Agreement)	2002	Legally binding	Monitoring, assessment, prevention and Response to haze pollution	All ASEAN member states
North-East Asia Clean Air Partnership (NEACAP)	2018	Voluntary	Emission inventory, integrated assessment modeling, policy dialogue	6 countries in North-East Asia

Challenges to multilateral cooperation in Asia-Pacific

- Insufficient domestic policy compliance and technical capacities in most countries
- Different climate, socio-economic and technological drivers of air pollution across the Asia-Pacific region, thereby subregion-specific responses
- Subregion-based cooperation mechanism while lacking the mandate and capacity for scientific assessment and policy coordination
- Lack of rule-based multilateral environmental governance at the regional levels

ESCAP: Strengthening multilateral cooperation



1. Building multilateral platform in North-East Asia

North-East Asian Subregional Programme for Environmental Cooperation
NEASPEC

Launched in 1993 and supported by ESCAP as the secretariat

NORTH-EAST ASIA CLEAN AIR PARTNERSHIP

Comprehensive platform on air pollution in North-East Asia for science-based, policy-oriented cooperation

Work Plan 2021-2025

- Propose potential **technical and policy measures**
- Organize **policy dialogue**
- Conduct **policy analysis** on air pollution management
- Support voluntary collaboration on the **Best Available Techniques**
- Support **technology forum**

2. Mobilizing new commitments to regional cooperation

ESCAP Resolution 75/4 on ***Strengthening regional cooperation to tackle air pollution challenges in Asia and the Pacific*** adopted in May 2019

Member States:

- Strengthen domestic policies and measures to reduce air pollution
- Mitigate the impacts of air pollution on human health
- Share experiences of subregional and regional cooperation
- Strengthen the transfer of technologies to tackle air pollution challenges

ESCAP:

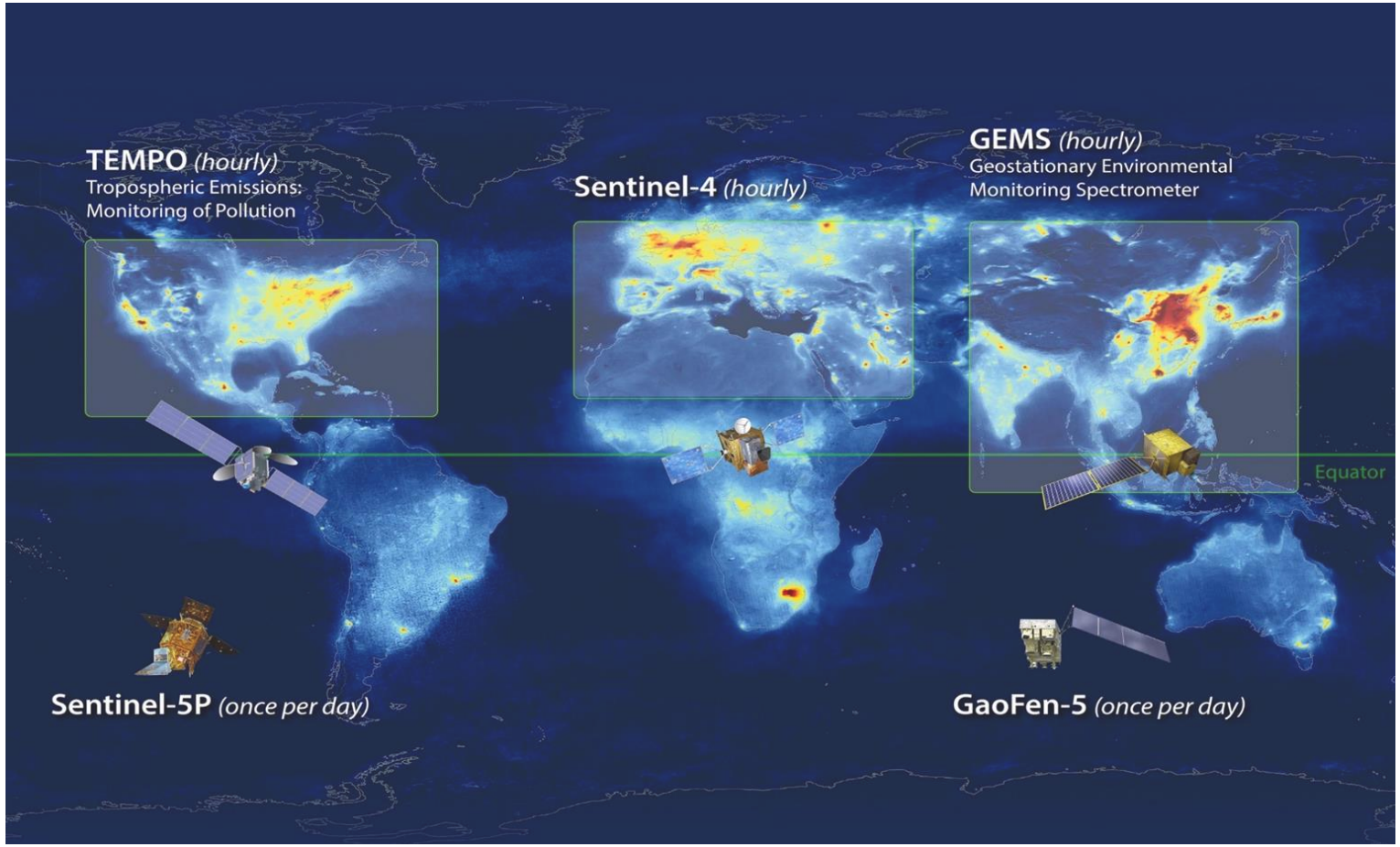
- Facilitate exchange of cooperation experiences; science and technological cooperation; information collection and dissemination
- Conduct analytical studies for policy development
- Provide technical support for policy development

3. Supporting technical capacity and multilateral arrangement for air quality management

Building the Pan-Asia Partnership for Geospatial Air Pollution Information (PAPGAPI)

Supporting Asian countries' access to air quality data from the geostationary satellite

Providing capacity building to the utilization of the data

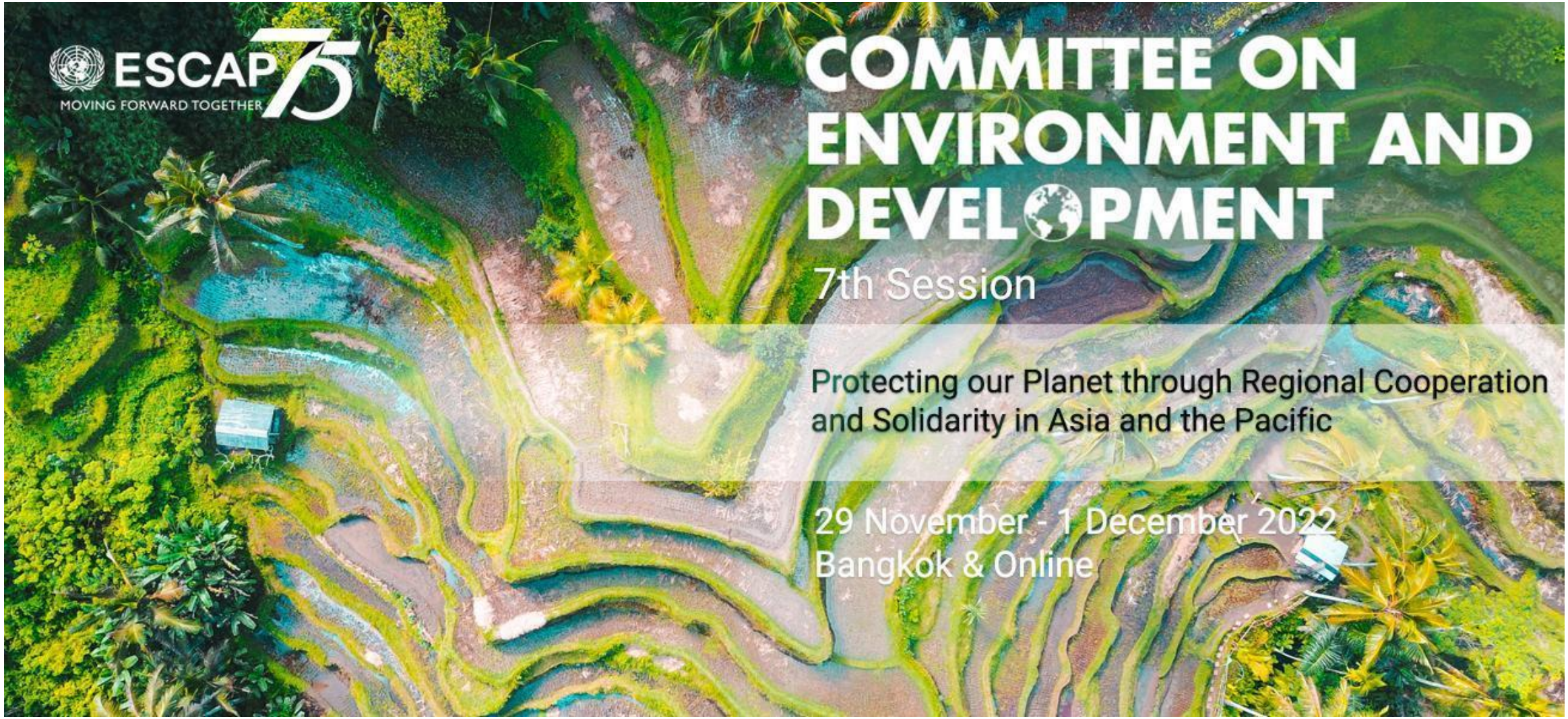


In partnership with

National Institute of Environmental Research +Pride

KOICA Korea International Cooperation Agency

4. Developing the regional action programme on air pollution



ESCAP 75
MOVING FORWARD TOGETHER

Thank You

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Major Capacity Building Efforts - Office of Air Quality Planning and Standards

First Meeting of the Forum for International Cooperation on Air Pollution (TFICAP)

11 October 2022

Outline

- Overview of the Office of Air Quality Planning and Standards
- Megacities Partnership
  - Overview
  - Pilot Cities
  - Moving Forward
  - Megacities Platform
- Regional Air Quality Management (AQM) Capacity-Building in Central Asia
  - Overview
  - Three Series of Workshops Delivered to Date
  - Upcoming Workshops
- Lessons Learned/Best Practices/Summary

Overview of the Office of Air Quality Planning and Standards

- Our primary mission is to preserve and improve air quality in the United States.
- To accomplish this, OAQPS:
  - compiles and reviews air pollution data,
  - develops regulations to limit and reduce air pollution,
  - assists states and local agencies with monitoring and controlling air pollution,
  - makes information about air pollution available to the public, and
- We also provide technical support thru:
  - Webinars
  - Air quality management tools on the internet
  - On-site visits

- Engineering
- Modeling
- Economics
- Monitoring
- Policy Analysis
- Emission Inventory Development
- Health Science
- Industrial Sector Expertise
- Risk Assessment

Megacities Partnership: Overview

- The U.S. EPA's Megacities Partnership began in 2015 as an international collaboration to address air quality and improve public health in cities around the world
- Focuses on capacity building and coordination between local agencies
  - Does not provide funding for equipment or capital
- Provides a framework to develop and implement plans to address air quality and improve public health

Megacities Partnership: Pilot Cities

- Four pilot cities selected to implement the Megacities Partnership Framework
  - Accra, Ghana
  - Addis Ababa, Ethiopia
  - Santiago, Chile
  - Lima, Peru

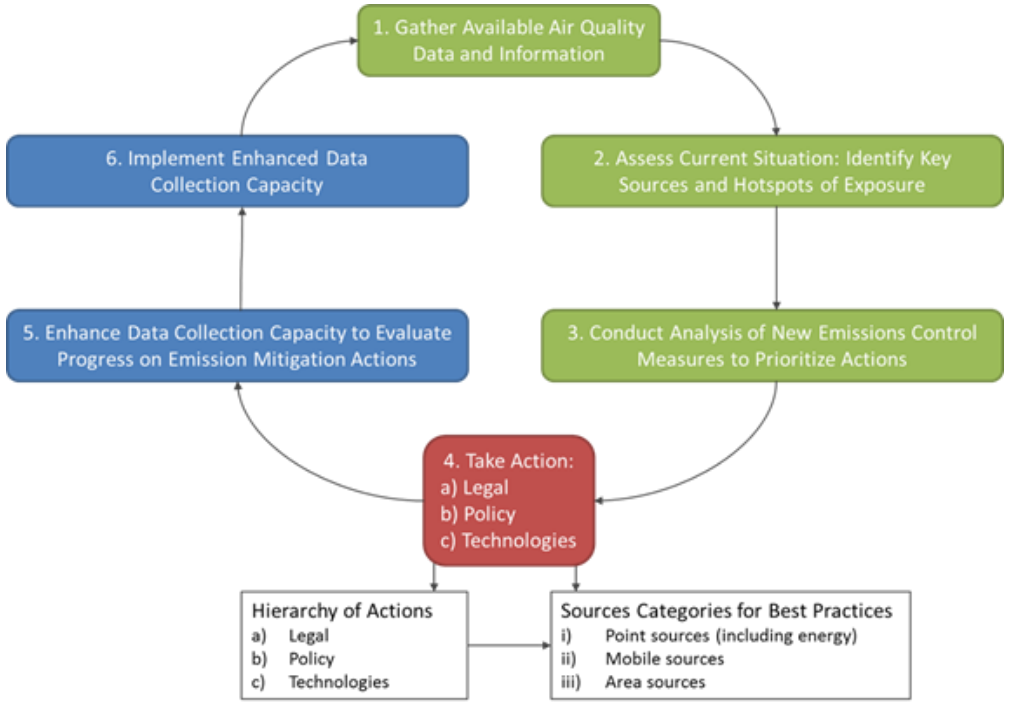
- Leveraged key partnerships with other organizations
  - CCAC SNAP Initiative – Stockholm Env. Institute
  - World Bank
  - WHO/CCAC Urban Health Initiative
  - Global Alliance for Clean Cookstoves

- Pilot Partnerships demonstrated adaptability of the platform to a wide range of experiences and capacities on air quality management

Megacities Partnership: Moving Forward

- Rather than starting new partnerships, the current focus is to develop capacity by making information freely available

- Templates
  - Based on experience in four pilot cities
  - One for each step in the air quality management process
  - Help provide structure and guidance for local governments
  - Can be modified to reflect specific circumstances in any location



The Megacity Framework

Megacities Partnership Platform

- Created platform/website with Megacities information and available resources:
  - Templates: Currently available in English, Spanish and Russian
  - Videos: Four informational videos that step through the Megacities process and templates

https://www.epa.gov/air-quality-management-process/megacities-partnership

Megacities Partnership: Future Activities

- Prepare template integrating climate into AQM
- Translate templates into French
- Post previous Megacities presentations as examples
- Explore possibility of a training course as funding allows

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Regional Air Quality Management (AQM) Capacity-Building in Central Asia

AQM Capacity Building in Central Asia: Overview

- Since 2020, U.S. EPA has been organizing virtual workshops for government partners in Central Asia
  - Objective: Build a regional community of experts and foster inter-governmental cooperation on air quality management (AQM) in Central Asia
    - Convened in collaboration with U.S. Embassies in Nur-Sultan, Kazakhstan and Bishkek, Kyrgyzstan and/or the Secretariat of the Convention on Long-Range Transboundary Air Pollution (LRTAP)

- Address topics of interest to participating countries
  - Share proven effective tools and techniques for AQM
  - Facilitate discussions and assist in developing strategies

Capacity building efforts to date

- Air Quality (AQ) Management Workshop – August 2020
  - Goal: Provide an overview of air quality management (AQM) topics, create a regional community of air quality experts, and strengthen intergovernmental cooperation on AQ management
  - 23 participants from Kazakhstan, Kyrgyzstan, and Uzbekistan

- Air Quality Monitoring Workshop– December 2020
  - Selected based on participant feedback from previous workshop
  - Focused on AQ monitor network development and technical capacity-building
  - 18 participants from Kazakhstan, Kyrgyzstan, Turkmenistan, Uzbekistan

- Air Quality Data Use and Management Workshop – May 2021
  - Selected based on participant feedback from earlier workshop
  - Devoted to AQ data collection, analysis and management
  - 32 participants from: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, and Afghanistan

Additional Workshops Planned – Fall 2022

- Eight additional virtual workshops will continue to grow a regional community of experts and foster inter-governmental cooperation
  - Provide simultaneous interpretation and materials in English and Russian for all sessions
  - Begin with Workshop 1 in November-December 2022 timeframe
- Content will be based on topics of interest to participants
  - Workshops 1-2 will focus on LRTAP in cooperation with the Secretariat
    - Convening collaborative workshops on overcoming barriers to ratification of LRTAP, specifically the Gothenburg Protocol
  - Workshops 3-8 will focus on various AQM topics in cooperation with the U.S. Embassy in Nur-Sultan
    - Include participatory exercises in each workshop, culminating in an analysis that can be used to inform AQM and emissions mitigation plans

AQM Capacity-Building: Lessons Learned

- Make sure you reach the right point of contact
  - AQM responsibilities are spread out across different Ministries
  - High turnover rates of personnel might mean having to cover same AQM topics more frequently than anticipated
- Adjust presentations/sharing of information to different levels of technical capacity
  - Offer to follow-up on technical questions via email or an additional webinar
- Simultaneous translation to native language of audience is essential
- Audiences value the opportunity to share opinions and experiences across regions and countries
- Audiences expressed interest in learning more about cooperation outside their regions, including long-range transboundary transport of pollution and to explore opportunities to attract investments (for example, expanding and improving air quality monitoring systems)

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Thank you

Paul Almodóvar
Carrie Wheeler
Office of Air Quality Planning and Standards
U.S. Environmental Protection Agency

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Lunch

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Breakout Room Sessions

14:00 – 15:30

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Summary of Discussion

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