

# Regional Air Pollution Frameworks in East Asia and Potential for Linkage with Co-benefits

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### Objectives

■ Brief overview of regional air pollution initiatives [frameworks] in Asia

Opportunities and challenges for integrating co-benefits [with climate change] into those initiatives





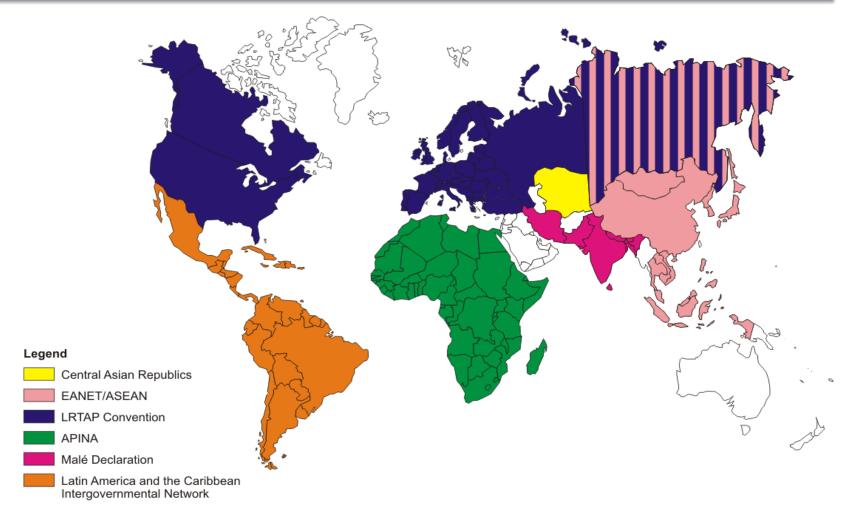
### Science Policy Interface

- ☐ Science Side: Proposal for Asian Science Panel on Air and Climate (ASPAC)
  - To promote linkage between science & policy
  - Promote regional epistemic community of scientists in Asia
- Policy Side: International cooperation frameworks / initiatives
- Need to link science panel with an international cooperation framework





## Existing regional initiatives on air pollution control

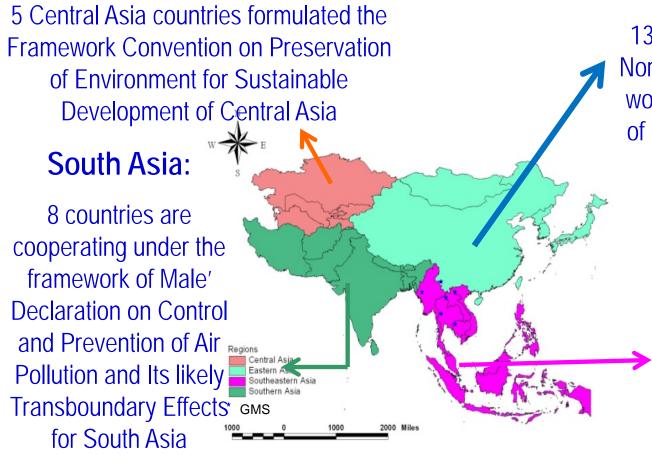


**Types**: - Binding International Treaty

- Regional Inter- governmental Co-operation Agreements and Declarations
- International Research Initiatives and Programmes

## Existing UNEP-related regional/sub-regional air pollution initiatives in Asia





#### East Asia:

13 countries, which includes
Northeast and Southeast Asia,
working under the framework
of East Asia Network on Acid
Deposition

#### Southeast Asia:

ASEAN member countries are working under the framework of ASEAN Haze Agreement

## Comparison of Selected Frameworks on Air Pollution in East Asia

Framework/ Secretariat	Focus/ Functions	Focus/ Pollutants	Future Development	Other
EANET/ UNEP/RRC.AP	<ul><li>Monitoring</li><li>Research</li><li>Cap. Bldg.</li></ul>	Acid Rain	<ul> <li>Expand monitoring to O3 &amp; PM2.5 (first step)</li> </ul>	<ul><li>Countries signed "Instrument"</li></ul>
ASEAN Haze/ ASEAN Secretariat	<ul><li>Information sharing</li><li>Capacity building</li></ul>	• Haze	<ul> <li>Ratification of all parties</li> </ul>	<ul><li>Legally binding</li></ul>
NEASPEC (coal power plants) / ESCAP-SRO (Incheon)	<ul><li>Capacity building</li><li>Research</li><li>Policy Development</li></ul>	<ul> <li>S02 (China &amp; Mongolia) in terms of air pollution</li> </ul>	<ul> <li>Coal power plants concluded</li> <li>Next step still in discussion</li> </ul>	<ul><li>ADB supported</li><li>Political/ diplomatic difficulty</li></ul>
LTP/ NIER-Korea	<ul><li>Monitoring</li><li>Modeling</li><li>Emission inventories</li></ul>	<ul> <li>SO2, NOX, PM10/2.5, O3, etc.</li> </ul>	<ul> <li>Various options for new phase</li> </ul>	<ul><li>Research Project</li></ul>

#### Membership in Existing Frameworks

Countries	EANET	ASEAN Haze	NEASPEC	LTP
China	•		•	•
Japan	•		•	•
South Korea	•		•	•
North Korea			•	
Mongolia	•		•	
Russia	•		•	
Cambodia	•	•		
Indonesia	•	Not ratified		
Lao PDR	•	•		
Malaysia	•	•		
Myanmar	•	•		
Philippines	•	•		
Thailand	•	•		
Vietnam	•	•		
Brunei		•		
Singapore		•		

## Potential Links between Air Pollution Frameworks and Co-benefits

- Promote additional scientific research
  - Especially monitoring
- Promote awareness raising on air and climate issues among various stakeholders
- ☐ Create linkages between existing air pollution frameworks & co-benefits initiatives such as CCAC
- Promote related capacity building
- Promote related policy dialogues leading to mitigation actions
  - Consider prioritizing the transport sector



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#### EANET – Potential Link to Co-benefits

#### Overview

EANET is mostly focused narrowly on acid rain and its monitoring

#### Opportunities

- EANET needs to consider expanding its scope
  - EANET needs to become more relevant for emerging issues
  - Several options for expanding the scope have been and are being considered
- Acid rain is influenced by climate change
  - Air pollutants causing acid deposition (e.g. O3 & aerosols) contribute to climate change
  - Climate change affects acid deposition
- Some members considering strengthening or introducing monitoring of O3 & PM2.5
- Assessment report may consider climate aspects

- Most countries, if not all, support strengthened/expanded monitoring of O3 & PM2.5
- Some countries may be reluctant to support further expansion of the scope
- Expanded scope may require more financial contributions
- Some national focal points are not closely linked to climate related policy



## ASEAN Haze Agreement – Potential Link to Co-benefits

#### Opportunities

- Interlinkages between haze and climate change
  - Causes of haze also linked to climate change
  - Deforestation
  - Forest fires
- Haze countermeasures may also relate to GHGs/SLCPs
- Seek additional funding from climate/SLCP related sources

- Haze itself is the focus, may be considered more urgent
- Existing focus on implementation of the original agreement





#### LTP - Potential Link to Co-benefits

#### Opportunities

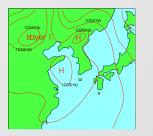
- LTP has a wider scope than EANET. In principle, climate co-benefits could be incorporated into monitoring, modeling, & emission inventories.
- LTP is now considering the focus for a new research phase. A broad range of ideas is being considered, which could include climate co-benefits.

- Obtaining consensus of the member countries
- Geographic scope is limited to 3 countries
- Funding









## NEASPEC – Potential Link to Cobenefits

#### Opportunities

- Existing project on coal-fired power plants has ended, and NEASPEC is considering a new focus
- Study led by Russia surveying existing air pollution cooperation frameworks in Northeast Asia
- Proactive stance of secretariat (ESCAP-SRO)

- Existing air pollution experience is not extensive
- Geopolitical considerations due to North Korea's membership
- NEASPEC is coordinated by foreign ministries
- Duplication/overlapping with activities of other initiatives
- Funding



## Joint Forum on the Atmospheric Environment in Asia and the Pacific

Closer cooperation among regional/sub-regional air pollution networks to enhance harmonization and sharing of good practices

Joint Forum on the Atmospheric
Environment in Asia and the Pacific

Central Asian
Environment
Convention

SPREP



Malé Declaration

Meeting of the Joint Forum on Atmospheric Environment in Asia and the Pacific, 10-11 March 2010

## Joint Forum – Potential Link to Cobenefits

#### Opportunities

- Joint Forum is in a good position to coordinate among regional initiatives/ frameworks
- Major focus of the Joint Forum at the initial stage is knowledge sharing and capacity building, which may include air and climate issues

- Coordination on climate change co-benefits requires interest among the member networks and their member governments
- Financing



### Asian Co-benefits Partnership (ACP) www.cobenefit.org

- A platform to improve information sharing and stakeholder dialogue on co-benefits in Asia.
- Goal: to support the mainstreaming of cobenefits into decision-making processes in Asia.



### Clean Air Asia (formerly CAI-Asia)

- CAA is a framework incorporating multistakeholder participation.
  - Includes business, local governments, research, and NGO communities
- Functions: information exchange, awareness raising, capacity building
- Can facilitate interdisciplinary discussions
- Better Air Quality Conference (BAQ) every 2 years
- Has taken up climate co-benefits as an important topic





## Overall Observations on Existing Frameworks

- Scope and ambition tend to be modest
- Tendency to be voluntary



- Governments tend to be conservative on expanding scope
- Networks often linked to specific ministries/departments in member countries; can hinder expanding the scope
- Weak funding structures



#### **Link to CCAC?**

- CCAC is yet another new initiative
- Existing initiatives/ frameworks not able to act quickly
- CCAC may have more funding opportunities

### Conclusions

- All existing initiatives/ frameworks have potential to link with cobenefits in principle
- Linkage areas may focus particularly on monitoring, modeling, capacity building, mitigation, adaptation, etc.
- Most frameworks limit the scope of pollutants. Expansion to air pollutants like O3 and PM2.5 may be easier. Can they be further expanded to Hg or others?
- However, in the past, it has been difficult to expand the scope of existing initiatives/ frameworks once they were established.
  - Strong effort may be needed to persuade governments about the priority of co-beneifts, and the appropriateness of using existing initiatives/ frameworks
- Need to obtain commitment of national governments for domestic use of a co-benefit approach first, then international cooperation frameworks can help facilitate actions.
- Many developing countries need comprehensive capacity building, including for scientific research



### Abbreviations

AIT	Asian Institute of Technology
CCAC	Climate and Clean Air Coalition
EANET	Acid Deposition Monitoring Network in East Asia
ESCAP-SRO	United Nations Economic and Social Commission in the Asia Pacific – Subregional Office (in Incheon, South Korea)
LTP	Long Range Transboundary Air Pollutants in Northeast Asia
NEASPEC	Northeast Asia Program on Environmental Cooperation
NIER	National Institute of Environmental Research (S. Korea)
RRC.AP	Regional Resource Center for Asia and the Pacific
UNEP-ROAP	United Nations Environment Program – Regional Office for