



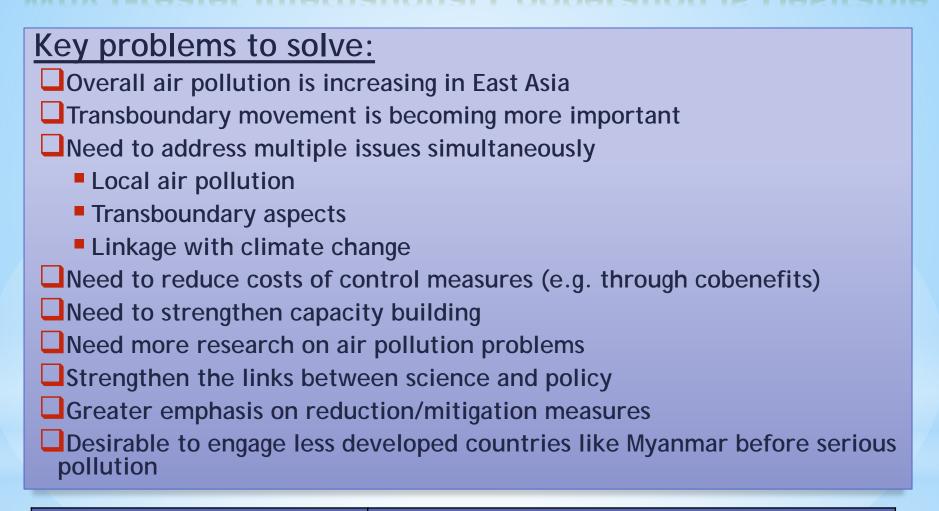
# Options and Considerations for Strengthening International Cooperation on Air Pollution in Asia

Mark Elder, IGES

International Workshop on Strengthening the International Cooperation Framework and Science-Policy Interface to Promote Air Pollution Control in East Asia 2013

Tokyo, Japan February 1, 2013

## Why Greater International Cooperation is Desirable



# ROLE OF INTERNATIONAL COOPERATION:

- 1. Facilitate a <u>common understanding</u> resulting in policy actions
- 2. Actions should be <u>coordinated</u> to enhance effectiveness and efficiency

# **Existing Selected Cooperation Frameworks**

GEOGRAPHIC SCOPE	FRAMEWORKS	
Global/hemispheric	UNFCCC, GAPF, ABC, CCAC	
More than one subregion	EANET, Joint Forum	
Subregional	ASEAN Haze Agreement, Male Declaration, TEMM, LTP, NEASPEC	

#### PROBLEMS WITH EXISTING FRAMEWORKS

- Duplication & overlap, extra cost
- Insufficient funding
- Limited effectiveness
- Insufficient scope: need more emphasis on mitigation, linkage between air pollution & climate change
- Should strengthen linkage to policy & implementation

# Past Efforts to Strengthen International Cooperation in Northeast and Southeast Asia

- Focused on strengthening each framework individually
  - Different countries had different priorities or reservations
  - Results limited: small changes, no significant expansion of scope, no focus on reduction measures
    - EANET: New Instrument
    - NEASPEC: New review study
    - LTP: Currently discussing new stage
- Possibility to merge some frameworks
  - Differences in geographic scope and focus
  - Administrative differences and complexity



- Emerging common view among countries on the importance of strengthening international cooperation
- But: different views on the best mode of cooperation

# Desirable Functions of an International Framework



FUNCTIONS	CURRENT SITUATION	PROSPECTS
Monitoring	<ul> <li>Covered in EANET, LTP</li> <li>Room to expand scope, number of stations, quality</li> </ul>	<ul> <li>Countries generally interested</li> <li>More capacity building needed</li> <li>Int'l cooperation helpful</li> </ul>
Modeling	<ul><li>MICS, LTP</li><li>Needs to be expanded</li></ul>	<ul> <li>N.E. Asia interested</li> <li>SE. Asia needs more capacity</li> <li>Cooperation framework is an issue.</li> </ul>
Assessment	<ul><li>EANET will do; ABC has done</li><li>More is needed</li></ul>	<ul><li>Japan &amp; Korea strongly favor</li><li>Difficult to object?</li></ul>
Research	<ul><li>EANET &amp; LTP limited; some under TEMM</li><li>More is needed</li></ul>	<ul> <li>Most willing, depends on funds</li> <li>Some differences on participants and which research in which framework</li> </ul>
Emissions reduction	<ul><li>Not covered by EANET, LTP</li><li>More action is needed</li></ul>	<ul> <li>Most difficult aspect</li> <li>China already making strong efforts</li> <li>Key issue for international framework</li> </ul>
Capacity building	<ul><li>Existing CB is important, but limited in scope</li><li>Wide range of CB needs</li></ul>	This may be a good key focus

# Desirable Scope of Pollutants: Options

Multipollutants-Multieffect Approach is Desirable

- Comprehensive, integrated approach
- Based on scientific modeling to maximize cost effectiveness

Key Point: EXPANDABILITY (easily add new pollutants in the future)

### SHOULD THESE BE INCLUDED?

Climate/SLCF (Air P. Cobenefit Appr.)

> DSS/Haze/ Yellow Sand

- Linkage would facilitate a cobenefit approach
- But already existing frameworks for climate (UNFCCC, CCAC)
- Natural & man-made air pollution usually considered separately
- Existing frameworks in N.E. & S.E. Asia
- Any benefits to combining?

Note

- PM seems to be of interest to all/most countries
- Ozone of increasing interest; China will be in the future

# Global/Hemispheric Level Options

### RATIONALE

- Many pollutants are now global or hemispheric: GHG, Ozone, Aerosols
- Desirability of linking & coordinating regional frameworks
- Global scope addresses trade competitiveness concerns of mitigation measures more comprehensively

	OPTIONS	COMMENTS
1	. Global Convention on Atmosphere (Vancouver Declaration 2010, IUAPPA)	<ul> <li>Would be comprehensive</li> <li>Difficult to agree, long time to negotiate</li> <li>Linkage/ division of responsibility w/climate</li> <li>Structure, focus? Modeled after LRTAP? Binding/Voluntary? Principles/Action?</li> </ul>
2	<ul><li>Global standards to link to regional/subregional conventions</li></ul>	<ul> <li>Easier to agree</li> <li>Could be weaker than a global convention</li> <li>Would build on existing mechanisms and promote cooperation among them</li> </ul>

# Regional/Subregional Level Options



### **RATIONALE**

- Regional linkage of air pollution is clearer, especially to local aspects
- Easier to reach agreement due to fewer countries

OPTIONS	ADVANTAGES/CHALLENGES/COMMENTS
1. More coordination among existing frameworks (e.g. strengthen Joint Forum	<ul> <li>Good in theory, difficult in practice</li> <li>Does not solve overlap &amp; duplication</li> <li>Information sharing could be main benefit</li> </ul>
2. Stronger efforts to strengthen existing frameworks	<ul> <li>Seems easiest, but limited past effectiveness</li> <li>Does not solve overlap &amp; duplication</li> <li>Hard to increase efficiency &amp; cost effectiveness</li> </ul>
3. Merge existing frameworks	<ul> <li>Better chance to reduce overlap &amp; duplication</li> <li>Challenges: differences in functions, geographic scope, administrative procedures</li> </ul>
4. Create new framework (Asian LRTAP?)	<ul> <li>More optimal scope (more ambitious)</li> <li>How to relate to existing frameworks</li> <li>Cost sharing? Secretariat?</li> </ul>

# Discussion of Geographic Scope



- Regional / subregional focus more realistic in short/medium term.
- Advantages & disadvantages of regional/subregional focus

#### Northeast Asia (subregional)

- Quicker focus on reduction measures is possible
- Which countries to include 3, 4, 5?

#### N.E. Asia + Southeast Asia (2 subregions)

- May need to emphasize capacity building
- Trans-subregional aspects (haze, ABC, ozone)

### Northeast + Southeast + South Asia (3 subregions)

- Trans-subregional aspects (haze, ABC, ozone)
- May need to emphasize capacity building
- More differences in priority pollutants, emissions sources

#### Fewer members:

- Easier to reach agreement, quicker actions
- Advantage for subregional but not regional scale

#### More members:

- More difficult to reach agreement, slower
- Better for larger scale problems
- Fewer frameworks may be more efficient
- ➤ Asian participation in global air pollution frameworks should be strengthened (e.g. GAPF, HTAP, etc.)

# Asian or East Asian LRTAP Option - Main Elements

Key Components	Sub-options	Suggestions
<ul> <li>Legal format (Framework/protocol?)         Legally binding or not? Voluntary (with reporting))</li> <li>Secretariat (UNEP, UNESCAP, RRC.AP?)</li> <li>Funding (Voluntary? Mandatory? UN Scale of Contributions?)</li> </ul>		<ul><li>Voluntary at start</li><li>Stepwise approach?</li></ul>
Geographic scope	<ul><li>Which subregions? NEA+SEA? S. Asia?</li></ul>	At least 2 subregions
Pollutant scope	<ul><li>Multipollutant &amp; flexible</li><li>Consider: climate, DSS, metals?</li></ul>	<ul> <li>May need network center</li> </ul>
Science panel	• Scope, organization, etc.	• Link to network center?
Monitoring	<ul><li>Scope, coordination?</li><li>EMEP structure?</li></ul>	• Suggest EMEP structure?
Modeling	<ul><li>Joint model? Network center?</li><li>Review existing ones (science panel)?</li></ul>	<ul> <li>Capacity building needed for some</li> </ul>
Capacity building	<ul><li>Scope?</li><li>Organization</li></ul>	<ul> <li>Very important for some countries</li> </ul>
Reduction strategies	<ul> <li>Compile existing measures</li> <li>First voluntary, with manatory reporting</li> <li>Later, legally binding if agreed</li> </ul>	<ul><li>Voluntary at start</li><li>Report &amp; compile existing ones</li></ul>

# Northeast Asia LRTAP Option

### Additional considerations regarding geographic scope

- Rationale: fewer countries to negotiate; transboundary problems more severe
- NEASPEC sub-option
  - Maybe better for including Russia
  - Mongolia emerging as major emitter
  - DSS (Yellow Sand) is a key issue, could be integrated.
  - Use environment as vanguard of détente (same as LRTAP/cold war)
  - North Korean air pollution could get quickly and significantly worse if détente occurs unexpectedly and the economy develops rapidly. Easier for NK to join before more economic development occurs.
- ☐TEMM sub-option
  - Institutionalization is relatively advanced, easy to use (convenient for environment ministries)
  - May be difficult to include other countries as necessary



# Option to Merge Existing Frameworks: EANET & LTP

## ☐ Main benefits

- Reduce burden of maintaining and participating in 2 separate networks
- Already proposed by Korea (politically feasible?)

# Merging Procedure

- Needs decision by all members of EANET & LTP (not just Japan & Korea)
- Korea & Japan could make joint proposal

# Political analysis

- Key issue is geographic scope. Without LTP, there is no major Northeast Asia framework with a broad focus on air pollution.
- Key issue is not the substance/details. Countries can simply decide to combine/reorganize monitoring, modeling. Existing overlap & duplication
- Name change is required. Both LTP and EANET parts must be visible.
- Key point is Japan recognizes Korea as a partner (e.g. name change, joint proposal to other networks)
- Ok to encourage Korea to refine its proposal, but Korea already took the first step.

## Recent Trends in International Discussions

### **Existing Frameworks**

#### **NEASPEC**

 Completed review of existing frameworks (Russian study)

### LTP

• Discussing new phase

#### **EANET**

- Will conduct assessment
- Will expand monitoring scope

## Selected Countries' Perspectives

#### RUSSIA

- Initiated NEASPEC study
- Russian proposal suggests exploring NE Asia LRTAP-style

#### **KOREA**

- Official focus on new LTP phase
- LTP has funding and management issues
- Discouraged by limited results of international cooperation
- Position on international cooperation is in internal discussion

#### **CHINA**

- · Not making new proposals, but not objecting either
- CRAES supports more research, publishing
- Published research is easier than official reports which need government approval
- Strengthening cooperation w/Southeast Asia & ASEAN

# Way Forward: Decision Process

- 1. What are the priority air pollution problems?
  - ☐ To what extent do countries agree?





- 3. If so, what kind of cooperation is best?
  - Bilateral?
  - ☐ Informal/bottom up/ NGOs?
  - Multilateral intergovernmental framework/organization?
- 4. If an international framework is desirable, then:
  - ☐Geographic scope?
  - ☐ Functions?
  - Legal status?
  - Secretariat?
  - Organizational structure
  - ☐ Financing?





