

## Overall Conclusions

RISPO-II Final Workshop

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Research on Innovative and Strategic Policy Options Second Phase (RISPO-II)



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## Overview of Economic Integration and Environment

- Economic integration in Asia has already achieved a certain level, although it is not nearly as extensive as in the EU.
  - The current level of economic integration in Asia is already resulting in
    1. significant negative environmental impacts
    2. difficulties in the implementation of environmental policies.
    3. opportunities to enhance environmental protection and policies.
  - Increased future economic integration in Asia is likely to intensify these effects
- Therefore, policy intervention to address the problems and take advantage of the opportunities of current and future economic integration is highly desirable.

## Potential Effects of Economic Integration on the Environment

- Environment is affected by many factors, not just economic integration.
- This study assesses the marginal effects of additional potential integration (not including past integration).
- Effect of past integration was probably large
  - if we believe increased trade/openness (early stage of economic integration) was a key factor in rapid economic growth of many Asian countries.
- Both modelling analysis and case studies agree that future potential integration will continue to have significant environmental effects.

## Potential Environmental Effects of Further Economic Integration

### Further integration will likely magnify both negative and positive effects

- A. Examples of negative effects (confirmed by both quantitative & qualitative analysis)
- Waste/recycling: illegal waste trade/dumping will become even more widespread, especially for waste that is difficult to treat in some Asian countries, such as home appliances and mobile phones, etc.
  - Agriculture: lower trade barriers will greatly increase large scale export-oriented agriculture and resulting land degradation & water pollution
  - Energy: More EI=> higher economic growth => increased energy use => increased GHG emissions, especially in developing countries which are not very energy efficient
- B. Examples of positive effects
- Waste/recycling: can increase trade in recyclables, promote international recycling networks, which in turn can enhance economic efficiency of recycling
  - Agriculture: Reduced trade barriers can result in a much larger scale market for organic agriculture, which is a clean production method, lowering costs and enhancing its economic potential
  - Renewable energy: increased energy use => increased energy prices => increased economic feasibility of high cost renewable energy; facilitates trade in RE equipment, facilitates technology transfer

## Implications of Economic Integration for Policymaking

- It is difficult for countries (developed or developing) to address environmental issues from EI on their own
- EI sometimes undermines national efforts
  - Waste: Japan's national recycling policy, Basel
  - RE: prisoners dilemma makes high target difficult
- EI potential to help national efforts:
  - Trade liberalization helps organic agriculture
- National capacity is still necessary to address issues
- Cooperation
  - Helps develop national capacity
  - Helps taking advantage of positive opportunities presented by EI
    - (e.g. trade in environmental goods & services, easier technology transfer, etc.)

## Synthesis of Case Study Policy Recommendations

➤ Overall, policy recommendations have a 2 tier structure:

	National Capacity Building	Regional Coordination
Energy	<ul style="list-style-type: none"> <li>• Increased targets</li> <li>• Regulatory framework</li> <li>• Supply &amp; demand side support policies</li> </ul>	<ul style="list-style-type: none"> <li>• Coordinated increases in RE targets,</li> <li>• Grid interconnection</li> <li>• Technology transfer</li> <li>• Financial assistance</li> </ul>
Agriculture	<ul style="list-style-type: none"> <li>• Stronger regulation of pesticides, IPM</li> <li>• Contract farming</li> <li>• Green procurement</li> <li>• Coordination with livestock industry</li> </ul>	<ul style="list-style-type: none"> <li>• Harmonized ecolabeling</li> <li>• Stronger coordination on pesticides</li> <li>• Further reduce organic trade barriers, environmental goods &amp; services</li> <li>• Reduce technical barriers to trade</li> </ul>
Waste/ Recycling	<ul style="list-style-type: none"> <li>• Ecotown type recycling industrial park</li> <li>• Enhanced regulatory framework</li> <li>• Data collection</li> </ul>	<ul style="list-style-type: none"> <li>• International recycling zones linking eco industrial parks</li> <li>• Regionally coordinated EPR</li> <li>• Information sharing</li> <li>• Regional certification of recyclers</li> </ul>

## Policies from Modelling Analysis

- Stricter environmental regulations and subsidies for firms' abatement activities on specific pollutants
- Economy wide measures like carbon tax
- International financial cooperation for improving political feasibility of regional policy cooperation
- ❖ In some cases could be combined with case studies (e.g. carbon tax is related to the energy sector)
- ❖ Economy wide policies must be supported by other types of policies, such as institutional reorganization, capacity building, or legislative/regulatory framework

## General Comments on Policy Recommendations

- ❑ Main research question was, “what are the environmental policies that will promote synergies between economic development, environmental protection, and poverty reduction in the context of economic integration in East Asia?”
- ❑ Often, policies to address environmental effects of EI are not necessarily different than other environmental policies.
- After all, environmental problems have many other causes besides EI, and they will need to be addressed regardless of whether or not there will be more EI.
- But analyzing environmental effects in the context of EI, shows that EI has important implications, e.g. how EI undermines national policies, or requires international policy cooperation in some cases.
- ❖ It was not feasible for this study to create a comprehensive environmental policy for each country. Instead, we focused on:
  - Policies relating to case studies
  - Policies that could be modeled with quantitative analysis
- ❖ But future research could explore other types of policies (e.g. air pollution regulations) using this combination of modeling and case study analysis in a more focused way.

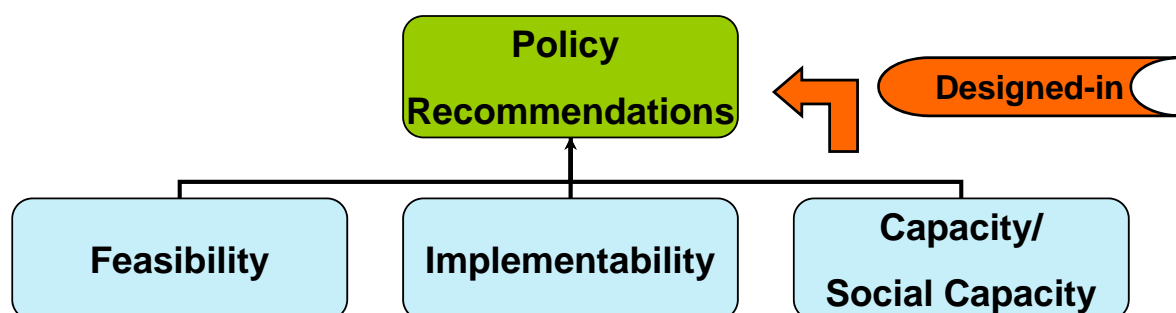
## Policy Recommendations and EI Scenarios

- ❖ Generally, for case studies, we concluded it was not appropriate to have separate policies for different EI scenarios (SEI, MEI, DEI), contrary to our initial expectations, with a few exceptions (e.g. OLIA: for SEI, additional trade liberalization is recommended.)
- ❖ This is because generally, EI affected the magnitude, but not the essential nature of the environmental problems
- ❖ Also in cases where EI is expected to affect the operation of policies, the extent of EI affects the magnitude of effect on policies, but not the essential nature of this effect.
  - E.g. in RE, more EI worsens the prisoners dilemma, but doesn't fundamentally change it.
- ❖ Different sectors may merit higher priority under different scenarios (modelling)
  - For example, EI may affect electricity more than steel
  - But with specific sectors, the overall recommended policy direction does not generally change under different scenarios.
- However, EI scenarios do influence the effects of economy wide policies and sector based taxes/charges/subsidies in the modelling analysis.

## Synthesis of Policy Assessment: Costs & Benefits

- Case studies used a broad “strategic” or policy cost benefit analysis.
  - Rough estimate of cost of policies
  - Rough estimate of benefits of policies (not necessarily monetized)
  - Range of costs & benefits:
    - modest policies => modest benefits => modest costs
    - ambitious policies => higher benefits => higher costs
- Overall: significant environmental benefits can be achieved with modest costs.
- Many costs are
  - Administrative, budget increases not large
  - Involve internalization of environmental costs (e.g. producers or consumers pay)
  - Can be paid for with subsidy switching
- Detailed multicriteria analysis or complex formal cost benefit analysis was not appropriate or feasible
  - (e.g. data not available)
  - We focused on policies, not projects or specific land areas
- At this stage, policymakers need to know the big picture; detailed analysis is premature. First step is to persuade policymakers to increase priority to environmental considerations in these sectors.

## Synthesis of Policy Assessment: Feasibility & Implementability



- Feasibility, implementability, capacity/social capacity were designed into policy recommendations.
- Key common elements:
  1. Cost: modest or reasonable, commensurate with benefits
  2. Synergies between economy and environment; emphasize economic opportunities from environmental policies
  3. Try to ensure that policies do not significantly disadvantage major stakeholders (strive for win-win policies)

## Implementability of Modelling/Economy-wide Policies—General points

- These policies are basically taxes, charges, or subsidies.
- Thus, “capacity” in technical sense is not an issue.
- Real question is political acceptability.
- This can be analyzed by political science methods, but not necessarily at the sector case study level
  - Implementability of the carbon tax cannot be assessed by looking at 3 sector cases.
  - (e.g. case study is not equivalent to political science)
- So how to assess implementability? =>

## How to Assess Implementability of Modelling/Economy-wide Policies

- Key problem is distribution of costs and benefits among sectors.
- Political opposition from businesses is often a key obstacle for environmental policies.
- Distribution of costs and benefits can be estimated by the modelling analysis
  - (changes in sectors’ production and trade)
- After “winners and losers” are determined, political science analysis can assess political feasibility.
- Limitation: companies/industries may calculate their gains & losses differently from GTAP; may not agree with our results.
- This is a topic for future research.

## Overall Summary of Economic Integration and Environment

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- EI leads to increased environmental impacts through scale effects (economic growth) and structural effects (shifts in industrial structure).
- EI undermines effectiveness of national policies in some aspects.
- But EI also provides opportunities to reduce negative environmental impacts.
- Policy responses:
  - Regional coordination and national capacity building
  - Comprehensive policy packages, not just ad hoc measures

## Value-added of looking at environmental policy in the context of EI

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- Many environmental problems are affected by EI, so analysis of EI can highlight priority areas.
  - These can be addressed at the time of EI-related negotiations, if EIA is conducted.
  - Therefore, environmental policymaking should consider EI.
  - This is true of many other policy areas, not just environment (e.g. financial regulation, antitrust, consumer safety, etc.)
- EI also affects the operation of some kinds of environment-related policies (e.g. RE, recycling, carbon tax).
  - Especially effects on competitiveness of industries
  - Therefore, EI should be considered when making policies in these areas.

## Comparison of RISPO-II with other methods for analyzing environmental effects of trade agreements

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- RISPO-II assessed a hypothetical integration scenario based on across the board liberalization.
- Analyses of specific trade agreements have specific lists of products to focus on, as well as non-trade policies that are sometimes included in these agreements.
  - Therefore case study candidates are clearer
  - Scenarios can be more clearly applied to case studies
  - Modelling and case study analyses can be more closely linked

## Environment and Globalization

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- The RISPO-II study fits into the larger question of the extent to which globalization undermines national level policies in general (one of the key issues of international political economy).
- Most attention was focused on policies other than environment (financial regulation, monetary, social welfare, labor policies, etc.).
- Environment was also a focus (whether globalization undermines environmental regulation)
- Regional economic integration is basically globalization on a regional scale.
- RISPO-II results are consistent with the argument that globalization (EI) affects the operation of national policies (e.g. Waste, RE)

## Overall Policy Implications for National Environment Ministries/authorities

- The environment is affected by a wide range of economic sectors and policy areas
  - Not just trade policy, but other policy areas too, like agriculture or energy, and others
  - Not just agriculture, energy, or electronics, but also others
- Likewise, non-environmental policies generally have environmental effects.



➤ Environmental policy should be systematically integrated into other areas of policymaking.



➤ **Therefore, environment ministries should be interested in and participate in a much wider range of policy areas than now, (for example, energy, agriculture, industry policies).**

## Importance of Upgrading Capabilities of Environment Ministries

- In order to participate more effectively in a wider range of policy discussions, environment ministries should upgrade their own capacities.
  - Especially a modest increase in number of staff and increased staff training.
    - Across the board “small government” policies to reduce staff are counterproductive; some areas (like environment) need more staff.
  - This will need some modest budget increase to support increased staff and training, but need not be large.
    - Could be funded by environment taxes or pollution charges
  - And/or more external support from policy research institutes
  - This study can help identify some priority areas

## General Policy Implications

- Importance of environmental impact analysis of policies to aid decision-making
    - Should use both quantitative and qualitative, modelling and case studies.
  - Mainstreaming environmental considerations into cost-benefit analyses of other policy areas, such as energy.
    - Environmental costs and benefits should be quantified and monetized where possible.
- Integrate environmental policy into other policy areas.

## Relevance to Actual Policymaking Processes

### **CURRENT & COMPLETED (WASTE SECTOR)**

- **G8 Environment Ministers Meeting**
  - 3R Initiative (waste case study)
  - New energy and global warming (renewable energy case study)
- **OECD/UNEP Conference on Resource Efficiency April 2008**
- **ADB/IGES Asia 3R Report March 2008**

### **FUTURE**

- **Tripartite Environmental Ministers Meeting (TEMM)**
  - Input to the Trade and Environment Working Group
- **ASEAN + 3 countries negotiations**
  - Ongoing multilateral and bilateral trade negotiations (including Free Trade Areas / Economic Partnership Agreements)
  - Input to negotiations for harmonization of regional environmental standards in ASEAN + 3
  - NEAT (Network of East Asian Thinktanks)
- **3R National Strategy Making (waste sector)**
- **FAO and IFOAM (agriculture sector)**
  - Input to on-going discussions on harmonization of organic products standards