Strategic approaches for Linking Emission Trading Systems in Asia and the Pacific

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October 15, 2014
Bangkok
Outline

1. Background
2. Requirements for establishing bilateral/multilateral linking
3. Prospect of linking emission trading systems in Asia and the Pacific
4. The way forward for linking ETSs in Asia and the Pacific
1. Background

- Evolvement of global carbon market
- Emission trading systems are emerging in Asia and Pacific
- International climate negotiation context
Evolvement of the global carbon market

- Over supply
- Continuing low carbon price
- Emerging national and sub-national emission trading schemes
- Diversified system design in aligning with national circumstance with mechanism of adjustment and policy intervention
- National and regional trading schemes starting to link up
Evolvement of global carbon market

There are about 15 key regional, national and sub-national ETSs around the world

**Alberta ETS**
Operation: 2009
Cap (2010): 116Mt
Emissions covered by ETS: 50%

**RGGI**
Operation: 2009
Cap: 188Mst
Emissions covered by ETS: 25%

**WCI**
Operation: 2013
Cap: California & Quebec 187Mt, in which CA 163Mt
Emissions covered by ETS: 85% (by 2015)

**EU ETS**
Operation: 2005
Cap: 1888Mt
Emissions covered by ETS: 41%
Market value: €54b

**Kazakhstan ETS**
Operation: August 2013
Cap: 147 Mt
Emissions covered by ETS: 55%

**South Korea ETS**
Operation: Scheduled 2015
Cap: (2020): 320-328Mt
Emissions covered by ETS 60%

**Tokyo ETS**
Operation: 2010
Cap (2010): 13Mt
Emissions covered by ETS: 20%

**China 7 pilot ETSs**
Operation: 2013
Cap (2013): 1200Mt
Emissions covered by ETS: 20%

**New Zealand ETS**
Operation: 2008
Cap (2008): 35Mt
Emissions covered by ETS: 50%
Market (2012): €30m
Emission trading systems are emerging in Asia and Pacific

- New Zealand ETS: operation in 2008
- Kazakhstan ETS: operation in August 2013
- South Korea ETS: Scheduled to operate in 2015
- Five countries are implementing participants of Partnerships for Market Readiness (PMR) supported by WB:
  - China: 7 pilot ETSs operated since 2013, national-wide ETS starting to operate after 2015
  - Vietnam, Thailand, Indonesia and India are working on their carbon pricing proposals
International climate negotiation context

A global climate agreement with legal bidding force to be adopted in 2015 and come into force after 2020 will establish:

- A legal foundation of future global carbon market

- Comparable national emission reduction efforts/ targets beyond 2020 *constitute the most important foundation on stringency of cap for bottom-up linking ETSs across countries*
2. Requirements for bilateral/multilateral linking

- Framework and objective of ETS design
- Requirement for linking
### Framework and objectives of ETS design

**Basic framework of ETS and necessary conditions for establishment and operation of ETS**

- **Basic Framework of ETS and Necessary external condition for operation of ETS**

#### Basic Framework

<table>
<thead>
<tr>
<th>Basic Framework</th>
<th>Institutional Set-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cap</td>
<td>Registry/Tracking</td>
</tr>
<tr>
<td>Coverage</td>
<td>Trading Platform</td>
</tr>
<tr>
<td>Allocation</td>
<td>Financial institution</td>
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<tr>
<td>MRV</td>
<td>Market Oversight</td>
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</tbody>
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**Supporting policies and Measures for Control and Adjustment of ETS’s operation**

- **Supporting measures for control of price**: price cap & floor, allowances, Reserve etc
- **Measures for reducing impact of carbon price**

**Flexible Measures**: Banking, Borrowing, Offset, Linking

**Legal foundation on ETS**

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### Objectives of ETS Design

- Cost Effectiveness
- Environment integrity
- Flexibility
- Efficiency
## Requirements for bilateral/multilateral linking

### Requirements for Linking

<table>
<thead>
<tr>
<th>Common Design Features</th>
<th>Essential</th>
<th>Desirable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Cap: Absolute or Relative</td>
<td></td>
<td>Emissions Scope / Sectoral Coverage</td>
</tr>
<tr>
<td>Stringency of Cap</td>
<td></td>
<td>Regulation Point (Upstream/Downstream)</td>
</tr>
<tr>
<td>MRV Standards and Process</td>
<td></td>
<td>Measurement Unit</td>
</tr>
<tr>
<td>Enforcement</td>
<td></td>
<td>Allocation Methodology</td>
</tr>
<tr>
<td>Offset Eligibility</td>
<td></td>
<td>Compliance Period</td>
</tr>
<tr>
<td>Borrowing</td>
<td></td>
<td>Banking</td>
</tr>
<tr>
<td>Price Caps</td>
<td></td>
<td>Registry</td>
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</tbody>
</table>

### Political and Legal Framework

- Political Willingness
- Legal Framework
- Linking Provision in the ETS Regulation
- Linking Agreement: Bilateral or Multilateral
Prospect

- **Benefits of linking**
  - Maximizing economic efficiency of ETSs
  - Minimizing market risk
  - Catalyzing the creation of global carbon market
  - Building a market-based model for regional cooperation on addressing climate change
- Comparable mitigation target beyond 2020
- Close trading relationships
- Positive governments’ attitudes to linking
3. Prospect of linking ETSs in Asia and the Pacific

- Prospect
- Challenges
Challenge

- Different design features between systems
  - Adopt different types of caps
  - Different Stringency of cap
  - Different compliance framework
  - Different eligibility of offset credits
  - Different cost containment measures

- Different governments’ expectation on linking

- Different capacity for implementation of system
4. The way forward

- Strategic approaches to harmonisation and linking of Systems
- Progressive Development and Linkage of Emissions Trading Systems
- Case study: Linking China pilot ETSs
Strategic approaches to harmonisation and linking of Systems

- Linking needs to be developed in a stepwise process

**Step 1: Research & Design**
- Absolute or Hybrid Caps
- Periodic Review and Adjustment of Cap
- International Standards in MRV
- Flexible Pricing Measures
- Strict Compliance and Enforcement
- Progressive Offset Provisions
- Robust Legal Framework

**Step 2: Analysis & Evaluation**
- Assess the Benefits of Linking
- Identify Potential Linking Partners
- Compare Design Features

**Step 3: Implementation**
- Negotiate and Harmonize ETS Linking and Design
- Prepare Linking Agreement
- Revise Domestic ETS & Related Regulations
Strategic approaches to harmonisation and linking of Systems

- **Step 1: Research & Design - Build a Foundation for Linking Early in the Design Process**
  - Set stringent cap: Absolute cap or hybrid cap and Periodic Review and Adjustment of Cap
  - International Standards in MRV
  - Progressive Offset Mechanisms
  - Flexible and Progressive Cost Containment Measures
  - Strict Compliance and Enforcement Provisions
  - Robust legal framework

- **Step 2: Analysis and Evaluation - Assessing the Linking Opportunity**
  - Assess the Benefits of Linking
  - Identify potential linking partners
  - Compare Design Features

- **Step 3: Implementation – Establishing a Linking Framework**
  - Negotiate and Harmonize ETS Linking and Design
  - Prepare Linking Agreement
  - Revise Domestic ETS and Related Regulations
Progressive Development and Linkage of Emissions Trading Systems

- Step 1. Starting with establishing linkage between domestic pilot ETSs/ between domestic existing carbon trading related instruments
- Step 2: Building linkage between pilot ETSs and national wide ETS
- Step 3: Establishing inter-linked ETSs across countries in the region
- Step 4: Integrating regional linked systems into global market
Case Study: Linking China Pilot ETSs

- **Prerequisites:**
  1. **Building Political willingness**
     - Central government has willingness for establishing the national ETS through linking existing pilots
     - Central government permits the transaction of allowances and carbon credits for meeting respective carbon intensity targets

  2. **Developing necessary legal framework**
     - Including Provision of linking pilot ETSs in national ETS legislation
     - National ETS legislation to permit the allowance issued by each pilot system to be traded and used in any pilot systems for compliances

  3. **Addressing the key different design features between pilot ETSs**
     - Central government to develop a set of common rules and regulations for system design and operation including the elements of coverage, cap-setting, allocation, MRV, compliance and enforcement, flexible measures, registries, trading platforms
     - Making necessary adjustments to key design features of the pilot systems according to common rules
Case Study: Linking China Pilot ETSs

- Linking process

Step 1: Analysis and Evaluation stage
- Analyze impact of linking
- Identify linking options
- Compare design feature of pilots

Step 2: Implementation stage
- Develop common rules
- Write common rules in ETS legislation
- Revise design of pilots
Conclusion

- Linking offers many potential benefits
- Linking requires harmonization of key design features between systems
- Linking ETSs across countries in Asia and the Pacific is feasible but challenges
- Building ETSs linkage across countries is not straightforward and needs to be developed in stepwise process
- Linking ETSs across countries is a long-term objective and needs taking early consideration in research and design stage
Thank you!

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