Linking of ETS systems: Policy issues and recent experiences

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Agenda

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- Rationale and policy issues relevant for linking
- Policy issues arising from the consideration of a EU ETS / Australian ETS link
- Example of the UK ETS getting an exemption from the EU ETS
- Communication and institutional structures needed for linking
Introduction

Ricardo - AEA is one of the world’s leading energy and climate change consultancies, with over 220 climate change and sustainability experts, providing analysis and solutions for major environmental challenges worldwide.

We have worked at the heart of ground breaking technical and policy developments across the environmental spectrum for the last 40 years, and continue to play a lead role as advisor to governments, international institutions and major corporations.

- Heritage
  - 1950’s - Air quality and clean air policy
  - 1970’s - Energy efficiency and consequences of oil crisis
  - 1980’s - Climate change and sustainability
  - Present day - Resource efficiency and resource productivity

- Domain expertise
  Climate change, energy, water management, resource productivity and security, air quality, waste and recycling, chemical risk and sustainable transport

- Services
  Strategic consultancy, economic modelling, project leadership and data management
Ricardo-AEA Worldwide

Global Projects
- Climate & Environment “Evidence on Demand” framework (UK DFID)
- Climate Negotiator Training for LDCs (UK CDKN)
- Nanotechnology in Tyres (OECD)

- Deploying Electric Vehicles (DoT)
- Brazil Energy Planning Models (FCO)
- Chile Carbon Market Design (WB)
- EMEA Climate Council (Citibank)
- Turkey MRV (World Bank)
- Ethiopia Climate Smart Initiative (WB)
- Kenya National MRV+ Framework (DANIDA)
- South Africa (GIZ)
  - GHG Projections
  - Climate M&E
- Riyadh Air Quality Management
- India
  - Lessons from UK & EU (DFID)
  - Urban Transport Modelling (GEF)
- CLIMA East Mitigation & Adaptation (EuropeAid)
- China Linking of ETS Pilots (FCO)
- Japan City Transport Model (FCO)
- Thailand & Indonesia GHG Reporting (GIZ)
- Vietnam GHG Inventory training
- Turkey MRV (World Bank)
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  - Lessons from UK & EU (DFID)
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- Thailand & Indonesia GHG Reporting (GIZ)
- Vietnam GHG Inventory training
- Waste to Energy Review (Zero Waste South Australia)
Rationale for linking

- Common political effort
- Lower administrative costs?
- Economic benefits:
  - Efficient emissions reductions
  - Competitiveness / alleviating carbon leakage risks
  - Market liquidity

Source: Zetterberg, 2012
### Policy issues relevant for linking

#### Linking considerations (ICAP, September 2014)

- MRV
- Caps and targets
- Allocation
- Compliance dates and trading periods
- Price support measures
- Registries and compliance
- Offsets
- Market oversight

### Potential barrier

<table>
<thead>
<tr>
<th>Harmonisation may facilitate operation</th>
<th>Not necessarily a barrier</th>
</tr>
</thead>
<tbody>
<tr>
<td>• MRV</td>
<td>• Sectoral / GHG coverage</td>
</tr>
<tr>
<td>• Registry design</td>
<td>• Point of regulation</td>
</tr>
<tr>
<td>• Compliance periods</td>
<td>(direct vs. indirect)</td>
</tr>
<tr>
<td>• Banking provisions</td>
<td>• Opt-in / opt-out</td>
</tr>
<tr>
<td>• Enforcement / penalties</td>
<td>provisions</td>
</tr>
<tr>
<td>• Cap level / stringency</td>
<td></td>
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<tr>
<td>• Borrowing</td>
<td></td>
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<tr>
<td>• Offset rules</td>
<td></td>
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<td>• Price ceilings / floors</td>
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Policy issues arising from the consideration of a EU ETS / Australian ETS link
Policy issues arising from the consideration of a EU ETS / Australian ETS link

Background to the Australian Carbon Pricing Mechanism (CPM)

- Now abolished due to the repeal of the Australian Clean Energy Act 2011

- Entities were liable (‘liable entities’) if they operated facilities that exceeded the emissions or gas consumption thresholds (includes power stations, heavy industry, wastewater, mines and landfills)

- **Fixed** Price Period commenced on 1st July 2012

- **Flexible** Price Period was due to commence 1st July 2015
Policy issues arising from the consideration of a EU ETS / Australian ETS link

Brief comparison of the two systems:

<table>
<thead>
<tr>
<th>Scheme</th>
<th>Australian CPM</th>
<th>EU ETS (Phase 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coverage</td>
<td>Power stations, heavy industry, wastewater, mines, landfills</td>
<td>Power stations, heavy industry, commercial aviation, large combustion facilities</td>
</tr>
<tr>
<td>GHGs</td>
<td>Carbon dioxide, methane, nitrous oxide, perfluorocarbons from aluminium production</td>
<td>Carbon dioxide, nitrous oxide (from specific sources) and perfluorocarbons from aluminium production</td>
</tr>
<tr>
<td>International units</td>
<td>CERs, ERUs, RMUs – up to 50% of a company’s obligation</td>
<td>Only CERs from Least Developed Countries are allowed</td>
</tr>
<tr>
<td>Domestic offsets</td>
<td>Domestic offsets allowed (Carbon Farming Initiative units)</td>
<td>Domestic offsets (and land-based credits) not allowed</td>
</tr>
<tr>
<td>MRV</td>
<td>Based on Australian National Greenhouse and Energy Reporting Scheme regime</td>
<td>EU ETS MRR and AVR regulations</td>
</tr>
</tbody>
</table>
Partial linkage (proposed from 1st July 2015)

- **One-way linkage** - Australian liable entities would have been able to purchase EUAs and use them to meet up to 50% of their obligations under the CPM until 2020

- Proposed amendments to the CPM to align with EU ETS settings:
  - The proposed carbon **price floor** of A$15 per eligible emissions unit will **not be implemented** (this also means removing the (unpopular with business) surcharge for surrendering international units)
  - The use of **Kyoto units (offsets)** restricted to only 12.5% (within an overall limit of 50% for eligible international units)
  - The proposed **price ceiling** will instead be set against the expected price of EUAs

The ICAP report “Linking Discussion Input Paper” (2014) highlighted price floors/ceilings and offset provisions as **potential barriers** to linking
Negotiation of a full bilateral treaty was underway to enable European liable entities to use ACUs for compliance purposes under the EUETS and vice versa:

- **MRV requirements** - The EU will have wanted to be satisfied that the CPM had adequate and comparable systems to ensure equivalence and environmental integrity of units traded

- **Comparable market oversight arrangements** – Prevention of similar (past) EU ETS fraud scandals

- **The types and quantities of third party units that can be accepted into either system** – both Kyoto units and any additional ETSs that either scheme may link with
UK ETS exemption from the EU ETS
Background to the UK ETS

- **Voluntary** scheme with £215M incentive to encourage participation:
  - participants received a portion of the £215M for every tCO2e reduced, equated to £17.7/tCO2 (total incentive/total scheme emissions reductions)

- Industrial sector companies excluding power generation invited, 31 took part:
  - assessed ‘2000’ baseline
  - participated in descending clock auction to purchase carbon credits

- 13% emissions reduction, on average, between 2000-2006
“Overlap” rather than linking
~ exemption required equivalence

The UK lobbied the European Commission for temporary exclusion of common installations, if schemes were “equivalent”.

→ **Useful insights for ETS linking** because the UK ETS had to demonstrate equivalence with the EU ETS in three areas:
  → ambition
  → penalties
  → MRV

<table>
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<tr>
<th>Scheme</th>
<th>UK ETS</th>
<th>Phase 1 EU ETS (pilot phase)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants</td>
<td>For companies (voluntary)</td>
<td>For installations (mandatory)</td>
</tr>
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Two year overlap

63 common installations
Equivalence issues: implications for linking (1 / 4)

• **Ambition:**
  - Method – setting the level of ambition amongst scheme participants
  - Targets – company vs. installation level
  - Baseline – 2000 (3 year average) vs. 2000

• **Penalties**
  - ‘Make-good’ provision
  - Level of penalties

• **MRV**
  - Reporting – Additional UK ETS rules around company boundaries
  - Emission sources – imported vs. generated electricity, heat and steam and inclusion in the scheme
  - Monitoring equipment – differences in use of CEMS
  - Calculation – EU ETS use of an OxF
Equivalence issues: implications for linking (2 / 4)

Ambition

Making the UK ETS equivalent:

- **UK targets were ‘converted’ into EU targets**, and then UK company-level targets tightened to show equivalence at an installation-level (target was raised if lower than NAP allocation and kept if higher to comply with UK ETS)

Implications for linking:

- Experience from the UK has shown that equivalence at installation-level was sufficiently important that installation **targets** in UK ETS were adjusted down in some cases to justify temporary exclusion from the EU ETS.

- To adequately compare equivalence of ambition, data must be available for equivalent **baseline periods** and ambition must be robustly understood.

- The more divergence in **baselines and their trajectories** towards the end target, the more challenging the comparison of ambition.
Penalties

Making the UK ETS equivalent:

- The UK adopted penalties comparable with EU ETS but also retained its own penalties that were more severe (the multiplier on the ‘make-good’ provision).

Implications for linking:

- Evidence from the interaction between the UK ETS and the EU ETS shows that there was a focus on ensuring that penalties were similar for emissions that were unaccounted for by allocated or traded units.
  - However, it was not required that the penalties be identical; also differences in currency were tolerated as UK ETS penalties were more severe than EU ETS.
  - Hence, this suggests that penalties should be comparable, but may need not be exactly the same.
Equivalence issues: implications for linking (4 / 4)

MRV

Making the UK ETS equivalent:

- Similarities in the principles and methods of M&R and in the process for verification of emissions - the differences were not substantial.

- Rather than attempting to demonstrate equivalence on MRV, the UK agreed that any UK ETS companies wanting to opt-out of the EU ETS would have to adopt the EU ETS MRV rules.

Implications for linking:

- Out of all the linking issues, it was only MRV for which complete harmonisation was required – which suggests that standardised MRV methodologies may be a requirement for linked systems.

  🔄 UK experience suggests MRV is more of a potential barrier to linking than suggested by ICAP. Effect of EC’s firm stance on equivalence with EU ETS?

- Standardisation of the basic method of reporting, including methodology, is important to support comparable verification between linked systems.
Communication and institutional structures needed for linking
Factors that will influence the type of institutional and governance structure needed to facilitate effective linking:

1. The **level of market integration** being sought
2. The **types of functionalities** that need to be met by the institutional mechanisms

### Fully integrated

**Phase III EU ETS**
- Multilateral benchmarking
- Allocation occurring across MS (EU 28 + 3 EEA-EFTA states)
- Common registry (EU Registry) / EU Transaction Log

### Closely integrated

**Phase II EU ETS**
- Allocation at a MS/country level (NAPs)...EC approval
- National registries
- Other shared design aspects (MRV...the ‘MRG’)
Possible levels of institutional integration under linked ETS systems

- **Merged**
  - Unlikely??

- **Common standards / procedures**
  - Accreditation bodies / MRV standards bodies – Following common standards, cooperation

- **Cooperation / Knowledge sharing**
  - Market oversight bodies – Information sharing

- **Fully separate**
  - Enforcement arrangements/bodies – Existing environmental sanctions in place, reluctance to relinquish powers
Communications and functionalities of linked ETS systems

Focal point for communication

Areas where dialogue between ET systems’ institutions would be required would include:

- Policy setting
- Target setting
- Trading platform and the mechanisms of the registry
- Price stability between the systems
- Penalties
- Proposed policy changes: affect either system
- Negotiating amendments to the policy
- Technical or accounting aspects of the linkage
- Market intervention measures (withholding / releasing allowances)
- Linkages with additional third parties
- Suspension or termination of the linkage
Thank you for your attention

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