

Ricardo Energy & Environment



- Internationally-renowned consultancy
- Heritage of world-leading scientific/technical capability
- Providing analysis and solutions for major environmental challenges
- Client base of international governments and businesses
- Headquartered in UK
- Over 400 scientists and technical staff
- Part of Ricardo PLC



Where we are





Some project examples



- China white certificates, carbon trading and renewable trading (World Bank)
- China carbon markets, design and linkage options (UK Government/Foreign Office)
- Vietnam Cement NAMA (Nordic Partnership initiative)
- Jordan Market Readiness Proposal (PMR)
- Mechanisms for linking carbon market systems (European Commission)
- CDM evaluation and reform options (European Commission)
- Evaluation of EU ETS Phase 3 benchmarks (European Commission)
- EU ETS MRV Compliance Forum 2014 (European Commission)
- INDC support (15 countries including Bangladesh, Brunei, Cambodia, Laos, Myanmar)



Agenda



- Benefits of linking and carbon market integration in Asia and Pacific
- Priorities for alignment and harmonisation for linked systems
- Degrees of linkage
- Institutional coordination
- Key areas for dialogue

Benefits of linking to facilitate carbon market integration in Asia and Pacific



- Evolutionary approach building on wide range of carbon market development in region
- Least cost abatement take advantage of cheaper abatement in less developed areas
- Concerted political action strong regional response
- Vehicle for harmonization / address differential policy impacts trade and competition
- Encourage financial flows / investment financial flows to less developed areas
- Knowledge sharing and improved standards
- Some caveats though:
 - Net costs between regions / government revenues
 - Price volatility
 - Regulated market uncertainty
 - Uncertainty over domestic action
 - Industry and power sector developments
 - Secondary benefits



Context – timescales for linkage



- Carbon market development strong in Asia region
- Carbon market development phases, pilots and operational phases all vary
- Some examples (selected systems only)

System/Country	2015	2016	2017	2018	2019	2020	2021 onwards
Vietnam				Pilot Cap		ap and trade	
Thailand - EPC		Demonstration		ull pilot starts 2019			
China - National		Phase to full National Full National			ull National		
Republic of Korea - KETS		1st phase		2nd Phase			5 Year Phases

- Opportunities for linkage will evolve
- Phased roadmap would be required
- Need for systems to have demonstrated effective operation to be linked

Degrees of harmonisation?



Linking considerations (ICAP, Jan 15/Sept 14)

Potential barrier	Harmonisation may facilitate operation	Not necessarily a barrier	
 Cap nature / stringency 	• MRV	 Sectoral / GHG coverage 	
 Borrowing 	 Registry design 	 Point of regulation (direct 	
 Offset rules 	 Compliance periods 	vs. indirect)	
 Price ceilings / floors 	 Banking provisions 	Opt-in / opt-out	
	 Enforcement / penalties 	provisions	

- Plans for facilitating linking need:
 - Examine landscape of issues across candidate systems
 - Dialogue and pathway to commonly agreed requisite level of harmonisation

Case examples



- Offset rules and price ceiling floors mechanisms
- Mechanisms affect location of abatement, price of units, cost effectiveness of abatement
- Examples (selected systems only)

Thailand	China	Kazakhstan	Korea
EPC intimately linked	Pilots included price	Domestic offset	Considering market
with Low Carbon City	floors/ceiling and	mechanism	stabilisation
Program for domestic	auctioning and		approaches
crediting	buyback		
EPC incorporates floor			
price guarantee			

- Key considerations:
 - Scope, limits and standards for offsets
 - Clarity on conditions and price levels for stabilisation measures
 - Harmonisation of approaches

Case examples



- System coverage
- Wide range of planned coverage across the region
- Examples (selected systems only)

Vietnam	Thailand	China	Indonesia	Kazakhstan	Korea
Steel sector	Energy	National	Power	Energy, oil	Power,
focus	intensive	suggested	sector and	and gas,	industry,
	industry and	as including	cement	mining,	transport,
	buildings	power,		chemicals,	buildings,
		metals,		agriculture,	waste
		buildings,		transport	
		chemicals			

- Key considerations:
 - Interesting sectors such as power (common) and buildings/transport/waste (less common)
 - Also, thresholds for inclusion will vary

Degrees of linkage



- Does the political and technical alignment allow full mutual recognition of emissions credits or are restrictions desired?
- Some key considerations when developing a roadmap for linking

Restrictions	Rationale
Phased approach	New and emerging systemsPhased alignment of ambitionMarket stability/confidence
One way link	Price control
Volume limits	 Restrict number of imported units used for compliance Domestic action Price control Third party offsets/further links
Type limits	Restrict linked units to certain sectors • Differing scope or types of abatement supported

Institutional coordination for key aspects



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

Commonality with emerging carbon markets in Asia with development work addressing:

- MRV methodologies and guidance
- Compliance and enforcement
- Legal basis for system
- How to facilitate greater coordination in preparation for, or as part of, linked system?

Key areas for dialogue



- Policy design
 - Target setting
 - Phasing
 - Harmonised allocation
 - Use of offsets

Questions for harmonised allocation

- Comparable sectors?
 - > Sizes, technologies, markets, growth
- Basis for consistent benchmarks?
- Comparable/different abatement potential?
- Differential positions regarding competition and leakage risk?

Key areas for dialogue



- Policy for market stability
 - Linkages with additional third parties
 - Price stability between the systems and mitigation mechanisms
 - Market intervention measures (withholding / releasing allowances)
 - Approach to development of policy changes
 - Suspension or termination of the linkage

Termination?

- Nature of linkage permanent, fixed term, reviews
- Clarity on arrangements and conditions for cessation
- Practical measures to enact termination

Conclusions



- Enormous potential benefits from linking systems
 - Facilitates carbon market integration by building on current developments
 - Least cost abatement
 - Standardisation and knowledge sharing
 - Concerted political action
- Route map required to consider alignment of any planned linked systems
 - Key issues underpinning integrity of systems
 - Level of harmonisation varies for issues
- Options for the nature of the link
 - Time limited, phasing, directional, limits
- Strong dialogue required for detailed technical issues



Thank you for your time

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