

Current status and future challenges for the carbon market in Asia

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Type of carbon market in Asia -except for Kyoto mechanism-

Cap and Trade: Emission Trading System

- China: Pilot project at 2 provinces and 5 cities
- Thailand: TVETS (Thailand Voluntary Emission Trading System)
- Republic of Korea
- Japan: JVETS, Tokyo Metropolitan Government ETS and Saitama ETS etc

Baseline and Crediting Mechanism

- Indonesia: Nusantara Carbon Scheme (NCS)
- Thailand: T-VER
- Vietnam: to be considered
- Japan: J-VER and Domestic Crediting System

Capacity building in China

Component of FY2012 activities

- 1. 2nd training programme for central and local government staffs (2 provinces & 5 cities) Guangdong and Shenzhen etc)
 - √ Japanese climate change policy (Inventory, GHG reporting system, J-VER, JVETS and Carbon offset etc)
 - ✓ Climate change policy at local levels
 (Tokyo Metropolitan Government, Yokohama-city etc)







2. Joint research on the future carbon market in Asia between IGES and Tsinghua University

Capacity building in Indonesia

Component of FY2012 activities

- Development of methodologies for Nusantara Carbon Scheme (NCS)
 - Biomass, Energy efficiency, Cook stove, Compost, Hydro power and Afforestation and reforestation (mangrove)
- 2. Development of elements for monitoring guidelines under Nusantara Carbon Scheme (NCS)
 - Identification of possible elements for monitoring (mitigation and forestry)
 - Consideration of possible options for non-permanence
- 3. Training programme for accreditation body and validation & verification body
 - ISO14064-1-3 and ISO14065
 - Case study for validation and verification
 - Case study for accreditation interview

Capacity building in Thailand

Component of FY2012 activities

- Consultation meetings with TGO for T-VER and TVETS
 T-VER
 - Support for the development of methodologies
 - Support for the development of general guideline and validation and verification guideline
 - Support for the institutional arrangement

<u>TVETS</u>

- Discussion on the format of GHG emission report
- Discussion of the designing of ETS (benchmarking options etc)
- 2. Training programme for validation and verification body
 - ISO14064-2 and 3 and ISO14065
 - Case study for verification of T-VER pilot project
 - Site visit for verification of T-VER pilot project



3. Consultation for the development of registry system

Technical issues for consideration (1) -cap and trade-

- ➤ Strict level of compliance
 - Compulsory or voluntary participation
 - Covered GHG
 - Covered sector
 - Level of target setting (capping level)
 - Free allowance or auction
- ➤ Cost containment measures
 - Banking or/and borrowing allowed
 - Ceiling place/floored price
 - Use of external credit (CER, any other credit etc) for compliance
 - Penalty for non-compliance

Technical issues for consideration (2) -baseline and crediting mechanism-

Development of methodology

- ➤ Simplification of methodologies
 - Default value (GEF and NCV etc)
 - Monitoring parameter
 - Treatment of minor source of GHG emissions
 - Simple equation of calculation methods
- > Applicability conditions
 - Specification of the technology or expansion of conditions
 - Reflection of national circumstances
 - Differentiation between CDM and domestic mechanism
 - Financial assessment (Options: Internal rate of return, NPV and Payback period)

Technical issues for consideration (3) -baseline and crediting mechanism-

Development of guideline

- > Possible elements for monitoring guideline
 - Definition of emission sources and carbon sink
 - Flow chart of monitoring plans
 - Structure of monitoring
 - Monitoring pattern
 - Measurement of equipment
 - List of default values etc
- ➤ It may not be necessary to specify the monitoring patter etc in the guideline because there will several types of projects.
- Guideline should be more general so that the project participant could understand it easily.

Political issues for consideration -baseline and crediting mechanism-

- ➤ Who will approve the following items?
 - Registration of proposed project
 - Proposed methodology
 - Guideline, Procedures and Implementation rule etc
 - Validation and Verification body

Example: Executive board, Technological committee etc

- Who will be an administrator and what will be the role?
 - Relevant ministry/agency
 - Decision making for each items described above
 - Nomination of members for regulatory body and relevant committee
 - Coordination with technical experts and/or consultants

Accreditation of VVB

	CDM	Pilot Project -China	Nusantara Carbon Scheme- Indonesia	T-VER/TVETS -Thailand
Scheme owner	UNFCCC secretariat	Each province	National Council on Climate Change Indonesia (NCCCI)	Thailand Greenhouse gas management organization (TGO)
Accreditation bodies	CDM Executive board	To be considered	KAN (Kommittee accreditatoin national)	NSC-ONAC (National standard council-Office of national accreditation council)
Validation and Verification Body	DNVBureau VeritasSGSTÜV Rheinland etc	To be considered	 PT Sucofindo PT. Surveyor Indonesia PT Mutu certification international DOE etc 	Management System Certification Institute (MASCI) DOE etc
Standard for accreditation	Accreditation standard for operational entities	To be considered	ISO14064-3 and 14065	ISO14064-3 and 14065

- ➤ Accreditation process based on the ISO 14065 has not been started yet in China, Indonesia and Thailand.
- ➤ It will take 2-3 years to accredit the potential validation and verification bodies from Japanese experiences.

Summary

- Technological issues (methodology and guideline etc) could be addressed and solved to start the pilot project of domestic carbon market.
- Pilot projects could be good examples for the case study to learn a series of project cycle as well as validation and verification.
- Institutional arrangement (especially establishment of relevant body) could be conducted in order to start a pilot project under the scheme.
- Accreditation of the validation and verification body could be one of the issues for moving forward to the further step due to the lack of capacity of accreditation body and validation and verification body.