An Interim Report on "Japanese Emissions Trading Scheme" by Advisory Committee on the Emissions Trading Scheme

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> 10 June 2008, Bonn SB28 IGES Side Event

Advisory Committee on Emissions Trading Scheme (ETS) : Set up and mandate

- Formed by the Director-General of the Global Environment Bureau of the Ministry of the Environment, Japan
- Set up with the view to examining its effectiveness and the need for ETS as a policy tool against climate change on the assumption that it is introduced in Japan
- Its mandate includes:
 - Analysing fundamental structure and issues associated with a possible emissions trading scheme
 - Exploring its components any necessary infrastructures for implementation

Advisory Committee on ETS in Japan: Members and meetings

- Members of the committee consists of specialists coming from a variety of fields such as academia, stock exchange, finance, bank, power utility, machinery, steal, car manufacturing, lawyer, market analyst associated with Ministry of Economy, Trade and Industry, Financial Services Agency as observers.
- A series of six intensive meetings were held between Jan and May 2008 to produce "an interim report"
- The report was forwarded to the special committee under the cabinet for the prime minister's consideration

Backgrounds and objectives of the study on ETS in Japan

- Backgrounds
 - Equitable role sharing among all countries to achieve the global target by 2050 should be ensured
 - Emissions reduction should be led by a mix of policies and measures, not only ETS
 - ETS have been implemented/considered in a number of countries, and talks are being underway for international linkage
- An in-depth study on a possible ETS to contribute to decision-making concerning its effectiveness and feasibility
- Impact of ETS on domestic industries and employment should also be considered with developing integrated strategies for both economy and environment.

Key Elements of ETS in Japan



Common Elements

(1) GHG covered

- In principle, the six GHGs under the Kyoto Protocol, but depending on required level of accuracy for MRV and share of each GHG in Japan
- May start with CO2 supplemented by other GHGs to satisfy the above criteria.

(2) Scheme period/total emission allowances

- To realise the Low Carbon Society in the long term, ETS should encourage to increase R&D, investment towards the LCS.
- the specific scheme period and total emission allowances should be defined as:
 - 1st Period (Pre-2012): Existing Kyoto Protocol Target Achievement Plan can be a basis for amount of total emission allowances.
 - 2nd Period (2013-2020?): Japan's medium-term target achievement plan for the post-2012 should be a basis for amount of total emission allowances.
 - 3rd period and thereafter (2021-2050?): Clear signals are needed to indicate that ETS shall continue towards the Low Carbon Society in the long term.

(3) Commitment period / retirement of allowances

 Each entity covered by ETS shall retire a certain amount of emission allowances annually equal to the amount of its verified emissions in the last fiscal year

(4) Enforcement against non-compliance

- In the event of non-compliance, a fine will be charged corresponding to the amount of the excess emissions.
- This charge should be set sufficiently higher than that of the allowance price.
- In addition, the excess emissions shall be offset in subsequent period by retiring allowances equal to the excess emissions.

(5) Monitoring/Reporting/Verification of emissions

- MRV should be conformed to ISOs and other international standards
- Existing system such as the GHG Reporting Scheme under "Climate Change Policy Law" and "Monitoring and Reporting Guidelines" of Japan's Voluntary Emissions Trading Scheme ("JVETS") can be a good basis.

Common Elements

(6) Registry

- The "JVETS registry system", already in use, shall be a basis with any necessary improvements.
- With regard to a linkage with the Kyoto Protocol, System link with the national registry shall be explored as necessary.

(7) Cost containment measures

- Banking and borrowing (with limit) can be allowed.
- Establishment of "administrative carbon market board" can be considered.
- A price cap will not be considered since it allows for expansion of the total emission allowances
- International credits such as Kyoto credits may be used for compliance (with limit) depending on post-2012 regime
- Qualified domestic credits to satisfy certain criteria regarding additionality and verification may be used (with limit) for compliance
- International linkage may be explored
- Hence, compatibility with other ETS should be considered

Common Elements

(8) Consideration for industries under international competition

 Having a major risk of carbon leakage, for specified industrial sectors, exceptional treatments such as free allocation and border adjustment measures shall be explored.

(9) Clarification of accounting and tax rules

 Accounting of allowance associated with corporate tax are necessary to be clarified under ETS taking into consideration discussion under IASB

(10) Infrastructure for carbon market

 Infrastructure for "healthy" carbon market should be established under stock exchanges and financial institutions, ensuring price discovery and liquidity of allowances

Allocation methods

Choice between allocation by auction and free allocation

- Although, at the initial phase, free allocation may be taken, auction may be gradually introduced in applicable sectors and industries
- For some cases, auction from the beginning may be conceivable.
- With respect to the risk of carbon leakage, further empirical analysis are needed to identify sectors and industries that are substantially exposed to international competition and accordingly qualified for free allocations.

Free allocation

- Benchmarks (e.g. BAT) may be considered to the extent possible
- For sectors and industries for which setting benchmarks is technically difficult, free allocations might be made as appropriate, taking into consideration their early actions

Auction

- Further study is needed for actual implementation of auctioning which is rather unknown area
- The application of auction revenues also will be studied (e.g. returning back to allocated entities, funding for R&D etc)

Options for allocated sectors

Option 1: Upstream Allocation Option 2: Downstream Allocation (End-Use of Electricity) Option 3: Downstream Allocation (Power Companies) Option 4: Downstream Allocation (Responsibility Sharing)

•All options mandate absolute emissions caps to covered entities

•For downstream allocation, we have options to allocate allowances to either electricity users or power companies

- When allowances are allocated to electricity users, allowances are not allocated to power companies ("indirect emissions")
- When allowances are allocated to power companies, allowances are not allocated to electricity users ("direct emissions")

Option 1: Upstream Allocation



This Option is characterised by high coverage by allocating allowances to producers, importers and distributors of fossil fuels. A cost pass-through mechanism from upstream to downstream should be needed.

Items		Draft ideas	
Allocated entities/coverage	Allocated entities	Upstream: fossil fuel producers/importers/distributors	
	Electricity	(Allocations made to producers/importers/distributors of fuel for power generation)	
	Allocation unit	Each firm	
	Coverage	 Fossil fuel = CO2 emissions from fuel combustion (nearly 100%) * Exclusion of the portion of fossil fuel used as a feedstock (for example, naphtha) ,not emitting CO2, might be considered. 	
Allocation method		100% auction. The corresponding portion of the auction revenue can be returned back to the allocated entities.	
MRV		Utilisation of the current import procedures	

Option 2: Downstream Allocation (End-Use of Electricity)



This Option intends to provide a direct incentive for emissions reductions through allocating allowances to large energy users of fossil fuels and electricity (emitters of GHGs).

Items		Draft ideas	
Allocated entities/coverage	Allocated entities	Downstream: large emitters in industry and business sectors (end-users of fossil fuels and electricity)	
	Electricity	Allocated to indirect emissions (end-use of electricity)	
	Allocation unit	Each firm	
	Coverage	Approximately 60% of total GHG	
Allocation method		100% free allocation, but auction will be gradually introduced	
MRV		Existing laws (Climate Change Policy Law and others) would be utilized. Consolidated accounting and verification would be acceptable if the data collection is good.	

Option 3: Downstream Allocation (Power Companies)



Allowances are allocated to power companies with regard to electricity as well as to other large energy users of fossil fuels.

Items		Draft ideas	
Allocated entities/coverage	Allocated entities	Downstream: Large direct emitters in power company, industry and business sectors (end-users of fossil fuels) (Optionally, allocation to fossil fuel distributors can cover small-size energy users of fossil fuel and the transportation sector.)	
	Electricity	Allocated to direct emissions (combustion of fossil fuels in power stations)	
	Allocation unit	Each firm	
	Coverage	Approximately 70% of total GHG	
Allocation method		Power companies: 100% auction. Large energy users: 100% free allocation, but auction will be gradually introduced .	
Emissions monitoring/accounting / reporting, emissions verification		Existing regulations (Climate Change Policy Law and others) would be utilized. For electricity direct emissions, the emissions and sales quantity of the power companies would be accounted for and verified.	

Option 4: Downstream Allocation (Responsibility Sharing)

Fossil fuels	Allocated to firms		Allocated to firms (Large vehicle service operators)
Electricity	Allocated to firms at a fixed electricity emissions intensity		Allocated to firms (large service operators at a fixed electricity emissions intensity
	Intensity targets are s	xed electricity amount	
	Large-size energy users	Small-size energy users	Transportation

Despite absolute caps being imposed, firms are responsible for their emissions resulting from changes in their own intensity, but those resulting from their activity levels are treated separately e.g. a fund established by firms.

- This option can be well fit in the currently ongoing program to achieve the Kyoto target, therefore, suitable for pre-2012 phase, since under "Keidanren Voluntary Action Plan", most industrial sectors have own intensity targets.
- This option could be replaced by Option 2 or 3 for post-2012 phase
- Even post-2012, this option might apply to industries that may be identified as vulnerable to the impact of international competition or to the significant risk of carbon leakage.
- Industries would be required to set emissions intensity targets at the world's highest level for which government will prepare guidelines.

Option 4: Downstream Allocation (Responsibility Sharing)

	Item	Draft ideas
Allocated entities/coverag	Allocated entities	Downstream: Large emitters and power companies (with pre-set intensity targets) "Emissions intensity targets" and "Planned activity level" that constitute absolute level of emission caps
	Electricity	Allocated to electricity users (end-use of electricity), but power companies have pre-set emissions intensity targets
	Allocation unit	Each firm
Φ	Coverage	Approximately 60% of total GHG
Allocation method		 Power companies: By "Baseline and credit", crediting for the difference beyond the target (If the emissions intensity target is not met, power companies buy allowances for the deficiency in emissions intensity multiplied by the amount of electricity (pre-set). In the reverse case, they can be sold.) Large energy users: 100% free allocation
MRV		Existing regulations (Climate Change Policy Law and others) would be utilized. Verification is required for emissions intensity setting and the actual data.

[Responsibility Sharing] note: "amount of emissions" = "intensity" × "activity level"

- O The amount of emissions matters for compliance. An emissions allowance is allocated early in the fiscal year. The emissions allowance equal to the actual amount of the emissions must be retired to the government at the year-end. Within the allowance, the proportion between the target emissions intensity and the planned activity level are set in advance, and the responsibility for achieving each target will be treated differently as follows:
- (i) **Emissions intensity**: The allocated firms will be responsible for any increase/decrease in the emissions amount resulting from any deterioration/improvement in the emissions intensity.
- (ii) **Activity level**: Any increase/decrease in the emissions amount resulting from an increase/decrease in the activity level will be treated separately e.g. a fund established by allocated firms will/sell allowances.