

# Evaluation of the Pilot Project of Domestic Emissions Trading Scheme

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Global Environment Bureau  
Ministry of the Environment, Japan

## 1. General Outline of the Project

### (1) Purpose of the Project

Emission trading is a well-known instrument that allows the market to reduce greenhouse gas (GHG) emissions by stimulating cost-effective innovation and investment. Ministry of the Environment Japan (MOE) is aware of its importance and of the fact that emissions trading scheme is introduced internationally. This pilot project of domestic emissions trading scheme aims to provide private companies with opportunities to build technical skills regarding emissions trading procedures such as validation, verification, monitoring, reporting, and trading through their voluntary participation of the program. This is the two-year pilot project of the MOE.

The goals of the project are to:

- provide private companies with opportunities to build experience and technical skills regarding emission trading procedures
- demonstrate that cross-sectional emissions trading scheme is feasible in Japan
- encourage participants to be aware of the importance of improved emission management
- establish an infrastructure for domestic emission trading

### (2) Participants

- Voluntary participations from private companies of a broad range of industries<sup>1</sup>.
- 63 parties (include 13 observers) participated in total.
- Participants were able to choose either of the following two options as a means of participation.

#### Type 1 (Entity-based)

Participants that had set corporate-wide GHG reduction targets for FY2003 and calculate their emissions. 31 companies joined the program as Type 1 parties.

#### Type 2 (Project-based)

Participants that joined the program through acquiring credits through domestic emissions reduction projects implemented or planned at or within either their own sites or other sites. 11 companies joined the program as Type2 parties (Six Type-2 companies also joined as Type-1 companies.).

- Other participants in the project:

#### Brokers

Five parties joined the emissions trading as brokers of credits.

#### Verifier

The applicant operational entity (AOE) for CDM projects verified the emissions of Type 1 parties and emission reductions of Type 2 parties.

- CERs were sold through the market by the operator (Mitsubishi Research Institute, Inc.).

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<sup>1</sup> Based on the agreements with the participants, the names of the participants, their emission reduction targets, reduction plans, emission data and verification evaluations are not and will not be released to the public.

- The MOE chose program participants taking into consideration diversity among industrial sectors and industry scale as well as their previous achievements.

### **(3) Units for Participation**

Participants can choose participation method from the following options:

- Single-site participation
- Plural-sites participation
- Corporation-wide participation

### **(4) Gases Covered**

Mandatory: CO<sub>2</sub> (direct emissions and indirect emissions from electricity and heat usage)

Recommended: CH<sub>4</sub>, N<sub>2</sub>O, HFC, PFC and SF<sub>6</sub>

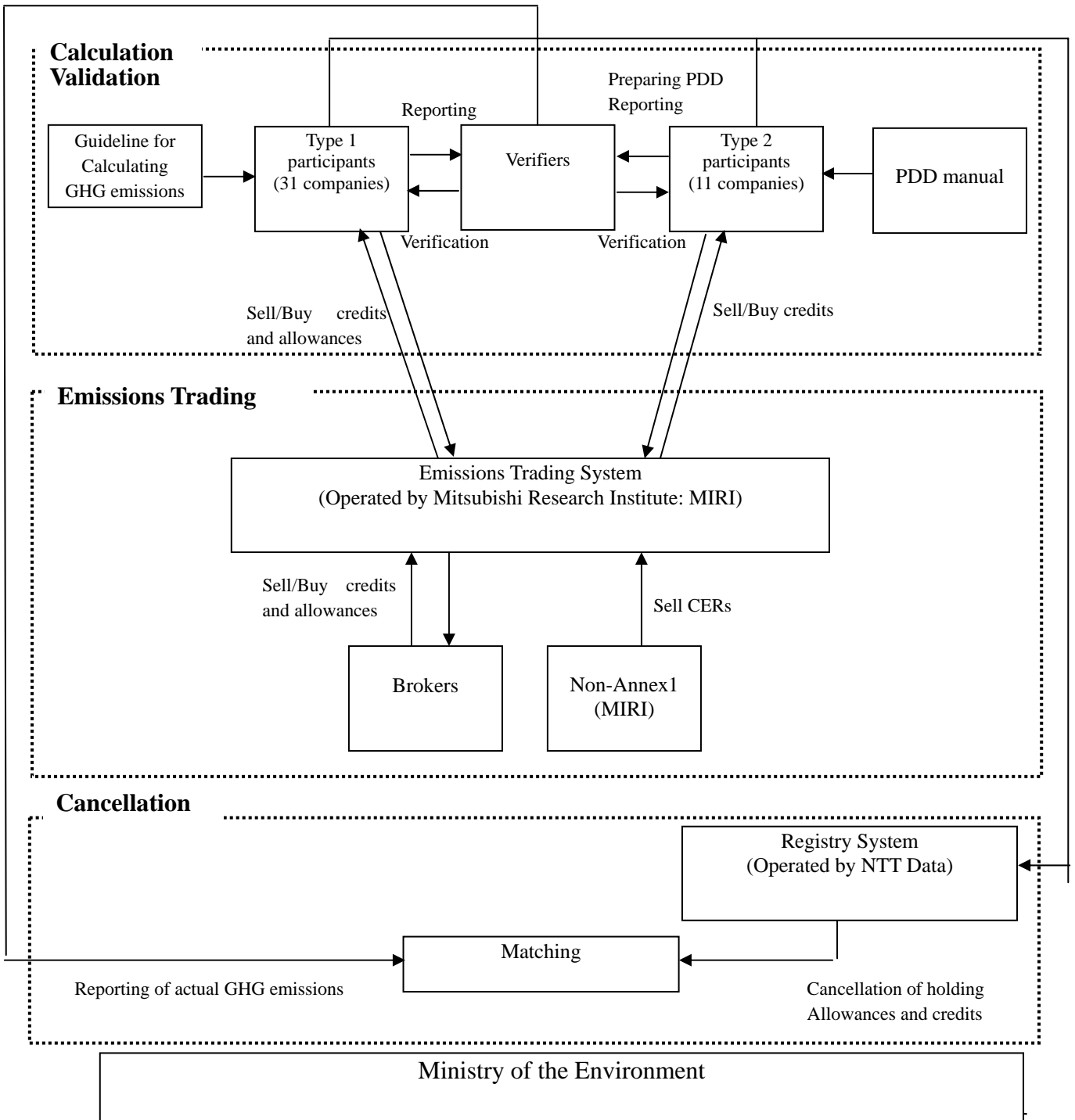
### **(5) Emissions Reduction Target and Allocation of the Allowances**

Type-1 participants chose their reduction targets from the following types:

- Absolute target: Participants set absolute reduction targets for the FY2003. Participants received allowances matching their emissions cap from the start. They are free to sell the allowances but need to ensure that they hold allowances equal to their actual verified emissions by the end of the reconciliation period (cap-and-trade).
- Relative target: Participants set emission targets per unit of output (output, production or total floor space). Credits were issued to participants when they reduced their emissions below their targets (baseline-and-credit).
- Absolute reduction target: Participants declared targeted-reduction that would be realized by their emission reduction efforts. Credits were issued to participants when they reduced emissions below their targets (baseline-and-credit).

### **(6) Procedures**

- To determine rules of the scheme, the MOE invited industry sectors to join a working group. The working group helped to ensure that the scheme reflected suggestions and concerns from private industry and that the program was developed through collaboration between private companies and the government. The working group was held eight times from April to October 2003.
- During the program period (FY2003), the participants had four periods of trading to buy or sell their allowances or credits. One period of trading lasted three days. All transfers of allowances and credits were transacted electronically in the registry.
- After the program period, Type-1 participants calculated their actual emissions using “the Guideline for Calculating GHGs Emissions by Private Companies (Draft),” standardized guideline developed by the MOE. The AOE verified the participants’ emissions.
- Type-2 participants each developed a project design document (PDD) and asked the AOE to validate it. After the program period, the AOE verified the emissions reductions from these projects.
- Strict rules such as additionality of the project were not employed for the validation process under the program, since most of the participants had little experience with the procedure for PDD preparation until then.

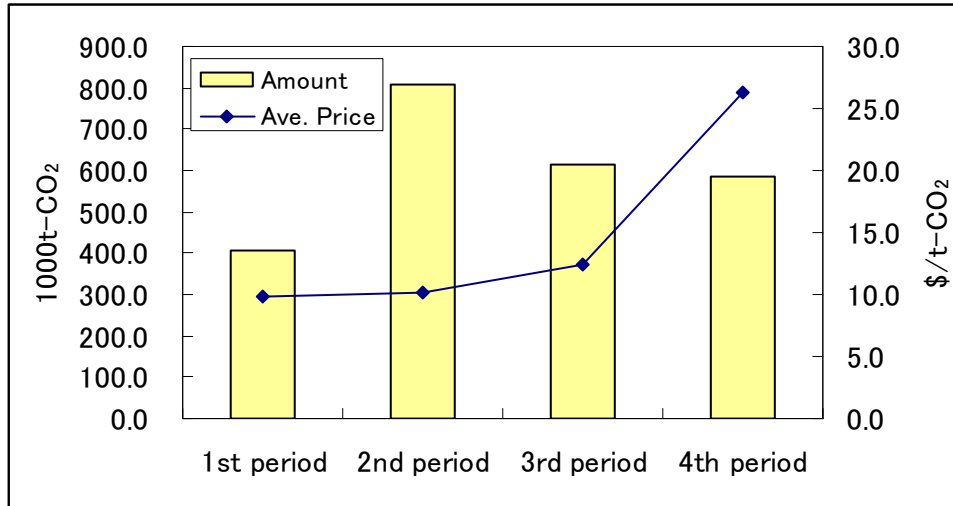


(7) Schedule

month	2003			2004					
	April – Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June
Type 1		→ Target Setting Period					→ Calculation Period	→ Verification Period	
Type 2		→ Preparing PDD	→ Validating PDD					→ Verifying Emission Reduction	
Transaction	Working group (eight times)		→ 1 <sup>st</sup> transaction		→ 2 <sup>nd</sup> transaction		→ 3 <sup>rd</sup> Transaction		→ 4 <sup>th</sup> Transaction (Reconciliation transaction) Cancellation Period

## 2. Result of the Emissions Trading

The total amount of allowances transferred (excluding allocation, retirements, and cancellations) was 2,417,886 t-CO<sub>2</sub>e. The graph below shows the amounts and average prices of allowances transferred during each transaction period.



Amount and average price of allowances transferred during each transaction period

Note: The prices in the graph should be used only as a guide, since these deals did not involve real monetary transactions.

- Out of 31 participants, 27 companies met their voluntary targets and 16 out of 27 companies met their targets by purchasing credits.

The participants could build technical skills as well as experience through this project. Also, this pilot project ensured that:

- domestic emissions trading scheme including infrastructure, such as guidelines for calculating GHG emissions, verification guideline and national registry, was feasible.
- domestic emissions trading could be an effective and efficient method for companies to achieve their emissions reduction goal in Japan.

## 3. Current Discussion

The Japanese government is currently discussing how to introduce domestic emissions trading scheme in the early stage to achieve the 6 percent reduction target. In the discussion in the last Central Environment Council meeting of June 18, two options for emissions trading, "mandatory participation scheme" and "voluntary participation scheme (with some incentives)," were presented as possible options. Most of the council members supported mandatory cap-and-trade approach. After the inter-ministry consultations, it will be determined when and how domestic emissions trading scheme would be introduced as a policy measure by March 2005.

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