Mandatory Greenhouse Gas Accounting and Reporting System

Stop Global Warming!

Team minus 6%

Takeshi SEKIYA

January 17, 2007

Ministry of the Environment
Objective of Mandatory Greenhouse Gas Accounting and Reporting System

1. Establish a basis for voluntary efforts by emitters in calculating their GHG emissions by themselves

- Calculate and come to know the GHG emission amounts resulting both directly and indirectly through emitters’ own activities
  Promote efforts through Plan-Do-Check-Action (PDCA) cycle in which we establish and enforce GHG emissions reduction measures and review their effects to formulate and then implement new measures

2. Promotion of voluntary efforts and momentum building among citizens and businesses through publication of information and enabling the information to be visualized

- The government totals and announces the emissions calculated
  Emitters come to know the state of their own emissions as well as of their measures dealing with them, and come to realize the necessity of further measures and recognize progress being made
  Promotion of voluntary efforts and momentum building among citizens and businesses at each level through publication of information and making the information able to be visualized
Information Flow of Mandatory Greenhouse Gas Accounting and Reporting System

Providing information
The submitted emissions-related information will be tallied for individual businesses as well as by prefecture and business type.

Report
The submitted emissions-related information will be tallied for individual businesses as well as by prefecture and business type. Other relevant information may also be reported.

*If there the rights and interests of an emitter may be impacted, the emitter may request the protection of its rights and interests.

Minister with jurisdiction
Reported information is tallied by the minister having jurisdiction over the business.

Notify

Minister of the Environment, Minister of Economy, Trade and Industry
Disclosure
Upon a disclosure request by citizen, information on changes in GHG emissions for individual places of business will be disclosed.

Public access

Request

Citizens
Implementation of Mandatory Greenhouse Gas Accounting and Reporting System

1. Parties to calculate and report emissions ("specified emitters")

(1) Specified emitters required to report energy-related CO₂

_Industrial sector, business sector_
- Operators of Type 1 and Type 2 energy management factories, as designated as under the Act Concerning the Rational Use of Energy (Reported by each operating location or place of business)

_Transport sector_
- Designated freight carriers, designated consignors, designated passenger carriers and designated air transportation services (Reported by business type)

(2) Specified emitters required to report GHGs other than energy-related CO₂

*Non-energy related CO₂, CH₄, N₂O, HFCs, PFCs, SF₆*

Emitters that meet both of the following requirements:
1) Each operating location or place of business emitting GHGs in conjunction with their business activities, having equipment with which total emissions of each GHG is more than 3,000 tons of CO₂ equivalent.
2) Company as a whole employing 21 or more workers.
(Report for each operating location or place of business when total emissions of each GHG gas for each operating location or place of business exceeds 3000 tons of CO₂ equivalent.)
2. Accounting of Emissions (1)

(1) Period regarding which accounting must be performed

- As a rule, reporting is to be done regarding the previous fiscal year. Reporting for HFCs, PFCs, and SF₆ is to be done for the previous year.

- Reporting for HFCs, PFCs, and SF₆ for the previous fiscal year will be permitted in FY2007 only.

(2) Calculation of GHG emissions pertaining to business activities by specified emitters

- For emissions activities that are subject to accounting, emitters will derive amounts using the means of calculation specified for each type of GHG by Cabinet Order/Ordinance of the Ministry, and total those amounts.

- However, in reporting emissions, calculation methods and emission factors different from those set forth in Cabinet Orders/Ordinances of the Ministry may also be used.
# Implementation of Mandatory Greenhouse Gas Accounting and Reporting System

## 3. Accounting of Emissions (2)

### E.g. 1, Application to waste incineration and product manufacturing

- **CO₂ emissions (t-CO₂)**
  
  \[
  \text{Emissions per unit incineration or per amount used (t-CO₂/t)} \times \frac{\text{Amount incinerated or amount used (t)}}{\text{Emissions factors (stipulated by gov’t)}}
  \]

  Assessed by each business entity

  - For each type of waste
  - E.g., Synthetic fabrics: 2.29 t-CO₂/t
  - Waste rubber tires: 1.77 t-CO₂/t

### E.g. 2, Use of HFCs in solvents or other chemical agents

- **HFC Emission (t-HFC)**
  
  \[
  \frac{\text{HFC used (t-HFC)}}{\text{Collection amount or sound treatment amount (t-HFC)}}
  \]

  Assessed by each business entity

  *Converted to CO₂ equivalent by multiplying by GWP*
3. Reporting of emissions (1)

(1) Reporting units
- As a rule, emissions are to be reported by each operating location or place of business. Energy management factories, consignors, passenger carriers, and freight carriers designated under the Act Concerning the Rational Use of Energy are to report emissions for the business entity as a whole.

(2) Deadline for reporting
- Report by June 30 every year.
  For FY2007 only, reports by designated consignors are to be submitted by the end of September.

(3) Entities to receive emissions reports
- Specified emitters are to report to the minister having jurisdiction over the business in question.
- Some reports may be submitted to local or regional representative bodies of the minister holding jurisdiction over the specified emitters, in the same way under the Act Concerning the Rational Use of Energy.
Implementation of Mandatory Greenhouse Gas Accounting and Reporting System

3. Reporting of emissions (2)

(4) Items to report

- Specified emitters are to report:
  1) Information on the specified emitters (business location)
  2) Information on emissions amounts for each GHG

- Each business location reporting CO₂ emissions derived from energy is to derive its figures by totaling the following three types of emissions (except those related to the supply of electricity or heat; i.e., post-distribution emissions)
  1) Emissions resulting from fuel use
  2) Emissions resulting from the use of electricity supplied by third parties
  3) Emissions resulting from the use of heat supplied by third parties

- Places supplying electricity or heat as their main area of operations (e.g., power plants) are to calculate/report emissions pertaining to the use of fuel (i.e., pre-distribution emissions) in addition to their post-distribution emissions.
Implementation of Mandatory Greenhouse Gas Accounting and Reporting System

3. Reporting of emissions (3)

(4) Reporting items
- When specified emitters reporting emissions of non-energy derived CO$_2$ use waste materials as raw fuel, they are to report separately the emissions generated through the use of waste materials as fuel and the emissions of other non-energy derived CO$_2$.
- Reporting entities using calculation methods and emission factors different from those set forth by the government are to delineate the methods/coefficients employed.

(5) Reporting-related penalties
- In cases of failure to report or falsified reporting:
  
  Offenders shall be levied a fine of no more than 200,000 yen
Implementation of Mandatory Greenhouse Gas Accounting and Reporting System

3. Reporting of emission (4)

(6) Relation to regular reporting under the Act Concerning the Rational Use of Energy

- In order to avoid burdensome emissions reporting, it is possible to combine this reporting with the regular reporting conducted under the Act Concerning the Rational Use of Energy ("Energy Saving Law").

1) **When reporting energy-derived CO$_2$ emissions only**

   - Regular reporting under the Energy Saving Law may be substituted as the reporting required under the Law on Promotion of Global Warming Countermeasures.

2) **When reporting regarding GHG gases other than energy-derived CO$_2$ emissions**

   - Submit report required under the Law on Promotion of Global Warming Countermeasures

3) **Reporting both energy-derived CO$_2$ emissions and other GHG emissions**

   - Submit the report required under the Energy Saving Law along with the emissions reporting required under the Law on Promotion of Global Warming Countermeasures.
Implementation of Mandatory Greenhouse Gas Accounting and Reporting System

4. Providing relevant information (1)

(1) Objective
- Central information in reporting/public release: GHG emissions amounts
- In addition to emissions amounts, upon request from the emitter, other information relevant to the calculated emissions will also be released publicly.
  The expected result is the development of voluntary emissions reduction measures by each emitter as well as increased understanding by citizens in various capacities regarding the state of emissions.

(2) Submission format
- Submit emissions report along with the format provided for “relevant information” (provision of such information is entirely voluntary).
- When submitting such information, one or both of the following types of information are to be provided.
  1) Information regarding the specified emitter as a whole, with the understanding that the information will be released by the Minister of the Environment and/or the Minister of the Economy, Trade and Industry.
  2) Information on particular business location, with the understanding that the information will be disclosed upon request only. (Provided by each business location)
Implementation of Mandatory Greenhouse Gas Accounting and Reporting System

4. Providing relevant information (2)

(3) Information that emitters can elect to provide

- Specified emitters may elect to provide the following information:
  1) Information on increases or decreases in reported emissions amounts
     e.g.: Increases/decreases, causes, self-assessments of the changes
  2) Information on changes in GHG emission unit
     e.g.: Emission unit relevant to the emissions assessed
  3) Information on measures implemented in order to reduce GHG emissions
     e.g.: Energy conservation or other activities conducted by a business entity or at a business location; emissions reductions attained when third parties use products produced by the business in question; cross-cutting efforts conducted across various business locations
  4) Information on accounting method for GHG emissions
     e.g.: Details regarding method of calculation
  5) Other information
5. Accounting and public release of data

(1) Accounting and reporting
- The Minister of the Environment and the Minister of Economy, Trade and Industry will tally the accounting results received by relevant ministers and will report results broken down by (i) business entity, (ii) business type, and (iii) prefecture, with these results to be reported along with relevant information regarding specified emitters.

(2) File register
- The Minister of the Environment and the Minister of Economy, Trade and Industry will record in the form of an electronic file (i) information on the specified emitters (or business locations, as applicable) and (ii) emissions amount for each GHG along with relevant information on each business location.
- The Minister of the Environment, the Minister of Economy, Trade and Industry, and other relevant ministers shall disclose this information upon request.