## Indicator 13.2.2

# **Indicator Name, Target and Goal**

**Indicator** 13.2.2 Total greenhouse gas emissions per year

**Target 13.2** Integrate climate change measures into national policies, strategies and planning

**Goal 13** Take urgent action to combat climate change and its impacts

### **Definition and Rationale**

#### Definition

This indicator is defined as Japan's total greenhouse gas emissions, which are estimated and reported based on the United Nations Framework Convention on Climate Change and other sources.

## Concepts

The total greenhouse gas emissions are estimated in accordance with the UNFCCC Reporting Guidelines, IPCC Guidelines for National Greenhouse Gas Inventories and other sources, and using various statistical information. They are not actual measurements.

### Rationale and Interpretation:

Greenhouse gas emissions are considered to be one of the main factors of climate change, and the effects of climate change countermeasures can be interpreted as a reduction in greenhouse gas emissions.

#### **Data Sources and Collection Method**

Estimation is made using various statistical information and in line with the above guidelines. For published data sources, necessary data is collected from publications, the web, etc., and for unpublished data, the Ministry of the Environment requests the owner to provide the data.

## Method of Computation and Other Methodological Considerations

#### Estimation Method

The total greenhouse gas emissions are estimated using various statistical

information and in line with the above guidelines and other sources.

### Comments and limitations

In line with the above guidelines and other sources, after the emission amount is estimated every year, the total emission amount is re-estimated not only for the latest year but also retroactively to 1990. Therefore, it should be noted that the numerical value of the indicator reported in the past may change after the report.

## **Data Disaggregation**

- By gas type (carbon dioxide ( $CO_2$ ), methane ( $CH_4$ ), nitrous oxide ( $N_2O$ ), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride ( $SF_6$ ), nitrogen trifluoride ( $NF_3$ ))
- By sector (energy; industrial processes and product use, agriculture, land use, land-use change and forestry; waste)

### References

• Greenhouse Gas Emission/Absorption Estimation Results (Ministry of the Environment)

http://www.env.go.jp/earth/ondanka/ghg-mrv/emissions/index.html

· Greenhouse Gas Inventory Office of Japan

http://www.nies.go.jp/gio/index.html

## **Custodian Ministries of Data**

Ministry of the Environment (National Institute for Environmental Studies)

#### **Custodian Ministries of Related Policies**

Ministry of the Environment Ministry of Foreign Affairs

## **International Organizations**

United Nations Framework Convention on Climate Change (UNFCCC) Secretariat