

Preparation of Japan's National Greenhouse Gas Inventory and Trends in GHG Emissions

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Abstract

On the basis of Article 4 and 12 of the United Nations Framework Convention on Climate Change (hereinafter, Convention) and Article 13 of the Paris Agreement, Japan is required to regularly prepare national greenhouse gas (GHG) inventories and submit them to the United Nations. Moreover, Article 7 of Japan's Act on Promotion of Global Warming Countermeasures, which provides for domestic measures under the Convention and the Paris Agreement, requires the Government of Japan to annually estimate and make public Japan's GHG emissions and removals.

In accordance with these Articles, the Greenhouse Gas Inventory Office of Japan (GIO) develops the national GHG inventory under a contract with the Ministry of the Environment. The emissions and removals are estimated based on the outcome of the Committee for the GHG Emission Estimation Methods. Before compiling the inventory, GIO collects data from relevant ministries, agencies, and organizations to estimate emissions and removals. Based on these data together with other data from statistical publications, GIO then compiles the GHG inventory.

Japan's GHG emissions and removals in FY2023 were 1,017 million tonnes of carbon dioxide equivalents (Mt CO₂ eq.). (Emissions: 1,071 Mt CO₂ eq., Removals: 53.7 Mt CO₂ eq.)

The emissions decreased by 23.3% (324.4 Mt CO₂ eq.) compared to the FY2013 emissions (1,395 Mt CO₂ eq.), mainly because of reduced energy consumption and the decrease in CO₂ emissions from electricity production due to the wider use of decarbonized electricity (wider adoption of renewable energy and resumption of nuclear power plant operations).

Access to relevant information

<https://www.nies.go.jp/gio/en/index.html>