

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 in cooperation with private consultant companies under a contract with the Ministry of the Environment. 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 FY2022 were 1,085 million tonnes of carbon dioxide equivalents (Mt CO₂ eq.). (Emissions: 1,135 Mt CO₂ eq., Removals: 50.2 Mt CO₂ eq.)

The emissions decreased by 19.3% (271.9 Mt CO₂ eq.) compared to the FY2013 emissions (1,407 Mt CO₂ eq.), mainly because of the reduced energy consumption (due to improved energy conservation, etc.) and the decrease in CO₂ emissions from electricity production due to the wider use of low-carbon 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>