

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

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Abstract

Under Article 4 and 12 of the United Nations Framework Convention on Climate Change (hereinafter, Convention) and relevant decisions adopted by the Conference of the Parties, the Annex I parties including Japan (i.e. developed countries) are required to prepare national greenhouse gas (GHG) inventories and submit them to the Secretariat of the Convention. Moreover, Article 7 of the Act on Promotion of Global Warming Countermeasures, which provides for domestic measures under the Convention, 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 FY2021 were 1,122 million tonnes of carbon dioxide equivalents (Mt CO₂ eq.). (Emissions: 1,170 Mt CO₂ eq., Removals: 47.6 Mt CO₂ eq.)

The emissions decreased by 16.9% (237.7 Mt CO₂ eq.) compared to the FY2013 emissions (1,408 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), despite the increase in hydrofluorocarbon (HFC) emissions.

Access to relevant information

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