

Activities in FY 2024-2025

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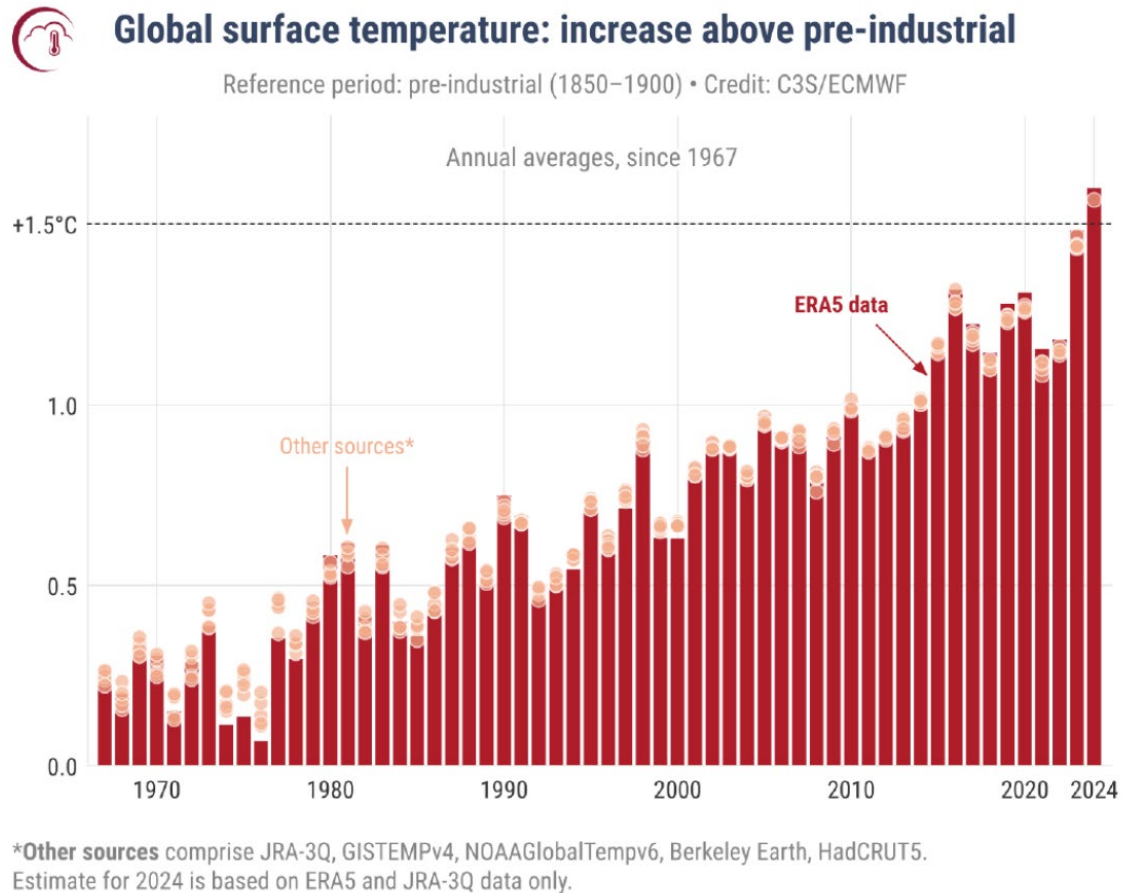
National Institute for Environmental Studies

The 31st AIM International Workshop

Ohyama Memorial Hall, NIES

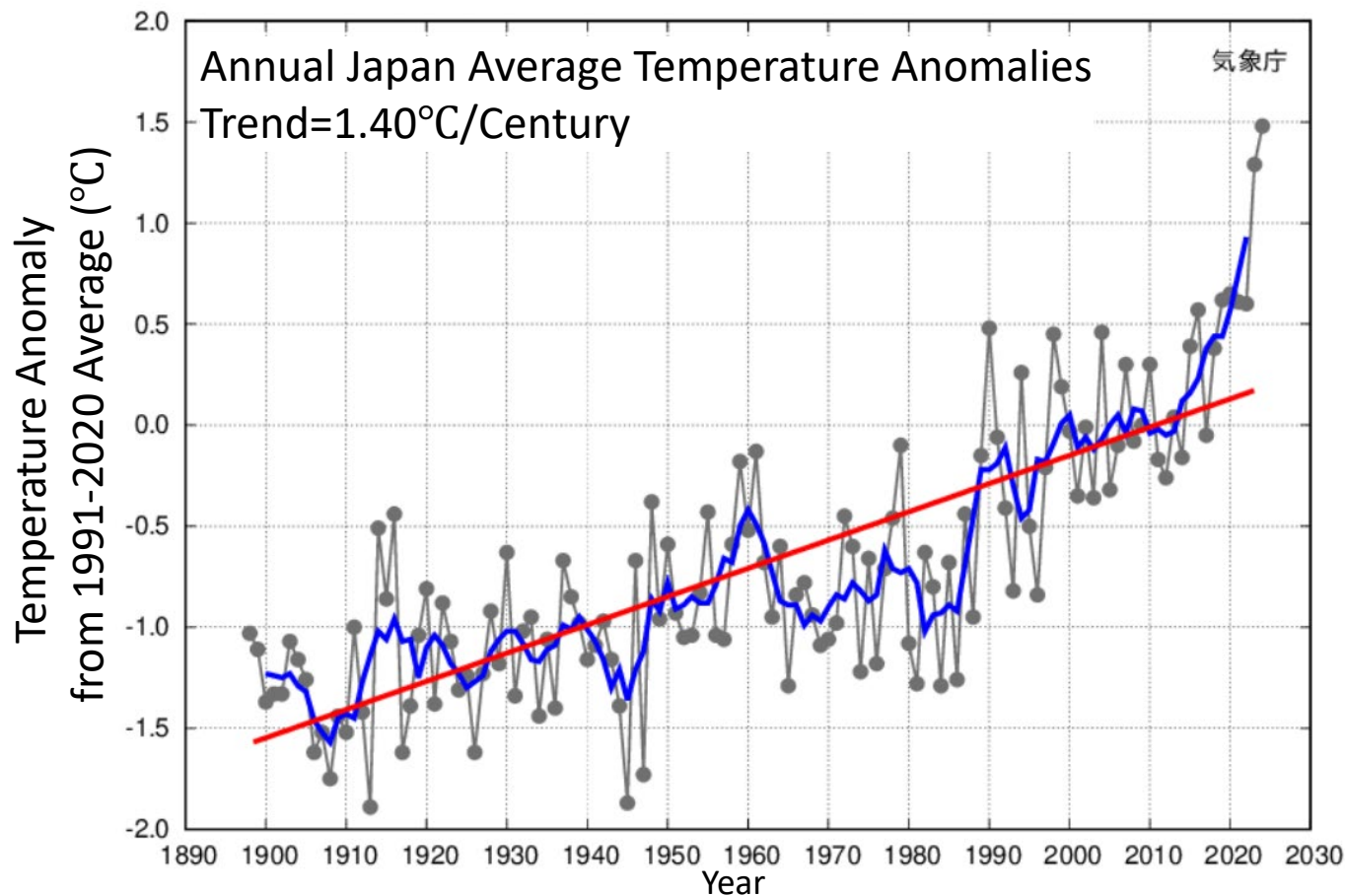
July 22, 2025

In 2024, global mean temperature exceeded 1.5 °C target...



Source: Copernicus Climate Change Service (2025) Global Climate Highlights 2024
<https://climate.copernicus.eu/global-climate-highlights-2024>

In Japan, 2024 was the hottest year.



Black line: average temperature anomalies from the base value for each year;

Blue line: 5-year moving average of the anomalies;

Red line: long-term change trend.

The base value is the 30-year average for the period 1991-2020.

Source: Japan Meteorological Agency Annual Japan's average temperature (in Japanese)

https://www.data.jma.go.jp/cpdinfo/temp/an_jpn.html

AIM Team's Contribution to Japan's NDC

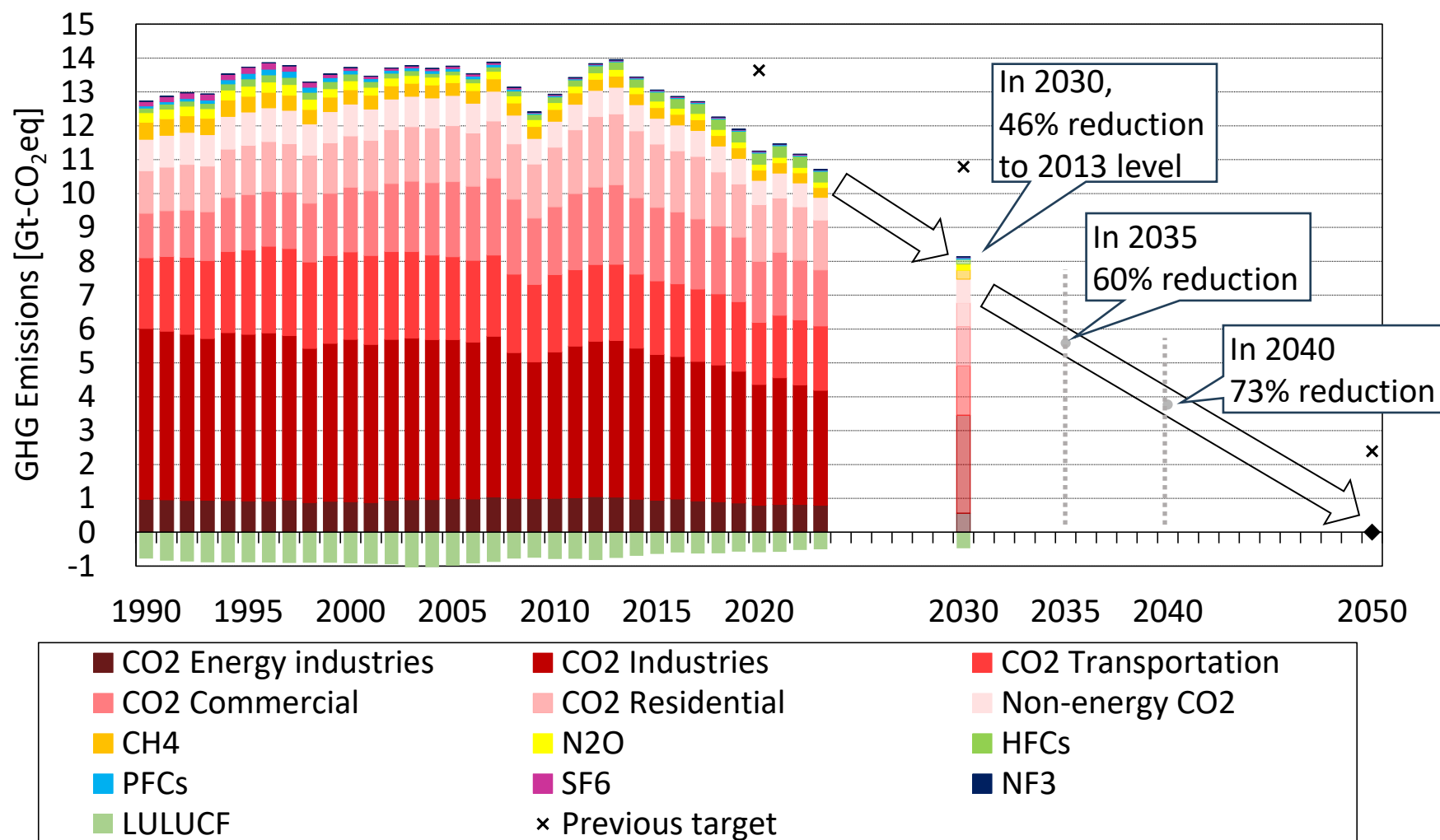
- Plan for Global Warming Countermeasures

- ✓ The 6th Joint Working Group (Central Environmental Council and Industrial Structure Council) on Nov. 25, 2024
Deliberation on 2035 and 2040 targets. Should the pathway to 2050 be concave, linear or convex?
- ✓ The draft plan was submitted on 24 December 2024.
- ✓ Cabinet approved it on Feb. 18, 2025.

- 7th Strategic Energy Plan

- ✓ The 66th Meeting of the Basic Policy Subcommittee, Advisory Committee for Natural Resources and Energy (on Dec. 3, 2024)
Energy Mix in 2040 and 2050 considering the net-zero GHG by 2050
- ✓ The draft plan was submitted on 25 December 2024.
- ✓ Cabinet approved it on Feb. 18, 2025.

Past GHG emissions and NDC in Japan

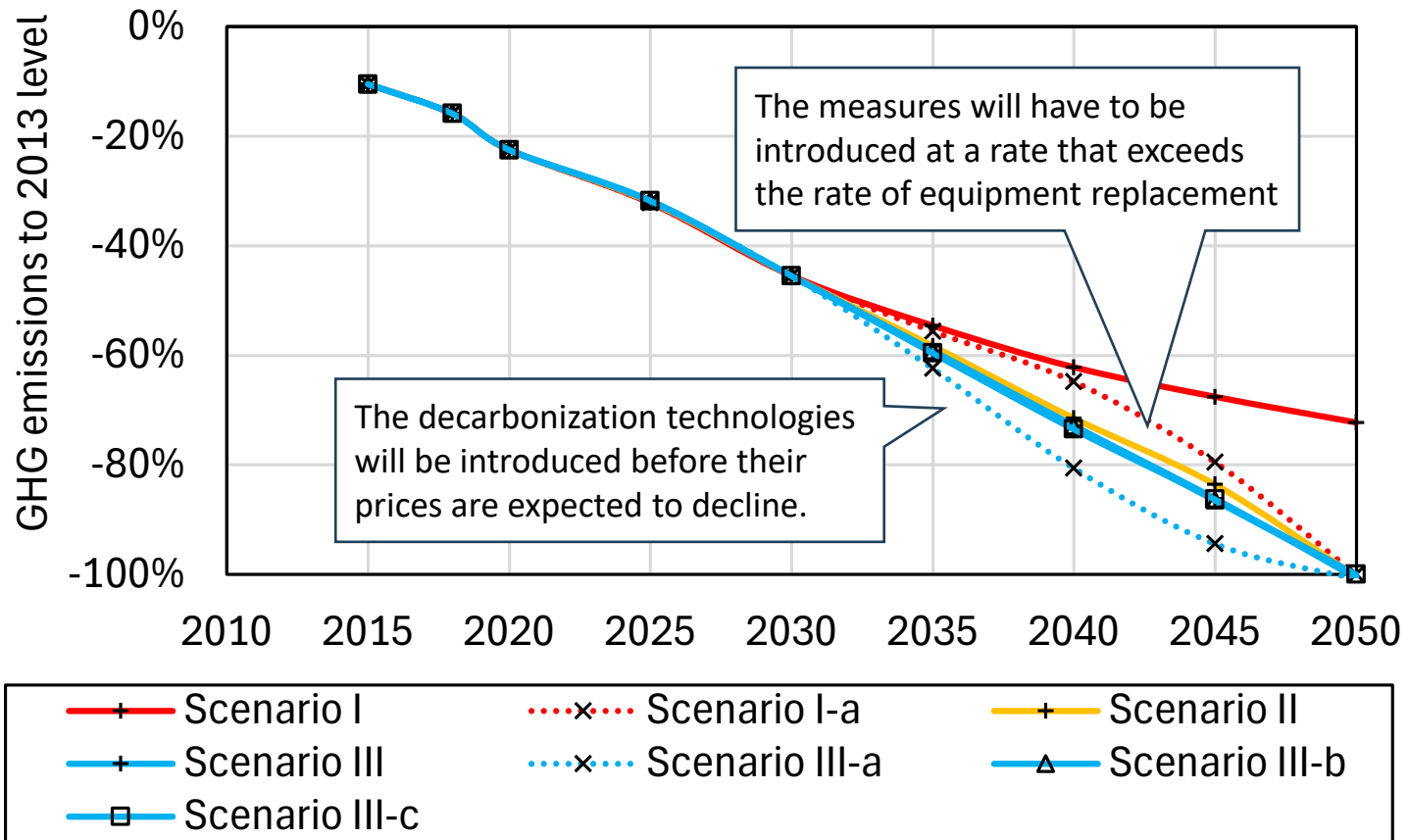


Source:

Historical data: Greenhouse Gas Inventory Office of Japan, Japan's National Greenhouse Gas Emissions
(Data for 2023 are tentative.)

Target: Japan's Nationally Determined Contribution (NDC) and Long-Term Strategy under the Paris Agreement

Assessment of GHG Emission pathways using AIM



AIM Team also assessed energy demand, power supply by technology, additional investment costs, and energy self-sufficiency to achieve the above pathways.

Activities in Asia

- The AIM team is working with teams in Thailand, Indonesia, Laos, Bangladesh, Vietnam, Malaysia and the Philippines including policy dialogues, under the support of MOEJ.
Brunei is interested in our work.
Through JICA training, the AIM team explains the role of model and demonstrates scenario exercises to determine GHG reduction targets.
- The AIM team is also collaborating with China, India and Taiwan teams.
- As COP29 Side Event, "Net-Zero and NDCs: Science-based climate policymaking and implementation in Asia" on November 18, 2024
- AIM and LoCARNet Peer-to-Peer Meeting for Sharing Experience and Lessons at NIES on July 24, 2025

Toward the next 5years;

- NIES will start the next 5-year plan from FY2026.
- Climate change is the most important issue, but we must consider material cycle, nature positive and human well-being.
- NIES is requested to show practical solutions to achieve both carbon-neutral (CN), circular economy (CE) and nature positive (NP) in global scale and local scale.
 - ✓ Global consistency
 - ✓ Local reality
 - ✓ Role model for Asian countries
- Sessions 6 and 7 will be more in-depth discussions.