ccGovernment of Japan

Submission on the topics of the global dialogues to be held in 2025 under the work programme for urgently scaling up mitigation ambition and implementation

January 2025.

Japan welcomes the opportunity to submit its views on the topics of the global dialogues in 2025, referred to in paragraph 9 of FCCC/PA/CMA/2024/L.23. As stated in paragraph 24 of the decision 1/CMA.5 (Outcome of the first global stocktake (GST)), global GHG emissions trajectories are not yet in line with the temperature goal of the Paris Agreement, and there is a rapidly narrowing window for raising ambition and implementing existing commitments in order to achieve it. Taking into account the objective of the Sharm el-Sheikh Mitigation Ambition and Implementation Work Programme (MWP), which is to urgently scale up mitigation ambition and implementation in this critical decade in a manner that complements the GST, Japan believes that the role of the MWP is crucial because the MWP can provide an opportunity for Parties and non-Party stakeholders to enhance their ambition and implementation in this critical decade to keep the window for 1.5 °C goal open.

At COP29, held in November 2024, discussions were held on the outcomes of the 2024 global dialogues, and possible approaches to follow-up and integration of the outcomes of GST1 were considered, but no substantive progress was made on how the MWP can deliver effective outcomes consistent with its objective. Japan believes that the topics to be addressed in the global dialogue should be those that accelerate the mitigation action of Parties and review global progress on the mitigation outcomes of the GST1 (mainly paragraphs 28 and 33) based on its objective. Also, the topics should be consistent with the scope of MWP stated in paragraph 4 of Decision 4/CMA.4, namely sectors covered in the *2006 IPCC Guidelines for National Greenhouse Gas Inventories of the Intergovernmental Panel on Climate Change* and the thematic areas in the contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change and relevant cross-cutting issues.

The World Meteorological Organization (WMO) has confirmed that 2024 is the warmest year on record at about 1.55 °C above pre-industrial level. The COP 30 in Belém must be the place to send clear and strong messages on how all Parties and actors should accelerate their mitigation actions as effectively as possible in the five years remaining in this critical decade to keep the 1.5 °C goal within reach in light of the 1st NDCs and the next NDCs to be submitted in 2025. Parties should start our discussion immediately at SB62, as decided in paragraph 13 of FCCC/PA/CMA/2024/L.23, so as to deliver an ambitious, substantive, and action-oriented MWP decision at COP 30. Japan is willing to contribute to this discussion to make the MWP outcome more productive in accordance with its objective and mandate.

Proposed Topics

1. Non-CO_2 Gases (based on paragraph 28(f) and 39 of Decision 1/CMA.5)

(1) Reason for the Proposal

- ✓ Despite the relatively high impact of non-CO_2 gases, which account for 26 % of global total GHG emissions as of 2023, NDCs that cover all types of GHGs are limited. In fact, according to the latest NDC Synthesis Report (FCCC/PA/CMA/2024/10), about 10% of Parties do not cover methane in their NDCs, and about 50% of Parties do not include fluorinated gases (F-gases). Consequently, effective measures to capture and reduce non-CO_2 gases have not been taken. Based on this fact, the CMA calls on Parties to contribute to accelerating and substantially reducing non-CO_2 emissions and to cover all GHGs in their next round NDCs as decided in the first GST outcome (paragraph 28(f) and 39 of Decision 1/CMA.5).
- ✓ As for methane, its emissions have increased by 29% in 2019 relative to 1990, with a continuously increasing trend over the period (Figure 2.5 of IPCC AR6 WGIII report). According to the IPCC AR6 WGIII report, methane emissions need to be reduced globally by 34% in 2030 compared to the 2019 level for the pathways limiting global warming to 1.5°C. Also, its rapid reduction would lower the level of peak warming and less reliance on net negative CO_2 emissions to achieve net zero emissions because methane is a short-lived climate pollutant (IPCC AR6 SYR SPM). Because methane is a short-lived climate pollutant, the faster we reduce their emissions, the more we can suppress the global temperature rise.
- ✓ Regarding F-gases, their emissions have continued to surge even during the global COVID-19 pandemic (Emissions Gap Report, 2024 (UNEP)). F-gases are expected to increase further due to the expanding demand for refrigeration and air conditioning equipment.

(2) Possible Subtopics

- ✓ Japan proposes that **(a) methane and (b) F-gases, including hydrofluorocarbons (HFCs),** are possible subtopics because the nature of reduction measures differs from gas to gas.
- ✓ These subtopics related to non-CO_2 gases can be discussed from the IPCC sector perspective, such as the IPPU and waste.

【Reference: Japan's Experience】

- ✓ Japan has reduced its methane emissions by approximately 40% in FY2022 compared with FY1990 by mainly decreasing the emissions from solid waste disposal with reduced amount of biodegradable waste landfilled. Japan has conducted a technology transfer of innovative semi-aerobic landfill structures with fewer methane emissions (called the "Fukuoka method") to the Asia-Pacific region.
- ✓ Japan is promoting the use of biogas, which is produced by recovering methane from livestock manure and sewage sludge. For example, the Basic Plan for the Promotion of Biomass Utilization mentions the promotion of biogas use, and the *Act on the Rationalizing Energy Use and Shifting to Non-fossil Energy* sets targets for biogas use by gas retailers. These measures will not only reduce methane emissions but also contribute to reducing CO_2 emissions from fossil fuels.
- ✓ Japan has been promoting non-fluorocarbons and low-GWP products to gas and equipment manufacturers in accordance with the *Act on Rational Use and Appropriate Management of Fluorocarbons*,. Furthermore,

Japan launched the Initiative on Fluorocarbons Life Cycle Management (IFL) at the COP25 in 2019 to promote fluorocarbon lifecycle management and provide capacity-building support for developing countries.

2. **Demand-side measures** (Based on paragraph 36 of Decision 1/CMA.5, Chapter 5 of IPCC AR6 WGIII report)

(1) Reason for the Proposal

- ✓ The IPCC AR6 WGIII report states that demand-side measures and new ways of end-use service provision can reduce global GHG emissions in end-use sectors (buildings, land transport, and food) by 40–70% by 2050 compared to baseline scenarios (SPM C.10).
- ✓ Despite its huge mitigation potential, the demand side has so far received less focus than the supply side. In order to promote mitigation globally, not only supply-side but also demand-side mitigation strategies and measures, especially on socio-cultural options and behavioral change, need to be enhanced, and all Parties should further strengthen demand-side mitigation actions in order to enhance the transition to sustainable lifestyles and sustainable patterns of consumption and production as stated in paragraph 36 of Decision 1/CMA.5.
- ✓ The IPCC's Special Report on Global Warming of 1.5 °C states that mitigation options in the energy demand sector have more potential for synergies and less for trade-offs with sustainable development goals than those in the supply-side sector. This analysis implies that demand-side measures can provide just and equitable solutions in the context of sustainable development.
- ✓ The past global dialogues focused on "accelerating just energy transition" and "Cities: buildings and urban systems" in 2024, but the demand-side measures have not been fully covered. Demand-side measures need to be encouraged in order to promote and complement the actionable solutions discussed in past global dialogues and to establish sustainable lifestyles among people.

(2) Possible Subtopics

- ✓ IPCC AR6 WGIII Report Chapter 5 states that the demand-side mitigation involves individuals (e.g., consumption choices), culture (e.g., social norms, values), corporate (e.g., investments), institutions (e.g., political agency), and infrastructure change (page 546). Also, it provides a variety of knowledge and insights related to demand-side mitigation, including end-use technologies, services, and relevant policies, which are not covered by the topics that have already been discussed in the 2023 and 2024 global dialogues. Based on that, Japan proposes the following subtopics.
  - **(a) Behavior and lifestyle changes**, which are associated with individual choices of action related to consumption and services, considering different social norms and cultures.
  - **(b) Policy and governance,** which includes policies to strengthen energy-saving activities in the demand sector.
  - **(c) Technology, infrastructure, and services,** which are related to the design and use of supporting hard and soft end-use technologies and infrastructure and services that enable changes in individual choices.

【Reference: Japan's Experience】

- ✓ Japan launched a nationwide action to build a new prosperous lifestyle as a demand-side measure that leads to net zero by encouraging behavioral changes in consumers, including product and service selection. This experience can be shared in the dialogue.
- ✓ Japan promotes the visualization of energy consumption and energy conservation diagnosis to drive the Home Energy Management System (HEMS), the Building and Energy Management System (BEMS), and the eco-tuning, which support optimal operation of consumers in terms of energy use.
- ✓ The Ministry of the Environment is operating the Nudge Unit of Japan BEST (Behavioral Sciences Team) in collaboration with industry, academia, and relevant ministries, which examines new policy approaches to create voluntary lifestyle change by utilizing the knowledge of behavioral science.
- ✓ The Tokyo Metropolitan Government plans to begin a new system in April 2025 regarding the mandatory installation of photovoltaic power generation in new residential buildings and promotes the use of photovoltaic power generation on the demand side.

Reference:

IPCC (2022) Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change

UNEP (2022) Emissions Gap Report 2022

UNFCCC (2024) Nationally determined contributions under the Paris Agreement, Synthesis report by the secretariat (NDC Synthesis Report)

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