

Japan's submission on the work related to Methodological issues under the Paris Agreement on transparency

April 2021

(1) Introduction

Japan welcomes the invitation from the SBSTA Chair to voluntarily submit further views on the common reporting tables for the electronic reporting of the information in the national inventory reports, the structured summary, and the common tabular formats on financial, technology development and transfer and capacity-building support.

The enhanced transparency framework (ETF) under Article 13 of the Paris Agreement is one of the most important key elements in achieving the objectives of the Paris Agreement because the ETF is an indispensable scheme to capture GHG emissions and removals from Parties as well as climate actions implemented by Parties accurately to combat climate emergency.

The SBSTA is requested to develop the common reporting tables (CRTs) for the electronic reporting of the information in the national inventory reports and common tabular formats (CTFs) for the electronic reporting of the information necessary to track progress made in implementing and achieving NDCs under Article 4. Although the formal negotiation sessions were postponed due to the COVID-19 pandemic, these tasks need to be completed at COP 26 as mandated to enable Parties to submit their first BTRs by the end of 2024. COVID-19 have had a negative impact on many aspects. However, the pandemic should not be used as an excuse for delaying our work. Even though face-to-face communication is difficult under the current situation, various virtual events for exchanging views on transparency using online tools have been successfully conducted thanks to the tremendous efforts of various actors, including the secretariat of the UNFCCC, and the mutual understanding of views and positions of each Party and negotiation group has been progressing. Based on the experiences so far, all possible means should be used to advance technical discussions and to develop the draft reporting tables and formats for reaching an agreement at COP 26 in Glasgow.

In the following, Japan presents our views on the development of CRTs and CTFs as well as a way forward to complete the work at COP26.

(2) Views on Common Reporting Tables (CRT) and Common Tabular Format (CTF)

2.1 CRT

(a) General views on common reporting tables (CRTs) for GHG inventories

- In preparing the CRTs for GHG inventories that will be commonly used by all Parties, the CRF tables for annual GHG inventories for Annex I Parties (including Sectoral Background Data Tables) should be the basis so as to maintain the quality of reporting under the current MRV framework, as specified in paragraph 3(f) of the MPGs (Decision 1/CMA.18, Annex).
- The CRTs under Article 13 of the Paris Agreement will allow for Parties to technically report and explain quantitative information on the GHG inventory internationally, but also domestically. It will mainly be prepared by a technical team inside each country and will be improved continuously. It will also contain quantitative information of the national GHG inventory at the time of submission and will not only serve to fulfill reporting obligations under the transparency framework under the

- Paris Agreement, but will also function as a repository of information on the national GHG inventory preparation even when the members of the technical teams change.
- The Sectoral Background Data Tables in the current CRF tables are useful as a tool to collectively record detailed information on the estimation of GHG emissions and removals. When using the 2006 IPCC Guidelines' worksheets or IPCC Inventory Software to estimate emissions and removals, data necessary to fill out the Sectoral Background Data Tables should be already available at hand, and therefore entering this data into the Tables would be relatively easy. It should also be noted that Parties are required to report GHG emissions and removals at the most disaggregated level in accordance with paragraph 47 of the MPGs. Therefore, reporting of data contained in the Sectoral Background Data Tables is essential to meet the requirements in the paragraph 47. Additionally, reporting of information in the Sectoral Background Data Tables is very useful in that they contain the details of the estimation methods for GHG emissions and removals for each emission source and removal sink, and this will be useful in identifying specific capacity-building needs during the technical expert review under the transparency framework. In addition to the cell structure of the tables, the current CRF tables have been useful in providing guidance through the footnotes on how to deal with complicated issues in GHG inventory reporting. Therefore, footnotes should also be utilized in providing supplemental guidance on reporting in the CRTs.
 - When reporting by using the CRTs, firstly, it is important that tables, columns and rows are maintained without deletion, for the purpose of comparability. It would not be desirable to submit with empty cells remaining. All cells should be filled out by using appropriate notation keys. The notation key "NE" (not estimated) would not only indicate the fact that no estimation was made for emission or removal, but it records an issue for future improvement. For instance, in Japan's experience, we used to report "NE" in many cells of the CRF tables due to reasons such as lack of default emission factor, etc. However, we would also list up these "NE" emission sources and removal sinks and prioritize among them, and work to gradually reduce the number over time through literature review and development of country-specific emission factors, etc. Since continuous improvement is an important principle under the transparency framework of the Paris Agreement, it is necessary to clearly keep track of what issues need to be improved in the future, such as emission sources and removal sinks that are currently reported as "NE" and continue to make efforts to improve on them.
 - Even though the use of the 2019 Refinement to the 2006 IPCC Guidelines, adopted at the IPCC49 Plenary held in Kyoto in May 2019, will depend on future negotiation outcomes and are not determined at present, options such as being able to add new categories from the 2019 Refinement as drop-downs in the CRTs, should be provided for Parties who wish to voluntarily apply the 2019 Refinement.
 - Previously, when the CRF tables corresponding to GPG-LULUCF and the 2006 IPCC Guidelines were prepared, the first version was adopted as a temporary version, and after several years of trial use by Parties, they were checked, and problems were identified. After the problems were fixed, then they were finally adopted. This type of step-by-step process utilized in the SBSTA in the past has proven useful, since when inventory compilers actually start using the tables, issues unforeseen are sometimes identified. It would be useful if a similar approach is adopted this time as well.

- The current CRF tables, which should be the basis for the CRTs, have some issues that should be rectified, such as editorial and aggregation errors due to limited time during negotiations of the CRF tables, and issues that call for improvement based on the experience of inventory compilation. Therefore, these issues should be modified in the CRTs, including those specified in the subsection (b) below.
- The CRTs for the AFOLU sector need to be separated into Agriculture and LULUCF tables, following paragraph 50 of the MPGs. The current CRF provides separate tables for Agriculture and LULUCF, but this was somewhat based on considerations for consistency with the reporting under the first commitment period of the Kyoto Protocol that used GPG 2000 and GPG-LULUCF. Regarding the AFOLU sub-category '3.C Aggregated sources and non-CO₂ emission sources on land' in the 2006 IPCC Guidelines, it may be useful to consider re-allocating between Agriculture and LULUCF sectors for GHG emissions from biomass, N₂O emissions from managed soil, GHG emissions from the tillage of organic soil, etc.
- Regarding LULUCF-related reporting, reporting that addresses natural disturbance as stated in paragraph 55 of the MPGs and supplemental reporting of emissions and removals from harvested wood products (HWPs) using the production approach as stated in paragraph 56 of the MPGs are not fully included in the current CRF tables, and therefore this would need to be reflected in the CRTs. As for reporting of emissions and removals from HWPs, it should be possible to choose which approach-based value is used for aggregation for the sector/national totals.
- Japan believes that flexibility for those developing country Parties that need it in the light of their capacities does not affect the structures of the reporting tables. Therefore, approaches to operationalizing the flexibility should not be addressed by the organization and content of tables, but by devising reporting methods such as using new notation key (e.g. FX). The application of flexibility should not undermine the robustness of the transparency framework. If a Party applies the flexibility in the reporting of GHG inventory due to its capacity constraints, it should provide the explanation that the flexibility is applied in the table for completeness of CRTs (Table 9 of current CRF tables).

(b) Specific points that require modification in the CRT, from the current CRF

- **Cross-cutting issues**
- ✓ Table 10s2
The A67-A70 cells that are sums of CO₂ should read CO₂ instead of CO₂ equivalent.
- ✓ Summary 1.As3
The '(IPCC TABLE 7A)' in the title should be removed.
- **Sectoral issues**
- ✓ Table 1C
The AD '1. Transport of CO₂' and '2. Injection and Storage' in B8 and B12 cells are not necessarily the sum of sub-categories (e.g. In the case of 1.C.1.2 Injection and storage, injection would most probably equal storage, therefore there is not a lot of meaning in summing the two), and therefore need to be colored grey instead of orange, similar to that in Table 1.B.2.
- ✓ Table 2(II)B-Hs1, etc.

In the current CRF Reporter, in order to complete Table2(II), all required gases must be manually added to each row in Table2(II)B-Hs1 (e.g. Although no other F-gas than HFC-23 is emitted from HCFC-22 production, we need to add all F-gases to Table2(II)B-Hs1 and fill them out with notation keys) Table2(II)B-Hs1 should pre-display all required gases, or it should be possible to directly enter notation keys to Table2(II) without bypassing Table2(II)B-Hs1, etc.

✓ Table2(II)B-Hs2

For cases such as unspecified mix of HFCs, it should be clarified in Note 2 that the unit in the emissions column is t-CO₂ equivalent.

✓ Table4.1

The Land transition matrix is important data, however, many countries have problems in its preparation. This data may be impossible to provide depending on the approach taken in the 2006 IPCC Guidelines. Therefore, it will be preferable to require it to be provided in the NID instead of in the CRT.

✓ Table 4.A-4.F

Each land-use category reporting table is set up to have the area for mineral soil and organic soil reported at the disaggregated, most detailed land-use category level (e.g. 4.A.1 forest land remaining forest land, 4.A.2.1 cropland converted to forest land, 4.A.2.2 grassland converted to forest land, etc.), but in practice, providing this data for the time-series requires an excessive amount of work. It should also be noted that the default emission factors especially for organic soil do not differ by detailed land-use category, and differentiating organic soil area by the detailed land-use category is not necessary for estimation. Therefore, these reporting columns of soil areas should be deleted or information in these columns should only be required at the level of the basic six broad land-use categories in order to improve usability of the tables for all countries.

✓ Table 4.A

When flux-based approaches such as the simple decay approach or the atmospheric-flow approach are used for HWP estimation, a balance of carbon flows between the atmosphere and forest/HWP carbon pools is achieved by consideration of the three elements: 1) removals by the forest carbon pools, 2) emissions from the forest carbon pools, and 3) emissions from the HWP carbon pool. It may be good to improve reporting by having the balance be completed within the background data categories in order to improve usability of the tables for all countries.

✓ Table 4.D, Table4(II)

These tables were put to use after they were prepared at SBSTA39, and without any trial period after the 2013 IPCC Wetlands Guidelines adoption. These tables need revision based on experience using them. For example, the current CRF Table 4.D has three sub-classifications: e.g. 4.D.1.1 peat extraction, 4.D.1.2 flooded land and 4.D.1.3 other wetlands. It should be noted that although peat extraction and flooded land are clearly defined by the IPCC guidelines, many other types of wetlands, including organic soil wetlands not subject to extraction, mineral soil wetlands which do not meet the definition of flooded land, and coastal wetlands, may be included in 4.D.1.3 other wetlands. It would be better to include more guidance on how to report the area or emissions/removals other than peat extraction and flooded land.

Table4 (I)

The current CRF Table 4(I) is designed for reporting of emissions from fertilization in each land-use category level, excluding those for cropland and grassland (which are covered under in 3.D) However, fertilization to non-cropland categories is not dominant, and in practice, it is difficult to grasp the amount of fertilization on forest land, wetlands, and settlements. It would be better to, for instance, set up a large aggregated reporting category called 'Direct nitrous oxide (N₂O) emissions from nitrogen (N) inputs to managed soils other than cropland and grassland,' and allow for Parties to report detailed sub-categories, if necessary.

✓ Table 4 / Table4(IV) / Summary 2

The LULUCF N₂O sum in the CRF Summary 2 table does not match the actual total of the N₂O emissions reported under 4(I) to 4(V) because 4(IV) table only has total N₂O emissions without sub-categorization of land-use categories. It is necessary to allow for separation of sub-categories by land-use category in Table 4(IV) or add a row for a sectoral total in Summary 2.

✓ Table4.Gs1

For the APPROACH B TOTAL, a direct entering should be allowed, or otherwise there should be given a choice to automatically sum the values entered separately for "HWP produced and consumed domestically" and "HWP produced and exported."

(c) Issues that should be noted pertaining to Agriculture and LULUCF

✓ Biomass burning

Biomass burning in the 2006 IPCC Guidelines includes calculations for biomass burning for all land uses. It is necessary to re-evaluate how to divide between Agriculture and LULUCF, including the handling of prescribed burning of savannahs and field burning of agriculture residues, which are covered under the Agriculture sector at present.

✓ N₂O emissions from soils

Regarding the reporting of mineralization/immobilization associated with loss/gain of soil organic matter, land converted to cropland and all aside from cropland is to be reported in LULUCF, and cropland remaining cropland is to be reported under Agriculture, posing difficulties in the division between Agriculture/LULUCF. This is due to the fact that continuity with the GPG-LULUCF estimation methodology (which only covers land converted to cropland) was prioritized. It may be good to consider sorting out the reporting method such as by attributing cropland and grassland to Agriculture, or by attributing all these emissions to LULUCF.

Regarding cultivation of organic soil, for the same activity of drainage and cultivation of peat soil, N₂O emissions are reported under Agriculture whereas CO₂ (and CH₄) emissions are reported under LULUCF. It may be good to consider sorting out the reporting method such as by attributing all emissions to LULUCF.

Regarding the above N₂O emissions from mineralization and cultivation of organic soil, Tier 1 and 2 methods in chapter 11 of the 2006 IPCC Guidelines call for individual calculation of activity data for N sources, and therefore makes it easy for separation with emission calculation of fertilization, etc. On the other hand, if it were allowed to take an approach to calculate the whole of cropland N₂O emissions by using a model, it would be better to technically consider whether or not any problems arise from the above point of separation.

- ✓ N₂O from aquaculture
It will be necessary to determine where N₂O from aquaculture (methodology provided in the Wetlands Supplement) should be reported under.
- ✓ HWP
When flux-based approaches such as the simple decay approach or the atmospheric-flow approach are used for HWP estimation, a balance of carbon flows between the atmosphere and forest/HWP carbon pools is achieved by consideration of the three elements: 1) removals by the forest carbon pools, 2) emissions from the forest carbon pools, and 3) emissions from the HWP carbon pool. It may be good to improve reporting by having the balance be completed within the background data table, by adding a HWP pool column, like the current KP-LULUCF CRF table.

2.2 CTF

(d) The structured summary, including examples to demonstrate how the proposed format could encompass different types of indicators (both quantitative and qualitative) and facilitate tracking of progress

- In the structured summary, all Parties should report the progress towards the implementation and achievement of their NDCs under Article 4 as transparently as possible. The structured summary for tracking progress made in implementing and achieving NDCs should be a common table for all Parties and should accommodate all types of NDCs under Article 4. Reporting in a tabular format is excellent because it encourages the structured, transparent, and comparative reporting of qualitative as well as quantitative information. A common table that covers both quantitative and qualitative information should be designed as a structured summary. In addition, reporting in narratives in the BTR complements reporting in tables and helps to increase the transparency of reporting. Information on the progress of implementation and achievement of NDCs should never be reported in a table alone.
- The reporting in a common structured summary table has the efficacy of leading the compliers of the BTR reporting to work more efficiently because a structured table makes it clear what needs to be reported. A clear and understandable common table is helpful to address concerns such as lack of reporting experience and capacities in developing country Parties.
- Whether a reporting item in the structured summary is reportable according to its type of NDC does not affect the design of the table. If a certain reporting item in the structured summary is inapplicable according to the type of NDC, it can be reported using the notation key “NA” (Not applicable).
- The structural summary should include information on all reporting items specified in paragraph 77 of the MPGs. The reporting items specified in paragraph 77 refer to the relevant information on each selected indicator, GHG emissions and removals consistent with the coverage of its NDC under Article 4, contribution from the LULUCF sector, and the relevant information on cooperative approaches.
- Regarding the reporting of information on contribution from LULUCF sector, only the total number of contributions from LULUCF sector is supposed to be reported in the structured summary. However, disaggregated information by each element (category and activity) for the cases where reference points and baselines are set in each category or activity level may be necessary to ensure

transparency. Therefore, an additional standardized table for the reporting of contributions from LULUCF sector to complement the structured summary could be considered after COP26 as an extra mandate given to the SBSTA a Party that would like to report more disaggregated information on contributions from LULUCF sector voluntarily.

- Information on cooperative approaches in the structured summary should include the reporting of the information prescribed in paragraph 77(d) of the MPG. The guidance to be developed for Article 6 is not intended to replace the reporting requirements set out in paragraph 77(d) of the MPGs but is complementary to provide a methodology for their calculation. Therefore, the outcome of the Article 6 guidance will not affect the design of the structural summary.
- In case Parties may need more disaggregated information or tables to ensure transparency of the reporting of information on cooperative approaches, they should be considered and developed under the SBSTA agenda item of “Matters relating to Article 6 of the Paris Agreement”, if necessary. The outcome of its consideration should be incorporated into the CTF after its adoption.

(e) **The common tabular formats on financial, technology development and transfer and capacity building support, including examples and options for the summary tables, the structure and content of the tables, and how to improve comparability and ensure consistency across specific tables.**

- Japan believes that the draft informal note prepared by co-facilitators at COP25 should be the basis for further negotiation at the upcoming SB52. We also welcome the deepened discussion at the Climate Dialogue hosted by UNFCCC last November.
- In order to ensure consistency between the format on ‘financial support provided and mobilized’ and ‘financial support received and needed’, standardized lists of options will be useful. Furthermore, the definition of each option listed should be specified clearly in form of guideline or such, apart from the tables. On the other hand, footnotes and documentation box are also needed to ensure the flexibility in reporting operation by the Parties. These columns should be easy to be recognized.
- Avoiding double counting of inflow and outflow in relation to the multilateral assistance by the Parties, there is the need to have column indicating inflow or outflow or check box that indicates whether inflow or outflow.

(3) **Way forward**

- Taking into account the mandate given to the SBSTA and the time remaining until COP 26, it is necessary to quickly move to technical and specific discussions from conceptual discussions in order to design concrete reporting tables as many Parties have already stressed at the previous informal consultations by the SBSTA Chair held in January 2021. Technical and specific discussions on the actual design of reporting tables cannot be done without draft tables. Concrete ideas on the design of reporting tables have already been presented through previous negotiation sessions and related events, as well as through submissions from Parties. It is desirable to document them on an informal paper and use it as input for future negotiations.
- Based on the past experience in developing CRFs for GHG inventories and CTFs for BRs, the design

of the tables will take time and will not be completed by discussions only during formal sessions of SBs and COP26. The contents and items to be reported in the reporting tables have been already agreed in the MPGs adopted at COP24, and the remaining work is how to place those reporting items in the tables. However, it should be kept in mind that the specific design of the table and the arrangement of the items in the table will determine the workload of compilers in charge in each country in preparing the reporting tables, and the transparency and understandability of the information reported in the tables. Therefore, it is necessary to ensure that enough time is spent for detailed discussion and refinement of the tables through workshops or other means, by ensuring progress with documenting concrete ideas presented.

- Regarding the common reporting table for GHG inventories, it should be noted that some countries may aim to submit their first GHG inventories under the Paris Agreement in April 2023 in order to report GHG emissions and removals for the year 2021 which is the first year of the 1st NDC implementation period in line with their current GHG inventory reporting cycles, prior to the deadline for the first BTR, which is the end of 2024. In that case, given the time required to develop electronic reporting software for the preparation and reporting of CRTs, this year's COP26 will be the last chance to adopt those. For this purpose, it is desirable to hold at least two technical workshops focusing on the development of CRTs by COP26. Japan recognizes that in many relevant forums, including the Climate Dialogues held last year, many Parties proposed that CRTs should be developed based on the current CRFs for Annex I Parties. Therefore, Japan would like to suggest that the SBSTA Chair or the secretariat to prepare draft CRTs ahead of the technical workshops mentioned above, by reflecting the reporting requirements of the MPG in the existing CRFs for Annex I Parties. Also, in order to efficiently conduct detailed technical considerations for developing CRTs in various sectors of GHG inventories, Japan proposes holding technical discussions divided into (1) energy, IPPU, and waste, and (2) AFOLU (agriculture and LULUCF).
- With regard to the structured summary to track the progress of NDCs, Japan understands that there are differences of views among Parties, particularly with regard to the format of the structural summary such as table(s), narrative, graph. etc., but it is clear that the SBSTA is requested to develop common tabular formats in para.12 of Decision 18/CMA.1. It should be kept in mind that many NDCs have quantitative information and that many Parties need common tabular formats to report the progress of their NDCs in a transparent manner. Since specific proposals of structural summary have been made by Parties, Japan would like to request the SBSTA Chair or the secretariat to prepare an informal paper organizing these proposals, and to conduct technical discussions based on the paper.
- As many countries, including Japan, set the 2050 net-zero target consistent with the long-term goal of the Paris Agreement and accelerate their efforts to tackle climate emergency, Japan would like to stress again that it is necessary to establish a robust transparency framework that accurately track the progress of climate actions. Japan hope that more space for further technical discussions will be provided as soon as possible.

Annex: Specific proposals on the structured summary
(Excel format)