April 2021

SUBMISSION OF THE ENVIRONMENTAL INTEGRITY GROUP (EIG) ON METHODOLOGICAL ISSUES UNDER THE PARIS AGREEMENT

The EIG appreciates the opportunity to share its views on methodologies issues on Article 13 of Paris Agreement with a view to the successful implementation of the Enhanced Transparency Framework and to prepare for the informal technical discussions on:

- The common reporting tables for the electronic reporting of the information in the national inventory reports, including examples and options for the formats and contents of tables, in particular sectoral report and background tables, and options for implementation of the flexibility provisions;

- 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;

- 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.

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I. Introduction

The EIG encourages Parties to move forward in the discussion on pending issues of the Enhanced Transparency Framework in order to prepare for a successful outcome at COP26. Therefore the group proposes to move away from abstract discussions to work on concrete examples of inventory tables, tracking progress tables, and support tables to help visualize different options to reflect MPGs provisions.

The EIG expresses its readiness to engage in virtual work in order to advance the work on pending issues, including by holding technical workshops based on draft examples of inventory tables, tracking progress tables, and support tables, and how they can reflect provisions included in the MPGs.

On inventory tables, the EIG is of the view that one single set of common reporting formats, based on the existing common reporting formats (CRF), currently utilized by Annex I Parties under the Convention, can be developed to be applicable to all Parties. The EIG provides some suggestions of tables for the consideration of Parties.

The EIG recognizes that operationalizing the flexibility provisions as defined in the MPGs is needed in order to reflect the provisions related to the use of flexibility (i.e. flexibility to the scope, frequency and level of detail of reporting). The EIG provides some suggestions of how to operationalize flexibility provisions.

On tracking progress tables, the EIG considers that it is possible to account for the diversity of NDCs through one single set of common tables and that working on one common structured summary will allow Parties to track the implementation and achievement of NDCs over time. The EIG is pleased to share options for the structured summary tables, as well as worked examples for the consideration of the Parties.

Finally, the EIG also stresses the importance of achieving balance in our progress on Transparency of Action and Transparency of Support.

On support tables, The EIG believes that the development of the CTF should be guided as closely as possible by the MPGs, while the translation of the MPGs into the CTF may also require some degree of pragmatism. The EIG is pleased to share proposals regarding the remaining most crucial open issues on the CTFs for Means of Implementation.

Submission of the Environmental Integrity Group (EIG) on the common reporting tables for the electronic reporting of the information in the national inventory reports, including examples and options for the formats and contents of tables, in particular sectoral report and background tables, and options for implementation of the flexibility provisions

I. Introduction

The EIG is of the view that one single set of tables, applicable to all Parties ("common reporting tables"), should be developed in order to facilitate improved reporting and transparency over time.

The EIG considers the common reporting format (CRF) tables the most appropriate basis to build on experience gained. There is extensive experience with inventory reporting tables (i.a., the common reporting format, as contained in annex II to decision 24/CP.19). For these tables, an IT solution for electronic reporting is also implemented and functioning. Moreover, the CRF tables follow the same sectoral structure as is defined in the MPGs[1]. Thus, using these tables as a basis for the reporting of inventory information under the new transparency framework is the most efficient way to proceed. Nevertheless, some amendments to existing tables would be necessary to fully accommodate the provisions of chapter II of the new MPGs (e.g., relating to the use of flexibility).

Independently of their suitability and their proven usability, some amendments to the existing CRF tables are necessary, building on Parties' reporting experience, so as to facilitate usability by all Parties, including by those developing countries who will use the tables for the first time. The EIG is pleased to submit examples and options for the format and contents of the tables, along with a number of recommendations for improvements, under Section II of this document.

The EIG is also pleased to submit a number of recommendations with regard to the implementation of the flexibility provisions, under section III below, as well as a few suggestions on how to reduce the reporting burden.

In developing the common reporting tables (CRT) for the electronic reporting of the information in the national inventory reports, the EIG is guided by the principles inscribed in the modalities, procedures, and guidelines established under Decision 18/CMA.1[2].

II. Suggestions for possible improvements to the common reporting tables

The EIG is pleased to submit examples and options for the formats and contents for the Energy, Waste, IPPU, Agriculture, and LULUCF sectoral report tables, in annex to this document.

As a complement to these suggestions, additional comments are provided below.

[1] See Annex to Dec.18/CMA.1, paragraph 50: "Each Party shall report the following sectors: energy, industrial processes and product use, agriculture, LULUCF and waste"

[2] a) Building on and enhancing the transparency arrangements under the Convention, recognizing the special circumstances of the least developed countries (LDCs) and small island developing States (SIDS), and implementing the transparency framework in a facilitative, non-intrusive, non-punitive manner and respecting national sovereignty. and avoiding placing undue burden on Parties; b) The importance of facilitating improved reporting and transparency over time; c) Providing flexibility to those developing country Parties that need it in the light of their capacities; d) Promoting transparency, accuracy, completeness, consistency and comparability; e) Avoiding duplication of work and undue burden on Parties and the secretariat; f) Ensuring that Parties maintain at least the frequency and quality of reporting in accordance with their respective obligations under the Convention; g) Ensuring that double counting is avoided; h) Ensuring environmental integrity.

1. Energy
   - A column is added in the summary tables for aggregated GHG emission (in CO_2 eq). The aggregate number is automatically generated and would not impose additional burden on Parties.
   - The subsectors have been reviewed and updated.
   - The reporting of CO_2 captured is made more transparent by allowing the reporting of negative numbers in a dedicated column for CO_2 captured.
   - Clarifications have been brought to footnotes throughout the sectoral tables.
   - In order to improve transparency, it would be desirable if Table1.A(a)s3 could show separately for each category 1A3bi-iii the "Fuel tourism and statistical difference", which results from the difference between the amount of fuel sold and the one from the fuel used approach. Negative values should also be allowed. Currently, in order to avoid negative values, Parties have to find a separate solution to calculate each fuel type.

2. Industrial processes and product use
   - In the IPPU sectoral background tables 2(II)B-H, only those gases should have to be chosen from a drop down list, for which AD and emissions are reported. The sectoral report table 2(II) should automatically mark NO in those cells where no sectoral background data has been entered.
   - A column is added in the sectoral summary tables for aggregated GHG emission in CO_2 eq.
   - Clarifications are made for reporting of CO_2 capture and storage.
   - Additional subcategories are added where needed, such as for hydrogen production and rare earth metal production. The latest IPCC guidance provides methodologies for both the suggested new categories.
   - The outline of the background tables related to reporting of recovered emissions is made consistent with the energy sector.
   - On Table 3.B (a): More excreta management systems are included in the proposed tables. However, in the case of Mexico, there are particular conditions in excreta management systems, which is concatenated, meaning that there is more than one type of waste management system within the livestock production units that have implications in the estimation of emissions. Therefore, this is one area where support could be required to systematize the information provided by Parties.

3. Agriculture
   - To report according to the MPGs, data on agriculture and LULUCF need to be reported separately to apply the key category and the insignificance thresholds (paragraphs 25 and 32 of the MPGs, respectively).
   - A column is added in the sectoral summary tables for aggregated GHG emission in CO_2 eq.
   - Additional manure management systems are added.
   - Space is added to allow for reporting on N_2O emissions from rice production.
   - The definition of Frac(GASM) has been updated to be consistent with the 2006 IPCC Guidelines.
   - In addition to the changes proposed in the annexed tables, the following improvements could be made to existing CRF tables :
   - For the majority of the Agriculture sectoral tables: only one option could be used for the reporting of cattle with three predefined subcategories (dairy cattle, mature non-dairy cattle, growing cattle) and a drop-down list for other.
   - Table 3.A: the row for “Gross energy” can be deleted (right table) since this is already included in the left table.
   - Table 3.B(b): Include also N_2 in column “Q” “Total N volatilised as NH_3, NO_X and N_2”.
   - Table 3.C: if N_2O emissions from fertilizer application to rice is included in this table there should also be a column for AD. Furthermore, demarcation from reporting in Table 3.D should be clarified. This concerns particularly reporting of indirect emissions from volatilization and leaching of nitrogen. As this might be rather difficult, it would be a better idea to report all N_2O emissions from fertilization in Table 3.D.

- Table 3.D: $Frac_{GASM}$ into $Frac_{GASM}$ and $Frac_{GASPRP}$ should be split. Usually, there is a large difference in the NH_3 volatilization from applied organic nitrogen and from urine and dung deposited during grazing.
- Table 3.D Footnote 4: Grassland should also be included in the footnote.

Whilst the current state of the reporting format (including suggested changes) are detailed, we note that in most cases the same value can be used in different cells when no detailed data is available (e.g. for $Frac_{GASM}$, $Frac_{GASPRP}$).

5. LULUCF
   - To report according to the MPGs, data on agriculture and LULUCF need to be reported separately to apply the key category and the insignificance thresholds (paragraphs 25 and 32 of the MPGs, respectively). Several paragraphs of the MPGs refer to the LULUCF sector and/or related data (see paragraphs 47, 77, 81, 82 and 100), which recommends the use of tables in line with the structure already contained in the CRF tables.
   - In general the consistency and demarcation of the reporting in the agriculture and LULUCF sector should be better defined (e.g. in the footnotes). Default assumptions should be clarified (e.g. whether grassland is considered agricultural land, cultivated land or not). This concerns among others the reporting of emissions from organic soils, N_2O emissions from mineralization/immobilization of SOM, emissions from fertilization and emissions from liming.
   - In the past, Parties to the Kyoto Protocol have routinely provided additional information that is not part of the CRF but is based on IPCC Good Practice Guidance for the LULUCF sector. As this information would serve reporting in line with the guiding principles of the Paris Agreement, Parties may consider integrating additional tables (e.g. on areas subject to natural disturbances, on forest management reference levels, or on changes in carbon pools).
   - Table4(I): The current CRF Table 4(I) is designed for reporting of emissions from fertilization at each land-use category level, excluding those for cropland and grassland (which are covered in Table 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. In any case, as the N_2O emissions from application of fertilizers to other land than cropland and grassland are reported in the LULUCF-sector it should be ensured, that these emissions are accounted for. The fact that these N_2O emissions are now partially reported under LULUCF may be in conflict with the principle of transparent reporting.
   - In the sectoral summary tables, a column is added for aggregated net GHG emissions/removals (in CO_2 eq).
   - A column is added for SO_2 in the sectoral summary table.
   - Additional details are added to the background tables for CH_4 and N_2O emissions to improve the compilation of data in the sectoral summary.
   - Clarifications have been brought to footnotes throughout the sectoral tables.
   - Columns are added to allow reporting of both direct and indirect N_2O in the same background tables.
   - Improvements are made to the background tables for harvested wood products.
   - Finally, in Tables 4A to F: The net carbon contents by type of transition are included. These changes increase the level of transparency. Nonetheless, in the case of Mexico, this is one area where support could be needed to integrate this information in the first Biennial Transparency Report.

6. Waste
   - Table5A: options are added for better categorisation of waste disposed at landfills. This distinction can be made on the basis of the IPCC calculation template for landfills. However, if options are

identified that are not addressed by the current calculation template, the calculation template would have to be adapted accordingly.
- A column is added in the sectoral summary tables for aggregated GHG emission (in CO_2 eq).

7. Comments applicable to all sectoral tables
   - The EIG submits several suggestions regarding the reporting of CO_2 captured in the energy and IPPU sectoral tables. The EIG further suggests that the information regarding CO_2 captured be included in the sectoral and general summary tables as memo items.
   - It should be possible to enter data at subcategories level, if data is not available at a more disaggregated level. This should apply to all categories where it is possible to report subcategories.

III. Options for the implementation of flexibility provisions

In accordance with Article 13, paragraph 2, of the Paris Agreement, the enhanced transparency framework shall provide flexibility in the implementation of the provisions of Article 13 to those developing country Parties that need it in the light of their capacities. According to Decision 18/CMA.1, flexibility for those developing country Parties that need it in the light of their capacities is reflected in the modalities, procedures and guidelines for the transparency of action and support. To fully conform with the Annex to Decision 18/CMA.1, the CRT under the Paris Agreement should reflect the provisions related to the use of such flexibility.

In general, the application of flexibility as well as existing capacity constraints must be declared transparently. Use of flexibility can be adequately reflected within the tables.

There are six flexibility provisions[3] in regard to the national inventory report. The EIG suggests that four flexibility provisions should be applied by using notation keys and footnotes in the existing tables while the remaining two provisions can be addressed separately in the national inventory document (NID), as outlined in the table below. Notation keys are particularly helpful for the review process, because they allow for all tables to be fully completed. Flexibility could hence be operationalized by introducing a new notation key. The notation key used for flexibility should be different from existing notation keys in order to make it transparent where flexibility is used and where other reasons are responsible for providing a notation key instead of a numerical value. However, the EIG is of the view that Parties should make the best attempt first to provide information in the CRT and not overuse notation keys if they are able to provide information in light of their capacities.

In Annex II, this submission gives illustrative examples for the operationalization of flexibility in the current CRF tables 7 (Summary Overview for Key Categories), 9 (Completeness – Information on Notation Keys), Summary 2 (Summary Report for CO2 Equivalent Emissions) and 10 (Emission Trends), respectively. In these sample tables, the proposed use of footnote marks, notation keys and other elements to reference flexibility is highlighted in yellow.

Those developing country Parties that apply the flexibility provisions need to endeavour to improve their reporting and provide self-determined estimated time frames for such improvements (paragraph 6 of the MPGs), in accordance with the principle of facilitating improved reporting and transparency over time.

[3] Key category analysis (para. 25), uncertainty assessment (para. 29), assessment of completeness (para. 32), quality assurance/quality control (para. 34-35), covered gases (para. 48), time series (para. 57-58)

Provision	Scope	Approach
Key category analysis (para. 25)	threshold no lower than 85% instead of 95%	**footnote** to the name of the table; **additional cell** for the threshold applied
Uncertainty assessment (para. 29)	at a minimum, a qualitative discussion of uncertainty for key categories, instead of a quantitative estimation and a qualitative discussion	addressed separately in the NID (e.g. narrative, etc.)
Assessment of completeness (para. 32)	use "NE" when the level of emissions is below 0.1% of the national total GHG emissions (excl. LULUCF) or 1,000 kt CO_2eq, whichever is lower, instead of 0.05% or 500 kt CO_2eq	**footnote** to the name of the table; **notation key** in the explanation cell
Quality assurance/ quality control (para. 34-35)	- "encouraged to elaborate an inventory QA/QC plan" instead of "shall" - "encouraged to implement and provide information on QC procedures" instead of "shall"	addressed separately in the NID (e.g. narrative, etc.)
Covered gases (para. 48)	at least 3 gases (CO_2, CH_4, N_2O) and any of the additional 4 gases (+ HFCs, PFCs, SF_6, NF_3) that are included in the Party's NDC under Article 4 of the Paris Agreement, are covered by an activity under Article 6, or have been previously reported vs. 7 gases	**footnote** to the name of the table; **notation key** to the relevant cells
Time series (para. 57-58)	- (time series information) a consistent annual time series from at least 2020 onwards plus the NDC reference year/period data instead of data from 1990 onwards - (the latest reporting year) no more than 3 years prior to the submission of the NIR instead of 2 years	**footnote** to the name of the table

Proposals for the implementation of flexibility provisions in the Common Reporting Formats for GHG Inventory Tables

1) Key category analysis (MPGs, para. 25)

TABLE 7 SUMMARY OVERVIEW FOR KEY CATEGORIES [1][2]
(Sheet 1 of 1)
Key category identification threshold applied: **85** **per cent**

Year
Submission
Country

KEY CATEGORIES OF EMISSIONS AND REMOVALS	Gas	Criteria used for key source identification		Key category excluding LULUCF	Key category including LULUCF
		L	T		
For example: 3 *.B Manure management*	CH_4	*X*		*X*	

Note: L = Level assessment; T = Trend assessment.

[1] This table is filled automatically based on the IPCC Tier 1 methodology.

[2] Table content subject to the flexibility provision pursuant to paragraph 25 of the MPGs: « Each Party shall identify key categories for the starting year and the latest reporting year referred to in chapter II.E.3, including and excluding land use, land-use change and forestry (LULUCF) categories, using approach 1, for both level and trend assessment, by implementing a key category analysis consistent with the IPCC guidelines referred to in paragraph 20; those developing country Parties that need flexibility in the light of their capacities with respect to this provision have the flexibility to instead identify key categories using a threshold no lower than 85 per cent in place of the 95 per cent threshold defined in the IPCC guidelines referred to in paragraph 20, allowing a focus on improving fewer categories and prioritizing resources.»

2) Assessment of completeness (MPGs, para. 32)

TABLE 9 COMPLETENESS - INFORMATION ON NOTATION KEYS[1]
(Sheet 1 of 1)

Year
Submission
Country

Sources and sinks not estimated ("NE")[2]			
GHG	**Sector**[3]	**Source/sink category**[3]	**Explanation**
CO_2	***For example (developing country Parties):*** *Industrial Processes and Product Use*	*2.A Mineral Industry/2.A.4 Other Process Uses of Carbonates/2.A.4.c Non-metallurgical Magnesium Production*	*Insignificant (FLEX): detailed explanation for not reporting these sources and sinks, or reference to section/chapter in NID, where further explanation can be found*
CH_4			
N_2O			
HFCs			
PFCs			
SF_6			
Unspecified mix of HFCs and			
NF_3			

Sources and sinks reported elsewhere ("IE")[4]				
GHG	**Source/sink category**	**Allocation as per IPCC Guidelines**	**Allocation used by the Party**	**Explanation**
CO_2				
CH_4				
N_2O				
HFCs				
PFCs				
SF_6				
Unspecified mix of HFCs and				
NF_3				

[1] Table content subject to the flexibility provision pursuant to paragraph 32 of the MPGs: «Each Party may use the notation key "NE" (not estimated) when the estimates would be insignificant in terms of level according to the following considerations: emissions from a category should only be considered insignificant if the likely level of emissions is below 0.05 per cent of the national total GHG emissions, excluding LULUCF, or 500 kilotonnes of carbon dioxide equivalent (kt CO_2 eq), whichever is lower. The total national aggregate of estimated emissions for all gases from categories considered insignificant shall remain below 0.1 per cent of the national total GHG emissions, excluding LULUCF. Parties should use approximated activity data and default IPCC emission factors to derive a likely level of emissions for the respective category. Those developing country Parties that need flexibility in the light of their capacities with respect to this provision have the flexibility to instead consider emissions insignificant if the likely level of emissions is below 0.1 per cent of the national total GHG emissions, excluding LULUCF, or 1,000 kt CO_2 eq, whichever is lower. The total national aggregate of estimated emissions for all gases from categories considered insignificant, in this case, shall remain below 0.2 per cent of the national total GHG emissions, excluding LULUCF.»
In line with paragraph 6 of the MPGs, developing country Parties shall clearly indicate the table cells to which this kind of flexibility is applied by use of the notation key "FLEX".

[2] Clearly indicate sources and sinks which are considered in the 2006 IPCC Guidelines but are not considered in the submitted inventory. Explain the reason for not reporting these sources and sinks, in order to avoid arbitrary interpretations. An entry should be made for each source/sink category for which the notation key "NE" (not estimated) is entered in the sectoral tables.

[3] Indicate omitted source/sink category.

[4] Clearly indicate sources and sinks in the submitted inventory that are allocated to a sector other than that indicated by the 2006 IPCC Guidelines. Show the sector indicated in the 2006 IPCC Guidelines and the sector to which the source or sink is allocated in the submitted inventory. Explain the reason for reporting these sources and sinks in a different sector/category. An entry should be made for each source/sink for which the notation key "IE" (included elsewhere) is used in the sectoral tables.

3) Covered gases (MPGs, para. 48)

SUMMARY 2 SUMMARY REPORT FOR CO_2 EQUIVALENT EMISSIONS[1]

(Sheet 1 of 1)

Year
Submission
Country

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO_2[2]	CH_4	N_2O	HFCs	PFCs	SF_6	Unspecified mix of HFCs and PFCs	NF_3	Total
	CO_2 equivalent (kt)								
Total (net emissions)[2]									
1. Energy									
A. Fuel combustion (sectoral approach)									
1. Energy industries									
2. Manufacturing industries and construction									
3. Transport									
4. Other sectors									
5. Other									
B. Fugitive emissions from fuels									
1. Solid fuels									
2. Oil and natural gas and other emissions from energy production									
C. CO_2 transport and storage									
2. Industrial processes and product use				FLEX	FLEX	FLEX	FLEX	FLEX	
A. Mineral industry									
B. Chemical industry				FLEX	FLEX	FLEX	FLEX	FLEX	
C. Metal industry				FLEX	FLEX	FLEX	FLEX	FLEX	
D. Non-energy products from fuels and solvent use									
E. Electronic Industry				FLEX	FLEX	FLEX	FLEX	FLEX	
F. Product uses as ODS substitutes				FLEX	FLEX	FLEX	FLEX	FLEX	
G. Other product manufacture and use				FLEX	FLEX	FLEX	FLEX	FLEX	
H. Other				FLEX	FLEX	FLEX	FLEX	FLEX	
3. Agriculture									
A. Enteric fermentation									
B. Manure management									
C. Rice cultivation									
D. Agricultural soils									
E. Prescribed burning of savannahs									
F. Field burning of agricultural residues									
G. Liming									
H. Urea application									
I. Other carbon-containing fertilizers									
J. Other									
4. Land use, land-use change and forestry[2]									
A. Forest land									
B. Cropland									
C. Grassland									
D. Wetlands									
E. Settlements									
F. Other land									
G. Harvested wood products									
H. Other									
5. Waste									
A. Solid waste disposal									
B. Biological treatment of solid waste									
C. Incineration and open burning of waste									
D. Waste water treatment and discharge									
E. Other									
6. Other *(as specified in summary 1.A)*				FLEX	FLEX	FLEX	FLEX	FLEX	
				FLEX	FLEX	FLEX	FLEX	FLEX	
Memo items:[3]									
International bunkers									
Aviation									
Navigation									
Multilateral operations									
CO_2 emissions from biomass									
CO_2 captured									
Long-term storage of C in waste disposal sites									
Indirect N_2O									
Indirect CO_2[4]									

Total CO_2 equivalent emissions without land use, land-use change and forestry	
Total CO_2 equivalent emissions with land use, land-use change and forestry	
Total CO_2 equivalent emissions, including indirect CO_2, without land use, land-use change and forestry	
Total CO_2 equivalent emissions, including indirect CO_2, with land use, land-use change and forestry	

[1] Table content subject to the flexibility provision pursuant to paragraph 48 of the MPGs: «Each Party shall report seven gases (CO_2, methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6) and nitrogen trifluoride (NF_3)); those developing country Parties that need flexibility in the light of their capacities with respect to this provision have the flexibility to instead report at least three gases (CO_2, CH_4 and N_2O) as well as any of the additional four gases (HFCs, PFCs, SF_6 and NF_3) that are included in the Party's NDC under Article 4 of the Paris Agreement, are covered by an activity under Article 6 of the Paris Agreement, or have been previously reported.»
In line with paragraph 6 of the MPGs, developing country Parties shall clearly indicate the table cells to which this kind of flexibility is applied by use of the notation key "FLEX".

[2] For carbon dioxide (CO_2) from land use, land-use change and forestry the net emissions/removals are to be reported. For the purposes of reporting, the signs for removals are always negative (-) and for emissions positive (+).

[3] See footnote 7 to table Summary 1.A.

[4] In accordance with the UNFCCC Annex I inventory reporting guidelines, for Parties that decide to report indirect CO_2, the national totals shall be provided with and without indirect CO_2.

4) Time series (MPGs, para. 57-58)

TABLE 10 EMISSION TRENDS[1]
GHG CO_2 eq emissions
(Sheet 1 of 6)

Year
Submission
Country

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Base year[2]/ NDC reference year/period	Starting year (X)	X+1	X+2	...	Latest reporting year	Change from base to latest reported year
	(kt CO_2 eq)						%
Total (net emissions)[3]							
1. Energy							
A. Fuel combustion (sectoral approach)							
1. Energy industries							
2. Manufacturing industries and construction							
3. Transport							
4. Other sectors							
5. Other							
B. Fugitive emissions from fuels							
1. Solid fuels							
2. Oil and natural gas and ther emissions from energy production							
C. CO_2 transport and storage							
2. Industrial Processes							
A. Mineral industry							
B. Chemical industry							
C. Metal industry							
D. Non-energy products from fuels and solvent use							
E. Electronic industry							
F. Product uses as ODS substitutes							
G. Other product manufacture and use							
H. Other							
3. Agriculture							
A. Enteric fermentation							
B. Manure management							
C. Rice cultivation							
D. Agricultural soils							
E. Prescribed burning of savannahs							
F. Field burning of agricultural residues							
G. Liming							
H. Urea application							
I. Other carbon-containing fertilizers							
J. Other							
4. Land use, land-use change and forestry[3]							
A. Forest land							
B. Cropland							
C. Grassland							
D. Wetlands							
E. Settlements							
F. Other land							
G. Harvested wood products							
H. Other							
5. Waste							
A. Solid waste disposal							
B. Biological treatment of solid waste							
C. Incineration and open burning of waste							
D. Waste water treatment and discharge							
E. Other							
6. Other *(as specified in summary 1.A)*							
Memo items:							
International bunkers							
Aviation							
Navigation							
Multilateral operations							
CO_2 emissions from biomass							
CO_2 captured							
Long-term storage of C in waste disposal sites							
Indirect N_2O							
Indirect CO_2[4]							
Total CO_2 equivalent emissions without land use, land-use change and forestry							
Total CO_2 equivalent emissions with land use, land-use change and forestry							
Total CO_2 equivalent emissions, including indirect CO2, without land use, land-use change and forestry							
Total CO_2 equivalent emissions, including indirect CO2, with land use, land-use change and forestry							

[1] Table content subject to the flexibility provision pursuant to paragraphs 57 and 58 of the MPGs: «Each Party shall report a consistent annual time series starting from 1990; those developing country Parties that need flexibility in the light of their capacities with respect to this provision have the flexibility to instead report data covering, at a minimum, the reference year/period for its NDC under Article 4 of the Paris Agreement and, in addition, a consistent annual time series from at least 2020 onwards.» «For each Party, the latest reporting year shall be no more than two years prior to the submission of its national inventory report; those developing country Parties that need flexibility in the light of their capacities with respect to this provision have the flexibility to instead have their latest reporting year as three years prior to the submission of their national inventory report.»

Note: All the other footnotes for this table are given at the end of the table on sheet 6.

IV. Suggestions of possible improvements with regard to the electronic reporting software (provided for reference only, as outside the scope of the negotiation mandate)

The EIG underscores the importance of adequate and functioning software that includes the possibility of direct import of data. The software also requires a high level of performance so that countries can process their data simultaneously.

The CRF Reporter Tool itself has now been in use for several years and various improvements have been implemented, making it a valuable instrument for producing high quality inventories. Further improvements may be envisaged as more Parties are using the tool.

In the short term, it is of particular importance to bring the performance of the software in line with an increasing number of Parties. Past experience has shown that there are bottlenecks that urgently need to be overcome.

In the medium term, software improvements should be envisaged to further enhance the usability of the tool. Practitioners' experiences indicate that adding basic feedback functionalities (e.g. plausibility checks) could help inventory compilers to identify simple mistakes. Simplifying the use of units (e.g. by eliminating, to the extent possible, different units of weight such as t, kt or Gg) would be another option to reduce the risk of input errors. Table cells filled in beforehand with pertinent default information may be another approach worth considering to facilitate reporting by Parties. A survey amongst experienced practitioners could unearth additional ideas to improve the usefulness of the software while reducing the burden on Parties.

Further possible improvements to the existing CRF Reporter software could include:

- Improving the performance of file/data import and export. This is especially pertinent when more countries are involved, as there are long queues and unreliable information on pending upload/download times.
- Improving the performance of navigation within the web application.
- Expanding possibilities for assigning roles to users.
- Improving the software performance, to enhance usability of the available Data Checks. Currently, software performance impacts their usability. (As a concrete example: if all the nodes are orange in the completeness check, even if the dataset is complete, the user has to click on every single node through the whole data entry tree to confirm that there is no missing data.).
- Improving the readability of documentation boxes. Currently, readability is low due to layout issues.
- Correcting a number of errors in the numerical output of some reporting tables[4].
- Import values from previous years to current reporting year.
- Actual reporting year should be visible when opening tables.

The EIG acknowledges that, up to now, some Parties have reported based on the IPCC inventory software and thus are not familiar with the CRF tables. Such experiences need to be borne in mind when implementing the MPGs. The EIG considers it important that the transfer of data from IPCC to CRF table formats is facilitated, e.g. through improvements of the interface between calculation and reporting tools, supporting material or focused assistance provided by the UNFCCC Secretariat.

Experience from reporting indicates that targeted capacity building on the use of the CRF Reporter Tool may be a useful way to assist Parties in the handling and submission of data. As many Parties may start using the software for the first time, establishing a helpdesk or an online forum for inventory compilers (moderated, e.g. by the UNFCCC Secretariat) could be another means to help practitioners in familiarizing themselves with the tool. User-friendly electronic reporting formats, ideally with functionalities for automated data import/transfer, would further facilitate reporting by Parties.

Valuable input on potential ways to assist Parties in reporting can also be derived from the experience of national experts participating in the review process under the UNFCCC. While the main purpose of reviews lies in the assessment of the implementation of Party commitments, reviews also provide an important opportunity for capacity building and information sharing. Feedback from individual reviews, e.g. via the lead reviewer meetings, could be used more systematically to identify ways to facilitate the reporting process, in particular with regard to the preparation of GHG inventories.

Finally, efforts should be made to harmonize reporting under the UNFCCC with other global statistics (e.g. IEA – energy, FAO – agriculture, OECD – GHG emissions, etc.) to reduce reporting burden on Parties and make better use of synergy potentials

[4] A non-exhaustive list of issues and errors is provided in **Erreur ! Source du renvoi introuvable.** of Switzerland's NIR 2021, available here after 15. April 2021: https://www.bafu.admin.ch/bafu/en/home/topics/climate/state/data/climate-reporting/latest-ghg-inventory.html

ANNEX I – EXAMPLES OF SECTORAL REPORT AND BACKGROUND TABLES

See separate Excel documents:

- Annex I - EIG Inventory tables for the Energy sector_April 2021
- Annex I - EIG Inventory tables for the IPPU sector_April 2021
- Annex I - EIG Inventory tables for the Agriculture sector_April 2021
- Annex I - EIG Inventory tables for the LULUCF sector_April 2021
- Annex I - EIG Inventory tables for the Waste sector_April 2021

Submission of the Environmental Integrity Group on 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

I. Introduction

The EIG is pleased to present an option for the structured summary table, as well as worked examples of the structured summary tables to show how the proposed option for the structured summary table could "accommodate all types of NDC under Article 4, as appropriate"[5] (see **ANNEX II – WORKED EXAMPLES OF STRUCTURED SUMMARY TABLES FOR DIFFERENT TYPES OF NDCS)**.

There are six worked examples of the structured summary tables presented here in total:

- Table 1. A worked example for a multi-year NDC with absolute targets
- Table 2. A worked example for an NDC with a 5-year indicative target and 10-year absolute target
- Table 3. A worked example for a single-year NDC with a BAU target
- Table 4. A worked example for a single-year NDC with an intensity target
- Table 5. A worked example for a single-year NDC with quantitative P&M targets
- Table 6. A worked example for a single-year NDC with qualitative P&M targets

We believe that these tables effectively demonstrate that a tabular format structured summary can be applicable to all types of NDCs, including NDCs with multi-year GHG emissions targets, and also NDCs with quantitative and qualitative policies and measures (P&M) targets.

Each of the tables enables a transparent and efficient presentation of all essential information to track progress made in implementing and achieving an NDC under Article 4, by providing a bird's-eye view of how a given Party is progressing towards its NDC target(s). They also enable an adequate assessment of how a Party has achieved the target(s) of its NDC. This particular feature of the EIG table greatly enhances the applicability of a tabular format structured summary to NDCs with qualitative P&M targets (see Table 6: A worked example for a single-year NDC with qualitative P&M targets).

According to Decision 18/CMA.1, Parties shall provide information defined in paragraph 77 in a structured summary to track progress made in implementing and achieving its NDC under Article 4. This information includes the information provided under paragraph 77(d) for Parties who participate in cooperative approaches that involve the use of internationally transferred mitigation outcomes (ITMOs) towards an NDC, or that authorize the use of mitigation outcomes for international purposes other than achievement of its NDC. Additional information that may result from the adoption by the CMA of a decision on reporting under Article 6 can be included directly, or if needed at a later stage, under "any other information consistent with decisions adopted by the CMA on reporting under Article 6", as per paragraph 77(d) (iii). Consequently, negotiations under SBSTA on the development of the structured summary, and the adoption by the CMA of the common tabular formats for the electronic reporting of the information referred to in chapters III of the annex to Decision 18/CMA.1 do not need to wait for the adoption by the CMA of a decision on reporting under Article 6. The EIG expects that both the CMA decision on the structured summary and the CMA decision on Article 6 will be taken at COP26.

[5] Annex to Dec.18/CMA.1, paragraph 79.

ANNEX II – WORKED EXAMPLES OF STRUCTURED SUMMARY TABLES FOR DIFFERENT TYPES OF NDCS

See separate Excel document “Annex II - EIG Structured Summary tables_April 2021”, which includes

- Table 1. A worked example for a multi-year NDC with absolute targets
- Table 2. A worked example for an NDC with a 5-year indicative target and 10-year absolute target
- Table 3. A worked example for a single-year NDC with a BAU target
- Table 4. A worked example for a single-year NDC with an intensity target
- Table 5. A worked example for a single-year NDC with quantitative P&M targets
- Table 6. A worked example for a single-year NDC with qualitative P&M targets

Submission of the Environmental Integrity Group on 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.

Introduction

The EIG believes that the development of the CTF should be guided as closely as possible by the MPGs, while the translation of the MPGs into the CTF may also require some degree of pragmatism.

The EIG would like to make the following proposals regarding the remaining most crucial open issues on the CTFs for Means of Implementation:

Climate finance mobilized: The EIG believes that each of the sub-paragraphs (para 125 a-j of the MPGs) should form a distinctive reporting category. The information contained the parenthesis in each of the sub-paragraphs should be translated into the various reporting options for each category (see tables in the annex).

Concessionality of finance: The EIG recognizes the importance of the reporting of the level of the concessionality of finance. It notes that the metric of "grant equivalents" is an important metric in this context, but it is not the only one and for several financial instruments the "grant equivalent" metric does not exist. The design of the MPGs will have to take this fact into account.

Use of notation keys and footnotes: The EIG believes that notation keys are important to indicate the level of information that is available. The footnotes should be used to provide additional information, in particular with regards to the qualifiers that follow from the MPGs.

Reporting of multilateral finance: It is key that we avoid any type of double counting in the system and therefore countries have to clearly report on whether they report on inflow or outflow figures, noting that Parties will always fully rely on information by the multilateral organisations themselves if they choose to report on outflow figures.

Automated data transfer between CTF on Finance, Technology Transfer and Development (TT) and Capacity Building (CB)*:* We have to reduce the reporting burden for countries as much as possible. Therefore the EIG proposes to use an automated data transfer for those data entries in the transparency of finance tables, which contain an element of TT or CB to the respective TT and CB tables (see tables in the annex).

Technical interface with other statistical systems: The EIG would like to reemphasize the importance of a technical solution to facilitate the upload of information from other statistical systems such as the OECD DAC CRS into the UNFCCC reporting system to reduce the reporting burden for Parties and to reduce the potential possibility for errors in the translation of the data. Parties should of course always have the possibility to enter the data manually without a data transfer and if they choose to opt for a data transfer, have the possibility after the upload to adjust and amend the data to ensure consistency of the data with the UNFCCC reporting framework.

ANNEX III: EIG SUGGESTIONS FOR SUPPORT TABLES

Paragraph 123 of MPGs

Bilateral, regional and other channels

	Year	Amount		Recipient		Status	Channel	Funding source	Financial Instrument	Type of support	Sector	Sub-sector*	Additional Information **	Capacity Building	Technology development and transfer objectives**
Reporting parameters		US Dollars	Domestic currency	Recipient country or region	Title of project, programme, activity or other (specify)								Project/programme details Implementing agency Link to relevant project/programme documentation		
Drop-down menu	*Calendar year* *Fiscal year*					*Disbursed* *Committed*	*Bilateral* *Regional* *Multi-bilateral* *Other (specify)*	*ODA* *OOF* *Other (specify)*	*Grant* *Concessional loan* *Non-concessional loan* *Equity* *Guarantee* *Insurance* *Other (specify †)*	*Adaptation* *Mitigation* *Cross-cutting*	*Energy* *Transport* *Industry* *Agriculture* *Forestry* *Water and Sanitation* *Cross-cutting* *Other (specify †)*			Yes No N/A	Yes No N/A

* as applicable

** as available

† Fill-out field to be made available

Fields where automatic transfer of data between the Common Tabular Format related to finance, technology development and transfer, and capacity-building, if the capacity-building of the technology development and transfer column contains a “yes”.

Paragraph 124 of MPGs

Multilateral channels

Reporting parameters	Year	Institution	Amount		Inflows/Outflows*		Recipient* **		Status	Channel	Funding Source	Financial Instrument	Type of support **	Sector **	Subsector **	Capacity Building * **	Technology development and transfer objectives * **
			*Core/ General**	*Climate-specific**	Inflows	Outflows	*Country, Region, Global*	*Title of Project, Programme, Activity, Other (specify)*									
Drop-down menu	*Calendar year Fiscal year*								*Disbursed Committed*	*Multilateral Multi-bilateral*	*ODA OOF Other (specify †)*	*Grant Concessional loan Non-concessional loan Equity Guarantee Other (specify †)*	*Adaptation Mitigation Cross-cutting*	*Energy Transport Industry Agriculture Forestry Water and Sanitation Cross-cutting Other (specify †)*		Yes No N/A	Yes No N/A

* As applicable

** As available

† Fill-out field to be made available

Fields where automatic transfer of data between the Common Tabular Format related to finance, technology development and transfer, and capacity-building, if the capacity-building of the technology development and transfer column contains a “yes”.

Paragraph 125 of MPGs

Information on finance mobilized through public interventions

Relevant information can be submitted in textual and/or tabular format

	Year	Amount		Amount of resources used to mobilize the support		Type of public intervention used	Recipient		Channel	Type of Support	Sector	Subsector	Additional Information
Reporting parameters		*US Dollars*	*Domestic currency*	*US Dollars*	*Domestic currency*		*Country, Region, Global*	*Project, Programme, Activity or Other (specify †)*					
Drop-down menu	*Calendar year* *Fiscal year*					*Grant* *Concessional loan* *Non-concessional loan* *Equity* *Guarantee* *Insurance* *Policy intervention* *Capacity-building* *Technology development and transfer* *Technical assistance* *Other (specify †)*			*Bilateral* *Regional* *Multilateral*	*Adaptation* *Mitigation* *Cross-cutting*	*Energy* *Transport* *Industry* *Agriculture* *Forestry* *Water and Sanitation* *Cross-cutting* *Other (specify †)*		

† Fill-out field to be made available

Fields where automatic transfer of data between the Common Tabular Format related to finance, technology development and transfer, and capacity-building, if capacity-building or technology development and transfer or technical assistance are the type of public intervention used.

Paragraph 127 of MPGs

Information on support for technology development and transfer provided under Article 10 of the Paris Agreement

Reporting parameters

Drop-down menu

Title	Recipient Entity	Description and objectives	Type of support	Sector	Type of technology	Status of measure or activity	Activity undertaken by the public/private sector
			Mitigation *Adaptation* *Cross-cutting*	*Energy* *Transport* *Industry* *Agriculture* *Water and sanitation* *Other (specify †)*			*Public sector* *Private sector* *Public and private sector*

† Fill-out field to be made available

Fields where automatic transfer of data between the Common Tabular Format related to finance, technology development and transfer, and capacity-building.

Paragraph 129 of MPGs

Information on capacity building support provided under Article 11 of the Paris Agreement

Reporting parameters

Drop-down menu

Title	Recipient Entity	Description and objectives	Type of support	Status of measure or activity
			Mitigation *Adaptation* *Cross-cutting*	

† Fill-out field to be made available

Fields where automatic transfer of data between the Common Tabular Format related to finance, technology development and transfer, and capacity-building.

Paragraph 133 of MPGs

Information on financial support needed by developing country Parties under Article 9 of the Paris Agreement

Reporting parameters

Drop-down menu

Title of activity, programme, or project	Programme/ Project Description	Estimated Amount		Expected time frame	Expected Financial instrument	Type of Support	Sector	Sub-sector	Capacity Building	Technology development and transfer	Activity anchored in national strategy/NDC	Expected use, impact, and estimated results		
		US Dollars	*Domestic currency*									Expected use	Expected impact	Estimated results
					Grant, Concessional loan, Non-concessional loan, Equity, Guarantee, Other (specify †)	*Mitigation, Adaptation, Cross-cutting*	*Energy Transport Industry Agriculture Water and sanitation Other (specify †)*		*Yes No N/A*	*Yes No N/A*				

† Fill-out field to be made available

Fields where automatic transfer of data between the Common Tabular Format related to finance, technology development and transfer, and capacity-building, if the capacity-building of the technology development and transfer column contains a “yes”.

Paragraph 134 of MPGs

Information on financial support received by developing country Parties under Article 9 of the Paris Agreement

Reporting parameters

Drop-down menu

Title of activity, programme or project	Project/ Programme Description	Channel	Recipient entity	Implementing entity	Amount received		Time frame	Financial instrument	Status	Sector	Sub-sector	Type of Support	C.B.	TT	Status of activity	Use, impact, and estimated results		
					US Dollars	Domestic currency										Use	Impact	Estimated Results
		Bilateral *Regional* *Multilateral* *Other (specify)*						*Grant* *Concessional loan* *Non-concessional loan* *Equity* *Guarantee* *Other (specify †)*	*Committed* *Received*	*Energy* *Transport* *Industry* *Agriculture* *Water and sanitation* *Other (specify †)*		*Mitigation* *Adaptation* *Cross-cutting*	*Yes* *No* *N/A*	*Yes* *No* *N/A*	*Planned* *Ongoing* *Completed*			

† Fill-out field to be made available

Fields where automatic transfer of data between the Common Tabular Format related to finance, technology development and transfer, and capacity-building, if the capacity-building of the technology development and transfer column contains a “yes”.

Paragraph 136 of MPGs

Information on technology development and transfer support needed by developing country Parties under Article 10 of the Paris Agreement

Reporting parameters								
Title of activity, programme, project or other	Programme/project description	Type of support	Type of technology	Expected time frame	Sector	Expected use, impact, and estimated results		
						Expected use	Expected impact	Estimated results
Drop-down menu		*Mitigation* *Adaptation* *Cross-cutting*			*Energy* *Transport* *Industry* *Agriculture* *Water and sanitation* *Other (specify †)*			

† Fill-out field to be made available

Fields where automatic transfer of data between the Common Tabular Format related to finance, technology development and transfer, and capacity-building.

Paragraph 138 of MPGs

Information on technology development and transfer support received by developing country Parties under Article 10 of the Paris Agreement

Reporting parameters

Drop-down menu

Title of activity, programme, project or other	Programme/project description	Type of technology	Time frame	Recipient entity	Implementing entity	Type of support	Sector	Status of activity	Expected use, impact, and estimated results		
									Expected use	Expected impact	Estimated results
						Mitigation *Adaptation* *Cross-cutting*	*Energy* *Transport* *Industry* *Agriculture* *Water and sanitation* *Other (specify †)*	*Planned* *Ongoing* *Completed*			

† Fill-out field to be made available

Fields where automatic transfer of data between the Common Tabular Format related to finance, technology development and transfer, and capacity-building.

Reporting parameters

Drop-down menu

Paragraph 140 of MPGs

Information on capacity-building support needed by developing country Parties under Article 11 of the Paris Agreement

Title of activity, programme, project or other	Programme/project description	Expected time frame	Type of support	Expected use, impact, and estimated results		
				Expected use	Expected impact	Estimated results
			Mitigation *Adaptation* *Cross-cutting*			

Fields where automatic transfer of data between the Common Tabular Format related to finance, technology development and transfer, and capacity-building.

Paragraph 142 of MPGs

Information on capacity-building support received by developing country Parties under Article 11 of the Paris Agreement

Reporting parameters

Title of activity, programme, project or other	Programme/project description	Implementing entity	Recipient entity	Type of support	Time frame	Status of activity	Use, impact, and estimated results		
							Use	Impact	Estimated results
				Mitigation *Adaptation* *Cross-cutting*		*Planned* *Ongoing* *Completed*			

Drop-down menu

Fields where automatic transfer of data between the Common Tabular Format related to finance, technology development and transfer, and capacity-building.

Paragraph 144 of MPGs

Information on support needed and received by developing country Parties for the implementation of Article 13 of the Paris Agreement and transparency-related activities, including for transparency-related capacity-building (2 years)

Reporting parameters

Information on support needed by developing country Parties for the implementation of Article 13 of the Paris Agreement and transparency-related activities, including for transparency-related capacity-building (2 years)

Title of activity, programme, project or other	Objectives and description	Recipient entity	Channel	Amount		Expected time frame	Status of activity	Expected use, impact, and estimated results		
				US Dollars	Domestic currency			Expected use	Expected impact	Estimated results
							Planned *Ongoing* *Completed*			

Drop-down menu

Reporting parameters

Drop-down menu

Information on support received by developing country Parties for the implementation of Article 13 of the Paris Agreement and transparency-related activities, including for transparency-related capacity-building (2 years)

Title of activity, programme, project or other	Objectives and description	Recipient entity	Channel	Amount		Time frame	Status of activity	Use, impact, and estimated results		
				US Dollars	Domestic currency			Use	Impact	Estimated results
							Planned *Ongoing* *Completed*			