

SUBMISSION BY THE GOVERNMENT OF CANADA
Experience with Voluntary Use of the UNFCCC Reporting Guidelines for Annex I Parties
3 May, 2013

Context and Scope of this Submission

The *UNFCCC Reporting Guidelines on Annual Inventories for Annex I Parties* (UNFCCC Reporting Guidelines) are standardized requirements for reporting national greenhouse gas inventories to the UNFCCC. Since 2009, Canada has been actively participating in the SBSTA process to revise the UNFCCC reporting guidelines and facilitate the implementation of the 2006 IPCC Guidelines for National Greenhouse Gas Inventories (2006 IPCC Guidelines).

Following the adoption of revised UNFCCC Reporting Guidelines at the 17th Conference of the Parties (CoP17) in December 2011, Parties were invited to examine and use the revised UNFCCC Reporting Guidelines during a trial period (October 2012 to May 2013) and provide views on their experience by way of a submission. Canada is pleased to provide the following views on its experience with the revised Reporting Guidelines, more specifically on the representation of reporting requirements in the Common Reporting Format tables.

General Experience with the Revised Reporting Guidelines

Canada acknowledges the improvements made in the revised UNFCCC Reporting Guidelines and appreciates the time and commitment shown by all Parties in developing this version for trial use. In the course of its examination of the final revised Common Reporting Format (CRF) tables posted by the Secretariat¹, Canada put particular emphasis on the congruence of these tables with the text of the revised Reporting Guidelines in Decision 15/CP.17, the outcome of the fourth expert workshop on November 2011 and with the 2006 IPCC Guidelines. Substantive issues were identified with the reporting of i) indirect CO₂; ii) harvested wood products; iii) unmanaged land areas; and iv) emissions from mobile combustion. Editorial issues were also noted and are provided in table format in Annex I.

1) Reporting Format for Indirect CO₂ emissions is not consistent with the agreed text and requires additional clarity:

The table format for the calculation of national totals suggests that the reporting of indirect CO₂ emissions should be mandatory and included under Memo Items, while paragraph 29 of the revised UNFCCC Reporting Guidelines specifically indicates it should be optional. Further, the format of CRF tables Summary 2 and Table 10 is not consistent with the format agreed to in Durban, which provided space for the optional reporting of these indirect emissions at the bottom of the tables, completely separate from the national totals with and without LULUCF.

In the absence of clarity on the circumstances that warrant reporting emissions of CO, CH₄ and NMVOC as emissions of 'indirect CO₂' as well as adding these emissions to national

¹ Final CRF Tables located here:
http://unfccc.int/national_reports/annex_i_ghg_inventories/reporting_requirements/items/5333.php

totals, Canada reiterates that these emissions be clearly marked as optional and unambiguously separated from the mandatory reporting.

Finally, as described in the Appendix to the new UNFCCC Reporting Guidelines, a new Chapter (Chapter 9) on Indirect CO₂ and nitrous oxide (N₂O) emissions has been added to the structure of the National Inventory Report. In order to maintain consistency with Paragraph 29, it should be clearer that Chapter 9 is optional.

Proposed Changes:

To maintain consistency with Paragraph 29 of the revised UNFCCC Reporting Guidelines, the title for Chapter 9 in the Appendix of Decision 15/CP.17 should appear as “Chapter 9: Indirect CO₂ and nitrous oxide emissions (*optional*)” instead of “Chapter 9: Indirect CO₂ and nitrous oxide emissions”.

To increase transparency around the reporting of indirect CO₂, a footnote referring to “indirect CO₂” should also be added at the bottom of CRF Tables 6, 8, 10 and Summary 2 (Sheets 1, 2, 3 and 4): “Parties may (but are not required to) report indirect CO₂ and N₂O emissions; when indirect CO₂ or N₂O are not reported, total emissions including indirect gases are not required.”

Finally, the format of CRF Tables 10 and Summary 2 (Sheet 1) should be also be revised to reflect what was agreed by Parties regarding indirect CO₂ reporting (shown below).

Total CO₂ equivalent emissions without land use, land-use change and forestry
Total CO₂ equivalent emissions with land use, land-use change and forestry
Indirect CO₂ reported^{(3) (4)}
Total CO₂ equivalent emissions, including indirect CO₂, without land use, land-use change and forestry
Total CO₂ equivalent emissions, including indirect CO₂, with land use, land-use change and forestry

2) Reporting of Harvested Wood Products may lead to double-counting emissions or removals:

Several approaches are recognized by the IPCC to estimate and report emissions from Harvested Wood Products (HWP). The use of inconsistent approaches by different countries precludes inclusion of HWP in national total emissions, as this would lead to double-counting emissions or removals at a global scale. For example, in Table 4.G (1 of 2) carbon (C) gains in HWP pool result from a C transfer out of an existing biomass pool; a C gain in HWP stocks does not originate directly from the atmosphere in the same year. Hence, gains in HWP C stocks may have already been counted elsewhere several years ago as an increase in biomass C stocks. Likewise, emissions from the HWP pool may have been reported elsewhere as emissions from harvesting. Converting net C stock changes in the HWP pool into CO₂ emissions to, or removals from, the atmosphere may therefore double count removals and/or emissions at a global scale. To avoid double-counting, HWP should not be

included in national totals, unless a country can demonstrate that emissions and removals are not already reported elsewhere. Double counting is less likely to occur if a country reports HWP as a pool in a land category. For greater transparency, countries should indicate whether HWP are considered separately from the LULUCF land-use categories.

Proposed Change: In Table 4, Total of category G "Harvested Wood Products" should not automatically be added to national totals. Add a check box "To be added to national totals", and a footnote stating " HWP should be added to national totals only if the Party can demonstrate that HWP emissions and removals reported here are not already reported elsewhere." In Table 4.G (1 of 2) delete "removals" and only keep "emissions" from HWP and provide a checkbox where countries indicate the land category(ies), if any, where HWP is a pool.

3) Reporting Unmanaged Land Area should not be mandatory:

Canada interprets Table 4.1 as a requirement to report all unmanaged land areas by sub-category. It is unclear why such detailed reporting of unmanaged land areas would be required, since emissions/removals from unmanaged lands are not considered anthropogenic. In fact, only the conversion of unmanaged land to managed land should be reported. Further, it is unclear how Parties are to use this table if they choose the option, outlined in footnote 3, of not differentiating areas and area changes in unmanaged land.

Proposed Change: Remove all columns corresponding to unmanaged land categories and clarify how to fill Table 4.1 if areas and changes in areas of unmanaged land are not differentiated.

4) Reporting mobile emissions in categories other than “road transportation” is inconsistent with the 2006 IPCC Guidelines :

The creation in Table 1.A (a) sheet 4, of a new sub-category of emissions from mobile combustion within the category Commercial /Institutional and Residential is inconsistent with the 2006 IPCC Guidelines. Reporting in this manner will create confusion as emissions from cars, trucks, buses, etc. would be split between Road Transportation and the Commercial/Institutional and Residential categories. In the absence of clear guidance on how to implement such a separation, this new sub-division will also reduce the comparability of Transportation emissions and could potentially lead to double counting of emissions.

Proposed change: To ensure internal consistency and consistency with the 2006 IPCC Guidelines, it is strongly recommended that the reporting of mobile combustion for the commercial/institutional and residential category be deleted from Table 1.A (a).

In Canada's view, the four issues above merit particular attention in light of their bearing on the calculation of national totals, the clarity of reporting requirements, the potential double-counting of emissions or removals, maintaining the focus on anthropogenic greenhouse gases and loss of comparability. Additional issues in the revised CRF tables identified during the trial period are also provided in Annex I.

Annex I – Additional Reporting Issues

Table Number	Category, Subcategory or Footnote	Issue	Recommended Change
Energy			
1.B.1	1.B.1.b	Footnote (5) states “Include fugitive emissions from coke and charcoal production under this category”. There is no default method in the 2006 IPCC Guideline for calculating fugitive emissions from coke and charcoal production. The note following the footnotes in Table 1B1, also supports that there is a lack of clear direction in the IPCC guidelines.	Remove footnote.
1.B.2	1.B.2.d	The new tables show “Drop-down list” and “Geothermal energy production” as new categories under 1.B.2.d Other (please specify). There is no default method for calculating fugitive emissions from geothermal energy production.	Remove all sub-categories from 1.B.2.d and let the country specify any other emission sources.
IPPU and Waste			
2(I).A-G (sheet 1 of 2)	2.A.4. “Other Process Uses of Carbonates”	This row is redundant. Under category 2.A.5. “Other” - located further down - one of the sub-categories is “Other Uses of Carbonates.” This sub-category should cover any other uses of carbonates.	Remove row 2.A.4. “Other Process Uses of Carbonates.”
2(I).A-G (sheet 1 of 2)	2.B.8.g. “Other”	Styrene (a petrochemical product) comes after this sub-category and without a number assigned. To be consistent in the series, Styrene should come first followed by “Other.”	Re-number “Other” as 2.B.8.h and move to the end. Bring Styrene one row up, and number as 2.B.8.g.
2 (II) (sheet 2 of 2)	2.D., “Non-Energy Products from Fuels and Solvent Use	Category 2.D. is missing from the Table.	Add row for category 2.D. in the Table.
2 (II) (sheet 1 of 2)	All	Misplaced and is in between Table 2(I).A-G sheet 1 of 1, and Table 2(I).A-G sheet 2 of 2.	Move Table (II) sheet 1 of 2, to after Table 2(I).A-G sheet 2 of 2.
Agriculture and LULUCF			
Virtually all AFOLU tables	Documentation Box	Note states detailed explanation should in either Chapter 6 or Chapter 7 of NIR	These Chapters numbers do not follow outline provided in Annex 1 Appendix of Reporting Guidelines. Should refer to either Chapter 5 – Agriculture or Chapter 6 – LULUCF.
Table 3		There is no IPCC guidance for estimating emissions of CO ₂ from savannah burning, NO, CO and NMVOC. Inserting cells for this reporting creates a precedent to insert cells for all possible categories, activities or gases that are not covered by the guidelines	Insert a footnote indicating that reporting of CO ₂ , NO, CO, NMVOC emissions in this table is optional.
Table 3.B(b)		What does ‘typical’ animal mass means? Is this information relevant?	Rephrase column heading “Typical Animal Mass” or delete.

Table 3.B(b)		Title of column	Changing "Total N Volatized as NH ₄ and NO _x " to "Total N Volatized as NH ₃ and NO _x "
Table 3.D		There is no IPCC guidance for the emission of NO _x from biomass burning, nor is there biomass burning listed in Table 4.Ds1.	Move footnote (4) to Table 4.E. Change footnote to "...are to be reported here. Indicate whether NO _x emitted from burning of savannas and crop residues is included."
Table 3.E		The purpose and need of specifically requiring a breakdown between living and dead biomass are unclear, given it is not required in any of the land categories?	Delete the "Additional Information" box.
Table 3. F		Field burning of agriculture residues is not considered a source of energy - so the word "fuel" is strange here. Heading would be more appropriate as "Biomass available" rather than "Fuel available".	Change column heading "Fuel available" to "Biomass available"
Table 3. G-H		Urea is the only carbon-containing N fertilizer is listed, but other carbon-containing N fertilizers also exist, such as urea ammonium nitrate, ammonium bicarbonate, etc.	Under H, a dropdown menu should be provided for countries to add other carbon-containing N fertilizers if applicable
Table 4	Footnote 2	Footnote 2 seems incomplete.	
Table 4	Footnote 3	The current footnote wording is misleading. According to the 2006 IPCC guidelines page 7.5 "The scope of the assessment now includes CO ₂ emissions from all lands converted to permanently Flooded Lands." Appendix 2 provides a possible approach for estimating CO ₂ emissions from lands converted to permanently Flooded Land. However, Section 7.3.2.1 of the 2006 IPCC guidelines presents a default carbon stock change method for estimating carbon stock change due to land conversion to permanently flooded land.	Change text to "Parties may decide not to prepare estimates for CH ₄ emissions from flooded land contained in Appendix 3 of volume 4 of the 2006 IPCC Guidelines, although they may do so if they wish."
Table 4	New footnote 4 suggested for category "F. Other Land"	This footnote exists in current CRF table 5 and we considered that it should be kept for clarity purposes, and update it based on the definition given by 2006 guidelines for "Other Land".	It should say "This category includes bare soil, rock, ice, and all land areas that do not fall into any of the other five categories. It allows the total of identified land areas to match the national area, where data are available" (text from volume 4 of the 2006 Guidelines, page 3.7)
Table 4		Depending on estimation approaches used by various countries, adding HWP to national totals may lead to double-counting emissions or removals at the global scale. HWP should be added to national totals only if a country can demonstrate that the emissions and removals reported here are not already reported elsewhere.	Total of category G "Harvested Wood Products" should not automatically be added to national totals. Add a check box "To be added to national totals", and a footnote stating "HWP should be added to national totals only if a country

			can demonstrate that the emissions and removals reported here are not already reported elsewhere."
Table 4.1		Current format un-necessarily lengthens the number of footnotes.	Replace footnotes 4 to 7 inclusively with one footnote referring to the location of the land category definitions in the guidelines.
Table 4.D		In wetlands, Net C stock changes apply to biomass and DOM only. Net CO ₂ emissions/removals from soils are directly measured.	Delete column "Net carbon stock change in soils" from under heading "Changes in C stocks". Instead, have two columns under "Net CO ₂ emissions/removals": "Net CO ₂ emissions/removals from soils" and "Total Ecosystem net CO ₂ emissions/removals".
Table 4.D	Footnote 9	The origin of N ₂ O emissions from flooded land may be the application of N fertilizer, but it is not necessarily always so. Current footnote (9) states an assumption as if it were a fact.	Change footnote (9) to: "If N ₂ O emissions from flooded land mostly originate from the application of N fertilizer on surrounding land, then indicated IE."
Table 4.(I)		Current table design is repetitive.	Delete column "Description" and move its contents in Table title and footnotes if needed.
Table 4 (III)	All subcategories	In all "Land converted to..." categories, "Other land converted to..." should be included	Include "Other land converted to..." in all subcategories
Table 4 (III)	Footnote 1	Reference to Equation 11.18 in this footnote is wrong	Change "Equation 11.18" for "Equation 11.8"
Table 4.G (1 of 2)		Current format precludes use of country-specific categories, which is inconsistent with Reporting guidelines and IPCC guidelines.	Throughout tables, add a wood category "3. Other" as well as a subset of "1. Solid Wood" and "2. Paper and paperboard"
Table 4.G (1 of 2)		Half-lives are used in the calculations of losses, but not in any calculation in this table. Like other underlying parameters, half-lives should be documented in the inventory report.	Delete column "Half Life" and delete footnote 5.
Table 4.G (1 of 2)		Current wording in Footnote 3 is too restrictive. The use of a domestic category breakdown is usually recommended under both Tier 2 or 3 (not only Tier 3). Current wording is inconsistent with IPCC guidelines.	Footnote 3 Replace "Includes solid wood products (sawnwood, wood panels) and paper and paperboard only, as defined in" with "Categories are defined in ...". Replace "A Party may apply different categories in case tier 3 methods are available." with: "Countries may apply different or more detailed category breakdowns that better reflect their wood product industry."

Table 4.G (1 of 2)		Inconsistent with 2006 IPCC guidelines.	Delete Footnote 6 and "Land area" column.
Table 4.G (1 of 2)		Current format is un-necessarily lengthy and complex.	Footnotes 10, 12, 13 and 14 should refer to the respective equation numbers in the IPCC 2006 guidelines.
Table 4G	Footnote 15	Footnote 15 refers to an information item but its numbering is out of order from the other tables.	Edit footnotes as required to maintain numbering format order.

Cross Cutting Tables

Summary 2	Footnote 3	Footnote 3 associated to category 3.D Agricultural Soils, is missing	Revise if this footnote is still applicable and add it, otherwise remove the footnote marker from category 3.D
Table 7	Second Note	Second note that says: "The key categories included are the ones identified by the secretariat" seems to be not applicable to the context of this table that is expected to be filled out with the results of the key category analysis as completed by the Party.	Remove second note.