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Overview of KP LULUCF reporting tables for CP2

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Introduction

- Updated UNFCCC GL for CP2 (24/CP.19)
 - Includes new gases, new GWP (4/CMP.7)
 - Includes the implementation of IPCC 2006 GL
 - New reporting categories, new tables and re-allocation of some sources
- Changed accounting rules for LULUCF over CP2 (2/CMP.7)
 - Forest management (FM) mandatory
 - FM accounted relative to a reference level (FMRL) limited by a cap on the “removal side”
 - New activity Wetland drainage and rewetting
 - Natural disturbances can be excluded from accounting
 - Possible to account for carbon equivalent forests
 - Etc.
- Updated guidelines for KP-reporting (2/CMP.8)
 - Includes implementation of IPCC 2013 GL for KP and WL
 - Includes new activities and tables



Introduction (2), the process...

1. Decisions on accounting rules and reporting obligations to fulfil requirements of accounting (2/CMP7). Discussions mostly guided by the latest information from IPCC (2006 GL) and experience from CP1.
2. Request to IPCC to update GL (WL and KP Supplements) to support the new reporting requirements.
3. IPCC present the reports.
4. Final decisions on reporting obligations are taken and tables are developed.

- Long process with many experts involved (negotiators, scientists, inventory compilers etc.).
- The tables are the final product of efforts made over more than four years.
- Are we happy with them?



NIR-1 SUMMARY TABLE (footnotes)

1. Carbon stock changes. Indicate R, NR, IE or NO for articles under Article 3.3, FM or any elected activity under Article 3.4 or IO for HWP. With the exception of HWP, if changes in a carbon pool are not reported, verifiable information in the national inventory report (NIR) must be provided that demonstrates that these unaccounted pools were not a net source of anthropogenic greenhouse gas emissions. Indicate NA (not applicable) for each activity that is not elected under Article 3.4.
2. Emissions. Indicate R, NR, IE or NO for articles under Article 3.3, FM or any elected activity under Article 3.4. Indicate NA (not applicable) for each activity that is not elected under Article 3.4.
3. Organic soils. Includes CO₂ emissions/removals from organic soils, including CO₂ emissions from dissolved organic carbon associated with drainage and rewetting. On-site CO₂ emissions/removals from drainage and rewetting from organic soils and off-site CO₂ emissions via water-borne carbon losses from organic soils should be reported here for wetland drainage and rewetting.
These emissions could be reported for other activities as appropriate.
(see 2/CMP.7)



Revision of CRF-tables

NIR-1 SUMMARY TABLE (footnotes)

4. HWP from deforestation. HWP from lands reported under deforestation, which originated from the deforestation event at the time of the land-use change shall be accounted for on the basis of instantaneous oxidation (IO).
5. Fertilization. N₂O emissions from fertilization of afforestation/reforestation, deforestation, forest management, revegetation and wetland drainage and rewetting **should be reported here when these emissions are not reported under the agriculture sector.**
6. Drained/rewetted soils. CH₄ and N₂O emissions from drained and rewetted organic soils should be reported here, as appropriate, **when emissions are not reported under the agriculture sector.** For wetland drainage and rewetting only emissions from organic soils are included.
7. Drained/rewetted soils. CH₄ emissions from drained soils and drainage ditches should be reported here, as appropriate.



Revision of CRF-tables

NIR-1 SUMMARY TABLE (footnotes)

8. Mineralization/immobilization. N₂O emissions from nitrogen mineralization/immobilization associated with loss/gain of soil organic matter resulting from change of land use or management of mineral soils under afforestation/reforestation, deforestation, forest management, cropland management, grazing land management and revegetation **should be reported here when these emissions are not reported under the agriculture sector.**
9. Biomass burning. Emissions from burning of organic soils should also be included here, as appropriate.
10. Biomass burning. If CO₂ emissions from biomass burning are not already included under changes in carbon stocks, they should be reported under biomass burning. Parties that include CO₂ emissions from biomass burning in their carbon stock change estimates should report IE (included elsewhere).

Revision of CRF-tables

NIR-2.1 LAND TRANSITION

- For areas converted from "natural forest" to "planted forest".
- Note that only areas have to be reported. CSC included in activity tables.

Table NIR 2.1. LAND TRANSITION

Additional information: area of natural forests converted to planted forests

ACTIVITY DATA		
Subdivision ⁽¹⁾	Total area subject to conversion	Area of organic soils ⁽²⁾
	(kha)	



Revision of CRF-tables

NIR-3 KEY CATEGORIES

- Table for Key categories. No real changes.

4(KP)Recalculations

- New table for recalculations.

4(KP) REPORT OF SUPPLEMENTARY INFORMATION FOR LAND USE, LAND-USE CHANGE AND FORESTRY ACTIVITIES UNDER THE KYOTO PROTOCOL

- Summary table for emissions/removals per activity and gas.
- Numbers generated from other tables.

4(KP-I)A.1 Article 3.3 activities: Afforestation and reforestation

- Areas more clearly reported (total/mineral/organic).
- HWP included as a separate pool.
- Separated reporting of land qualified for Natural disturbances.
- Possible but not mandatory to report new emissions/removals related to methods provided in IPCC WL SL



Revision of CRF-tables

4(KP-I)A.1.1 Emissions and removals from natural disturbance, AR

- New table to report Natural disturbances.
- Needed for parties that elect ND in their first report under the second CP.

4(KP-I)A.2 Article 3.3 activities: Deforestation

- Areas more clearly reported (total/mineral/organic).
- HWP included as a separate pool.
- Separated reporting of land qualified for Natural disturbances.
- Possible but not mandatory to report new emissions/removals related to methods provided in IPCC WL SL
- Possible to report how deforested land are distributed on different land use categories as Information item .

4(KP-I)A.2.1 Deforestation. Land otherwise subject to forest management or elected activities under Article 3.4

- Reporting of areas under deforestation otherwise subject to forest management or elected activities under Article 3.4



Revision of CRF-tables

4(KP-I)B.1 Article 3.4 activities: Forest management

- Areas more clearly reported (total/mineral/organic).
- HWP included as a separate pool.
- Separated reporting of land qualified for Natural disturbances.
- Possible but not mandatory to report new emissions/removals related to methods provided in IPCC WL SL
- Separation of reporting for carbon equivalent forest.

4(KP-I)B.1.1 Forest management reference level (FMRL) and technical correction

- New table to report technical corrections of the reference level for accounting of FM (FMRL).

4(KP-I)B.1.2 Carbon equivalent forests

- New table to report on carbon equivalent forests.

4(KP-I)B.1.3 Emissions and removals from natural disturbance, FM

- New table to report Natural disturbances.
- Needed for parties that elect ND in their first report under the second CP.



Revision of CRF-tables

4(KP-I)B.2 – B.5 Elected Article 3.4 activities

- Tables for reporting of CM, GM, RV, WDR (new)
- Areas more clearly reported (total/mineral/organic).
- Possible but not mandatory to report new emissions/removals related to methods provided in IPCC WL SL

4(KP-I)C Carbon stock changes in the harvested wood products (HWP) pool

- New table to report changes in the HWP-pool.
- Includes information for different product categories separated per activity:
 - Half-lives
 - Carbon stock
 - Changes during the inventory year
- Supplementary information on harvest distribution also needed



Revision of CRF-tables

4(KP-II)1 Direct and indirect N₂O emissions from N fertilization

- Partly new. Direct and **indirect** emissions from fertilization are reported here.
- Fertilization on agricultural soils is reported in the agricultural sector.
- Indirect emissions reported for the first time.

4(KP-II)2 CH₄ and N₂O emissions from drained and rewetted organic soils

- Partly new. Emissions of N₂O and CH₄ from drained and rewetted organic soils are reported per activity.
- CH₄ only mandatory for WDR.
- N₂O from drained agricultural soils is reported in the agricultural sector.



Revision of CRF-tables

4(KP-II)3 N₂O emissions from N mineralization/ immobilization due to carbon loss/gain associated with land use conversions and management change in mineral soils

- Partly new. N₂O emissions from mineralization/ immobilization due to carbon loss/gain associated with land use conversions and management change in mineral soils not reported in the agricultural sector.
- Keep track of the emissions allocated in the Agricultural sector to avoid double counting.

4(KP-II)4 Greenhouse gas emissions from biomass burning

- Reporting of biomass burning per activity.
- Activity data has been changed to "**fuel burned**" instead of "**biomass burned**" to include more of the available fuel.
- All carbon pools can be included, even burning of peat soils.
- Greenhouse gas emissions from burning of agriculture residues are still reported in the agriculture sector.

Accounting

- New activities and parameters have been added.
- Data generated from other tables.



Revision of CRF-tables

INFORMATION TABLE ON ACCOUNTING FOR ACTIVITIES UNDER ARTICLES 3.3 AND 3.4 OF THE KYOTO PROTOCOL ⁽¹⁾

Commitment period accounting (Yes/No)

Annual accounting: (Yes/No)

PARTY
Inventory year
Submission year

Number of the
reported year in the
commitment period: #

GREENHOUSE GAS SOURCE AND SINK ACTIVITIES	Base Year ⁽²⁾	NET EMISSIONS/REMOVALS									Accounting parameters	Accounting quantity ⁽⁴⁾
		2013	2014	2015	2016	2017	2018	2019	2020	Total ⁽³⁾		
(kt CO ₂ eq)												
A. Article 3.3 activities												
A.1. Afforestation/reforestation												
Excluded emissions from natural disturbances ⁽⁵⁾												
Excluded subsequent removals from land subject to natural disturbances ⁽⁶⁾												
A.2. Deforestation												
B. Article 3.4 activities												
B.1. Forest management												
Net emissions/removals												
Excluded emissions from natural disturbances ⁽⁵⁾												
Excluded subsequent removals from land subject to natural disturbances ⁽⁶⁾												
Any debits from newly established forest (CEF-ne) ^{(7),(8)}												
Forest management reference level (FMRL) ⁽⁹⁾												
Technical corrections to FMRL ⁽¹⁰⁾												
Forest management cap ⁽¹¹⁾												
B.2. Cropland management (if elected)												
B.3. Grazing land management (if elected)												
B.4. Revegetation (if elected)												
B.5. Wetland drainage and rewetting (if elected)												

Thank you!