Review ID: FCCC/SA-II/2006/General

Party: CARBONIA
Submission year: 2006

Table 1: General observations pertaining to a Parties submission.

Sector	Source/sink category	Issue	Response by Party	Status of the issue	Explanation	Recommended follow-up
General	**Completeness of common reporting format (CRF)**	Carbonia has provided inventory data for the years 1990 to 2004 and included all required tables, except table 9(b). Notation keys are used throughout the tables.	table 9(b) has been submitted, but empty as there are no additional GHG in the Carbonian inventory			
General	**National inventory report (NIR)**	An NIR has been submitted and included information on key categories, methods, data sources, uncertainty estimates, quality assurance/quality control procedures, verification activities, etc. The NIR provides a description of the QA/QC and verification procedures used in the preparation of the GHG inventory.				
General	*Key category analysis by Carbonia*	Carbonia used the IPCC tier 1approach to identify its key categories using the level and trend assessment. Carbonia has not included the LULUCF sector in its key categories assessment.	Carbonia has included the LULUCF sector in its key category assessment, but the NIR includes only a discussion on the key source analysis. The results of the key category analysis are presented in CRF Table 7 that has been provided.			
General	*Uncertainty estimates*	The NIR states that an IPCC tier 1 uncertainty analysis has been performed, and the results of this analysis are presented, both at a summary level and at the individual source category level.				
General	**Consistency of information between CRF and NIR**	Based on the information included in summary table 3 of the CRF, the data is largely consistent, with the following inconsistencies noticed: in CRF table Summary 3 Carbonia reports method used for estimating CO_2, CH_4 and N_2O emissions from '1.A.2. Manufacturing industries and construction', however, the NIR states that CO_2, CH_4 and N_2O emissions from 'Other (1.A.2.f)' are estimated using a tier 3 method. In CRF table Summary 3 Carbonia reports method used for estimating emissions from '1.A.3. Transport' as 'CS, M', however, the NIR states that tier 2 and tier 3 methods are used. Carbonia reports, in CRF table Summary 3, that method used for '1.A.4. Other sectors' is 'T2', however, the NIR states that tier 2 and tier 3 methods are used. For '1.A.5. Other' CRF table Summary 3 indicates method used as 'CS, M' while the NIR states that a tier 3 method is used. Carbonia reports using country-specific EFs for the whole stationary combustion, however, the NIR indicates that IPCC default values are used (i.e. peat) and point source measurements (i.e. refinery gas).	1A2f and 1A4c include CO2, CH4 and N2O emissions from mobile machinery which are calculated with CS emission factors and a model 'M' which implements a 'T3' methodology. Emissions from sector 1A3 are calculated with CS emission factors and a model 'M' which implements a 'T3' methodology. 1A5 Other include CO2, CH4 and N2O emissions from military transport which are calculated with CS emission factors and a model 'M' which implements a 'T3' methodology. It is true that in category 1A4 IPCC default EF is used for peat and in category 1A1 CS and PS EFs are used. This information will be updated in summary table 3 in the next submission.			

General	**Consistency of information between CRF and NIR**	For '2.B Chemical industry' and CH_4 emissions CRF table Summary 3 indicates 'CS' as method used and 'PS' as EFs used, however, the NIR indicates that IPCC default methodology and EF have been used for estimating CH_4 emissions from '2.B.5. Ethylene production'. In CRF table Summary 3 the method used to estimate CH_4 emissions from '2.C. Methal production' is reported as 'CR', however, the NIR states that emissions from 'Rolling mills' were estimated using a country-specific method. The methods used for estimating CO_2 emissions from '2.C. Metal production' are reported as 'CS, T2', however, the NIR states that the method used for '2.C.2 Ferroalloys production' is tier 1b and for '2.C.3 Aluminium production' as tier 1. 'NA' is reported for the method applied and EF for PFC emissions from '2.C.3. Aluminium production' in CRF table Summary 3, however, the NIR states that a tier 3b has been used. 'NA' is also reported in CRF table Summary 3 for SF_6 from '2.C.4 SF_6 used in aluminium and magnesium foundries' while the NIR states that the IPCC methodology was used.	2.B. Chemical industry CH4: both informations are correct; CS/PS refers to Ammonia Prod.; information in summary table 3 will be updated in the next submission. 2.C. Metal production CH4: CS is correct; information in summary table 3 will be corrected in the next submission. 2.C. Metal production CO2: information in the NIR and in summary table 3 is correct; CS,T2 refers to 2.C.1.Iron and Steel; information in summary table 3 will be updated in the next submission. 2.C.3. PFC / 2.C.4.SF6: NA is reported in the CRF for 2003, because Aluminium Production is NO, and SF6 is no longer used in Foundries; nevertheless for the years in which emissions ocurred the methodologies are correctly reported in summary table 3 in the corresponding CRF			
		EF used for estimating N_2O emissions from manure management are reported as CS in CRF table Summary 3, however the NIR indicates that IPCC default values are used. Method used to estimate CO_2 emissions for the LULUCF sector are reported as 'T1, T3' in CRF table Summary 3, however, in the NIR they are reported as tier 1 and country-specific. In CRF table Summary 3 method used for estimating GHG emissions from '6.C. Waste incineration' is reported as 'D', however, in the NIR it is stated that a CORINAIR method has been used. The method used to estimate CH_4 and N_2O emissions from '6.D. Other' is reported as 'CR' in CRF table Summary 3, while in the NIR the method used is reported as country-specific.	N2O Emissions are determined using specific N excretion (Nex) rates of animals per animal waste management system (AWMS). For both factors (AWMS, Nex) CS values were used, therefore in Summary table 3 the EF was reported as CS. 5.A In the NIR chapter 1.2.1.1 (sector 5.A.1) methods are described as Tier 3; in the NIR chapters 1.3. and 1.4 concerning cropland and grassland methods are described as Tier 1. Nevertheless some sub-sectors are also calculated with CS methods. It is difficult to reflect in summary table 3 the diversity of IPCC sector 5 concerning methods. However, summary table 3 will be updated for the next submission and CS will be included. 6.C Waste incineration method is IPCC default 'D' using 'CS' and 'D' emission factors. Information in summary table 3 will be corrected in the next submission. 6.D Other: country specific is correct; information in Table 3 will be corrected in the next submission.			
General	**Recalculations**	Carbonia provided recalculated estimates (tables 8(a)) for 1990 to 2004. No explanations for the recalculations are provided in table 8(b). The effect of the recalculations for the base year (as reported in the CRF tables) was a increase by 0.43% in CO2 equivalent emissions excluding LULUCF.	The effect of the recalculations for the base year was an increase by 0.54% and an increase by 1.05% in 2004. The CRF reporter contained incorrect information on the CRF submission 2005. This is why some numbers about recalculations in the CRFs are incorrect. Consequently, Table 2.1 of the S&A Part II is incorrect for Industrial Processes, which should be 1.99% for CO2 and 98.21% for CH4. The main reasons for the increase of reported CO2 emissions (1990: +1.1%, 2004: +1.8%) are revised coke oven coke net calorific values (cross-sectoral), a revised natural gas CO2 emission factor (cross-sectoral), a revised industrial waste CO2 emission factor (cross-sectoral) and higher emissions from Industrial Processes mainly due to the improved methodology for 2 B 1 Ammonia Production. The main reasons for the decrease of reported methane emissions (1990: -6.3%, 2004: -5.7%) are methodological changes in the sectors 6 A 1 Managed Waste Disposal on Land and 6 B Waste Water Handling. The main reason for the increase of reported N2O emissions (1990: +9.3%, 2004: +9.0%) is the revision of the N excretion rates in the Agriculture sector that lead to higher emissions in 4 B Manure Management and 4 D Agricultural soils. The main reason for the decrease of reported emissions of fluorinated compounds (1990: -10.9% , 2004: -22.1%) is the incorporation of a new study on HFC use and emissions in the sub-category 2 F 2 Foam Blowing.			

General	**Secretariat's key category assessment**	The sectoral findings in the remainder of this report are organized by the structure of the IPCC source categories. The secretariat has indicated whether a source category is identified as a key category or not, following the secretariat's key category assessment. The results of this assessment for Carbonia are provided in the spreadsheets "Key categories (BY)" and "Key categories (LY)". The following source categories became source categories in 2006: '1.A.3.a Civil aviation - CO2', '1.B.2 Oil and natural gas - CH4', '2.C.3 Aluminium production - CO2 and PFCs', '2.C.4.b SF6 used in magnesium foundries - SF6', '5.A.1 Forest land remaining forest land - CO2', '5.B.1 Cropland remaining cropland - CO2', '5.C.2 Land converted to grassland - CO2' and '6.B Waste-water handling - N2O'.	The Carbonian key category analysis identified 38 key categories and 3 LULUCF key categories (the same as the secretariat) that largely coincide with the key categories identified by the secretariat. Differences are: '1.A.3.b Road transportation - gasoline – N2O', '2.A.3 Limestone and Dolomite use – CO2', '2.F.8 Other sources of SF6 – SF6' and '3 Solvents – CO2' are also considered as key, wheras '2.C.3 Aluminium production - CO2' is not considered a key category.			

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