



UNITED  
NATIONS



Framework Convention  
on Climate Change

Distr.  
GENERAL

FCCC/ASR/2008/LUX  
24 June 2008

ENGLISH ONLY

---

## Annual status report of the greenhouse gas inventory of Luxembourg

1. This status report was prepared by the expert review team in accordance with decision 22/CMP.1 as part of the initial check of the greenhouse gas inventory submitted. It reflects the content of the inventory of 2008 as submitted by the Party.
2. In this report, the following abbreviations are used:

CRF: common reporting format  
LULUCF: land use, land-use change and forestry  
KP-LULUCF CRF: tables for reporting activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol  
NIR: national inventory report  
SBDT: sectoral background data tables

*Notation keys*

C: confidential  
IE: included elsewhere  
NA: not applicable  
NE: not estimated  
NO: not occurring

*Greenhouse gases*

CO<sub>2</sub>: carbon dioxide  
CH<sub>4</sub>: methane  
N<sub>2</sub>O: nitrous oxide  
HFCs: hydrofluorocarbons  
PFCs: perfluorocarbons  
SF<sub>6</sub>: sulphur hexafluoride  
NO<sub>x</sub>: nitrogen oxides  
CO: carbon monoxide  
NMVOCs: non-methane volatile organic compounds  
SO<sub>2</sub>: sulphur dioxide

INTRODUCTION											
General information	Date of receipt		Date of resubmission		Comments						
	CRF <sup>a</sup>	23 April 2008									
	NIR	2 June 2008									
	Additional information <sup>b</sup>										
	KP-LULUCF CRF <sup>c</sup>										
	KP-LULUCF information <sup>d</sup>										
	CRF provided for years	CRF	1990–2006		KP-LULUCF						
	Base year or period	1990			Base year for HFCs, PFCs and SF <sub>6</sub> <sup>e</sup>			1995			
	Gases covered	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
National inventory report	Description	The organization of the NIR, in general, follows the structure as outlined in the revised UNFCCC reporting guidelines (decision 18/CP.8). However, some of the recommended annexes such as “Detailed discussion of methodology and data for estimating CO <sub>2</sub> emissions from fossil fuel combustion”, “CO <sub>2</sub> reference approach and comparison with sectoral approach, and relevant information on the national energy balance”, “Assessment of completeness and (potential) sources and sinks of greenhouse gas emissions and removals excluded” and “Tables 6.1 and 6.2 of the IPCC good practice guidance” are not provided.									
	Language of NIR	English									
Common reporting format	Missing source category larger than 7 per cent for Annex A sources	No missing source category larger than 7 per cent has been identified.									

<sup>a</sup> CRF refers to the common reporting format tables included in document FCCC/SBSTA/2006/9.

<sup>b</sup> Additional information can be any information submitted by a Party in conjunction with the national inventory report (NIR) or CRF tables.

<sup>c</sup> Parties to the Kyoto Protocol are required to report anthropogenic greenhouse gas emissions by sources and removals by sinks from land use, land-use change and forestry activities under Article 3, paragraph 3, and, if any, elected activities under Article 3, paragraph 4, using the agreed common reporting format tables (decision 6/CMP.3). The reporting of KP-LULUCF CRF tables is voluntary until the 2010 submission.

<sup>d</sup> Parties to the Kyoto Protocol are required to include in their annual greenhouse gas inventories information on anthropogenic greenhouse gas emissions by sources and removals by sinks from land use, land-use change and forestry activities under Article 3, paragraph 3, and, if any, elected activities under Article 3, paragraph 4, in accordance with paragraphs 5–9 in the annex to decision 15/CMP.1. The reporting of this information is voluntary until the 2010 submission.

<sup>e</sup> A Party can choose 1990 or 1995 as its base year for the fluorinated gases in accordance with Article 3, paragraph 8, of the Kyoto Protocol.

PART I																		
Provision of information for the latest reported inventory year in the CRF: 2006																		
Tables		Energy		Industrial processes		Solvent use		Agriculture		Land use, land-use change and forestry		Land use, land-use change and forestry (KP) <sup>a</sup>		Waste				
	Sectoral report tables	1	✓	2(I)	✓	3	✓	4	✓	5	✓	5(KP).		6	✓			
				2(II)	✓													
	Sectoral background data tables	1.A(a)	✓	2(I).A-G		✓	3.A-D		✓	4.A	✓	5.A	✓	5(KP-I)A.1.1		6.A	✓	
		1.A(b)	✓	2(II).C		✓				4.B(a)	✓	5.B	✓	5(KP-I)A.1.2		6.B	✓	
		1.A(c)	✓	2(II).E		✓				4.B(b)	✓	5.C	✓	5(KP-I)A.1.3		6.C	✓	
		1.A(d)	✓	2(II).F						4.C	✓	5.D	✓	5(KP-I)A.2				
		1.B.1	✓							4.D	✓	5.E	✓	5(KP-I)A.2.1				
		1.B.2	✓							4.E	✓	5.F	✓	5(KP-I)B.1				
		1.C	✓							4.F	✓	5 (I)		✓	5(KP-I)B.2			
		Bunkers separately			✓								5 (II)	✓	5(KP-I)B.3			
													5 (III)	✓	5(KP-I)B.4			
													5 (IV)	✓	5(KP-II)1			
												5 (V)	✓	5(KP-II)2				
														5(KP-II)3				
													5(KP-II)4					
													5(KP-II)5					
													Accounting table					
Summary tables (emission totals)	Summary 1.A			✓	Summary 1.B			✓	Summary 2			✓						
Other tables	Summary 3			✓	Table 7 (Key categories)			✓	Table 9(a) (Completeness)			✓						
	Table 10 (Trends)			✓					Table 9(b) (Completeness)									
Comments																		
Totals	Provided for gases	CO <sub>2</sub> ✓		CH <sub>4</sub> ✓		N <sub>2</sub> O ✓		HFCs ✓		PFCs		SF <sub>6</sub> ✓						
	Provided for years	1990–2006		1990–2006		1990–2006		1990–2006				1990–2006						
CO <sub>2</sub>	Comparison of CO <sub>2</sub> from fuel combustion	Reference approach			Sectoral approach			Difference more than 2 per cent			If difference is more than 2 per cent							
		✓			✓						Explanation provided							
HFCs, PFCs, SF <sub>6</sub>	Disaggregation by species			HFCs			PFCs			SF <sub>6</sub>								
				✓														
	Reporting of actual and/or potential emission estimates in the consumption of halocarbons and SF <sub>6</sub>			Actual	Potential	Actual	Potential	Actual	Potential	Actual	Potential							
			✓						✓									
Notation keys	Used in	Summary table 1.A			✓	Sectoral report tables			✓	Sectoral background data tables			✓					
	Comments																	

<sup>a</sup> The reporting of KP-LULUCF CRF tables is voluntary until the 2010 submission.



**PART II**  
**Provision of CRF tables for years reported (continued)**

		Years																		Information gaps relating to reporting <sup>b</sup>	Comments
		Base year <sup>a</sup>	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006		
<b>Agriculture</b>	<b>Sectoral report:</b> Table 4		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	Table 4.A		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	Table 4.B(a)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	Table 4.B(b)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	Table 4.C		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		No data are reported in this table, but notation keys NO, NA are used.
	Table 4.D		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	Table 4.E		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		No data are reported in this table, but notation key NA is used.
	Table 4.F		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
<b>Land use, land-use change and forestry</b>	<b>Sectoral report:</b> Table 5		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	Table 5.A		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	Table 5.B		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	Table 5.C		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		No data are reported in these tables, but notation key NE is used.
	Table 5.D		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	Table 5.E		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	Table 5.F		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	Table 5 (I)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	Table 5 (II)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	Table 5 (III)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		No data are reported in these tables, but notation keys NA, NE are used.
	Table 5 (IV)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	Table 5 (V)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		

**PART II**  
**Provision of CRF tables for years reported (continued)**

	Base year <sup>a</sup>	Years															Information gaps relating to reporting <sup>b</sup>	Comments										
		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004			2005	2006								
<b>Land use, land-use change and forestry (KP)<sup>c</sup></b>	<b>Sectoral report: Table 5 (KP)</b>																											
	Table 5(KP-I)A.1.1																											
	Table 5(KP-I)A.1.2																											
	Table 5(KP-I)A.1.3																											
	Table 5(KP-I)A.2																											
	Table 5(KP-I)A.2.1																											
	Table 5(KP-I)B.1																											
	Table 5(KP-I)B.2																											
	Table 5(KP-I)B.3																											
	Table 5(KP-I)B.4																											
	Table 5(KP-II)1																											
	Table 5(KP-II)2																											
	Table 5(KP-II)3																											
	Table 5(KP-II)4																											
	Table 5(KP-II)5																											
	Accounting table																											

**PART II**  
**Provision of CRF tables for years reported (continued)**

		Years																	Information gaps relating to reporting <sup>b</sup>	Comments		
		Base year <sup>a</sup>	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005			2006	
Waste	Sectoral report: Table 6		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
	SBDT Table 6.A		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
	Table 6.B		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
	Table 6.C		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Summary and other tables	Summary 1.A		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
	Summary 1.B		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
	Summary 2 (CO <sub>2</sub> equivalent emissions)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
	Summary 3 (Methods/emission factors)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	SBDT Table 7 (Key categories)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
	Table 8(a) (Recalculation – recalculated data)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
	Table 8(b) (Recalculation – explanatory information)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
	Table 9(a) (Completeness)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	Table 9(b) (Completeness)																					
	Table 10 (Trends)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		

<sup>a</sup> This column indicates that the Party uses a base year other than 1990 in accordance with decisions 9/CP.2 and 11/CP.4, and does not reflect the choice of a base year for the fluorinated gases.

<sup>b</sup> This column indicates that reporting gaps (blank cells) have been identified in a given table of the CRF, owing to limited use, or lack of, notation keys (NO, NE, NA, IE, C).

<sup>c</sup> Parties to the Kyoto Protocol are required to report anthropogenic greenhouse gas emissions by sources and removals by sinks from land use, land-use change and forestry activities under Article 3, paragraph 3, and, if any, elected activities under Article 3, paragraph 4, using the agreed common reporting format tables (decision 6/CMP.3). The reporting of KP-LULUCF CRF tables is voluntary until the 2010 submission.

PART III Provision of information relating to recalculations						
Table 8(a) (Recalculated data)	✓	Comments				
Recalculation for years	1990–2005					
Recalculated sectors/gases	Energy	Industrial processes	Solvent use	Agriculture	Land use, land-use change and forestry	Waste
CO <sub>2</sub>	✓					
CH <sub>4</sub>	✓			✓		✓
N <sub>2</sub> O	✓			✓		
HFCs						
PFCs						
SF <sub>6</sub>						
Table 8(b) (Explanatory information)	✓			✓		✓
Full CRF for the recalculated base year	✓	Percentage difference in aggregate greenhouse gas base year estimate			with LULUCF	0.15 %
					without LULUCF	0.14 %

.....