



UNITED
NATIONS



Framework Convention
on Climate Change

Distr.
GENERAL

FCCC/ASR/2008/SWE
3 June 2008

ENGLISH ONLY

Annual status report of the greenhouse gas inventory of Sweden

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

CO₂: carbon dioxide
CH₄: methane
N₂O: nitrous oxide
HFCs: hydrofluorocarbons
PFCs: perfluorocarbons
SF₆: sulphur hexafluoride
NO_x: nitrogen oxides
CO: carbon monoxide
NMVOCs: non-methane volatile organic compounds
SO₂: sulphur dioxide

INTRODUCTION													
General information		Date of receipt				Date of resubmission			Comments				
	CRF ^a	14 April 2008											
	NIR	14 April 2008											
	Additional information ^b	14 April 2008							Thermal values and emission factors energy				
	KP-LULUCF CRF ^c												
	KP-LULUCF information ^d												
	CRF provided for years	CRF	1990–2006			KP-LULUCF							
	Base year or period	1990				Base year for HFCs, PFCs and SF ₆ ^e				1995			
	Gases covered	CO ₂	CH ₄	N ₂ O	HFCs	PFCs	SF ₆	NOx	CO	NMVOCs	SO ₂		
		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
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, recommended annexes on the “CO ₂ reference approach and comparison with sectoral approach, and relevant information on the national energy balance” and “Assessment of completeness” are not provided. In addition, Sweden submitted separate files containing information on thermal values and emission factors energy, key category analysis summary 1990–2006 and key source analysis 1990–2006.											
	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.											

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

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

^c 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.

^d 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.

^e 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) ^a		Waste	
	Sectoral report tables	1	✓	2(I)	✓	3	✓	4	✓	5	✓	5(KP).		6	✓
	Sectoral background data tables			2(II)	✓										
		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 ₂ ✓		CH ₄ ✓		N ₂ O ✓		HFCs ✓		PFCs ✓		SF ₆ ✓			
	Provided for years	1990–2006		1990–2006		1990–2006		1990–2006		1990–2006		1990–2006			
CO ₂	Comparison of CO ₂ 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 ₆	Disaggregation by species			HFCs		PFCs		SF ₆							
				✓		✓									
	Reporting of actual and/or potential emission estimates in the consumption of halocarbons and SF ₆			Actual	Potential	Actual	Potential	Actual	Potential						
				✓	✓	✓	✓	✓	✓						
Notation keys	Used in	Summary table 1.A			✓	Sectoral report tables			✓	Sectoral background data tables			✓		
	Comments														

^a The reporting of KP-LULUCF CRF tables is voluntary until the 2010 submission.

PART II																									
Provision of CRF tables for years reported																									
			Years																	Information gaps relating to reporting ^b	Comments				
			Base year ^a	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005			2006			
Energy	Sectoral report: Table 1			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						
	SBDT	Table 1.A(a)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						
		Table 1.A(b)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
		Table 1.A(c)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
		Table 1.A(d)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
		Table 1.B.1		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
		Table 1.B.2		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
		Table 1.C		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
Industrial processes	Sectoral reports:		Table 2(I)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						
			Table 2(II)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
	SBDT	Table 2(I).A–G			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
		Table 2(II).C			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
		Table 2(II).E			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		No data are reported in this table, but for years 1990–2004 notation key NO is used and for years 2005–2006 notation keys NO, NA are used.			
		Table 2(II).F			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
Solvent use	Sectoral report: Table 3			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						
	SBDT	Table 3.A–D		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						

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

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

PART II																						
Provision of CRF tables for years reported (continued)																						
		Years																		Information gaps relating to reporting ^b	Comments	
		Base year ^a	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	SBDT	Summary 1.A		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
		Summary 1.B		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
		Summary 2 (CO ₂ equivalent emissions)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
		Summary 3 (Methods/emission factors)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		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)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		

^a 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.

^b 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).

^c 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 ₂	✓	✓	✓		✓	
CH ₄	✓	✓		✓	✓	✓
N ₂ O	✓	✓	✓	✓	✓	✓
HFCs		✓				
PFCs		✓				
SF ₆		✓				
Table 8(b) (Explanatory information)	✓	✓	✓	✓		✓
Full CRF for the recalculated base year	✓	Percentage difference in aggregate greenhouse gas base year estimate			with LULUCF	-80.81 %
					without LULUCF	-0.20 %
